**Oracle® Hospitality Simphony 1.6
Documentation Library Overview**

October 2016

ORACLE®

Introduction

This library contains articles describing how to use Simphony features and functionality. These articles are PDF versions of articles originally published on the MICROS Members or Wiki pages. They reflect the MICROS branding associated to the product for that release. PDF renderings may cause some distortion in the content.

1.x mTablet E Series

This article reviews the features and setup of the mTablet E Series workstations. These Workstations are currently supported for Simphony v1.6 MR9 and higher.

Contents

	This article discusses a topic related to **hardware**.
	This feature or functionality was introduced in Simphony 1.6 MR9.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses a **tool, utility, or other application** that is used by the Simphony system.
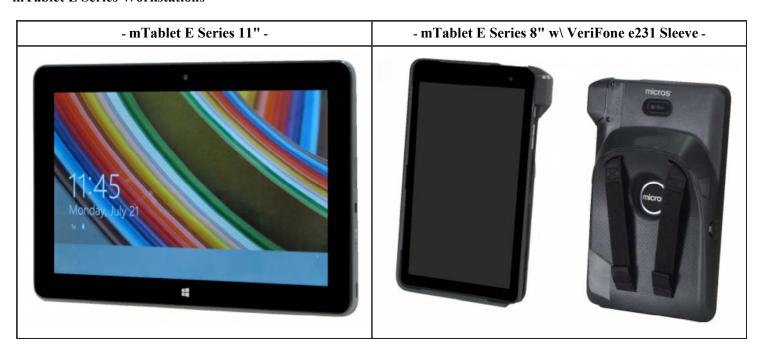
Overview

MICROS introduces its latest Point-of-Sale workstations. There are two available sizes:

- mTablet E Series 8 inch
- mTablet E Series 11 inch

These workstations are supported as Ops clients and are shipped by MICROS with the Microsoft Windows 8.1 Embedded Industry Standard operating system (with OPOS Drivers included). If tablets are acquired running Microsoft Windows 8.1 Standard Edition, they'll run Ops, but some peripheral devices will need to have OPOS Drivers installed manually.

mTablet E Series Workstations

- mTablet E Series 11" -	- mTablet E Series 8" w\ VeriFone e231 Sleeve -

See the MICROS Hardware Group SharePoint for mTablet E Series specification and accessory documentation. Login credentials are required to access the web site.

It is recommended *not* to configure an mTablet E Series workstation to run any of the following services:

- Credit Card Service Host
- KDS Controller
- Interface Service Host
- Property CAL Server

Supported Peripherals

- The mTablet E Series 8" workstation is compatible with the **VeriFone e231 Sleeve** that includes a Barcode scanner, Magnetic Card Reader, and hand strap.
- Both tablets are compatible with the **Mag Tek uDynamo Audio Jack Reader** for reading Magnetic Cards.

Additional Features
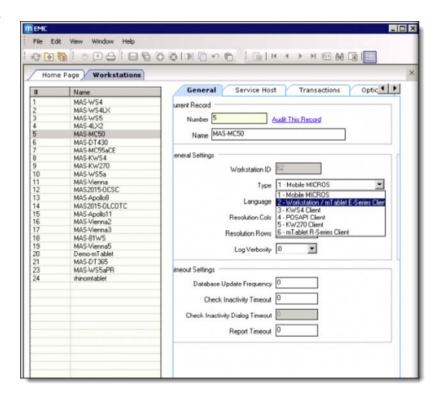
- Battery Status (%) and Wireless Signal Strength display on the Ops screen
- Several new Screen Themes have been added. Additionally, a new Theme Designer has been made available too. See the Operations Client User Interface Themes article for more information.

EMC Configuration

Adding Workstations

To configure an mTablet E Series workstation, follow the steps outlined here:

1. Navigate to the *EMC-> Workstations module-> General tab-> General Settings section-> Type* field. Select **[2 – Workstation / mTablet E-Series Client]**.
2. Configure the balance of the Workstations module based on the customer's preferences.
3. Save all changes.

Adding Peripheral devices

To add and enable Peripheral devices to mTablet E Series workstations, follow the steps outlined here:
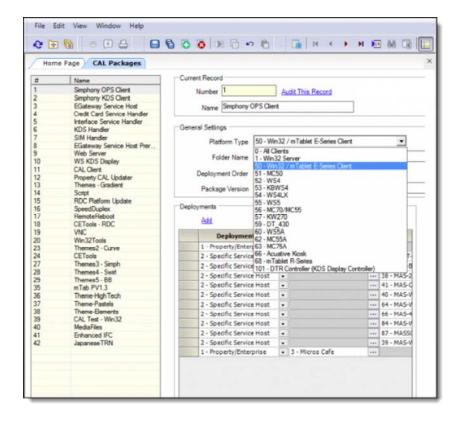
1. Navigate to the *EMC-> Workstations module-> Select the mTablet E Series workstation record-> Devices tab-> **Peripheral Device Configuration** section.
2. To add the **Mag Tek uDynamo Audio Jack Reader**, click the **Add** link. From the **Add Device** window's **Select Peripheral Device Type** field, select **Audio Jack Mag Stripe Reader**.
3. To add the **Mag Card Reader** for the **VeriFone e231 Sleeve** attached to mTablet E Series 8" workstations, click the **Add** link. From the **Add Device** window's **Select Peripheral Device Type** field, select **OPOS Mag Stripe Reader**.

4. To add the **Barcode Scanner** for the **VeriFone e231 Sleeve** attached to mTablet E Series 8" workstations, click the **Add** link. From the **Add Device** window's **Select Peripheral Device Type** field, select **OPOS Barcode Reader**.
5. Click **OK**.
6. Save all changes.

Configuring CAL Packages

To configure CAL Packages for the mTablet E Series workstations, follow the steps outlined here:

1. Navigate to the *EMC-> Enterprise-> CAL Packages module-> General Settings section-> **Platform Type*** field. Select **[50 – Win32 / mTablet E-Series Client]**.
2. Configure the **CAL Package Deployment Schedule** based on the customer's preferences.
3. Save all changes.
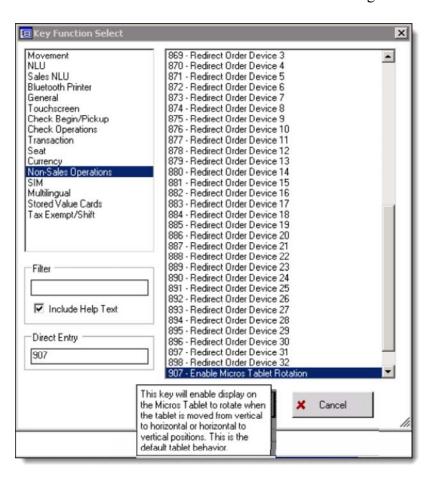
Adding Page Design Functions

Tablet Screen Orientation
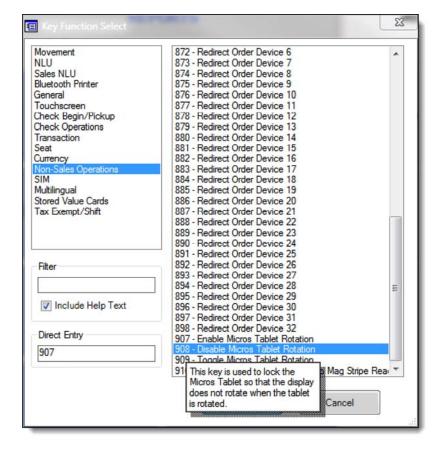
mTablet E Series Workstations by default will automatically adjust the screen orientation (Portrait or Landscape) by rotating the tablet. There are a few Page Design functions that can be set to either allow, lock down or toggle the tablet's rotation to the preferred orientation.

1. To enable the tablet to automatically adjust its screen orientation, configure the **Non-Sales Operations** function **[907 – Enable Micros Tablet Rotation]**.
2. Click **OK**.
3. Save all changes.
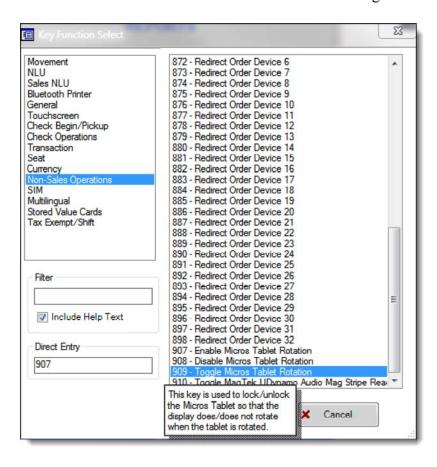
1. To disable the tablet from automatically adjusting its screen orientation, enable the **Non-Sales Operations** function **[908 – Disable Micros Tablet Rotation]**.
2. Click **OK**.
3. Save all changes.
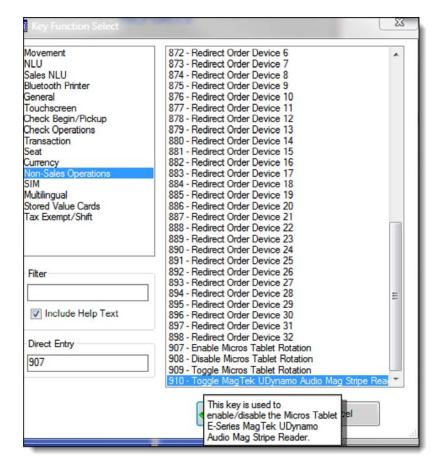
1. To allow users to toggle the tablet screen orientation, enable the **Non-Sales Operations** function **[909 – Toggle Micros Tablet Rotation]**.
2. Click **OK**.
3. Save all changes.

Toggling ON\OFF the Mag Tek uDynamo Audio Jack Reader

Since the Mag Tek uDynamo Audio Jack Reader can emit a loud tone when first connected and enabled, a function was added to allow users to toggle the device ON\OFF.

1. To configure the Audio Jack MSR toggling function, enable the **Non-Sales Operations** function **[910 – Toggle Mag Tek UDynamo Audio Mag Stripe Reader]**.
2. Click **OK**.
3. Save all changes.

1.x mTablet Imager Module

*This article reviews the features and setup of the integrated (end cap) **mTablet Imager Module** for the use of reading Barcodes, swiping Magnetic (Mag) Cards and eventually (RFID) Reader functionality from mTablet / mStation clients. This device is currently supported on Simphony v1.6 MR8 and higher.*

Contents

- 1 Overview
    - 1.1 Usage
- 2 EMC Configuration
    - 2.1 Scanner Characteristics
- 3 See also

This article discusses a topic related to **hardware**.

This feature or functionality was introduced in Simphony Simphony 1.6 Maintenance Release 8.

This article discusses **configuration**, or various programming scenarios, or both.

Overview

An end cap combination MAG Card, Barcode Scanner and RFID Reader module has been introduced for use with the mStation. The **mTablet Imager Module** is connected to the end of an mTablet and powered via a USB port. The mTablet Imager Module's Barcode scanner will correctly scan standard as well as 2D Quick Response Code (QR) barcodes and can successfully export them via a SIM script to 3rd party applications.

> **Note:** mTablets are required to be running **Platform Version 1.3** in order to support the **mTablet RFID/Imager Module**.

Usage

There are two modes from which users can choose to configure the 'mTablet Imager Module'. The end cap module can be mounted on an mTablet that's configured as either a Docked unit (attached to an mStation base unit) or as a Floating Tablet. Using the Trigger button on the end cap module will allow users to manually scan items as presented under the unit's Scan Window.

Attached mTablet RFID/Imager Module	mTablet RFID/Imager Module attached to an mTablet / mStation
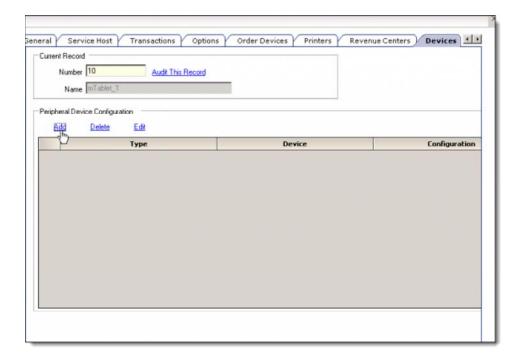
EMC Configuration
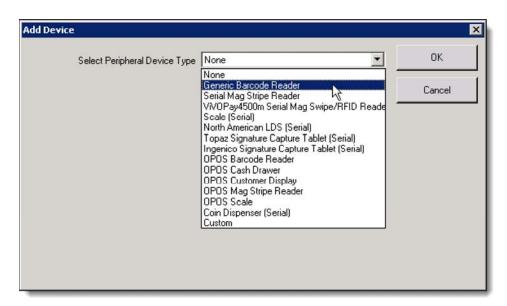
As stated earlier, users can use the mTablet end cap module on a Docked or Floating mTablet. The only difference between the configuration steps for a Docked or Floating Tablet unit is the enabling (or disabling) of the *EMC-> Property-> Property Hardware-> Workstations-> Options tab-> Offline/Misc tab-> **Miscellaneous Options*** section-> **[39 - Floating tablet]** option.

To configure an mStation end cap module, follow the steps outlined below:
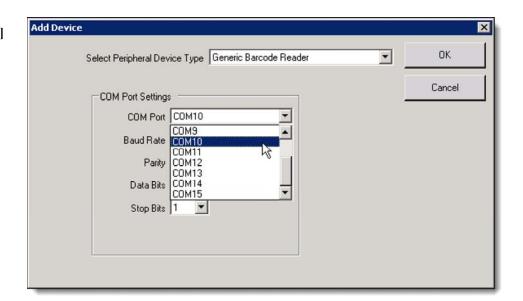
1. Add a new peripheral device to each applicable mTablet Workstation by accessing the *EMC-> Property-> Property Hardware-> Workstations-> Devices tab-> **Peripheral Device Configuration*** section. Press the **Add** link.

2. An **Add Device** window displays. From the **Select Peripheral Device Type** dropdown menu, select the **[Generic Barcode Reader]** device and press the **OK** button.
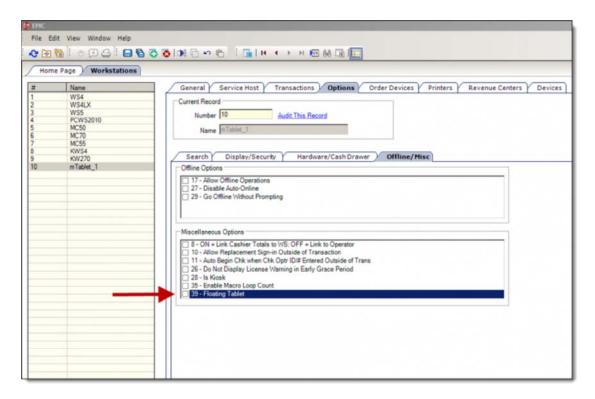
- When the end cap module is installed on a Floating mTablet, users can only see and select the **[Generic Barcode Reader]** device choice.

3. From the **COM Port Settings** section, users *must* select the **[COM10]** setting from the dropdown menu (for either Docked or Floating mTablets). All other settings can remain at the default settings. Press the **OK** button and **Save** all changes.

4. Configure the scanner for 2D mode by scanning the appropriate configuration barcodes contained within the "**Quick Start Guide**" enclosed with the scanner (if needed).

5. To configure a Docked mTablet, access the *EMC-> Property-> Property Hardware-> Workstations-> Options tab-> Offline/Misc tab-> Miscellaneous Options* section-> **[39 - Floating tablet]** option and ensure that this option is *disabled*. To configure a Floating mTablet, ensure that this option is *enabled*. **Save** all changes.

Scanner Characteristics

Barcode
Scanner Laser

Add/Transfer Check

The term Transfer Check means to give ownership of a check from one operator to another, or to transfer from one Revenue Center to another. The term Add Check means to combine two checks together while in a transaction. A check can be transferred or added by Check Number, Check ID, Table Number, or Transfer Check SLU, although users typically transfer checks by Check Number.

	This article discusses the usage of one or more Function Keys. (499-519, 437)
	This article discusses behavior that is important for Reporting.

Contents

Why Add or Transfer?

Transfer

A check transfer may occur for several different reasons depending on business practices, but here are two common reasons why it is used:

- A couple arrives at a restaurant to find that there are no tables currently available. These customers go to the bar Revenue Center to have a couple drinks. (The bartender starts their check.) When a table opens, the check is transferred from the bartender to the server, so the customer only has to pay one check at the end of their visit.
- A bartender is working the day shift, 11am - 5pm. At 5pm, a new bartender comes in. The daytime bartender has to leave, so the new bartender transfers the check(s) owned by the daytime bartender.

Add

Checks may be added together for similar business practices:

- This functionality may be used when one customer asks to pay another customer's bill.
- Checks may be added together when an operator accidentally began two checks for the same customer

Security

Who transfers to whom?

A general note for all check adding/transferring is this: a user can only transfer a check IN to themselves. What is meant by this? A user cannot transfer a check OUT, to other users. (If a user could transfer checks out, a dishonest employee may transfer checks to other employees, making it look like the other employees owe the balance of the check.)

What about sales?

Similarly to the last section, it should be noted that an employee's sales are never transferred.

- Employee A begins a check and rings $100 of sales
- Employee B transfers the check, adds $10 of sales, and pays it

In this scenario, Employee A has $100 in sales; Employee B has $10. It would be a security problem (or more likely, a tax problem with the government) if employees could move sales to other employees.

Transfer vs. Add

The same function keys are used for adding checks and transferring them. The term "add check" means to combine two checks, while "transfer check" means to take a check from another operator or Revenue Center. The same function key is used in both instances:

- When a user is in a transaction, the Add/Transfer key is "adding" two checks together.
- When a user has not yet begun a transaction (he/she is on the Default Transaction Screen), the Add/Transfer key is "transferring" ownership of the check.

Standard Function Keys

Several function keys exist to allow transferring checks:

437 - Add/Transfer by ID
    This key is used to Add or Transfer a check by ID.
499 - Add/Transfer Check SLU
    When this key is pressed, the workstation will display a SLU of checks that can be transferred or added from other operators in the RVC.
500 - Add/Transfer by Number
    When this key is pressed, the workstation will ask for the check number to be added or transferred. This function key will add/transfer checks only within the current RVC of the workstation or transaction.
501 - Add/Transfer by Check # RVC?
    This key is used to add or transfer a check by check number, from one of the eight Revenue Centers

assigned in the Add/Transfer section of the Revenue Center Parameters module. When this function key is used, the operator must first select the Revenue Center, and then enter the check number.

502-509 - Add/Transfer by Check # RVC 1-8

These eight keys are used to add or transfer a check by check number, from one of the specific Revenue Centers assigned in the Add/Transfer section of the Revenue Center Parameters module. For instance, if the [Add/Transfer by Check# RVC 2] function key (503) is used, the check will be added/transferred from the RVC #2 specified in RVC Parameters.

510 - Add/Transfer by Table Number

When this key is pressed, the workstation will ask for the table number to be added or transferred. This function key will add/transfer checks only within the current RVC of the workstation or transaction.

511 - Add/Transfer by Table # RVC?

This key is used to add or transfer a check by table number, from one of the eight Revenue Centers assigned in the Add/Transfer section of the Revenue Center Parameters module. When this function key is used, the operator must first select the Revenue Center, and then enter the table number.

512-519 - Add/Transfer by Table # RVC 1-8

These eight keys are used to add or transfer a check by table number, from one of the specific Revenue Centers assigned in the Add/Transfer section of the Revenue Center Parameters module. For instance, if the [Add/Transfer by Table# RVC 2] function key (513) is used, the check will be added/transferred from the RVC #2 specified in RVC Parameters.

Other Function Keys

There are two function keys that allow a user to transfer some or all of the checks at one time. These functions are discussed on the Block Transfer page.

- 520 - Block Transfer
- 521 - Auto Block Transfer

Transferring from one RVC to another

Tax implications

What happens when transferring a check from RVC to RVC? Does tax get recalculated?

1. Scenario #1: Order Type Masking
   - Setup two Tax rates
   - Tax Class #1 has both rates enabled
   - Serving Periods in both RVCs have both tax rates enabled
   - Order Type in RVC 1: Tax 1 enabled, Tax 2 disabled
   - Order Type in RVC 2: Tax 1 disabled, Tax 2 enabled
   - What happens:
     - Transferring a check between RVCs makes the Tax recalculate.
2. Scenario #2: Order Types
   - Setup two Tax rates
   - Tax Class #1 has both rates enabled
   - Serving Periods in RVC 1: Tax 1 enabled, Tax 2 disabled
   - Serving Periods in RVC 2: Tax 1 disabled, Tax 2 enabled
   - Order Types in both RVCs have both rates enabled

- What happens:
  - Transferring a check between RVCs, the taxes DO NOT recalculate. Is this wrong?
    - This is not wrong. Upon further investigation, the issue really has nothing to do with transferring between RVCs at all...
      - If I'm in RVC 1 and Lunch Serving Period has Rate 1 active (and Rate 2 inactive), while Dinner Serving Period has Rate 2 active (and Rate 1 inactive), does tax get recalculated? No. If I ring a Coke in Lunch, tax isn't recalculated on that existing Coke item when it becomes dinner (new items will receive the new tax). This is no different when moving a check from one RVC to another.
      - If I'm in RVC 1 with "Dining" Order Type active, and I switch to "To-go" Order Type, does tax get recalculated? Yes. The check total will change accordingly for existing items on the check. Again, this behavior is seen within a RVC and also when transferring from one RVC to another one, so there is no bug.
3. So, in the end, what have we learned?
   - Changing the Order Type will recalculate taxes on a check. Otherwise, tax is relatively static.

Auto Gratuity

Checks can be transferred between RVCs only when the Automatic Service Charge for the RVCs is the same. The following chart summarizes the behavior:

Auto Service Charge of Current RVC	Auto Service Charge of Check's RVC	Can Transfer?
0	0	YES
0	1	NO
1	0	NO
1	2	NO
2	2	YES

Privileges

Four Employee Role option bits determine if an operator is privileged to perform Add/Transfer operations.

Authorize Adding of Checks in the Same Revenue Center
　　Select this option to allow employees associated with this Role to add checks (to be in a check, and add another check to it) within a Revenue Center, and to authorize non-privileged employees to do so as well.
Authorize Adding of Checks Between Revenue Centers
　　Select this option to allow employees associated with this Role to add checks (to be in a check, and add another check to it) from another Revenue Center, and to authorize non-privileged employees to do so as well.
Authorize Transfer of Checks in the Same Revenue Center
　　Select this option to allow employees associated with this Role to transfer checks from another

operator within the same Revenue Center, and to authorize non-privileged employees to do so as well.

Authorize Transfer of Checks Between Revenue Centers

Select this option to allow employees associated with this Role to transfer checks from another Revenue Center, and to authorize non-privileged employees to do so as well.

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Authorize Transfer of Checks in the Same Revenue Center
    Select this option to allow employees associated with this Role to transfer checks from another operator within the same Revenue Center, and to authorize non-privileged employees to do so as well.
Authorize Transfer of Checks Between Revenue Centers
    Select this option to allow employees associated with this Role to transfer checks from another Revenue Center, and to authorize non-privileged employees to do so as well.

Adding a Menu Item

Adding a Menu Item is a different process than adding records in other EMC modules. In the Menu Item Maintenance module, a user has the ability to add Master Records, Definition Records and Price Records. This article discusses how to add a Menu Item Master record with all its definitions and prices at the same time (the dialog is frequently called the Menu Item Wizard); for specific information on adding masters, definitions, and prices individually, see the appropriate article: Adding Menu Item Masters, Adding Menu Item Definitions, Adding Menu Item Prices.

⭐	This article contains a **best practices** section.
🎼	**This article relates to programming of an EMC module.**
❓	This article discusses **configuration**, or various programming scenarios, or both.

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- 1 Steps for Adding an Item
- 2 Other Considerations
- 3 Best Practices
- 4 See also

Steps for Adding an Item
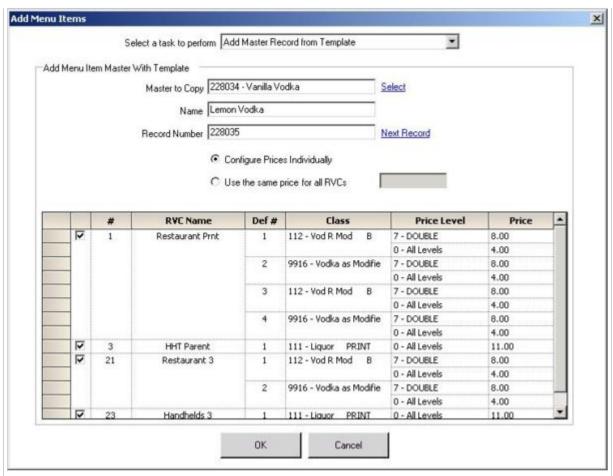
To add a Menu Item, perform the following steps:

1. Open the Menu

Add Menu Items

Select a task to perform [Add Master Record from Template ▼]

Add Menu Item Master With Template

Master to Copy [0 - None] Select

Name [ ]

Record Number [0] Next Record

☐ Copy Menu Item names

⦿ Configure Prices Individually

○ Use the same price for all records [ ]

Def #	Class	Price Seq	Price Level	Effectivity Group	Price	

[OK] [Cancel]

When the dialog displays initially, all fields are blank. If the dialog had been opened after a Menu Item Master record was selected, its values would display.

Item

After selecting "Vanilla Vodka" as the template, the grid displays all the definitions and prices associated with Vanilla Vodka. Note that none of the cells can be edited in this grid except for the checkbox (leftmost column) and the price (rightmost column); all other cells are read-only and displayed for information purposes only.

Maintenance module
2. Press the Add Record icon from the toolbar.
   - If Menu Item Maintenance was opened from the Property Scope, the insert dialog defaults to "Add Master Record from Template".
   - If Menu Item Maintenance was opened from the Revenue Center Scope, choose "Add Master Record from Template" from the "Select a task to perform" drop-down.
3. Select the template record by pressing "Select" next to the "Master to Copy" field.
4. After selecting the template record, configure the following fields:
   - The **Name** of the new item
   - The **Record Number** of the item. By default, this field displays the next available record number after the selected record to copy. A user can change the record number; to return the field to its default value, press "Next Record"
   - Select the **Copy Menu Item Names** checkbox to have all of the existing primary and foreign names—including the Long Descriptor(s)—copied from the original Menu Item to the new Menu Item. (This field displays only when "Add Master Record from Template" is selected above.)
   - The **Price(s)** of the item:
     - Configure Prices Individually: For some items, multiple definitions and prices exist. For these items, "Configure Prices Individually" is usually the best option. For example, the image shows "Vanilla Vodka" as a template. This item has multiple definitions and prices.
     - Use the same price for all RVCs: For items that have the same price in every RVC (soda, perhaps), it is easier to enter a single price that applies to all RVCs. This configuration would be used in a situation where a site with many unshared RVCs has standard pricing for certain items.

For instance, an amusement park may have 35 Revenue Centers that charge $3.00 for a soda. When adding a "diet soda" item for that site, it is easier for the site to use the "Use the same price for all RVCs" option, instead of entering a price amount 35 times.

- The **RVC(s)** where the item will be created (checkboxes in the grid). Usually, definitions are created in the same RVCs as the template item, so these checkboxes remain checked.

5. Press OK. At the prompt "Add this menu item?", choose Yes.
6. After the item is added, another prompt occurs: *This record was added successfully. Add another menu item?*
   - Yes: The name field becomes empty and the record number updates to the next available record number. At this point, the user is at step #4 of these instructions.
   - No: The dialog closes.

Other Considerations

There are other considerations when using this dialog:

- If the user does not have Employee Role permissions to add Menu Item Master records, the "Add Master Record from Template" option will not appear in the "Select a task to perform" drop-down.
- If one Menu Item Master record is selected in Table View before entering this dialog, the dialog will default to using that record as the "Master to Copy".
- If viewing a Menu Item Master's Definition Summary in Form View, this dialog defaults to the selected Master Record.
- All the fields in the grid are read-only except for the checkbox column and the price column. All other columns are provided for informational purposes only.
- Revenue Centers appear in the grid when these conditions are met:
  - The template Menu Item Master record has a definition in the RVC
  - The user is able to view the RVC, based on RVC-Level Security settings.
  - Menu Item Maintenance was opened from the Property Scope. (If opened from the RVC scope, only the current RVC's definitions will display.)

Best Practices

When creating a new property and adding several items at a time, the ideal method for setting up items is to create a record that belongs to a Major/Family group, then to create all other records in the same Major/Family group using the initial record as a template. For example, when creating appetizers:

1. Set up one Menu Item Master in the Food Major Group and Appetizer Family Group
2. Create all its definitions/prices.
3. Now create the other appetizers based on this definition

With this method, some minor changes will be needed after the definitions are created for the items. Menu Item Classes, for instance, aren't all the same within the same Family Group (some appetizers will print to the Hot Printer while others will not). Even with these minor changes, this method of inserting new menu item records is, by far, the most efficient method possible.

Adjust Closed Check

Adjust Closed Check is a function key that allows an operator to change or add a tip and/or tender on a closed check, or to change the number of guests. Unlike the Reopen Closed Check function, which actually opens a check to be used as a regular guest check again, the Adjust Closed Check function prevents the users from altering anything on the check but the tip, payment, or guest count. Often, Employee Roles are set up to allow the average user (bartender, waiter, etc.) to adjust checks but not to reopen them.

This article discusses the usage of one or more **Function Keys**. (422, 442)

This article discusses behavior that is important for **Reporting**.

Contents

Example Usage

A guest check is closed with a CASH tender key. After the customer pays and leaves, the server realizes that the customer paid with a VISA card, even though the check was accidentally closed to cash. The server uses the **[Adjust Closed Check]** function key to change the tender from CASH to VISA.

Steps to adjusting closed check:

1. The operator presses the **[Adjust Closed Check]** function key and enters the check number.
2. BOB prompts, **Adjust this closed check?**. At this time the Check Summary Area of the workstation shows some information about the check.
   - If multiple checks exist with the same check number, pressing **[Clear (no)]** will move the workstation to the next check number in the list, again prompting for **Adjust this closed check?**. A user can continue to answer **[Clear (no)]** until the appropriate check is listed.
3. Once the appropriate check has been displayed, press **[Enter (yes)]**

4. Now you are in adjust check mode. In some good databases, the **[Adjust Closed Check]** key has a TS-Next screen attached to it, and you'll be taken to the payment screen.
5. From the payment screen, select "Cash" in the Check Detail Area and perform a touch-void.
6. Then, pay the check to VISA.

Notes

- Once in adjust check mode, it is possible to use the **[Cancel Transaction]** function key (605) at any time to exit the check.
- Once in adjust check mode, it is not possible to service total the check without printing; it is only possible to pay or print.

Printing Adjusted Checks

When a closed check is adjusted, the result prints at the designated guest check printer. The detail that prints is determined by the nature of the original check:

- If the adjusted check was an On-demand guest check, or a fast transaction that was service totaled by an On-demand operator, the entire check is reprinted, showing the new information (e.g., the new method of payment).
- If the adjusted check was a By-round guest check, a Special By-round guest check, or a fast transaction that was service totalled by a By-round operator, a chit prints that shows the nature of the adjustment (e.g., the void of the original payment, and the posting of the new payment).

In either case, the text `ADJUST CLOSED CHECK` prints at the top of the transaction detail in double-wide characters.

Reporting

For Report Writer reports, a "j" prints in the status field for any check that has been adjusted. The PMC Reports use a capital letter ("J").

Adjusting from Previous Business Days

While the **[Adjust Closed Check]** function key (422) only allows checks from the current business day to be adjusted, another function, 442, **[Adjust Closed Check (Prev. Days)]** allows check adjustments to occur for the current business day *and* previous business days, for a pre-defined number of days. The number of days allowed for adjusting closed checks is configured in RVC Parameters on the Posting and Control tab.

Workstation Usage

To use this key at the Workstation:

1. Press the **[Adjust Closed Check (Previous Days)]** function key (423)
2. When the key is pressed, the workstation will allow checks to be adjusted for the current Revenue Center, for the number of days specified in the RVC Parameter field.
   - If the field is set to 0, only the current business day's checks will be accessible.

Reporting

Reporting numbers for a previous day cannot be changed by use of the **[Adjust Closed Check from Previous Business Days]** function keys. When a check is adjusted from a previous day, only the current day's checks and totals are affected. It should be noted that adjusting from a previous day will make reports seem "out of balance" for a day. However, when reports are taken for a larger period of days (including the date of the original check and the date of the adjustment), the reports are indeed "in balance." Please reference the following examples:

Example 1

Here's an example of adjusting Check #1000 from April 10, closed for $10.00. To make this example simple to follow, no other checks are opened in the system. This check is adjusted on April 15.

The user adjusts the check, voids the payment (cash) and applies a new payment (credit card). The Checks section of Financial Reports shows no change. The tender section, however, will show:

```
Cash         -1 -10.00
Credit Card   1  10.00
```

Taking a report for the entire period (for instance, the week including April 10 and April 15), the report shows:

```
Cash          0   0.00
Credit Card   1  10.00
```

Example 2

Another example of adjusting Check #1000 from April 10, closed for $10.00. To make this example simple to follow, no other checks are opened in the system. This check is adjusted on April 15.

The user adjusts the check, voids the payment (cash) and applies a new payment (credit card) including a $2.00 tip. The top section of the report will show:

```
Service Charges   1   2.00
Checks Begun      0   2.00
Checks Paid       0   2.00
```

The tender section of the report will show -10.00 cash, and 12.00 for the credit card payment.

Taking a report for the entire period (for instance, the week including April 10 and April 15), the report shows:

```
Checks Begun      1 12.00
Checks Paid       1 12.00
Net Sales           10.00
Service Charges   1  2.00
Total Revenue       12.00
```

The tender section of the report will show 12.00 for the credit card payment, and 0.00 for cash.

Other Considerations

Generally, the Adjust Closed Check function keys should be programmed on the Default Transaction Screen. Additionally, there are considerations to keep in mind when adjusting checks from a previous day:

- While the maximum value of the RVC Parameter fields "Number of Days to Adjust Closed Checks" is 999 days, checks are purged from the Simphony system after approximately six weeks. Therefore, it is typically not possible to adjust checks that are more than six weeks old.
- It is not possible to void a credit card payment on a check when that credit card payment has already been batched by the Simphony system.

Reprinting Closed Checks

Simphony does not have a function key for reprinting a closed check. Instead, users create a macro that includes the steps of adjusting, and then using a "print" service total key.

Privileges

An operator has access to the Adjust function keys only when associated with an Employee Role with the proper privileges:

- Authorize/Perform Adjust Closed Check
- Auth/Perform Adjust Closed Check from Previous Business Days

A Revenue Center Parameters option (#16 in Posting and Control) relates to Adjusting Checks:
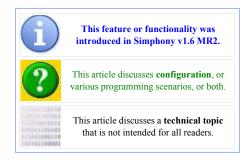
- Allow Overtender of Closed Checks

Amount Rounding by Tender Media

This article reviews the 'Amount Rounding by Tender Media' setup steps.

Contents

Overview

The rounding of the 'Amount Due' on checks was previously enabled only by configuring the Currency module. With this release, users can configure 'Amount Rounding by Tender Media' as well. To configure this feature, several option bits have been added throughout the EMC.

EMC Configuration

Tender Media Configuration

Access the EMC-> Property-> Tender/Media-> Options-> Ops Behavior-> Amount Options New option bits have been added:

- **[86 – Enable Tender Rounding]**
- **[87 – ON = Round Amount Due to Nearest 10; OFF = to Nearest 0]**
- **[88 – ON = Round Amount Due on 10s Digit; OFF = on Units]**

A new Combo box has also been added named **'Insignificant Digits'**.

Note: When option bit **86** is disabled, option bits **87**, **88** and the **'Insignificant Digits'** combo box are all disabled (grayed out).

> ⚠️ **WARNING:** Existing option bit **[53 – Round Tender to the Next Highest Dollar]** does not behave exactly as its name seems to indicate. Enabling this option bit did not mean that the Amount Due would be rounded. When used in conjunction with option bit **[3 – Assume Paid in Full]**, a tender key with option bit 53 enabled would tender the transaction to the next highest dollar above the Total Amount Due if no amount was entered prior to pressing the tender key. For example, if the total amount due was $9.35 the transaction will be tendered for $10.00. This feature is overridden by the 'Open Check Block Settlement' feature.

Currency Configuration

Access the EMC-> Property-> Currency module. For consistency with changes done to Tender Media rounding options, a new combo box was added to the Base and Alternate Currency settings named '**Insignificant Digits**'.

Revenue Center Parameters Configuration

Access the EMC-> Revenue Center-> RVC Parameters-> Format-> Format Options.

The following new option bits were added:

- **[44 - Print Rounding Total on Guest Check and Customer Receipt]**

  When option is enabled the rounding total will be printed on guest checks and customer receipts if Tender Rounding is enabled for the tender media after check was closed.

- **[45 - Display rounded amount due]**

  When option is enabled the rounded amount will be displayed in parentheses after Amount Due if default Cash Tender has option bit [86 – Enable Tender Rounding] enabled. When this option bit is ON, then Total Due line will not display Total Discount information on Rear Display.

Rounding Based on Tender Media Option Bits

When the Tender Media rounding option bits are enabled, then the Amount Due amounts will be rounded regardless of the Currency rounding option bits for a particular tender type. Examples of rounding when Tender Media option bit **[86 – Enable Tender Rounding]** is enabled are shown here:

More Rounding Based on Tens Digit

The following examples show how the amount due is rounded depending on whether the Rounding based on Tens Digit option is selected or cleared.

Round total due to nearest 10	Round based on tens digit	Amount Due: 2.53	2.47	2.62	2.32
☑	☐	2.50	2.50	2.60	2.30
☐	☐	2.55	2.45	2.60	2.30
☑	☑	3.00	2.00	3.00	2.00
☐	☑	2.50	2.50	2.50	2.50

Rounding Based on Currency Option Bits

When the option bit '**Enable Amount Due Rounding'** checkbox is enabled for a 'Base Currency', the rounding behavior will be the same as the example of Tender Media rounding when option bit **[86 – Enable Tender Rounding]** is enabled. The difference between setting the rounding option bits on Currency vs. Tender Media is that Currency rounding rules apply to ALL Tenders while Tender Media rounding affects individual tenders.

Rounding and Insignificant Digits

The Turkish lire (TL) are comprised of three coins (valued at 10,000 TL, 25,000 TL and 50,000 TL) and several paper denominations, the smallest of which is the 100,000 TL. The exchange rate between the TL and the US Dollar is approximately 1,500,000 TL to 1 US Dollar. Assuming that we want to apply Turkish rounding rules to all Tender types, the Currency must be configured as shown here:

In case the rounding rules must be applied to a Cash tender only, then the '**Enable Amount Due Rounding'** checkbox setting in the Currency module should be disabled, but option bits **[86 – Enable Tender Rounding]** and **[87 – Round Amount Due to nearest 10]** in the Cash Tender must be enabled and the '**Insignificant Digits'** setting must be equal to '**3'**.

Displaying Rounded Amount Due

If option bit **[45 - Display rounded amount due]** is enabled in RVC Parameters and option **[86 – Enable Tender Rounding]** is enabled in the 'Default Cash Tender', then the rounded Amount Due will be displayed in parentheses after the Amount Due in the Check Detail area and on the Rear Display (if configured to do so).

Tender Rounding in Canada

Canada eliminated the penny from their currency pool and needed to have this functionality so that cash tenders could be rounded to the nearest nickel while Credit Card (CC) transactions would still be tracked to the penny. For those sites utilizing Coin Dispensers, pennies are not dispensed for rounded cash transactions. Simphony sites in Canada can use the following configuration. The default Cash Tender must have option bit **[86 – Enable Tender Rounding]** enabled and option bits **[87 – Round Amount Due to nearest 10]** and **[88 – Round Amount Due on 10s Digit]** disabled. To be able to accept exact

unrounded cash amounts, the Payment screen must have an additional Cash button with option bit **[86 – Enable Tender Rounding]** disabled.

> **WARNING:** To avoid possible confusion with two cash buttons programmed on the same screen, it is recommended to disable the **[3 – Assume Paid in Full]** option bit for both the Default and unrounded cash tenders.

To be able to accept US Dollars, the following configuration is recommended:

1. Access the EMC-> Property-> Currency-> the '**Alternate Currency'** must have an entry for US Dollars.

	#	Name	Decimal Digits		Rate	Options		Insignifi▲
	1	PESO	0	▼	30.0000	2000	…	0
	2	US Dollar	2	▼	1.0000	0000	…	0
	3	Turkish Lira	0	▼	1500000	1800	…	3

2. Create a new Cash Tender named 'US Cash', with no rounding options enabled.

Current Record

Number 9   Audit This Record

Name US Cash

General Settings

Privilege Group 1

Key Type 1 - Payment

NLU 9

3. Create a new Macro under the '**Macros'** tab that must have two steps assigned; 'Currency Conversion' for the 'US Dollar' and the 'US Cash' Tender Media.

Current Record

Number 52   Audit This Record

Name US Cash

Macro Steps

Step	Key Type		Key Number		Alpha/#
1	11 - Function	▼	721 - US Dollar	…	
2	7 - Tender Media	▼	9 - US Cash	…	
3	0 - Disabled	▼		…	

4. Add a new touchscreen button assigning '**Key Type' [12-Macro]** for the 'US Cash' macro.

Amount Rounding by Tender Media

This article reviews the 'Amount Rounding by Tender Media' setup steps.

> **This feature or functionality was introduced in Simphony v1.6 MR2.**
>
> This article discusses **configuration**, or various programming scenarios, or both.
>
> This article discusses a **technical topic** that is not intended for all readers.

Contents

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			Rounds to:		
☑	☐	2.50	2.50	2.60	2.30
☐	☐	2.55	2.45	2.60	2.30
☑	☑	3.00	2.00	3.00	2.00
☐	☑	2.50	2.50	2.50	2.50

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Rounding] disabled.

> ⚠️ **WARNING:** To avoid possible confusion with two cash buttons programmed on the same screen, it is recommended to disable the **[3 – Assume Paid in Full]** option bit for both the Default and unrounded cash tenders.

To be able to accept US Dollars, the following configuration is recommended:

1. Access the EMC-> Property-> Currency-> the '**Alternate Currency'** must have an entry for US Dollars.

Base	Alternate

	#	Name	Decimal Digits	Rate	Options	Insignifi
	1	PESO	0	30.0000	2000	0
	2	US Dollar	2	1.00000	0000	0
	3	Turkish Lira	0	1500000	1800	3

2. Create a new Cash Tender named 'US Cash', with no rounding options enabled.

Macros	Tender Media	Currency

General	Options	Menu Levels	Output

Current Record

Number 9   Audit This Record

Name US Cash

General Settings

Privilege Group 1

Key Type 1 - Payment

NLU 9

3. Create a new Macro under the '**Macros'** tab that must have two steps assigned; 'Currency Conversion' for the 'US Dollar' and the 'US Cash' Tender Media.

Tender Media	Currency	Macros

Current Record

Number 52   Audit This Record

Name US Cash

Macro Steps

Step	Key Type		Key Number		Alpha/#
1	11 - Function		721 - US Dollar	...	
2	7 - Tender Media		9 - US Cash	...	
3	0 - Disabled			...	

4. Add a new touchscreen button assigning '**Key Type' [12-Macro]** for the 'US Cash' macro.

See also

- Currency Rounding
- Simphony 1.6 Maintenance Release 2

Assign Employee ID or Mag Card (PMC Procedure)

Assign Employee ID or Mag Card is a PMC Procedure that allows an Employee ID or Mag Card to be assigned to an Employee. This procedure is available on Keyboard Workstations only.

This article discusses functionality that relates to **Personnel**.

This article discusses PMC functionality.
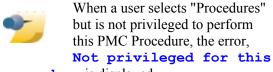
Contents

- 1 Usage
- 2 See also

Usage

To enter this PMC Procedure, a user should perform the following steps:

1. Use the **[Launch PMC]** function key (300)
2. Select **[2 - Procedures]**
3. Select **[1 - Assign Employee ID/Mag Card]**

When a user selects "Procedures" but is not privileged to perform this PMC Procedure, the error, **Not privileged for this procedure** is displayed.

The first screen of the procedure is a prompt to **Select Employee, Filter by Name**. At this prompt, the operator can scroll through the list and/or type characters to find a specific employee. After the employee is selected, the workstation displays the prompt, **Swipe Mag Card or Enter ID**. After performing one of those actions, the selected Employee's ID will change, and the procedure will be closed.

Understanding Autofire

The Autofire function allows you to add items to a guest check and hold the order until a pre-set "fire" time (when the order is sent to the remote order devices). Autofire lets you schedule an order in advance, and then when the scheduled time arrives, the order is automatically fired by the system and the transaction totals are posted. Menu items post at the time the check is fired, with the remaining totals, for example discounts, service charges, and gratuities posting when the check is tendered for payment.

Common Usage

The Autofire function is ideal for situations such as room service orders, where the order can be entered into the system, then held for posting and firing at a specified date and time. You simply ring up the menu items, press the Autofire button, and then enter the date, for example 91216 (representing September 12, 2016). Then enter the time when the order is to be fired, for example 16:30 for 4:30 p.m. (the 24 hour time format must be used). After confirming this entry, the check is scheduled in the system. Autofire is a perfect solution for this situation. For example, take the following scenario:

1. A guest in Room 923 fills out the menu and hangs it on the doorknob. The customer has requested to have breakfast delivered at 7:00 a.m.
2. A hotel employee collects all orders later in the evening.
3. The hotel employee rings each doorknob menu order into the system and uses Autofire to schedule the orders appropriately. Hotels often set guidelines for their staff on how to place Autofire orders. Typically, the operator schedules the order to fire 30 or 45 minutes before the customer asks for it, allowing time for kitchen preparation and delivery. In addition, hotels often require operators to add a menu item called Delivery Time, which then prompts for a forced modifier list of delivery times. For this example, operators configure orders to fire 45 minutes in advance.
4. At 6:15 a.m., the order fires automatically via Autofire.
5. The items are prepared and delivered to Room 923 at 7:00 a.m.

Sending Orders Automatically at a Predefined Time

1. Begin a check and add the ordered menu items.
2. Press the touchscreen button configured for the **Autofire** function key.
   Enter the date and time when the order is to be fired. The time of an Autofire order is entered using the 24-hour format, for example 16:30 for 4:30 p.m.
3. After confirming this entry, Autofire checks are scheduled to fire in the system and are accessible to edit in the Open Check SLU prior to their scheduled fire time.

Autofire Check Characteristics

There are several characteristics that are unique to Autofire checks. They are:

- A previously posted guest check cannot be used as an Autofire check. The Autofire tender must be the first tender used on the check.
- Menu item additions and voids on Autofire checks are treated as previous round items, while tender changes are treated as current round items.
- Split checks are not allowed until the check has been fired, at which point it is a regular check.

- If the check is paid in full or changed to a different tender, all menu items are immediately fired to the remote order devices.
- Once an Autofire check is fired, it then becomes a regular check and all related check functions can be performed.

Editing and Voiding Autofire Orders

When handling Autofire checks:

- You can pick up Autofire checks similar to any guest checks. You can add new menu items and void items that are not yet fired to the remote order devices. After adding new items, the check is an Autofire check only if you press the touchscreen button assigned to Autofire again. The workstation then displays a prompt that allows you to confirm the original fire time of the check or specify a new time.
- You can simply void all menu items to cancel an Autofire check. You can also pick up an Autofire and manually send by pressing the service total key.
- When Autofire is enabled, the Open Check SLU displays the Autofire checks last in inverse mode, sorted by fire time, with an AUTOFIRE CHECK banner printed at the top of the check. If multiple checks have the same fire time, those checks are sorted by check number.

Autofire Delays

If, for some reason, an Autofire check is not fired within ten minutes of its scheduled time, a banner is printed at the bottom of the guest check stating the date and time it was originally set to be fired. Autofire checks that are not fired within 24 hours of their scheduled time are purged from the system. A CHECK NUMBER #### PURGED! message appears on the default workstation's screen.

SIM Field Command

The **Time to Fire** field is available for use in SIM scripts and Data Access queries.

Autofire Reports

The following are the available types of Autofire reports:

Table 1 - Types of Autofire Reports

Report Name	Description
Autofire Open Check	Shows all checks that have been rung as Autofire checks and that have not yet fired.
Employee Open Check	Shows all checks in the system that are open, including Autofire checks. There is no special flag to indicate that a check is an Autofire check.
Financial Reports	Shows an Autofire line below the begun/paid and outstanding area.

Configuring Autofire

This section explains how to configure sending orders automatically at a user defined time.

Follow the steps outlined here

1. In the EMC, select a property, click **Sales**, and then click **Tender/Media**.
2. Under the General tab, add a new Tender/Media record, and select **2 - Service Total** as the **Key Type**.
3. Click the **Options** tab, and then the **Ops Behavior** secondary tab.
4. Select **Hold Entire Check for Autofire,** and then click **Save**.
5. Go to **Sales**, **Tender Media**, **Autofire** key, and configure the following:
   a. Select the **Hold Entire Check for Autofire** option under the category **POS Ops Behaviors** to enable the Autofire functionality for the selected Autofire tender/media key. All other service total options are disabled.
   b. Select all the menu levels on which the Autofire is active under **Menu Level**.
   c. Select all the output devices for the Autofire checks under **Tender Output**.
6. Disable the **Preserve Hold Status from Previous Round** option for the service total key under **Sales**, **Tender Media**.
7. Go to **Sales**, select **System Parameters**, and then enable the **Use DDMMYY Format** option under the **General** tab to support international sites that require the DDMMYY format.
8. Add a touchscreen button for the tender/media record that you created in Step 3, and select the **Key Type** as **Service Total**. Touchscreen Programming provides more information about configuring the touchscreen **Autofire Time Edit Screen**.
9. In the EMC, select **RVC Information**, **RVC Parameters**, and then **Autofire**. You can configure the following revenue center parameters for Autofire:

Table 1 – Autofire Revenue Center Parameter Configuration

Autofire Revenue Center Parameter Options	Descriptions
Autofire Workstation	Enable this option to select the workstation from which Autofire checks are fired and printed.
Default Autofire Tender/Media	Enable this option to select the tender that was created in the previous section of this page.
Autofire Checks Allowed	Specify the number of Autofire checks that may be scheduled. The maximum allowed is 9999.
Maximum Days	This setting controls how far in advance an Autofire check can be scheduled. The valid range is 1 to 999 days.
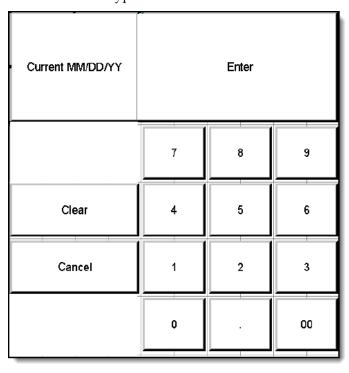
Autofire Revenue Center Parameter Options	Descriptions
Print Autofire Memo at time of entry	Enable this option to have a memo chit automatically printed when an Autofire check is entered in this revenue center.
Print Guest Check at time of Autofire	Enable this option to have a guest check printed when an Autofire check is fired. The Autofire check then becomes a regular check and all related check functions can be performed. The guest check prints at the Guest Check Printer defined for the "Autofire Workstation."
Enable Autofire in this Revenue Center	Enable this option to allow Autofire checks in this RVC. When this option is disabled, it is not possible to create Autofire checks in the Revenue Center. This option is designed to prevent excess network traffic for Revenue Centers where Autofire is not used.

Touchscreen Programming

There are several touchscreen programming requirements for the Autofire function:

- An Autofire Tender/Media key must be added to an appropriate touchscreen
- A date/time Autofire touchscreen must exist; this screen displays when the Autofire Tender/Media key is pressed

Create a touchscreen, similar to the one shown below, for date and time entry for Autofire checks. This is a typical Autofire touchscreen.

The **Current MM/DD/YY** button is a keypad function that enters the current date. This key type was created so that the user can easily enter the date for an Autofire check when the check is to be fired the same day it is being entered on the workstation.

1. Create the following keys for the Autofire Touchscreen:
   - Key - Current MMDDYY
     Legend - Enter Current MM/DD/YY for the key label
     Type - Keypad
     Select - Current MMDDYY
   - Key - Enter
     Legend - Specify Enter for the key label
     Type - Keypad
     Select - Enter
   - Key - Clear
     Legend - Enter Clear for the key label
     Type - Keypad
     Select - Clear
   - Key - Cancel
     Legend - Enter Cancel for the key label
     Type - Function
     Function Key Categories - Select Movement
     Select - Cancel
   - Keys - Numbers 0-9 and 00 (repeat these steps for each number)
     Legend - Enter a number 0-9 for the key label
     Type - Keypad
     Select the appropriate Numeric setting (0-9 or 00)
   - Key - Decimal Point
     Legend—Enter a "**.**" for the key label (do not include the quote marks)
     Type - Keypad.
     Select - Decimal "**.**" key

2. Add an Autofire button to an appropriate touchscreen, such as the Food shell.
   - Key – Autofire
     Legend - Enter a key label, such as Autofire
     Type - Tender/Media
     Select – the Autofire Tender/Media

3. From the Touchscreen Assign module, select the Autofire screen you previously created (for date/time entry).
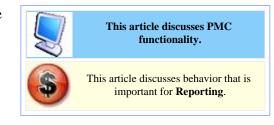
   When the touchscreen button assigned to the Autofire Tender/ Media is pressed, the workstation displays the touchscreen configured as the **Autofire Time Edit Screen** in the **Touchscreen Assignment** module.

Printing Autofire Checks

Autofire checks are printed from the default Autofire workstation defined in the RVC Parameters module. This workstation's order device output settings are used for all Autofire orders in the Revenue Center. If a default workstation is not specified, the last workstation from which the Autofire check was created is used. Like regular guest checks, the workstation notifies the user when a print job is sent to the backup printer.

Autofire Open Check Report

The **Autofire Open Check Report** lists all checks that are scheduled for autofire at the time the report is run. Checks are grouped by employee and sorted by scheduled date and time.
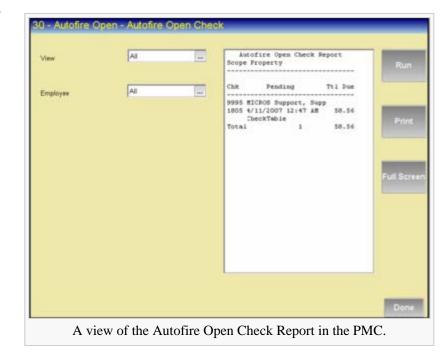
	This article discusses PMC functionality.
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report

The PMC version of the report allows a choice of **View** and **Employee**. The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Autofire Open Check Report in the PMC.

mymicros.net Report

This section of this article is a stub. This means that this page requires more information than it currently has. To request immediate attention for this page or to add suggestions, click here.

Report Examples

- PMC Autofire Open Check

See also
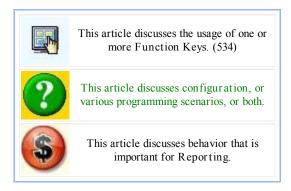
- PMC Reports
- WS Autosequences
- List of PMC Reports

Automatic Service Charge

An Automatic Service Charge is a service charge that applies to
items automatically, without being entered by operator
intervention. This feature is typically used in Banquets or Room
Service Revenue Centers.

This article discusses the usage of one or
more Function Keys. (534)

This article discusses configuration, or
various programming scenarios, or both.

This article discusses behavior that is
important for Reporting.

Contents

EMC Configuration

Service Charge

Some specific configuration is necessary for Automatic Service Charges:

- Option bit #1 OFF (Preset)
- Option bit #2 OFF (Percentage)
- Percent field configured for the percent to be charged (the example image shows 20%)

Tip Configuration

Automatic Service Charges can post to Employee Tip Reports as service charges or charged tips, or the
service charges may not post to tip reports at all.

#4 - Post to Service Charges Total on Tip Reports
    This option should be enabled if this service charge will count as "service charge tips" on Employee
    Tip reports.
#3 - Post to Charged Tips Total on Tip Reports
    This option should be enabled if this service charge will count as "charged tips" on Employe Tip
    Reports
Service Charges collected by "the house"
    If the automatic service charge is not paid to the servers, both options #3 and #4 should be disabled.
    This is a typical configuration when the service charges are paid to "the house" and not to the
    employees.
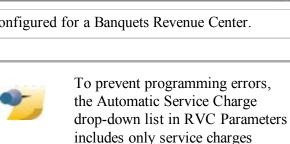
Floor Amount

Optionally, the [17 - Use Floor Amount] option can set the minimum amount of an automatic service charge. This setting guarantees that a service charge for a check will have a minimum amount. Consider the example of a 10.00 check with a 20% service charge. If the site has this option ON and the "Amount" set to 3.00, the service charge will be 3.00, even though it should only be 2.00 (20% of 10.00 is 2.00)

RVC Parameters

In Revenue Center Parameters, on the

An automatic service charge configured for a Banquets Revenue Center.

General tab, the Automatic Service Charge is selected. Additionally, the "# of guests Before Auto Service Charge" field can be given a value to determine if the Automatic Service Charge is always on, or if it becomes enabled after a certain number of guests. (See below.)
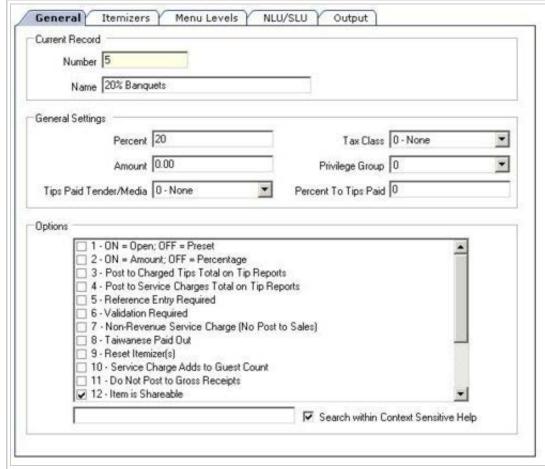
> To prevent programming errors, the Automatic Service Charge drop-down list in RVC Parameters includes only service charges configured as the Preset Percentage type (option bits 1 and 2 are OFF).

For a "true" automatic service charge (where it is is always on), the [Auto Service Charge Defaults to Off] option (#10 on the Options tab), would be disabled. To prevent the service charge from enabling for all transactions, this option should be enabled. With the [Auto Service Charge Defaults to Off] bit enabled, there are two possibilities:

- Typical usage: The intent of the [Auto Service Charge Defaults to Off] option is to allow a Revenue Center to be configured so tables with a certain number of guests or more apply the automatic service charge, but there is no service charge when there are fewer guests. For instance, a Revenue Center may have a policy where an automatic service charge is added to tables of six guests or more. In this scenario, the option is ON, and the "# of Guests Before Auto Service Charge" is configured to 6.
- Non-standard usage: The option can be ON, and the "# of Guests Before Auto Service Charge" is configured to 0. In this situation, the automatic service charge can be applied at any time, by pressing a touchscreen key of the service charge. From that point forward, the check will calculate the Auto Service Charge. This method is used infrequently.

Menu Item Class

The Automatic Service Charge will apply to all items in a Menu Item Class with the [Add to Automatic Service Charge Itemizer] option bit enabled. This is very important — the itemizer of the service charge does not matter, and the itemizer of the menu item class does not matter. The only consideration for applying the Automatic Service Charge is this option bit.

Reporting

A service charge will report to tracking as a "0" count when it is automatic. This behavior is intentional, because the service charge was not actually ordered. This is similar to how taxes report.

Service Charge Exemption
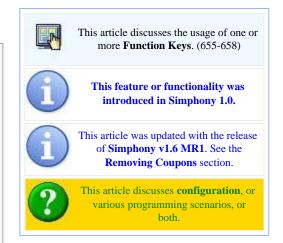
When the automatic service charge is enabled for a check, it is possible to remove the service charge by using the [Exempt Auto Service Charge] function key (534). To use this function key, the operator must be associated with an Employee Role with the [Authorize/Perform Automatic Service Charge Exemptions] option enabled.

Automatic Coupon Discount

"Coupons" redirects here. See Coupons (disambiguation) for other articles about coupon functionality.
*This article is about discounts programmed in EMC as **Coupon (Automatically applied, operator must enter)**. See Manual Discount for information about manual discounts. See Automatic Discount for information about automatic discounts.*

This article discusses the usage of one or more **Function Keys**. (655-658)

This feature or functionality was introduced in Simphony 1.0.

This article was updated with the release of **Simphony v1.6 MR1**. See the **Removing Coupons** section.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

Understanding automatic coupon discounts

An automatic coupon discount is applied to the check without user-interaction. The workstation applies automatic coupon discounts based on conditions within the transaction, and only after the operator informs the workstation that the discount is available. For instance, a site may run a promotional sale: *with this coupon, buy one DVD and receive one CD for free*. In this sale, whenever both a CD and a DVD appear on a single transaction and you enter a coupon on the check, a 100% discount applies to the CD. There are several automatic discount types. This scenario is just one example of an automatic discount configuration.

Related Links: Discount

Types of automatic coupon discounts

This section is a summary of the available Automatic Coupon Discount Types. For further information, read the main article on each type of discount.

Item Price Substitution
    This type of discount is used in scenarios such as "All Beverages are half-
    price on Tuesday", or "If three burgers are ordered, they are all 20% off."
    See the "Sales Price" description as well; it is similar to this type.

Quantity Threshold
    This type of discount is used for Buy-One-Get-One scenarios, such as
    "Buy one DVD and get one CD for 50% off", or "Buy three shirts and a tie is free."

Total Price Threshold
    This type of discount is used for scenarios such as "15% off all purchases of $200 or more".

Combination Pricing
    This type of discount is used for combination meals, such "when Fries/Soda/Burger are applied on one check,
    charge $4.00".

Sales Price
    This type of discount is similar to Item Price Substitution, but it is simpler to program. Use this type of discount for
    "all burgers are $2.00 on Wednesdays", without the option of configuring Minimum Quantity of trigger items or
    Max Count per check.

Discount interaction (exclusivity)

Discount exclusivity is a concept that controls the manner in which different discounts interact with each other. You can
configure discounts to be exclusive to the entire transaction or per menu item. Discounts can be part of user-defined
exclusivity groups, allowing a discount to interact with some specific discounts but excluding other specific discounts.

Related Links: Discount Exclusivity

Configuring automatic coupon discount options

1. Navigate to *EMC > Enterprise / Property / Zone > Configuration > Discounts > General*.
2. Set the Activation Type to **2 - Coupon (Automatically applied, operator must enter)**. (The image shows all three
   choices of the drop-down.) When the Activation Type is Coupon, the Percent field and Trigger MI Group fields are
   dimmed. In addition, several discount options do not apply to these automatic discount types (see below).
3. Select the Tax Class that is discounted when this discount is applied.
4. Select a Privilege Group to restrict the use of this discount to only employees who are linked to the same privilege
   group. Set the Privilege Group to 0 to allow this discount to be used by all employees.
5. Select the Condiment Discountability.
6. Select the Report Group to associate with this discount.
7. Not all discount options apply to automatic coupon discounts. The following options are functional for automatic
   coupon discounts:

Option	Description
1 - ON = Open; OFF	Select this option to make this discount an open discount, prompting the operator for the amount or percentage. Unselect this option to use a preset amount or preset percentage for this discount.

= Preset	
2 - ON = Amount; OFF = Percentage	Select this option to make this discount an amount discount. Unselect this option to make this discount a percentage discount.
3 - This is an Item Discount	For automatic discounts, this option controls the sorting/consolidation of the discount on a check. Selecting this option causes each item in the Menu Item Award Group to show the discounted amount on customer receipts and on the workstation display. When this option is unselected, all items in the Menu Item Award Group show a combined discounted amount as one entry.
4 - Employee Meal	Select this option so this discount prompts for the employee receiving the discount. For more information, see the discussion above.
5 - Reference Entry Required	Select this option to require the operator to enter a name or number (up to 19 alpha characters) when using this discount. For more information, see Reference Entry.
6 - Validation Required	Select this option to cause a validation chit to print when this discount is used. For more information, see Validation Required.
7 - Limit Discount to Value in Amount Field	Select this option to limit the amount of a discount. For coupon discounts, this field is functional for Item Price Substitution Discounts only, and only when the discount is programmed as a **Percent Off** discount. This option does not apply in any other configuration. Enter an amount in the Amount field, which represents the highest discount possible when this option is selected.
8 - If No Amount is Entered, Use the Full Discountable Amount	Select this option to control the open amount discount calculation if the operator does not enter an amount before pressing this discount key. In essence, this option allows you to program a discount as both a 100% discount (if no amount is entered prior to selecting this Discount key) and as an open amount discount (if the amount is entered prior to selecting this Discount key). Selecting this option along with the **[Limit Discount to Value in Amount Field]** option is a good way to configure discounting coupons. A site has a $10 coupon that can be used for up to $10 per transaction, but if the transaction amount is only $7.50, the coupon is applicable for $7.50. In this situation, the discount can be programmed as an open amount discount with $10 in the Amount field and having this option selected, as well as selecting [Limit Discount to Value in Amount Field]. Then, transactions above $10 have the discount applied as $10, while transactions under $10 have the discount applied for the full discountable amount of the check, which is under $10. You cannot program a coupon as a preset amount discount in this coupon scenario, because when the operator attempts to enter the $10 preset amount discount, the $7.50 check returns the error "Discount Amount Too Large".
9 - Simple Item Exclusivity	When you select this option, only this discount can apply to a menu item. This prevents individual items from being discounted more than once. When this option is unselected, the settings on the Exclusivity tab determine how this discount interacts with other discounts.
10 - Tender Required (Only for Subtotal Discounts)	Select this option to require the operator to tender the transaction after applying a subtotal discount. Unselect option **[3 - This is an Item Discount]** when using this option.

11 - Affects Auto Service Charge (Only Subtotal Discounts)	Select this option to apply this discount to an automatic service charge. Unselect this option to apply this subtotal discount only to the subtotal of menu items sales.
12 - Check for Valid DHC Employee Number (Simphony v1 only)	DHC sites only: Select this option to have the system verify that the employee number entered for an employee meal is a valid DHC employee number.
14 - Do Not Allow Subtotal Discount While Seat Filter is Active	Select this option if this is a subtotal discount that should not be posted while seat filtering is active. Unselect this option if this is an item discount or if seat handling is not in use.
17 - Item is Shareable	Select this option to allowing sharing of this discount between two or more seats or checks through TouchEdit or TouchSplit.
18 - Employee Meal Discount Applies to Scheduled Employees Only	Set this option for sites using timekeeping and only when discount option **[4 - Employee Meal]** is selected. Selecting this option allows this discount to be used as an employee meal discount only for employees who are scheduled to work. When this option is unselected the workstation does not check the time schedule before applying this discount.
22 - Employee Meal Discount Applies to Employees On Break Only	Set this option for sites using timekeeping and only when discount option **[4 - Employee Meal]** is selected. Selecting this option allows this discount to be used as an employee meal discount only for employees who are on breaks. When this option is unselected the workstation does not check the time schedule before applying this discount.
23 - Simple Transaction Exclusivity	When this option is selected, only this discount can be applied to a single check. This prevents the check from being discounted more than once. When this option is unselected, the settings on the Exclusivity tab determine how this discount interacts with other discounts.
24 - Discount is Final	When this option is selected, you cannot apply additional discounts to the transaction after this discount is posted.
25 - Discount Combo	When this option is selected, combo group menu items are discounted if the **Allow Discounts** option is

Meal Group Items (Simphony v2 only)	selected for the combo group.
29 - Menu item to use check open time	When this option is selected, a menu item uses the check's open time (instead of using the current time) to determine effectivity of the discount.
30 - Selected menu item to include parent menu item in discount	When this option is selected, a parent menu item is included in the discount when you select a child menu item for the discount.
31 - Net Automatic Service Charge Itemizer	When this option is selected, the net value of the menu item posts to the Automatic Service Charge Itemizer, reducing the Automatic Service Charge total after the discount is applied. When this option is unselected, the Automatic Service Charge Itemizer posts the full value of the menu item and the Automatic Service Charge is not reduced. This option applies only to item discounts (Discount option [3] selected) and only when the menu item it is applied to is set to add to the Automatic Service Charge Itemizer (Menu Item Class option 12 selected).

You can configure more fields for automatic coupon discounts on the Auto tab. For more information, read the main article about the specific types of automatic discount.

Configuring automatic coupon discount effectivity

You can configure all discounts — automatic, coupon, or manual — to be effective at different times of day, different days of the week, or for a specific date range.

Configuring automatic coupon discount per revenue center

1. Navigate to *EMC > Revenue Center > Setup > RVC Parameters > Options*.
2. Select option **[48 - Enable Automatic Discounts by Default]** to automatically apply automatic coupon discounts for this revenue center. When this option is unselected, automatic coupon discounts are not applied by default and must be turned on per transaction. You can override this setting using one of the following function keys to control automatic discount behavior.

Function Key	Description
655 - Auto Discount Toggle	This key toggles the automatic discounts on and off. By default, every transaction sets automatic discounts to enabled or disabled based on the RVC Parameter option **[48 - Enable Automatic Discounts by Default]**. This function key toggles the state of the discounts only for the transaction.
656 -	This key applies all discounts possible based on the discount configuration. Unlike Auto Discount Toggle,

Auto Discount Apply	this function key turns on all discounts that apply to the point that the function key is used. Subsequent menu items added to the check are not considered for automatic discounts.
657 - Auto Discount Remove	This key removes all discounts that have been applied to the transaction.
658 - Remove Coupon Discounts	This key shows a dialog with all coupons that have been applied to the transaction. Within the dialog, you can select and remove coupons.

To aid a programmer in determining why a discount did or did not apply, a special feature of function key 656 exists. When entering "1702" before pressing this key, a diagnostics window appears showing the inner workings of the Discount Engine. The data displayed in the window is also written to the Ops log, which can be retrieved through EMC.

Using automatic coupon discounts

In an environment with automatic coupon discounts, the workstation functionality is generally the same, with a few noticeable differences:

- After you enter the coupon, the check detail area removes discounts automatically. Discounts are added automatically when transaction criteria is met and removed automatically when another discount presents a "better deal".
- You cannot void automatic coupon discounts. However, you can remove them (see Removing Coupons on this page).
- When automatic coupon discounts have been applied to the check, you cannot service total the check. It must be paid.

How behavior differs between auto discounts and coupon discounts

Discounts that are programmed as the coupon activation type do not apply to transactions automatically until they are first entered by the operator. Coupons are used in scenarios such as this:

- A retail store sends a 20% coupon mailer. The coupon is good for 20% off any single item in the store.
- A customer may present this coupon at any time during the transaction or even before the transaction. The operator enters the coupon.
- As the customer's order is entered into the workstation, the automatic discount applies to the highest-priced item ordered, thus giving the customer the "best deal".

Coupon Discounts are not necessarily physical coupons. The coupon functionality is for a discount that automatically applies to a check, but not to all checks. For instance, an employee meal may be configured as a coupon discount. With this configuration, the operator enters the coupon because the meal is for an employee, not because a physical piece of paper is presented. This discount is not programmed as an automatic discount because employee meals do not apply to all checks.

This example demonstrates the difference between automatic discounts and coupon discounts. With both types, the workstation applies the discount based on the transaction rules, providing the customer with the "best deal". However, coupon discounts do not apply to the check until the operator enters the coupon.

Note that it is also possible to ring in the coupon after all the menu items have been ordered. In fact, this method may be more efficient — when several coupons are present, the workstation must consider the rules for all of them and determine which items become discounted; by applying all the coupons at the end of the transaction, the workstation can more easily calculate the business rules. Instead of calculating while the transaction is in progress and then recalculating when another item is added, the workstation calculates the total once.

Removing coupons

There may be situations when either the customer or the operator wants to remove a coupon from a check.

1. Click the **[Remove Coupon Discounts]** function key (658). The workstation shows a dialog of all coupons that have been entered on the transaction.
2. Select the coupon and press OK to remove it.

With the release of Simphony v1.6 MR1, you must remove coupon discounts using a touch '**Void**' key. The Function 11 - **[658 - Remove Coupon]** has been removed from the Touchscreen Design list. If there was a previously configured **Remove Coupon** button *prior* to an upgrade to v1.6 MR1, the error message, "This method is obsolete. Use the void key to remove a coupon discount." appears after selecting this button.

See also
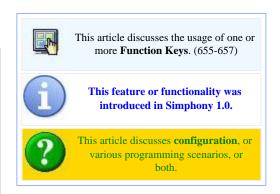
Discounts	Discount · Manual Discount · Automatic Discount · **Automatic Coupon Discount** · Automatic Discounts for Decimal Quantity Menu Items · Combination Pricing Discount · Item Price Substitution Discount · Quantity Threshold Discount · Sales Price Discount · Total Price Threshold Discount · Discount Engine · Discount Exclusivity · Discount NLU · Menu Item Group · Revenue Center Group
Learning series: Discounts	

Automatic Discount

*This article is about discounts programmed in EMC as **Automatic (Automatically applied, operator cannot enter)**. See Manual Discount for information about manual discounts. See Automatic Coupon Discounts for information about coupon discounts.*

This article discusses the usage of one or more **Function Keys**. (655-657)

This feature or functionality was introduced in Simphony 1.0.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Understanding automatic discounts
    - 1.1 Types of automatic discounts
    - 1.2 Discount interaction (exclusivity)
    - 1.3 Rules for automatic discounts and automatic coupon discounts
        - 1.3.1 Best deal for customer
        - 1.3.2 Best deal for merchant
- 2 Configuring automatic discount options
- 3 Configuring automatic discount effectivity
- 4 Configuring automatic discounts per revenue center
- 5 Configuring discount privileges
- 6 Using automatic discounts
- 7 See also

Understanding automatic discounts

An automatic discount is applied to the check without user-interaction. The workstation applies automatic discounts based on conditions within the transaction. For instance, a site may run a promotional sale: *buy one DVD and receive one CD for free*. In this situation, whenever both a CD and a DVD appear on a single transaction, a 100% discount will apply to the CD. There are several automatic discount types. This scenario is just one example of an automatic discount configuration.

Related Links: Discount

Types of automatic discounts

This section is a summary of the available Automatic Discount Types. For further information, read the main article on each type of discount.

Item Price Substitution
    This type of discount is used in scenarios such as "All Beverages are half-

Main Articles
Item Price Substitution Discount
Quantity Threshold Discount
Total Price Threshold Discount

price on Tuesday", or "If three burgers are ordered, they are all 20% off."
See the "Sales Price" description as well; it is similar to this type.

Quantity Threshold
This type of discount is used for Buy-One-Get-One scenarios, such as
"Buy one DVD and get one CD for 50% off", or "Buy three shirts and a tie is free."

Total Price Threshold
This type of discount is used for scenarios such as "15% off all purchases of $200 or more".

Combination Pricing
This type of discount is used for combination meals, such "when Fries/Soda/Burger are applied on one check, charge $4.00".

Sales Price
This type of discount is similar to Item Price Substitution, but it is simpler to program. Use this type of discount for "all burgers are $2.00 on Wednesdays", without the option of configuring Minimum Quantity of trigger items or Max Count per check.

Discount interaction (exclusivity)

Discount exclusivity is a concept that controls how different discounts interact with each other. Discounts can be programmed to be exclusive to the entire transaction or per menu item. in addition, discounts may be programmed as part of user-defined exclusivity groups, allowing a discount to interact with some specific discounts but excluding other specific discounts.

Related Links: Discount Exclusivity

Rules for automatic discounts and automatic coupon discounts

- Automatic discounts and automatic coupon discounts can only be applied during fast transactions.
- Automatic discounts and automatic coupon discounts use menu item groups to determine which items should be discounted. The "discount itemizers" from legacy products do not apply to the automatic discount model.
- The "better deal" always wins. For instance, if you enable both "buy one DVD get one CD for free" and "buy one DVD get one car for free", the workstation discounts the price of the car to $0.00 because this is a better deal than receiving a CD for $0.00. When you use automatic discounts, the discount engine performs calculations to determine which discounts are applied and which items receive a discount. Two types of calculations determine the discounts: best deal for customer and best deal for merchant.

Best deal for customer

Each automatic discount type provides the "best deal" for the customer, which means that the workstation scans all menu items and determines the largest discount to apply. In this example configuration, a common best deal scenario is described as follows:

- A combo discount is configured so any Pants-and-Shirt purchase is $30.
- If a customer orders a $25 pair of pants and a $20 shirt, the discount will be $15:

$25 for a pair of pants, $20 for a shirt = $45. The combination price is $30, so the discount is $15.

- If the customer then orders a $25 shirt, the discount will be recalculated:

$25 for a pair of pants, $25 for a shirt = $50. The combination price is $30, so the discount is $20.

In this example, the higher-priced shirt is discounted, so the customer receives a total discount of $20 instead of just $15. This is the behavior for all automatic discounts and it is not configurable (except for Quantity Threshold Discounts; see the next section). By default, Ops considers all menu items on the check and all discounts that can apply, and creates the largest possible discount for the customer.

Best deal for merchant

You can configure quantity threshold discounts to provide the best deal for merchant, which means that the lowest possible discount will be given to the customer. This configuration is required in some jurisdictions. Consider this discount: *buy one entree and get a second (of equal or lesser value) for 50% off*. The two examples show the different behavior of the discount based on the best deal configuration.

```
-- Ex 1: Best for Customer --
 Filet              20.00
 Chicken Dinner     15.00
 Spaghetti          10.00
 Discount           -7.50

-- Ex 2: Best for Merchant --
 Filet              20.00
 Chicken Dinner     15.00
 Spaghetti          10.00
 Discount           -5.00
```

"Best Deal for Merchant" functionality was introduced in Simphony 1.0 Service Pack 11.

- In Example 1, the Filet is the most expensive item, so it is the trigger. The Chicken Dinner is more expensive than the Spaghetti, so it is discounted by 50%. The total discount is $7.50.
- In Example 2, the Filet is the most expensive item, so it is the trigger. The Spaghetti is the least expensive entree, so it is discounted by 50%. The total discount is $5.00.

Configuring automatic discount options

1. Navigate to *EMC > Enterprise / Property / Zone > Configuration > Discounts > General*.
2. Set the Activation Type to **1 - Automatic (Automatically applied, operator cannot enter)**. (The image shows all three choices within the drop-down.) When the Activation Type is Automatic, the Amount, Percent, and Trigger MI Group fields are dimmed. These fields do not apply to automatic discounts. In addition, several discount options do not apply to these automatic discount types (see below).
3. Select the Tax Class that is discounted when this discount is applied.
4. The Privilege Group is not considered for automatic discounts.
5. Select the Condiment Discountability.
6. Select the Report Group to associate with this discount.
7. Only four of the discount options apply to automatic discounts. The following options are functional for automatic discounts:

Option	Description
3 - This is	For automatic discounts, this option controls the sorting/consolidation of the discount on a check.

an Item Discount	Selecting this option causes each item in the Menu Item Award Group to show the discounted amount on customer receipts and on the workstation display. When this option is unselected, all items in the Menu Item Award Group show a combined discounted amount as one entry.
9 - Simple Item Exclusivity	When you select this option, only this discount can apply to a menu item. This prevents individual items from being discounted more than once. When this option is unselected, the settings on the Exclusivity tab determine how this discount interacts with other discounts.
23 - Simple Transaction Exclusivity	When this option is selected, only this discount can be applied to a single check. This prevents the check from being discounted more than once. When this option is unselected, the settings on the Exclusivity tab determine how this discount interacts with other discounts.
24 - Discount is Final	When this option is selected, you cannot apply additional discounts to the transaction after this discount is posted.

The concept of a Revenue Center Group was introduced with the implementation of automatic discounts. In this field, select a Revenue Center Group to which this discount belongs, or select 0-All for the discount to be available in all revenue centers.

Further configuration for automatic discounts is done on the Auto tab. For more information, read the article about the types of automatic discounts.

Configuring automatic discount effectivity

In both Simphony v1 and v2, you can configure all discounts — automatic, coupon or manual — to be effective at different times of day, different days of the week, or for a specific date range. Set this configuration in the Discounts module > Effectivity tab.

Configuring automatic discounts per revenue center

Follow these steps to enable automatic discounts for a revenue center:

1. Navigate to *EMC > Revenue Center > Setup > RVC Parameters > Options*.
2. Select option **[48 - Enable Automatic Discounts by Default]** to have the discount apply automatically in this revenue center. When this option is unselected, automatic discounts must be turned on per transaction using one of the following function keys. Three function keys control automatic discount behavior:

Function Key	Description
655 - Auto Discount Toggle	This key toggles the automatic discounts on and off. By default, every transaction sets automatic discounts to enabled or disabled based on the RVC Parameter option **[48 - Enable Automatic Discounts by Default]**. This function key toggles the state of the discounts only for the transaction.
656 - Auto Discount	This key applies all discounts possible based on the discount configuration. Unlike Auto Discount Toggle, this function key turns on all discounts that apply to the point that the function key is used. Subsequent menu items added to the check are not considered for automatic discounts.

Apply	
657 - Auto Discount Remove	This key removes all discounts that have been applied to the transaction.

To aid a programmer in determining why a discount did or did not apply, a special feature of function key 656 exists. If you enter "1702" before pressing the 656 key, a diagnostics window shows the inner workings of the discount engine. The data shown in the window is written to the Ops log, which can be retrieved through EMC.

Configuring discount privileges

Automatic discounts apply to the check without regard for the operator's Privilege Group setting. However, coupon discounts require the operator to have sufficient Privilege Group settings. There are no other privilege considerations, except for use of the discount function keys. Each function key is associated with an employee role option.

- Authorize/Use Auto Discount Toggle - function key 655
- Authorize/Use Auto Discount Apply - function key 656
- Authorize/Use Auto Discount Remove - function key 657

Using automatic discounts

In an environment with automatic discounts, the workstation functionality is generally the same, with a few noticeable differences:

- The check detail area shows and removes discounts automatically. Discounts are added automatically when transaction criteria is met and removed automatically when another discount presents a "better deal".
- You cannot void automatic discounts.
- Automatic discounts are not associated with a seat number. Therefore, when filtering seats, the automatic discount is not shown on the same seat as the items it is discounting.
- You cannot service total the check after automatic discounts have been applied to the check. It must be paid.

See also

- Menu Item Groups
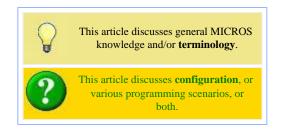
Discounts	Discount · Manual Discount · **Automatic Discount** · Automatic Coupon Discount · Automatic Discounts for Decimal Quantity Menu Items · Combination Pricing Discount · Item Price Substitution Discount · Quantity Threshold Discount · Sales Price Discount · Total Price Threshold Discount · Discount Engine · Discount Exclusivity · Discount NLU · Menu Item Group · Revenue Center Group
Learning series: Discounts	

Auto Menu Level

The term **Auto Menu Level** refers to the RVC Parameters configuration allowing the Main and/or Sub Menu Levels to change at a specific time of day.

<table>
<tr><td>💡</td><td>This article discusses general MICROS knowledge and/or **terminology**.</td></tr>
<tr><td>❓</td><td>This article discusses **configuration**, or various programming scenarios, or both.</td></tr>
</table>

Contents

- 1 Why use Auto Menu Levels?
- 2 Which Level is Active?
    - 2.1 General Example
    - 2.2 Complex Example
- 3 See also
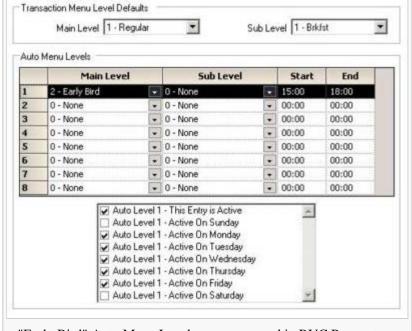
Why use Auto Menu Levels?

Typically, auto menu levels are used to control pricing levels at different times of a day or week. For instance, a Revenue Center may offer an "Early Bird Special (entrees are 20% off)" every weekday from 3pm to 6pm. For this "Early Bird Special" to automatically occur, an Auto Menu Level can be programmed for 3pm to 6pm, Monday through Friday. Menu Item Definitions would have to be programmed with multiple prices accordingly; one price on the "Early Bird" level and another "general" price. *See Menu Item Price for more information.*

"Early Bird" Auto Menu Level as programmed in RVC Parameters. Note that the Start/End times display in a 24-hour format.

Which Level is Active?

First, note that the Menu Level Hierarchy shows that menu levels programmed per Serving Period override Auto Menu Levels. Because of this, all discussions about Auto Menu Level functionality assume that the serving periods in the RVC are programmed with "0-None" as the default level.

General Example

In the simplest case, the new level or levels become active at the time the Auto Menu Level is scheduled to begin, and the level is no longer active at the scheduled end time. In the example image, the default Main Menu Level is "1 - Regular", and the Main Level will change to "2 - Early Bird" at 3pm based on the Auto Menu Level configuration. ***Note:** It is possible to change both the Main and Sub levels when an Auto Menu Level begins. In this example scenario, however, only the Main Level is changed.* At 6pm, the default Main Level will return to "1 - Regular".

Complex Example

While rare, it is possible to program Auto Menu Levels to overlap. In this case, which Menu Level will be active? The answer is based on the order in which the Auto Menu Levels have been programmed. Both of the examples displayed are for automatic Main Level changes:

Example 1

In this example, at 3pm, the Main Level will become "2 - Early Bird". Does the Main Level change to "3 - Free Drinks" at 4pm? No. When a transaction begins, the

An example of **improperly-programmed** Auto Menu Levels

#	Main Level	Start	End	Days Active
1	2 - Early Bird	15:00	18:00	Monday - Friday
2	3 - Free Drinks	16:00	17:00	Monday - Friday

workstation considers the Auto Menu Level table *in order of the programmed Auto Levels.* Therefore, the workstation looks to see if Auto Menu Level #1 is active. It is active (because the time for this Auto Menu Level is 15:00-18:00), and therefore the workstation will use the "Early Bird" main level. With this example configuration, the "Free Drinks" menu level will never be reached.

Example 2

In this example, at 3pm, the Main Level will become "2 - Early Bird". At 4pm, the Main Level will become "3 - Free Drinks." This occurs because the "Free Drinks"

An example of properly-programmed Auto Menu Levels

#	Main Level	Start	End	Days Active
1	3 - Free Drinks	16:00	17:00	Monday - Friday
2	2 - Early Bird	15:00	18:00	Monday - Friday

level is programmed at Auto Level #1, and it starts after "Early Bird" which is programmed as the Auto Level #2. The workstation's logic is:

- It is 3pm. Is Auto Level #1 active? No. Is Auto Level #2 active? Yes. Active Main Level is "2 - Early Bird"
- It is 4pm. Is Auto Level #1 active? Yes. Active Level is "3 - Free Drinks"
- It is 5pm. Is Auto Level #1 active? No. Is Auto Level #2 active? Yes. Active Main Level is "2 - Early Bird"
- It is 6pm. Is Auto Level #1 active? No. Is Auto Level #2 active? No. The Main Level is "1 - Regular", which is the default Menu Level for the Revenue Center.

Summary

The logic for determining the Menu Level of the transaction is similar to the logic used for determining the active Menu Item Price. In short, once the workstation has determined that one level is active, it does not look at other Auto Menu Levels. Therefore, careful programming should be used when configuring multiple Auto Menu Levels that occur on the same days at the same times.

See also
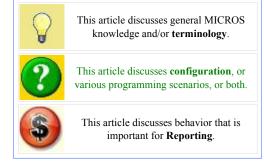
Menu Levels	Menu Levels · **Auto Menu Level** · Menu Level Hierarchy · Menu Level Pop Up · Menu Level Prefixes and Suffixes
	Learning series: Menu Levels

Autosequence Function Key

The term **Autosequence Function Key** refers to programming a touchscreen key as an "Autosequence" key type, allowing an operator to run a WS Autosequence with a single keystroke, as opposed to entering PMC and then selecting the report to run.

💡	This article discusses general MICROS knowledge and/or **terminology**.
❓	This article discusses **configuration**, or various programming scenarios, or both.
💲	This article discusses behavior that is important for **Reporting**.

Contents

- 1 EMC Configuration
- 2 Workstation Operations
- 3 Privileges
- 4 See also

EMC Configuration

Autosequence Function Keys are added to touchscreens in the touchscreen design module of EMC. To add an Autosequence Function Key:
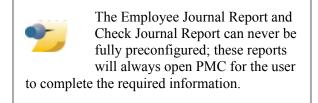
- Select a touchscreen key and choose Key Type #31, Autosequence (displayed in the sample image)
- The Key Number box will populate with the WS Autosequences that are programmed for the property. Select the appropriate autosequence.
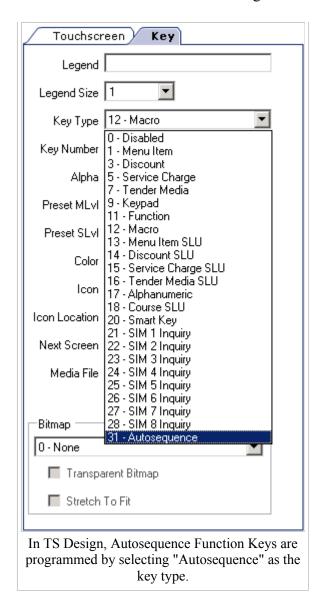
Workstation Operations

To run the autosequence, an operator simply presses the Autosequence Function Key, and the autosequence will run. If the autosequence is fully preconfigured (it does not contain any steps that prompt the user), its steps will execute without interaction. If a step does require user interaction, the workstation will display PMC and the user can enter the required information. ***Note: Mobile MICROS workstations do not support PMC; if an operator attempts to run a report requiring user input from a Mobile MICROS client, an error message will display that the key type is not supported.***

Autosequence Function Keys may be used from the Default Transaction Screen or other non-transaction screens only; the one

exception to this is when an autosequence has 16 "skip" steps, thus being used as a lockout macro.

> The Employee Journal Report and Check Journal Report can never be fully preconfigured; these reports will always open PMC for the user to complete the required information.

In TS Design, Autosequence Function Keys are programmed by selecting "Autosequence" as the key type.

Privileges

Any employee with the proper privileges may access an Autosequence Function Key. For more information, see Privilege Groups: WS Autosequence Behavior.

Barcode Scanner

*This article reviews the features and setup of the Bluetooth **mStation Scanner** for the use of reading Barcodes from mTablet \ mStation clients. This device is currently supported on Simphony v1.6 MR7 and higher.*

Contents

- 1 Overview
  - 1.1 Usage
- 2 EMC Configuration
  - 2.1 Scanner Characteristics
  - 2.2 Scanner Dock Mounting Examples
- 3 See also

	This article discusses a topic related to **hardware**.
	This feature or functionality was introduced in Simphony Simphony 1.6 Maintenance Release 7.
	This article discusses **configuration**, or various programming scenarios, or both.

Overview

A Barcode scanner has been introduced for use with the mStation. The **mStation Scanner** supports Bluetooth technology. The mStation Scanner dock is connected to the mStation and powered via a USB port. The mStation Scanner will correctly scan standard as well as 2D Quick Response Code (QR) barcodes and can successfully export them via a SIM script to 3rd party applications.

> **Note:** mTablets are required to be running **Platform Version 1.3** in order to support the **mStation Scanner**.

Usage
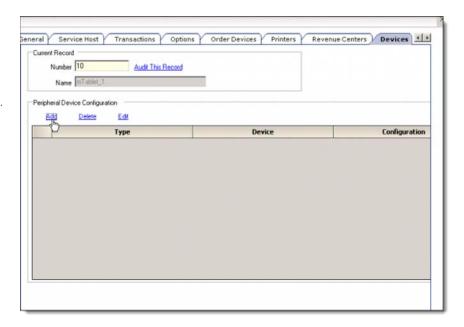
There are two modes from which users can choose to configure the mStation Scanner. The scanner can be semi-permanently mounted (**Presentation mode**) to the mStation base unit and will automatically scan items as presented to the unit's Scan Window, or it can be removed from the scanner's dock (**Trigger mode**) in order to manually scan items by pressing the **'Scan Trigger'**. Once scanning is completed from Trigger mode, the scanner can be reconnected to the dock in order to maintain the internal (rechargeable) batteries charge.

mStation Scanner	mStation with an attached mStation Scanner

EMC Configuration
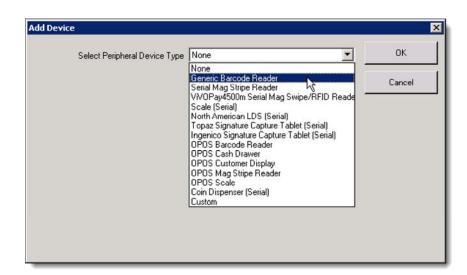
To configure an mStation Scanner, follow the steps outlined below:
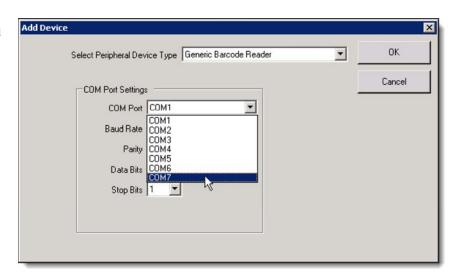
1. Add a new peripheral device to each applicable mTablet Workstation by accessing the *EMC-> Property-> Property Hardware-> Workstations-> Devices tab-> **Peripheral Device Configuration*** section. Press the **Add** link.
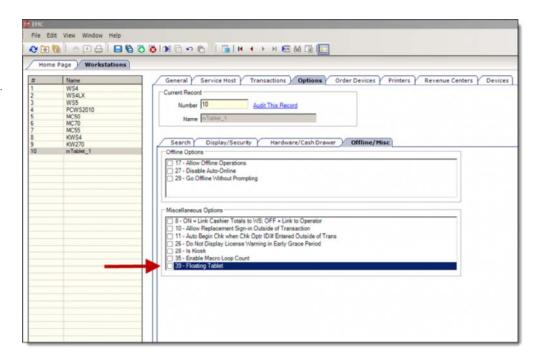
2. An **Add Device** window displays. From the **Select Peripheral Device Type** dropdown menu, select the **[Generic Barcode Reader]** device and press the **OK** button.

3. From the **COM Port Settings** section, users *must* select the **[COM7]** setting from the dropdown menu. All other settings can remain at the default settings. Press the **OK** button and **Save** all changes.

4. Configure the scanner for 2D mode by scanning the appropriate configuration barcodes contained within the "**Quick Start Guide**" enclosed with the scanner (if needed).

5. Access the *EMC-> Property-> Property Hardware-> Workstations-> Options tab-> Offline/Misc tab-> Miscellaneous Options* section-> **[39 - Floating tablet]** option and ensure that this option is *disabled*. **Save** all changes.

Scanner Characteristics

Scan Trigger

Battery Door

Scan Window

micros

Pairing LED   **Battery LED**

Power Input   **Pairing Button**   **Securing Screw Insert**

Power Pins   **Pairing Button**

Scanner Dock Mounting Examples

- As illustrated here, the mStation Scanner dock can be mounted on either side of the mStation base unit.
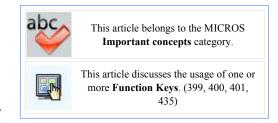
- If desired, an mStation Scanner can be mounted on the same side of an mStation base unit in tandem with a MICROS Mini Printer.

See the *Installing the mStation Wireless Scanner Kit* document available on the Hardware SharePoint.

Begin Check

The term **Begin Check** is used to describe the beginning of a transaction. There are various methods to begin checks, and the functionality is usually configured based on an employee's job function. For instance, a waiter who has a section of tables typically begins checks by table number, whereas a bartender may usually begin checks as fast transactions or possibly by check ID. ***Note:*** *The term* ***check*** *in this article is a generic term that technically means* ***transaction***. *In MICROS, there is a difference between Guest Checks and Customer Receipts, but for purposes of this article, to begin a "check" simply means to start a transaction.*

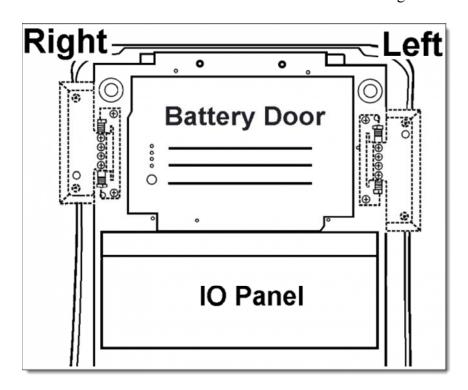|	
abc ✓	This article belongs to the MICROS **Important concepts** category.
	This article discusses the usage of one or more **Function Keys**. (399, 400, 401, 435)

Contents

- 1 Function Keys
- 2 Fast Transactions
- 3 Privileges
- 4 See also

Function Keys

399 - Begin Party Check
    This key is used to begin Party Checks. If the Revenue Center Parameters option to **[Prompt for Guest Check Information when Beginning Party Check]** is enabled, the operator will be prompted to enter Guest Information. See Party Check for more information.

400 - Begin Check by Number
    This key is used to begin checks by check number. A Revenue Center Parameter option determines if check numbers are generated automatically, or if the operator will enter a check number. Typically, check numbers are generated automatically.

401 - Begin Check by Table
    This key is used to begin checks by table number. Revenue Centers can be programmed to use either the 5-digit Table Number or the 4-character Table ID. See Table Number for more information. This function is often used by servers who are assigned a section of tables in a restaurant.

435 - Begin Check by ID
    This key is used to begin checks by Guest Check ID. This function is often used by bartenders who need a way to identify a customer. For example, a bartender may use an ID to show a customer's name, or shirt color so the check can be easily identified on the Open Check SLU.

You must be authorized to begin a guest check. You may also be required to begin a check by table number. If this is the case, you cannot begin a check by check number.

Fast Transactions

A transaction can be started as a Fast Transaction, which means that an operator presses a menu item key to start the transaction. See the Fast Transaction article for more information.

Privileges

To begin checks, an employee must be associated with an Employee Role with the **[Create New Checks using [Begin Check] key]** option enabled.

Begin Check for Another Operator

The **Begin Check for Another Operator** feature is designed for one operator to begin checks for another operator. The feature is commonly used by hosts who begin checks for servers, or by room service attendants who begin orders for the room service food runners.

This article discusses general MICROS knowledge and/or **terminology**.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Example
- 2 EMC Configuration
- 3 Workstation Functionality
    - 3.1 Using Prompts for Employee or ID Number
    - 3.2 Using Auto Begin Check
- 4 See Also

Example

Terri, the hostess, seats a party at Table 12 and takes their drink order. She then begins a check for Jerald, who will be the server at Table 12 for the remainder of their stay. Before service totalling, Terri may add the drink order for the table. If items are ordered, the sales may post to the check operator (Jerald) or the transaction operator (Terri), based on the Revenue Center Parameters posting options.

EMC Configuration

For a user to begin a check for another operator, the operator option, **[Require Check Employee Number with New Checks]**, must be enabled, or the workstation option **[Auto Begin Check when Check Operator Number or ID is Entered Outside of a transaction]** must be enabled.

Optionally, the operation option, **[Use Employee Number to Open Check for Another Employee]**, may be enabled. If this option is enabled, the operator beginning the check will be required to enter the employee number of the operator for whom the check is being started. When this option is not selected, this operator will be required to enter the Employee ID of the other operator.

Workstation Functionality

Using Prompts for Employee or ID Number

1. Sign in.
2. Begin a check and, if necessary, enter a check number or table number.
3. The workstation prompts for the employee number/ID, based on the EMC configuration above.
4. Enter the employee number or Employee ID of the employee for whom you are opening this check.

5. A new check displays, ready for transaction entries.

Using Auto Begin Check

This functionality is only in use when the workstation option, **[Auto Begin Check when Check Operator Number or ID is Entered Outside of a transaction]** is enabled. ***Note:*** *This option cannot be used to open checks by table number.*
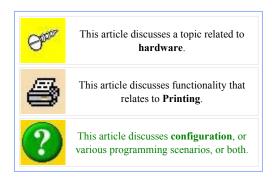
1. Sign in.
2. Enter the employee number or Employee ID of the employee for whom you are opening this check.
3. If necessary, enter a check number.
4. A new check displays, ready for transaction entries. Your last name appears in the upper right corner of the display. The check operator's name and employee number appear in the transaction summary.
5. If necessary, assign a table number using the **[Table Number]** function key.

Bluetooth Printer Bixolon-SPP-R200II Setup

This article reviews the setup of the Bixolon-SPP-R200II Bluetooth printer. This device is supported for both versions of Simphony (v1.x and v2.x) and for all supported Mobile MICROS handhelds.

Contents

	This article discusses a topic related to **hardware**.
	This article discusses functionality that relates to **Printing**.
	This article discusses **configuration**, or various programming scenarios, or both.

Printer Configuration

In order to modify the default printer configuration for the Bixolon-SPP-R200II Bluetooth printer, users should download and utilize the **Unified Mobile Utility** v.3.0.1 or v3.0.2.
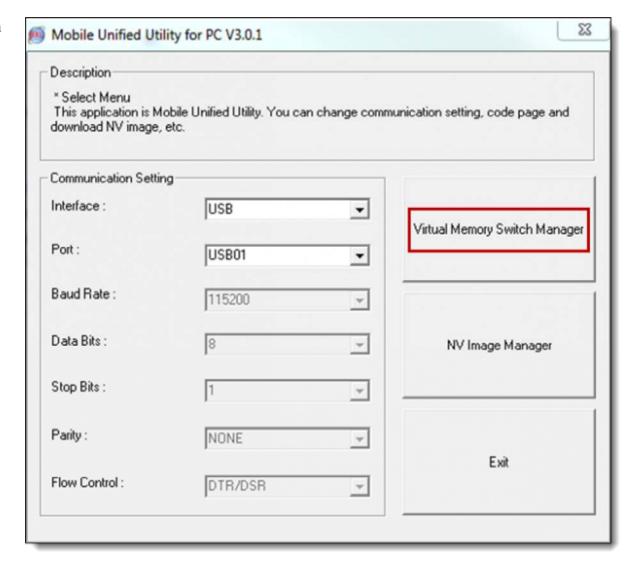
It's available for download using the following link:
http://www.bixolon.com/html/en/download/download_product.xhtml?prod_id=18

Once downloaded and installed, follow the steps as outlined below:

1. Connect a
   USB cable
   between

the Bixolon printer and a PC and switch the printer from OFF to ON.

2. Under

Mobile Unified Utility for PC V3.0.1

Description

* Select Menu
This application is Mobile Unified Utility. You can change communication setting, code page and download NV image, etc.

Communication Setting

Interface :	USB
Port :	USB01
Baud Rate :	115200
Data Bits :	8
Stop Bits :	1
Parity :	NONE
Flow Control :	DTR/DSR

Virtual Memory Switch Manager

NV Image Manager

Exit

Communication Setting, within the '**Interface'** dropdown menu, select the '**USB'** connection type.

3. Select the correct **USB Port** from within the dropdown menu for the '**Port'** field.
4. From the PC's Desktop, click on the *Start button-> All Programs-> BIXOLON-> **Mobile Unified Utility***
5. Select the '**Virtual Memory Switch Manager'** button.

6. Select the **'Interface Setting'** tab.

7. Set the following fields to the listed settings as shown below:

   ▪ **Baud Rate**
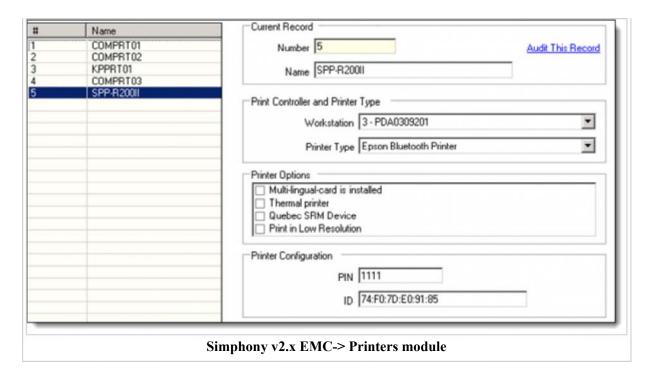
19200
- **Parity - None**
- **Data Bits - 8**
- **Flow Control - DTR/DSR**
- **Select RF Interface Type - Bluetooth**
- **Enable Bluetooth Setting - Select the check box to enable**
- **Authentication Encryption - Enable**
- **Connection Mode - Mode 2**
- **PIN Code - 1111** (Or another code of your choice)
- **Printer Name - SPP-R200II**

8. Select the **Save** button and the printer will be updated with the new settings.
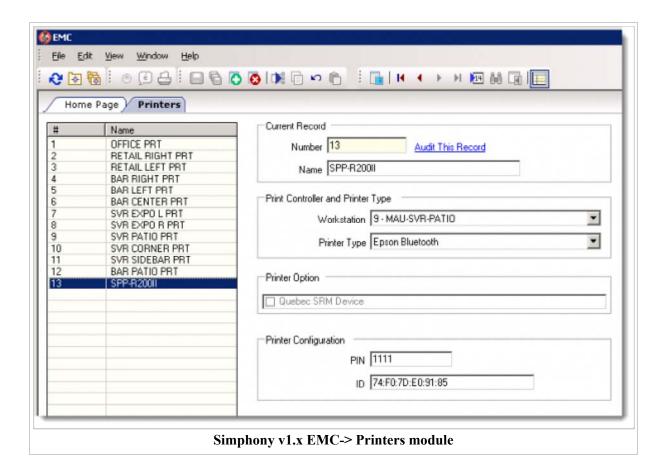
EMC Configuration

Shown here is the Simphony v2.x EMC-> **'Printers'** module.

1. Set the following settings as shown below:

Simphony v2.x EMC-> Printers module

- **Name - SPP-R200II (Printer Name)**
- **Printer Type - Epson Bluetooth Printer**
- **PIN - 1111 (Use the PIN Code that was set during the printer setup)**
- **ID - 00:00:00:00:00:00 - The Mac or Hardware address can be determined by running the printers Self Test!**

Shown here is the Simphony v1.x EMC-> **'Printers'** module.

Simphony v1.x EMC-> Printers module

Self-Test Instructions
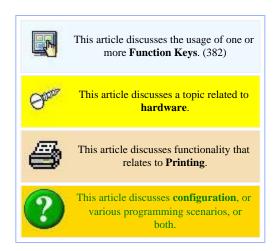
1. Turn the printer power off and close the printer paper cover.
2. Pressing the paper feed button and power button simultaneously turns the printer on.
3. The printout is produced after releasing the two buttons.
4. To add a printout of the ASCII pattern, press the paper feed button once more.
5. After the ASCII pattern is printed out, the self-test is automatically terminated

Bluetooth Printing

In Simphony, **Bluetooth Printing** refers to the configuration and usage of printing from an mTablet E Series workstation or a Mobile MICROS client to a wireless printer via the Bluetooth protocol.

This article discusses the usage of one or more **Function Keys**. (382)
This article discusses a topic related to **hardware**.
This article discusses functionality that relates to **Printing**.
This article discusses **configuration**, or various programming scenarios, or both.
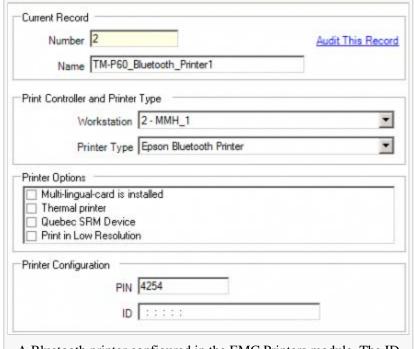
Contents

- 1 Configuring Bluetooth printing in EMC
- 2 Configuring Bluetooth printing in Ops
    - 2.1 Simphony version 2.7 with mTablet E Series
- 3 Supported printer hardware
- 4 See also

Configuring Bluetooth printing in EMC

1. From the EMC property scope, select the Printers module and then select or create a printer. In form view, a Bluetooth configuration panel appears (as shown on the right).
2. You can configure the Bluetooth printer using one of the following methods, depending on the environment where the handheld is being used:

    - The handheld device always uses the same Bluetooth printer. In this environment, enter the Bluetooth ID of the printer in the ID field. (This configuration is not shown in the image.)
    - The handheld device frequently uses different Bluetooth printers. This environment is common in stadiums or other large venues where the handheld devices are not stored with the same printers when not in use. In this type of environment, leave the ID field blank and configure the printer through the Printer dialog box.
    - The Bixolon-SPP-R200II model is supported for Bluetooth printing using the

    Printer Type of **[Epson Bluetooth Printer]** for mTablet Clients and all supported handheld devices (for Simphony version 1.6 MR6 and later and Simphony version 2.x).

A Bluetooth printer configured in the EMC Printers module. The ID field is blank in this example because the Mobile MICROS client frequently uses different Bluetooth printers.

Configuring Bluetooth printing in Ops

When you configure the Bluetooth printer with a Bluetooth ID in the EMC, you do not need to configure anything on the Mobile MICROS device.

When you configure the Bluetooth printer with a blank Bluetooth ID in the EMC, you must also configure the mTablet or Mobile MICROS device to print to the printer.

In a typical configuration, a Mobile MICROS device is the print controller for only one Bluetooth printer. However, if a device controls multiple printers, the steps shown here occur for each printer that the Mobile MICROS client controls.

Follow these configuration steps (generally at the beginning of the user's shift):

1. The user signs in to the device and presses the **[Select Printers]** function key (382).
2. The device shows a dialog box with the printer name from EMC. Press **OK**.
3. The Select Printer dialog appears. Press **[Search for Printers]**.
4. The device searches for all Bluetooth devices within range.
5. A list of all Bluetooth devices appears, showing the Bluetooth printer name its Bluetooth ID. Select the appropriate printer.
    - The Bluetooth printer's name that appears in the list is the physical printer name, not the name that is configured in EMC. This name is configured via an EPSON or Bixolon-SPP-R200II configuration utility.
    - When multiple printers are in range, they all appear. To determine a printer's Bluetooth ID, the P60 printer can print a diagnostics chit. To print this chit, power off the printer, and then press "feed" while powering the printer on.

The Bixolon-SPP-R200II printer does 'not' print the printer's PIN or Bluetooth ID number for security reasons. You can configure the device's Bluetooth ID using the software (cabling purchased separately) that accompanies the printer.

This configuration is only valid as long as the Ops process is running. If the user closes Ops or restarts the client device, you will need to re-configure the Bluetooth printer in Ops. In addition, the client provides a catch-all feature when the printer is not configured. If the user forgets to configure the printer, the Select Printer dialog box appears the first time a print job is attempted, and the user must perform steps 3 through 5.

Simphony version 2.7 with mTablet E Series

There is a one-to-one relationship between a tablet and a Bluetooth printer. In other words, after you identify and configure a Bluetooth printer in the EMC and pair it with a specific mTablet E Series workstation as the Print Controller Service Host, you cannot assign another mTablet workstation or Mobile MICROS handheld device to the same Bluetooth printer.

Supported printer hardware

- The EPSON P60 model works with Bluetooth printing.
- The Bixolon-SPP-R200II model works with Bluetooth printing with Simphony 1.6 MR6 or later and Simphony v2.x, using the **Printer Type** of **Epson Bluetooth Printer**.

See also

- Bluetooth Printer Bixolon-SPP-R200II Setup
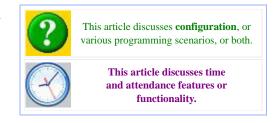- Mobile MICROS

Printing (Hardware)	Printing · Printers (EMC Module) · **Bluetooth Printing** · IP Printer · Order Device · Print Controller · Roll Printer · Slip Printer · Hardware Specs
Learning series: Printing	

Break

A **Break** is a rest period for hourly workers, such as a lunch break, that can be tracked by Simphony. Breaks can be either paid or unpaid and time limits may be set for breaks. The time spent on unpaid breaks subtracts from the total time credited for pay by Simphony.

This article discusses **configuration**, or various programming scenarios, or both.

This article discusses time and attendance features or functionality.

Contents

- 1 EMC Configuration
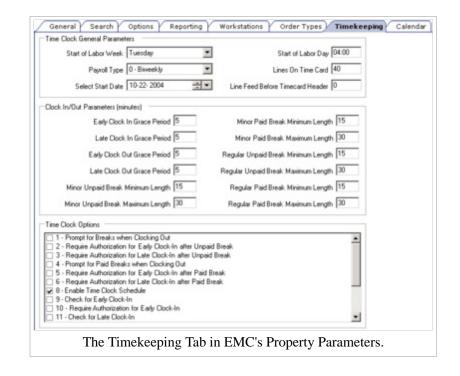
EMC Configuration

Parameters for breaks are configured within the Timekeeping tab of the Property Parameters module. The following configurable fields relate to breaks:

The Timekeeping Tab in EMC's Property Parameters.

Minor Unpaid Break Minimum Length
> Some jurisdictions legislate break length requirements for minor employees. If applicable, enter the minimum number of minutes allowed for unpaid breaks taken by a minor employee.

Minor Unpaid Break Maximum Length
> Some jurisdictions legislate break length requirements for minor employees. If applicable, enter the maximum number of minutes allowed for unpaid breaks taken by a minor employee.

Minor Paid Break Minimum Length
> Some jurisdictions legislate break length requirements for minor employees. If applicable, enter the minimum number of minutes allowed for paid breaks taken by a minor employee.

Minor Paid Break Maximum Length
> Some jurisdictions legislate break length requirements for minor employees. If applicable, enter the maximum number of minutes allowed for paid breaks taken by a minor employee.

Regular Unpaid Break Minimum Length
> Enter the minimum number of minutes allowed for an unpaid break taken by a regular employee.

Regular Unpaid Break Maximum Length

Enter the maximum number of minutes allowed for an unpaid break taken by a regular employee.

Regular Paid Break Minimum Length

Enter the minimum number of minutes allowed for a paid break taken by a regular employee.

Regular Paid Break Maximum Length

Enter the maximum number of minutes allowed for a paid break taken by a regular employee.

Business Day

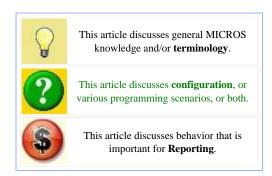In food service, hotel, and casino environments, a **Business Day** refers to the begin/end times of a day of business.

This article discusses general MICROS knowledge and/or **terminology**.

This article discusses **configuration**, or various programming scenarios, or both.

This article discusses behavior that is important for **Reporting**.

Contents

- 1 Business Day vs. Calendar Day
- 2 Purpose of a Business Day
- 3 Business Days and Simphony
  - 3.1 Start of Day Rules

Business Day vs. Calendar Day

- A calendar day always begins at 12am.
- A business day could have any begin time; however, it is typical that a business day begins in the early morning hours (3am or 4am, perhaps).

Purpose of a Business Day

Business Days exist to include all the hours of a restaurant's operational hours. Usually, a business day ends when there is no business ("last call"). At 24-hour sites, business days often correspond to an early-morning shift change (if a large percentage of employees begin work at 6am, this might be the start of the site's business day).

Business Days and Simphony

In Simphony, a business day can be programmed to start automatically (every day at 4am, for instance) or manually (a night auditor manually begins the business day). See Start of Day for configuration information.

Start of Day Rules

Simphony has business rules to determine how and when a business day can begin, and which business day is beginning. The rules exist for both Automatic Start of Day and Manual Start of Day.

Note: Simphony prevents the same business day from starting twice. For instance, based on

Starting a new Business Day

- Start of Day cannot be run twice in 8 hours
- Start of Day cannot be run twice between midnight and noon
- Start of Day cannot be run twice between noon and midnight
- If a business day is scheduled to run automatically, it is not possible to start the business day manually via a PC Autosequence.

the rules discussed here, a site could start the business day for the 17th at 2pm on the 16th and run SOD again at 6am on the 17th. However, because the same business day (the 17th) is trying to start in both situations, an error will display: Cannot begin the same business day twice.
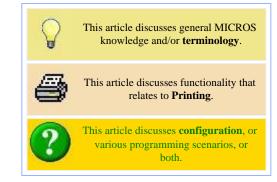
Which Business Day is Starting?

- Business Day calculation is based on noon-to-noon times
    - If SOD is run before noon, Simphony assumes the Business Day completed is for the previous calendar day. (If SOD runs at 3:05am on the 17th, the 16th is the Business Day that is closing, and the 17th is the Business Day being started.)
    - If SOD is run after noon, Simphony assumes the Business Day completed is for the current calendar day. (If SOD is run at 11:52pm on the 17th, the 17th is the Business Day that is closing, and the 18th is the Business Day being started.)

By-Round Guest Check

A **By-Round Guest Check** is guest check that prints each time it is service totalled. A By-Round Guest Check provides the operator with a complete guest check that is ready for immediate presentation to the customer at the end of every service round; the functionality is often used in conjunction with Slip Printers.

By-Round operations are enabled for operators when the operator option, **[ON = On Demand; OFF = By Round]**, is disabled. When By-Round Guest Checks are in use, checks print service round, but only the detail posted in the recently-completed round is printed.

This article discusses general MICROS knowledge and/or **terminology**.

This article discusses functionality that relates to **Printing**.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

EMC Configuration

In addition to the operator option that controls the behavior, there are a number of options that can be configured based on the operations of the site:

RVC Parameters

The following Revenue Center Parameters format options apply to By-Round Guest Checks:

9 - Print "Reprint" in the Check Header
> Select this option to cause the descriptor **[*** Reprint # ***]** to print in the header section of a reprinted check where '#' represents the number of times. For example, if this is the second printing of the check, the descriptor will say *** Reprint 1 ***. The descriptor prints in double-wide format.

11 - Print Previous Balance Each Round
   Select this option to cause the balance of the previous round (and check number) to print as the first entry in any succeeding service rounds.
13 - Service Round Totals Include Current Round Only
   This option affects By-Round operators. Select this option to cause the subtotal of each service round to print the total for that round only. Disable this option to cause the subtotal printed for each service round to print the cumulative subtotal for the transaction.
14 - Print Service Total Time on Checks
   This option affects By-Round operators. Select this option to print the time on guest checks when they are service totalled, The Tender/Media (Service Total) key must have the "Print Summary Totals" printing option enbaled. The time prints to the left of the Balance Due. The Balance Due descriptor is truncated from 12 to 9 characters. The time, if printed in AM/PM format, does not print the AM or PM characters. The amount due will appear on the next line when this option is enabled.
22 - Print Transaction Employee # and Workstation # on Guest Check Each Round
   This option is only available for by-round operators. Select this option to print the transaction employee's Employee Number, Check Name, and the workstation number on a by-round guest check at the end of each service round. Disable this option to suppress printing the Employee Number and the workstation number.
34 - Print Guest Count at End of By-Round Checks
   Select this option to print the current guest count at the end of each service round on the guest check.

Workstation Operations

By-round printing provides the server with a copy of all customer activity through the last service round. Each time the check is picked up on the workstation and service totalled, all new postings are printed. While by-round operations are generally performed in Slip Printer environments, they are sometimes used in Roll Printer environments as well.
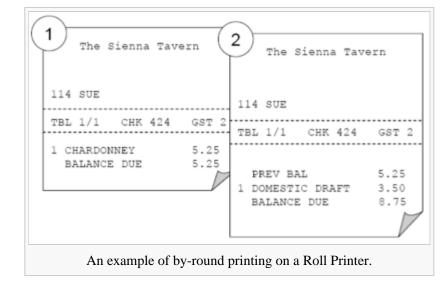
Using a Roll Printer

If a Roll Printer is used, by-round checks print the previous balance (the balance due at the end of the previous service round) and the detail from the current round. In the example image on the right, check #424 was begun by a by-round operator:

1. First Printing: One drink was posted and the check was service totalled.
2. Second Printing: The check was picked up and a second drink was posted and service totalled again.

To summarize, each time a Guest Check is printed on a roll printer, the following is printed:

- The Guest Check Header
- The Previous Balance
- All details from the current round
- The new balance due

An example of by-round printing on a Roll Printer.

Using a Slip Printer

When a Slip Printer is used, by-round checks print only the detail from the current round. In a Slip Printer environment, each check stores the location on the check where the next round of printing should start. For example, if 11 items are ordered in the first round, items ordered in the second round will start printing on line 12. This behavior ensures that the guest check will display all the items ordered. Note that this behavior applies only to Guest Checks; print jobs such as Validation Chits and Credit Card Vouchers will always print from the top of a new page.

Other Considerations

Tender/Media Print Settings

When a By-Round Operator service totals a check, it will always print; the Tender/Media print options are ignored.

Tender/Media Reprint Check Functionality

The **[19 - Reprint Check]** tender option works differently with By-Round Operators than for On-Demand Operators:

- When the option is disabled, the check details from the current round are appended to the end of the Guest Check; the information prints below the previous round's items.
- When the option is enabled, the entire check prints each round.

In most By-Round environments with Slip Printers, two separate Tenders are created:

Print Round
  [Reprint Check] is disabled. This is the tender that is generally used for normal operations.
Print Check
  [Reprint Check] is enabled. This tender is typically used only when the original slip has been damaged. Often, this tender is restricted to specific Privilege Groups so that the average user cannot continuously reprint checks.

Reprinting Permissions

The RVC Parameters setting, **[Number of Checks Printed Before Authorization]**, is ignored for By-Round Operators; each time a By-Round Operator uses a tender with the **[19 - Reprint Check]** option set, authorization is required. The Employee Role bit, **[Authorize Unlimited Reprinting of a Check]**, controls this behavior.

Special By-Round Printing

A "Special By-Round Operator" is an on-demand operator (a Service Total tender does not cause printing) until a Tender/Media key is used that either prints the check or pays a portion of it. After the check has been printed or paid, the check becomes a By-Round Guest Check, where each Service Total will then print the check.

The purpose of this functionality is to ensure that all items are printed each round after the initial printing of a check. For example, after a server delivers a check to a table, the customers decide to order an after-dinner cognac; because the operator is configured as "Special By-Round", a new guest check will print when the cognac is added to the check.

Special By-Round Printing is enabled by enabling the operator option, **[Special By-Round; "Temporary On-Demand"]**.

See also

- On Demand
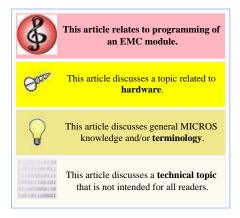- Slip Printer

Check and Receipt Printing	**By-Round Guest Check** · Guest Check Headers and Trailers · On Demand Customer Receipt · On Demand Guest Check · Print Customer Receipt
Learning series: Check and Receipt Printing	

CAL Package

*A **CAL Package** is a group of files and/or folders that are copied to workstations and other CAL-enabled devices. The packages can be configured to be sent to all devices in the enterprise, to devices in selected properties, or only to specific devices. This article will discuss the EMC configuration of the packages, as well as the configuration of the files themselves; however it should be noted that the files should be configured only by qualified staff members.*

Contents

- 1 CAL File Structure
  - 1.1 Directory Structure
  - 1.2 Setup.dat
  - 1.3 What's in a Package?
- 2 EMC Configuration
  - 2.1 Privilege Restrictions and Notes
- 3 Example Configurations
  - 3.1 Service Host Exclusion
  - 3.2 Specific Platform Types
- 4 See also

	This article relates to programming of an EMC module.
	This article discusses a topic related to **hardware**.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses a **technical topic** that is not intended for all readers.

CAL File Structure

Each type of CAL-enabled client has a folder on the application server containing the files and folders that will be downloaded to clients. For example, the `SimphonyClient` subdirectory exists in the PPC, Win32, WS4, WS4LX, and WS5 folders, because each of those platforms is able to run the SarOps.exe Simphony Client software. The Win32 subdirectory includes other packages for other types of service hosts.

Directory Structure

> **Note:** To update a workstation's platform (to upgrade the CE version, for instance), a PlatformUpdate folder will be placed under the Packages directory of the specified client, parallel to the SimphonyClient folder. See also, CAL.
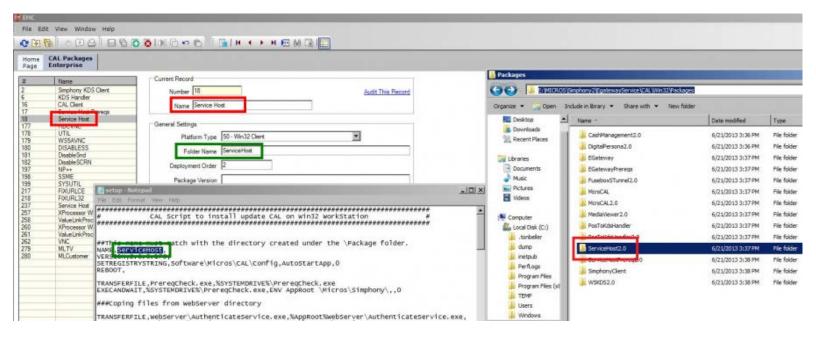
The files and folders within CAL Packages are located on the Simphony's application server, under the EGatewayService directory. The following subdirectories exist in the EgatewayService\CAL folder:

- **DC** - Used for KDS Display Controllers
  - Packages
    - DCKDS
- **PPC** - Used for Mobile MICROS devices
  - Packages
    - SimphonyClient
- **Win32** - Used for any type of Win32 client, including 2010 and 2015 workstations, or other service hosts such as KDS Controllers or SIM File Access servers.

- Packages
    - ECCServer
    - EGateway
    - PosToKdsHandler
    - SimphonyClient
    - SimSVCHandler
    - VssService
- ServiceHosts - this directory contains automatically-generated setup information for each service host. The subdirectories in this folder are named by the service host ID.
    - <<each service host listed by ID>>
    - <<each service host listed by ID>>
- **WS4** - Used for WS4 devices
    - Packages
        - SimphonyClient
- **WS4LX** - Used for WS4LX devices
    - Packages
        - SimphonyClient
        - WebServer
- **WS5** - Used for WS5 devices
    - Packages
        - SimphonyClient
        - WebServer
- **WS5A** - Used for WS5A devices
    - Packages
        - SimphonyClient
        - WebServer
- **mTablet** - Used for mTablet devices
    - Packages
        - SimphonyClient
- **Android** - Used for Android devices
    - Packages
        - SimphonyClient

Setup.dat

The configuration in the CAL Packages module determines when or if a client receives a new package. New packages are those which include a new Setup.dat version number. The name that is configured in the EMC-> Enterprise level-> CAL Packages-> General Settings section-> '**Folder Name'** field, *must* match what is specified within the Setup.dat file-> '**NAME'** field in order for the desired CAL Package to successfully download to the specified client(s). See below:

What's in a Package?

The files vary based on the type of client, but for workstations there are generally three items in the SimphonyClient folder:

- bin - this directory includes DLLs and the SarOps.exe executable
- cfg - this directory includes translation files
- setup.dat - this file provides instructions for the workstation when installing the software (See also, CAL.)

EMC Configuration

As mentioned above, each type of client has a folder on the application server. In addition, each type of client must have a corresponding CAL Packages entry in the EMC for updates to occur.

The **CAL Packages** module is opened from the enterprise scope of the EMC. The configurable fields are as follows:

Form View of the CAL Packages module in EMC. The Add/Delete links will add more "Deployment" rows, allowing multiple properties and/or service hosts to be configured for a single CAL Package.

Platform Type
> Select the type of platform that will receive the CAL Package. If this field is set to "All Clients", all platforms will download the package if platform contains a folder that matches the '**Folder Name'** field's text, as shown here. Using the example image shown here, all clients with a **"SimphonyClient"** folder on the application server will receive the update.
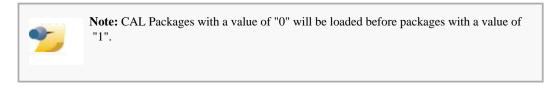
Folder Name
> Enter the name of the folder on the server where the CAL Package is located. This field is case-sensitive. The folder name given here is a subfolder of the "Packages" folder for the client.

Deployment Order
> When configuring CAL Packages in the EMC, it's possible to assign a specific package deployment order. By default, all packages have an order of "0", however this can result in packages going to the Workstation (WS) Client(s) in an undesirable order. By assigning an order, certain things can be put in place that were created by one package that a later package may need to make use of in order to succeed. For example, if a SIM script package is sent down before SarOps, the CF\POSClient\sim folder won't exist yet
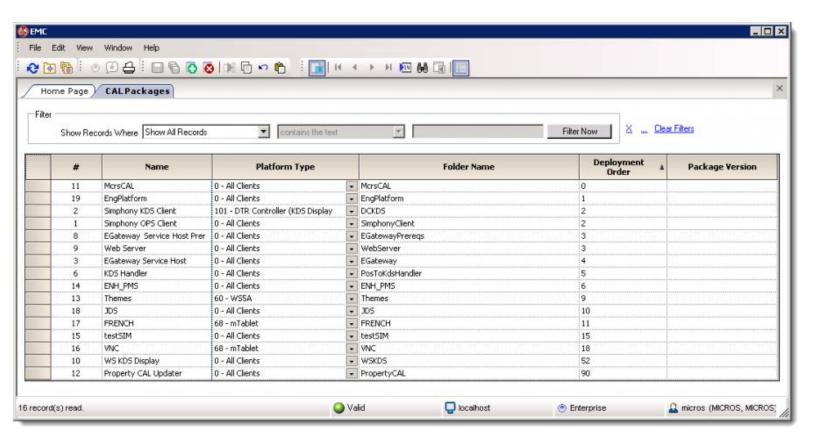
and the SIM script package will fail.

> **Note:** CAL Packages with a value of "0" will be loaded before packages with a value of "1".

The following table illustrates the recommended order for CAL Packages to be deployed.

Deployment Order	Package Name
0	CAL Client
1	Platform updates
2	SimphonyClient and RDC Client
3	EGatewayPrereqs and WebServer
4	EGateway
5	POStoKDSHandler
6	Interface files (Opera PMS, etc)
7+	Custom (WSKDS, SIM scripts, etc)

As displayed below, the CAL Client package should *always* be enabled and should *always* be sent down first so that the most recent version of the CAL Client is in use by the WS. The '**Deployment Order**' field will accept values ranging from "0" to "999,999,999" in the EMC.

Package Version
    This field is for future use.

Deployments

This section is used to configure which workstations or service hosts will receive the package. In the deployments section of the form, use the Add and Delete links to add/remove rows from the grid. Each row can be configured with the following information:

- Deployment Type - Select the type of deployment for this row. This column determines the other columns that become enabled. The value of this field is not stored in the database; this is simply used as a GUI aide to present only one of the next two columns enabled at the same time.
- Property - Choose a specifc property where the package will be downloaded, or choose the Enterprise.
- Service Host - Choose a specifc Service Host where the package will be downloaded; this field allows specifc workstations or other service hosts to be selected.
- Action to Take - To prevent a package from being downloaded, set this field to "Skip". For installations to proceed, select "Install".
- Effective From - Select the start date and time, if any, when this package becomes active. This field can be used to schedule upgrades.
- Effective To - Select the end date and time, if any, when this package becomes inactive. This field can be used to schedule upgrades.

Privilege Restrictions and Notes
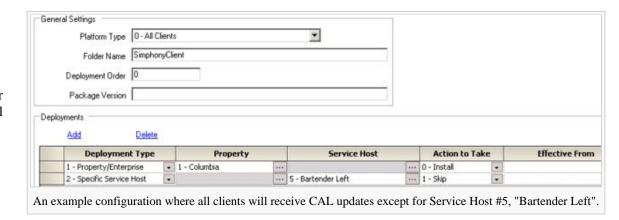
This module should be restricted to only those employees with a solid understanding of CAL and CAL Packages. Incorrect configuration of records in this module could result in unwanted behavior in the system.

Also note, when new Service Hosts are added into the EMC Service Host Module, new CAL Deployments will be added to any CAL Package where the Folder Name is **SimphonyClient**. The deployment record will be added with "skip" as the action to take. This behavior prevents service hosts (for instance, a Credit Card Service Host) from receiving updates intended for Win32 workstations.

Example Configurations

Service Host Exclusion

In a situation where one client should not receive updates, a "skip" entry should be added. In the example image, the Inside Service Station workstation will not receive updates, but all other workstations in the property will receive updates.

An example configuration where all clients will receive CAL updates except for Service Host #5, "Bartender Left".
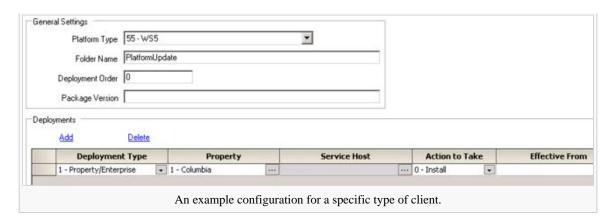
Specific Platform Types

In some situations, a programmer may want to update all WS5 clients but no other clients. This may be necessary at times when a new CE version has been

released. In the example image, only WS5 clients will receive the updates. Also note that this display shows the **PlatformUpdate** package, not a **SimphonyClient** package; this configuration is used to update the operating system of CE clients.

An example configuration for a specific type of client.

See also

- CAL
- New CAL 2.x
- Simphony CAL Troubleshooting

Cash Drawer

A **Cash Drawer** is a physical bin attached to a workstation that holds money.

Contents

- 1 Assigning and Unassigning
    - 1.1 Assign Cash Drawer By Workstation
        - 1.1.1 Function Key Differences
        - 1.1.2 Unassign Cash Drawer Function Key
        - 1.1.3 Employee Role Permissions
    - 1.2 Assign Cash Drawer By Workstation is disabled
- 2 Best Practices
- 3 Options Bits
- 4 Troubleshooting

⭐	This article contains a **best practices** section.
🖥️	This article discusses the usage of one or more **Function Keys**. (839, 840, 848, 849)
🔑	This article discusses a topic related to **hardware**.
❓	This article discusses **configuration**, or various programming scenarios, or both.
🔒	This article discusses a topic related to **security**.

Assigning and Unassigning

The correct combination of the function keys: **[Assign Cash Drawer]** (848), **[Assign Cash Drawer 1]** (839), and **[Assign Cash Drawer 2]** (840), along with the setting of the Employee Role option bit **[Authorize/Perform Assignment of a Cash Drawer]** can sometimes be confusing. There are two typical configurations: cash drawers are assigned by workstation, or cash drawers are assigned by operator.

Assign Cash Drawer By Workstation

This section discusses all the possibilities when the workstation option bit **[Assign Cash Drawer By Workstation]** is enabled.

Function Key Differences

Function Key 848 – Assign Cash Drawer	Function Keys 839 or 840 – Assign Cash Drawer 1 or 2
This will assign the drawer to the user who is signed in.	This will assign the drawer to the user who is signed in.
If there are two drawers on the workstation, the system will assign drawer	If there are two drawers on the workstation, these buttons allow the user to

#1 if both are currently unassigned. If drawer #1 is assigned, the system will assign drawer #2, and vice-versa.	select which drawer he or she wants to assign. (To give a choice, obviously both buttons need to be on the touchscreen.)
Use of this button will open the cash drawer.	Use of this button will NOT open the cash drawer.
If the cash drawer is unassigned, pressing this key will prompt BOB to ask, `Assign Cash Drawer #?`	If the cash drawer is unassigned, pressing this key will prompt BOB to ask `Assign Cash Drawer #?` while the top of the screen says "INACTIVE" which means no one is assigned.
If the user attempts to assign the drawer when another user is already assigned, the error message is `All Cash Drawers Currently Assigned`.	If the user attempts to assign the drawer when another user is already assigned, there is no error message. Similarly to above, the top of the screen will say "NAME" (of the person currently assigned to the drawer). Thus, one person may assign the drawer OVERRIDING the Operator who is already assigned.
Any user is allowed to use this feature. The Employee Role option bit **[Authorize/Perform Assignment of a Cash Drawer]** does not need to be enabled. (See later; it *should not* be enabled.)	Not any user can use this feature. The Employee Role option bit **[Authorize/Perform Assignment of a Cash Drawer]** would have to be enabled. NOT enabling this bit means that a manager will have to authorize the drawer assignment. (This is the purpose of these keys!)
At the end of a shift, the user or a privileged manager needs to unassign the drawer to allow another user to use the drawer.	At the end of a shift, it is not necessary to unassign the drawer, because another user may override the assigned user (see above; operators override).

Note: There is not a way to assign a cash drawer for another employee. For instance, a manager cannot assign a cash drawer for a bartender. Like almost all operations in MICROS, the user needs to be signed in to perform the task themselves, then have a manager authorize whenever necessary.

Unassign Cash Drawer Function Key

The **[Unassign Cash Drawer]** function key (849) unassigns the drawer from the user. It does not matter if the user assigned the drawer using function 848 or 839/840. All users can always unassign a drawer *from themselves*. The only way to prevent this is to remove this function key from the touchscreen or to restrict its access using a "lockout macro."

Employee Role Permissions

The Employee Role option, **[Auth/Perform Assign Cash Drwr 1&2; Unassgn Drwr from Others]**, has two functions.

1. Enabling this option bit means that a user may unassign a drawer from OTHER users. Obviously not every user should have this enabled, and it should usually be enabled only for management classes.
2. Enabling this option bit means that a user is allowed to use function 839 or 840.

Assign Cash Drawer By Workstation is disabled

When **[Assign Cash Drawer by Workstation]** is not enabled, this is the least secure option for the site. For this setup, a user can open the cash drawer when the operator module has "Cash Drawer 1" or "Cash Drawer 2" selected. A No Sale function will allow the user into the drawer.

With this configuration, *any* user can go to *any* workstation and open drawer #1 if it exists, or drawer #2 if it exists. This allows, for instance, multiple bartenders to share one drawer (again, not secure) or would allow more than one manager to access a drawer. Sometimes a restaurant will have a cash drawer only for managers to store "reserve" cash. This workstation may be set up so that any manager can open the drawer.

Best Practices

Usually, only the Assign Cash Drawer (848) feature is used in a typical hotel or restaurant environment. (This is not the most secure method, but it appears that this is the preferred method by sites.) The user may or may not have access to an Unassign Drawer button on the touchscreens. Users assign and unassign the drawer whenever they want, and only managers have the Employee Role option bit to **[Auth/Perform Cash Drawer Assignment]** enabled.

Some operations are a little more secure about their cash tills (usually amusement parks, casinos, or stadiums). These sites do not allow a user to get into a cash drawer unless a manager is present. For this instance, you would use the 839 or 840 features, and keep the Employee Role option bit disabled for average users. This way, when an employee presses the Assign Drawer 1 (or 2) button, a manager's authorization is required to perform this function.

For general database setup, it is probably best to stick with the Assign Cash Drawer (848) function unless otherwise necessary, and to allow only management roles to have the **[Auth/Perform Cash Drawer Assignment]** option bit enabled.

Options Bits

A number of option bits in Control Parameters affect Cash Drawer behavior. (These options were in RVC Parameters prior to Simphony 2.0, and their option bit numbers were 16 less than the number shown here.)

23 - Open Drawer Only if Balance Due is 0.00
    Select this option to prevent a Tender/Media key from opening the cash drawer unless the balance due is $0.00. Disable this option to allow a Tender/Media key to open the cash drawer even if there is a balance due on the transaction. If the transaction's subtotal is 0.00 and the **[Do Not Open Cash Drawer if Subtotal is 0.00]** option is enabled, the setting of this option is irrelevant.

36 - Do Not Open Cash Drawer if Subtotal is 0.00
    Select this option to prevent the cash drawer from opening for transactions in which the subtotal is $0.00. An Adjust Closed Check operation, which changes the type of tender used, but for which the transaction balance remains $0.00, is an example of a transaction in which one might want the cash drawer to remain closed because nothing is

removed from or placed in the drawer. Disable this option to allow the cash drawer to open whenever a Tender/Media key is pressed that is programmed to open the drawer.

38 - Staydown Operators Pop Up if 2 Drawers Assigned

Select this option to make Staydown operators become Popup operators when both are using the same workstation (a workstation with two cash drawers) and both cash drawers are assigned. This option applies mainly to bartenders, who are usually staydown operators, but who should be treated as popup operators (signed out at the end of a transaction) when two bartenders are using one workstation with two drawers assigned (one drawer for each bartender).

42 - Always Open cash Drawer if Change Due

When this option is enabled, the Cash Drawer will open even when there are no Tenders on the check that should usually open the drawer, provided that there is change due for the transaction, and provided that the current tender is not configured to open the drawer. This option is intended for Tender/Media records such as Gift Certificates, where change is issued only if the Gift Certificate exceeds the value of the transaction (thus, the drawer should be opened to issue change), but the drawer should remain closed when the Gift Certificate does not exceed the transaction's total. (In this example, the Gift Certificate tender would be configured to NOT open the cash drawer.) When this option is disabled, the Cash Drawer will open only for Tender records that are configured to open the drawer.

Troubleshooting

- **Problem:** I cannot assign a drawer. Error: `This workstation has no cash drawers.`

  Answer: In the EMC Workstation module, set the workstation's "Number of Cash Drawers" field to "1" (or 2); it is currently set to "0", causing this error.

- **Problem:** I cannot assign a drawer. Error: `This workstation is not programmed to allow cash drawer assignment.`

  Answer: In the EMC Workstation module, enable the workstation's option, "Assign Cash Drawer by User Workstation".

Cashier Financial Report

The **Cashier Financial Report** provides financial information for each cashier, including tenders and tips paid.

This article discusses PMC functionality.

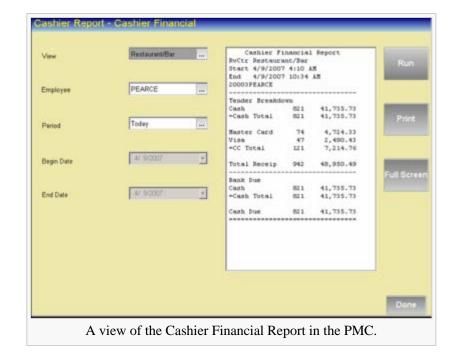This article discusses behavior that is important for **Reporting**.

Contents

- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report

The PMC version of the report allows a choice of **View**, **Employee** or **Period**. Additional notes:

- The **Begin Date** and **End Date** fields are active when the "Period" is configured as "Enter Dates".
- The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Cashier Financial Report in the PMC.

mymicros.net Report

This section of this article is a stub. This means that this page requires more information than it currently has. To request immediate attention for this page or to add suggestions, click here.

Report Examples

- PMC Cashier Financial

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports
- Offline Cashier Financial Report
- Cashier

Chain and Fire

Chain and Fire is a feature that allows an operator to post menu items to a series of checks (to chain them) without sending the items to order devices, and then to press a separate service total key to send all the items (to fire them) to their order devices. This allows order chits that would normally be received and posted separately to be consolidated and sent to the remote order devices as one order. Chaining orders is useful when serving large groups that require separate checks.

This article discusses general MICROS knowledge and/or **terminology**.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Example Scenario
- 2 Workstation Operations
    - 2.1 Table Numbers
    - 2.2 Check Numbers
- 3 EMC Configuration
- 4 See also

Example Scenario

A convention group of 20 is visiting New York City. Members of the group inform the waiter that they are on expense accounts and require separate checks. The waiter begins a check by table number and enters the order for the first guest and presses the tender/media key specially programmed as the **[Chain]** function. The order is service totaled but held in a buffer. The waiter begins another check for the next guest at the same workstation; he presses Begin Check and a blank check with the same table number displays (the group number is incremented by 1). He enters the order for this guest and presses **[Chain]**. When he reaches the last guest he uses the regular service total key (**[Fire]**), firing the consolidated order to the appropriate remote order printers.

Since the invention of Touch Split, Chain and Fire functionality is rarely used in most environments. For typical examples of splitting checks, see Touch Split.

Workstation Operations

1. The operator begins the first guest check to be chained.
2. The operator enters the appropriate menu items.
3. The operator presses **[Chain]**. Note that the operator will remain signed in to the workstation even if he is a Pop Up operator.
4. The operator repeats steps 1-3 for all checks in the party, except the last check.

While chaining, the checks are stored in the workstation's buffer before being "fired" to the order devices. Therefore, when using Chain and Fire, the same workstation must be used for all checks that are chained and then fired.

5. After entering sales items for the last check, the regular Service Total key (called *Fire* throughout this article) is used. At this time, all of the orders are sent to designated remote printers at the same time and on the same order chit.

Table Numbers

If the first check is begun using a table number, all of the guest checks must have the same table number when chained together. In fact, attempts to use other table numbers are ignored by the workstation. Consider the following steps:

1. User begins table 4 (Group 1), adds items, and presses **[Chain]**
2. User begins table 8.
3. At this point, the workstation displays table 4, group 2. The workstation prevented table 8 from being used, changing the operator's entry to table 4.
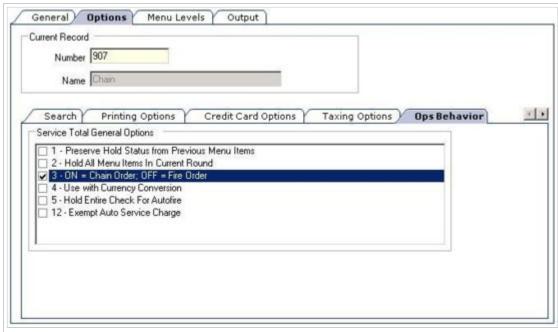
Check Numbers

If beginning checks by check number, the only restriction is that all chained checks are begun by check number. It is not possible to use table numbers if the first check was begun without a table number. Note that when the order prints and there is no table number, the following steps occur:

1. Begin check 1977 and use **[Chain]**
2. Begin check 1978 and use **[Chain]**
3. Begin check 1979 and "fire" the order.
4. At this point, the order chit will print with check number 1979, which is the last check number in the chained/fired checks.

EMC Configuration

The **[Chain]** key is simply a service total key that is programmed to Chain Orders. In the EMC Tender/Media module, create or select a Tender and select "Service Total" as the Key Type on the General tab. Then enable **[3 - ON = Chain Order; OFF = Fire Order]** on the Ops Behavior tab. There is no further configuration for the "chain" key; the "fire" key is a service total key with the same option disabled.

The Ops Behavior Tab for a Service Total Key Type in the EMC Tender/Media module. The highlighted option determines if a service total is a "chain" key (shown) or a "fire" key.

Check Number

In MICROS products, every transaction is associated with a **Check Number**. In Simphony, the check number is always between 1 and 9999 (a 4-digit number). In general, check numbers start in numeric order: if a user begins check number 1007, the next check number to begin for the RVC is 1008.

This article belongs to the MICROS **Important concepts** category.

Contents

- 1 Options
    - 1.1 Operator Assigns Check Numbers
- 2 Configuration
- 3 See also

Options

Operator Assigns Check Numbers

There is a Revenue Center Parameter option bit, **[Operator Assigns Check Numbers]**. When this option is enabled, the operator assigns the check number, instead of the check automatically being started with the next available check number. This option is designed for sites that have their own guest checks with pre-printed numbers (instead of using roll printers). Typically, revenue centers are programmed with the option disabled, and the check numbers are generated automatically.

Configuration

Revenue Center Parameters includes settings for "Min Guest Check #" and "Max Guest Check #". When check numbers are generated automatically, after the "Max Guest Check #" is reached, the next check number is the "Min Guest Check #". For example, consider the following scenario (which is a typical configuration):

- Minimum Check # = 1000
- Maximum Check # = 9999

In this scenario, after check 9999 has been started, the next check number will be 1000.

To keep check numbers unique per Revenue Center, installers sometimes assigned an exclusive range of check numbers per RVC. For example, in Revenue Center #1, check numbers could range from 1000 to 1999. In Revenue Center #2, check numbers could range from 2000 to 2999. This programming scenario is generally used only for small properties where all the Revenue Center numbers are less than 10.

Check Operator vs. Transaction Operator

In MICROS, there are two terms that refer to an employee accessing a check. A **Check Operator** (sometimes called the **Check Employee**) is the person who began the check (or to whom it was transferred), while the **Transaction Operator** is the person who is accessing the check now.

	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 Scenario
- 2 Reporting
    - 2.1 #6 - Post Totals and Tender to Transaction Operator
        - 2.1.1 Checked
        - 2.1.2 Unchecked
    - 2.2 #7 - Post Tender (only) to Transaction Operator
        - 2.2.1 Checked
        - 2.2.2 Unchecked
- 3 See also

Scenario

1. Joe begins a check
    - Joe is the Transaction Operator and the Check Operator
2. Joe service totals the check.
    - Joe is the Check Operator
    - There is no transaction operator (there is no active transaction after a service total)
3. Bob picks up the check and rings items.
    - Joe is the Check Operator
    - Bob is the Transaction Operator
4. Mary picks up the check and rings items.
    - Joe is the Check Operator
    - Mary is the Transaction Operator
5. Jane signs in and transfers the check from Joe to herself.
    - Jane is now the Check Operator and the Transaction Operator

Reporting

Two Revenue Center Parameter Posting and Control option bits control which operator receives the totals — check operator or transaction operator. Note that these examples assume that employees are allowed to "pick up other employees' checks". Also note that there are really just three scenarios:

1. Neither bit is checked — all sales and tenders post to the check operator

2. #6 is checked (and #7 by default) — all sales and tenders post to the transaction operator
3. #7 is checked (only) — all sales post to the check operator, but tenders post to the transaction operator

#6 - Post Totals and Tender to Transaction Operator

Select this option to post sales totals, tenders, and tips to the transaction operator's report totals. Disable this option to post sales totals, tenders, and tips to the check operator. NOTE: Enabling this option could prevent individual Employee Financial Reports from balancing. Also note that if this option is selected, transactions in this Revenue Center will be calculated as if the next option, "Post Tender To Transaction Operator", is selected as well, even if it is not checked. ***Note:*** *When this option is checked, #7 is checked and disabled by default, to ensure the proper configuration.*

Checked

With this option checked, the following scenario occurs:

1. Joe begins a check, and adds $25.00 of items.
   - The $25.00 in sales go to Joe.
2. Bob picks up the check and adds $10.00 of items
   - The $10.00 in sales go to Bob.
3. Mary picks up the check and pays it
   - The $35.00 of tender go to Mary.

The reason for the note, *enabling this option could prevent individual Employee Financial Reports from balancing* becomes a little more obvious after reading through this scenario. Bob's report, for example, will show $10 of sales, with no checks begun or paid. That may look a little odd.

Unchecked

With this option unchecked (and #7 unchecked), the following scenario occurs:

1. Joe begins a check, and adds $25.00 of items.
   - The $25.00 in sales go to Joe.
2. Bob picks up the check and adds $10.00 of items
   - The $10.00 in sales go to Joe.
3. Mary picks up the check and pays it
   - The $35.00 of tender go to Joe.

When this option is disabled, it allows users to access Joe's check while still posting sales to Joe. Often, this is the configuration, and only managers can pick up other people's checks.

#7 - Post Tender (only) to Transaction Operator

Select this option to post tenders and tips to the transaction operator's tracking group totals. Disable this option to post tenders and tips to the check operator's tracking group totals. Note: If the previous option, "Post Totals to Transaction Operator", is selected, transactions in this Revenue Center will be calculated as if this option is enabled, even if this option is not checked. ***Note:*** *When #6 is checked, this option is checked and disabled by default, to ensure the proper configuration.*

Checked

With this option checked, the following scenario occurs:

1. Joe begins a check, and adds $25.00 of items.
   - The $25.00 in sales go to Joe.
2. Bob picks up the check and adds $10.00 of items
   - The $10.00 in sales go to Joe.
3. Mary picks up the check and pays it
   - The $35.00 of tender go to Mary.

With this option enabled (and #6 isn't enabled), only the payment goes to the Transaction operator.
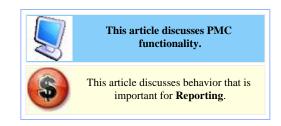
Unchecked

With this option unchecked, the following scenario occurs:

1. Joe begins a check, and adds $25.00 of items.
   - The $25.00 in sales go to Joe.
2. Bob picks up the check and adds $10.00 of items
   - The $10.00 in sales go to Joe.
3. Mary picks up the check and pays it
   - The $35.00 of tender go to Joe.

When this option is disabled, it is the same as the scenario that #6 is disabled — all sales and Tenders will post to Joe, the check operator.

Check Journal Report

The **Check Journal Report** is a journal of all sales transactions in a check detail layout.

	This article discusses PMC functionality.
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 Report Fields
- 2 PMC Report
- 3 mymicros.net
- 4 See also

Report Fields

The Journal displays every check that had been rung in within the selected parameters. The check detail will show items that were purchased, voided, etc. The user can select a range of check numbers to display or select a specific check to look at during a specific time span.
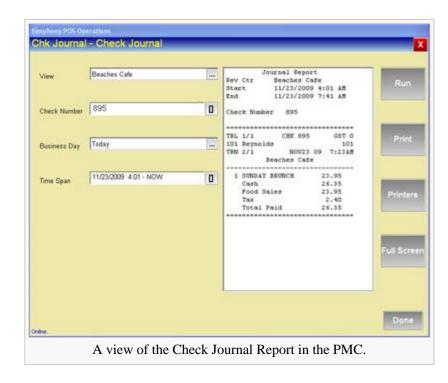
PMC Report

The PMC version of the report allows a choice of **View**, **Check Number**, **Business Day**, and **Time Span**. The report shows all transactions that have been done in that Revenue Center, listed out by check number and by the time the check was created.

To run the Check Journal Report:

1. On the workstation, select the **PMC** function.
2. Select **Reports**.
3. Select **Check Journal Report**.

For general information about PMC Reports, see WS Autosequences.

A view of the Check Journal Report in the PMC.
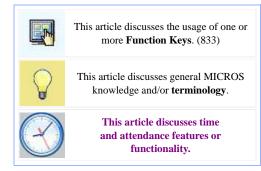
mymicros.net

Journal Reports are not available on mymicros.net, they are only available at the Property Level.

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports

Clock In/Out

The **clock in/out** function key allows a privileged operator to **clock in** or **clock out**. The same function key (833) is used for both functions — if the operator is already clocked in, the workstation knows the desired operation is "clock out"; if the operator is not clocked in, the workstation knows the desired operation is to "clock in".

	This article discusses the usage of one or more **Function Keys**. (833)
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses time and attendance features or functionality.

Contents

- 1 Configuring Employees to Clock In
- 2 Offline Functionality
- 3 Privileges
    - 3.1 Employee Role
    - 3.2 Other Privileges

Configuring Employees to Clock In

An employee is able to clock in or out when the property employee record is assigned an Employee ID and the record has at least one Job Code assigned. In fact, an employee *must* clock in when at least one Job Code is assigned. Employees who have no Job Codes assigned do not need to clock in (these may be employees who are paid a salary) and are always able to sign in to workstations.

If the employee clocking in has only one job code, the workstation will not prompt for a choice of job codes; if the employee has more than one job code, the workstation will prompt for the job code to be used.

Offline Functionality

- Operators are able to clock in when in Yellow Mode; clock in/out records are stored in the Offline Cache Service Host until connection is reestablished.
- When a workstation is operating in Red Mode, a clock in cannot be recorded. When an employee presses the **[Clock In]** function key on a Red Mode workstation, a time chit will print. A manager or other authorized employee must use this chit as a time entry record and later (from an online workstation) manually correct the time card entry with a time card adjustment. Also note that employees can sign in to a Red Mode workstation without clocking in; the Red Mode Workstation is unaware of clock in/out status.

Privileges

Employee Role

There are several Employee Role options related to clocking in and clocking out. All these options are on the Operations > Timekeeping tab:

Clock in at Rate 1

> Select this option to allow employees associated with this role to Clock In at Job Rate 1. "Job Rate 1" refers to Pay Rate #1 that is assigned for the employee record.

Clock in at Rate 2

> Select this option to allow employees associated with this role to Clock In at Job Rate 2. "Job Rate 2" refers to Pay Rate #2 that is assigned for the employee record.

Clock in at Rate 3

> Select this option to allow employees associated with this role to Clock In at Job Rate 3. "Job Rate 3" refers to Pay Rate #3 that is assigned for the employee record.

Clock in at Rate 4

> Select this option to allow employees associated with this role to Clock In at Job Rate 4. "Job Rate 4" refers to Pay Rate #4 that is assigned for the employee record.

Clock in at Rate 5

> Select this option to allow employees associated with this role to Clock In at Job Rate 5. "Job Rate 5" refers to Pay Rate #5 that is assigned for the employee record.

Clock in at Rate 6

> Select this option to allow employees associated with this role to Clock In at Job Rate 6. "Job Rate 6" refers to Pay Rate #6 that is assigned for the employee record.

Clock in at Rate 7

> Select this option to allow employees associated with this role to Clock In at Job Rate 7. "Job Rate 7" refers to Pay Rate #7 that is assigned for the employee record.

Clock in at Rate 8

> Select this option to allow employees associated with this role to Clock In at Job Rate 8. "Job Rate 8" refers to Pay Rate #8 that is assigned for the employee record.

Clock in at Rates 9-255

> Select this option to allow employees associated with this role to Clock In at Job Rates 9-255. Typically, an employee does not have more than 8 Pay Rates assigned; for this reason, all Pay Rates 9-255 are controlled by this single option bit.

Change Revenue Center at Clock In

> Select this option to allow employees associated with this Role to change their Revenue Center assignment when clocking in.

Authorize Changing Revenue Center at Clock In

> Select this option to allow employees associated with this Role to authorize changes in the Revenue Center assignment of other employees who are clocking in.

Authorize Clock In / Authorize Clock In/Out for the Wrong Location

> Select this option to allow employees associated with this Role to authorize other employees to clock in. Also, this option controls the ability to allow users to clock in or out for the "Wrong Location"; this situation occurs when a Property Employee Record has the option "Limit Clock-In to Workstations in the Clock-In RVC" or "Limit Clock-Out to Workstation in the Clock-Out RVC" enabled.

Clock Out with Open Checks

> Select this option to allow employees associated with this Role to clock out at the end of a shift even if they still have open guest checks. If this option is enabled, it overrides the setting of the "Cannot Clock Out with Open Checks" option in the Job Code module.

Other Privileges

In addition to Employee Roles, other modules include options that affect Clock In/Out behavior. For more information, visit the specific module:

- Job Code
- Property Parameters

Clock-In Cycle

A **Clock-In Cycle** for an operator includes one clock in and the subsequent clock out. On employee time cards and labor detail reports, clock in cycles are sequentially numbered from the start of the current payroll period to the current date. If breaks are not used, a cycle is the equivalent of a work shift.

This article discusses time and attendance features or functionality.

A clock in cycle includes the day, date, and time of the entry and the Job Code under which the employee clocked in.

Similar terminology

In some instances, the term "shift" is used to refer to a Clock-In Cycle. For documentation purposes, the term Shift relates to Employee Reporting Shifts; reporting shifts function independently from Clock-In Cycles.

Clock-in Status Report

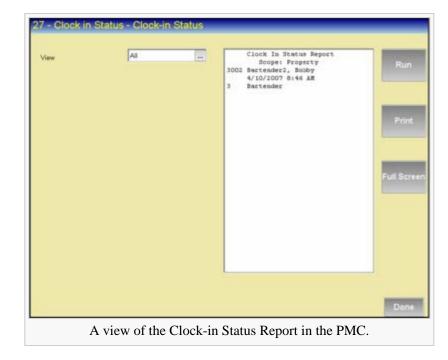The **Clock-in Status Report** displays the employees who are currently clocked in or who are currently on a break.

This article discusses behavior that is important for **Reporting**.

This article discusses time and attendance features or functionality.

Contents

- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report

The PMC version of the report only allows a choice of **View**. The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Clock-in Status Report in the PMC.

mymicros.net Report

This section of this article is a stub. This means that this page requires more information than it currently has. To request immediate attention for this page or to add suggestions, click here.
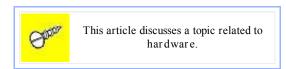
Report Examples

- PMC Clock-in Status

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports

Coin Dispenser

A Coin Dispenser, sometimes called a Coin Changer, is a physical device attached to a workstation that holds coins.

This article discusses a topic related to hardware.

Contents

- 1 Operation
- 2 EMC Configuration for Simphony v1.x
- 3 EMC Configuration for Simphony v2.x
- 4 Supported Hardware
    - 4.1 Coin Balancing
- 5 Troubleshooting

Operation

Unlike a Cash Drawer, a Coin Dispenser is not assigned; if it is configured and connected to a workstation, a Cash Tender will send commands to the device to dispense coins. Note that only the "coin portion" of a transaction is controlled by the Coin Dispenser; if a $20 is presented for a $16.45 transaction, the $0.55 will be dispensed automatically by the coin changer, but the $3.00 must be given by the operator.

EMC Configuration for Simphony v1.x

Each workstation that uses an Coin Dispenser requires specific configuration steps. In the EMC Workstations module, the following should be configured:

- From the Workstation-> Options tab-> enable the option bit: [14 - Enable Coin Dispenser].
- On the devices tab: from under the Peripheral Device Configuration header select 'Add and scroll down and select the Coin Dispenser (Serial) 'Type'. Choose the desired COM Port.
- All other settings will be fixed as follows:
    - Baud Rate: 9600
    - Parity: E
    - Bits: 7
    - Stop Bits: 1
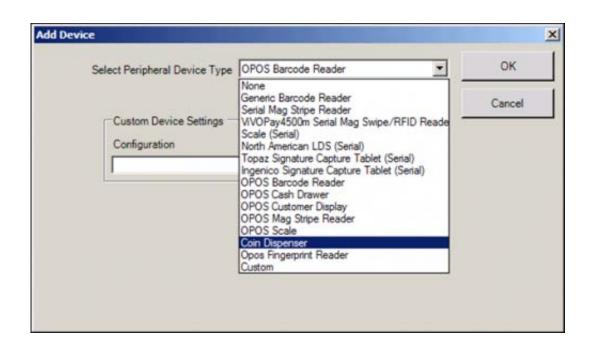
EMC Configuration for Simphony v2.x

Note: Support for Coin Dispensers begins with the release of Simphony v2.5

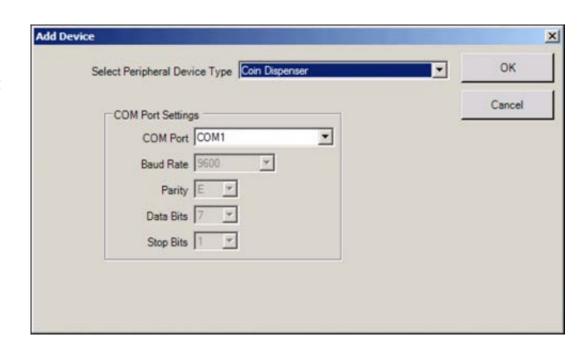- Navigate to the EMC-> Property level-> Setup tab->

Hardware/Interfaces-> Clients and Printing-> Workstations-> Select the Workstation record-> open the 'Devices' tab.
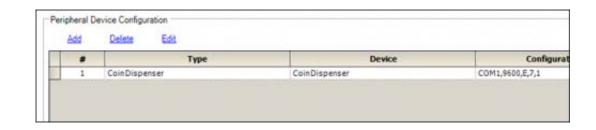 - Under the 'Peripheral Device Configuration' section, click Add.

- The 'Add Device' window appears. From the drop-down menu, select the 'Coin Dispenser' 'Type'.

- Choose the desired COM Port. All other settings will be fixed as follows:
  - Baud Rate: 9600
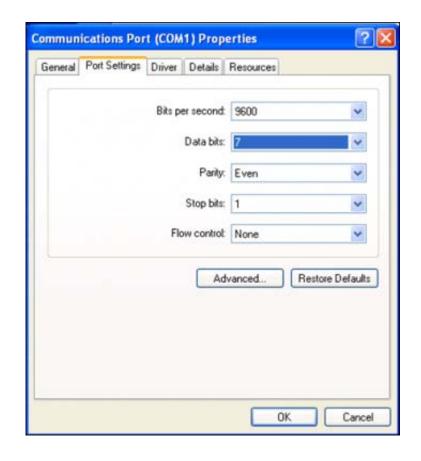 - Parity: E
  - Bits: 7
  - Stop Bits: 1

- Once added, the 'CoinDispenser' record will appear.
  - 'Save' all changes.

Peripheral Device Configuration

Add   Delete   Edit

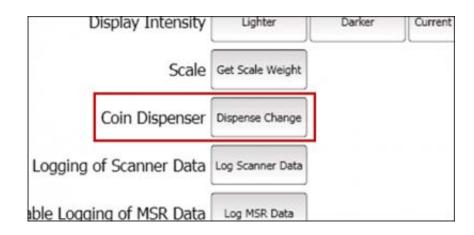| #	Type	Device	Configurat
1	CoinDispenser	CoinDispenser	COM1,9600,E,7,1

From the Workstation:

- Allow the change to download to the client
- Plug in the Coin Dispenser's Serial cable to the appropriate COM port
- Restart the workstation

- For Win32 clients, modify the 'Device Settings' for the COM port so that they match the EMC configuration. A restart of the Workstation will be needed after this change is made. A restart is not necessary for Windows CE clients.

Communications Port (COM1) Properties

General | Port Settings | Driver | Details | Resources

Bits per second: 9600

Data bits: 7

Parity: Even

Stop bits: 1

Flow control: None

Advanced...   Restore Defaults

OK   Cancel

To verify that the Coin Dispenser is connected and ready for operations:

- Sign in on the Workstation as a PMC-privileged employee
  - Launch PMC-> 'Functions'
  - Select 'Device Diagnostics'
  - Select 'Coin Dispenser-> Dispense Change'. This should cause the device to dispense a penny.

Supported Hardware

The only known supported device is the Telequip T-Flex; see the product website (http://www.craneps.com/en/products/view/107/T-Flex%E2%84%A2) for the latest device drivers and installation software.

Coin Balancing

The hardware itself has built-in logic that will vary the coins which are dispensed so that no single type of coin will be depleted. For instance, if $0.55 is dispensed three times in a row, it is probable that both of these combinations will be dispensed at least once:

- 1 Quarter and 3 Dimes
- 2 Quarters and 1 Nickel

Troubleshooting

Ensure that any Workstation with a Coin Dispenser attached does not have a printer or other device configured for the same COM Port as the Coin Dispenser. Check in the EMC-> Property level-> Setup tab-> Hardware/Interfaces-> Clients and Printing-> Workstations-> Select the Workstation record-> open the 'Devices' tab.

- Under the 'Peripheral Device Configuration' section, highlight any other configured device's record and click Edit. Even if that device is not in use, there may be problems with Coin Dispenser operations.
- Closely review the 'Printers' module as well.

Combination Pricing Discount

This article discusses general MICROS knowledge and/or **terminology**.

This article discusses **configuration**, or various programming scenarios, or both.

Understanding combination pricing discounts

A combination pricing discount is a type of automatic discount or automatic coupon discount that allows a single price to be charged for multiple items when they appear on a check at the same time. This type of discount is used in combo meal scenarios such as *burger, fries, and soda are 3.25.*

Configuring combination pricing discounts

1. Navigate to *EMC > Enterprise / Property / Zone > Configuration > Discounts > Auto.*
2. Select **[4 - Combination Pricing]** from the drop-down list.
3. Enter information in the following fields:

Field	Description
Priority	This field determines the order in which discounts are calculated. This field is blank (0) for all discounts by default, meaning that discounts are calculated at the same time. When using this field, the workstation calculates all discounts in priority 1, then in priority 2, and so on. Priority 0 discounts are calculated last. The Priority field allows the discount engine to determine which discount to apply quicker, thus reducing CPU time on the workstation.
Trigger MI Groups	Select the menu item groups that belong to this combination discount. This discount is used in scenarios such as *Fries, Drink, and Burger for $3.25*. You can configure a maximum of four trigger menu item groups for combination pricing discounts. A Trigger MI Group can be used more than once (for example, if the combo meal includes two sides). However, this is not the typical configuration.
Amount Substitution	Enter the price to be charged for this combo meal.
Max Count	Enter the maximum number of combo meals that can be ordered per check. In general, this field is set to 0 to allow an unlimited amount of combo meals on a single check.

Configuring discount interaction (exclusivity)

For information about configuring a discount to interact with other discounts, see Discount Exclusivity.

Using combination pricing discounts

The customer gets the best deal when the system performs the discount calculation. The first example shows the discount amount after a "Burger" item is ordered. All three items are discounted by $1.75, making the price $3.25.

If the operator then adds a Big Burger item for a higher price ($2.75 in the example), the discount recalculates to include the best deal for the customer. Because the best deal is to discount the Big Burger and not the Burger, the new discount is $2.25, making the Big Burger, Fries, and Soda a combined price of $3.25.

```
-- Example 1: One burger --
  Fries            1.00
  Soda             1.75
  Burger           2.25
  Discount        -1.75
```

```
-- Example 2: Two Burgers --
  Fries            1.00
  Soda             1.75
  Burger           2.25
  Big Burger       2.75
  Discount        -2.25
```

Combination pricing discounts appear on customer receipts based on the configuration of the Item Discount option. Typically, combination pricing discounts are configured with option [3 - This is an Item Discount] unselected, so the discount appears as one total instead of as individual discounts per item.
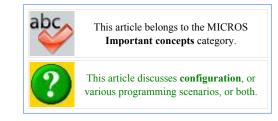
See also

Discounts	Discount · Manual Discount · Automatic Discount · Automatic Coupon Discount · Automatic Discounts for Decimal Quantity Menu Items · **Combination Pricing Discount** · Item Price Substitution Discount · Quantity Threshold Discount · Sales Price Discount · Total Price Threshold Discount · Discount Engine · Discount Exclusivity · Discount NLU · Menu Item Group · Revenue Center Group
Learning series: Discounts	

Condiments

Merriam-Webster says that the term "condiment" is from Latin condimentum: to season; it means something used to enhance the flavor of food. We know condiments as items that are external to the actual item: A packet of ketchup or sugar, salt or pepper, chocolate sprinkles or coconut shavings. **Condiments** in MICROS take on these same roles as external items to a "regular" item. They are usually used to give further detail to the person preparing the items — a well-done steak, or a salad without tomatoes. Condiment menu items in MICROS aren't always actual items, but often instructions or "modifiers," such as the words extra, add, substitute, without, and even the term Don't Make. In MICROS, the terms **Condiments** and **Modifiers** are used interchangeably.

This article belongs to the MICROS **Important concepts** category.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

What makes an item a Condiment?

By itself, an item cannot be a condiment — the discussion about condiments largely revolves around Menu Item Classes, as it is the Menu Item Class that establishes if an item is a condiment or not. Only one condition within the Menu Item Class must be true for an item (well, the class of items) to be a condiment: *At least one "Member of Condiment Groups" boxes needs to be checked.*

There is another option, option bit #2 in Menu Item Class, **[ON = Condiment Menu Items; OFF = Regular Menu Items]**. Truly, this option has little effect on an item, except that the EMC breaks Menu Item Classes into two groups, "Regular Items" and "Condiment Items", when displaying in the Menu Item Class Table View.

Condiment Option Bits

Menu Item Class

#8 – Allow Menu Items in this Class to be Non-Priced
    While this is not really a "condiment-specific" option bit, this heavily relates to condiments. Most condiment items do not have price records associated with them. For those items to show up on SLUs or be "orderable", this option must be enabled.
#9 – Condiment Changes Print Group of Parent Menu Item
    The best example of using this option bit is when a database has all appetizers configured as Print Group 1 and all entrees configured as Print Group 2. A condiment, "As Appetizer" is in a Class with this option enabled, and its Print Group is Print Group 1. Then, when the server presses "Chicken Dinner", and rings "As Appetizer" as a condiment, now the "Chicken Dinner" will have Print Group 1, and thus print at the top of the order chit with the appetizers. (Order Device sort options apply.)
#21 – Require Number of Condiments to Match Number of Parent Items
    Enabling this requires the user to enter as many forced condiments as there are parent items. For instance, a user who enters [6 > @ > Filet Mignon] will have to press "Medium Well" 6 times if this is enabled. If it is disabled, the user has to press "Medium Well" only once.
#22 – ON = Use Own Output Link; OFF = Use Parent's Condiment Link
    This allows condiments to print (Order Devices) independently of their parent items. Usually this is disabled—if I am a condiment, I will print to wherever my parent item prints (when the Order Devices are Enabled). There are some circumstances where this should be enabled, and they will be discussed later. When this is disabled, a condiment will follow the parent item to all printers where both the Parent Item and Condiment Item are programmed to print. Usually, a database has condiment classes programmed to print to all 15 Order Devices by default, and this option bit disabled—this guarantees that the item will always print where its parent is programmed to print.
#23 – Add Condiment Price to the Parent Item's Price on Check Only
    This allows condiment prices to be "rolled" into the Parent item's price. For instance, my Absolut ($5) on the rocks ($2) will show as "Absolut - $7" on a guest check when this is enabled. If it is disabled, the guest sees a $5 and a $2 charge, or maybe doesn't see the $2 charge at all! (The $2 charge wouldn't show on the guest check if the menu item class is not programmed to print the item on checks/receipts, and if this is disabled.)

Sorting by Print Group

#30 – Sort Condiments by Print Group
    This allows the Condiments associated with one item to sort themselves by Print Group. One good usage of this option bit is the Condiment-as-Seat-Number database setup. Often an installer will use condiment group #64 as a forced modifier that prompts for seat numbers. Situation:

```
Reuben Sandwich
  WITHOUT
  1000 Island
  Seat 1
```

- Server rings in a Reuben Sandwich, and selects "Seat 1" as the forced modifier
- Server rings in two more condiments "WITHOUT" and "1000 Island"
- If the two condiments are print group 3, and the "Seat 1" condiment is print group 8, the Seat Number will always print at the bottom in the printout to the kitchen.

Consolidate Menu Items with Condiments

#41 – Consolidate Menu Items with Condiments on Order Output
This will consolidate Parent Menu Items, but then list each condiment with its seat number to which the condiment applies (The option bit, "Print Seat Numbers with Individual Items" must be enabled for the Order Device).

```
Seat 1, 2
  2 Chix Wings
       S1 EXTRA
       S1 Sauce
       S2 WITHOUT
       S2 Bleu Cheese
```

- A Server who rings in Chicken Wings (EXTRA Sauce) for Seat 1 and Chicken Wings (WITHOUT Bleu Cheese) for Seat 2 will see the result on the right:

Consolidate Parents with Matching Condiments

#42 – Consolidate Parents with Matching Condiments on Order Output
If you ring in two identical items, they will be consolidated (Order Device Sort options apply, too). If a server rings in two Caesar Salads, both "WITHOUT Cheese", the kitchen will the first example on the right. The second example displays the items if this option is disabled.

```
-- Example 1: #42 enabled --
2 Caesar Salad
   WITHOUT
   Cheese
```

```
-- Example 2: #42 disabled --
 Caesar Salad
   WITHOUT
   Cheese
 Caesar Salad
   WITHOUT
   Cheese
```

RVC Parameters

Format > #35 – Hide Previous Round Condiments on Display
When this is enabled, a user who picks up a service totaled check will not see the condiments initially. They can toggle the condiments (view or not view) with the Display/Hide Condiments touchscreen key.
Posting and Control > Control #21 – Enable Condiment Masking
For condiments on NLU keys, this will display only the condiments belonging to a condiment group that is allowed by the Parent Item
Format > #4 – Wrap Condiments on Guest Checks
Condiments that are enabled to print on the guest check will print as many condiments as can fit on a line (wrapping), instead of printing one condiment per line

Order Devices

Wrap Condiments
Prints as many condiments as can fit on a line (wrapping), instead of printing one per line
Print Condiments in Red
This will override the MI Class Color setting for the printer, and always print in red.
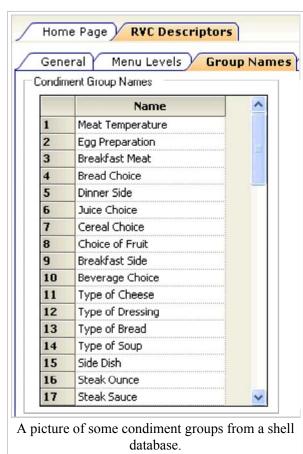
Operator

Display Condiment Help
> For forced condiments, having this enabled will show the user a list of the condiment choices. If it is disabled, the condiment window does not appear.
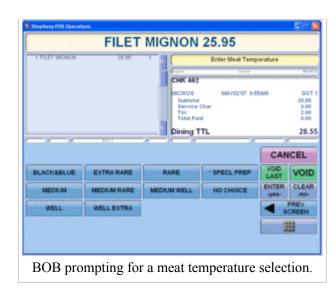
Touchscreen Design

Function > Transaction > #648 Display/Hide Condiments
> Only works when the RVC Format #35 bit is enabled; this option will toggle the condiment view on or off.

"Required" and "Member Of" Condiment Groups (Forced Condiments)

Simphony allows 64 condiment groups per Revenue Center. The condiment groups are given names in RVC Descriptors. This helps to keep databases organized; it is also the prompt used on the workstation to show instructions to the user when a condiment group is required.

A picture of some condiment groups from a shell database.
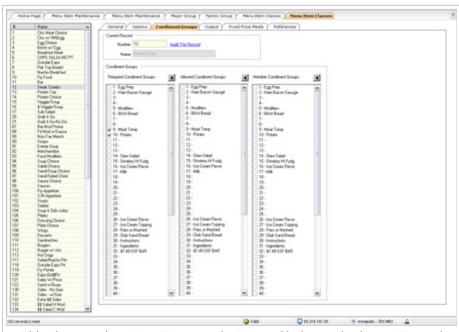
A Blue-Option-Bar BOB will say something like "Enter Meat Temperature" or "Enter Juice Choice" when a forced condiment is required. The term "forced condiment" is used because a condiment choice is required before another menu item can be entered.
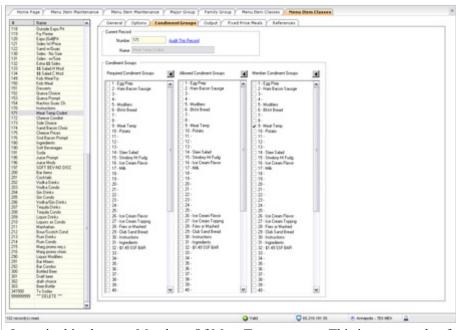
BOB prompting for a meat temperature selection.

Standard Example

The condiment group "Meat Temperatures" exists in almost all databases. Items such as "Steak Combo" and "Burger" are in a class that **requires** the Meat Temperatures Condiment Group. Items such as "Rare" and "Medium" are in a class that is a **member of** that Condiment Group. When I press "Steak Combo" (which requires Meat Temperatures) I see the Menu Items in the "Meat Temperatures" condiment group and I must enter one. Note that any condiment group that is "Required" is always "Allowed."
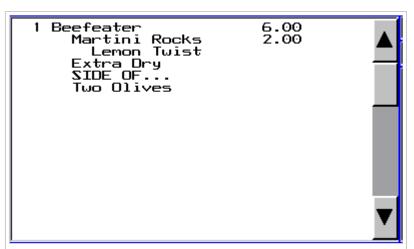

This class requires Meat Temps and a Potato Choice, and prints to Hot and Expo Printers. This is an example of a class used for the item Steak Combo.

Items in this class are Members Of Meat Temperatures. This is an example of a class used for the items "Rare" and "Medium."

Condiments Requiring Condiments

There are some situations where you will need one condiment to require another condiment. It is often taught in "Boot Camp" that you can ring in an Entrée, and then have two condiment choices: Soup or Salad. Selecting one of these then prompts your choice of Soups or Salads, accordingly. While this is a good example, it isn't really practical in the real world because usually it is just easier to have both soups and salads on the same screen. More typically, this feature is used when one item requires further explanation for the remote printer. A good example of this is when a user rings a Beefeater Martini. The next question a server asks is: Olives or Twist? The bartender needs to know this when preparing the item; therefore the server is prompted with a condiment-requiring-a-condiment.
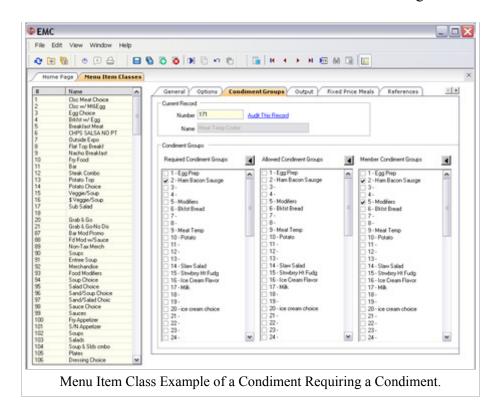

In this example, notice that Lemon Twist, the condiment-of-the-condiment, is indented further than the other condiments. The last three condiments (not forced condiments, but additional modifiers added by the waiter) are at the same indented level as the Martini Rocks, because they are modifying Beefeater, not Martini Rocks.

The condiment-modifying-condiment feature only allows the two levels of condiments. This means — based on the example on the right — that you cannot have the item "Lemon Twist" require another condiment choice.

Programming Condiments Requiring Condiments

Programming a condiment to require a condiment is actually very simple. In the Menu Item Class, check the "Member Of" box(es) as appropriate, and also select the appropriate
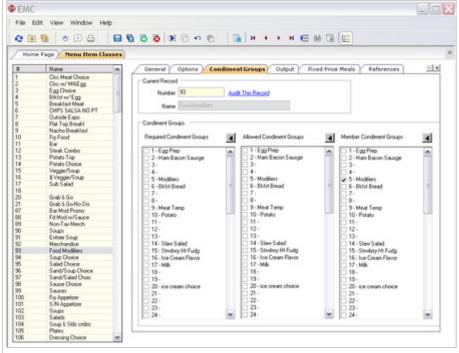
"Required" condiment group(s). You will see that the item Martini Rocks is a member of the condiment groups Vodka Modifiers and Gin Modifiers (and All Bar Preps), and it requires the Drink Garnish condiment group (Lemon Twist is in the Drink Garnish group).

Menu Item Class Example of a Condiment Requiring a Condiment.

General Condiments

Most condiments are not forced condiments. Typically, most Simphony Shell Databases contain many, many condiments, and these condiments are overwhelmingly the largest percentage of menu items in a database. In a true Shell Database programmed for immediate use, there are not many "Regular" items programmed, as they change from site to site, whereas there will be close to 2,000 condiment items programmed that apply to almost every site. This is a sampling of some common condiment items that are found in a database:

Add, Allergic To, Dressing on the Side, Al Dente, BBQ Sauce, Croutons, Mayo, Cheese, Lettuce, Tomato, Shrimp, Don't Make, As Entrée, As Appetizer, Only, On the Side, Linguini, Extra, Sub, To Go, Instead Of, No Salad Dressing, Pepper, Salt, Olives, etc.

The "Food Modifiers" class is a Member Of Condiment Group #5. Most condiment menu items are in a general class group such as the "Modifiers" group.

These condiments are not forced condiments; they are simply items that attach themselves to the parent items. A parent item needs to allow condiments to be rung in. This is accomplished like this:

1. The rules of "What makes an item a condiment?" say that I need to have at least one Member Of box checked. Most databases have a condiment group called "All Food Preps" and another called "All Bar Preps", and the general condiments (like those listed above) are in these groups.
2. All my "Regular" Food items should be in a Menu Item Class that allows the "All Food Preps" condiment group.

Allowed Condiment Groups

Often, databases are created where every menu item class allows every Condiment Group. This is generally bad programming practice; this article will explain why the databases that always check every "allowed" box have created problems.

- This is, first, unnecessary: If all condiments are in the "All Food Preps" condiment group, then only one box needs to be checked per "Regular" Food class, "Allow All Food Preps."
- Secondly, this does not allow for room for growth — when you require an item to be "not allowed" as a condiment for every group but one. (Example 1.)
- Finally, when condiment classes have every Condiment Group Allowed, now you have created a situation where one condiment is actually modifying another, and you have again severely limited your room for growth.

Condiment Examples

Example 1

- **Situation**: A stadium's restaurants want to include an option for a Souvenir Cup ($2.00 charge) for sodas. Not a forced modifier, but a menu item on a SLU that can only be attached to Sodas.
- **Solution**
  1. Add a condiment group in RVC Descriptors called Souvenir Cup.
  2. Add a menu item class that is a Member of Souvenir Cup, but not a Member of "All Food Preps" or "All Bar Preps."
  3. The Menu Item Class that contains the sodas should allow the Souvenir Cup group. No other menu item class needs to allow this condiment group; therefore the item "Souvenir Cup" can only be attached to Sodas.
- **Lesson**: This was a simple fix, but this would have required far more work if the database had incorrectly been programmed with every condiment group allowed by every menu item class.

Example 2

- **Situation**: The chef at a fine-dining restaurant wants to force the servers/bartenders to specify the type of peppers when they enter "Add Peppers or Without Peppers." The reason is simple: the kitchen had several types of peppers, and clarification to the cooks in the kitchen was necessary.
- **Solution**: Add a Menu Item Class that is just like the All Food Preps class, but it also requires the Pepper Types condiment group.
- **Lesson**: This is only possible when the "All Food Preps" class correctly does not allow other menu item classes. Observe the following examples.

Correct Programming for this example

The example on the left is the correct example of how a database should be programmed.

```
1 House Salad           13.00          1 House Salad           13.00
    1000 Island                            1000 Island
  ADD                                    ADD
  Peppers                                Peppers
     Red peppers
```

The Menu Item Classes for "1000 Island" and "ADD" do not allow condiment groups. When "Peppers" is rung in, it can correctly prompt for its Required Condiments.

Incorrect Programming for this example

The example on the right is an incorrect example of how a database should be programmed. The Menu Item Class for "1000 Island" incorrectly allows other condiment groups. When the item "ADD" is ordered, it is already on the second tier of condiments because it is modifying "1000 Island" instead of "House Salad." So when we ring Peppers, there is no way to have it prompt for the type of peppers. This incorrect method is another great example of how checking "allow condiment group" for each group does not allow room for growth—you could not address this chef's situation easily with an incorrectly programmed database.

Example 3

- **Situation**: The restaurant has every entrée prompting for a choice of salad or soup. The issue is this: They want to conserve paper and lessen confusion at their Cold Printer station—they don't want the Entrée to print to the Cold Printer every time, they only want the salad to print there if the server/bartender entered a salad.
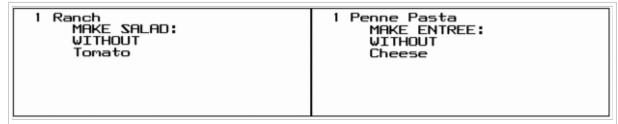- **Solution**
  1. First we need to allow the salad dressing choices to print to their own printer, instead of following the Parent Items. For the Salad Dressing Choices class, we need to:
     1. Enable MI Class option bit #22, Use Own Output Link.
     2. Enable the appropriate Order Device Output printers for this class.
  2. This addresses the immediate situation, but then we have another issue. What if the server/bartender wants to modify the Entrée or the Salad? How do we make sure the items print to the appropriate printers?
     1. Create two new condiment groups, called "Make Salad" and "Make Entrée", and edit existing "Regular" Menu Item Classes to allow these Condiment Groups.
     2. Create Menu Item Classes that is are condiment classes, and make one a Members of the "Make Salad" and the other a member of the "Make Entrée" class. These classes will allow "All Food Preps."
     3. For these classes, enable MI Class option bit #22, Use Own Output Link. Each class should be programmed to go to the appropriate printers.
     4. Create a "Make Salad" menu item, and a "Make Entrée" menu item, each linked to the appropriate class.

- **Lesson**: Because the database didn't have every Menu Item Class allowing every Condiment Group we had a lot of room for growth in this situation. It was only necessary to add a few Menu Item Classes — strategically programmed — to honor the requests of the site. The workstation operations for this: A server/bartender rings in Penne Pasta with the forced condiment "ranch". The customer wants the salad without tomatoes, and the Penne Pasta without cheese.

```
1 Penne Pasta           12.50
    Ranch
    MAKE SALAD:
       WITHOUT
       Tomato
    MAKE ENTREE:
       WITHOUT
       Cheese
```

We have made this possible with our programming, and the server/bartender rings in the items as shown on the right.

The order chits will print in the following manner:

```
 1  Ranch                        1  Penne Pasta
      MAKE SALAD:                      MAKE ENTREE:
      WITHOUT                          WITHOUT
      Tomato                           Cheese
```

The cold printer chit is on the left. The cook at the cold station only sees the salad and its condiments, because they don't need to see any other information. If a bowl of soup had been ordered instead of salad, nothing would have printed. The hot printer chit is on the right. The cook at the hot station only sees the entrée and its condiments. In this example, the expo printer will print every item, looking similar to the order (first box).

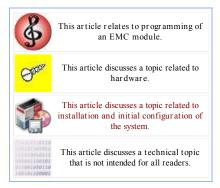# Ideal Database Setup for Condiment Handling

- Order Devices have the option bit OFF – Print Condiments in Red
  - Use MI Class to determine Red or Black. If you enable Order Devices to print red condiments, you can never get one to print black, limiting your room for growth.
- MI Class for Condiments are members of only one condiment group (All Food Preps)
  - This class has the option: [Allow non-priced menu items] turned on
  - This class does not allow other condiment groups
  - This class does not have the option "Use Own Output" enabled
- MI Classes for each Condiment Group (forced condiments) should be a member of "All Food Preps" as well as the other condiment group (The "Member of Meat Temps" class is also a member of "All Food Preps")
- MI Classes for Regular Items allow only one condiment group
  - The "All Food Preps" group

Configuring Network Load Balancing for Simphony

Simphony is capable of distributing the work in a large environment by adding additional application servers. This article reviews the recommended configuration instructions.

🎼	This article relates to programming of an EMC module.
🔩	This article discusses a topic related to hardware.
💾	This article discusses a topic related to installation and initial configuration of the system.
▦	This article discusses a technical topic that is not intended for all readers.

Contents

Setting up a Windows Network Load Balancing for use with Simphony

Overview

Simphony is capable of distributing the work in a large environment by adding additional application servers. While no load balancing is necessary, and each Workstation (WS) or group of WS's can be configured to post to a particular server, this does not offer any redundancy should one of the servers not remain available for any reason.

Network Load Balancing is a feature of Windows Server 2003 and may be utilized to set up a virtual IP address that all of the WS's point to. This way the WS messages get routed to one of the servers. If a server drops out, the remaining ones handle the messages with no required change at the WS's. The WS's are always connecting to the same virtual IP, regardless of which server they are actually connected to.

Preparation

There are a few requirements that must be in place prior to starting the configuration. For this example, it will be assumed that there are two application servers, each running both Simphony and mymicros.net.

Each server should have at least two Network Interface Cards (NIC). One of the NIC's on each server must be set up with a Static IP address, and a third Static IP address must be available for use as the Load Balanced IP (also referred to as the Clustered IP address).

On each of the servers to be added to the Network Load Balancing (NLB) Cluster, the Remote Procedure Call (RPC) service and the RPC Locator service must both be set to Automatic and started.

Both servers must be able to ping each other's NLB IP address.

When adding a second server and the load balancing on an existing system, it is best for the WS's to be offline as there may be interruptions to the transactions. The EMC Playback Control Module should be used to force all WS offline and to prevent transaction play back.

Configuring Load Balancing

On one of the servers, open the Windows Network Load Balance Manager: Click the Start button | select Run | type nlbmgr.exe and click OK.

The cluster will need to be added here.

Right-click on Network Load Balancing Clusters and select New Cluster. This will bring up a number of configuration windows, which should be filled out as follows:

- On the Cluster Parameters window, fill in the following available sections:
    - Under the Cluster IP Configuration section, add the Static IP address that was reserved for the virtual Cluster IP along with the appropriate Subnet Mask. The full Internet name may be entered if known, but the default may be left in place if none was designated.
    - Under the Cluster Operation Mode section, select Unicast. Multicast would only be used if there was only one NIC on the server with multiple IP addresses assigned, one of which was being included in the cluster. Multicast has been known to cause

performance problems with Simphony, and is not recommended in this configuration.

- In the Remote Control section, either allow control or not as security policy may specify. Click on Next.
- This will take you to the Cluster IP addresses window, where the previously entered Cluster IP will display at the top and the lower area allows for additional Cluster IP addresses to be added. This area is left blank for this configuration. Click on Next again.
- The Port Rules window will be displayed. There will be one Default Defined Port Rule already configured. Highlight this rule and select Edit.
- In the Cluster IP address section, accept the default of All.
- In the Port Range section, accept the default of 0 – 65535.
- In the Protocols section, accept the default of Both.
- In the Filtering Mode section, accept the default of Multiple Host but change the Affinity setting to None. This will mean that the WS will use whichever server is available through the load balancer on each request. If Portal is being run on these servers, then the Affinity should be set to "Single", where the server that the initial connection is made to will remain the server for the duration of the connection, regardless of the number of different requests.
- No other options need to be defined in this window. Click on OK, then Next.
  - The Connect window will be displayed. Enter one of the IP addresses that are the static IP's on the NIC reserved from the cluster. Click on Connect.
  - Once the server is found, click on Next.
  - In the Host Parameters window, accept the displayed defaults, where Priority is set to 1 and the IP address is the Static IP and Subnet Mask of the NIC that is reserved for the Load Balancing. The default state of Started should be accepted as well. Click on Finish.

- After a moment, the cluster will appear in the console with the first server listed as a member.
  - Right-click on the second cluster name and select Add Host to Cluster.
  - Repeat the above steps for the second server, adding that server's Cluster IP address when prompted. Once completed, both servers will display under the Cluster and be highlighted in green. In the right-hand pane, the status of both servers will show as being Converged. This window does not automatically refresh, and a manual refresh may be needed to see the "Converged" status. The Log Entry window at the bottom of the screen will show the results of the configuration change as well as when it was completed. Clicking on each server listed on the left side will display the port rules configured on that particular machine.

The NLB virtual address should now be pingable from a machine on the same network, but not part of the cluster.

Setting up Simphony to use the Virtual Load Balanced address

Now that Windows Network Load Balancing is set up, the Simphony configuration must be adjusted to allow for the changes.

Several areas will be adjusted in MS Windows, Simphony and mymicros.net.

- A backup of the Simphony folder on each application server should be performed before proceeding!

Ensure that the Simphony services are set correctly on each server.

- On the Primary server, all services should be enabled, except the CAL Client, which should be set to Manual on a server.
  - If the EMS product is not used, the Micros EMS Batch Service can be disabled on both machines. If it is being used, it should only be enabled on one machine.

- On the Secondary server, the only services that should be Automatic and running are the Micros CAL Service, Micros Direct Posting Service, Micros NewDTS service and the Micros Portal Service.
- If the MyInventory product is used in conjunction with a Simphony site, the Data Posting Service (DPS) should only be running on one server.

The following chart illustrates the services and how many servers they should run on.

Service Name	Number of Servers they can be run on	Notes
Micros CAL Client	Zero	Cal Client should not be run on Servers; causes some odd behavior
Micros CAL Service	All	May be run on all Servers, CAPS determined by which server the WS is CAL'd from
Micros Data Transfer Service (DTS)	One	For Labor Posting
Micros Direct Posting Service (DPS)	All (or One)	OK to use all unless using MyInventory, where all transactions need the same ServerId

MICROS EMS Batch Service	One	Running multiples may cause items to be inserted multiple times (Sub and Main Menu Lvls)
Micros NewDTS	All	N/A
Micros Sequencer Service	One	Running multiples may cause the same sequence to be kicked off multiple times
Micros Portal Service	All	mymicros.net must be configured for the load balanced IP for this to work on all servers

In EMC, only one server should be specified as the Licensed Application Server, even if the codes have been generated on both server's hardware address. Only the one physical machine that is running Sequencer Service should be set up in EMC as well. The NLB address should not be used for licensing or Sequencer Machine.

Once the services are set to Auto, Manual or Disabled there are a few files that need to be updated.

- On the Primary server, where everything was previously working, copy the Micros\Simphony\EGatewayService\DBSettings.xml file to the Secondary server. This will insure that the correct Database (DB) IP addresses, catalog names and logons are in use on both servers.

- On the Primary server (in the same folder) open the Web.config. In each place where the ServerName or IP address of the Primary server appears, substitute the Clustered IP address. Repeat this process on the Secondary server.

- On the Primary server, in the Micros\Simphony\MyMicros\MyMicrosv5 folder, open the microsconfig.properties file.

- The DBserver IP addresses in the DB Location section should already be correct, but verify them. Also verify that the user is configured. If mymicros.net is working, then the password is correct as well.

- Scroll down to the Misc section. Three lines need to be uncommented and one line needs to be added. When complete, it should look like this:

```
db.driverClass=net.sourceforge.jtds.jdbc.Driver
db.protocol=jdbc:jtds:sqlserver
db.URL=@protocol@://@serverAddress@:@port@;databaseName=DBNAME
db.URL.simphony=@protocol@://@serverAddress@:@port@;databaseName=DBNAME
```

Scroll to the bottom and the very last line needs to be updated to show the Clustered IP address:

```
portal.enableCSRFAllowedURL=<Clustered IP address here>
```

Once these changes are made, this file can be copied to the Secondary server as it now has the correct settings.

The following files should also be adjusted with the virtual (Clustered IP) address on both servers. Not all are required, but should be done to maintain consistency.

1. <Drive letter>:\Micros\Simphony\DirectPostingService\DirectPostingService.exe.config
2. <Drive letter>:\Micros\Simphony\EGatewayService\CAL\Win32\Packages\EGateway\Web.config
3. <Drive letter>:\Micros\Simphony\EGatewayService\CAL\Win32\Packages\PosToKdsHandler\KDSCommandList.xml – update the CheckandPostingServiceHost and the DbDownloadServiceHost lines.
4. <Drive letter>:\Micros\Simphony\EGatewayService\CAL\WS4LX\Packages\WebServer\WebServer\wwwroot\EGateway\web.config.txt
5. <Drive letter>:\Micros\Simphony\EGatewayService\CAL\WS5\Packages\WebServer\WebServer\wwwroot\EGateway\web.config.txt
6. <Drive letter>:\Micros\Simphony\EGatewayService\Download\EMCClient\EMCManifest.xml
7. <Drive letter>:\Micros\Simphony\SequencerService\SequencerService.exe.config

Any CAL packages on the main server that have been added or altered will need to be copied to the secondary server. A difference in setup.dat versions of the same package will cause the WS to continually download the package, first from one server and then from the other.

From the EMC, under Enterprise Parameters, the mymicros.net URL will need to be adjusted to the Clustered IP address so that WS reports will use the correct address.

At this point, an Internet Information Services (IIS) reset should be performed and services started on each machine. The WS connectivity and operation should be tested as well as reporting in both mymicros.net and PMC. Any interfaces that are in use should be confirmed as functional prior to allowing the WS to come up from being forced offline. Once all of the sites are up, verify which server the transactions are routing through by checking the ServerId of the records in the que_checks_hist database table after the switch is complete.

Separate instructions will be detailed in another article for using the Opera interface with a Load Balanced Simphony system.

Credit Card Batching, Editing, and Transferring

Credit Card Batching, Editing, and Transferring are activities performed by users on finalized credit cards. This article discusses the EMC modules used to perform credit card operations and describe the terminology used by these modules.

This article relates to programming of an EMC module.

Contents
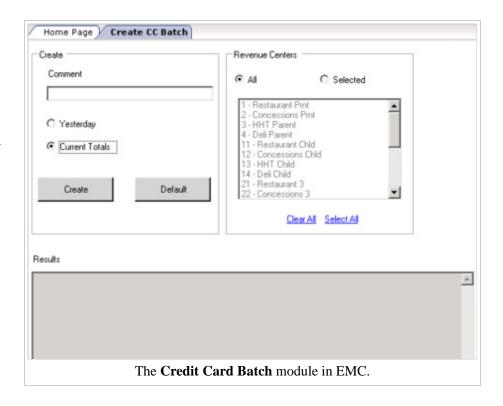
Create Batch

In the **Create Batch** module, a user can create a Credit Card Batch.

What is a Batch?

A "batch" is a collection of credit cards that have already been finalized on the workstation. Once a batch is created, these credit card records are ready to be edited or settled. If a user accesses a check on a workstation with a batched credit card, the credit card payment is not allowed to be modified.

Typically, Credit Card Batches are created via a PC Autosequence during the SOD process. That being the case, this module is used quite infrequently. It is used most often in these situations:

The **Credit Card Batch** module in EMC.

2 of 6

- The site wants to batch multiple times per day, at various times of their own choosing.
- For some troubleshooting purposes, a site may choose to run a batch using this module instead of automatically.

Using the Module

This module is divided into three sections:

Revenue Centers
> From this list, a user can choose the "All" option to create a batch for all RVCs, or choose "Selected" and then choose the RVC(s) to be batched. This list displays only the RVCs that the logged-in user is able to view, based on Employee Role permissions.

Create
> In this box, the user configures information about the batch that will be created. The "comment" field allows any user-defined text that describes the batch (this field may be used optionally). The "Yesterday" and "Current Totals" boxes let the user determine which type of totals to batch.

> - Yesterday - Choose this radio button if the batch to be created should be for Yesterday's totals (and all dates prior to yesterday). All checks that were closed yesterday or before and include an unsettled Credit Card will be included in the batch.
> - Current Totals - Choose this radio button if the batch to be created should be for all closed checks that include unsettled Credit Cards up to the current time. Typically, the "Yesterday" option is used, unless the site batches multiple times throughout a day.
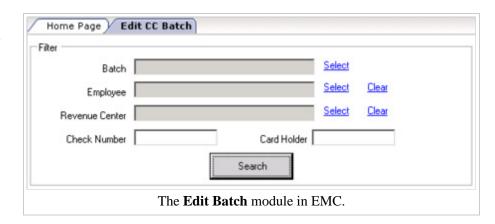
> > The "default" button sets the fields to the original state: the RVCs become unselected, the comment box is blanked, and the "All" radio button is checked.

Results
> After the user clicks "create", the Results window displays information about the batch.

Edit Batch

In the **Edit Batch** module, a user can edit records from a Credit Card Batch that has not yet been settled. A user may need to edit records in any of these scenarios:
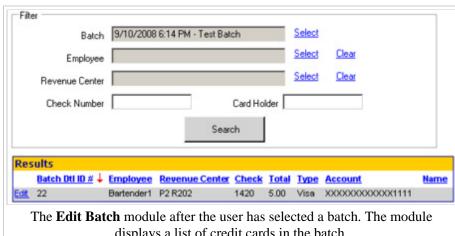
- During the settlement process, the system was not able to fully settle a batch. Some records may fail to settle, and they will have to be edited so that the "omit" flag is enabled.

The **Edit Batch** module in EMC.

- A user mistyped a manual authorization number, and the card will not settle. A user can edit the Authorization Code.
- A user mistyped a credit card number, and the card was not authorized because it did not reach the Floor Limit required to perform an authorization.

- A tip was entered as $2000.00 instead of $20.00. The user can edit the tip amount.

In many environments, PC Autosequences batch and settle credit cards automatically during the SOD process. When this occurs, there is no way to edit any of the cards in the batch. In more cautious environments, cards are batched automatically but settled manually (usually by a privileged member of the accounting staff), giving the user an opportunity to scan the records for abnormalities, such as the $2000.00 tip mentioned above.
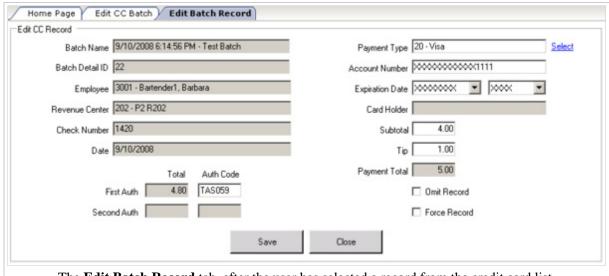

The **Edit Batch** module after the user has selected a batch. The module displays a list of credit cards in the batch.

Using the Module

When the module opens, by default there is nothing a user can do. Prior to pressing search, the user must select a batch. The records listed in the batch selection dialog include all batches for this property that have not yet been settled. The batches are named with the time of creation (in UTC) and the comment used when creating the batch, if any. In addition to selecting the batch, the user has the option of entering search criteria to return only specific results, using these filtering methods:

- The Employee who finalized the transaction.
- The Revenue Center where the transaction took place.
- The Check Number
- The name of the card holder. *Note: This field is often encrypted on the card and may not be stored in the MICROS database. Therefore, it is not always possible to use this as a search parameter.*

After search has been pressed, the results grid appears below the Filter box. (The example image shows a batch that contains only one credit card record.) To edit a record, click the "edit" link in the leftmost

The **Edit Batch Record** tab, after the user has selected a record from the credit card list.

column. This opens the **Edit Batch Record** form in a new tab. From this tab, the user can edit the properties of the credit card record:

Authorization Codes

> If the card was manually authorized, the user may have mistyped the authorization code; this field lets the user correct this information.

Payment Type

> This field lists all the Credit Card tenders in this property. A "Credit Card" tender is any tender where the tender's option bit, **[33 - Require Credit Auth Before Service Total]** is enabled. While it is rare that a user would change the Tender Type, this field allows this behavior.

Account Number and Expiration Date

> These fields let the user update the account number and month/year of the card's expiration. These fields display the masked information; when editing, the user will enter the full unmasked account number and expiration date.

Card Holder

> This field displays the name of the card holder if it is known. It cannot be edited.

Subtotal

> This editable field displays the total of the credit card amount prior to adding the tip.

Tip

> This editable field displays the tip added to the subtotal.

Payment Total

> This field calculates the value of the Subtotal and Tip amounts. This is the amount that will be charged to the customer.

Omit Record

> Select this option to omit this record from being settled.

Force Record

> Select this option to mark the record as "forced" for the settlement process. Normally, this option is used in instances where a record has been rejected, but the user does not wish to omit it from being settled. This option is not recognized by all Credit Card Driver Types.

Create Report

In the **Create Report** module, a user can generate a report that displays detailed information about credit card transactions. This module lets the user create reports on settled or unsettled batches, and it also allows some filtering criteria to view specific records.

This module is used in a number of scenarios; two common examples are:

The **Create Report** module in EMC.

- In many sites, PC Autosequences automatically batch credit cards, but the batch is not automatically settled. In this type of environment, someone on site (usually a member of the accounting staff) creates a report to review the batch before
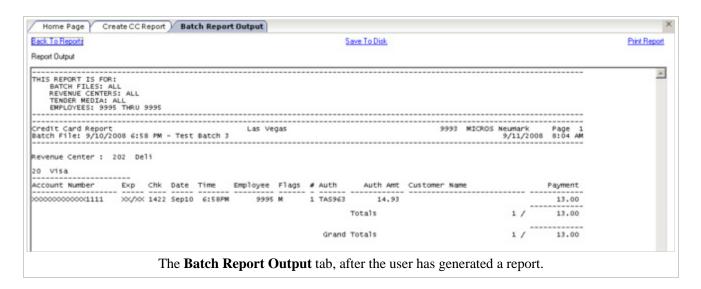
settlement, making edits to records if necessary.
- If a card holder has a dispute with the site, a report can be run to find the customer's card to troubleshoot the issue.

Using the Module

A report can be run at any time after the module opens. If only one unsettled batch exists for the property, it is common that a user enters the module and presses the "Run Report" button without entering any search information. This action will return a report that includes all unsettled batches, all employees, all RVCs, all payment types, and all account numbers. To generate a specific report that does not include all information, a user can use the search criteria:

Batch File
> Select a batch or range of batches to be used in taking the report. When the "Saved Batches" checkbox is checked, the list of batches includes all settled batches. When "Saved Batches" is unchecked, the list displays only unsettled batches.

The **Batch Report Output** tab, after the user has generated a report.

Employee
> Select an employee or range of employees to be used in taking the report. This field represents the employee who finalized the transaction.

Revenue Center
> Select a Revenue Center or range of Revenue Centers to be used in taking the report.

Payment Type
> Select a Tender/Media or range of Tender records to be used in taking the report. This field lists all the Credit Card tenders in this property. A "Credit Card" tender is any tender where the option, **[33 - Require Credit Auth Before Service Total]**, is enabled.

Last Four Digits
> To find a credit card by the last four digits, enter the last four digits here. To search for any credit card numbers, leave this field blank.
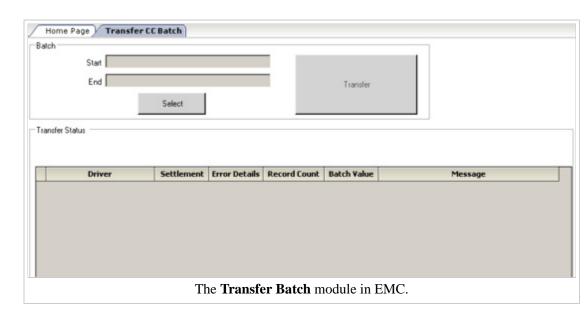
After "Run Report" is pressed, the **Batch Report Output** form displays in a new tab. From this tab, the user can view the report, print it, or save it to disk.

Transfer Batch

In the **Transfer Batch** module, a user can select a batch and transfer it to the bank.

Transfer and Settle

The terms "Settle Batch" and "Transfer Batch" are used interchangeably. When a batch is settled/transferred, this means that the credit cards in the

The **Transfer Batch** module in EMC.

batch are transmitted to the Credit Card Processor; this activity is essentially a deposit into the establishment's bank for the total of all Credit Cards that are included in the batch.

Using the Module

This module is quite simple to use:

1. Select the batch or range of batches to be settled.
2. Press the Transfer button.
3. A message above the grid will display the current activity. After the process is complete, the grid will display the results of the batch(es) with appropriate status messages.

Credit Card Operations (CA Driver)

For information about Credit Card Operations for systems that do not use MICROS credit card processing, see Credit Card Operations (No CA Driver)

This article discusses **Credit Card Operations** for workstations when the system is using MICROS credit card drivers to process credit card authorizations. This page is intended to give programmers real-world examples of how to program the system so that the proper credit card function keys can be used in appropriate situations.

This article contains a **best practices** section.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Configuration Overview
- 2 Authorize and Finalize Scenarios
    - 2.1 Single Credit Card
    - 2.2 Multiple Credit Cards
- 3 Authorize and Finalize in one Step
    - 3.1 Single Credit Card
    - 3.2 Multiple Credit Cards
- 4 Reasons to Avoid Overtendering Multiple CCs
- 5 Best Practices for Multiple Credit Cards
- 6 See also

Configuration Overview

The examples on this page assume that:

- The credit card Tender/Media records have been programmed with the option, **[3 - Assume Paid in Full]**, enabled
- The credit card Tender/Media records have been programmed with the option, **[33 - Require Auth Before Service Total]**, enabled
- The credit card tenders (VISA, MasterCard, etc.) are not programmed directly on touchscreens.

Authorize and Finalize Scenarios

The following examples are used in RVCs that are not Fast Transaction environments.

Single Credit Card

In the most typical scenario, the flow of a credit card transaction is as follows:

1. The employee presents the customer with a guest check.
2. The customer provides a credit card as a form of payment.
3. The employee performs a credit card authorization by picking up the check, using the **[CCard Authorize]** function key (629), and entering/swiping the credit card number.
4. The employee returns the credit card voucher, guest check, and the customer's credit card to the customer.
5. The customer adds a tip and leaves the credit card voucher on the table.
6. After the customer leaves, the employee gets the credit card voucher from the table. The employee then returns to a MICROS workstation, adds the tip and closes the check.
   - Most commonly, the employee uses the overtender method of paying. With this method, if the check total is $45, and the customer left a $7 tip, the employee will perform the following keystrokes on the workstation:
     1. **[52.00]**
     2. **[630 - CCard Finalize]**.
     3. The workstation prompts, **Tip amount is $7?**
     4. The user presses **[YES]** and the check closes.
   - Some systems are programmed where the employees do not use overtendering. With this method, the user would input the following:
     1. **[7.00]**
     2. **[$ Tip]** (A service charge key programmed on the touchscreen.)
     3. BOB displays **Enter charge payment.**
     4. The user presses **[630 - CCard Finalize]**.

Multiple Credit Cards

In some situations, a waiter or waitress is asked to pay a single check to two or more credit cards. Operationally this is not difficult, but because it is performed less frequently, operators sometimes get confused by the steps. Most notably, the extra step that is forgotten is the act of entering the amount to authorize/pay *before* pressing the authorize/finalize function keys. Consider the following example:

- A check is $100. The customers at the table give Samantha two credit cards: a VISA to charge $40, and a MasterCard to charge $60.
- Samantha picks up the check and enters the following:

> With more than two credit cards, steps 1 and 2 from this list will be repeated for all but the last card.

  1. **[40.00]**
  2. **[629 - CCard Authorize]**, and then enter/swipe the VISA credit card number.
  3. **[60.00]** (Alternatively, this step could be omitted. In this case, the workstation assumes that the difference needs to be authorized; thus $60 will be authorized without entering an amount.)
  4. **[629 - CCard Authorize]**. At this point, the workstation displays a dialog showing choices of **1. New Credit Card** and **2. Visa**. (In this situation, choice 2 will reauthorize the existing credit card.) Choose 1 to authorize a new card, and then enter/swipe the MasterCard credit card number
- Samantha returns the credit cards and vouchers to the customers.
- The customers add tips to the vouchers, sign, and leave.

- After the customers leave, the Samantha gets the credit card vouchers from the table and returns to a MICROS workstation to add the tip and close the check. In this situation, it is ideal that the user *does not* use the overtender method of paying (see below). Instead, the following steps should be followed (example assumes a $6 tip for the $40 check and a $10 tip for the $60 check):

> With more than two credit cards, steps 1-4 from this list will be repeated for all but the last card.

1. **[6.00]**
2. **[$ Tip]** (A service charge key programmed on the touchscreen.)
3. **[46.00]**
4. **[630 - CCard Finalize]**
5. At this point, the workstation displays a dialog showing choices of the authorized Credit Cards: `1. Visa` and `2. MasterCard`. Choose 1 to pay the Visa.
6. Now the check's total is 60.00.
7. Because there is only one Credit Card remaining, the user can treat the check as though this transaction is a single-CC transaction. Like the steps above, the operator may use the overtender method of paying or the add-tip-first method:
   - **Overtender Method**
     1. **[70.00]**
     2. **[630 - CCard Finalize]**.
     3. The workstation prompts, `Tip amount is $10?`
     4. The user presses **[YES]** and the check closes.
   - **Add-Tip-First Method**
     1. **[10.00]**
     2. **[$ Tip]** (A service charge key programmed on the touchscreen.)
     3. BOB displays `Enter charge payment.`
     4. The user presses **[630 - CCard Finalize]**.

Authorize and Finalize in one Step

The following examples are used in Fast Transaction environments. In Fast Transaction RVCs, tips are generally not accepted or allowed, and thus the RVC Parameters option, **[Do Not Prompt for Tips (No Overtendering if Charge Tip is Required)]**, should be enabled.

Single Credit Card

In the most typical scenario, the flow of a credit card transaction is as follows:

1. The employee enters all the items for the transaction.
2. The customer provides a credit card as a form of payment.
3. The employee uses **[625 - CCard Lookup]** to perform the authorization and pay the check in one step.

Multiple Credit Cards

In some situations, the cashier may be asked to pay a single check to two or more credit cards. While this is uncommon in Fast Transaction environments, it is operationally quite simple. Consider the following example:

- A check is $28. The customer wants to pay $10 on a VISA and $18 on a MasterCard.
- Our trusty cashier Samantha enters the following:
  1. **[10.00]**
  2. **[625 - CCard Lookup]**, and enter/swipe the VISA.
  3. **[18.00]** (Alternatively, this step could be omitted. In this case, the workstation assumes that the difference needs to be authorized and paid; thus $18 will be authorized

With more than two credit cards, steps 1 and 2 from this list will be repeated for all but the last card.

and paid without entering an amount.)
4. **[625 - CCard Lookup]**, and enter/swipe the MasterCard.

Reasons to Avoid Overtendering Multiple CCs

While it is possible to use overtendering on any check, this document recommends that overtendering is not used on checks with multiple credit cards. In some situations, the overtender method will cause user confusion in the multi-CC payment process. Consider this rare example:

1. Two credit cards are used on a $100 check. The request is to pay $90 to VISA and $10 on a MasterCard.
2. Assume that the cards have been authorized and the customers have added the tip amounts: $20 tip on the VISA and $3 tip on he MasterCard
3. If the operator attempts to pay the $90 VISA by overtendering (typing **[110.00] [CCard Finalize]**, BOB will display, `$ Tip Amount is $10?`. This occurs because the workstation does not make any assumptions about the user's intent. The workstation knows that $100 of the check needs to be paid, and that $110 for a VISA was entered as a payment.
4. If the operator presses **[Yes]**, the transaction will be closed incorrectly; the user will have paid $110 to VISA, $0 to MasterCard, and the tip amount will be incorrect.
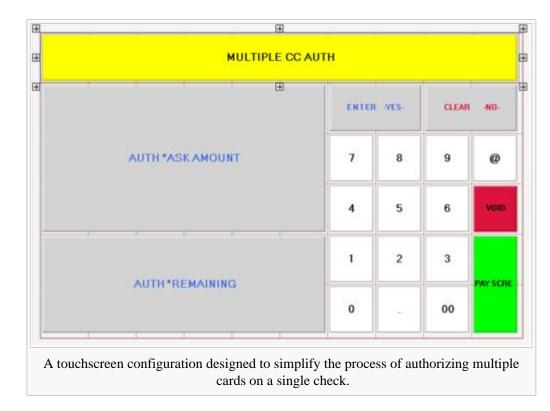
It is because of this scenario that overtendering is not recommended for checks with multiple cards.

Best Practices for Multiple Credit Cards

In RVCs that use fast transactions, the process of using multiple credit cards on a single check causes little confusion — the operator must enter the amount to charge before authorizing cards, but little else changes.

In the "Authorize and Finalize Scenarios", however, the process tends to be more confusing for a few reasons:

- Multiple cards on a single check is an uncommon occurrence
- Users do not usually enter an amount prior to pressing the **[CCard Finalize]** function key (630)
- Overtendering is almost always used for single-CC transactions, but it is discouraged for multi-CC transactions

Because of the possible end-user

A touchscreen configuration designed to simplify the process of authorizing multiple cards on a single check.
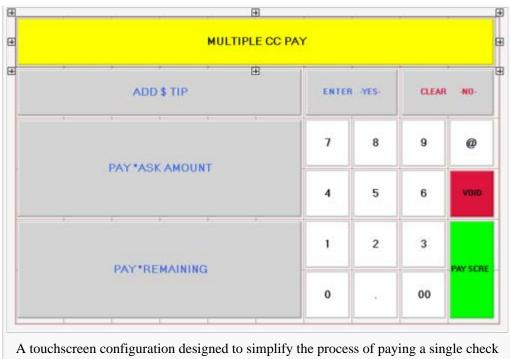
confusion, some well-programmed databases have created touchscreens that help a user through the process of authorizing multiple credit cards. In these databases, two keys on the payment screen are added:

- **[Auth Multi Cards]**
- **[Pay Multi Cards]**

These keys are next-screen touchscreen keys, which take the user to a screen for authorizing multiple cards or paying multiple cards.

Auth Multi Cards
> This screen (displayed in the first image), has two function keys:

A touchscreen configuration designed to simplify the process of paying a single check to multiple cards.

- **Auth *Ask Amount** - This function key is the **[CCard Authorize/Prompt]** function key (633). When used, the workstation will ask the user for the amount to be authorized. Because this function key prompts for the amount, users don't forget to enter the amount to authorize first, because the workstation will prompt for the amount. Users are instructed to use this key for all credit cards being authorized on a check except the last one.
- **Auth *Remaining** - This function key is the standard **[CCard Authorize]** function key (629). Users are instructed to use this key for the final credit card being authorized on a check. When this is used, the workstation will calculate all the previous authorizations on the check, and authorize the difference. For instance, if the check is $150 and $110 have been authorized on other credit cards, this function will authorize $40.

Pay Multi Cards
> This screen (displayed in the second image), has three function keys:

- **Add $ Tip** - This function key is a service charge key programmed as a $ Tip. When used, the workstation will ask for the amount of the tip. This key should be used for each credit card that was authorized on the check.
- **Pay *Ask Amount** - This function key is the **[CCard Finalize/Prompt]** function key (634). When used, the workstation will ask the user to select the credit card to be finalized (similar to step #5 from the Authorize and Finalize Multiple Credit Cards example above), and then the amount to be charged.
- **Pay *Remaining** - This function key is the standard **[CCard Finalize]** function key (630). Users are instructed to use this key for the final credit card being used to pay the check; this is essentially step #7 from the Authorize and Finalize Multiple Credit Cards example above.
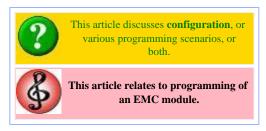
See also

Credit Cards · Credit Card Authorize/Finalize · Credit Card Batching, Editing, and Transferring · Credit Card Driver · Credit Card Driver Type · Credit Card Function

Credit Cards	Keys · Credit Card Merchant Group · **Credit Card Operations (CA Driver)** · Credit Card Operations (No CA Driver) · Credit Card Preamble · Credit Card Voucher · How to Configure Credit Cards · Loadable Credit Card Payment Driver Configuration · Prepaid Credit Card · Property Merchant Groups · Quick Service Transaction · RFID Credit Card Transaction
	Learning series: Credit Cards

Credit Card Preamble

This article reviews the setup of credit card preambles. There are several topics that are available by clicking on the provided links.

This article discusses **configuration**, or various programming scenarios, or both.

This article relates to programming of an EMC module.

Contents

What is a credit card preamble?

A Credit Card Preamble, sometimes called a Credit Card Prefix, is a digit or series of digits at the beginning of a credit card number that identifies the type of card that is being used.

Rules for defining credit card preambles

Adhere to the following rules for governing a valid credit card preamble:

- The **Start** and **End** preambles must end with an asterisk (*). For example, 304*
- The number of digits in the **Start** and **End** fields must be the same.
- The number of digits in the **Start** and **End** fields cannot exceed the Length defined.
- The value of the **End** field must be greater than the value of the **Start** field.

Sample List of Preambles for the U.S.

The values listed below apply to all US sites, however there are additional types that are accepted in other countries and the local processor should be contacted for the specific list. The list also changes as card providers are bought out (for example, Discover purchased Diners Club in 2008) and should be updated regularly. All credit cards are configured in the EMC in the Tender/Media module.
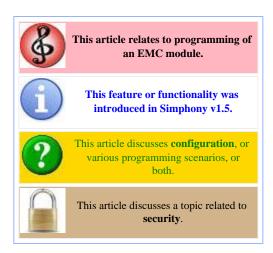
Start	End	Length	Card Type
40000000*	49999999*	16	Visa
51000000*	55999999*	16	MasterCard
222100*	272099*	16	MasterCard
34000000*	34999999*	15	American Express
37000000*	37999999*	15	American Express
36000000*	36999999*	14	Diners Club
38000000*	39999999*	16	Diners Club
30000000*	30599999*	16	Diners Club
30950000*	30959999*	16	Diners Club
35280000*	35899999*	16	JCB
60110000*	60110999*	16	Discover
60112000*	60114999*	16	Discover
60117400*	60117499*	16	Discover
60117700*	60117999*	16	Discover
60118600*	60119999*	16	Discover
62212600*	62292599*	16	Discover (CUP)
62400000*	62699999*	16	Discover (CUP)
62820000*	62889999*	16	Discover (CUP)
64400000*	65999999*	16	Discover

Credit Card Tokenization

Credit Card Tokenization is a security feature that helps protect merchants from credit card theft.

This article relates to programming of an EMC module.

This feature or functionality was introduced in Simphony v1.5.

This article discusses **configuration**, or various programming scenarios, or both.

This article discusses a topic related to **security**.

Credit Card Tokenization Overview

Tokenization technology involves replacing the customer's credit card (CC) number with a different identifier to uniquely identify the customer's credit card during the settlement of a transaction. This technology virtually eliminates the need to store any credit card numbers on persistent media on the merchant's site. All sensitive information that is stored for credit card processing will be kept off site.

Currently encryption technology is used to store customer's credit card data. While the encryption technology is secure, it requires ongoing maintenance tasks to maintain the security. The management of this technology is cumbersome for merchants. Many smaller merchants do not usually employ any MIS staff to monitor their networks and their security infrastructure. Larger Enterprise clients can incur very large auditing charges to verify that each site that they manage is PCI DSS (Payment Card Industry Data Security Standard) compliant.

Credit Card Tokenization Typical Use Case

A server picks up a guest check with the credit card that will be used for payment. The server swipes the credit card on the POS system and the credit authorization with the credit card number is sent to the credit card payment processor. The payment processor returns a valid authorization code and along with the payment a token is also returned to identify the

credit card during the transaction's settlement. Any record of the original card number, track data, etc. is erased from memory. When the voucher prints at the register, all that remains is the last 4 digits of the original credit card number and a token that identifies that card to the payment processor for any future operations.

- Consider the same transaction but the network connection to the credit card processor is down. In this case, a manual authorization will be required and no token can be acquired from the processor. The credit card data must be stored until a token can be acquired by the POS system - usually at transaction settlement time; at that point the sensitive credit card information would be purged from the system.

General Design Overview

SarOps will be responsible for collecting credit card information from the customer in the same manner it does today. The difference is that the driver will respond with a credit card token/alias that SarOps will need to store in the check detail. At that time, Ops will need to clear every trace of the card information from memory, this includes the card number, expiration date and all track data. Future authorizations (secondary authorizations) will use the card token to identify the account to the credit card driver. SarOps will continue to display the last four digits of the card number on the operator display and will also print the card number as it did in Simphony v1.4. When CC tokenization is in use, SarOps will also print the card alias on the credit card voucher as well as on the journal.
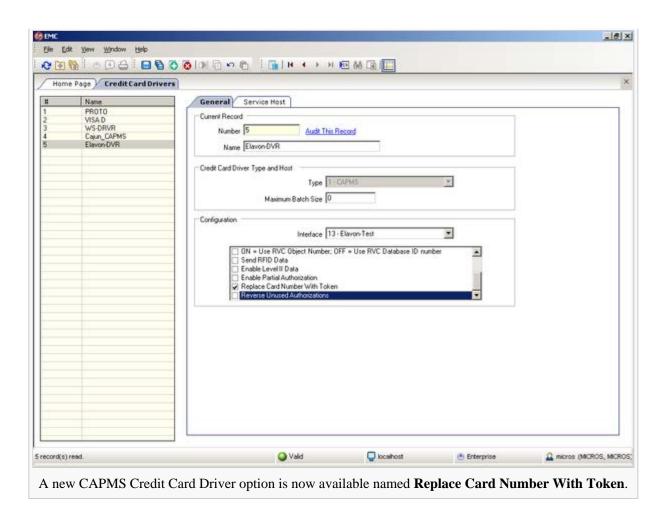
Important Considerations

- In Simphony v1.5 (GR), Credit Card Tokenization is compatible *only* with the CAPMS Credit Card Driver.

- Credit Card Tokenization and the **[627-CCard Recall]** Transaction function key are mutually exclusive as recalling a credit card stores card data within the Reference Detail. There is no easy way to determine what should and should not be deleted in that case and will lead to unwanted credit card data stored onsite on persistent media. Thus, CC Recall is outside of the scope of this work.

- Credit Card Tokenization *is* supported in conjunction with the use of another new Credit Card Driver option named **[Reverse Unused Authorizations]**.

- Please note that for a currently live environment that wants to make this change, that enabling Tokenization is *not* retroactive. All prior CC transaction records are not affected by this change and will need to be purged per the site's current purging method until the Tokenization enabling date has been reached.

Configuration

EMC

- To enable CC

Tokenization, navigate to the EMC | Setup tab |

A new CAPMS Credit Card Driver option is now available named **Replace Card Number With Token**.

Hardware/Interfaces header | Credit Cards |

Credit Card Drivers file and enable the **[Replace Card Number With Token]** option.

- Again, this is only available for use with the CAPMS type of Credit Card Driver.

Customer Receipt

A **Customer Receipt** is a paper copy record of a Fast Transaction. A paper copy of any other type of transaction is a Guest Check. Customer receipts may be programmed to print all of the transaction detail, or just the summary data (i.e., subtotal, tax, gratuity if any, amount paid, etc.) Customer receipts are usually printed on roll printers.

	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses functionality that relates to **Printing**.
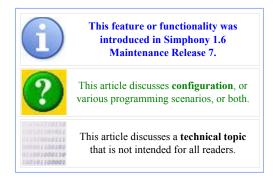
DEMOCA Credit Card Driver

This article reviews the enhancements made to the EMC and to SarOps when the DEMOCA Credit Card (CC) Driver is in use anywhere on the system.

Contents

- 1 Overview
    - 1.1 EMC Configuration
        - 1.1.1 Credit Card Drivers
    - 1.2 Usage
    - 1.3 EMC Message
- 2 See also

	This feature or functionality was introduced in Simphony 1.6 Maintenance Release 7.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses a **technical topic** that is not intended for all readers.

Overview
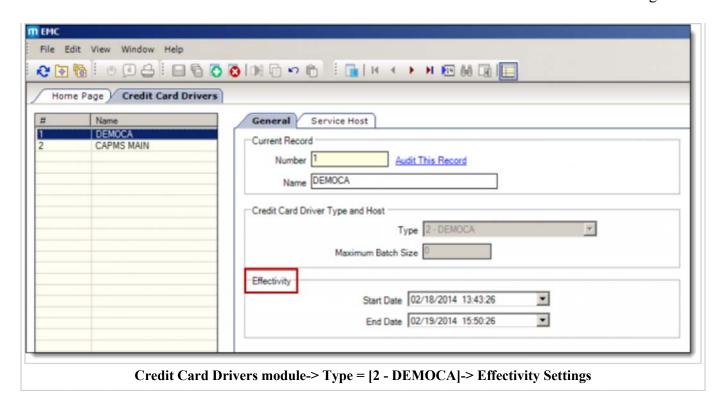
The configuration and use of the Demo Credit Card (CC) driver (DEMOCA) has been enhanced. Formerly, when the DEMOCA CC driver was used for pre-live testing, it was possible to continue using it after going "live", which could have resulted in checks, which were closed using the DEMOCA driver, of not being capable of being settled to an actual CC Processor. The DEMOCA driver has had additional configuration options added in order to ensure that it no longer cause potential CC Settlement issues for customers.

EMC Configuration

Credit Card Drivers

The DEMOCA driver can be assigned an Effectivity Date and Time so that locations can better control the use of the driver. To enable the Effectivity Date and Time for the DEMOCA driver, navigate to the *EMC-> Enterprise level-> Hardware-> **Credit Card Drivers module**-> General tab*.
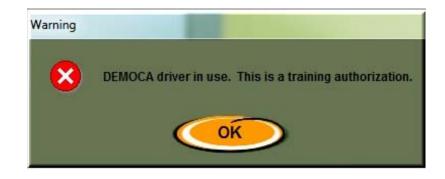
Follow the steps shown below:

Credit Card Drivers module-> Type = [2 - DEMOCA]-> Effectivity Settings

1. From the '**Credit Card Driver Type and Host'** section, when a user selects the CC Driver Type of **[2 – DEMOCA]**, the '**Effectivity'** section displays.
2. An '**Effectivity Date and Time'** setting can now be configured in the EMC to control and limit the use of the DEMOCA driver. Within the 'Effectivity' section, select the desired '**Start Date'** and time and '**End Date'** and time for the use of the driver.

Usage

When the DEMOCA driver is in use, Operators will experience the following on all Workstations:

- Operators will receive the message shown here when any CC transaction is authorized:
    - This should help notify users to assign their preferred and valid CC Driver(s) prior to going "live".

When the configured **Effectivity Date and Time** threshold settings have expired, Operators will receive the following message:

- Additionally, any CC Authorization will *no longer* be allowed.

When the DEMOCA driver is in use, printed CC Authorization validation chits will display a message indicating that the DEMOCA driver is in use.

- When the DEMOCA driver is in use, CC Authorization rounds will display the same message on Journals and PMC Journal Reports as the printed CC Authorization validation chit.
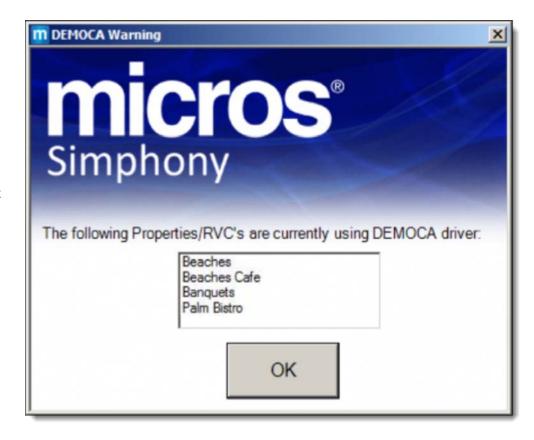 - *These are not optional settings, and will be in effect anytime the DEMOCA driver is in use.*

- All EMC changes performed within the Credit Card Driver module will be tracked by Audit Trail.

EMC Message

When the DEMOCA driver's 'Effectivity Date and Time' threshold has expired, on the Enterprise level, EMC users will receive a '**DEMOCA Warning**' message (listing each affected Property and Revenue Center). Click **OK** to exit.

- This message indicates that "No active credit card driver" is currently in use and that CC authorizations will *not* be allowed at the displayed Property(s) and RVC(s).

Distribution options in Simphony 1.x

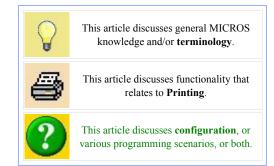This article relates to programming of an EMC module.

The following options appear in most modules. Some modules, such as Menu Item Maintenance, contain module-specific distribute dialog boxes.

Option	Description
Create Clone	Select this option to copy IP addresses of workstations and KDS displays and to distribute all revenue centers (RVCs) and create new RVCs.
Distribute RVCs	Select this option to distribute RVCs in addition to distributing the selected modules for the property. This option is intended for a user who wants to clone a property. The cloning process copies all modules for the RVC, creates new records, and overwrites existing records.
Copy IP Addresses	Select this option to copy IP addresses of the source record to the destination record. This option applies only to modules where the records include an IP address (for example, workstations and KDS displays).
Overwrite records if they exist	Select this option to overwrite existing records in the destination location. If the destination record is inherited, it is not overwritten.
Create records if they do not exist	Select this option to create new records in the destination location.

Dopplebon Printing

Dopplebon Printing is a printing method that allows one chit to print for each individual menu item on the order. This method of printing is generally used by kitchens where there is a single printer, and where a kitchen runner distributes the order chits to the various preparation stations.

	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses functionality that relates to **Printing**.
	This article discusses **configuration**, or various programming scenarios, or both.

In general, order devices are *not* configured as Dopplebon printers. In a typical environment, two similar items (for instance, the entrees Chicken Alfredo and a Penne with Shrimp) that are ordered in the same round are printed on the same chit. However, with Dopplebon Printing, those same two items will print on individual chits.

The Dopplebon configuration is typically used in locations outside the United States, and it is generally used in Fine Dining locations that use a kitchen runner.

Contents

- 1 EMC Configuration

EMC Configuration

Dopplebon Printing is configured on a per-printer basis; this feature is enabled when the Order Device option bit, **[3 - Print Dopplebon]** is on. Optionally, **[4 - Print Dopplebon Summary]** can be enabled; when this option is turned on, a summary of all the menu items will print on a summary chit that prints before all the individual item chits.

Employee Maintenance

Employee Maintenance is the EMC module used to configure employees; it is probably the most-used module in EMC other than Menu Item Maintenance. When compared to other modules, Employee Maintenance has some unique features: it can be opened from the Enterprise Scope, Property Scope, or RVC Scope, and its Table View offers a search feature.

This article belongs to the MICROS **Important concepts** category.

This article relates to programming of an EMC module.

This article discusses the redesigned version of Employee Maintenance that was introduced in Simphony 1.0 Service Pack 9.

This article discusses functionality that relates to **Personnel**.

Contents

Opening the Module

Employee Maintenance can be opened from the Enterprise, Property, or RVC Scope of EMC. Initially, no records display in the Table View grid;

the user sees only the Table View tab, which includes the search criteria box and an empty Table View grid. In the status bar, the number of existing records is displayed. In the example image, the number of employee records is being displayed because the user opened Employee Maintenance from the Enterprise Scope. When Employee Maintenance is opened from the Property Scope, the number of property employee records displays; similarly, the number of operator records displays when Employee Maintenance is opened from the RVC scope.

Other points to note:

- The Property drop-down in the Search box includes only the Properties that the user is able to see, based on the Property-Level Security Settings for the logged-in employee. Similarly, RVCs will display only when the user is able to view the RVC, based on RVC-Level Security Settings.
- The Employee Records, Property Employee Records, and Operator Records tabs under the grid display based on user permissions. If a user cannot view Employee or Property Employee records, only the Operator tab will display. (The "Record Type" drop-down in the search box follows this same behavior.)

Unlike other Table View/Form View modules, Employee Maintenance offers a search box. Because several thousand Employee records are likely to exist, the search box allows a user to work with only desired records.

Enterprise, Property, and RVC Scopes

Employee Maintenance is operationally the same when opened from any scope. EMC was designed with this module on all scopes for both security and convenience. This implementation is more secure because it allows some users, such as EMC Administrators, to view all Employees in the Enterprise; less-privileged users could be limited to specific Properties or RVCs only. This implementation is convenient because a user can work within a scope of a single Property or RVC without having to change the RVC and Property drop-downs (and other drop-downs in the add/delete dialogs).

The following limitations are observed when the module is opened from the Property or RVC scope:

- The "Property" drop-down box is locked at the Property in which the module was opened.
- When opened from the Property and viewing Employee Records, the only records that will display are those which have a Property Employee record in the current Property. (When opening this module from the enterprise scope, selecting a Property and then searching for Property records will produce this same result.)

- When opened from the RVC and viewing Employee Records or Property Employee Records, the only records that will display are those which have an Operator record in the current RVC. (When opening this module from the enterprise scope, selecting a Revenue Center and then searching for Employee or Property records will produce this same result.)
- When opened from the Property or RVC scope, the Property Summary view will display only the current property record.

Using the Search Features

By default, no items appear in Table View. To view all records, a user can press "Search" with all the search criteria empty. ***Note:*** *Depending on the number of employees in the database, it may be unwise to use "Search" without entering any search parameters.* To perform a search using specific parameters, enter the desired information into the search fields and then press "Search". The search will consider all the search criteria entered, making it possible to create searches such as *show all employees associated with Role #20 who are active in RVC 151 of Property 3*. The following parameters can be searched:

Record Type

> This field determines what types of records will display in Table View when a search is performed: Employees, Property Employee Records, or Operators.

> All searches use the Employee Group and Employee Level rules when returning records. An employee is never able to view records outside these security restrictions.

Last Name

> When using this field, records will only be returned when they contain the text in the last name field for the specified language. (Note: SQL text comparisons often take longer than comparisons that do not search text. While typing "Smith" will return the specific record you want, there may be faster search options than using the text fields.)

First Name

> When using this field, records will only be returned when they contain the text in the first name field for the specified language. (Note: SQL text comparisons often take longer than comparisons that do not search text. While typing "John" will return the specific record you want, there may be faster search options than using the text fields.)

Employee Role

> Enter an Employee Role number or a range of Employee Roles to be included in the search. When using this field, records will only be returned when the Employee record contains one of the selected Roles. For example, if "1" is entered for the Employee Role and an Employee has 8 roles assigned, if any of the 8 roles is Role "1", the record will be included in the results. Note that "0" is an invalid selection for this field, because it is not possible for an Employee to be associated with a Role that has a number "0".

Object Number or Range

> Enter an object number or range of object numbers to be searched, or leave the field blank to include any range of object numbers.

Property

> Select a Property to be used in the search. This field is used when selecting Property Employee records or Operators. Also, when this field is selected and Employee records will be returned, only Employee records with Property Records in the selected Property will be included in the results.

Employee Class

> When a property is selected, enter an Employee Class or range of Employee Classes to be included in the search. This field is only enabled when the "Record Type" is not Employee, and when a specific Property is selected.

> The Role, Class, and Job Code fields allow direct numeric entry. To choose a value from the list, click the ellipsis ("...") next to the text box to view the list of available selections.

Job Code

> When a property is selected, enter a Job Code or range of Job Codes to be included in the search. This field is only enabled when the "Record Type" is not Employee, and when a specific Property is selected. Each

Property Employee Record has 255 Job Codes; if any of the 255 Job Codes match any of the Job Codes entered in this field, the record will be included in the results. "0" is an invalid selection for this field.

Revenue Center

Select a Revenue Center to be used in the search. When this field is not 0-None, only records with Operator Records in the selected RVC will be included in the results.

View Deleted Employees

This check box displays allows the query to return deleted employees as well as active employees. This field is enabled only when the logged-in user has the ability to view deleted employees. See Employee: Deleting Employees for more information.

Employee, Property Employee and Operator Searches

Every search field is considered when performing searches for Employee Records, Property Employee Records, and Operator Records.

- If searching for Employee Records:
  - If the "Property" field is a value other than 0-None, Employee records will be in the search results only if they contain a Property Employee Record in the selected property. Similarly, it is possible to use the "Employee Class" and "Job Code" search fields to obtain specific employee records. For example, a user can search for Employee Records that exist in Property 4 and are in Employee Class #10.
  - If the "Revenue Center" field is a value other than 0-None, Employee records will be in the search results only if they contain an Operator Record in the selected RVC.
- If searching for Property Employee Records Records:
  - If the "Revenue Center" field is a value other than 0-None, Property Employee Records will be in the search results only if they contain an Operator Record in the selected RVC.
- If searching for Operator Records:
  - If the "Employee Class" and "Job Code" fields contain values, Operator Records will be in the search results only if the corresponding Property Employee Record meets the search criteria entered in the "Employee Class" and "Job Code" fields.

Using the Table Tabs

Under the table, there are tabs for the different types of records: Employee Records, Property Employee Records, and Operator Records. These tabs are designed to allow a programmer to toggle between the three record types quickly. These tabs are only functional after a list of items has been retrieved from the database. In the example image above, if the user selects a Property and then clicks "Property Employee Records", Property Employee Records for the Property will display.

When using these tabs to view Property Employee Records, the "Property" drop-down from the search panel must have a non-0 value. Similarly, the "Revenue Center" drop-down from the search panel must have a non-0 value when toggling to the "Operator Records" tab.

More Search Panel Functionality

Other notes about using the Search Features:

Hide Search Panel

When the "Hide Search Panel" link is clicked, the search panel is removed from view and the table view grid expands for
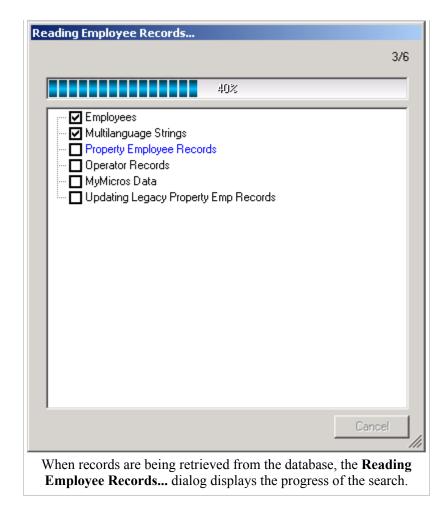
a full screen display. When the grid appears on the full screen, the link changes to "Show Search Panel"; clicking this link restores the Search Panel to view.

Clear Search Criteria

The "Clear Search Criteria" link resets all the search parameters to the defaults (blank text boxes). The Revenue Center and Property drop-downs are not affected by this link.

View Changed Records

This link does not affect the search functionality; it is discussed here because it is a part of the Search Panel. Click this link to display a list of all the records that have been changed. In most modules, a changed record appears as a yellow row in Table View. This is also true in Employee Maintenance, but because it is possible to make changes in multiple locations within the GUI, this link allows users to see changed records that may no longer be in view. There are three record types in Employee Maintenance (Employees, Property Employees, and Operators), but the "Changed Records

When records are being retrieved from the database, the **Reading Employee Records...** dialog displays the progress of the search.

Dialog" displays a fourth record type: Pay Rates. Pay Rates are part of the Property Employee record, but they are saved individually to the database. Because of this, they are listed as a separate record type in this dialog.

Table View Filtering

The grid also includes the standard Table View Filtering functionality, allowing a user to filter the results after they have been retrieved from the database. The Employee Maintenance functionality is the same as filtering in other modules, however Employee Maintenance also keeps track of the initial search when records are retrieved from the database. When the breadcrumbs link is clicked, EMC displays the search criteria used to get to the current state.

"Updating Legacy Property Emp Records"

When records are being retrieved from the database, EMC displays progress dialog that lists the steps being processed. The final step, "Updating Legacy Property Emp Records", is performed the first time a pre-Simphony employee record is read from the database. In 8700/9700, an employee could be assigned up to 8 Pay Rates; in Simphony, each Property Employee Record is configured with 255 Pay Rates. The first time an Employee Record is retrieved from the Simphony database via EMC, it will be upgraded to contain 255 Pay Rates, thus the first time this module is used after an upgrade, the dialog may remain on this step for several minutes.
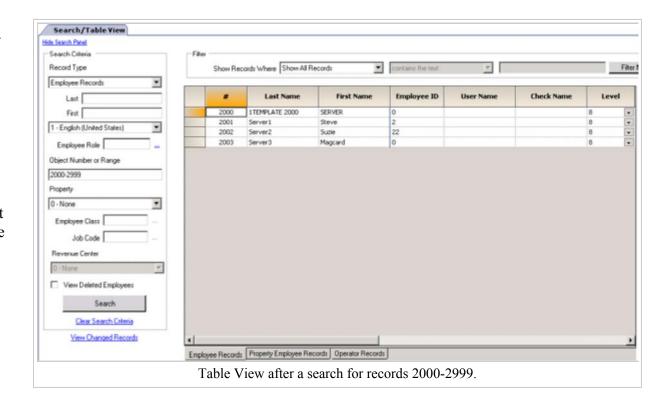
Working with Records

After entering search parameters, the table view grid shows the records that meet the search criteria. Like other EMC modules, the user can navigate between Table View and Form View by using the Table View Toggle icon, or by double-clicking the record number. In Employee Maintenance, it is also possible to change between the Table/Form views by clicking the tab that displays the data. (The Form View Tab is not visible and the Table View Toggle icon is disabled until a record has been viewed in Form View by double-clicking.)

Navigating Employee Records

Employee Records can be configured in two places: Table View and Form View. The Employee record is unique because some of its fields (name and object number) are displayed in Form View when viewing Property Employee Records and Operator records.

Table View

In the example image, the user searched for Employee records in the range 2000-2999, and the appropriate records are returned. The status bar is not displayed in the image, but it would show "4 record(s) read" after retrieving the 4 records that are displayed.

Table View after a search for records 2000-2999.

From this view, records can be edited just like any other Table View module. To enter Form View, double-click the Object Number of the desired record.

Form View

The text on the Form View Tab for Employee Records shows the word "Employee" followed by the number and name of the item:

Form View for an Employee Record. This view includes four tabs: General, Roles, Reporting, and References.

```
Employee: 2001 - Server1, Steve.
```

Form View for Employee records displays the Employee Name and Object Number at the top of the screen, with four tabs displayed below:

General

The General Tab displays basic information about the user, such as the user's ID, Level and Group. Note that the ID field will be disabled and masked if the logged-in user is not associated with an Enterprise Role with the option, **[View Employee IDs]** enabled.

Roles

The Roles Tab is used to assign Roles and Enterprise Roles to an employee. For more information, see Employee: Roles Tab.

Reporting

The Reporting Tab allows the configuration of a user's settings as they pertain to logging in to the mymicros.net reporting website.

References
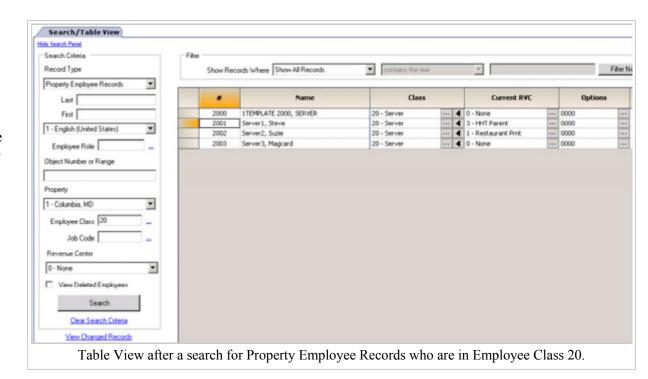
The References Tab shows the locations where an Employee is being referenced. When an EMC user attempts to delete an employee or a group of employees, the error message displays all the employees who cannot be deleted. For example, one message reads: *The following Employee Records cannot be deleted because they are being used as a Cash Drawer Employee for a workstation. No records have been deleted.* This message does not, however, list the workstation(s) that are associated with the employee(s). Thus, the purpose of the References Tab is to display exactly where an Employee is being referenced, so that the reference can be corrected before a record is deleted.

Navigating Property Employee Records

Property Employee Records can be configured in three places: Table View and Form View, and also in the "Property Summary" view that displays all the property records for a single Employee Record.

Table View

In the example image, the user searched for Property Employee records that are in the Employee Class 20 (server records, in this database), and the appropriate records are returned. The status bar is not displayed in the image, but it would show "4 record(s) read" after retrieving the four records that are displayed.
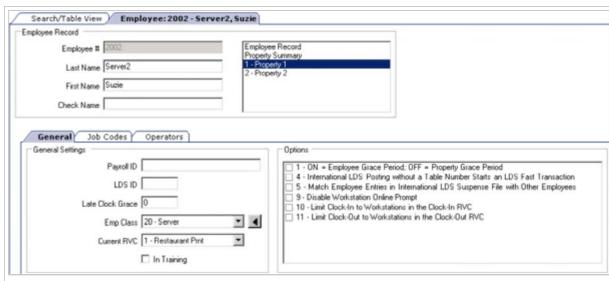
Table View after a search for Property Employee Records who are in Employee Class 20.

From this view, records can be edited just like any other Table View module. To enter Form View, double-click the Object Number of the desired record.

Form View

When a user switches from viewing Property Employee Records in Table View to Property Records in Form View, the initial display is the General tab. The text on the Form View Tab for Property Employee Records shows the words

Form view for a Property Employee Record. In Form View, the name and number of the Employee record displays at the top of the screen, with Property Employee records displayed below.

"Property Employee" followed by the number, sequence number, and name of the item:

```
Property Employee: 2001 - Server1, Steve
```

Form View for Property Employee Records and Operator Records is comprised of four sections:

Employee Name/Number fields
     These fields always display, but they may be disabled based on Employee Role permissions.
General Tab
     The General Tab displays general information for the Employee in this Property. This information includes the employee's Employee Class and Current Revenue Center, as well as property-specific options for the employee.
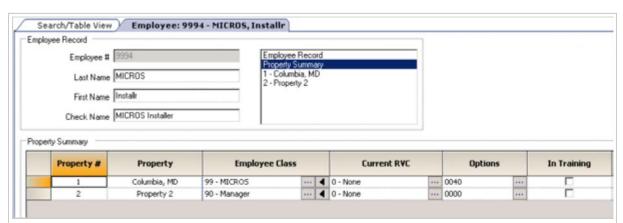Job Codes Tab
     The Job Codes Tab lists the 255 Job Codes assigned to an employee in a Property. On this tab, the user assigns the Pay Rate for each Job Code. For more information about this tab, see Pay Rates.
Operators Tab
     The Operators Tab lists each RVC in the Property where the employee has an Operator Record.

Property Summary

All Property Records for a single Employee will display when the "Property Summary" option is selected from the listbox at the top of the screen. From this view, a double-click on one of the rows will display the selected Property Employee Record in Form View.

The Property Summary View for an Employee Record; the Employee Name/Number fields are at the top of the form, then all Property Employee Records for that Employee are display below. This view allows users to see all properties associated with a single employee record. When a Property is double-clicked, Form View for the selected record displays.

Navigating Operator Records

Operator Records can be configured in two places: Table View and Form View. Form View for Operator records is the same view as Form View for Property Employee Records; the only difference is that when switching from Table View to Form View, the Form begins on the Operator tab instead of the General tab.

Table View

In the example image, the user searched for Operator records that are in the "Deli 3" Revenue Center,

and the appropriate records are returned. The status bar is not displayed in the image, but it would show "19 record(s) read" after retrieving the 19 records that are displayed.

From this view, records can be edited just like any other Table View module. To enter Form View, double-click the Object Number of the desired record.

Table View after a search for all operator records in the "Deli 3" Revenue Center.
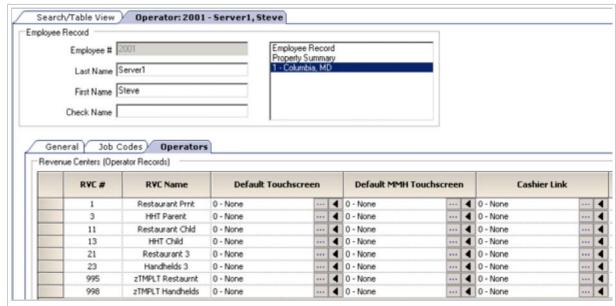
Form View

When a user switches from viewing Operators in Table View to Property Employee Records in Form View, the initial display is the Operator tab, which displays all the Operator Records associated with the Property Employee Record. The Employee fields always display, but they may be disabled based on Employee Role permissions.

Form View for an Operator Record. In Form View, the Employee Record displays at the top of the screen, with the configurable Operator grid below, on the Operator Tab. The Operator grid displays all the RVCs where an Employee has an Operator Record.

The text on the Form View Tab for Operator Records shows the word "Operator" followed by the number, sequence number, and name of the item:

```
Operator: 9002 - Manager2, Mary
```

Adding Records

The term **adding records** is an ambiguous term when discussing employees. It is possible to add a brand new Employee record, to add Employees to Properties (add Property Employee Records), to add Employees to RVCs (add Operator Records), or to add a new Employee record including all Properties and RVCs at once. Because of the necessary distinction when discussing these topics, there is not a single standard insert dialog for employees. In fact, the dialog changes based on the location within Employee Maintenance when the Insert dialog is requested:

Main Articles
Adding an Employee
Adding Employee Records
Adding Property Employee Records
Adding Operator Records

The insert dialog follows user permissions. For instance, a user who cannot add Employee Records will not have access to the dialogs for inserting Employee Records.

- In Form View:
  - When viewing Property Employee Records or Operator Records, it is only possible to add additional Operator records to the currently-viewed Property Employee Record. (If the General Tab or Job Codes tab is active, the view will switch to the Operators tab prior to the dialog displaying.)
  - When viewing the Property Summary tab, it is only possible to add the current Employee to other Properties.
  - When viewing an Employee Record, it is possible to "Add Employee Record from Template" or to add a range of employees without using a template.
- In Table View, the same choices are always available:
  - Add Employee Record from Template
  - Add Employee Records without a Template
  - Add Employees to a Property
  - Add Employees to a RVC
  - Assign Roles to Employees - this dialog is never displayed by default. The purpose of this type of dialog is to allow a user to Assign Roles to multiple employees at once. This is often useful when setting up new properties. To see this insert option, the EMC user must be able to edit employees.

In addition, Table View attempts to default to the choice that is most relevant to the user at the time the Insert Dialog is opened:

Current Record Type	Condition	Default
Employee	No items in the grid	Add Employee Record from Template
Employee	One item is selected	Add Employee Record from Template; the template record defaults to the selected item.
Employee	Multiple items are selected	Add Employees to Property; if a Property is selected in the Table View Search Tab prior to insert, the Insert Dialog defaults to the selected Property, and all employees who do not belong to the Property will be checked by default.
	No items in the grid	Add Employees to a Property

Property Employee Record		
Property Employee Record	One or more items are selected	Add Employees to a RVC. If a RVC is selected in the Table View Search Tab prior to insert, the Insert Dialog defaults to the selected RVC, and all employees who do not belong to the RVC will be checked by default.
Operator	*All Scenarios*	Add Employees to a RVC

Viewing New Records

Depending on the scope from which Employee Maintenance was opened, it is not always possible to see newly-added records. For example, consider the following scenario:

- The EMC user opens Employee Maintenance from the RVC scope
- The user searches for records 2000-2999. 50 records are returned.
- From an insert dialog, the user adds employee #2233 to the RVC.

Based on this series of events, the new record will not immediately appear in the list of records. Because Employee Maintenance was opened on the RVC scope, the initial results consisted of Employees and Property Employees only where there was an Operator record in the current RVC. When the new Operator record was added, it was created in the database, but there was not an in-memory Property Employee Record to which the Operator record could be attached; therefore, it has no way to appear. In this situation, a Refresh can be performed to display the new record(s).

This situation, while plausible, should be an unlikely event. In general, a user who is privileged to add Operator records will probably be able to view Property Employee Records; by opening Employee Maintenance from the Property scope, this issue would not occur.

Deleting Records

Records can be deleted in Employee Maintenance by pressing the delete key on the keyboard or by using the delete icon on the navigation bar. The delete prompt changes based on the user's location within Employee Maintenance when the Delete Dialog is requested:

> Property Employee Records and Operator Records are deleted in the same manner as other records. Employee Records, however, are deleted and also "permanently deleted". For more information, see Employee: Deleting Records.

- In Form View:
    - When viewing Operators, it is only possible to delete selected Operators from the form.
    - When viewing the General or Job Code tabs of a Property Employee Record, it is only possible to delete the currently-viewed Property Employee Record.
    - When viewing the Property Summary tab, it is only possible to delete selected Property Employee Records from the form.
    - When viewing an Employee Record, it is only possible to delete the currently-viewed Employee Record.
- In Table View:
    - The user is always shown the standard delete dialog.

When an EMC user attempts to delete a record or a group of records, the error message displays all the records that cannot be deleted. For example, one message reads: *The following Employee Records cannot be deleted because they are associated with an Operator Record that is configured as a TMS Operator. No records have been deleted.* This message does not, however, list the RVCs where the employee(s) are referenced. To get a list of the references for an employee, click the "Find References" link on the Employee's References Tab.

Distribution

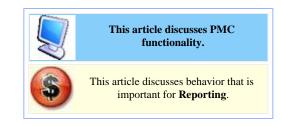Distribution has not been implemented for Employee Maintenance.

Other Considerations

Some other points to consider when using Employee Maintenance:

- The refresh button is only available in Table View.
- The undo and Audit This Record options are only available in Table View, via the Right-Click Menu.

Employee Financial Report

The **Employee Financial Report** provides financial reporting by employee or operator. The report is based on all sales-related entries such as checks opened, menu items ordered, and the number and amount of service charges, discounts, and tenders applied. This report can be used to balance the server's bank, to determine Tips Paid, and to track individual performance.

	This article discusses PMC functionality.
	This article discusses behavior that is important for **Reporting**.

Contents

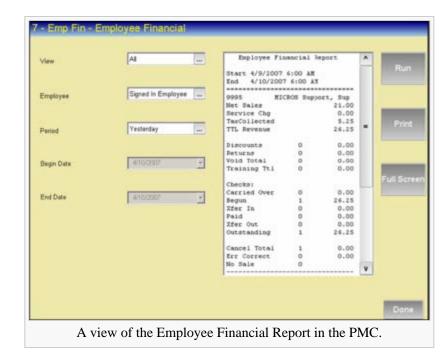- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report

The PMC version of the report allows a choice of **View**, **Employee** or **Period**. Additional notes:

- The **Begin Date** and **End Date** fields are active when the "Period" is configured as "Enter Dates".
- The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Employee Financial Report in the PMC.

mymicros.net Report

The **Employee Financial Report** is available online at mymicros.net for anyone who has access. The report can be run per Location and Revenue Center, as well as for a specific date or range of dates for any specific

A view of the Employee Financial Report in mymicros.net.

employee. This allows users at the Enterprise Level to see the report outside of the store.

Report Examples

- PMC Employee Financial

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports
- Offline Employee Financial Report

Employee Open Check Report

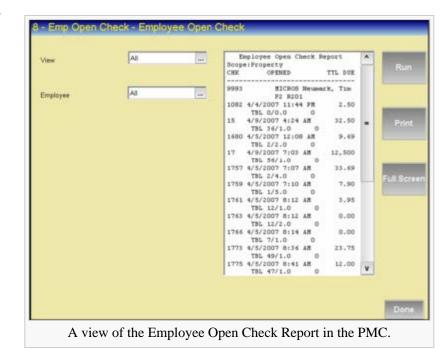The **Open Check Report** lists all open checks belonging to an employee at the time this report is taken.

This article discusses behavior that is important for **Reporting**.

Contents

- 1 PMC Report
- 2 Report Examples
- 3 Options
- 4 See also

PMC Report

The PMC version of the report allows a choice of **View** and **Employee**. The report can be taken for a Property, Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Employee Open Check Report in the PMC.

Report Examples

- PMC Employee Open Check

Options

Some option bits in the EMC relate to open checks:

- Job Code: Cannot Clock Out with Open Checks.
- Workstation Autosequences: There are several options that check for Open Checks before allowing an autosequence to run.
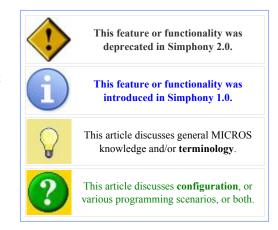
For a more in-depth discussion on these options, visit those specific articles.

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports
- Offline Employee Open Check Report

Enterprise-Level Menu Item Pricing

Enterprise-Level Menu Item Pricing is the method of configuring Menu Item Prices for similar items in one location of EMC, without configuring prices individually. This method of configuration allows a programmer to maintain uniform pricing in various properties throughout the enterprise. Enterprise Pricing is commonly used for liquor and beer items, which often have the same price based on tier. For instance, "top shelf liquor" items are all priced the same, and they are more expensive than "call liquor" items; similarly, "imported beer" is more expensive than "domestic beer."

Enterprise Pricing is flexible enough to be used in a multiple property enterprise (where prices in a "West Coast" tier may be more expensive than "East Coast" prices, for example), but it is also simple enough to be used in a single-property installation to maintain pricing consistency.

	This feature or functionality was deprecated in Simphony 2.0.
	This feature or functionality was introduced in Simphony 1.0.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 EMC Configuration
    - 1.1 Initial Configuration
    - 1.2 Maintenance
- 2 Workstation Operations
- 3 PMC Considerations
- 4 See also

EMC Configuration

Initial Configuration

Initially, there are five EMC modules used in the configuration of Enterprise pricing. For complete details on these modules, read the full article:

Price Group
> A Price Group is a label that defines a group of items. Common Price Group records include "Domestic Beer", or "Call Liquor". Price Groups are assigned to Menu Item Prices.

Price Tier
> A Price Tier is a level of pricing for similar items. Often, this module is configured based on geographic location, with common Price Tier records named "East Coast" or "West Coast."

Price Assignment
> In the Price Assignment module, Price Tiers are assigned to Price Groups, and the price is configured. This is the module where a user determines that "East Coast Domestic Beers" are $4.00 but "West Coast Domestic Beers" are $5.00.

Price Tier Assignment

In the Price Tier Assignment module, Price Tiers are assigned to Revenue Centers. In short, this is the module that lets a RVC know if it is to use "West Coast" pricing or "East Coast" pricing.

Menu Item Maintenance

In the Menu Item Maintenance module, Menu Item Prices are associated with Price Groups.

Maintenance

After the initial configuration, typical maintenance involves just one module: assigning new RVCs to appropriate tiers in the Price Tier Assignment module. Because new properties and RVCs are generally created via Distribution, users will rarely have to edit Menu Item Prices directly.

Workstation Operations

When Enterprise Pricing is in use, there is no operational difference for operators ordering Menu Items. When a Menu Item is ordered, the workstation's logic is:

1. Does the active menu item price have a Price Group assigned?
   - If not, charge the price configured in MI Maintenance.
   - If so, continue to step #2.
2. Does the current RVC have a Price Tier assigned for the Price Group of the item?
   - If not, the workstation displays the error: `Unable to find price assignment for menu item # (1234)`
   - If so, the workstation charges the price configured in the Price Assignment module.
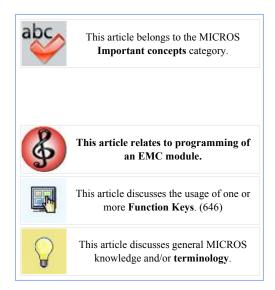
PMC Considerations

In the Menu Item PMC Procedure, a privileged user can update menu item prices. However, when a price is linked to a Price Group (in Menu Item Maintenance), the price fields will be disabled in PMC, and the field will display the price that will be charged for the item (as configured in Price Assignment).

Family Group

A **Family Group** is a category of menu items. Every menu item belongs
to a Family Group.

Contents

- 1 Standard Configuration
- 2 EMC Configuration
- 3 Function Key
- 4 See also

This article belongs to the MICROS **Important concepts** category.

This article relates to programming of an EMC module.

This article discusses the usage of one or more **Function Keys**. (646)

This article discusses general MICROS knowledge and/or **terminology**.

Standard Configuration

To understand what a Family Group is, you must first understand a Major Group. A Major Group is a basic category, such as "Food" or "Liquor". A Family Group can be considered a "sub-category" of a Major Group, such as: Appetizer, Salad, Gin, or Vodka.

The view below shows a sampling of a typical database Major/Family Group structure:

- Food
    - Appetizer
    - Salad
    - Dessert
    - Entree
- Liquor
    - Rum
    - Gin
    - Vodka
- Beer
    - Imported
    - Domestic

This is the most typical example of Family Group configuration, however configuration may vary drastically depending on the database and reporting needs. In some databases, Family Groups may be programmed to represent leased outlets so that an accountant can immediately see sales figures for that tenant.

EMC Configuration

Family Groups are configured from the EMC's property scope. In this module, there is not a Form View. The only configurable fields are:
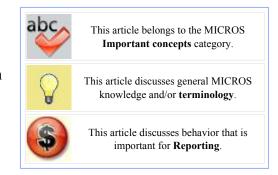
- Object Number
- Name
- Report Group

Function Key

The **[FamGrp Menu Item]** function key (646) can be used to display all Menu Items in a Family Group. When this key is used, the workstation will prompt for the Family Group. After a selection is made, the workstation will list all the menu items that are available in that Family Group (in the form of an NLU window). Note: only items that are available on the current Main/Sub Levels will be displayed.

Fast Transaction

A **Fast Transaction** is a transaction that does not require an operator to use a **[Begin Check]** key to start a new transaction. Instead, new transactions can be quickly started simply by pressing a Menu Item key or scanning an item. This functionality is often used in a retail/concession environment where an operator stands in one place and must quickly ring in transactions over and over again. It is also often used for bartenders who ring in many more transactions than a typical food server, and rarely need to assign customers to a specific table or check number.

abc ✓	This article belongs to the MICROS **Important concepts** category.
💡	This article discusses general MICROS knowledge and/or **terminology**.
💲	This article discusses behavior that is important for **Reporting**.

Contents

Enabling

Fast transactions are enabled per Revenue Center by turning on the RVC Parameters General Option #15, **[Allow fast transactions]**. When enabled, all operators can begin fast transactions unless the operator option, **[Cannot perform fast transactions]** is enabled. If **[Allow fast transactions]** is disabled, fast transactions cannot be performed in the RVC.

To begin a fast transaction, the operator just needs to sign in and press any Menu Item key.

Serving Totalling

Each Revenue Center may be programmed to allow fast transactions to be service totalled by disabling the RVC Parameters General Option #16, **[Do Not Allow Service Total of Fast Transactions]**. If a fast transaction is service totalled, it may be picked up and service totalled again, or picked up and closed, just like an ordinary guest check. A fast transaction will not be able to be split into multiple checks if it cannot be service totalled.

Related Options

RVC Parameters

Other options in RVC Parameters affect Fast Transaction behavior.

On-demand customer receipts
> When this option (#9 in General Options) is enabled, customer receipts won't automatically print after each fast transaction. The receipts will only print "on demand", meaning that the customer asks for a receipt. For a full description of this functionality, see On Demand Customer Receipt.

Print "Your order number is: XXXX" at Bottom of Receipts
> When this option (#21 in Format Options) is enabled, the check number will print at the bottom of the customer receipt so that it can be used as an "order number".

Operator Options

Line-by-line customer receipt
> This is a feature used to print each item as it is ordered. This is used as a security measure — an operator becomes unable to perform voids without having the void show on a receipt. If enabled, the receipt will print each menu item as it is rung up rather than at the end of the transaction. Only one credit card payment may be posted to a line-by-line fast transaction. If multiple payment types are used in a single line-by-line fast transaction (e.g. credit card and cash), the credit card payment must be last. The **[Credit Card Lookup]** function key (625) is used for credit authorization in this type of transaction. The Type Definition for Credit card [Tender] keys must be programmed to either of the following settings: Amount Required, Assume Paid in Full. The latter option is the usual choice for retail operations, in which charged tips and change due generally do not occur.

> Operator options are found in the Employee Class module, but they may be overridden per operator in the Employee Maintenance module. See operator options for more information.

Tender Media

Print Guest Check Trailer on Fast Transaction Customer Receipt
> Select this option to print the guest check trailer on the customer receipt if this key is used to close a fast transaction. If this option is not selected, the customer receipt trailer prints. This option is unaffected by the setting of the Print Check Trailer option.

Print customer receipt
> This option is used in conjunction with the On Demand Customer Receipt functionality.
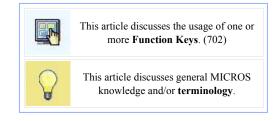
Touchscreens

CC Lookup
> Fast transaction operators may rarely need to authorize and finalize in separate steps. The **[CC Lookup]** function key (625) does both steps at once, saving time, and will usually be used for fast transactions.

Reports

Fast transactions report exactly as any other transaction would. The only small exception is printing an "F" for fast transactions in the status field on Employee Closed Check Reports.

Filter Seat

Seat Filtering is a feature that allows an operator to review items on a guest check that are assigned to a particular seat number or set of seat numbers. When seats are filtered, the operator can print the filtered seat(s), pay the filtered seat(s), and even split the filtered seat(s) to a new check number.

	This article discusses the usage of one or more **Function Keys**. (702)
	This article discusses general MICROS knowledge and/or **terminology**.

Contents

- 1 Why Filter Seats?
- 2 Workstation Operations
    - 2.1 When seats are filtered
- 3 EMC Configuration
    - 3.1 Tender/Media
    - 3.2 Revenue Center Parameters
    - 3.3 Discounts
- 4 Privileges
- 5 See also

Why Filter Seats?

There are four reasons to filter a check:

1. To allow review of the order by seat number, verifying that the order was entered properly.
2. To print memo checks, allowing the operator to hand out separate checks to individuals or groups at a table without actually creating two individual checks in the system.
3. To perform a "memo tender", which means to pay a memo check.
4. To split a check, which creates a new check in the system with its own check number.

Workstation Operations

After items have been ordered using seat numbers, the **[Filter Seat]** function key (702) can be used. In an example check with seats 1-4, the following steps can be used to look at a single seat number (in this example, Seat #2):

1. Press the **[2]** key.
2. Press the **[Filter Seat]** key.
    - At this point, the Check Detail Area shows only items from Seat #2
    - If **[Filter Seat]** is pressed again (or if **[Clear]** is pressed), the workstation leaves filtering mode and the Check Detail Area shows all detail from all the seats.

Continuing from step #2, a user can add more seats to the filter:

1. Press **[3]**
2. Press **[Filter Seat]**
3. At this point, the Check Detail Area shows items from Seats 2 and 3.

When seats are filtered

Continuing with the example above, what can a user do now? The currently filtered seat(s) are considered a part of a "memo check". Here's what's possible:

- A user may print the check using a Service Total Tender Media key that is configured to "Print Memo Checks"
- A user may pay the memo check using a Tender/Media key. The user may pay the exact amount or overtender — the payment only applies to the filtered seats, not the rest of the seats on the check.
- A user may use the **[Split Check]** function key (535). This will create a new check with only the detail from the current filter.

EMC Configuration

Almost all Filter Seat functionality is optional. Unlike other documented procedures, the Filter Seat options are generally based on site preferences, thus it is difficult to discuss the how some Filter Seat settings interact with others.

Tender/Media

In Tender/Media, these options control Filter Seat functionality:

13 - Print Memo Checks
    Select this option to allow this key to print memo checks.

15 - Increment Active Seat # After Memo or Seat Check Print
    Use this option only when seat filtering or memo checks are in use, and then, only when a single seat is active in the filter of the current guest check. Select this option to cause the active seat number or active memo check number to increment to the next number each time this key is used to print. This option allows the operator to tender all of the seat checks or memo checks active for a single transaction in succession.

Revenue Center Parameters

Several options in Revenue Center Parameters control Seat Filtering:

Print Split Check if Table Number is 0
    Select this option (#14 in Options/General) to automatically print split checks if the table number is 0. This option should be enabled in environments in which guest checks are begun and picked up by check number.

Prompt On-Demand Operators to Print Split Check
    Select this option (#1 in Prompt and Confirm) to cause an On-Demand operator to be prompted when splitting guest checks. The prompt **PRINT CHECK?** displays and the operator must press either **[Enter]** for yes, or **[Clear]** for no.

Prompt for Guest Count When Split Check
    Select this (#9 in Prompt and Confirm) option to prompt for the guest check count on the new check when performing a split check operation. The prompt occurs only if there is a guest count on the original check. The new count must be less than or equal to the original check's guest count. No prompting will occur if the

either of these options is enabled: RVC Parameter option **[Use Number of Seats for Guest Count]**; Menu Item Class option **[Add to Guest Count]**.

Print Trailer Lines on Split Check if On-Demand
    Select this option (#5 in Format Options) to print guest check trailer lines on split checks, if the original check from which it was split was an on-demand guest check.

Print "Closed To" Check Number Double Wide on Memo Guest Check
    Select this option (#7 in Format Options) to print the "Closed to" number double-wide on memo checks. The "Closed to" number prints on a memo check when the memo check is tendered. The workstation uses the next available check number as the "Closed to" number, which is used to record the tender on the journal, in Closed Check reports, and on the memo check itself. Disable this option to print the "Closed to" number in standard width.

Discounts

The following option prevents operators from applying discounts when seat filtering is active:

14 - Do Not Allow Subtotal Discount While Seat Filter is Active
    Select this option if this is a subtotal discount that should not be posted while seat filtering is active. Disable this option if this is an item discount, or if seat handling is not in use.

Privileges

Three Employee Role option bits control behavior relating to Filtered Seats:

Authorize/Use the [Split Check] Key and Perform Memo Tenders
    Select this option to allow employees associated with this Role to split guest checks and to perform memo tenders, and to authorize non-privileged employees to do so as well.

Authorize/Perform Printing of Memo Checks
    Select this option to allow employees associated with this Role to print memo checks and to authorize non-privileged employees to do so as well.
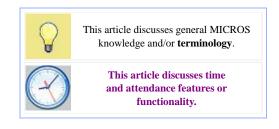
Authorize/Perform Reprinting of Memo Checks
    Select this option to allow employees associated with this Role to reprint memo checks and to authorize non-privileged employees to do so as well.

Grace Period

A **Grace Period** is a time range (in minutes) that can be set to allow some flexibility in clocking in or out when the time clock schedule is used. A grace period provides a range of time within which an employee can clock in or out without being considered early or late.

Grace Periods also affect reports. For example, if an employee has clocked in late beyond their grace period, his or her late status will be reported in the Employee Labor Detail Report.

This article discusses general MICROS knowledge and/or **terminology**.

This article discusses time and attendance features or functionality.

Contents

- 1 EMC Configuration
- 2 Option Bits

EMC Configuration

There are two locations in EMC where grace periods are programmed:

- The Timekeeping Tab in Property Parameters module is where the four grace period types are programmed. These options may be overridden by the Employee Role setting **[Authorize/Perform Clock In/Out Outside of Schedule or Scheduled Breaks]**:
    1. **Early Clock In Grace Period** - the amount minutes that employees are allowed to deviate from the times assigned in the Time Clock Schedules module for early clock-in before requiring manager authorization.
    2. **Late Clock In Grace Period** - the amount minutes that employees are allowed to deviate from the times assigned in the Time Clock Schedules module for late clock-in before requiring manager authorization.
    3. **Early Clock Out Grace Period** - the amount minutes that employees are allowed to deviate from the times assigned in the Time Clock Schedules module for early-clock out before requiring manager authorization.
    4. **Late Clock Out Grace Period** - the amount of minutes that employees are allowed to deviate from the times assigned in the Time Clock Schedules module for late clockout before requiring manager authorization.
- In Employee Maintenance, each Property Employee Record may be configured with a Late Clock In Grace period. This setting overrides the Property Parameter "Late Clock In Grace Period" setting when the employee option bit, **[ON = Employee Grace Period; OFF = Property Grace Period]** is enabled.

Option Bits

The Timekeeping tab in Property Parameters contains several option bits related to Grace Periods:

1 - Prompt for Breaks when Clocking Out

    Select this option to cause employees who are clocking out to receive the prompt `Are you taking a break?`. If the employee responds NO, the workstation considers this clock-out to be the end of a shift. If the employee responds YES, the workstation applies any break-related programming to this clock-out. This break is considered unpaid unless the Time Clock option, **[Prompt for Paid Breaks when Clocking Out]**, is enabled. Disable this option to suppress prompting about breaks, making any clock-out considered the end of a Clock-In Cycle.

2 - Require Authorization for Early Clock-In after Unpaid Break

    Select this option if an employee requires authorization to clock in early from an unpaid break. In this usage, early means before the expiration of the Minimum Unpaid Break time, also defined on the Timekeeping Tab in Property Parameters. Authorization may be granted by any member of an Employee Role for whom the **[Require Authorization for Late Clock In]** option is enabled. Disable this option to cause the workstation to prompt the employee about being early, but without requiring authorization.

3 - Require Authorization for Late Clock-In after Unpaid Break

    Select this option if an employee requires authorization to clock in late from an unpaid break. In this usage, late means after the expiration of the Maximum Unpaid Break time, also defined on the Timekeeping Tab in Property Parameters. Authorization may be granted by any member of an Employee Role for whom the Require Authorization for Late Clock In option is enabled. Disable this option to cause the workstation to prompt the employee about being early, but without requiring authorization.

4 - Prompt for Paid Breaks when Clocking Out

    This option is only active if the option Prompt for Breaks when Clocking Out is enabled. Select this option to cause employees to receive the prompt `Are you taking a break?`. After responding YES, the employee will be prompted again `Are you taking a break?`.If the employee responds NO, labor hours and pay accumulation is suspended for the duration of the break. If the employee responds YES, the workstation continues to accumulate labor hours and pay during the break. Disable this option to suppress prompting about the nature of the break. The workstation will then assume that any break is unpaid.

5 - Require Authorization for Early Clock-In after Paid Break

    Select this option if an employee requires authorization to clock in early from a paid break. In this usage, early means before the expiration of the Minimum Paid Break time, also defined on the Timekeeping Tab in Property Parameters. Authorization may be granted by any member of an Employee Role for whom the **[Require Authorization for Late Clock In]** option is enabled. Disable this option to cause the workstation to prompt the employee about being early, but without requiring authorization.

6 - Require Authorization for Late Clock-In after Paid Break

    Select this option if an employee requires authorization to clock in late from a paid break. In this usage, late means before the expiration of the Maximum Paid Break time, also defined on the Timekeeping Tab in Property Parameters. Authorization may be granted by any member of an Employee Role for whom the Require Authorization for Late Clock In option is enabled. Disable this option to cause the workstation to prompt the employee about being early, but without requiring authorization.

8 - Enable Time Clock Schedule

    Select this option to activate the Time Clock Schedule. If this option is enabled, every attempt to clock in and clock out is compared to the Time Clock Schedule. Disable this option to cause the workstation to ignore the Time Clock Schedule when employees clock in or out.

9 - Check for Early Clock-In

Select this option to cause the workstation to check the Time Clock Schedule when employees clock in. If the employee is early, the workstation prompts **`You are early. Clock in is [scheduled time]`**. In this usage, early means prior to the scheduled time, less any grace period defined on the Timekeeping Tab in Property Parameters. Disable this option to cause the workstation to ignore early clock-ins.

10 - Require Authorization for Early Clock-In

For early clock ins, select this option if employees are allowed to deviate from the times assigned in the Time Clock Schedule before requiring manager authorization.

11 - Check for Late Clock-In

Select this option to cause the workstation to check the Time Clock Schedule when employees clock in. If the employee is late, the workstation prompts **`You are late. Clock in time was [scheduled time]`**. In this usage, late means after the scheduled time, plus any grace period defined on the Timekeeping Tab in Property Parameters. Disable this option to cause the workstation to ignore late clock-ins.

12 - Require Authorization for Late Clock-In

For late clock ins, select this option if employees are allowed to deviate from the ties assigned in the Time Clock Schedule before requiring manager authorization.

13 - Check for Early Clock-Out

Select this option to cause the workstation to check the Time Clock Schedule when employees clock out. If the employee clocks out early, the workstation prompts **`You are early. Clock in is [scheduled time]`**. In this usage, early means prior to the scheduled time, less any grace period defined on the Timekeeping Tab in Property Parameters. Disable this option to cause the workstation to ignore early clock-outs.

14 - Require Authorization for Early Clock-Out

For early clock outs, select this option if the employees are allowed to deviate from the times assigned in the Time Clock Schedule before requiring manager authorization.

15 - Check for Late Clock-Out

Select this option to cause the workstation to check the Time Clock Schedule when employees clock out. If the employee clocks out late, the workstation prompts **`You are late. Clock in time was [scheduled time]`**. In this usage, late means after the scheduled time, plus any grace period defined on the Timekeeping Tab in Property Parameters. Disable this option to cause the workstation to ignore late clock-outs.

16 - Require Authorization for Late Clock-Out

For late clock outs, select this option if employees are allowed to deviate from the items assigned in the Time Clock Schedule before requiring manager authorization.

Gross Pay Calculation

Gross Pay is the pay that an employee accumulates prior to payroll deductions (e.g., income taxes, FICA, insurance premiums, and so on). Simphony calculates gross pay per employee using the clock-in and clock-out times recorded by the workstation and the pay rates programmed for each employee in Employee Maintenance.

This article discusses behavior that is important for **Reporting**.

This article discusses time and attendance features or functionality.

Contents

Calculating Time Worked

Clock-in times and clock-out times are rounded to the nearest hundredth of an hour, and then used in payroll calculations. Due to rounding, this means that two shifts that appear to start and end at the same time may actually produce a different labor total. For example, the table below displays calculations for two shifts that both appear to span from 12:00 to 8:01; however the totals calculate differently.

Actual Clock Times, Including Seconds	Clock Times Rounded to Hundreths of an Hour	Clock-in Time Shown on Timecard and Report	Calculated Time, in Hundredths of an Hour	Calculated Pay, at $2.01/Hour
12:00:00 - 8:00:32	12:00:00 - 8:00:36	12:00 - 8:01	8.01	6.10
12:00:00 - 8:01:15	12:00:00 - 8:01:12	12:00 - 8:01	8.02	6.12

Regular Pay

An employee clocks in for a specific pay rate, either assigned by the Time Clock Schedule or chosen by the employee. Simphony calculates regular pay by multiplying the amount of time worked by the pay rate chosen for the shift.
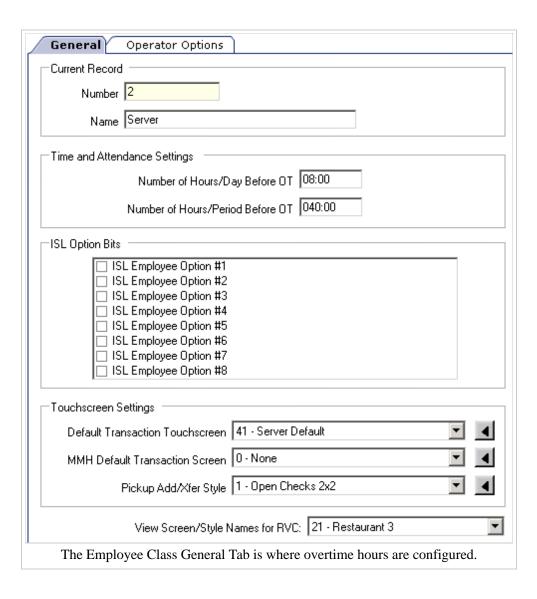
Continuing the example begun above, if the employee clocks in at a job code which is linked to a pay rate of $5.00 per hour, Simphony credits the employee with $40.05 in pay at the end of the shift (8.01 x $5.00 = $40.05).

Overtime Pay

Simphony may be programmed to calculate overtime for employees who work beyond a preset amount of time in the course of a day or in the course of a week. Overtime hours are programmed in Employee Class:

- Number of Hours/Day Before OT - This field can be programmed for the number of hours and minutes worked in a single day before employees in the class are paid at the overtime rate.
- Number of Hours/Period Before OT - This field can be programmed for the number of hours and minutes worked in a week before employees in the class are paid at the overtime rate.

The Employee Class General Tab is where overtime hours are configured.

The Start of Labor Day and Start of Labor Week fields within the Timekeeping Tab of the Property Parameters module are used to determine the beginning and ending points of a labor "day" and a labor "week" for overtime calculation purposes.

Example

An operator clocks in for every shift in the course of a week at the Bartender pay rate, which is configured for $5.00/$7.50 regular/overtime pay. The Number of Hours/Day Before OT field for the property has been set to 40.00 hours. If the employee works 42.00 hours in the course of a week, Simphony credits the employee with:

- $200.00 in regular pay (40.00 hours x $5.00 = $200.00) and
- $15.00 in overtime pay (2.00 hours x $7.50 = $15.00), for a total gross pay of $215.00.

Other Considertaions

Regular and overtime rates can be changed on a per-Clock-In Cycle basis per employee with the Adjust Timecard Procedure in PMC. Because of this, it is not necessarily possible to perform simple math to arrive at the expected gross pay. For instance, in the example above, the bartender's pay rate was programmed at
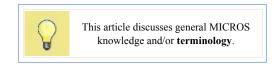
$5.00/hour and she worked 40 hours — it is easy to determine that she earned $200 regular pay.

If, however, the bartender worked one 8-hour day at a higher rate (because of a holiday where jurisdictional laws require double-pay), her total might show: 40 hours, but for $240. (32 hours @ $5.00, 8 hours @ $10.00) In this example, the report may look wrong to the untrained eye: *why did a user whose pay rate is $5.00 per hour get paid $240 for 40 hours?*

Therefore, to correctly calculate the overtime pay rate, the pay rate for each Clock-In Cycle must be considered instead of just the pay rate programmed in the EMC. For more information on this scenario, see Adjust Employee Time Card.

Group Number

When using Table Numbers, a Guest Check will also show the **Group Number** of the check. The Group Number represents the number of the group seated at a table. For instance, if two couples at table six instruct the waiter that they need separate checks, new groups will be created at the table during the Touch Split procedure. The workstation will display these checks as `6/1` and `6/2`; the table number is always displayed with a trailing "slash" and then the group number.

This article discusses general MICROS knowledge and/or **terminology**.

Contents

- 1 How Multiple Groups are Created
- 2 Privileges
- 3 Optional Settings
- 4 See also

How Multiple Groups are Created

Each table may have up to 99 groups open at one time. Groups may be created by two methods:

In the example, Aaron is only allowed to begin table #7 when the Revenue Center Parameters option, **[Allow Only One Group per Table]**, is disabled.

- An operator can use the Touch Split operation.
- An operator can begin a check at a table number where another check is already open. For example:
    1. John begins Table #7. The Check Summary Area of the workstation will display `7/1`.
    2. Aaron begins Table #7. The Check Summary Area for this check will show `7/2`.

Privileges

In the example above, Aaron must be associated with an Employee Role with the option, **[Authorize/Perform Open of Checks for Multiple Groups at a Table]**, enabled. This option allows a user to create the second group at the same table. Note that this option does not apply to the process of beginning a second table via the Split Check procedure.

Optional Settings

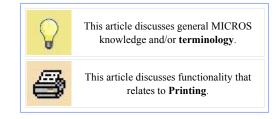Another RVC Parameters option determines the next group number that will be created:

Use First Available Instead of Next Highest Group Number
    This option controls the group numbers that are assigned when a new guest check is opened for a table that already has open guest checks. Select this option to cause the workstation to assign the first available group

number when beginning a check for a table that already has open checks. For example, if groups #1, #2, #45, and #46 are in use, the System will assign #3 to the next check. Disable this option to assign the next highest group number. Continuing the example above, the next check would be assigned group #47.

Guest Check

A **Guest Check** is a record of all sales on a check, from the customer's first order to final payment. Guest Check detail entries include menu items, discounts, service charges, voids, returns, and tender/media entries. A guest check prints (when enabled) for any transaction that is not a Fast Transaction:

	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses functionality that relates to **Printing**.
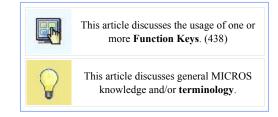
- When a check is begun by a **[Begin Check]** or **[Begin Table]** function key; when printed, this is a Guest Check
- When a Fast Transaction is begun but service totaled; after being picked up again and printed, this is a Guest Check
- Any check, after being service totaled; this is a Guest Check
- See the Guest Check Pickup page for some more details.

Terminology

The term "check" is sometimes used to describe both guest checks and customer receipts. In generic use of the term, "check" means "transaction", but it should be noted that there is a difference between customer receipts and guest checks.

Guest Check ID

The **Guest Check ID** feature allows an operator to enter a descriptor for a check. This descriptor can be used in conjunction with a check number, table number, or both. The Guest Check ID can also be assigned through SIM. The ID can be added when the guest check is begun or during a subsequent service round.

	This article discusses the usage of one or more **Function Keys**. (438)
	This article discusses general MICROS knowledge and/or **terminology**.

Contents

- 1 Why use Guest Check ID
- 2 Function Keys
- 3 See also

Why use Guest Check ID

A Guest Check ID is used to attach a label of up to 16 alphanumeric characters to uniquely identify a guest check. This feature is used to give the check a name that is recognized by the user. Most often, this feature is used by bartenders — they may name a check "John" or "Joe" or "Tim". This allows them to easily pick up a check for the correct guest.

Function Keys
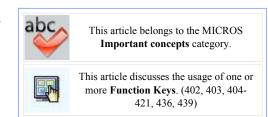
The **[Guest Check ID]** function key (438) allows a user to add a Guest Check ID to a check that has already been opened. In addition, other functions allow a user to:

- Begin Check by ID
- Pickup Check by ID
- Transfer Check by ID

Guest Check Pickup

For the Tender Type "Pickup", see Pickup and Loan

The term **pick up a guest check** means that an operator has signed in to a workstation and he/she is going to access a guest check that was already service totaled. Operators service total checks when a service round is complete; the guest check is then "picked up" when the operator wants to perform more operations on the check.

abc ✓	This article belongs to the MICROS **Important concepts** category.
[icon]	This article discusses the usage of one or more **Function Keys**. (402, 403, 404-421, 436, 439)

Contents

- 1 Function Keys
- 2 See also

Function Keys

There are several function keys that can be used to pick up guest checks. In fact, there are so many functions that the EMC's Key Function Select dialog (shown on the right) has its own category for this: Check Begin/Pickup. To use any of the keys listed below, the key must be programmed on the operator's Default Transaction Screen.

402 - Pickup by Number
    This key is used to pickup a check in the current Revenue Center, using the check number.
403 - Pickup Check#, RVC?
    This key is used to pickup a check using the check number, from one of the eight Revenue Centers assigned to the workstation.
404-411 - Pickup, Check#, RVC 1-8
    These eight keys are used to pickup a check using the check number, from one of the specific Revenue Centers assigned for the workstation, as programmed in EMC. For instance, if the **[Pickup, Check#, RVC 2]** function key (405) is used, the workstation will pick up the

check from the RVC #2 specified for the workstation.

412 - Pickup by Table

This key is used to pickup a check in the current Revenue Center, using the Table Number or Table ID.

413 - Pickup, Table#, RVC?

This key is used to pickup a check using the Table Number or Table ID, from one of the eight Revenue Centers assigned to the workstation.
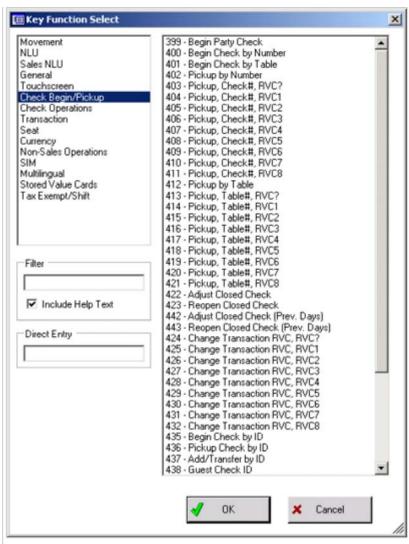
414-421 - Pickup, Table#, RVC 1-8

These eight keys are used to pickup a check using the table number, from one of the specific Revenue Centers assigned for the workstation, as programmed in EMC. For instance, if the **[Pickup, Table#, RVC 2]** function key (415) is used, the workstation will pick up the check using a table number from the RVC #2 specified for the workstation.

436 - Pickup Check by ID

This key is used to pickup a check by ID.

439 - Pickup Check SLU

This is the most popular form of picking up checks. This key will show all the accessible open checks on the touchscreen SLU; the user can then simply pickup the check by picking the appropriate check from a list.

The Touchscreen Design module with the Check Begin/Pickup keys shown in the Key Function Select dialog.

HALO

A **High Amount Lock Out**, commonly called a **HALO**, is a programmer-defined threshold that prevents operators from entering an amount that is too high. A HALO can be programmed for a Tender, a Service Charge, and for a Menu Item Class. The HALO field is used to prevent user error, user theft, or both.
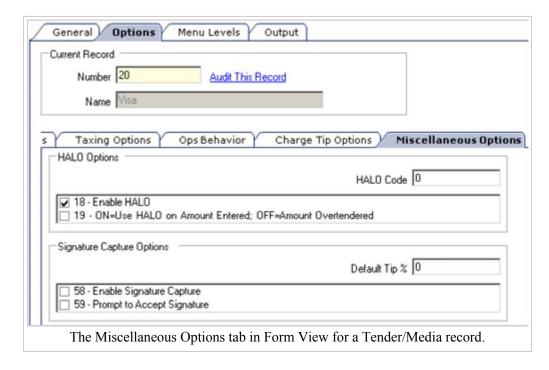
This article discusses general MICROS knowledge and/or **terminology**.

This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Tenders
    - 1.1 Example Scenarios
    - 1.2 Privileges
- 2 Service Charges
    - 2.1 Privileges
- 3 Menu Item Classes
    - 3.1 Privileges
- 4 Discounts and HALOs
- 5 See also

Tenders

Each Tender/Media record can be programmed with a HALO; the configurable fields are found on the Miscellaneous Tab in Form View for a tender record. A Tender HALO can be programmed on the amount entered by the user or on the amount overtendered. The following options are configurable for a Tender's HALO:

HALO Code

Enter the High Amount Lock Out value for this Tender/Media. Note that the value entered must contain all zeroes except for the first digit. For

The Miscellaneous Options tab in Form View for a Tender/Media record.

instance, valid values are: 2, 20, 200, 2000. Invalid values are 45, 450, 405.

18 - Enable HALO

>Select this option to enable the High Amount Lock Out for this Tender/Media.

19 - ON = Use HALO on Amount Entered; OFF = Amount Overtendered

>This option only applies if "Enable HALO" is selected. If this option bit is selected, the HALO for this Tender/Media will be computed on the amount entered. (For instance, if 500 is the HALO code, this tender key will require authorization if an amount higher than 500 is entered.) If this option bit is not selected, the HALO applies to the overtender amount. (For instance, if 500 is the HALO code, an operator will be prompted for authorization if the amount of the tender entered is more than 500 above the amount of the check.) By setting the HALO Code to 0 and not selecting this option, it is possible to prevent the operator from issuing change for this Tender/Media.

Example Scenarios

The HALO field generally has two uses: to prevent users from issuing change, and to prevent users from paying very large checks.

1. In the example image, this tender has been configured to prevent a user from issuing change. This configuration is possible because option 19 is set for the "amount overtendered" and the HALO code is 0. This means that the workstation will prevent the user from paying checks if the amount tendered is greater than the check amount. This configuration is used often for credit cards or gift certificates.
2. To prevent a user from paying a large check, option 19 will be enabled, and the HALO Code will be set to an amount determined by the site. For example, if this field is set to "300" and option 19 is enabled, non-privileged users will not be able to pay checks that are more than $300.

Privileges

A user may make payments that exceed a Tender's HALO only when associated with an Employee Role with the option enabled, **[Authorize Over HALO Amounts on [Tender/Media] Keys]**. Generally, this option is enabled for manager-type roles only. In the example above, the site would configure their roles so that a manager would be able to authorize payments over the HALO amount, ensuring that a manager will be present when any check over $300.

Service Charges

Each Service Charge record can be programmed with a HALO; this is primarily used to prevent users from adding large tips to checks. A service charge HALO allows any decimal amount or a zero value. There are two possibilities:

> The HALO field was added for Service Charges in Simphony 1.0 Service Pack 9.

The HALO is a zero value

>Any amount for the service charge is valid.

The HALO is another value

>When the service charge is added to a check, it must be smaller than HALO amount. If the amount exceeds the HALO, a privileged user will have to authorize this action.

Privileges

A user may add Service Charges to a check that exceed the HALO only when associated with an Employee Role with the option enabled, **[Authorize/Perform Over HALO Amounts on [Service Charge] Keys]**. Generally, this option is enabled for manager-type roles only.

Menu Item Classes

Each Menu Item Class has a configurable HALO field, thus affecting any Menu Item Definition in the class. A Menu Item Class's HALO field represents the total dollar amount of the items that are being ordered, and it is often used for Open Items. For example, an Open Item class may have a HALO configured at $50. When an operator attempts to order more than $50, the workstation prompts, **Amount too large -- Continue?**. The operator then needs to press **[Yes]** or **[No]** to answer the prompt.

Like a Service Charge HALO, when a Menu Item Class's HALO is configured as "0", any amount entered is valid.

The HALO can also be used for Menu Item Classes that are not open-item classes; this is generally used to prevent user errors. For example, a beer Menu Item Class may be programmed with a HALO of "$20". If a beer is $3.00, the user will be prompted to confirm the amount when more than $20 of beer is ordered at a time. This will occur when the user enters **[7] [@] [Beer]**, because 7 beers at $3.00 is $21.

Privileges
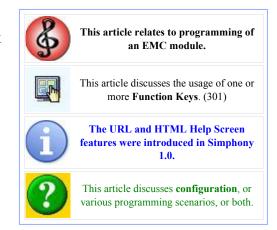
There are no privileges to determine a user's ability to exceed a Menu Item halo. This configuration exists only to prevent errors.

Discounts and HALOs

Discount records do not have a HALO field, however it is possible to limit the amount of a discount by enabling the option, **[7 - Limit Discount to Value in Amount Field]** for a discount and configuring the amount field as necessary. See Discount: Discount Options for more information.

Help Screen

A **Help Screen** is a window that displays on a workstation to show information to the user. In Simphony, help screens have the ability to link to an HTML file or a URL. The URL feature is optimal for companies that would like standardized help screens throughout multiple properties. Content for this feature can be customized to the company's needs and can contain information such as a drink recipe file for bartenders, a daily specials file for servers, or a link to the corporate intranet. This feature is especially useful for employees in training or employees who are having difficulty conducting a procedure.

	This article relates to programming of an EMC module.
	This article discusses the usage of one or more **Function Keys**. (301)
	The URL and HTML Help Screen features were introduced in Simphony 1.0.
	This article discusses **configuration**, or various programming scenarios, or both.

Contents
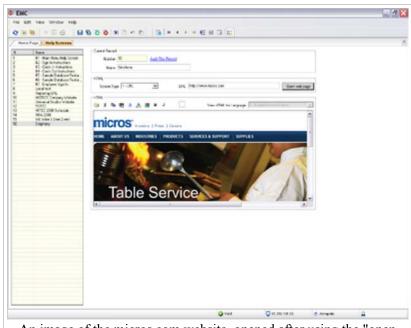
- 1 EMC Configuration
    - 1.1 Linking to a URL
    - 1.2 HTML Content
    - 1.3 Standard Text
    - 1.4 Creating a Topic List
- 2 Workstation Operations

EMC Configuration

In the Touchscreen Design module of the EMC, the **[Help]** function key (301) should be added to a touchscreen. This function key displays the Default Transaction Help Screen as programmed in Property Parameters. Help Screens themselves are programmed from the property scope of the EMC, under the "Property" header. In this module, Help Screens can be linked to a URL or saved as HTML, in addition to providing plain text messages.

Linking to a URL

To point to a URL, simply enter the website address in the URL field. To test the URL for validity, click "Open web page." *Note: To access URLs, workstations must be able to*

An image of the micros.com website, opened after using the "open web page" button to test the URL's validity.

access the Internet or must be connected to a local intranet.

HTML Content

By selecting HTML as the screen type, the text box enables and allows free text entry. HTML files can be created in a separate editing program, such as Microsoft NotePad® or WordPad®, and then copied into the EMC. ***Note: Workstations can access HTML files with or without Internet access.***

Standard Text

When HTML is the selected type of help screen, a programmer can simply add text to the text box; this text will appear on the workstation help screen.
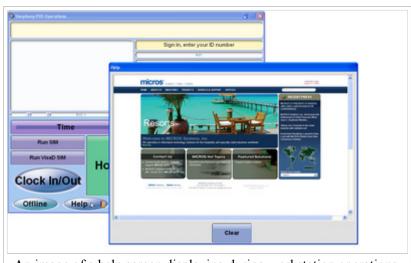
Creating a Topic List

When HTML is the selected type of help screen, a list of all help screens can be generated automatically and placed on one screen. This list is especially useful for programming the Default Transaction Help Screen: the default transaction help screen often contains a list of all the other help topics.

To create the list of topics, put your cursor in the text box where the list should appear, and then press the icon that looks like a list (to the right of the italics *I* symbol).

Workstation Operations

When the **[Help]** function key (301) is pressed, the Help Screen displays in a separate Help Window, as shown here.
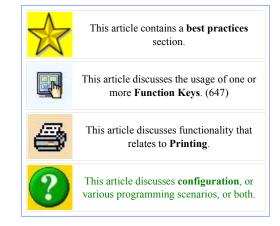
An image of a help screen displaying during workstation operations, after pressing the **[Help]** function key.

Hold and Fire

Hold and Fire is a feature that allows users to ring in an item and "hold" it, so that they may later "fire" this item and send it to its order devices. While this feature is used infrequently in the field (chefs often prefer the course line method of ordering), Hold and Fire is easy to train, maintain and program.

⭐	This article contains a **best practices** section.
🖼	This article discusses the usage of one or more **Function Keys**. (647)
🖨	This article discusses functionality that relates to **Printing**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

Usage and Programming

While this feature has existed for a while, there are some hesitations or misconceptions about its use. Installers are often unfamiliar with the concept because of the rare instance that a site asks to use it. This article will attempt to clarify the usage of this feature and discuss the best configuration options.

The "Hold Menu Item" function

For consistency, "Hold Menu Item" will be referred to as "HOLD" throughout this document. Allowing a menu item to be held is very simple to program: on a touchscreen, just add the **[Hold Menu Item]** function key (647).

This key works very similarly to the **[Void]** function key (601). To put a menu item on hold, an operator can do one of the following:

- Press HOLD twice. This will hold the last item that has been added to the check.
- Press HOLD and then order an item. The item entered will be on hold.
- Highlight an item in the check detail after it has been ordered. Press HOLD.

An H in the check detail represents any item that is being held. To "unhold" a held item, simply highlight the item in the check detail and press HOLD.

Service Totaling the Menu Items

An item that is on hold in the current round will not be sent to an order device. This is the purpose of the Hold Menu Item feature. The following scenario represents a typical situation in which Hold Menu Item would be used.

The server, Sally, enters the following items:

```
Shrimp Cocktail
Chicken Fingers
Filet Mignon      H
Shrimp Alfredo    H
```

At this point, Sally service totals the order:

- The items Shrimp Cocktail and Chicken Fingers will print immediately to the appropriate printers
- Filet Mignon and Shrimp Alfredo will not print.

When Sally wants to fire the entrees, she can pickup this check and service total again. Now the Filet Mignon and Shrimp Alfredo will print to the appropriate printers.

Other Service Total Tenders

In our previous example, what happens if Sally needs to order a round of drinks after firing the appetizers, but before firing the entrees? A misconception exists that if she rings in two beers and service totals, the entrees will be fired at the same time. This is only partially true — to avoid this, another tender needs to be created that allows the beers to be sent but the entrees to remain on hold.

The situation would be the following progression:

1. Sally places the order from the previous example.
2. Sally picks up the check again and rings in two beers.
   - She presses **[SEND & KEEP HOLD]**, which sends only the beers to the bar printer; the entrees are still on hold.
3. Then she picks up the check again and service totals using the standard **[Send]** key when she wants the entrees to print to the kitchen.

Tender/Media Option Bit Configuration

There are three service total Tender/Media keys that are appropriate to this discussion. The chart below discusses configuration and usage.

Tender	Option Bits Enabled	Result
Send	- None	All items on hold from a previous round print to appropriate remote printers. All items in the current round print unless they were rung in as a held item.
Preserve Hold (Send & Keep Hold)	- Preserve Hold Status From Previous Menu Items	Acts just like Send, except items on hold from a previous round remain on hold.
Hold All		

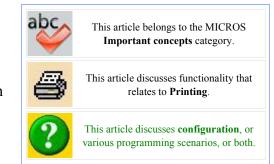|		
	▪ Preserve Hold Status From Previous Menu Items ▪ Hold All Menu Items in Current Round	Essentially puts an "H" next to every item that was rung in the current round, and also keeps any item on hold that was on hold from a previous round.

Best Practices

Almost every screen in a full service restaurant RVC has PRINT and SEND keys on it. For a site that wants to implement Hold and Fire, touchscreens should also include at least the Preserve Hold key.

With this third key on the screen (and of course a fourth key — the HOLD key), touchscreens could become somewhat cluttered. A recommendation is that the screens are programmed so that the regular PRINT and SEND keys are reprogrammed to be two other keys: a HOLD key and another key called "Service" (or something similar). This "Service" key is programmed as a next-screen that has a choice of tenders: PRINT, SEND, SEND & KEEP HOLD, and also the HOLD button to do any last-minute adjustments.

How Menu Items Print

When a check is service totalled, users expect that menu items will print at the appropriate printers (or display on the appropriate KDS Displays). But someone new to MICROS products may not understand *why* or *how* that happens. This article explains **how menu items print**, so that users can always have the correct configuration. At the very least, this page can be used to troubleshoot printing problems and to verify configuration.

abc ✓	This article belongs to the MICROS **Important concepts** category.
🖨	This article discusses functionality that relates to **Printing**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Example
- 2 EMC Configuration
    - 2.1 Menu Item Class
    - 2.2 Order Devices
    - 2.3 Workstations
- 3 Summary
- 4 See also

Example

- A printer is configured: **Hot Food Printer**.
- The menu item, **Chicken Wings**, needs to be printed
- This is RVC #1.

EMC Configuration

Menu Item Class

The first step is somewhat obvious... is the Menu Item Class programmed to print? Troubleshooting:

1. Enter Menu Item Maintenance
2. Select your menu item. This could be easily done by searching for Appetizers. (This is the logical location for **Chicken Wings**.)
3. Once the definition is selected, look at the Menu Item Class. Does it appear to be right? Let's see...
4. Click the link button next to the Menu Item Class field.
5. Now you're looking at that item's Menu Item Class. Click on the **Output** tab.
6. Which order devices are checked? Any? Let's make sure that it will output to order device #1. (More of an explanation later.)

Order Devices

Now that you've saved changes in the Menu Item Class, open the "Order Devices" module from the EMC.

1. This module starts in Table View. Double click order device #1 to enter Form View.
   - Order Device #1 is what was selected in the Menu Item Class section of this page.
2. On this page, these are the fields that are important:

> Device Type
>> Set this to "Remote". (More discussion on the Order Device page about Local/Remote; but for this example we're only using "Remote")
>
> Device
>> Set this to the **Hot Food Printer** that was previously mentioned
>> *Note: If this field is set to 0-None, no printing will take place.*
>
> Order Device Redirect
>> Because this is printer #1, set this field to printer #1, or click the "Set to Device 1" link. (More discussion on the Order Device Redirection page about this setting)
>> *Note: If this field is set to 0-No Output, no printing will take place.*

Workstations

OK, so far we've set up:

1. A menu item that prints to order device #1.
2. An order device that says order device #1 is your **Hot Food Printer**.

At this point, your **Chicken Wings** should print to your **Hot Food Printer**, right? Not quite. Open the EMC Workstations Module.

1. Select your workstation.
2. On the Order Devices tab enable order device #1.

Summary

To print a Menu Item:

1. Verify that your menu item is in a class that prints to your order device.
2. Verify that your order device is redirected to itself and that it has the appropriate physical printer or KDS Display listed for the "Device" field.
3. Verify that your workstation is set to print to your order device.

Increment Current Employee Shift (PMC Procedure)

The **Increment Current Employee Shift PMC Procedure** is used to increment a shift for the employee signed into the workstation.

🖥️	**This article discusses PMC functionality.**
🔴$	This article discusses behavior that is important for **Reporting**.
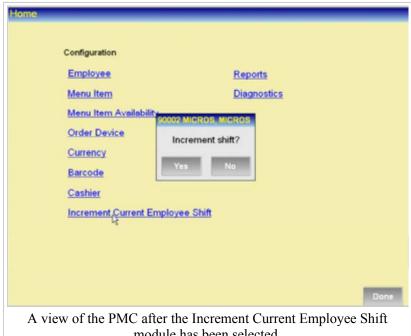
Contents

- 1 Usage
- 2 Privileges
- 3 See also

Usage

To increment a shift, press the **[Increment Current Employee Shift]** function. At the "Increment Shift?" prompt, press Yes.
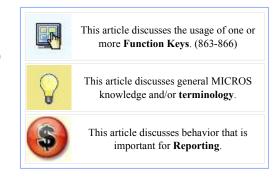
A view of the PMC after the Increment Current Employee Shift module has been selected.

Privileges

This procedure is only available for employees associated with an Employee Role where the **Increment Current Employee Shifts** option is enabled.

Increment Shift

The process of **Incrementing a Shift** means that an employee is "resetting" his/her financial report back to 0.00. This is often used when an employee works a breakfast/dinner double shift (or something similar) and the employee is required to make a deposit at the end of each shift; it is also used for shifts that span a business day. Shifts can be incremented using the Employee PMC Procedure or by using one of the increment shift function keys.

	This article discusses the usage of one or more **Function Keys**. (863-866)
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 Examples
- 2 Function Keys
- 3 See also

Examples

- An employee working a "double shift" can work the breakfast shift and make a deposit of all his cash due. Then he can increment his shift so the dinner shift will start at 0.00. At the end of the dinner shift, the employee will know how much money to deposit without having to subtract the breakfast totals.
- Shift increments are sometimes used in environments where the employee works during the Start of Day time. For instance, if an employee's shift is from 1am-9am, and Start of Day runs at 3am, the system can be configured so the employee's report shows all activity from 1am-9am. In this situation, the employee's report did not "reset" at 3am. For more information about this scenario, see Employee Shifts.

Function Keys

Four function keys allow a user to quickly increment shifts:

863 - Increment Employee Shift for Signed-In Operator
    When this function key is used, the workstation will increment the shift for the signed-In operator.
864 - Increment Employee Shift, Prompt
    When this function key is used, the workstation will display a list of employees. The user can then select the employee and press the Increment Shift link.
865 - Increment Cashier Shift for Signed-In Operator
    When this function key is used, the workstation will increment the shift for the cashier associated with the signed-in operator or the cashier associated with the workstation.
866 - Increment Cashier Shift, Prompt

	Function Keys 863-866 were introduced in Simphony 1.0 Service Pack 7.

	Function Keys 863 and 865 can be used on MMH workstations and "regular" workstations. Function Keys 864 and 866 function on regular workstations only, because PMC is required to provide a list to the user.

When this function key is used, the workstation will display a list of cashiers. The user can then select the cashier and press the Increment Shift link.

Installing the VeriFone E23x Card Reader Driver

<div style="border:1px solid">

Contents

- 1 System requirements
- 2 Installing the driver
- 3 Configuring the OPOS magnetic stripe reader or the barcode reader
- 4 Removing the VeriFone E23x card reader driver
- 5 Testing the VeriFone E23x card reader

</div>

System requirements

- Microsoft Windows 7 or later
- Microsoft .NET Framework 4 or later

Installing the driver

If an older version of the driver already exists, you must uninstall the old driver before installing the new driver.

You can connect the VeriFone E23x magnetic stripe reader before or after installing the driver. Click the link provided here: https://portals.micros.com/hardware/mTabletmStation/Forms/AllItems.aspx

1. Download the VeriFone E23x card reader driver.
2. Run the **E23xDriverInstaller_1.2.0.exe** file.
3. Click **Yes** each time you are prompted.
4. Run the **E23x_OPOS_DLL_Install_1.5.2.0.exe** file.
5. Click **Yes** each time you are prompted.

Configuring the OPOS magnetic stripe reader or the barcode reader

1. Log into the EMC and select the property that will be using mTablet E devices.
2. From the **Setup** tab, under the **Hardware/Interfaces**, click **Workstations**.
3. Click the Form view\Table view toggle button to go to the form view.
4. Select the workstation that will be using the VeriFone E23x card reader. If required, add a new workstation record.
5. Click the **Devices** tab.
6. Click **Add** under the **Peripheral Device Configuration** section.
7. If you want to configure a magnetic stripe reader device, select **OPOS Mag Stripe Reader** as the device type. If you want to configure a barcode reader, select **OPOS Barcode Reader** as the device type. Click **OK**.

8. If you selected OPOS Mag Stripe Reader as the device type, enter the device name as **MSRE23x** in the Configuration box. If you selected OPOS Barcode Reader as the device type, enter the device name as **ScannerE23x** in the **Configuration** box. Click **OK**.
9. Click **Save**.
10. Reload the database and restart the service host.

Removing the VeriFone E23x card reader driver
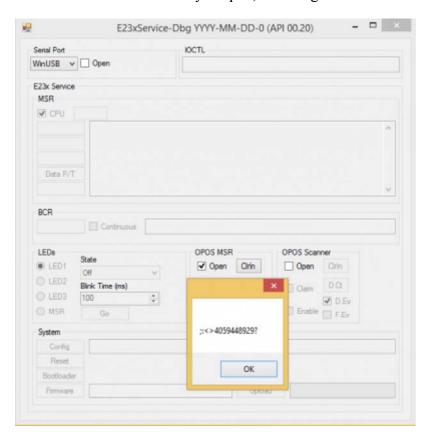
To remove the VeriFone E23x magnetic stripe reader driver from the operating system, you need to uninstall the following components:

- E23x Driver Installer <versions>
- E23x OPOS DLL
- Microsoft Point of Service (POS) for .NET v1.12
- OPOS Common Control Objects 1.13.001

Testing the VeriFone E23x card reader
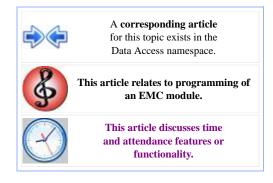
You can use the e23xservice.exe application to test the barcode reader or magnetic stripe reader functionality through the OPOS interface.

1. Copy the **e23xservice.exe** and **e23xD.dll** files to the **<Drive>:\Program Files\Verifone\E23xOPOS** folder.
2. Exit the ServiceHost application.
3. Run the **e23xservice.exe** application.
4. Under **OPOS MSR**, select the **Open**, **Claim**, **Enable**, and **D. Ev** (data events) check boxes. After each successful swipe attempt, the **D. Ev** check box is deselected.
5. Swipe the card.
6. If the card successfully swiped, a message with the card data appears.

Job Code

A **Job Code** identifies a particular job category in the timekeeping system. Job Codes are used to link hourly employees to their specific pay rate when they clock in and to group labor hours and costs into job categories on reports for analysis. Additionally, Job Codes can be associated with Employee Roles and Employee Classes, changing an employee's privileges for the duration of the shift.

	A **corresponding article** for this topic exists in the Data Access namespace.
	This article relates to programming of an EMC module.
	This article discusses time and attendance features or functionality.

Contents

EMC Configuration

Job Code records are configured in the **Job Codes** EMC module and Employees are assigned Job Codes in Employee Maintenance.

Job Codes
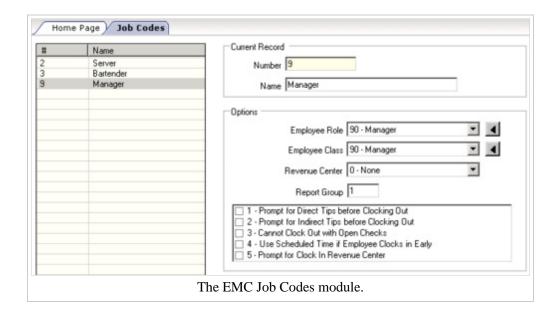
The **Job Codes** module is accessed from the Property Scope and contains the following configurable fields and option bits:

The EMC Job Codes module.

Name
> Enter a name for this Job Code. Up to sixteen characters are allowed.

Report Group
> Enter a Report Group for this Job Code. Labor reports sort and subtotal by Report Group. If the Report Group for this Job Code is zero, it will not show on any Job Code Reports.

Role
> Select an Employee Role from the drop-down to associate with this Job Code. This field allows a Job

Code to override the operator's privileges:
- If the field is set to 0-None, the operator will have privileges based on the role(s) assigned in EMC's Employee Maintenance module.
- If the field is not 0-None, the Employee Roles assigned to the employee in EMC do not apply. Instead, only the privileges associated with the role from this field will be active for the duration of the Clock-In Cycle.

Employee Class

Select an Employee Class from the drop-down to associate with this Job Code. This field functions similarly to the Employee Role field:
- If the field is set to 0-None, the operator will use the Employee Class assigned in EMC's Employee Maintenance module.
- If the field is not 0-None, the Employee Class assigned to the employee from the EMC does not apply. The employee will be assigned the class in this field for the duration of the Clock-In Cycle. Note that the operator's **[Override Class Options]** setting will always apply. Therefore, the configuration works as follows:
    1. A Job Code is configured with the "Server" Employee Class
    2. An Operator record is configured to Override Class Options
    3. When the operator clocks in to the Job Code, the "Server" Employee Class options and fields will be applied to the employee for the duration of the Clock-In Cycle, *except* the operator option bits.

Revenue Center

Select the Revenue Center in which this Job Code is available, or select "0-None" to make this Job Code available in all Revenue Centers.

1 - Prompt for Direct Tips before Clocking Out

Select this option to prompt employees who are clocked in under this Job Code to declare the amount of direct tips received (tips given directly from the customer to the employee) when clocking out.

2 - Prompt for Indirect Tips before Clocking Out

Select this option to prompt employees who are clocked in under this Job Code to declare the amount of indirect tips received (tips given from one employee to another) when clocking out.

3 - Cannot Clock Out with Open Checks

Select this option to prevent employees clocked in under this Job Code from clocking out while they have open guest checks. This restriction can be overridden for employees associated with Employee Roles where the **[Clock Out with Open Checks]** option is enabled.

4 - Use Scheduled Time if Employee Clocks in Early

Select this option to use the employee's scheduled clock-in time for labor calculations if the employee clocks in earlier than scheduled.
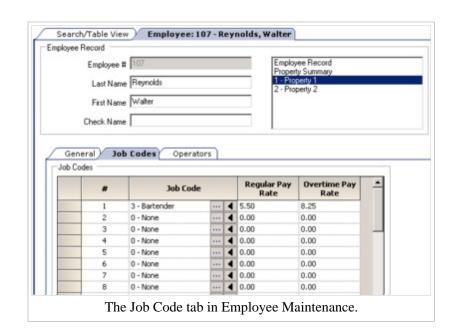
5 - Prompt for Clock In Revenue Center

Select this option to allow employees to select their Revenue Center when they clock in.
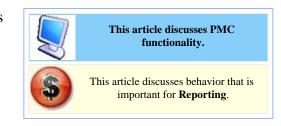
Employees

Job Codes are linked to specific employees in the Employee Maintenance module. From the Job Codes tab of

the Employee form, an employee can be assigned up to 255 job codes. See also, Pay Rates.

The Job Code tab in Employee Maintenance.

Job Code Labor Report

The **Job Code Labor Report** summarizes all accumulated employee labor totals by Job Code.

This article discusses PMC functionality.
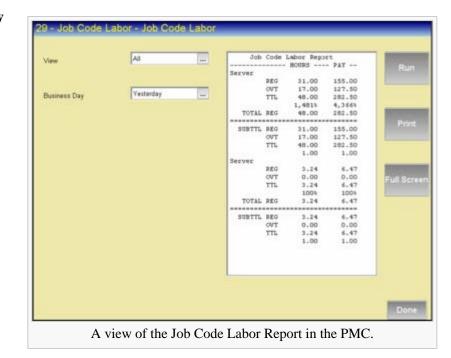
This article discusses behavior that is important for **Reporting**.

Contents

- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report

The PMC version of the report allows a choice of **View** and **Business Day**. The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Job Code Labor Report in the PMC.

mymicros.net Report

This section of this article is a stub. This means that this page requires more information than it currently has. To request immediate attention for this page or to add suggestions, click here.

Report Examples

- PMC Job Code Labor

See also
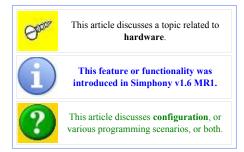
- PMC Reports
- WS Autosequences
- List of PMC Reports

KDS Display Status

This article reviews the 'KDS Display Status' controller and its use. It's now available for sites beginning with the release of Simphony v1.6 MR1.

Note: This feature does ***not*** currently exist in Simphony v2.x.

This article discusses a topic related to **hardware**.

This feature or functionality was introduced in Simphony v1.6 MR1.

This article discusses **configuration**, or various programming scenarios, or both.

Contents
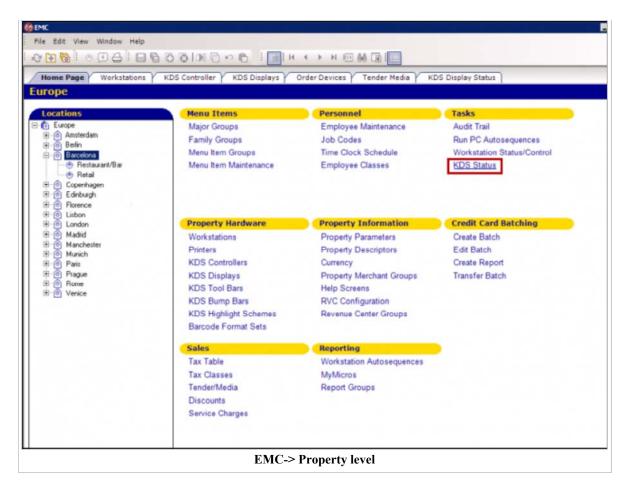
- 1 Overview
    - 1.1 Column Header Definitions
    - 1.2 Performing a KDS Status Search
- 2 See also

Overview
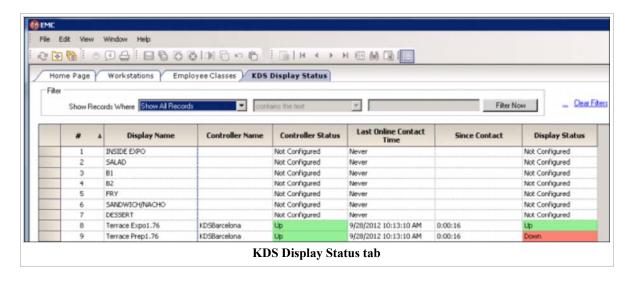
The ability for users to view and filter the connectivity status of a Property's KDS Displays and Controllers has been introduced. This should particularly assist users at larger Property's with many Revenue Centers in checking on the status of their KDS systems.

- A link to access a 'KDS Display Status' controller has been integrated at the following location: EMC-> Property level-> Tasks-> **'KDS Status'**.

EMC-> Property level

- When opened, the default view (**'Filter'** header-> **'Show Records Where'**-> **Show All Records**) will list all of the selected Property's KDS Displays and KDS Controllers.

KDS Display Status tab
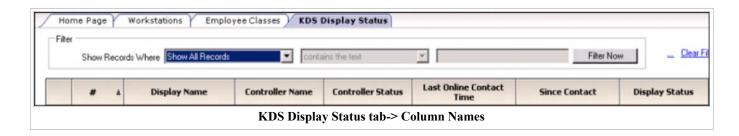
- On the bottom of the screen, there is a **'Live Status'** header with an **'Enable'** checkbox. Once the 'Enable' checkbox is selected, it starts the 'KDS Status' controller to run a check on the current status of all of the selected Property's KDS devices. By default, every 30 seconds, it will run a Property-wide KDS system check and then update the page.

KDS Display Status tab-> Live Status-> Enable checkbox

Warning: It is recommended that once a KDS Status check has been completed that the user *unchecks* (disables) the Live Status-> 'Enable' checkbox in order to prevent the unnecessary use of system resources.

Column Header Definitions

KDS Display Status tab-> Column Names

- The selected Property's KDS device record number

Display Name - This column displays the name of the KDS Display

Controller Name - This column displays the name of the KDS Controller

Controller Status - This column will display a KDS Controller's Status. There are three possible KDS Controller statuses. They are:

1. **Up** – (highlighted green) Running and functioning normally
2. **Unknown** - (highlighted yellow) An 'Unknown' status may be caused by any of the following scenarios:

    - No KDS Controller Status record in the database
    - A KDS Controller may be considered "**Not Configured**" if a KDS Display is not attached to the KDS Controller

Last Online Contact Time - This column displays the last contact time between the database and the KDS Controller while the KDS Controller was on-line. The KDS Controller periodically makes requests to obtain any changed records; during this process, the 'Last Contact Time' for the KDS Controller is updated. This information is obtained from the database query that occurs at the interval determined by users when the 'Live Status' controller is enabled.

   Note: This time is based upon the Local time setting of the Simphony Application Server.

Since Contact - This column displays the time elapsed since between the 'Last Contact' column and the current Date/Time.
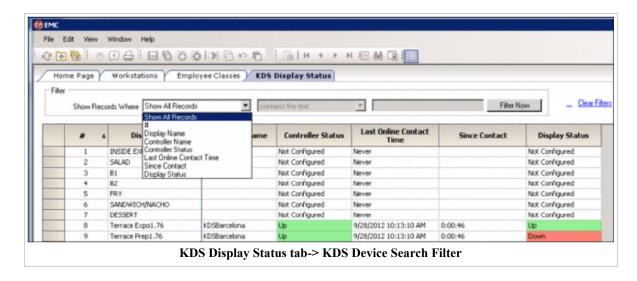
   Note: This value does not get updated in real-time; rather it updates at the interval determined by the last time the 'Live Status' controller was enabled by users.

Display Status - This column will display the current KDS Display Status. There are three possible KDS Display statuses. They are:
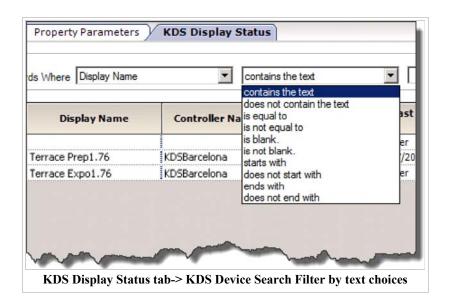
1. **Up** - (highlighted green) Running and functioning normally
2. **Down** - (highlighted red) Not running
3. **Unknown** – (highlighted yellow) An 'Unknown' status may be caused by any of the following scenarios:

   - The KDS Display's KDS Controller status for is 'Down' or 'Unknown'.
   - There is no KDS Display Status record in the database.
   - A KDS Display may be considered "Not Configured" if it is not attached to a KDS Controller.
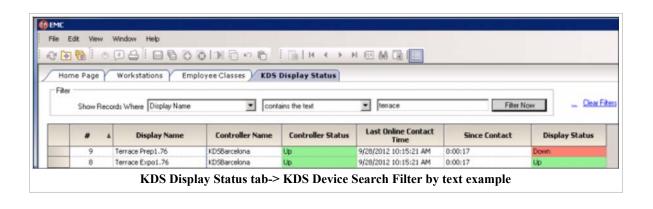
Performing a KDS Status Search

- Under the 'Filter' header, there is a drop-down menu named '**Show Records Where**' that provides numerous KDS device search filtering options to include the KDS Display record '**#**', '**Display Name**' and KDS '**Controller Name**' to list a few. All of the optional filtering choices are shown here:

KDS Display Status tab-> KDS Device Search Filter

Accompanying the filtering choices is another drop-down menu that contains several text search variables that may further assist user's in pinpointing specific text used in KDS device naming conventions. The text search options are listed here:

KDS Display Status tab-> KDS Device Search Filter by text choices

- In this example, a user has filtered the search by '**Display Name**', '**contains the text**', '**terrace**' and then selects the '**Filter Now**' button. The search results are shown here:

KDS Display Status tab-> KDS Device Search Filter by text example
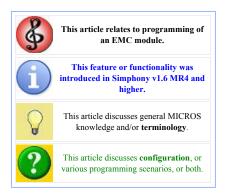
Kitchen Themes

*This article reviews the functionality and configuration steps to enable **Kitchen Themes** for KDS Systems.*

🎼	**This article relates to programming of an EMC module.**
ℹ️	**This feature or functionality was introduced in Simphony v1.6 MR4 and higher.**
💡	This article discusses general MICROS knowledge and/or **terminology**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

Overview

The **Kitchen Themes** feature allows a business to create multiple configuration settings for its Order Devices, which are stored in the database and identified by name (e.g., Breakfast Theme, Lunch Theme, Dinner Theme, Happy Hour, Corporate Banquets, and Private Banquets etc.). With it, managers can change the order direction and output of the entire restaurant by simply activating a new theme.

> ⚠️ **Warning:** For those who choose to utilize the Kitchen Themes feature *prior* to the release of Simphony v1.6 MR5, it's vital that Kitchen Themes be configured to account for all 24 hours of a day (even if Revenue Centers are not open for business during certain times). Failing to do so may result in the KDS system to discontinue working as expected.

Usage

During the business day, a restaurant may open and close portions of the facility to accommodate the changing needs of its customers and trade. It's not uncommon, for example, for restaurants to close a portion of the seats during mid-morning hours that are normally filled during the breakfast and lunchtime rushes. Similarly, the bar may be closed at lunch time, but opened in the evening for happy hour and dinner.

Clearly, the number of employees needed during the day will vary with the customers and as sections or even Revenue Centers (e.g., bars, retail shops or a drive-thru) open and close, the number of Workstations, printers, and other peripheral devices used by the system will also change. The job of determining which Order Devices will be active and when usually falls to the manager. If the restaurant is large, implementing the changes can be cumbersome as well. The Kitchen Themes feature was designed to speed up the transition phase between shifts or active periods by storing common sets of order device configurations into a separate table in the database. Each data set (or themes) is assigned a name for easy identification. When a change is required, the manager simply activates the appropriate theme (either through

the EMC or a KDS PMC Procedure). The system automatically copies the new settings to the appropriate device tables and reloads the database. The advantages are clear:

- **Efficiency** — Simple, direct, reconfiguration of restaurant devices – a time-saver.
- **Accuracy** — Reduces the amount of error caused by manual reconfiguration.
- **Variety** — No limits on the number of themes that can be stored.
- **Flexibility** — User's control when the configuration is changed.
- **Consistency** — Repeatable results.

Kitchen Themes is an optional feature. Employees must be privileged to set or change the active kitchen theme.

EMC Configuration

Step-by-Step Procedures
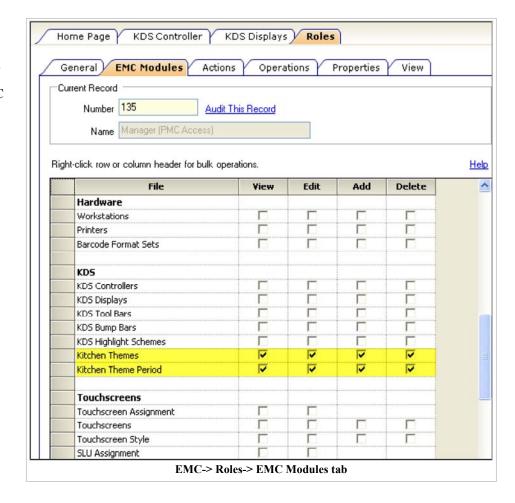
This section describes the procedures required to enable and use the **Kitchen Themes** feature.

Assign Employee Privileges

Follow these steps to allow an employee to configure or change the active Kitchen Theme:
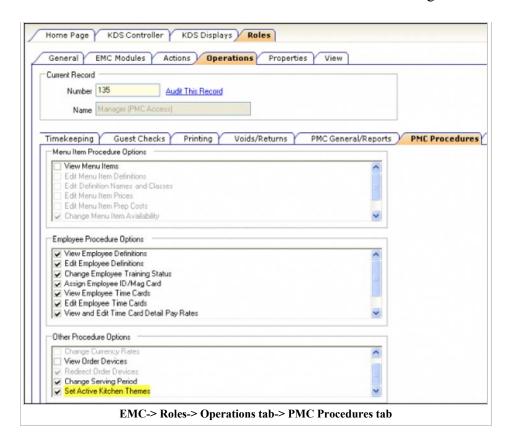
1. Open the *EMC-> Enterprise* level-> *Personnel-> **Roles*** module.

2. Highlight the **Name** of an 'Employee Class' from the table. For Kitchen Themes, this is typically a manager or administrative-level employee. Click on the '**EMC Modules**' tab and under the '**KDS**' files, enable the appropriate EMC access options for both the '**Kitchen Themes**' and '**Kitchen Theme Period**' modules.

EMC-> Roles-> EMC Modules tab

3. To allow users to change the current active Kitchen Theme, go to the '**PMC Procedures**' tab. Under the '**Other Procedure Options**' section, check the '**Set Active Kitchen Themes**' box to

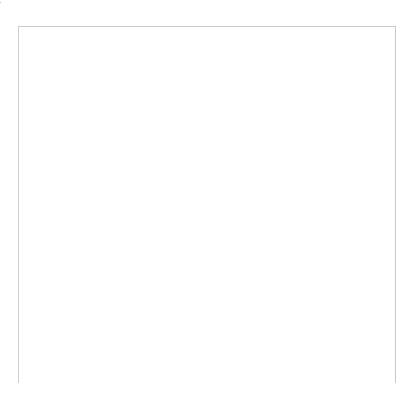assign the privilege to run this procedure to members of this class.

4. Click the **'Save'** icon to save the record.
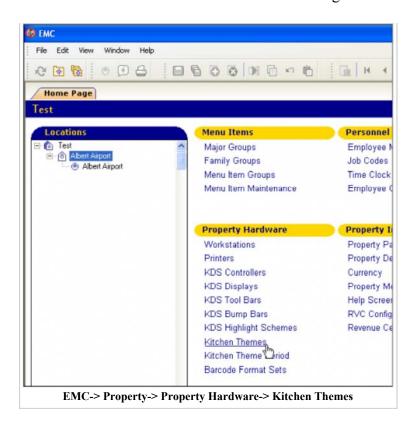

EMC-> Roles-> Operations tab-> PMC Procedures tab

Activate Themes for the First Time

Kitchen Themes are stored as rows of device data in a separate table in the database. As you configure a new Kitchen Theme, notice that the options bits are duplicates of those found in the Workstations, and Order Devices forms. This duplication is what allows for the retention of multiple configurations which can then be recalled to the active system at the discretion of the user.

- Follow these steps to activate Kitchen Themes for the first time:

1. Configure the Workstations, and Order Devices as usual.

2. Open the *EMC-> Property level-> Property Hardware-> **Kitchen Themes*** module.

EMC-> Property-> Property Hardware-> Kitchen Themes
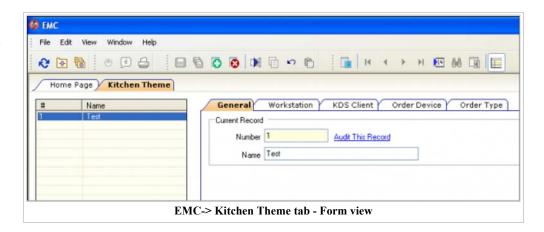
3. By default, the page opens to Table view.

EMC-> Kitchen Theme tab - Table view
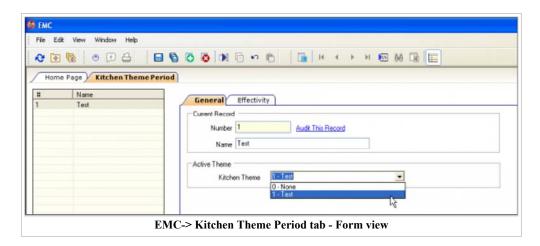
- Toggle to Form view. (*Optional*) Assign the **Name** of the kitchen theme to something descriptive (e.g., Breakfast Theme 6-10:30, Lunch Theme 10:30-3:00, High\Low Volume Theme, etc.)

EMC-> Kitchen Theme tab - Form view

4. Edit each additional tab (i.e., Workstation, KDS Client, Order Device and Order Type) as needed.

5. Click the '**Save**' icon to save the record.

6. Open the *EMC-> Property level-> Property Hardware-> **Kitchen Theme Period*** module.

7. Click the '**Insert**' icon to add a new record to the **Kitchen Theme Period** table. The system will automatically assign the next available **Number** and add the record. From Table view, toggle to Form view to the **General** tab.

8. From the **Active Theme** section, select the appropriate **Kitchen Theme** from the drop-down menu that will correspond to the *Kitchen Theme Period-> **Effectivity tab*** settings.

EMC-> Kitchen Theme Period tab - Form view

9. From the '**Effectivity**' tab, configure the following Kitchen Theme Period settings for each period:

Effectivity

- '**Start Date**' and '**End Date**' fields
  - Enter the effective dates for this record. When both the 'Start Date' and 'End Date' settings are left disabled, the record is considered effective.
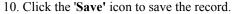
Recurrence Day of the Week

- '**Monday**' through '**Sunday**' check boxes
  - Select the recurrence effective day of the week for this record.
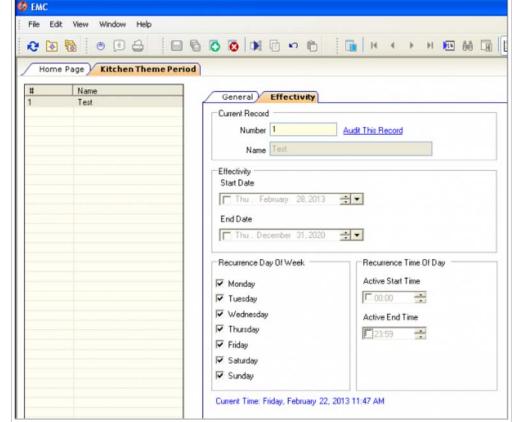
Recurrence Time Of Day

- '**Active Start Time**' and '**Active End Time**' setting fields
  - Enter the recurrence time of day for this record. When both the Start Time and End Time settings are left disabled, the record is considered effective all day long.

EMC-> Kitchen Theme Period tab - Effectivity tab

10. Click the '**Save**' icon to save the record.

11. When the configuration is complete, the theme(s) will automatically be active based on their current system setting. Only one theme may be active at a time, therefore ***do not*** overlap the 'Active Start Time' and 'Active End Time' settings.

> **Note:** Kitchen Themes may be "deactivated" by accessing the Kitchen Theme Period-> General tab-> Active Theme-> Kitchen Theme setting and assign it the **[0 – None]** setting and Save.

Copy an Active Theme to a New Theme

Follow these steps to take the active theme's configuration and copy to a new theme:

1. Open the *EMC-> Property level-> Property Hardware-> **Kitchen Themes*** module.

2. Remain on Table view. Select the **Name** of the theme to be copied and right-click on the gray box on the far left that's adjacent to the Kitchen Theme's record number as shown here:

3. From the drop-down menu, select the '**Import Current Settings to Kitchen Theme'** option. This will copy the existing configuration information to a new theme record. The original theme (i.e., the one from which the settings are copied), remains unchanged.

4. Change the **Name** of the new kitchen theme to something more descriptive (e.g., Breakfast Theme 6-10:30, Lunch Theme 10:30-3:00, High\Low Volume Theme, etc.)

5. Edit the **Theme** fields as needed.

6. When the configuration is complete, click the '**Save'** icon to save the record.

EMC-> Kitchen Theme Period tab - Importing theme

Create a New Theme

> **Note:** Kitchen Themes are only allowed to be added beginning at the Property level.

Follow these steps to create a new theme:

1. Open the *EMC-> Devices-> **Kitchen Themes*** module.
2. Click the '**Insert'** icon to add a new record to the theme table. The system will automatically assign the next available **Number** and add the record. From Table view, toggle to Form view.

> **Note:** When a new theme is started, the system imports the current (active) device settings as the starting point.

3. (*Optional*) **Name** the Kitchen Theme to something descriptive (e.g., Breakfast Theme, Banquet Theme or High-Volume Theme, etc.).
4. Click the '**Save'** icon to save the record.
5. Proceed to the **Workstation** tab.

Enabling Workstation Order Device Masking

Follow these steps to specify which of the user workstation order devices is relevant to this kitchen theme:

1. Open the *EMC-> Devices-> **Kitchen Themes*** module.
2. Highlight the **Name** of a kitchen theme from the table and toggle to Form view.
3. Go to the **Workstation** tab. Beneath the '**Workstation Order Device Output'** header; use the '**Add'** link (to add individual Workstations) or the '**Add All'** link (to add all of the configured Workstations at once) that will be communicating to the assigned Order Devices set up in the system. If needed, use the '**Delete'** link to remove any undesired Workstations from the module.
4. Highlight a Workstation from the list and specify under the **Order Devices** column which devices will be accessible to it by selecting the check box next to each of the desired Order Device(s) that are listed there.

> **Note:** Only those Workstations relevant to the current theme need to be defined. When the new theme is loaded, any active device that is not included in the new theme will be set to disabled.

5. Repeat Step 4 for each Workstation in this kitchen theme.
6. Click the '**Save'** icon to save the record.

Configure the KDS Devices

Follow these steps to configure the KDS devices to be used with this theme. Options set here are only applicable when the kitchen theme is active.

1. Open the *EMC-> Devices-> **Kitchen Themes*** module.
2. Highlight the **Name** of a Kitchen Theme from the table and toggle to Form view.
3. Go to the **KDS Clients** tab. Beneath the '**Kds Display'** header; use the '**Add'** link (to add individual KDS Displays) or the '**Add All'** link (to add all of the configured KDS Displays at once) that will be utilizing this kitchen theme. If needed, use the '**Delete'** link to remove any undesired KDS Displays from the module.
4. Select the **KDS Device** from the table and set the following options:

   - **Tool Bar** — From the drop-down list, select the Tool Bar to be used.
   - **Bumpbar Layout** — From the drop-down list, select the Bump Bar layout to be used.
   - **Panels** — Enter the number of panels or logical "monitors" that will define this KDS station when the kitchen theme is active.
   - **Panel Layout** — Specify whether the KDS station displays multiple panels horizontally (top-to-bottom) or vertically (left-to-right).
   - **Serpentine Mode** — Specify how the orders will flow on the KDS station when this kitchen theme is active. The options are:
     - **TSR** (*PC-Based Clients Only*) — Displays incoming orders starting from the top left corner, filling the first column, then spilling into the top of the next column, and so on. The TSR mode uses columns only; it ignores the number of rows. The KDS station displays as many orders on the screen as possible.
     - **Horizontal** — Displays incoming orders on the screen from left to right, row by row, starting from the top left corner and moving across.
     - **Vertical** — Displays incoming orders starting from the bottom right corner, moving up and then moving to the left.

5. Repeat Step 4 for all of the KDS devices associated with this theme.
6. Click the '**Save'** icon to save the record.

Configure the Order Devices

Follow these steps to configure the Order Devices associated with this theme. Options set here are only applicable when the kitchen theme is active.

1. Open the *EMC-> Property level-> Property Hardware-> **Kitchen Themes*** module.
2. Highlight the **Name** of a Kitchen Theme from the table and toggle to Form view.
3. Go to the **Order Devices** tab. The Device table is automatically populated with the names of all the order devices currently in that Property. Select the correct RVC. Select the desired order device.

4. From the **General** tab, set the following options:

- **Device Type** — Select the **'1 - Remote'** type for a KDS Display.
- **Primary Device Type** — Select the **'1 – KDS'** device type for a KDS Display.
- **Device** — Set the primary device for displaying remote orders from this KDS Display.
- **Backup Device Type** — Select the **'1 – KDS'** device type for a backup KDS Display.
- **Backup Device** — Select an alternate KDS Display device for receiving remote orders in the event of a communication failure with the primary KDS device.
- **Order Device Redirect** — Select the order device to which this order device is redirected. Selecting this order device's own name allows for normal operation. To disable output to this device, clear the option. When using KDS, the following conditions apply:
    - A KDS client may be directed to another KDS client.
    - KDS client may be directed to a printer.
    - A printer may not be redirected to a KDS client.
    - A printer may be directed to another printer.

5. Select the **KDS** tab and set the following options:

- **KDS Course Alerts** — Configure Course Alerts
- **Appetizer Alerts** — Specify how long an appetizer can be in the system before alerting the kitchen that it is taking too long to prepare.
- **Non-Appetizer Alerts** — Specify how long a non-appetizer can be in the system before alerting the kitchen that it is taking too long to prepare.

On a Prep or Expo display, the order background color will change from white to yellow when Alert 1 expires. When Alert 2 expires, the background color will change to red. On an SOS display, the background colors also change colors when an alert expires. In addition, the SOS table will display one exclamation point (**!**) after Alert 1 expires and two exclamation points (**!!**) when Alert 2 expires. The exclamation point(s) will continue to display until the table is tendered.

Alert 2 *must* be greater than Alert 1. Use the button to bring up a dialog box and enter the times.

EXAMPLE

Alert 1 Time=00:10:00 (appears 10 minutes after the order is sent to the kitchen)

Alert 2 Time=00:15:00 (appears 15 minutes after the order is sent to the kitchen)

- **Primary Runner Chit Printer** — Assign the appropriate printer that will print runner chits when orders are bumped from the KDS device.
- **Backup Runner Chit Printer** — Assign the appropriate printer that will print runner chits when communication to the Primary Runner Chit Printer cannot be established.
- **Backup Order Device** — Select the KDS device to be used as backup display for this order device.
- **Single Item Per Sub-Order (SIPS)** — Select this option to print a separate runner chit for each item of the sub-order.
- **Send to panel** — Specify the panel number (i.e., 1 or 2) on a split-screen KDS client where orders will be displayed.
- **Beep on New Order** — Specify the type of sound (if any) that will be emitted from the KDS display when a new order is submitted from this order device.

6. From the Dynamic Order Mode **(DOM)** section, set the following options:

- **Dynamic Order Mode Type** — Select a 'Dynamic Order Mode Type' based on the following descriptions:
    - **DOM Fire On Fly** — Displays items on the KDS as they are being rung up in the system.
    - **DOM Fire On Next** — Displays items on the KDS after the next item is entered or changed in the POS.
    - **DOM Fire On Tender** — Displays changed items on the KDS after an order is tendered. This option is the default when the **Dynamic Order Mode** is enabled. The option works with both KDS and printers. For a printer, sorting only occurs when the **DOM Fire On Tender** send option is selected. This priority functionality is based on the type of send option selected for the order device.

7. Continue to the DOM sorting priority section and set the following options:

- **Add Sort Rule** — Set the KDS sorting priority for items that have been added to an order. For example, a sorting priority of **[0 - Sort to Top]** means that any items added to an order will sort to the top of the entire order on the KDS station. Condiments will sort to the top of the group of condiments linked to the parent menu item.
- **Modify Sort Rule** — Set the KDS sorting priority for items that have been changed in an order. For example, a sorting priority of **[1 - No Sort]** means that any items modified in an order will remain in the same location of that order on the KDS station.
- **Void Sort Rule** — Set the KDS sorting priority for items that have been voided in an order. For example, a sorting priority of **[2 – Sort to Bottom]** means that any items voided in an order will sort to the bottom of the entire order on the KDS station.
- **Add Highlight Scheme** — Select the Highlight Scheme (color configuration) used to display items when the quantity of an item has been changed. For example, if "1 Hamburger" has been ordered and it changes to "2 Hamburger", the item will appear in the color configured here, letting the preparer know that the quantity has changed. This functionality occurs unless the KDS option **[19 – Do Not Consolidate Menu Items]** is enabled.
- **Modify Highlight Scheme** — Select the Highlight Scheme (color configuration) used to display items on orders when the item has been modified.
- **Void Highlight Scheme** — Select the Highlight Scheme (color configuration) used to display items on orders when the item has been voided.

8. Continue to the **Order Notification** section and set the options according to site preferences.
9. Select the **KDS Option** tab and set the options according to site preferences.
10. Go to the **Order Type** tab. From the **Order Devices** column, specify which KDS devices will display orders generated by this order device. Up to 8 linked devices are allowed.

> **Note:** This option allows a user to bump orders simultaneously on linked devices.

11. Go to the **Printer Definitions** tab and set the following options to link KDS devices to different runner chit printers:

- From the **Primary Runner Chit Printer** drop-down list, specify where the selected KDS device will print its runner chits when an order is marked done.
- From the **Backup Runner Chit Printer** drop-down list, specify where the selected KDS device will print its runner chits in the event that its designated primary runner chit printer has failed.

12. Click the **'Save'** icon to save the record.

Making Temporary Kitchen Theme Changes

Once the feature is activated, managers can temporarily change the current theme through PMC Procedures. Instructions for this process are provided below.
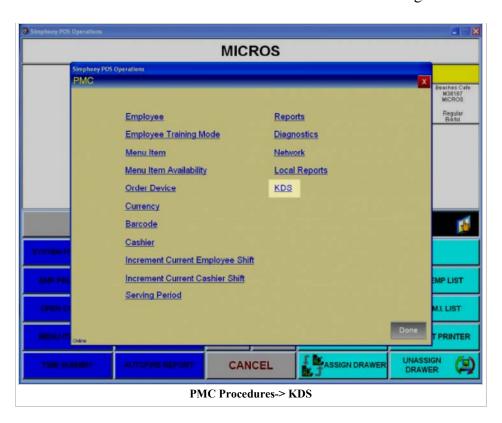
Changing the Active Kitchen Theme

> **Note:** Only privileged employees can set or change the active Kitchen Theme.

Follow these steps to change a Kitchen Theme through **PMC Procedures** from a Workstation:

1. Access any Workstation on the Property and access PMC Procedures and select the **'KDS'** procedure.

PMC Procedures-> KDS

2. Select a new (i.e., different) kitchen theme from the provided list of the **Kitchen Themes** and select the '**Enable Theme'** link. Select the '**Done'** button to exit. Users also have the option to manually set the Kitchen Theme for the entire day by selecting the '**Set for a day'** checkbox.

PMC Procedures-> KDS

KDS allows a user to change a device setting without creating a new kitchen theme or modifying the existing record. When a change is made to a User Workstation, Devices, or Order Devices form while a Kitchen Theme is active, a dialog box is displayed asking if the change should be included in the active theme.

- If '**YES'** is selected, the system will change the current configuration and update the record in the Kitchen Themes table.
- If '**NO'** is selected, the configuration is changed but not the Kitchen Themes record. This is, in effect, a temporary change. The system will continue to use the modified theme until the current theme is re-fired or another theme is activated.
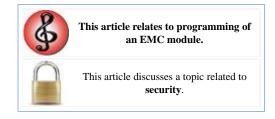
Restrictions

1. If RVCs are going to share Kitchen Display hardware, then their configuration for the KDS Controller and the KDS clients *must* be the same.

   a. This means that the same theme *must* be in effect for each RVC.
   b. If a Kitchen Theme is activated for one RVC, then all of the RVCs sharing that KDS Controller *must* use the same theme.

2. RVCs that require their own control of the KDS Hardware / Clients must have their own KDS Controller service.

   a. This means that those KDS clients or the KDS controller service *cannot* be shared amongst other RVCs.

Key Manager

This article discusses the EMC module. For a technical discussion about the Key Manager security feature, see Key Manager (technical)

Key Manager is an EMC module that allows the database encryption pass phrase and the transmission key to be changed. The database encryption pass phrase is used to encrypt secure data (credit card numbers, etc.) in the database; its value can be defined based on site security needs. The transmission key is the encryption scheme for network traffic; this key is not user-defined.

	This article relates to programming of an EMC module.
	This article discusses a topic related to **security**.

Contents

Encryption Pass Phrase

Key Status

To access the the '**Key Manager**' utility navigate to the EMC (Enterprise level)-> Tasks-> and click on the 'Key Manager' link. The '**Encryption**

EMC's Key Manager module.

Key Status' group box diplays the current status of the 'Encryption Key' and of the 'Key Rotation':

Encryption Key Status

- Encryption key pass phrase and database in sync - This message displays when the system is functioning normally.
- Warning: Encryption key pass phrase and database not in sync! - This message displays when the system detects that the transaction database and key database are out of sync. One possible cause is that someone restored an old transaction database that is not in sync with key database. When this happens system will generally experience problems with encryption-related transactions, such as credit card authorizations.
- Status cannot be determined - This message displays when either database (transaction database or key database) is not accessible, thus EMC can not read data successfully from both databases to determine the sync status.

Key Rotation Status

- Idle - There is no key rotation being performed.
- In progress... - The key is currently in the process of being rotated
- Status cannot be determined - This message displays when EMC fails to read the rotation status out of transaction database.

Key Rotation

Simphony 1.6 or higher

With the release of Simphony v1.6 or later, including Simphony v2.x, a new Key Rotation scheme will be in use. The SDATA1 and SDATA2 databases will no longer be used. The keys and passphrase will now be stored in MCRSCACHE. During an upgrade to Simphony v1.6 or later, the Key Manager tool will be automatically run.

It will perform the following operations:

- Create the new key DB schema (in MCRSCACHE).
- Extract the encryption keys and passphrase from SDATAs (if they were formerly in use).

Warning

Warning: *Prior* to performing an **upgrade** from an earlier application version (e.g., from Simphony v1.5 to Simphony v1.6) *or* running the **Key Manager Tool**, it is *strongly* recommended that:

- All existing Credit Card records have been batched and settled.

- The existing database has been backed up.

- It is also recommended that all open checks be closed before performing the upgrade.

Changing the Pass Phrase

To change the pass phrase, the user (or users) must know the current pass phrase. When a Simphony system is initially installed, its default pass phrase *must be changed*. The default pass phrase is `DEFSIMP1.0`.

There are some important considerations when changing the pass phrase:

Note: If the pass phrase is lost, the encrypted data in the database is unrecoverable. *There are no back doors.* Contact your MICROS Account Manager in the event of such an occurrence.

- The pass phrase must be 1 to 24 characters long.
- The pass phrase and confirm pass phrase must match
- The database must be accessible
- IIS and the Simphony EGateway Service must be running.
- The process of key rotation runs in the background so that it does not require the system to be down during the key rotation process.

Transmission Key

A transmission key is used for encryption of traffic between a workstation and the data center. When the transmission key is rotated, the data center generates a new key; when a client communicates with the data center, it is given a new key for all subsequent communications to be encrypted.

Privileges
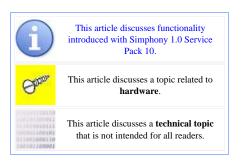
Users may access the Key Manager module only when associated with an Enterprise Role with the **[Key Manager]** action enabled. Typically, this module is restricted to administrator-type employees only — generally, only two or three employees in the entire Enterprise may access this module.

List of Simphony 1.x Services

*This article is a **List of Simphony Services** for Simphony v1.x — this will describe the types of Services, the configuration of the Service, the platform limitations and recommendations and the number of Services allowed.*

This article discusses functionality introduced with Simphony 1.0 Service Pack 10.

This article discusses a topic related to **hardware**.

This article discusses a **technical topic** that is not intended for all readers.

Contents

What is a Service?

For a technical definition of "service", see the Wikipedia entry.

In Simphony, a Service is a piece of software that runs on a piece of hardware. A Service Host is any machine that runs one or more Services. It's important to note that Internet Information Services (IIS) can be utilized to run as a Web Service for machines running Win32 or Windows 64-bit Operating Systems. WebServer can run the same Services as IIS, however only for Windows CE clients.

Configuration

In EMC, there is not a single module where Services are configured; instead, Services are always configured as a part of another record. Typically, Service records are configured on the Service Host Tab for a record. Services can run at the Enterprise level or at the Property level depending on the configuration. If the Service is linked to an Enterprise Service Host (a machine that does not have Ops installed), it can run that Service for multiple Properties. If a Service is linked to a machine running Ops, it will only be accessible by the other machines located on the same Property.

Lists of Services

Service Type	Configuration	Platform Recommendations	Quantity Restrictions
Credit Card	Credit Card Services are created when the Credit Card Driver is assigned to the Service Host.	Any Windows PC, machines running Windows 64-bit, Win32 (including PosReady), WS4LX, WS5 and WS5A.	Maximum of one Service will display per Service Host.
Interface	Interface Services are not created when Interface records are created, rather they are created when the Interface is assigned to the	Any Windows PC, machines running Windows 64-bit, Win32 (including PosReady), WS4LX, WS5 and	Multiple services can run on the same Service Host, however all services will have the same Service ID.

	Service Host.	WS5A.	
KDS	A KDS Controller Service is created when a KDS Controller is created. The Port field is configurable in EMC.	Any Windows PC, machines running Windows 64-bit, Win32 (including PosReady), WS4LX, WS5 and WS5A.	Maximum of one Service will display per Service Host. A KDS system can only be run at the Property level, for one Property. However, it *can* be configured for multiple Revenue Centers at the same Property.
Offline Open Check and Shift Cache	Offline Open Check and Shift Cache Services are created when a Service Host is assigned to this Service. This Service collects and stores timekeeping and transactional information while a Property is running in yellow mode.	Any Windows PC, machines running Windows 64-bit, Win32 (including PosReady), WS4LX, WS5 and WS5A.	One per Property. For the "Offline Open Check Report" to be accurate, the 'Offline Open Check and Shift Cache' *must* be assigned to an Ops client that supports *all* of the Revenue Centers in the Property.
OLC/OTC	An Offline Cache Service is created when a Property is created. In Property Parameters, a user configures the Service Host to be used as the Offline Cache machine for the Property.	You can run these on a Service Host that is not running Ops.	One per Property.
OPS	When a workstation record is created in EMC, an OPS Service and a Service Host are created. The Service fields (Port and URL) are not configurable.	Any MICROS workstation platform or any Windows PC.	One per Service Host. Every Service Host has one or zero OPS services.
Printing	When a workstation record is created in EMC, a Print Service is created. The Service fields (Port and URL) are not configurable.	Not applicable. A print service runs with each OPS client.	One per Service Host; only if the Service Host is running an OPS client.
SIM	A SIM File Access Service is created when a Property is created; these can also be added in Enterprise Parameters. In Property Parameters, a user can:	Any Windows PC.	Each Propery is configured to have zero or one SIM File Access Services. This service is either the Property's SIM service or a SIM Service created in Enterprise Parameters.

	- Configure the SIM File Access Service. The Service Host and Port fields are configurable. - Select the SIM File Access Service for the Property. This is either the SIM File Access Service that is created by default for the Property, or a SIM File Access Service configured in Enterprise Parameters.			

ServiceIDs and the ServiceHost.XML

When a service is assigned to a service host, it triggers the Egateway to create a ServiceHost.xml file on the Simphony application server in the Simphony\EgatewayService\CAL\ServiceHosts folder. A ServiceHosts folder is created for each service host in the enterprise, and each folder has a ServiceHost.xml file with the current service assignments.

The Client Application Loader (CAL) then transfers the ServiceHost.xml file to the client. Once the file is written to the client's own Simphony folder, the information in the ServiceHost.xml is picked up by the local Egateway or web server and is written to the web.config file of the client running the interface. The service host then pulls the operating configuration from the web.config to run the services.

Three files are created in the Simphony\EgatewayService\DB folder. They are:

- InterfaceService
- CreditCardService
- VSSService

Each of these files is recreated if there is a service assigned or when the configuration of one of those services changes.

Core Simphony Services

> **Note:** All of the Simphony Core Sevices can be run from multiple Simphony Application servers with the exception of the **Sequencer Service**. The 'Sequencer Service' can only have one instance running at one time.

The following list of core Simphony components and Services are not configured in EMC:

- **CAL** exists as both a Web Service in IIS and a Windows Service at the Enterprise level. The Windows Service exists so that older CAL Clients (mainly WS4's that have never been upgraded) can be upgraded to a version of CAL that recognizes the Simphony eCAL. Once a machine is on a new enough version (higher than CAL v63) it will then access the Simphony CAL contained within the EGateway Service.
- **Check and Posting Service (CAPS)** - This Web Service posts transactions into the Simphony database and provides Check Numbers to workstations when beginning a check.
- **Data Transfer Service** - This Service in Simphony v1.0 to v1.6 MR 1 handled Employee timecard posting. From Simphony v1.6 MR 2 and higher, the Labor Posting Service (LPS) handles timecard posting.
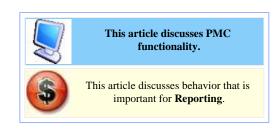
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- **Direct Posting Service** - This Service is responsible for posting transactions from the Transaction database into the mymicros.net Reporting databases.
- **EGateway Service** - This Web Service houses a number of other Services depending on the configuration. The EMC must connect to it. Credit Cards, Interfaces, VSS, Check and Posting all run within the EGateway Service, which runs as a Web Service. Web Services are run by IIS on Win32 and Win64 machines or by WebServer on CE machines. KDS Runs as part of WebServer when configured for a CE Client.
- **Labor Posting Service** - Beginning with the release of Simphony v1.6 MR2 this Service posts Employee time card punches from the Simphony Transaction database to the mymicros.net Reporting databases.
- **MyMicros Portal Service** - Allows connection to the Reporting database by both the Portal and the PMC (Workstation Reports).
- **NewDTS** - Handles the moving of Definitions and Journals and applicable EMC configuration changes from The Transaction database to the Reporting databases. It also handles Daily Aggregations and the Move History job.
    - With the release of Simphony 1.7, '**NewDTS'** will be changed to simply '**DTS'**. This renaming will allow the Simphony v1.x Services and Simphony v2.x Services with the same names to be performing the same tasks.
- **Sequencer Service** - This services launches Autosequences at their configured time and is required for Automatic Start of Day to run.

List of PMC Reports

This article lists all the PMC Reports that are available.

Contents

- 1 Online Reports
- 2 Offline reports
- 3 See also

This article discusses PMC functionality.

This article discusses behavior that is important for **Reporting**.

Online Reports

These reports can be taken only when the workstation is in online mode:

- 1 - Property Financial Report
- 2 - Revenue Center Financial Report
- 7 - Employee Financial Report
- 8 - Employee Open Check Report
- 9 - Employee Closed Check Report
- 10 - Employee Tip Report
- 11 - Employee Labor Detail Report
- 12 - Employee Labor Summary Report
- 14 - Cashier Financial Report
- 18 - Menu Item Sales Report
- 23 - Time Period Detail Report
- 24 - Time Period Summary Report
- 25 - Serving Period Financial Report
- 27 - Clock-in Status Report
- 28 - Labor Availability Report
- 29 - Job Code Labor Report
- 30 - Autofire Open Check Report
- 36 - Employee Journal Report
- 37 - Check Journal Report

Offline reports

These reports can be taken only when the workstation is in offline mode:

- 31 - Offline Revenue Center Financial Report
- 32 - Offline Employee Financial Report
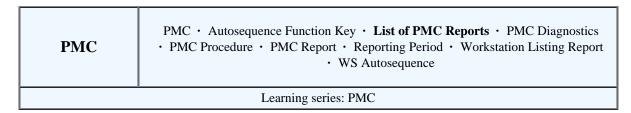
While offline, the only reports that will display in the list are reports that contain all "offline" report types, listed here. If an

33 - Offline Cashier Financial Report
- 34 - Offline Employee Time Card Report
- 35 - Offline Employee Open Check Report

autosequence is configured with at least one "online" report step, it will not display while in offline mode.

See also

- List of mymicros.net Reports

PMC	PMC · Autosequence Function Key · **List of PMC Reports** · PMC Diagnostics · PMC Procedure · PMC Report · Reporting Period · Workstation Listing Report · WS Autosequence
	Learning series: PMC

Local Order Receipt

Local Order Receipt Printing is a method of programming an order device to route print jobs to a different printer based on the workstation that is sending the print job. This method of printing is often used in environments where a wine steward or sommelier retrieves bottles of wine for the wait staff. In this type of environment, a user at Workstation A has his wine chit print at the printer attached to Workstation A, while a user at Workstation B has her wine chit print at the printer attached to Workstation B. After the chit prints, the user hands the chit to the wine steward, who retrieves the bottle.

🖨	This article discusses functionality that relates to **Printing**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

EMC Configuration

Order Devices
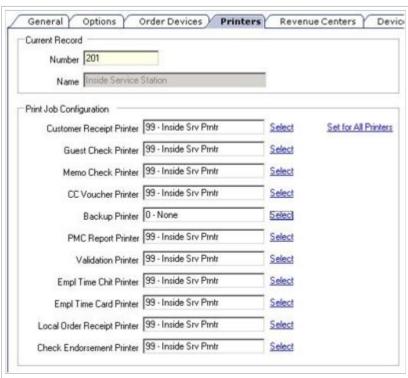
In the Order Devices module of EMC, each order device can be configured as Local or Remote. When "Local" is chosen, it is not possible to select the physical device or backup device; indeed, this is the point of the Local Order Receipt. When this device is set as a "Local" device, orders will print at the physical workstation that is programmed as the "Local Order Receipt Printer" for the workstation. The Workstation configuration is discussed below.

An Order Device programmed as a "Local" device type.

Workstations

In the EMC Workstations Module, each workstation is assigned printers for different types of print jobs. Typically, the same printer is used for all print jobs, and it is usually the case that the printer is physically attached to the workstation.

In the image shown, the "Inside Service Station Printer" is configured to use the "Inside Srv Prntr" as its Local Order Receipt Printer. In the Order Device image above, the "Wines Printer" is configured as a Local Device Type. This means that any order sent to the "Wines Printer" will print at the "Local Order Receipt Printer" for the workstation. In the example of the workstation displayed in the image, the order will print at the "Inside Service Printer".

The "Inside Service Station Printer" is programmed as the Local Order Receipt Printer for this workstation.

Other Uses

Local Order Device as a Backup

In some databases, the Local Order Device is used as a backup method in cases where an entire network goes down.

A typical Revenue Center that uses the "Local Order Device" for a backup. Note that the "Local Order Device - All Food" printer is initially redirected to No Output.

In these databases, there are often two Order Devices programmed as "Local" Device Types: one for "All Food" and one for "All Liquors." Further programming includes:

- Both of these Order Devices are redirected to "0 - No Output"
- The Menu Item Classes for food and liquor items are programed to print to the appropriate "All Food" or "All Liquors" printers

With this configuration, a manager can redirect the order output of the order device through PMC if the network should fail or if a remote printer cannot be reached for some other reason. The manager sets the redirect:

- The unreachable printer is set to "0 - No Output"
- The Local printer is redirected to itself (See Order Device Redirection)

Now that the order prints locally, the order chit will print at the Local Order Receipt Printer, and the operator can walk the receipt to the kitchen for preparation.

Room Service
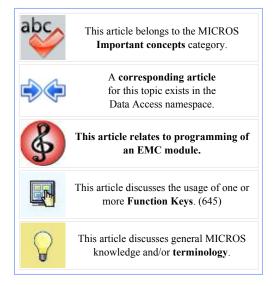
Local Order Receipt Printers are often programmed in Room Service Revenue Centers (with configuration similar to the last section), where one printer prints every Menu Item on the order.

Major Group

A **Major Group** is a basic category of a Menu Item, such as "Food"

or "Liquor". Every menu item belongs to a Major Group.

abc ✓	This article belongs to the MICROS **Important concepts** category.
➡️⬅️	A **corresponding article** for this topic exists in the Data Access namespace.
𝄞	**This article relates to programming of an EMC module.**
🖥️	This article discusses the usage of one or more **Function Keys**. (645)
💡	This article discusses general MICROS knowledge and/or **terminology**.

Contents

- 1 Standard Configuration
- 2 EMC Configuration
- 3 Function Key
- 4 See also

Standard Configuration

Typical Major Groups include:

- Food
- Liquor
- Beer
- Wine

These are typical examples of Major Groups, however configuration may vary drastically depending on the database and reporting needs. In some databases, Major Groups may be programmed to represent leased outlets so that an accountant can immediately see sales figures for that tenant.

EMC Configuration

Major Groups are configured from the EMC's property scope. In this module, there is not a Form View. The only configurable fields are:

- Object Number
- Name
- Report Group

Function Key

The **[MajGrp Menu Item]** function key (645) can be used to display all Menu Items in a Major Group. When this key is used, the workstation will prompt for the Major Group. After a selection is made, the workstation will list all the menu items that are available in that Major Group (in the form of an NLU window). Note: only items that are available on the current Main/Sub Levels will be displayed.

Menu Item Availability (PMC Procedure)

The **Menu Item Availability PMC Procedure** allows a user to update the number of menu items available or to set an item's Out of Menu Item state.

This article discusses PMC functionality.

Contents

- 1 Usage
- 2 Offline
- 3 Privileges
- 4 See also

Usage

From the PMC main page, the default Select Menu Item screen displays. Select Menu Item Availability. The Select Menu Item screen displays a list of all Menu Item Definitions in the current Revenue Center where the definition sequence number is #1 (see the Menu Item Availability article for an explanation).

To edit the availability of a Menu Item, select the menu item and then press **[Edit]**. The Edit Menu Item Availability screen displays, as shown to the right.

The Edit Menu Item Availability screen contains three configurable fields (explanation on Menu Item Availability page):

A view of the Edit Menu Item Availability screen within the PMC.

- Out of Menu Item
- Check Menu Item Availability
- Count Available

Offline

This procedure is available while the workstation is operating in Offline Mode.

Privileges

An operator has access to this procedure only when associated with an Employee Role with the **[Change Menu Item Availability]** option enabled.

Menu Item Class

Understanding menu item classes

A menu item class consists of a set of options that apply to similar menu items in a revenue center. A menu item class specifies important information, including:

- The tax class associated with the menu items
- Whether or not the item is a condiment
- The behavior of menu levels after ordering an item
- The order devices to which the items print
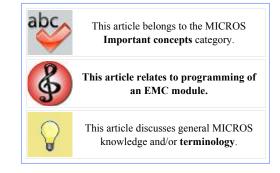
Configuring similar menu items into a class is easier than individually setting each menu item's order device output or condiment settings. Consider this example:

The menu items Coke, Diet Coke, Sprite and Root Beer probably all behave the same way — they are taxed the same, they do not require condiments, and all print to the same order device(s). Because of this, it is easier to have just one menu item class called *Soda* and make all soda menu items a part of this class.

abc ✓	This article belongs to the MICROS **Important concepts** category.
⇒⇐	A **corresponding article** for this topic exists in the Data Access namespace.
𝄞	**This article relates to programming of an EMC module.**
💡	This article discusses general MICROS knowledge and/or **terminology**.
🖨	This article discusses functionality that relates to **Printing**.
?	This article discusses **configuration**, or various programming scenarios, or both.

Menu Item Definition

A **Menu Item Definition** record is a revenue center-level menu item record; menu item definitions define how Menu Item Master records act, including behavior such as the SLU where the item appears, the Menu Level(s) where the item is active, and the name of the item that will display on touchscreens and order devices.

abc ✓	This article belongs to the MICROS **Important concepts** category.
🎼	**This article relates to programming of an EMC module.**
💡	This article discusses general MICROS knowledge and/or **terminology**.

Contents
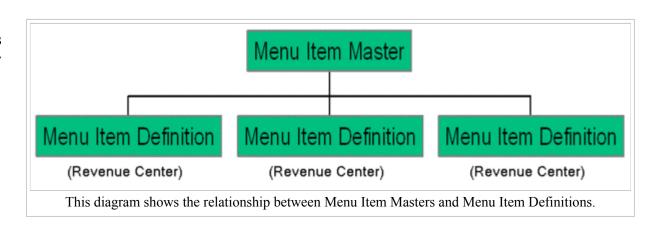
- 1 Menu Item Hierarchy
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Menu Item Hierarchy

When Menu Item Definitions are created, they are linked to a Menu Item Master record. A Menu Item Master record without any definitions is a record that cannot be ordered!

This diagram shows the relationship between Menu Item Masters and Menu Item Definitions.

Consider the hierarchy diagram, and assume the Menu Item Master record is "Shrimp Cocktail." Without the definition records, there would be no way to perform a sale of "Shrimp Cocktail." Also, note that it is possible for multiple definitions to exist in a single Revenue Center, allowing different behavior of the same Menu Item Master record. Multiple definitions are often programmed for liquor items, where a liquor item may be a condiment item in one scenario but a "regular" item in another scenario. *Note: While EMC allows 64 definition in a single RVC, it is rare that a site uses more than five or six definitions. Typically, most items have one definition per RVC.*

The Menu Item Hierarchy is represented in Menu Item Maintenance. When viewing Menu Item Definition records in Form View, the Menu Item Master record to which the Definition belongs is always displayed. In addition, the "Definition Summary" view shows all definitions that exist for a single Master record.

EMC Configuration

Main article: Menu Item Maintenance; specifically, see Navigating Definition Records
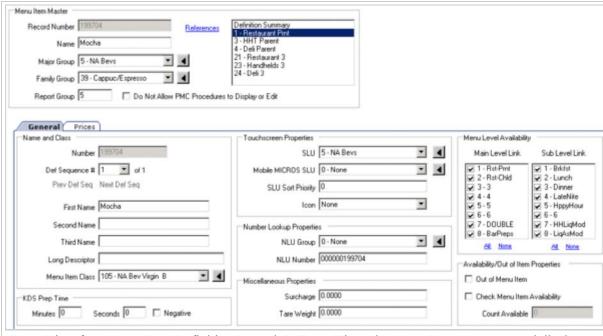
Menu Item Masters, Definitions, and Prices are all configured in the Menu Item Maintenance module. Menu Item Definition Records contain the following fields:

Form View for a Menu Item Definition Record. In Form View, the Menu Item Master record displays at the top of the screen, with the configurable MI Definition fields below, on the General Tab.

Number

> This field represents the Menu Item Master Record Number. (This field is not configurable.)

Def Sequence #

> This field shows the definition sequence number of this definition. The definition sequence number is the number of the definition in this RVC for this Master record. Up to 64 definitions can exist in a single RVC for a single Master record. (This field is not configurable.) Note that if multiple definitions exist and one or more definitions is deleted, other definitions will be renumbered sequentially starting with 1. For instance, if definitions 1-6 exist for an item and 2-4 are deleted, definitions 5 and 6 will become definitions 2 and 3, respectively.

First Name

> The name of this menu item definition. This name appears on the workstation's check detail area and on KDS displays, guest checks, customer receipts, and remote printers.

Second Name

> The second name is an alternate name for this menu item. This second name will print on the Touchscreen Keys and/or the Remote Printers, depending on the settings of the Menu Item Class option bits, **[Print Name 2 on Order Output instead of Name 1]** (option 18) and **[Use Name 2 on Touchscreens instead of Name 1]** (option 19). This field is often used to abbreviate the text that shows on the Touchscreen Buttons and Order Output — because only 12 characters print to the Order Devices, but 16 are allowed as the Definition Name, it is often helpful to put abbreviations in the Second Name field, and to enable the "Print Name 2 on Order Output instead of Name 1". Also, the Second Name field can be used when the Order Devices option

bit to "Print Both Menu Item Names" is enabled. "Print Both Menu Item Names" is often used for a remote Wine Printer. This way, it is possible to have the First Name of the wine print the name, while the second name represents the Bin number and type of wine. If this field is blank, the first name is used by default.

Third Name

The Third Name for a definition is used for search operations when the **[Order Menu Item By Name 3]** function key (678) is used.

Long Descriptor

When this field is not blank, this descriptor will print on Guest Checks and Customer Receipts, below the Menu Item and its price.

Menu Item Class

The Menu Item Class to which this menu item definition belongs.

KDS Minutes

The number of minutes necessary to prepare this item. This field is used when a Revenue Center is using KDS Menu Item Timing.

KDS Seconds

The number of seconds necessary to prepare this item. This field is used when a Revenue Center is using KDS Menu Item Timing.

KDS Negative/Positive

"Positive" is the default setting. Select this radio button for most menu items (most menu items have a positive prep time). Select "Negative" if this item has a negative prep time. A negative prep time is typically used for condiments that may alter the time of an item to be prepared. For instance, if a Prime Rib has a default prep time of 5 minutes, perhaps the menu item "Rare" has a prep time of negative 2 minutes. When ordered together, the Rare Prime Rib has a total prep time of 3 minutes.

SLU

The SLU key to which this Menu Item Definition belongs. When the user presses a SLU button on the workstation, all menu items belonging to that SLU will appear. Note that as a practical limit, no more than 1,024 menu items should be linked to a single SLU.

Mobile MICROS SLU

The SLU key to which this Menu Item Definition belongs, for Mobile MICROS devices.

SLU Sort Priority

In this field, a number may be programmed to prioritize the sorting order of the SLU. This field is used when the Touchscreen Style option, **[Sort Screen Using Menu Item Sort Priorities]** is enabled. Entry format is 0-99, where "1" items show on the screen first, followed by "2" items, then "3" items, up to 99, then "0" items.

Icon

To assign an Icon to this Menu Item as it appears on SLU screens, make an appropriate selection from the drop-down list. Note that icons could slow performance of a workstation.

NLU Group

The number of the NLU Group, if any, to which this menu item belongs.

> The NLU fields are sometimes used in Barcode Ordering configurations.

NLU Number

A unique NLU number for this menu item, if it is to be ordered via NLU. Up to 12 digits are allowed.

Surcharge

    Any applicable surcharge for this menu item, if Florida Surcharge is enabled.

Tare Weight

    The tare weight of the empty package for an item that is sold by weight (e.g., the weight of the salad container at a salad bar, where salad is sold by weight).

Menu Level Link and Sub Level Link

    The Main/Sub levels on which this definition is active. In most cases, all levels are enabled for every definition, but this varies based on programming needs. The links below the box let the user easily set/unset all the options.

Out of Menu Item

    If this box is checked, operators are prevented from ordering this item. If this option is selected, the users will receive the workstation error message, **`Out of Menu Item`**. This prevents the user from trying to order an item that the kitchen will be unable to prepare, so that the server can immediately return to the customer for an alternate selection.

> The Availability/Out of Item Properties fields are available for Definition #1 only. For more information about the Availability/Out of Item Properties, see Menu Item Availability.

Check Menu Item Availability

    If this option is checked, the system will use the "Count Available" field to determine how many items are left.

Count Available

    This field displays the number of menu items that are available, if the **[Check Menu Item Availability]** option is enabled. This number decrements each time the item is ordered, and the number of remaining items shows on the Menu Item SLU button. This field is often used for Daily Specials. For instance, a chef may have only 20 Maine Lobsters available for this evening's menu. After 20 Lobsters have been ordered, the workstation will prompt the servers, **`No more Maine Lobsters remaining`**.

Menu Item Master Fields

To give users a better understanding of the Master/Definition relationship, the Menu Item Master fields are always displayed on the menu item definition form. If a user does not have privileges to edit the Menu Item Master fields, the fields will be disabled.

Adding Records

This section discusses adding definitions to existing MI Master records. For information on adding Menu Item Masters, Definitions, and Prices at the same time (Menu Item Wizard), see Adding a Menu Item

Typically, Menu Item Definition records are added when master records are added. However, there are times when a programmer may want to add new definitions to existing menu item master records. Some common examples include:

- A restaurant needs to add another definition to all its beer items, which will print to a different printer during Happy Hour.
- No definitions exist in RVC 1 for an item, but definitions exist in RVC 2.

In Menu Item Maintenance, three different dialogs exist to add menu item definitions, based on the location within Menu Item Maintenance when the Insert button is pressed.
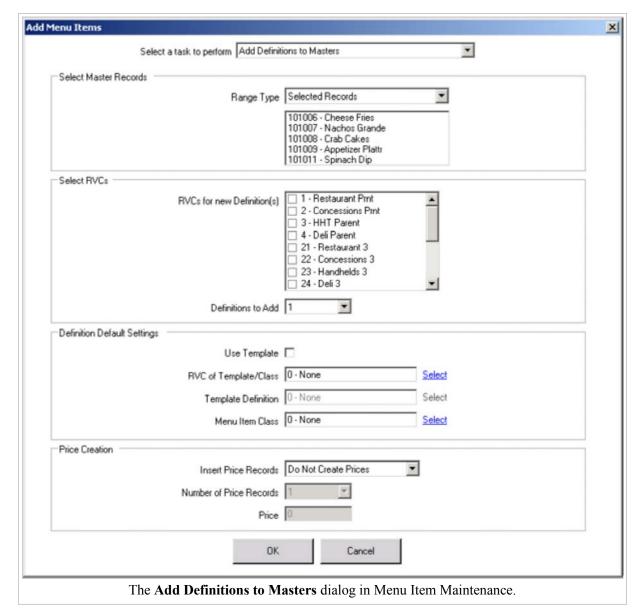
Add Definitions to Masters

The **Add Definitions to Masters** dialog is available from Table View only. This dialog gives the user a variety of methods for adding definition records, including selections of the master items to receive definitions, the RVC(s) where definitions will be created, default settings for the new definition(s), and the method for creating prices.

Select Master Records
    In this section, select the Menu

The **Add Definitions to Masters** dialog in Menu Item Maintenance.

Item Master records that will receive the new definitions.

- **Selected Records**: This is the default setting when this dialog is opened from Table View and more than one Menu Item Master record is selected. When this view is chosen (as shown in the example image), the list of selected Master Records is displayed.
- **Record Number or Range**: When this Range Type is selected, the programmer can enter individual record numbers and/or ranges, using the same format as the standard insert dialog.
- **Select Range**: When this Range Type is selected, the programmer can select a numeric range of Menu Item Master records to receive definitions. With this range type, the user selects the begin/end items. This choice is used when the Menu Item Master records that will receive definitions are arranged sequentially. This Range Type is used infrequently; however in older products, this was the only method for adding Menu Item Definitions.

Select RVCs

> In this section, select the RVCs where the definitions will be created, and select the number of definitions per RVC that will be created. When Menu Item Maintenance is opened from the RVC Scope, only the current RVC will be displayed, and it is checked by default.

Definition Default Settings

> In this section, select the method for creating the new definitions.

- **Use Template**: Typically, this checkbox is checked. By checking this box, the "Template Definition" field becomes enabled.
- **RVC of Template/Class**: To select a Menu Item Class or Template Definition, this field must be selected first. When Menu Item Maintenance is opened from the RVC Scope, this field is locked at the current RVC.
- **Template Definition**: If "Use Template" is checked, select a definition that will be used as the template for the new definition(s) that are being created.
- **Menu Item Class**: If "Use Template" is not checked, this field is enabled, allowing a Menu Item Class to be assigned to the new menu item definition(s). Typically, new definitions are created using templates, so this field is not frequently used.

Price Creation

> In this section, specify how price records will be created when the definition(s) are created. Choices for this section are:

- **Do Not Create Prices**: When this option is used, no price records are created.
- **Inherit Prices from Template**: This method is used frequently. If the new definition(s) are being created based on a template record, choose this option to use the template definition's prices as the prices for each new definition.
- **Specify Prices**: When this option is selected, the "Number of Price Records" and "Price" fields become enabled. Typically, this option is used when the new definitions will have one price record each.

Add Definitions to this Master

When viewing a Menu Item Master's Definition Summary, the insert dialog defaults to the **Add Definition Records to this Master** task. This dialog is similar to the Add Definitions to Masters Dialog, except that it simplifies the choices because only one Menu Item

Master record can be affected. In this dialog, the following fields can be configured:

RVCs for new Definition(s)
 Select the RVCs where the

The **Add Definition Records to this Master** dialog from Menu Item Maintenance. This dialog is only available when looking at a Menu Item Master's Definition Summary view.

  definitions will be created
Definitions to Add
 Select the number of definitions per RVC that will be created.
Use Template
 Choose a template definition, or select No Template. This field displays definitions that appear in the Definition Summary grid.
Insert Price Records
 Choose this checkbox to create Menu Item Prices for the new definitions.
Number of Price Records
 If "Insert Price Records" is checked and "Use Template" is set to "No Template", select the number of prices to be added to each definition.
Price
 If "Insert Price Records" is checked and "Use Template" is set to "No Template", enter the price. Typically, this option is used when the new definitions will have one price record each.

Insert Definition Record(s)

When viewing a Menu Item Definition in Form View, the **Insert Definition Record (s)** dialog displays. (There are no other choices for inserting records from this view.) This dialog is similar to the Add Definitions to this Master dialog, except that it simplifies the choices to the following:

Definitions to Add
 Select the number of definitions to add.
Use Template Definition
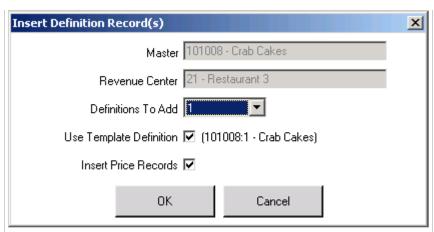
By default, this box is checked. There is not a choice of definitions to be used as a template; the definition being viewed in Form View will be used as the template.

Insert Price Records

Choose this option to create prices when the definition is created. This option can be checked only when "Use Template Definition" is selected.

Insert Definition Record(s)

Master	101008 - Crab Cakes
Revenue Center	21 - Restaurant 3
Definitions To Add	1
Use Template Definition	☑ (101008:1 - Crab Cakes)
Insert Price Records	☑

OK   Cancel
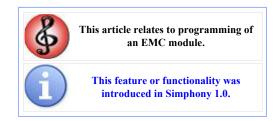
The **Insert Definition Record(s)** dialog from Menu Item Maintenance. This dialog appears when Insert is pressed while viewing a definition in form view.

Menu Item Distribution

For distribution in other modules, see Distribute

Menu Item Distribution is the method of distributing menu item records in the Menu Item Maintenance module. Because the Menu Item Maintenance module allows the configuration of multiple record types (Menu Item Masters, Menu Item Definitions, and Menu Item Prices), the Menu Item Distribution dialogs differ from the dialogs that appear in other modules.

This article relates to programming of an EMC module.

This feature or functionality was introduced in Simphony 1.0.

Contents

Opening the Distribute Dialog

In EMC, Menu Item Distribution occurs once the Menu Item Maintenance module has been opened:

1. Select "Distribute" from the Edit Menu.
2. Two possibilities:
   - If Menu Item Maintenance was opened from the Property Scope, the user will be prompted for the distribution type.
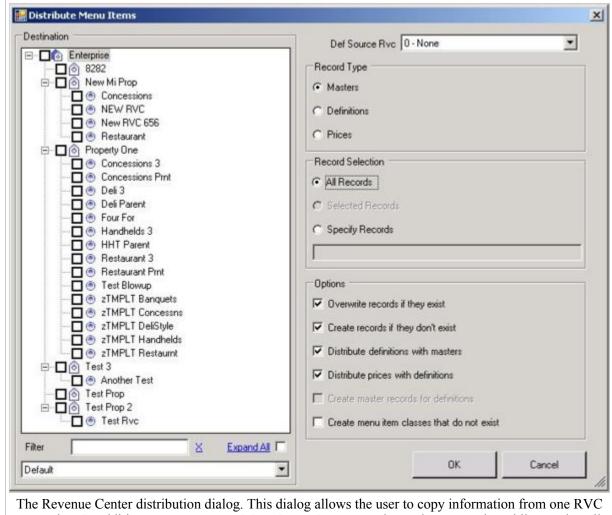
When Menu Item Maintenance is opened from the Property Scope, the **Select Distribute Type** dialog prompts the user for the type of distribution.

   - If Menu Item Maintenance was opened from the RVC Scope, the user will be taken directly to the Revenue Center Distribution dialog.

Revenue Center Distribution

The Revenue Center Distribution dialog displays when a user selects "Distribute from One RVC to Many", or when MI Maintenance is opened from the RVC Scope. This option is typically used when distributing Menu Item Definitions and Prices within a single property. With this option, one RVC's

The Revenue Center distribution dialog. This dialog allows the user to copy information from one RVC to another. In addition, a user can copy Menu Item Master records to other properties while copying all definitions/prices, using template definitions/prices from a single RVC.

definitions/prices can be distributed to multiple RVCs.

Dialog Overview

This dialog consists of the Selection Hierarchy panel that allows the user to determine the destination Properties and Revenue Centers for distribution. The configuration section offers several options to determine exactly what records should be distributed and created. Note that some values are selected by default, based on the selections in Table View prior to opening the dialog. The following fields are configurable:

Def Source RVC
    This field defaults to the RVC of the Definitions or Prices being viewed in Table View, or it defaults to 0-None if Menu Item Master records are being viewed.
Record Type
    This box defaults to the value that is currently being viewed in Table View.
Record Selection
    If records are selected in Table View, this box defaults to "Selected Records". Otherwise, the default is All Records.
Options

Most of the options are enabled/disabled based on the type of record that is selected. The options are:

- **Overwrite records if they exist**: Enable this option to overwrite existing records in the destination RVC or Property. If this option is not enabled, existing records will remain unchanged.
- **Create records if they don't exist**: Enable this option to create new records in the destination RVC or Property. If this option is not enabled, new records will not be created.
- **Distribute definitions with masters**: Select this option to distribute Menu Item Definition records with Menu Item Master records. When this option is selected, a source RVC must be specified. This option is only available when distributing Menu Item Master records.
- **Distribute prices with definitions**: Select this option to distribute Menu Item Price records with Menu Item Definition records. This option is typically enabled; it is only available when distributing definition records.
- **Create master records for definitions**: This option is used when moving definitions from a Revenue Center in one property to a Revenue Center in another property. When this is enabled, Menu Item Master records in the destination property will be created for definitions if they do not exist. If this option is disabled and there is no Master Record with the same object number, the definition record will not be created in the destination RVC, because there is no destination Master Record to be associated with the definition. Additionally, if Major Groups and Family Groups in the new property do not exist for the Master Record, they will be created.
- **Create menu item classes that do not exist**: Select this option to create Menu Item Classes in the new RVC(s) if they do not exist. For instance, if the source RVC has a definition with class #77, and the destination RVC does not include class #77, the class will be created in the destination RVC.

Distributing Master Records

This dialog can be used to distribute Master Records from one property to another. When distributing Master Records, it is also possible to distribute definitions and prices. To distribute Master Records, perform the following steps:

1. Set the Record Type to "Masters"
2. Choose the appropriate Record Selection type
3. Select these options as appropriate:
   - Overwrite records if they exist
   - Create records if they don't exist
4. If definitions will be distributed, perform the following:
   - Choose the "Def Source RVC"
   - Select "Distribute definitions with masters"
   - If appropriate, select "Distribute Prices with definitions"
   - If appropriate, select "Create menu item classes that do not exist"

Finally, select the destination Properties and/or RVCs. Note that selecting the Destination Property in the Selection Hierarchy Panel causes all RVCs belonging to the Property to be checked automatically. This may not be desirable behavior, depending on the type of distributing that needs to occur. For instance, consider the following scenario:

> If distributing Masters and Defs from one Property/RVC to another Property/RVC, it may be best to use the Property Distribution distribution type.

- Destination Property has 45 RVCs
- The user is trying to distribute Masters to Destination Property A, and defs into RVCs 41 and 42 of that property.

- When the user selects Property A, all 45 RVCs become selected. It is then necessary to *uncheck* all but RVCs 41 and 42. Because of this, it may be better to use the Property Distribution dialog.

Distributing Definition Records

This dialog can be used to distribute Definition Records from one RVC to another, either within the same property or to other properties. When distributing Definition Records, it is also possible to distribute prices. To distribute Definition Records, perform the following steps:

When distributing Menu Item Definitions with "Selected Records" as the range type, all Definitions for a particular object number will be copied, even if all definitions are not selected. For example, if you are distributing object number 1234, definition sequence #2, all definitions for object number 1234 will be copied, not just sequence #2.

1. Set the Record Type to "Definitions"
2. Choose the appropriate Record Selection type
3. Select these options as appropriate:
   - Overwrite records if they exist
   - Create records if they don't exist
4. Choose the "Def Source RVC"
5. If appropriate, select "Distribute Prices with definitions"
6. If appropriate, select "Create menu item classes that do not exist"
7. If distributing from a Revenue Center in one property to a Revenue Center in another property, it may be appropriate to select the "Create master records for definitions" option
8. Finally, select the destination Revenue Centers.

Distributing Price Records

This dialog can be used to distribute Price Records from one RVC to another, either within the same property or to other properties. To distribute Price Records, perform the following steps:

When distributing Menu Item Prices with "Selected Records" as the range type, all Prices for a particular object number will be copied, even if all prices are not selected. For example, if you are distributing object number 1234, definition #1, price sequence #2, all price for object number 1234 will be copied, not just definition #1 and sequence #2.
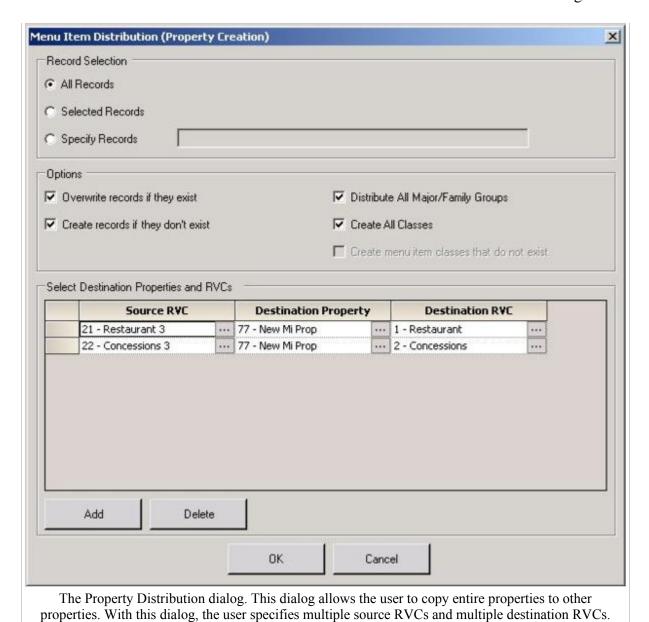
1. Set the Record Type to "Prices"
2. Choose the appropriate Record Selection type
3. Select these options as appropriate:
   - Overwrite records if they exist
   - Create records if they don't exist
4. Choose the "Def Source RVC"
5. Finally, select the destination Revenue Centers.

Property Distribution

The Property Distribution dialog displays when a user selects "Distribute using Multiple RVCs as Templates (new property creation)". This option is used

when copying Master records from one property to another, while specifying multiple source and destination RVCs.

In the example image, the user is copying menu items into "New Mi Prop". In that property, the "Restaurant" RVC will get its definitions and prices from the source property's "Restaurant 3" RVC and the "Concessions" RVC will get its definitions and prices from the source property's "Concessions 3" RVC.

The Property Distribution dialog. This dialog allows the user to copy entire properties to other properties. With this dialog, the user specifies multiple source RVCs and multiple destination RVCs.

Dialog Overview

This dialog consists of some of the same options used in the RVC Dialog, but the main difference is that this dialog does not contain the Selection Hierarchy panel. Instead, this dialog includes a grid that allows the user to map the source/destination RVCs. The following fields are configurable:

Record Selection
  Choose from All Records, Selected Records, or Specify Records.
Options
  Most of the options are enabled/disabled based on the type of record that is selected. The options are:

- **Overwrite records if they exist**: Enable this option to overwrite existing records in the destination RVC or Property. If this option is not enabled, existing records will remain unchanged.
- **Create records if they don't exist**: Enable this option to create new records in the destination RVC or Property. If this option is not enabled, new records will not be created.
- **Distribute All Major/Family Groups**: Select this option to distribute all Major Groups and Family Groups from the Source Property to each Destination Property before distributing Master Records. If this option is not selected, Major Groups and Family Groups will not be created in the new property if

they do not already exist; therefore, it may be possible to have Menu Item Master records with "0" Major and/or Family Groups. It is recommended that this option is enabled. Typically, this Distribution Dialog is used for complete property creation; therefore, it is usually desirable that the Major/Family Groups are created first.

- **Create All Classes**: Select this option to distribute all Menu Item Classes from the Source RVC to the Destination RVC before distributing Menu Item Definition Records. Typically, this Distribution Dialog is used for complete property creation; therefore it is usually desirable that all the Menu Item Classes are created in each Revenue Center first.

- **Create menu item classes that do not exist**: Select this option to create Menu Item Classes in the new RVC(s) if they do not exist. For instance, if the source RVC has a definition with class #77, and the destination RVC does not include class #77, the class will be created in the destination RVC.

Add/Delete Buttons

These buttons allow the user to add new rows to the grid and to remove unwanted rows. Each row contains the Source RVC (from the current property), the Destination Property, and the Destination RVC. The example image shows a typical configuration where all the destination RVCs are in the same property, but it is also possible to distribute to RVCs in multiple properties at the same time.

Distributing

To distribute, perform the following steps:

1. Choose the appropriate Record Selection type
2. Select the appropriate options
3. Add source and destination RVC(s).
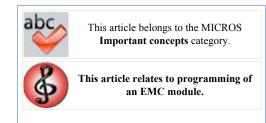
Because this dialog is designed for property creation, the options "Distribute All Major/Family Groups" and

"Create All Classes" are usually checked.

Menu Item Maintenance

"Maintenance" redirects here. For Employee Maintenance, see Employee Maintenance

Menu Item Maintenance is the EMC module used to configure menu items; it is probably the most-used module in EMC. When compared to other modules, Menu Item Maintenance has some unique features: it can be opened from the RVC scope or the Property scope, its Table View offers a search feature, and it offers multiple ways to distribute records.
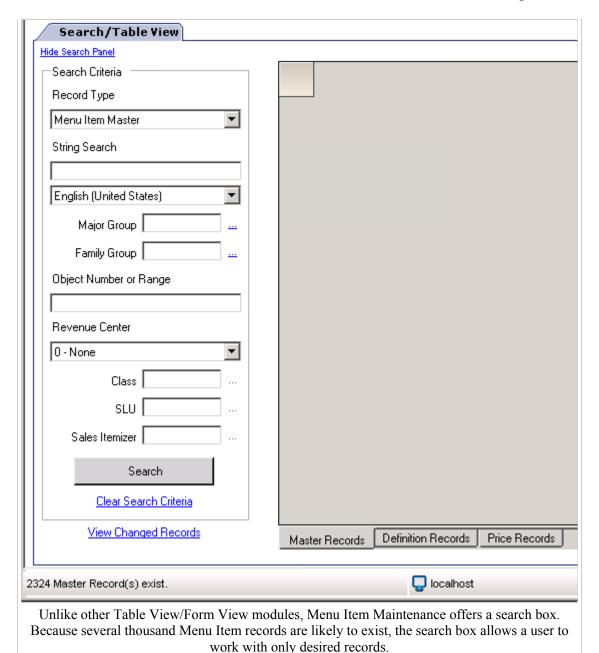
abc✓	This article belongs to the MICROS **Important concepts** category.
🎵	**This article relates to programming of an EMC module.**

Contents

Opening the Module

Menu Item Maintenance can be opened from the Property Scope or the

RVC Scope of EMC. Initially, no records display in the Table View grid; the user sees only the Table View tab, which includes the search criteria box and an empty Table View grid. In the status bar, the number of existing records is displayed. In the example image, the number of master records is being displayed because the user opened MI Maintenance from the Property Scope. When MI Maintenance is opened from the RVC Scope, the number of definition records displays (if a user does not have permissions to view definition records but does have permissions to view price records, the number of price records displays).

Other points to note:

Unlike other Table View/Form View modules, Menu Item Maintenance offers a search box. Because several thousand Menu Item records are likely to exist, the search box allows a user to work with only desired records.

- The Revenue Center drop-down in the Search box includes only the RVCs that the user is able to see, based on the RVC-Level Security settings for the logged-in employee.
- The Master, Definition, and Price tabs under the grid display based on user permissions. If a user cannot view Master or Definition records, only the Price tab will display. (The "Record Type" drop-down in the search box follows this same behavior.)

RVC Scope vs. Property Scope

Menu Item Maintenance is operationally the same when opened from the RVC Scope or the Property Scope. EMC was designed with this module on both scopes for both security and convenience. This dual-module functionality is more secure because it allows some users, such as Property Experts, to be programmed with permissions to edit Menu Items in multiple RVCs; less-privileged users could be programmed to access Menu Items for specific RVCs only (see Revenue Center-Level Security). This dual-module functionality is convenient because a user can work within the scope of a single RVC without having to change the RVC drop-down (and other RVC drop-downs in the add/delete dialogs).

The following limitations are observed when the module is opened from the RVC Scope:

- The "Revenue Center" drop-down box is locked at the Revenue Center in which the module was opened.
- When viewing Menu Item Master records, the only records that will display are those which have definitions in the current RVC. (This same result is produced when the module from the property scope, the user selects a Revenue Center, and then the user searches for Menu Item Master records.)
- When viewing the Definition Summary view, only definitions from the current RVC will display.

Using the Search Features

By default, no items appear in Table View. To view all records, a user can press "Search" with all the search criteria empty. ***Note: Depending on the number of menu items in the database, it may be unwise to use "Search" without entering any search parameters.*** To perform a search using specific parameters, enter the desired information into the search fields and then press "Search". The search will consider all the search criteria entered, making it possible to create searches such as *show all appetizers that belong to Menu Item Class #20*. Note that the user must save changes to changed records before performing a search. The following parameters can be searched:

Record Type
> This field determines what types of records will display in Table View when a search is performed: Masters, Definitions, or Prices.

String Search
> When using this field, records will only be returned when they contain the text in the name field for the specified

> The Major Group, Family Group, Class, SLU, and Sales Itemizer fields allow direct numeric entry. To choose a value from the list, click the ellipsis ("...") next to the text box to view the list of available selections.

> language. Note that Menu Item Definition/Price searches will look for the text in either the Name 1 or Name 2 fields. (Note: SQL text comparisons often take longer than comparisons that do not search text. While typing "Shrimp Cocktail" will return the specific record you want, a family group search on "Appetizers" will return results more quickly.)

Major Group
> Enter a Major Group number or a range of Major Group numbers to be included in the search. Note that this range can contain "0" as a choice, but not with other object numbers. For instance, "0" is valid, "1-4" is valid, and "1,2,3" is valid; but "0,2,3" is not valid.

Family Group
> Enter a Family Group number or a range of Family Group numbers to be included in the search. Note that this range can contain "0" as a choice, but not with other object numbers. For instance, "0" is valid, "1-4" is valid, and "1,2,3" is valid; but "0,2,3" is not valid.

Object Number or Range
> Enter an object number or range of object numbers to be searched, or leave the field blank to include any range of object numbers.

Revenue Center
> Select a Revenue Center to be used in the search. This field is used when selecting Definitions or Prices. Also, when this field is selected and Menu Item Master records will be returned, only Master Records with Definitions in the selected RVC will be included in the results.

Class
> When "Menu Item Definition" or "Menu Item Price" is chosen as the Record Type, enter a Menu Item Class or range of Menu Item Classes to be included in the search. This field is only enabled when the "Record Type" is not Master, and when a specific RVC is selected.

SLU
> When "Menu Item Definition" or "Menu Item Price" is chosen as the Record Type, enter a SLU or range of SLUs to be included in the search. This field is only enabled when the "Record Type" is not Master, and when a specific RVC is selected.

Sales Itemizer
> When "Menu Item Definition" or "Menu Item Price" is chosen as the Record Type, enter a Sales Itemizer or range of Sales Itemizers to be included in the search. This field is only enabled when the "Record Type" is not Master, and when a specific RVC is selected.

> **Search Trick!** Often, users need to verify that all the Sales Itemizers match the Major Groups for every item in a database. (This is often the necessary configuration when interfacing to PMS systems.) To verify this configuration, a user could search for "Major Group = 1" and "Sales Itemizers = 2-15". The search results will display any record that is in the #1 Major Group but is not programmed in a MI Class with the #1 Sales Itemizer.

Master vs. Definition/Price

Searches for Menu Item Master records are slightly different than searches for Menu Item Definition and Menu Item Price records:

- The Class, SLU, and Sales Itemizer fields are specific to Menu Item Definitions and Prices. Thus, the fields are disabled and any values in the fields are not considered when searching for Menu Item Master records.
- When searching for Menu Item Master records, the Revenue Center field is considered. When this field has a value other than 0, the search will return only Menu Item Master records that contain definitions in the selected RVC.

Using the Table Tabs

Under the table, there are tabs for the different types of records: Masters, Definitions, and Prices. These tabs are designed to allow a programmer to toggle between master, definition, and price records quickly. These tabs are only functional after a list of items has been retrieved from the database. In the example image above, if the user selects a Revenue Center and then clicks "Definition Records", definition records for the RVC will display.

When using these tabs to view Definitions or Prices, the "Revenue Center" drop-down from the search panel must have a non-0 value.

More Search Panel Functionality

Other notes about using the Search Features:

Hide Search Panel
> When the "Hide Search Panel" link is clicked, the search panel is removed from view and the table view grid expands for a full screen display. When the grid appears on the full screen, the link changes to "Show Search Panel"; clicking this link restores the Search Panel to view.

Clear Search Criteria
> The "Clear Search Criteria" link resets all the search parameters to the defaults (blank text boxes). The Revenue Center field is not affected by this link.
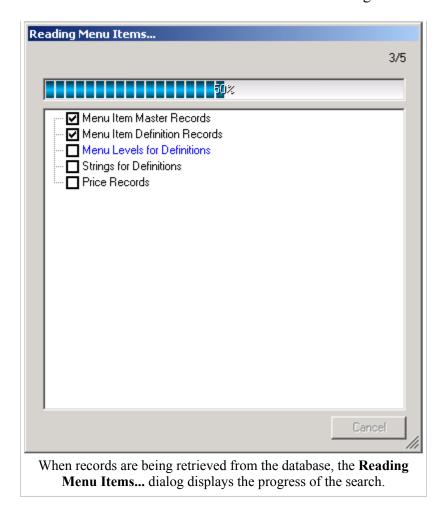
View Changed Records
> This link does not affect the search functionality; it is discussed here because it is a part of the Search Panel. Click this

link to display a list of all the records that have been changed. In most modules, a changed record appears as a yellow row in Table View. This is also true in Menu Item Maintenance, but because it is possible to make changes in multiple locations within the GUI, this link allows users to see changed records that may no longer be in view.

Table View Filtering

The grid also includes the standard Table View Filtering functionality, allowing a user to filter the results after they have been retrieved from the database. The MI Maintenance functionality is the same as filtering in other modules, however MI Maintenance also keeps track of the initial search when records are retrieved from the database. When the breadcrumbs link is clicked, EMC displays the search criteria used to get to the current state.

When records are being retrieved from the database, the **Reading Menu Items...** dialog displays the progress of the search.

Working with Records

After entering search parameters, the table view grid shows the records that meet the search criteria. Like other EMC modules, the user can navigate between Table View and Form View by using the Table View Toggle icon, or by double-clicking the record number. In Menu Item Maintenance, it is also possible to change between the Table/Form views by clicking the tab that displays the data. (The Form View Tab is not visible and the Table View Toggle icon is disabled until a record has been viewed in Form View by double-clicking.)

For all records in Table View, records can be edited just like any other Table View module. The right-click menu is similar to other modules, but there is not a "Quick Add" option. Also note that the "Undo" option is only available via the right-click menu; it is not available in Form View.

Navigating Master Records

Menu Item Master records can be configured in two places: Table View and Form View. The Menu Item Master record is unique because it is displayed in Form View when viewing Definition and Price records.

Table View

In the example image, the user searched for Menu Item

Master records that are appetizers, and the appropriate records are returned. The status bar is not displayed in the image, but it would show "12 record(s) read" after retrieving the 12 records that are displayed.

To enter Form View, double-click the Object Number of the desired record.
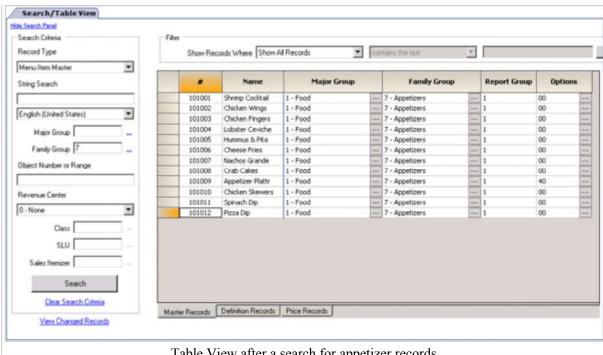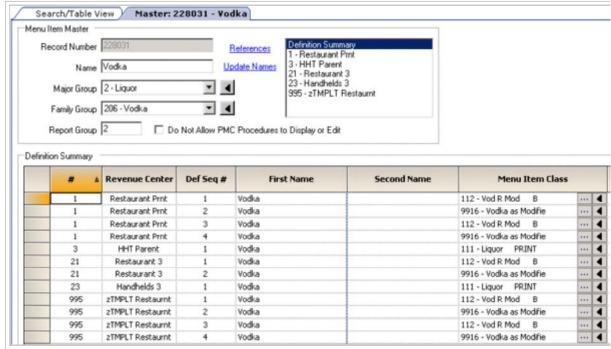
Table View after a search for appetizer records.

Form View

Form View for Menu Item Master records defaults to the "Definition Summary", which shows the Menu Item Master information at the top of the screen, and then all Menu Item Definition records associated with the Master Record below. From here, individual Menu Item Definition records can be displayed in Form View by using a double-click on one of the definition records. (More discussion below.)

Form View for a Menu Item Master Record. This view is called the "Definition Summary" view; the Menu Item Master configurable fields are at the top of the form, then all Menu Item Definitions display below. This view allows users to see all definitions associated with a single master record. When a definition is double-clicked, Form View for the selected record displays (shown below).

The text on the Form View Tab for Master Records shows the word "Master" followed by the number and name of the item:
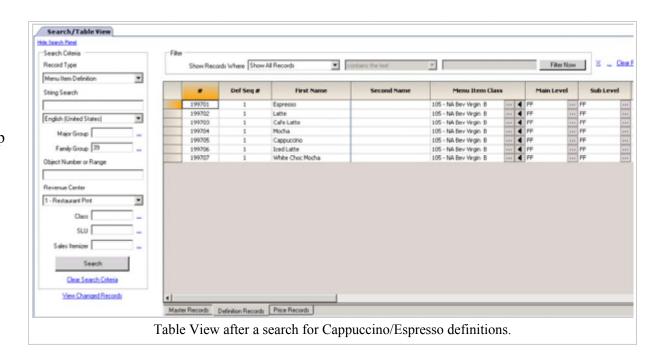
```
Master: 229031 - Vodka.
```

Navigating Definition Records

'**Menu Item Definitions** can be configured in three places: Table View and Form View, and also in the "Definition Summary" view that displays all definitions for a single Master Record.

Table View

In the example image, the user searched for Menu Item Definition records that are in Family Group 39

Table View after a search for Cappuccino/Espresso definitions.

(Cappuccino/Espresso records, in this database), and the appropriate records are returned. The status bar is not displayed in the image, but it would show "7 record(s) read" after retrieving the seven records that are displayed.

From this view, records can be edited just like any other Table View module. To enter Form View, double-click the Object Number of the desired record.
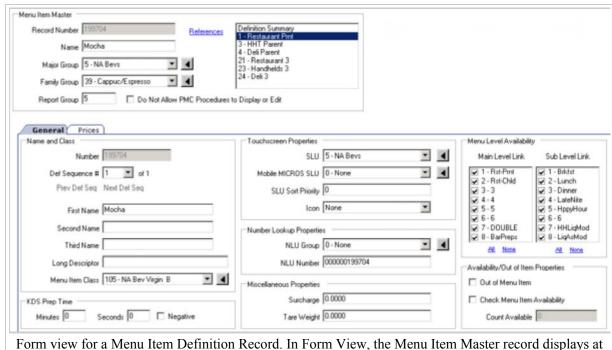
Copy Master Names

In some databases, especially older databases that were upgraded, Menu Item Definition names may have become out of sync with Menu Item Master names due to poor programming. This causes problems where a definition's name may say "Iced Tea", but it is in fact a definition belonging to the Master item "Soda". In this scenario, a user sees "Iced Tea" on the touchscreens, but the item reports as a "Soda" sold. To correct this, a user can choose one of the right-click menu options that are unique to Menu Item Definitions:

- Copy Master Names: This function will update the selected definition names to have the same name as the corresponding Menu Item Master record.
- Copy Master Names (Clear 2nd Name): This function will update the selected definition names to have the same name as the corresponding Menu Item Master record, and it will make the Second Name fields for the selected definitions blank.

Form View

When a user switches from viewing Definitions in Table View to Definitions in Form View, the initial display is the General tab, which includes all the Definition fields. The Master Fields always display (giving the user an understanding of the

Form view for a Menu Item Definition Record. In Form View, the Menu Item Master record displays at the top of the screen, with the configurable MI Definition fields below, on the General Tab.

Master/Definition relationship), but they may be disabled based on Employee Role permissions.

The text on the Form View Tab for Definition Records shows the word "Definition" followed by the number, sequence number, and name of the item:

```
Definition: 199704:1 - Mocha
```

Form View for Menu Item Definitions and Menu Item Prices is comprised of three sections:

- Menu Item Master fields
- General Tab (MI Def fields)
- Price Tab (MI Price fields)

Definition Summary
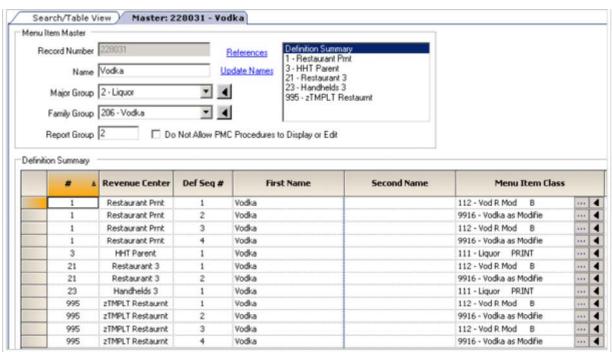
If Table View of Menu Item Maintenance is showing Menu Item Master records, the Form View for Menu Item Master records will default to the Definition Summary view (example

image), which
shows all menu
item definition
records
associated with
a single Master.
From this view,
a double-click
on one of the
rows will
display the
selected
definition in
Form View, as
shown below.
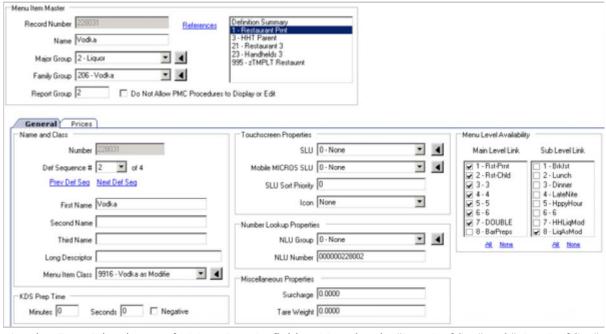
From the
Definition
Summary View,
clicking the
Update Names
link causes all
the Menu Item
Definitions in
the grid to
update their first
names to the
same value as
the Menu Item
Master record.

**Other
Considerations**

When viewing
Menu Item
Definitions in
Form View,
some fields are
enabled and
some fields are
disabled, based
on the method
of entering

Form view for a Menu Item Master Record. This view is called the "Definition Summary" view; the Menu Item Master configurable fields are at the top of the form, then all Menu Item Definitions display below. This view allows users to see all definitions associated with a single master record. When a definition is double-clicked, Form View for the selected record displays (shown below).

Another Form View image of a Menu Item Definition. Note that the "Prev Def Seq" and "Next Def Seq" links are enabled, allowing the user to quickly navigate from one definition sequence to the next.

Form View. The following scenarios determine which controls are enabled:

- Menu Item Masters in Table View:

   Prev/Next Def Seq Links are enabled. When menu item masters are displayed in Table View, all definitions of each master record are viewable, therefore the links are enabled to allow easy navigation from one definition to the next.

- ▪ Menu Item Definition or Price records in Table View:
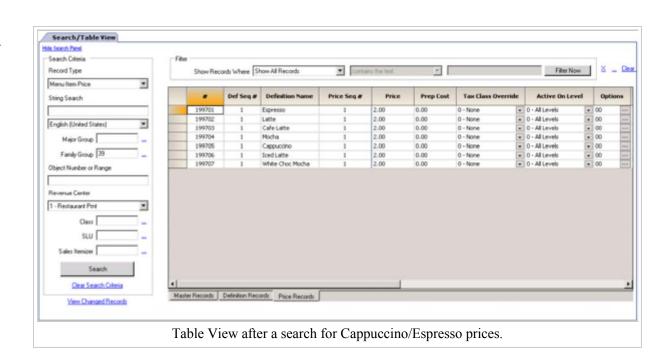
> **Prev/Next Def Seq Links are disabled.** When a user is viewing menu item definitions or prices in Table View, the Prev/Next links are disabled. Because different search criteria can be used to obtain menu item definition records (perhaps a search by MI Class was used), it is possible that only definition #2 of an item is in the Table View list, even though four definitions of the item exist in the database. In addition, Table View can be sorted or filtered by any column, again making the "prev/next" links become impossible to use when Definitions are the Table View record.

Navigating Price Records

Menu Item Price records can be configured in two places: Table View and Form View. Form View for Menu Item Price records is the same view as Form View for Definitions; the only difference is that when switching from Table View to Form View, the Form begins on the Price tab instead of the General tab.

Table View

In the example image, the user searched for Menu Item Price records that are in Family Group 39
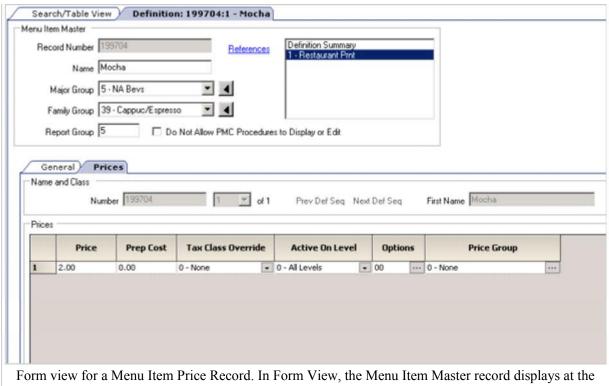
Table View after a search for Cappuccino/Espresso prices.

(Cappuccino/Espresso records, in this database), and the appropriate records are returned. The status bar is not displayed in the image, but it would show "7 record(s) read" after retrieving the seven records that are displayed.

From this view, records can be edited just like any other Table View module. To enter Form View, double-click the Object Number of the desired record.

Form View

When a user switches from viewing Prices in Table View to

Form view for a Menu Item Price Record. In Form View, the Menu Item Master record displays at the top of the screen, with the configurable MI Price grid below, on the Price Tab. The Price grid allows up to eight prices.

Prices/Definitions in Form View, the initial display is the Price tab, which displays all the Prices associated with a single Definition. The Master Fields always display (giving the user an understanding of the Master/Definition relationship), but they may be disabled based on Employee Role permissions.

The text on the Form View Tab for Price Records shows the word "Definition" followed by the number, sequence number, and name of the item:

```
Definition: 199704:1 - Mocha
```

Form View for Menu Item Definitions and Menu Item Prices is comprised of three sections:

- Menu Item Master fields
- General Tab (MI Def fields)
- Price Tab (MI Price fields)

On the price tab, only the prices in the grid are configurable. The "Name and Class" group box shows information relevant to the Menu Item Definition; these fields are always disabled on the price tab.

Adding Records

The term **adding records** is an ambiguous term when discussing menu items. It is possible to add a brand new Master record, to add Definitions to Master records, to add Prices to Definitions, or to add a new Master record including all definitions and prices at once. Because of the necessary distinction when discussing these topics, there is not a single standard insert dialog for menu items. In fact, the dialog changes based on the location within Menu Item Maintenance when the Insert dialog is requested:

Main Articles
Adding a Menu Item
Adding Menu Item Masters
Adding Menu Item Definitions
Adding Menu Item Prices

- In Form View:
  - When viewing Prices, it is only possible to add additional prices to the currently-viewed definition.
  - When viewing Definitions, it is only possible to add additional definitions to the currently-viewed master.
  - When viewing the Definition Summary tab, it is possible to "Add Definition Records to this Master", in addition to adding a Menu Item Master records.
- In Table View, the same choices are always available:
  - Add Master Record from Template
  - Add Master Records without a Template
  - Add Definitions to Masters
  - Add Prices to Definitions

The insert dialog follows user permissions. For instance, a user who cannot add Menu Item Master records will not have access to the dialogs for inserting Master Records.

In addition, Table View attempts to default to the choice that is most relevant to the user at the time the Insert Dialog is opened:

Current Record Type	Condition	Default
Master	No items in the grid	Add Master Record from Template
Master	One item is selected	Add Master Record from Template; the template record defaults to the selected item.
Master	Multiple items are selected	Add Definitions to Masters; the range type defaults to "Selected Records" with the records that have been selected.
Definition	No items in the grid	Add Definitions to Masters; the range type defaults to "Record Number or Range" for user-defined entry.
Definition	One or more items are selected	Add Prices to Definitions; the range type defaults to "Selected Records" with the records that have been selected.
Price	*All Scenarios*	Add Prices to Definitions; the range type defaults to "Select Range"

Deleting Records

Records can be deleted in Menu Item Maintenance by pressing the delete key on the keyboard, using the right-click delete option, or by using the delete icon on the navigation bar. The delete prompt changes based on the user's location within Menu Item Maintenance when the Delete Dialog is requested:

When deleting Menu Item Master records, any barcode record that is linked to the Master will also be deleted. When deleting price or definition records, deletion is not allowed if a barcode is linked to the record.

- In Form View:
  - When viewing Prices, it is only possible to delete prices from the form.
  - When viewing Definitions, it is only possible to delete the currently-viewed definition.

- When viewing the Definition Summary tab: If no definitions are selected, the user is prompted to delete the Master Record. If at least one record is selected, the user is prompted to delete the selection of definitions.
- In Table View:
  - The user is always shown the standard delete dialog.

When an EMC user attempts to delete a Menu Item Master record or a group of Master records, the error message displays all the records that cannot be deleted. For example, one message reads: *The following records cannot be deleted because they are being used as the Primary Item for one or more Combo Meals. No records have been deleted.* This message does not, however, list the Combo Meal(s) that are associated with the Menu Items. To get a list of the references for an item, click the "References" link on the Menu Item Master Form View page.

Distribution

Main article: Menu Item Distribution

Like other EMC modules, records can be distributed to other properties and Revenue Centers. The Menu Item Maintenance module allows two types of distribution: distributing from one RVC to many, or distributing using multiple RVCs. For more information, see the Menu Item Distribution article.

Other Considerations

Some other points to consider when using Menu Item Maintenance:
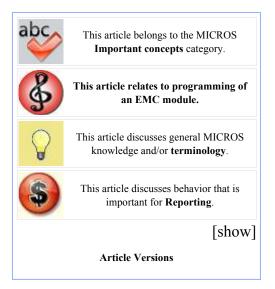
- The refresh button is only available in Table View.
- The undo and Audit This Record options are only available in Table View, via the Right-Click Menu.
- Menu Item Maintenance makes a relatively small number of database queries. The following events cause Menu Item Maintenance to make a web service request to the DB for information:
  - When the module opens, the database is queried to retrieve a list of Languages, Major Groups and Family Groups; if the module is opened from the RVC scope, the MI Classes and SLUs are also loaded from the DB.
  - During a refresh, all this information is reloaded from the DB. In addition, the active records are reloaded from the DB.
  - When a user presses the "Search" button, a DB call is made.
  - Each time a new RVC is encountered, a DB call is made. For example, if a user searches for Menu Item Master records, no RVC information is loaded. If the user then toggles to view all the Definitions, a DB call is performed to get information for Definitions in the RVC (a list of MI Classes, Menu Levels, etc.)
- After a user has added records, EMC does *not* make a database request. Instead, the following occurs:
  - If a user adds a new Menu Item Master that falls within the search criteria, the new Master record will exist in the list of records. For instance, if a user searches for items in the Appetizer Family Group, and then adds a new Appetizer record, the item will be displayed in the list. However, if the user adds a new Glass of Wine, it will not be displayed.
  - If a user adds a new Menu Item Definition or Price, these new items will display only if the parent item exists. For example, if a user searches for all Soup records, and then adds a definition to a Vodka item, the new definition will not be displayed. New prices are added similarly — if the Menu Item Definition for the price already exists in the search criteria, the new price will be added to the list of items.

Menu Item Master

A **Menu Item Master** record is a property-level menu item record. This record is the top of the Menu Item Hierarchy and its primary purpose is to display on reports.
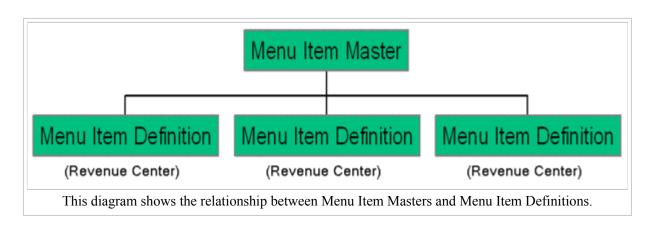
abc ✓	This article belongs to the MICROS **Important concepts** category.
🎵	**This article relates to programming of an EMC module.**
💡	This article discusses general MICROS knowledge and/or **terminology**.
$	This article discusses behavior that is important for **Reporting**.

[show]

Article Versions

Contents

- 1 Menu Item Hierarchy
- 2 EMC Configuration
    - 2.1 Definition Summary
    - 2.2 Adding Records
- 3 See also

Menu Item Hierarchy

Menu Item Definitions are the records that are can be ordered; menu item definitions appear on touchscreens and print on order chits, guest checks, and customer

This diagram shows the relationship between Menu Item Masters and Menu Item Definitions.

receipts. Menu Item Definition records are created in Revenue Centers, and they *define* how a Menu Item Master record acts.

Consider the hierarchy diagram, and assume the Menu Item Master record is "Shrimp Cocktail." When the menu item definitions are ordered, the sale count of the Menu Item Master increases. This is the purpose of the Menu Item Master record — only one instance of the item "Shrimp Cocktail" needs to exist in a property, but the multiple Menu Item Definition records allow different behavior of this Master record. (For instance, in one RVC, Shrimp Cocktail may be $6.00, but it may be $9.00 in another Revenue Center. In addition, it is likely that the Menu Item Definitions in one RVC print to different printers in another RVC.)

The Menu Item Hierarchy is represented in Menu Item Maintenance by showing all Menu Item Definitions that are attached to a single Menu Item Master. The image that describes this is shown below.

EMC Configuration

Main article: Menu Item Maintenance; specifically, see Navigating Master Records

Menu Item Masters, Definitions, and Prices are all configured in the Menu Item Maintenance module. Menu Item Master records contain the following configurable fields:

Form view for a Menu Item Master Record. This view is called the "Definition Summary" view; the Menu Item Master configurable fields are at the top of the form, then all Menu Item Definitions display below. This view allows users to see all definitions associated with a single master record.

- The Name of the item
- The Number of the item
- The Report Group of the item
- The Major Group of the item
- The Family Group of the item

In addition, the **[Do Not Allow PMC Procedures to Display or Edit]** option bit controls the following: Select this option to prevent this menu item from displaying or being edited in the PMC. This option prevents configuration changes to be made to all definitions of this item. This option does not affect the ability to configure Menu Item Availability through Menu Item Availability PMC Procedure; MI Availability can always be edited in PMC.

Definition Summary
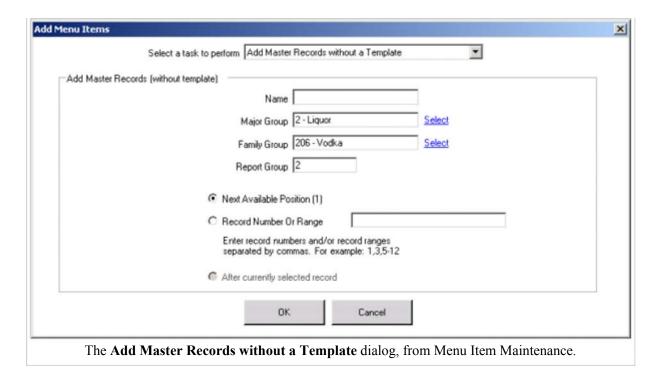
The image displayed shows Form View for a Menu Item Master record. From form view, the "Definition Summary" is the default view, showing all Menu Item Definition records associated with the Master Record. In addition, a user can use the "Update Names" function to update all the menu item definition names to have the same name as the Master Record.

Adding Records

For information on adding Menu Item Masters, Definitions, and Prices at the same time (Menu Item Wizard), see Adding a Menu Item

Typically, Menu Item Master records are only

added when adding Definitions and Prices at the same time, based on a template record. This section discusses the process of adding only Menu Item Master records, without adding definitions and prices. This method is typically used when creating a new property,

The **Add Master Records without a Template** dialog, from Menu Item Maintenance.

and there are no appropriate template records to be used.

Steps for creating Menu Item Master records:

1. From Table View or Form View's Definition Summary view, press the Insert icon on the toolbar, or press the "Insert" key on the keyboard.
2. From the "Select a task to perform" drop-down, choose "Add Master Records without a Template".
3. Enter appropriate values in the following configurable fields:
    - **Name** - Enter the name of the item. Like the standard insert dialog, if the name includes the characters $#$, the $#$ characters will be replaced with the object number of the record being created. For instance, if the name is "My Record $#$", the new record will be created as "My Record 4" if object number 4 is created. ***Note:*** *If the inclusion of the object number will create a name that is invalid (too long), the name will be truncated to the proper number of characters.*
    - **Major Group** - Select a Major Group for the new item. If a menu item master is selected before entering the dialog, the dialog will display to that record's Major Group.
    - **Family Group** - Select a Family Group for the new item. If a menu item master is selected before entering the dialog, the dialog will display to that record's Family Group.
    - **Report Group** - Select a Report Group Number (0-99) for this Menu Item. Menu Item Reports sort and subtotal by Report Group. If the Report Group number is 0, this Menu Item will not show on Menu Item Reports. Like the Major Group and Family Group fields, this field defaults to the value of the menu item master record that is selected before entering the dialog.
4. Select the appropriate value for the object number:

    Next available position
        When this is chosen, the new record will be created at the next available record number. The image shows "(1)" as the next object number; this is the next available Menu Item Master record for the property.
    After currently selected entry
        When this is chosen, the new record will be created at the next record number after the currently-selected entry. The image shows "(228035)" as the next record after the currently-selected record.
    Record number or range

When this is chosen, the new record number(s) are user-defined. The total number of new records to be created displays below the text as the programmer enters values into the field. For instance, if the programmer types 50-60, **New Records: 11** will appear.

5. Press OK to create the records. If necessary, the user will be prompted for invalid entries. This module follows the same Error Checking as the standard insert dialog.

Menu Item (PMC Procedure)

The **Menu Item PMC Procedure** is used to edit menu items definitions, menu item availability and menu item price records from a workstation.

> This article discusses PMC
> functionality.

Contents

- 1 Usage
    - 1.1 Menu Item Selection
    - 1.2 Menu Item Edit
        - 1.2.1 Definition: General
        - 1.2.2 Definition: Availability
        - 1.2.3 Price
- 2 Privileges
- 3 See also
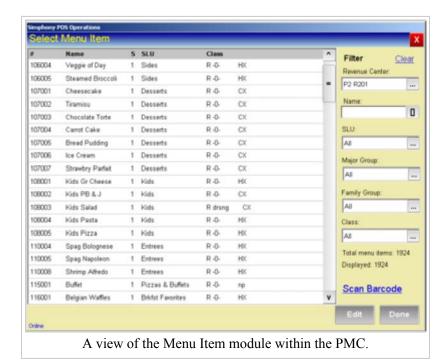
Usage

Menu Item Selection

To edit a menu item, select "Menu Item" from the first page of the PMC. By default, all menu item definitions from the current revenue center will display (except definitions with a Menu Item Class of 0). To quickly find a menu item, use any combination of the filter boxes that are listed:

- Name (type characters that appear in the first name of the definition)
- SLU
- Major Group
- Family Group
- Menu Item Class

To edit a menu item, select the desired menu item and then press **[Edit]**. Alternatively, it is possible to select a specific menu item by pressing **[Barcode/LDS]** and then scanning the item; this will take the user directly to that Menu Item's configuration screen.

A view of the Menu Item module within the PMC.

Menu Item Edit

The configuration screen is comprised of two tabs; the following fields are avialable for edit:

Definition: General

These Menu Item Definition fields can be configured:

- First Name
- Second Name
- Menu Item Class - Note that it is not possible to set a Menu Item's Class to 0-None from PMC
- NLU Group
- NLU Number
- SLU Group
- Tare Weight
- Surcharge

A view of the Definition Tab from the Edit Menu Item screen within the PMC Menu Item module.

Definition: Availability

There are three configurable availability fields:
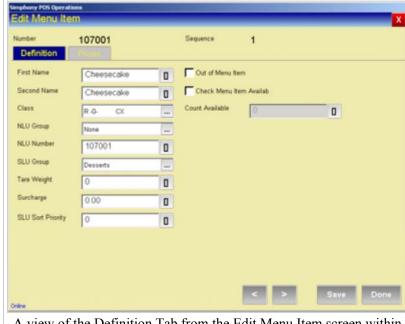
- Out of Menu Item
- Check Menu Item Availability
- Count Available

Price
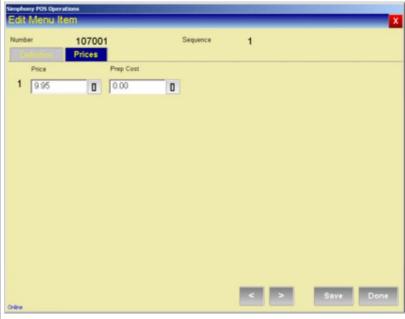
Only two fields from Menu Item Price records are configurable on this form:

- Prices
- Prep Cost

The price field may be disabled if Enterprise-Level Menu Item Pricing is in use.

A view of the Price Tab from the Edit Menu Item screen within the PMC Menu Item module.

Privileges

An operator has access to this procedure only when associated with an Employee Role with the **[View Menu Items]** option enabled. With that option enabled, users may view the records but not make changes. The ability to make changes to records is controlled by other Employee Role option bits:

- The Menu Item Availability fields are enabled only for operators who are associated with an Employee Role with the **[Change Menu Item Availability]** option enabled.
- The Menu Item Price field is enabled only for operators who are associated with an Employee Role with the **[Edit Menu Item Prices]** option enabled.
- The Prep Cost field is enabled only for operators who are associated with an Employee Role with the **[Edit Menu Item Prep Costs]** option enabled.
- The Menu Item Definition fields are enabled only for operators who are associated with an Employee Role with the **[Edit Menu Item Definitions]** option enabled.
- The Menu Item Definition Name and Class fields are enabled only for operators who are associated with an Employee Role with the **[Edit Definition Names and Classes]** option enabled.
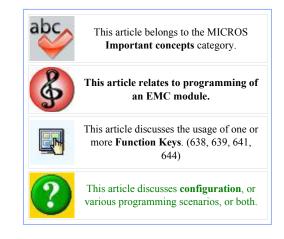
Menu Item Price

This article primarily discusses the per-item configuration of Menu Item Prices. For an overview of Enterprise Pricing, see Enterprise-Level Menu Item Pricing

In the most basic terms, a **Menu Item Price** is the amount charged for the sale of a Menu Item. In Simphony, Menu Item Prices are configured per Menu Item Definition. Typically, a menu item definition is programmed with one price, however a definition may be programmed with multiple prices (for a small/medium/large soda, for example), or with no price at all (common for condiments).

abc	This article belongs to the MICROS **Important concepts** category.
	This article relates to programming of an EMC module.
	This article discusses the usage of one or more **Function Keys**. (638, 639, 641, 644)
?	This article discusses **configuration**, or various programming scenarios, or both.

Contents

EMC Configuration
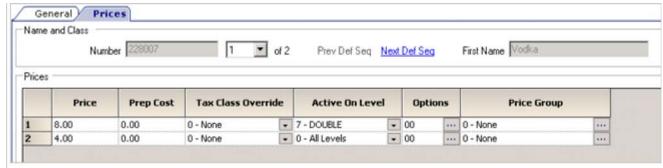
Main article: Menu Item Maintenance; specifically, see Navigating Price Records

Menu Item Prices are

#	Def Seq #	Definition Name	Price Seq #	Price	Prep Cost	Tax Class Override	Active On Level	Options	Price Group	
803017	1	Autogrph Footbll	1	3.75	0.00	0 - None	0 - All Levels	00	0 - None	
803018	1	Souvenir Pen	1	3.75	0.00	0 - None	0 - All Levels	00	0 - None	
803019	1	Orioles Jersey	1	3.75	0.00	0 - None	0 - All Levels	00	0 - None	
803020	1	Redskins Jersey	1	3.75	0.00	0 - None	0 - All Levels	00	0 - None	

Table View in Menu Item Maintenance displaying Menu Item Prices.

Form View in Menu Item Maintenance displaying Menu Item Prices. Form View for MI Prices is the "Prices" tab while looking at a Menu Item Definition. In the example image, the user sees all Menu Item Prices for Definition #1 of "Vodka". Also note that this example observes the rules for a properly programmed database, as discussed below.

configured in Menu Item Maintenance. Prices may be edited in bulk by using Table View; they are also displayed in Form View from the Menu Item Definition form. Menu Item Price records contain the following fields:

Number

This field represents the Menu Item Master Record Number. (This field is not configurable.)

Def Sequence #

This field shows the definition sequence number to which this price is attached. (This field is not configurable.)

Definition Name

This field displays the name of the Menu Item Definition to which this price is attached. (This field is not configurable.)

Price Sequence #

This field shows the price sequence number of this price. The price sequence number is the number of the price for this Definition record. Up to eight definitions can exist for a single Definition record. This field is not configurable. Note that if multiple prices exist and one or more prices is deleted, other definitions will be renumbered sequentially starting with 1. For instance, if price 1-6 exist for an item and 2-4 are deleted, price 5 and 6 will become prices 2 and 3, respectively. The price sequence number is important when determining the active price.

Price

This field displays the price of the item. When the item is ordered, this will be the price charged to the customer, unless the Price Group field is configured. See below for more information.

Prep Cost

This field displays the prep cost for the price record.

Tax Class Override

By default, this field is programmed as 0-None, which means that the price will use the Tax Class configured for the Menu Item Class associated with the Menu Item Definition. To use a different Tax Class for the price, select the appropriate Tax Class from the list.

Active On Level

By default, this field is programmed as 0-All Levels, which means that the price is active for all Menu Levels. This field displays either the Main Levels for the RVC or the Sub Levels, depending on the configuration of the Menu Item Class. See below (Sub Level Pricing vs. Main Level Pricing) for more information.

Options

This field contains two options relating to Fixed Price Meals.

Price Group

If this field is set to 0-None, the price configured in the Price column will be used. To use Enterprise-Level Menu Item Pricing, select the appropriate Price Group from the list. See below for more information.

Adding Records

This section discusses adding prices to existing MI Definition records. For information on adding Menu Item Masters, Definitions, and Prices at the same time (Menu Item Wizard), see Adding a Menu Item

Typically, Menu Item Prices are added when definition records are added, or when the Menu Item Wizard is used. However, there are times when a programmer may want to add new prices to existing menu item definition records. Some common examples include:

- A restaurant needs to add another price to all its beer items, which will be 50% off the "regular" price during Happy Hour.
- When the definition was initially added, the user forgot to add prices.
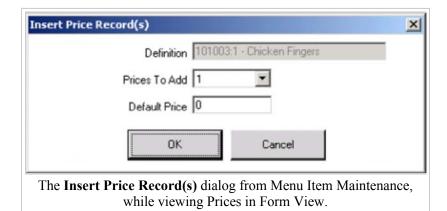
In Menu Item Maintenance, two different dialogs exist to add menu item prices, based on the location (Table View or Form View) within Menu Item Maintenance when the Insert button is pressed.

Form View

While viewing a Menu Item Price in Form View, the **Insert Price Record(s)** dialog displays. (There are no other choices for inserting records from this view.) This insert dialog allows the user to add prices to the current definition only. This dialog is very basic; the user is only able to define two fields:

The **Insert Price Record(s)** dialog from Menu Item Maintenance, while viewing Prices in Form View.

Prices To Add

Select the number of prices to add to the current definition. This drop-down box allows valid choices only; if two definitions currently exist, the drop-down will include choices of 1-6, preventing the user from adding more than 8 prices. *Note: If 8 prices already exist, this dialog will not open and the user will be presented with an error message: "No more price records can be added for this Menu Item Definition."*

Default Price

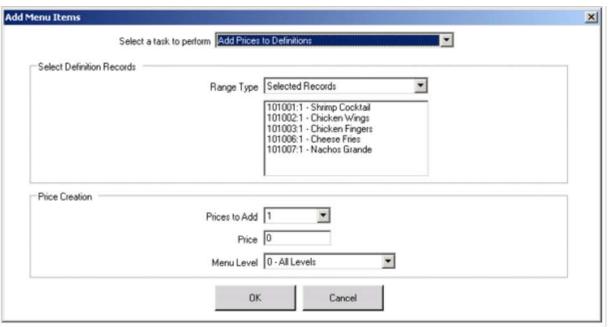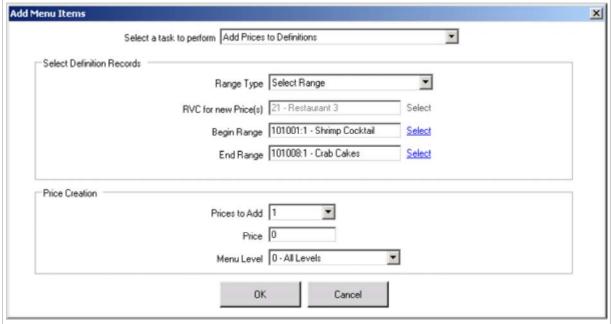Enter the amount that will be charged.

Table View

The **Add Prices to Definitions** dialog is available in Table View. This dialog

allows the user to create Menu Item Prices by defining a begin/end range of object numbers, or to select the Menu Item Definitions that will receive the new price record(s).

Select Definition Records

In this section, select the

The **Add Prices to Definitions** dialog from Menu Item Maintenance, while in Table View. This image shows an example where Menu Item Definitions have been selected, and the Range Type defaults to "Selected Items".

The **Add Prices to Definitions** dialog from Menu Item Maintenance, while in Table View. This image shows an example where the user will add prices to a series of Menu Item Definitions, based on a start/end range.

definitions to receive the new prices. This can be done in one of two ways:

- **Selected Records**: If Menu Item Definitions are active in Table View, and at least one Menu Item Definition is selected before accessing the Insert Dialog, this will be the default setting. When this is chosen, the selected definition(s) are displayed. (This is the common method of adding prices to definitions; displayed in the top image on the right.)
- **Select Range**: When this range type is selected, the user must select the RVC where the new prices will be created, the Begin Definition, and the End Definition. This option is used infrequently; it is

displayed in the bottom image on the right. ***Note:*** *When Menu Item Maintenance is opened from the RVC Scope, only the current RVC is available in the "RVC for new Price(s)" field.*

Price Creation

In this section, specify how the price records will be created. The choices for this section are:

- **Prices to Add**: Select the number of prices for each Menu Item Definition selected. This insert dialog will ignore requests to create prices greater than sequence number 8; if a definition already has 6 prices and the user chooses to add 3 prices, price #9 will not be created.
- **Price**: Enter the amount that will be charged for the item.
- **Menu Level**: Select the Menu Level on which the new price(s) will be active. Because some definitions may be configured to use Sub Level Pricing and others may be using Main Level Pricing, this field shows the names "Menu Level 1" through "Menu Level 8", instead of the actual names of the levels for the RVC.

Enterprise Pricing

Main article: Enterprise-Level Menu Item Pricing

The concept of "Enterprise Pricing" exists to allow programmers to configure similar items' prices in one location of EMC. For instance, all "East Coast Domestic Beers" may be $4.00, but "West Coast Domestic Beers" will be $5.00. This type of programming is possible with Simphony's Enterprise-Level Menu Item Pricing functionality. When a Menu Item Price has a Price Group configured, the price of the item is determined by the combination of Price Group (Domestic Beer) and Price Tier (East Coast or West Coast). This functionality is described in more detail in the main article, Enterprise-Level Menu Item Pricing.

Workstation Operations

Which price is active?

Multiple prices can be assigned to a single Menu Item Definition. When this is the case, how does the workstation know which price to use? How should a programmer configure the system to achieve the desired result?

An example of properly-programmed prices and levels

Price #	Price	Level
1	8.00	7 - Double
2	4.00	0 - All Levels

The answer to these questions is actually rather simple. When a menu item is ordered, the workstation searches the prices assigned to the definition starting with price sequence #1, then price sequence #2, and so on. The first price that meets the active level is the one that is used.

In the "properly-programmed" example, the item will be 8.00 when ordered on Menu Level 7, but 4.00 when ordered at any other level (because "Level 0" means all levels). The workstation's logic is:

1. The current level of the transaction is level 5.
2. Price #1 for the item is active on Level 7. Continue to the next price.
3. Price #2 for the item is active on Level 0. This represents any level. The item is 4.00.

Now imagine the example if the programming were reversed, as shown in the "improperly programmed" example. The workstation's logic is:

1. The current level of the transaction is level 5.

An example of **improperly-programmed** prices and levels

Price #	Price	Level
1	4.00	0 - All Levels

2. Price #1 for the item is active on Level 0; this includes all levels. The item is 4.00.

2	8.00	7 - Double

This works, but what if the item is rung on level 7? The logic is:
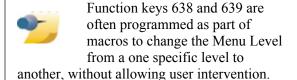
1. The current level of the transaction is level 7.
2. Price #1 for the item is active on Level 0; this includes all levels. The item is 4.00.

Therefore, if the "All Levels" price level is used, it should always be the last price sequence number programmed for a definition.

Function Keys

638 - Change Price Main Level
This key is used to change all the prices (active on a specified Main Level) entered on a check to different prices; this key applies only to Menu Items using Main Level Pricing. When this key is used, the workstation will prompt the user to select a Main Level. Then, the user will be prompted again for a Main Level. At this point, the workstation will change the price of all menu items using the first Main Level selected to the second Main Level selected.

> Function keys 638 and 639 are often programmed as part of macros to change the Menu Level from a one specific level to another, without allowing user intervention.

639 - Change Price Sub Level
This key is used to change all the prices (active on a specified Sub Level) entered on a check to different prices; this key applies only to Menu Items using Sub Level Pricing. When this key is used, the workstation will prompt the user to select a Sub Level. Then, the user will be prompted again for a Sub Level. At this point, the workstation will change the price of all menu items using the first Sub Level selected to the second Sub Level selected.

641 - Menu Item Price Override
When this key is pressed, the user may override the price of the menu item with another price entry. This function key applies the price override to the last item ordered.

644 - Price Inquire
When this key is pressed, the workstation is toggled into Price Inquiry Mode. When the next item is ordered, the workstation will prompt, `Item is $12.34. Do you want to order this item?` After answering the question (yes or no), the Price Inquiry mode is reset to OFF.

652 - Weight Price Override
This function key's behavior is discussed on the Weighed Menu Items article.

Other Pricing Terminology

Sub Level Pricing vs. Main Level Pricing

The terms **Sub Level Pricing** and **Main Level Pricing** are often used to describe which type of Menu Level — Main Level or Sub Level — a Menu Item Price is using. In Menu Item Maintenance, one of the configurable fields for Menu Item Prices is the "Active on Level" field. This is a drop-down field that shows either the Main Levels or the Sub Levels; the type of list depends on the setting of the Menu Item Class option bit #10, **[ON = Use Sub Level Pricing; OFF = Use Main Level Pricing]**.

Fixed Items and Open-Priced Items

Main article: Open-Priced Menu Items

All the examples in this article discuss Menu Items with "fixed prices", meaning that an item's price is based on the configuration in EMC (either the Menu Item Maintenance price or the price from Price Assignment, if Enterprise Pricing is in use).

There may be times when a site wants to allow the user to determine the price of the menu item at the time the item is ordered. This type of configuration is called an "Open Price"; for more information on this type of configuration, see Open-Priced Menu Items.

Weighed Items

Main article: Weighed Menu Item

A Weighed Menu Item is a menu item that is priced per unit of measurement (pounds or kilograms). The operator is required to enter the weight of the item and the workstation calculates the price. For detailed information, see Weighed Menu Item.

Menu Items (overview)

"Menu Items" redirects here. For other articles about menu item functionality, see Menu Items

A **Menu Item** is the core foundation of all transactions. Everything "ordered" or "rung in" for our systems is a Menu Item. In restaurant Revenue Centers, it is obvious that drinks and entrees, etc., are Menu Items. Perhaps less obviously, in retail Revenue Centers, shirts and pants (etc.) are also considered Menu Items. Therefore, in Simphony, it can be said that any item being sold is a Menu Item.

abc ✓	This article belongs to the MICROS **Important concepts** category.
🎼	**This article relates to programming of an EMC module.**
💡	This article discusses general MICROS knowledge and/or **terminology**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Menu Item Hierarchy
    - 1.1 Overview
    - 1.2 Property (MI Master)
    - 1.3 Revenue Center (MI Definition)
        - 1.3.1 Menu Item Prices
- 2 Configuration
    - 2.1 Multiple Definitions
        - 2.1.1 Common Example
- 3 See also
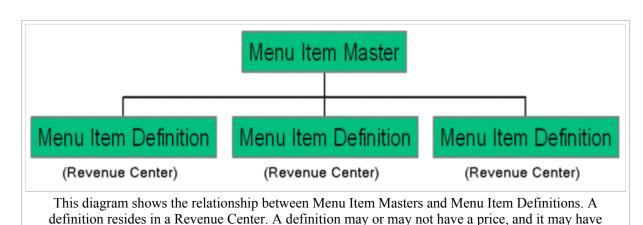
Menu Item Hierarchy

This section discusses the relationship between Menu Item Masters, Definitions, and Prices. For a complete overview of Masters, Definitions, and Prices, see the individual articles on those topics.

Overview

There are three terms that describe menu items:

- Menu Item Master
- Menu Item Definition
- Menu Item Price

This diagram shows the relationship between Menu Item Masters and Menu Item Definitions. A definition resides in a Revenue Center. A definition may or may not have a price, and it may have multiple prices.

Property
(MI Master)

Main article: Menu Item Master

Menu Item Master records exist on the property scope. This record doesn't contain much information:

- The Name of the item
- The Number of the item
- The Report Group of the item
- The Major Group of the item
- The Family Group of the item

As you can see, a Menu Item Master doesn't actually do anything. It does not show on touchscreens, it does not have a price... it basically does nothing *except* it shows on Menu Item Reports. That, of course, is very important.

There is only one Menu Item Master per property for a Menu Item. For instance, in a properly-programmed database, only one "Shrimp Cocktail" Master Record exists. Looking at the diagram, you see that a Menu Item Definition exists in a Revenue Center. This is where we *define* how a Menu Item Master Record acts.

Revenue Center (MI Definition)

Main article: Menu Item Definition

A **Menu Item Definition** defines how the Menu Item Master acts; or how and when it appears to a user:

- The SLU on which the item appears
- The NLU on which the item appears
- The Menu Level(s) where it is active
- The Name of the item for touchscreens and Order Devices
- The Menu Item Class to which it belongs.

Menu Item Prices

Main article: Menu Item Price

A menu item definition might have one or more prices, or it may have none. Here are some examples for using Menu Item Prices.

- **Multiple Prices**
    - Up to 8 prices can exist for a single menu item definition.
    - Perhaps two prices exist: One for a "Double" Liquor Menu Level and one for the regular price of liquor
    - Perhaps three prices exist: Small, Medium, and Large Sodas
    - Perhaps different prices exist to override the Menu Item Class tax class.
- **No prices**
    - The items "Medium Well" and "Without Tomato" would not be programmed with a price record. It is typical for condiment items to be programmed without price records.

With multiple prices programmed, which price record is going to be used when an item is ordered? The price article includes details about determining the active price.

Configuration

Multiple Definitions

To expand on the Property/Revenue Center hierarchy shown above, it should be noted that it is also possible to have multiple Menu Item Definitions in one RVC! In fact, this is a quite common scenario. Because a definition only *defines* how an item acts/appears to a user, it is possible to make an item behave multiple ways in one RVC. Indeed, a single Revenue Center can have up to 64 definitions for the same item — although it is very unlikely that more than 5 or 6 definitions exist.

In the diagram shown, it just happens that the price of every definition is the same. This is not necessarily how a site would be programmed. Even a small three-RVC hotel such may have different prices — often the Room Service RVC is a little more expensive.

Common Example

A common example of this configuration is the progamming of liquor. Sometimes, liquor is ordered like this:

- Ring the liquor (Absolut 6.00) which prompts for a descriptor of how the item is made (Bloody Mary 0.00)

And sometimes liquor is ordered like this:

- Ring the name of a drink (Bloody Mary 0.00) which prompts for the type of liquor (Absolut 6.00)

Either way the item is ordered, we're still ringing in a Bloody Mary with Absolut Vodka (see more about Programming Liquor). In a small hotel with three revenue centers, the diagram at the right describes this possible configuration.

Menu Item Sales Report

The **Menu Item Sales Report** provides sales totals for each menu item.

<table>
<tr><td>🖥️</td><td>This article discusses PMC functionality.</td></tr>
<tr><td>💲</td><td>This article discusses behavior that is important for Reporting.</td></tr>
</table>

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Report Fields
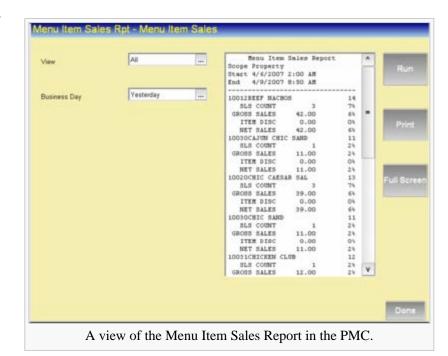
The following information is included in the Menu Item Sales Report:

- Sales Count: The number of each menu item sold.
- Gross Sales: The total value of sales, before deducting for discounts, voids, or returns.
- Item Discount: The total dollar amount of any discounts taken on the menu item.
- Net Sales: The total sales, less returns, discounts, and voids.

PMC Report

The PMC version of the report allows a choice of **View** and **Business Day**. The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Menu Item Sales Report in the PMC.

mymicros.net Report

Report Examples

- PMC Menu Item Sales Report

See also
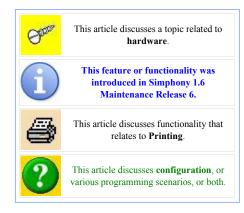
- PMC Reports
- WS Autosequences
- List of PMC Reports

MICROS Mini Printer Setup

This article reviews the setup of the MICROS Mini Printer. This is a 32 column printer (the paper is 2 inches in width) that can attach to the side of an mStation (right side only).

Contents

- 1 Overview
- 2 EMC Configuration
- 3 See also

	This article discusses a topic related to **hardware**.
	This feature or functionality was introduced in Simphony 1.6 Maintenance Release 6.
	This article discusses functionality that relates to **Printing**.
	This article discusses **configuration**, or various programming scenarios, or both.

Overview

The MICROS Mini Printer can be configured to perform the following print tasks (among others):

- Customer Receipts
- Guest Checks
- KDS Runner Chits
- Order Device Output
- Workstation Reports

This printer may only be attached on right side of the mStation as shown here.

MICROS Mini Printer attached to an mStation

EMC Configuration

To configure the MICROS Mini Printer, follow the steps outlined below:

1. Access and navigate to the *EMC-> Property-> Property Hardware-> Printers* module.
2. Select the new **Printer Type** named **[MICROS Mini Roll Printer]** from the dropdown menu.
3. In order to be properly power the printer, it ***must*** be connected to **COM Port 2** on the mStation. Select the **[COM2]** choice from the "**COM Port**" dropdown menu.
4. **Save** all changes.
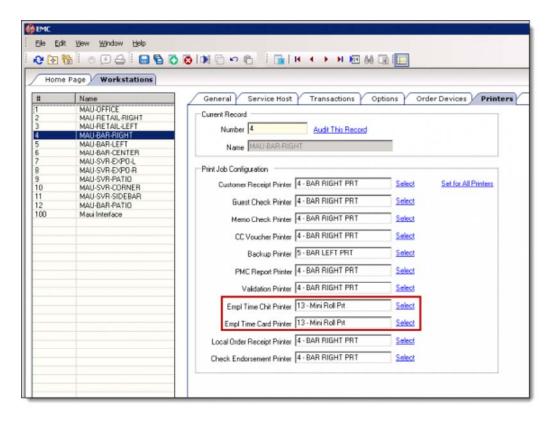
The MICROS Mini Printer does ***not*** have Auto-cut capability; rather it has a serrated edge to help tear the paper.

Since the MICROS Mini Printer does not have Auto-Cut capabilities, there are some instances whereby operators need to have a slight delay occur in order to allow them the opportunity to tear individual print tasks prior to a second voucher or chit printing. The following configuration details that can affect such a printing delay should be noted:

- For non-Auto-cut printers, it was determined that if the option located in the *EMC-> Revenue Center-> RVC Information-> RVC Parameters-> CA/EDC tab-> **Credit Card Options***-> **[4 – Prompt Before Printing Second Voucher]** was enabled or not, the first print task would occur and then operators will receive a `Print second voucher` prompt message. Before responding to the prompt, operators will have the opportunity to tear the first print task and then respond to the prompt by selecting either the '**Enter/Yes'** or '**Clear/No'** buttons on the Ops display to continue with the second print task.

- When operators Clock In/Out on a Workstation,

'Employee Time Chit' printers can be assigned in the *EMC-> Property-> Property Hardware-> Workstations-> Printers* tab-> **Print Job Configuration** section. If a non-Auto-cut printer has been assigned as the 'Employee Time Chit Printer' and the 'Employee Time Card Printer', the Time Chit will print and operators will receive a `Print Time Card` prompt. Again, before responding to the prompt, the delay affords operators the time to tear off the 'Time Chit'. Operators can respond to the prompt by selecting either the '**Enter/Yes'** or '**Clear/No'** buttons on the Ops display to continue with the 'Time Card' print task. If a printer other than a MICROS Mini Printer is assigned for either of the 'Employee Time Chit\Card' printing tasks, operators will **not** receive a prompt as the tasks will print independently of each other.

Note: This printer cannot be attached to a Sales Recording Module (SRM) device. Additionally, the *EMC-> Property level-> Property Parameters-> Options-> [38 - Enable Sales Recording Module]* option **must** be disabled.

Mobile MICROS

The term Mobile MICROS refers to any ops client running on a portable/handheld device. Mobile MICROS devices perform the same operational tasks as other workstations, with some exceptions (mostly due to screen size limitations).

♪	This article relates to programming of an EMC module.
⌐	This article discusses a topic related to hardware.
?	This article discusses configuration, or various programming scenarios, or both.

Contents

Supported Platforms

Simphony supports the following handheld devices:

DT Research 430

The DT Research 430.

See the DT Research website (http://www.dtresearch.com/index.htm) for more information.

For configuration steps for this supported MMH beginning with Simphony 1.6, click here.

The DT Research 430 must run Windows® CE 6.0 for use with Simphony.

With the release of Simphony 2.6, support for this device has been discontinued.

Symbol MC50

See the Symbol MC50 website (http://www.symbol.com/product.php?productID=240) for more information.

The Symbol MC50.

The MC50 must run Windows Mobile 2003 for use with Simphony.

UPDATE This software will go End of Service 7/8/2014 and will consequently render the device non-compliant with PCI standards. Please prepare accordingly.

Motorola MC55

See the Motorola MC55 website (http://www.motorola.com/Business/US-

The Motorola MC55.

EN/Business+Solutions/Industry+Solutions/Federal+Government/Federal+Law+Enforcement+Solutions--Devices/MC55_US-EN) for more information.

The MC55 must run Windows Mobile 6.1 (CE 5.2) for use with Simphony.

Motorola MC55A

See the Motorola MC55A website (http://ap3.motorola.com/partners/sg/enterprise/pv-mc55a-overview.asp) for more information.

For configuration steps for this supported MMH beginning with Simphony 1.6, click here.

The MC55A must run Windows® CE 6.0 for use with Simphony.

With the release of Simphony 2.6, support for this device has been discontinued.

The Motorola MC55A.

Symbol MC70

See the Symbol MC70 website (http://www.motorola.com/business/v/index.jsp?vgnextoid=d3da7b103d175110VgnVCM1000008406b00aRCRD) for more information.

The MC70 must run Windows Mobile 6.1 (CE 5.2) for use with Simphony.

The Symbol MC70.

MMH Limitations

Somewhat obviously, Mobile MICROS clients have some touchscreen design limitations due to their smaller screen size. In addition, here is a summary of other limitations on the client:

- No support for the Property Management Console
- Clients are limited to only one Revenue Center.
    - In the Workstations module, up to eight Revenue Centers may be assigned to a single "regular" workstation. However, Mobile MICROS clients can be configured for only the first of the eight RVCs
    - In RVC Parameters, up to eight Revenue Centers may be assigned for Adding and Transferring

checks. However, Mobile MICROS clients will not be able to add or transfer to these Revenue Centers. On MMH clients, Add/Transfer functions only work within the same RVC.
- For a full list of function keys that are supported on MMH vs. "regular" Ops clients, see the Function Key Comparison article.

Battery Life Indication

Starting with Simphony 1.4, MMH clients show the end-user a warning once the battery life has reached 30%:

- At 30% and 25%, the user will see a warning
- From 20% to 10%, the user will see a warning for every 2% drop.
- Below 10%, a warning will display every 1%

If a MMH is powered on at 28%, the next warning will be at 23%. Then, starting at 20%, the warnings will follow the schedule displayed.

MMH's supported in Simphony v1.6

For the most part, the 'DT Research 430' and 'Motorola MC55A' MMH's can be added to the EMC-> Workstations module as in previous versions.
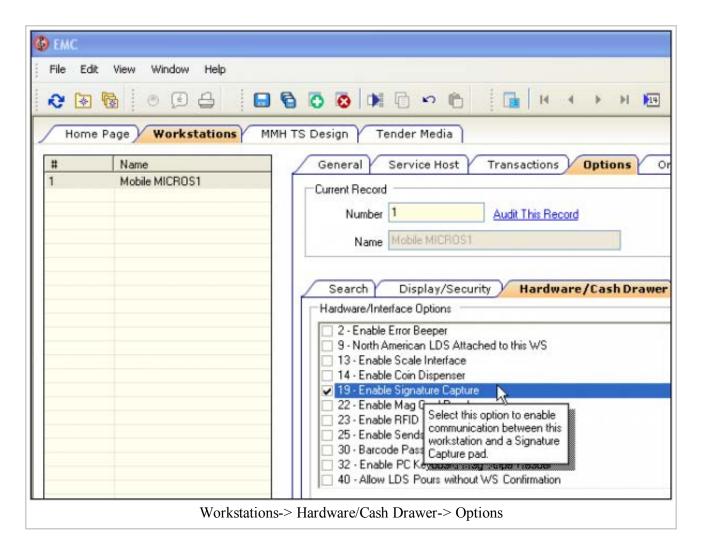
There are a number of similarities between these two newly supported handhelds as shown below:
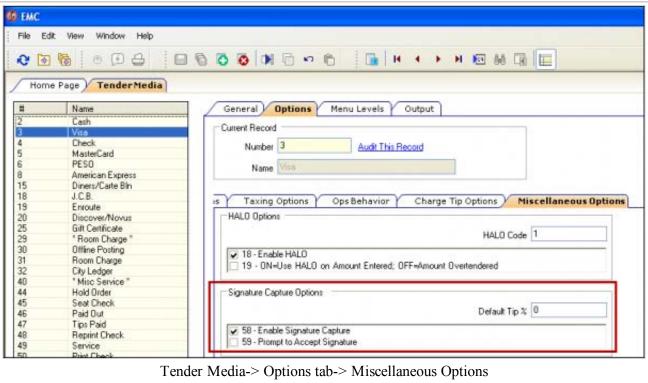
- Both devices run Windows CE 6.0 only - Currently, they are not compatible with Windows Mobile.
- The Processor types of both devices are ARMV4I
- Both devices support Mag Cards, Barcode Scanners and Bluetooth Printing
- Each device now supports 'Signature Capture' for Credit Card (CC) transactions

EMC Configuration for enabling the 'Signature Capture' feature

Simphony 1.6 MMH 'Signature Capture' configuration steps and capabilities are much like the legacy MICROS 9700 HMS application.

- To enable 'Signature Capture' capabilities on the MMH device, navigate to the EMC-> Property level-> Property Hardware-> Workstations module-> Options tab-> Hardware/Cash Drawer tab-> under Hardware/Interface Options header-> and enable the [19 - Enable Signature Capture] option and 'Save'.

Workstations-> Hardware/Cash Drawer-> Options

Tender Media-> Options tab-> Miscellaneous Options

- The 'Signature Capture' CC finalization transaction flow is enabled from the EMC-> Property

level-> Sales-> Tender/Media module. Highlight any applicable Credit Card Tender Media record and navigate to the 'Options' tab-> Miscellaneous tab-> under 'Signature Capture Options' header and enable the [58 – Enable Signature Capture] option. Option [59 – Prompt to Accept Signature] can be enabled to display a prompt to the Server to accept or reject a guest's signature before the transaction is finalized. There's also a 'Default Tip %' field that when configured will calculate and display the default tip percentage to the patron on the handheld screen. The default tip amount may be adjusted by the guest. Once configured, 'Save' all changes.

Viewing the Signature Captures

The captured image of any guests' signature is saved in Bitmap format in the SIGNATURE table of the Transactional database.
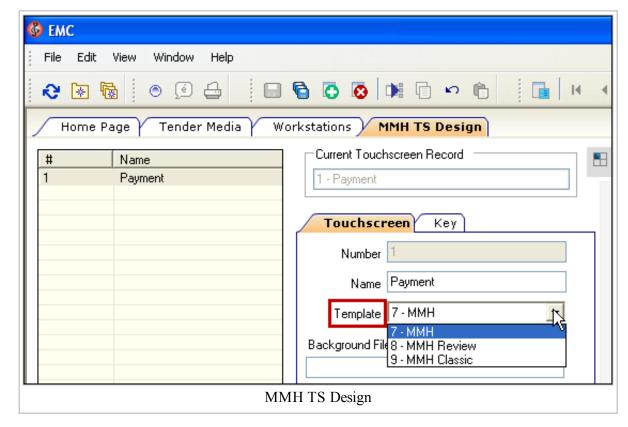
The check image, including the signature that was captured may be viewed by using the Audit & Analysis tool in Simphony Reports. A link to the image can be clicked on from the Transaction Summary view of the check. The image, journal, and check detail all have separate links that can be chosen.

MMH Touchscreen Design

MMH TS Resolution setting

The DT Research 430 MMH has an improved screen resolution of 272 x 480. Therefore, this resolution setting is also available for all other MMH devices. The configuration of MMH Touchscreen templates is the same as previous versions for handhelds. Navigate to the EMC-> Revenue Center level->

MMH TS Design

User Interface-> Mobile MICROS- Touchscreen device module-> Touchscreen tab-> 'Template' dropdown menu and select any of the three existing templates as shown here:

CAL Package Additions

There's been no significant change to the deployment of CAL packages to load the software to a MMH with the exception of the addition of two new CAL Package folders that have been added to the EGatewayService\CAL folder; they are named 'DTR430' and 'MC55A' respectively. When CAL application downloads occur to these specific types of MMH's from the Application Server, they'll receive these updates from one of these newly added folders.

MTablet and mStation

*The **mTablet** (a.k.a. the **mTablet R Series**), when used in tandem with the **mStation**, is a Workstation that is used for Simphony v1.6 MR4 (and higher) installations. The roadmap for these devices includes their eventual use for Simphony v2.x installations as well.*

	This article discusses a topic related to **hardware**.
	This feature or functionality was introduced in Simphony 1.6 MR4.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses a **tool, utility, or other application** that is used by the Simphony system.

Contents

The System

mTablet

- Designed for the Hospitality and Retail Industry
- Innovative LCD technology enables a daylight viewable display
- High Capacity Battery Option for Portable Use
- Integrated Payment Processing
- Integrated Modular MSR
- Highly Ruggedized & Spill Resistant
- Unparalleled abilities for managerial and staff procedures
- Operations can continue even during an internet outage
- WI-FI and Bluetooth Support

mStation

- Wide Range Device
- Expansive Peripheral Hardware Connectivity
- Modular Scanner and Printer
- High Capacity Battery Option for Portable Use
- Integrated Customer Display Options
- Slim Footprint

Components

- mTablet -	- mStation -

The mTablet

The MICROS mTablet is an all new tablet designed specifically with POS requirements and harsh hospitality environments in mind. Featuring a 10.1" display with a projected capacitive touch screen, the mTablet utilizes the latest technologies, from its cutting edge dual core processor, to the unique adaptive LCD technology available on the daylight viewable model. A modular design allows the mTablet to feature a secure, integrated magnetic card reader that is capable of hardware encryption of track data, which can be quickly replaced with additional peripheral devices such as scanner/imagers and RFID readers as they become available.

Windows® Embedded Compact 7

The mTablet comes preinstalled with the latest embedded operating system from Microsoft, Windows Embedded Compact (EC) 7. By taking advantage of the modular nature of this embedded operating system, MICROS is able to tailor an OS image specifically for the mTablet. This ensures the image only contains components and drivers relevant to the hardware, dramatically reducing the OS size and

resource requirements. This strict control of the operating system also allows MICROS to improve the security of the mTablet. By choosing not to include an e-mail client, drive letters, scripting components, and other components often targeted by developers of malware, MICROS has greatly reduced the chances of the mTablet being afflicted by a virus, spyware or other destructive programs.

mTablet Main Parts

LCD and Touch screen

The Liquid Crystal Display is 10.1" in size, with a resolution of 1024x768 and is capable of supporting 262K colors.

Two LCD options are available, a standard LED backlit TFT display and a daylight readable TFT with adaptive LCD technology. The adaptive display provides automatic transition from a transmissive LCD panel to a monochrome reflective panel. This technology provides easy viewing in the brightest conditions and by eliminating the need for extra bright backlighting, it conserves power and battery life in the process.

The touch screen sensor utilizes projected capacitive technology with multi-touch and gesture support. The sensor is made of hardened Dragontail® glass for superior scratch and shatter resistance.

Magnetic Card Reader

The ultra thin, 3-track magnetic stripe reader (MSR) is attached to the top of the mtablet. It is secured in place by 4 Allen head screws. The MSR is capable of encryption at the swipe. Below the MSR assembly is a removable microSD storage card. The MSR seam between the MSR assembly and main body of the mTablet is fully gasketed, providing high levels of protection against spills.

Power Button

The power button is located at the upper left corner of the mTablet. It is used to turn on and off the tablet, and enter/exit the suspend power state. The power button is also used to activate the MICROS Factory Recovery features of the mTablet.

Charging LED

A tri-color LED at the right corner of the LCD indicates the mTablet battery status. Detailed behavior of the charge status LED is provided later in this article.

Ambient Light Sensor

The ambient light sensor provides automatic adjustment of the LCD brightness. The ambient light adjustments behave differently based on the panel type installed. With the standard LCD, the backlight brightness increases as ambient lighting increases. With the daylight viewable adaptive LCD, the backlight brightness decreases when a set ambient light level is reach, and the backlights are turned off in high bright/outdoor conditions.

Charging/Communications Connectors

The bottom of the mTablet features three unique connectors. A set of contacts used for charging the mTablet when docked in gang charger are at the left most side. The center connector is a MICROS specific high density connector used for interfacing with the mStation. This connector provides several buses to the mStation, including Ethernet, USB, Serial as well as battery charging. The rightmost connector is a USB 'On The Go' "OTG" port, which can be used for maintenance purposes as well as charging the mTablet from an external wall power adapter. MICROS makes a wall power adapter available for this purpose, but a generic USB power adapter can be used.

The mStation

The mStation allows customers to use all of their existing peripheral devices, from printers and cash drawers to customer displays, scanners, scales and more. Additionally, when wireless networks are not present or have gaps in signal coverage, the mStation allows customers to take advantage of traditional wired networks, with a 10/100/1G capability.

The mStation is AC powered and features and internal universal power supply. The mStation can also be powered by an optional internal battery pack. When equipped with the optional battery, the mStation can provide several hours of remote usage, and provide power to most connected peripherals, including cash drawers and customer displays, as well as maintaining the charge in the mTablet battery.

> **Note:** The mStation is not stand alone intelligent. The MICROS mTablet must be docked in the mStation to allow any peripheral functionality.

When the mTablet is combined with the mStation, the result is a complete POS client featuring a full range of peripheral and connectivity options.
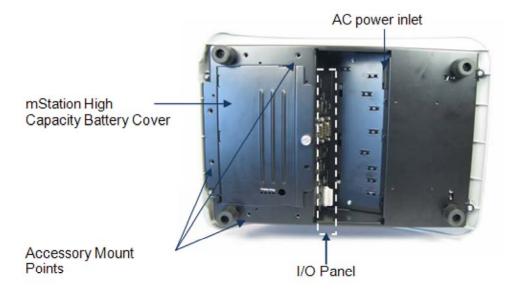

mTablet Rotation from the mStation

The mStation allows the mTablet to be used in a Portrait or left/right Landscape orientations. A button on the rear of the mStation hinge mechanisms releases the assembly for rotation.
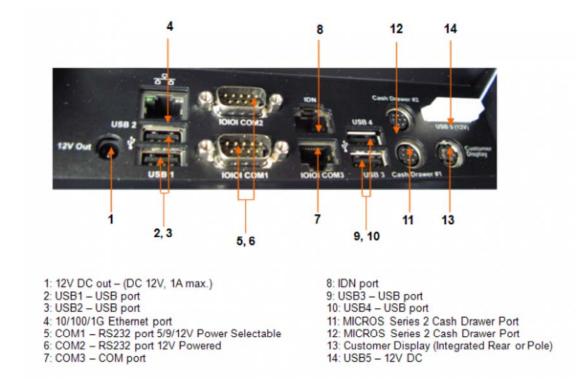
Press and hold this button to rotate the mTablet.

mStation Bottom View

AC power inlet

mStation High
Capacity Battery Cover

Accessory Mount
Points

I/O Panel

mStation I/O Panel

1: 12V DC out – (DC 12V, 1A max.)
2: USB1 – USB port
3: USB2 – USB port
4: 10/100/1G Ethernet port
5: COM1 – RS232 port 5/9/12V Power Selectable
6: COM2 – RS232 port 12V Powered
7: COM3 – COM port

8: IDN port
9: USB3 – USB port
10: USB4 – USB port
11: MICROS Series 2 Cash Drawer Port
12: MICROS Series 2 Cash Drawer Port
13: Customer Display (Integrated Rear or Pole)
14: USB5 – 12V DC
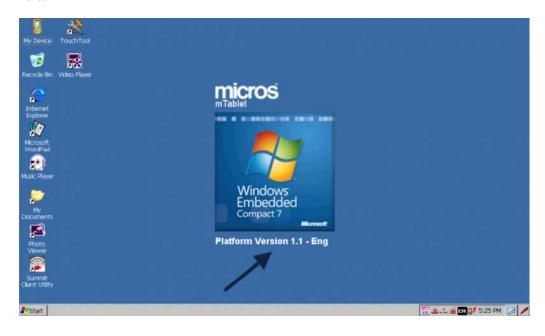
Warning: Do *not* insert a 6-Pin modular plug into the 8-Pin IDN port. A 6-Pin plug can push some pins out of position where they can short to the connector shell and possibly damage the IDN and or RS232 interface components. *Always* use an 8-Pin modular plug when you connect IDN or RS232 peripherals to the workstation.

mTablet and mStation Hardware Specifications

To review the Hardware Specifications for these devices, click here:[1] (http://www.micros.com/NR/rdonlyres/DBD63078-7D5D-4FA1-838E-7F294D67F36D/0/mStation13My16SpecsLR.pdf)

mTablet Platform Software

The mTablet platform version is always displayed below the '**Windows Embedded Compact 7**' logo in the splash screen as shown here.

The mTablet platform software consists not only of the Windows Embedded Compact 7 operating system, but also several other components that MICROS has developed specifically for the device. All of these components come pre-loaded on the mTablet. These software components include:

- A bootloader tailored for the mTablet, to provide pre-boot functionality such as the MICROS Factory Recovery and Auto Flash Upgrade.
- The OEM Abstraction Layer (OAL), essential software that allows the Windows Embedded Compact 7 OS to control the mTablet hardware.
- Hardware Device Drivers, specific to the unique capabilities of the mTablet and mStation.
- mTablet API Driver, to allow application programs to easily access the various functions of the mTablet.
- A Diagnostic Utility, providing a resource to test the functionality and validate software versions of both the mTablet and mStation. The Diagnostic Utility provides the ability to test peripheral components such as the magnetic card reader, cash drawers, operator display, customer displays and more.

MICROS Client Application Loader

The mTablet comes pre-loaded with a new MICROS Client Application Loader (CAL). The CAL is an intelligent software agent designed to remotely manage the software on the mTablet. The CAL is open in design and can be used with both MICROS and non-MICROS applications. A restaurant can implement or expand its Point-of-Sales (POS) by simply answering a few simple questions. The cost of the CAL is included in the cost of the mTablet.

mTablet Power Button & LED Management

This section describes the mTablet platform, Power button usage and LED states.

The mTablet power button is used to enter and exit low power states, reboot the system and activate the mTablet recovery tools. The LEDs on the mTablet and mStation provide an indication of system and battery status. The figure below shows the power button and LEDs location.

Power button function at "POWER OFF STATE"

When the system is in the **POWER OFF STATE**, the mTablet power button can perform three different functions, depending on how long the button is depressed.
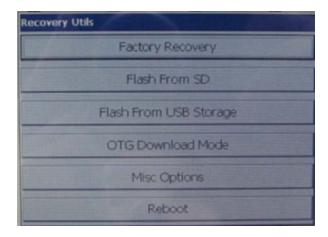
Time Interval	Function	Remark

0 seconds <X <2 seconds	System POWER UP	-
10 seconds <X <15 seconds	Factory Recovery mode	Red LED blinks; then release button
X >15 seconds	System SHUT DOWN	Red LED turns off; then release button

Option #1:
When the power is off, press the power button for less than 2 seconds and release, the system will power up.

Option #2:
When the power is off, press the power button for 10 seconds, the battery status LED at the top right corner of the display will blink red, release the power button. The system will display the **"Factory Recovery Mode"** screen.

	Warning!: All data on the microSD, including application data and offline totals will be lost during a Factory Recovery.

Option #3:
When the power is off, press the power button for more than 15 seconds, the battery status LED will blink red then turn off, release the power button. The system will shut down.

Power button function at "POWER ON or RESUME STATE"

When the system is in the **POWER ON** or **RESUME STATE**, the mTablet power button can perform two functions depending on the duration that it is depressed.

Time Interval	Function	Remark
X <1 second	System SUSPENDS	Vibrator on/off to signal; user releases button
X >4 seconds	System SHUT DOWN	Vibrator on/off to signal; user releases button

Option #1:
When the power is on, press the power button less than 1 second, a slight vibration will occur, release the power button. The system will enter suspend mode.

Option #2:
When power is on, press the power button more than 4 seconds, a slight vibration will occur, release the power button. The mTablet will shut down.

Power button function at "SUSPEND STATE"

When the system is in the **SUSPEND STATE**, users can resume the system by pressing the mTablet power button for less than 1 second.

Time Interval	Function	Remark
X <1 second	System RESUME	Vibrator on/off to signal; user releases button

mStation Status LED and Battery Charging LED

Battery Status LED

System Status LED

mStation System Status LED description

State			System LED
mTablet	Power	Power by	
Present	ON	Stand on AC power	GREEN
Present	ON	Stand on Battery Power	GREEN
Present	OFF	-	OFF
Not Present	-	-	OFF

mStation Optional Battery Status LED description

Battery status	Battery LED	
	Charging	Discharging
>20% Capacity	GREEN	GREEN BLINK
5% < Capacity < 20%	AMBER	AMBER BLINK
<5% Capacity	RED	RED BLINK
Discharged	OFF	OFF
No battery Present	OFF	OFF

Running the Windows Compact 7 Diagnostics Utility

For Windows Embedded Compact 7, the MICROS Diagnostic Utility is located at MyDevice/Boot/Utilities folder.

1. From the mTablet desktop, go to **MyDevice**-> **Boot->**-> **Utilities** folder.
2. Double-press or double-click on the **Diagutility_Vienna** icon.

3. The **"Micros Diagnostic Utilities"** main screen displays.
4. Press or click on the icon you want for more details.
5. Press or click on the **Exit** button to exit the MICROS Diagnostic Utility.
6. For all screens, press **Home** button to go back MICROS Diagnostic Utility main menu screen.

If the mTablet is docked on an mStation:

- The screen displays both of the mTablet and mStation diagnostic options.
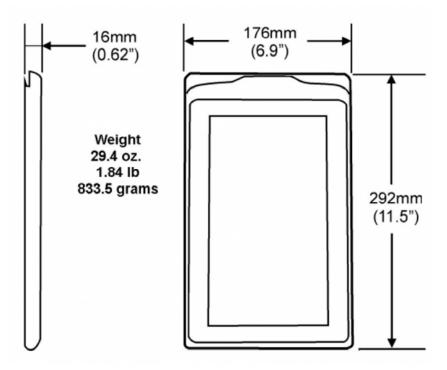- The screen title will read **"Docked"**.

Alternatively, if the mTablet is Floating (Un-docked) from the mStation:

- The screen only displays mTablet diagnostic options.
- The screen title will read **"UnDocked"**.
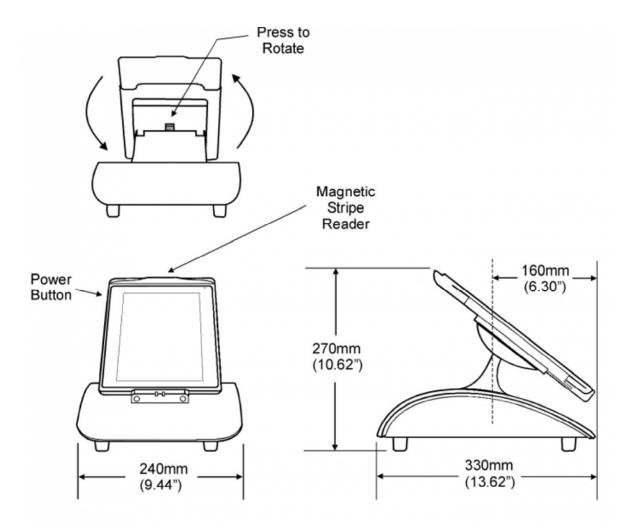
The dock and undock events are captured in Ops PMC logs for troubleshooting.

Dimensions

mTablet

16mm
(0.62")

176mm
(6.9")

Weight
29.4 oz.
1.84 lb
833.5 grams

292mm
(11.5")
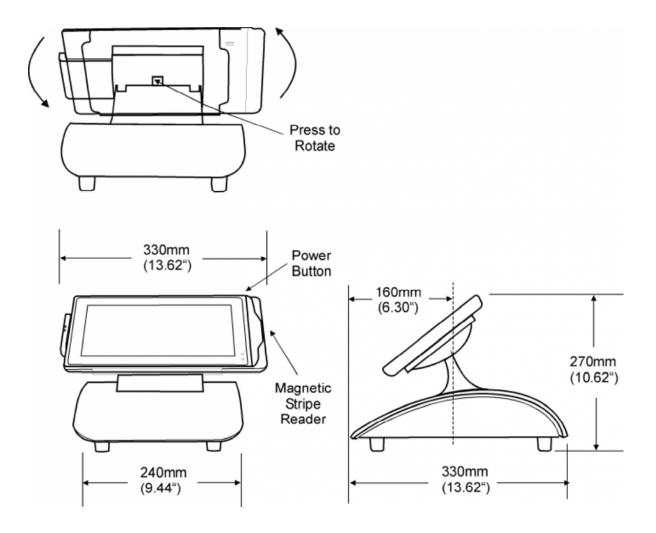
mTablet and mStation Portrait orientation profile

Press to
Rotate

Magnetic
Stripe
Reader

Power
Button

270mm
(10.62")

240mm
(9.44")

160mm
(6.30")

330mm
(13.62")

mTablet and mStation Landscape orientation profile

Press to Rotate

330mm
(13.62")

Power Button

Magnetic Stripe Reader

240mm
(9.44")

160mm
(6.30")

270mm
(10.62")

330mm
(13.62")
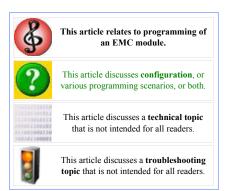
MTablet and mStation Troubleshooting Tips

*This article contains troubleshooting tips for Simphony installations utilizing mTablets and mStations (**R Series**). These troubleshooting steps are also available in Clarify and were written as Clarify Solutions. A .PDF document containing this same information (including the Clarify Solution numbers) has been made available for downloading (see the link provided below).*

Contents

	This article relates to programming of an EMC module.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses a **technical topic** that is not intended for all readers.
	This article discusses a **troubleshooting topic** that is not intended for all readers.

The **mTablet and mStation Troubleshooting Tips for Simphony** doc is available for downloading in PDF format: Download

Having trouble downloading the files from the links provided? You may need to log in to the Micros Member Login area

(http://members.micros.com/members/product_support/) to authenticate your credentials before downloading files.

(http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/mTablet_and_mStation_Troubleshooting_Tips_Simphony.pdf)

Clarify Solution 90719

Title = The mTablet is running really slow following a platform upgrade to Platform Version (PV) 1.2

Resolution = This issue can be caused by the upgrade failing on the mStation (base) unit. This results in a version mismatch that degrades performance. This is because PV1.2 changed the way data is written to the mStation's Persistant Store from the mTablet. In order for the new process to function correctly, both the mTablet and mStation need to be on the same version as changes were made on both ends. To verify the versions perform the following:

1. Close or Minimize Ops.
2. Access the *Start Menu-> Programs-> Windows Explorer* (or open MyDevice if on the Desktop).
3. Access the *BOOT-> Utilities-> DiagUtility_Vienna* which will open up the Diagnostics UI (equivalent to WS5A Diagnostics).
4. Access the mTablet '**Sys Info'** section (upper left corner) which will provide a list of version info for the mTablet as shown below:

    PV1.2 versions:
    MICROS Build Version = 5.8
    mTablet MCU Firmware version = V2.0s

mTablet Driver Version = 1.2E

5. Access the mStation Sys Info section which will provide firmware version info for the base unit: (only visible when the mTablet is docked to an mStation)

MCU version = 1.2 i
Base DLL = 1.8

If the mTablet upgraded to PV1.2, but the mStation version is lower than 1.2 i, performance will be greatly hindered. To correct this issue, an on-site technician will need to manually update the base firmware.

Clarify Solution 90722

Title = During a platform/firmware upgrade, the mStation's LEDs (located on the backside of the mTablet's base connector) will change colors

Issue 1: After running a platform upgrade on an mTablet/mStation, the mStation's LEDs do not power on and/or mStation's MCU Firmware version is blank.

Issue 2: After running a platform upgrade on an mTablet/mStation, the mStation's LEDs are both red.

Resolution = Issue 1: This is an issue in which the firmware update to the base was corrupted causing it to fail when written to the mStation's Persistent Store. The end result is what is known as a "bricked" base unit. The mStation unit will need to be RMA'd so that a manual flash can be accomplished. This can also be determined if there is no mStation MCU Firmware version in diagnostics (see Clarify Solution 90719).

Issue 2: The double red LEDs indicate that the firmware is being updated and it should not be powered off nor should the mTablet be removed. If the mTablet shows the all updates are completed and the LEDs are still red after a prolonged period of inactivity, a simple reboot of the mTablet should restore them to a green state. The mStation may also need to be power cycled (unplug the power cord and plug it back in) if rebooting the mTablet does not correct issue.

> **Note:** After a PV1.2 upgrade, the base LEDs indicate different things: one LED indicates a connection to the mTablet, while the other indicates the battery status of the BASE BATTERY, which is an optional battery that can be added (uses the same TOTEX battery that is used in KW270 WSs). Because of this change, only one green LED will display following the upgrade on a base with no battery, which is normal.

Clarify Solution 90730

Title = A site is trying to install peripheral devices on an mTablet/mStation and need to know which devices are supported

Resolution = With the release of Simphony 1.6 MR6, the following devices are supported on the mTablet/mStation:

- Serial Coin Dispenser (Telequip model only)
- Serial Barcode Reader: both Standard and 2d (QR code) Barcode scanners (Note: SarOps will only support Standard Barcodes with the 2d scanner, but QR codes can be used via SIM using pass-through mode for 3rd party software)
- Serial ViVOpay 4800m RFID Reader
- Customer (Pole) Displays: 20x2 and 10x2
- Cash Drawers (2) - older models require a dongle cable to convert the connector to a smaller mStation connector
- Printer with optional Sales Recording Module (SRM) device
- IP Printer TM-88 Printer (locally managed)
- IDN Printer TM-88
- Bluetooth (Epson P60) printer
- Bluetooth Bixolon-SPP-R200II printer
- Integrated Magnetic Stripe Reader
- Serial Mettler Toledo-VIVA Scale
- Serial Mettler Toledo-8217 Scale

Note: Most devices will not function when the mTablet is configured with the Workstation **[39 - Floating Tablet]** option enabled (see Clarify Solution 90732). Key exceptions are the IP and Bluetooth printers.

Clarify Solution 90732

Title = mTablet peripheral devices do not function or the EMC displays no devices in the dropdown menu when trying to add a device to the *EMC-> Property-> Workstations-> **Devices*** section

Resolution = In Simphony v1.6 MR4 - MR6, only partial functionality for the mTablet has been added. This means that the mTablet is only supported in "**Always Docked**" or "**Never Docked**" (AKA Floating) states. To facilitate these modes, an option has been added to the *EMC-> Property-> Property Hardware-> Workstations-> Options tab-> **Offline/Misc tab*** called **[39 - Floating Tablet]**. This option should only be enabled if the mTablet in question is going to be used as a Hand Held device with no mStation base attached (or only using the base for battery charging purposes). Enabling this option disables any peripherals used by the MicrosDevices.dll (with the exception of the integrated MAG Card Reader). If a user tries to enable this option with devices already configured, the EMC will generate an error that an invalid device has been configured when trying to "**Save**" the change. If the option is enabled without any previously configured devices, it will save as expected; however, the devices dropdown menu will not populate. This is done so users cannot add devices to a "**Floating**" tablet and would require them to be removed upon switching to a "**Floating**" mTablet state.

Clarify Solution 90734

Title = When undocking an mTablet to use as a Hand Held workstation, SarOps generates a "Please connect this tablet to its station to perform operations" message when trying to Sign In

Resolution = This message is generated in Simphony v1.6 MR4 - MR6 because those versions only support "**Always Docked**" or "**Never Docked**" functionality. In order to prevent this message from displaying on an mTablet that is a "**Never Docked**" mTablet, the *EMC-> Property-> Property Hardware-> Workstations-> Options tab-> **Offline/Misc tab*** -> **[39 - Floating Tablet]** option should be enabled.

Clarify Solution 90737

Title = When attempting to CAL a new mTablet, users are able to select the Application server and a Property, but no Workstation (WS) identities are present. Other Workstations display Workstation identities

Resolution = The most common cause of this issue is that the mTablets Workstation configuration is incorrectly set to **[2 – Workstation]**. CAL on the mTablet is set to only look for WS identities with the **[6 – mTablet]** Workstation Type. Perform the following steps:

1. Access and open the *EMC-> Property-> Property Hardware-> Workstations-> **General*** tab.
2. Select the new mTablet record and set the Workstation "**Type**" field to **[6 – mTablet]** and "**Save**" all changes.

Clarify Solution 90739

Title = When trying to configure an mTablet as a Service Host (e.g., KDS Controller, Interface, etc.), those services fail to start and won't run

Resolution = Simphony v1.6 MR4 - MR6 does not support WebServer for mTablets. The only services that can be run through an mTablet are ones that can be configured using SarOps' 12359 Port such as an Offline Open Check and Shift Cache or Offline Labor Cache (OLC)/Offline Transaction Cache (OTC).

Clarify Solution 90747

Title = The site has performed a WipeStore (WCF) on their mTablet which removed the WiFi configuration on the "**Never Docked**" (Floating) mTablet

Resolution = Similar to the DT Research 430 Mobile MICROS Hand Held (MMH), the mTablet uses the Summit Client Utility (SCU) software to configure a WiFi connection to an Access Point (AP). Perform the following steps to (re)configure WiFi:

1. From the Windows CE7 desktop (or *Start* button-> *Programs*), select the Summit Client Utility (SCU).
2. Navigate to the Profile tab and select the "**Scan**" button.
3. A list of available Access Points (APs) will generate, select the appropriate AP from the list and select "**Configure**" (or double tap the AP).
4. A prompt about creating a new profile will pop up and display the type of encryption used.

The most common are:

> **WPA PSK**
> **WPA2 PSK (PSK stands for PassKey or password)**

1. Select "**Yes**" to enter the PassKey.
2. Enter the PassKey (password) which is usually case-sensitive into the field and select "**OK**" (the on-screen keyboard will display when you tap within the password field).
3. Users will then see a new profile named after the AP that was selected. Be sure to select the "**Commit**" button on the Main Profile page to "**Save**" all changes.
4. Users will need to make the profile active by navigating back to the Main tab, select the dropdown menu and locate/select the new profile.
5. Lastly, once the profile displays in the dropdown menu, select the "**OK**" button in the upper right corner of the window, this should connect the WiFi (which is visible in the lower right corner of the *Start* bar by Windows clock) if all settings/PSK are correct.

Additionally, users may also have to configure multiple profiles in cases where multiple on-site APs have been assigned different SSIDs (names). In this case users would need to repeat the steps above for each AP SSID with the difference being that instead of selecting a single profile in the dropdown menu, users would use the "**List**" option located just below the dropdown menu. Select all of the applicable profile check boxes and select "**OK**". With a list in place, users can then select the radio button for Auto Profile to "**ON**" and this will automatically change profiles when a stronger AP signal in the list is present compared to the one you are currently using.

> **Note:** In instances where multiple on-site APs use the same SSID (such as hotels or stadiums), users only need to create one profile. The strongest AP signal will be used similar to Auto Profile but the transition is more seamless since all APs are using the same SSID/PSK. Additional (more advanced) options are also available in the *Profile tab* and *Global tab*. These settings should only be adjusted when the default settings do not perform as expected or if a site (IT) has specific settings that need to be used.

Clarify Solution 90761

Title = Site/tech needs assistance configuring an Epson P60 Bluetooth (BT) printer on the mTablet

Resolution = Similar to the DT Research 430 Mobile MICROS Hand Held (MMH), the mTablet also has a Bluetooth pairing application contained within the Windows CE Control Panel.

Perform the following steps to pair/configure the Epson P60 printer on the mTablet:

1. Run the Self Test on the new BT printer by powering off the printer, holding down the "**Feed**" button and powering it back on. This will give users the BT address and PIN needed for the EMC configuration.
2. Access and open the *EMC-> Property-> Property Hardware-> **Printers*** module and insert a new record.
3. Select the "**Printer Type**" **[Epson Bluetooth]** in the dropdown menu.
4. Enter the BT address from the Self Test printout as well as the PIN in their respective fields.
5. Link the mTablet that is going to be paired with the printer as the Print Controller and "**Save**" the record. Be sure to assign the BT printer under the *EMC-> Property-> Property Hardware-> Workstations-> **Printers tab*** for the mTablet as well for whatever print jobs you want to use it for.
6. On the mTablet, minimize/close SarOps.
7. Open the Windows CE Control Panel and open the "**Bluetooth Device Properties**" utility.
8. Depending on which view/position users are utilizing on the mTablet (Portrait or Landscape) will determine how the UI looks. Using the mTablet in Portrait view (MAG Card Reader up or down) will only have a single window; whereas, holding it in

Landscape view (MAG Card Reader on left or right) will have 2 windows where the second window is the "Trusted Devices" window.

9. Ensure that the printer is not powered off (or in PowerSave mode) and select the "**Scan Device**" button within the utility.
10. After some time, the printer should display on the list (check the Self Test printout for the printer's name). Users will most likely see 2 instances of the same name with different icons (one looks like a printer and the other looks like a blue circle with arrows... this is the BT sync).
11. Select the BT sync instance first (tap and hold in single window, tap and use arrow to move to trusted window if present) and users will be prompted if they need to authenticate; select "**YES**" and enter the PIN from the Self Test printout.
12. Repeat step 11 for the Printer instance as well.
13. Tap and hold the BT Sync and set it to be active and do the same for the printer (users should see the icons display red check marks).
14. Restart SarOps and test the printing.

> **Note:** If the first scan shows the printer name with a logo that has a '**?**' in it, authenticate it using the steps outlined above and close and reopen the utility and the correct icons should be present.

Clarify Solution 90763

Title = Users would like to deploy a CAL package to mTablets only

Resolution = With the addition of the mTablet, the *EMC-> Enterprise-> Hardware-> **CAL Packages*** module has been updated to include a new "**Platform Type**" called **[68 – mTablet]**. Selecting this platform type for CAL Packages will deploy solely to mTablets.

MTablet Configuration

*This article reviews the configuration steps for adding an mStation client (a.k.a. the **mTablet R Series**) to the EMC.*

Contents

This article discusses a topic related to **hardware**.

This feature or functionality was introduced in Simphony 1.6 Maintenance Release 4.

This article discusses **configuration**, or various programming scenarios, or both.

EMC Configuration

Configuring the mTablet is much like adding any other workstation.

1. In the EMC, select Property, select

Workstations, select General, and then select **General Settings**.
2. In the Type field, select **[6 - Tablet Client]**.

> **Note:** With the release of Simphony 1.6 Maintenance Release 9, the name of the '**Type**' field for these workstations has been changed to **[6 - mTablet R-Series Client]**.

To configure an mTablet as a floating (permanently un-docked) client:

1. In the EMC, select

Workstations, select Options, and then select **Offline/Misc**.

2. In the Miscellaneous Options section, select option **[39 - Floating Tablet]**. Unselect this option to use most common peripheral hardware devices.

> **Note:** With the release of Simphony 1.6 Maintenance Release 6 (and later), support for serially connected scales has been added for mStations. Additionally, the **Bixolon-SPP-R200II** printer is supported for Bluetooth printing on mTablets and Mobile MICROS Handhelds (MMH). See the Bluetooth Printing article for more details.

Peripheral Device Support

The following is a breakdown of the current peripheral device support for the mTablet and mStation under differing network connectivity and configuration scenarios:

mTablet/mStation Peripheral Support	Docked	or	Floating
Wired or	-Integrated Magnetic Stripe Reader -Cash Drawers (2) -IDN TM-88 Printer -IP TM-88 Printer (locally managed) -Serial TM-88 Printer -TM-P60 Bluetooth Printer -Serial Coin Dispenser (Telequip only) -Serial ViVOpay 4800 RFID Reader -Serial Barcode Reader -Serial Mettler Toledo-VIVA Scale -Serial Mettler Toledo-8217 Scale -2x20 Customer Display		(Offline Mode) -Integrated Magnetic Stripe Reader -TM-P60 Bluetooth Printer
Wireless	-Integrated Magnetic Stripe Reader -Cash Drawers (2) -IDN TM-88 Printer -TM-P60 Bluetooth Printer -Serial TM-88 Printer -Serial Coin Dispenser (Telequip only) -Serial ViVOpay 4800 RFID Reader -Serial Barcode Reader -Serial Mettler Toledo-VIVA Scale -Serial Mettler Toledo-8217 Scale -2x20 Customer Display		-Integrated Magnetic Stripe Reader -TM-P60 Bluetooth Printer

Configuring the MagTek Dynapro Mini

Follow these steps to configure the MagTek Dynapro Mini for use with the mTablet E-Series:

1. In EMC, select Property, select Setup, select Workstations, select the workstation, and then select **Options**.
2. Select Display/Security option **[55 - Enable the Encrypted MSR]**.
3. Select Hardware/Cash Drawer option **[57 - Use PinPad as MSR reader]**.
4. Click the **Devices** tab.
5. Click **Add**.
6. In the Select Peripheral Device Type drop-down list, select **USB or Bluetooth Mag Stripe Reader** and click **OK**.
7. Save the changes.
8. Reload the workstation database and restart the Service Host.

MTablet Configuration

*This article reviews the configuration steps for adding an mStation client (a.k.a. the **mTablet R Series**) to the EMC.*

Contents
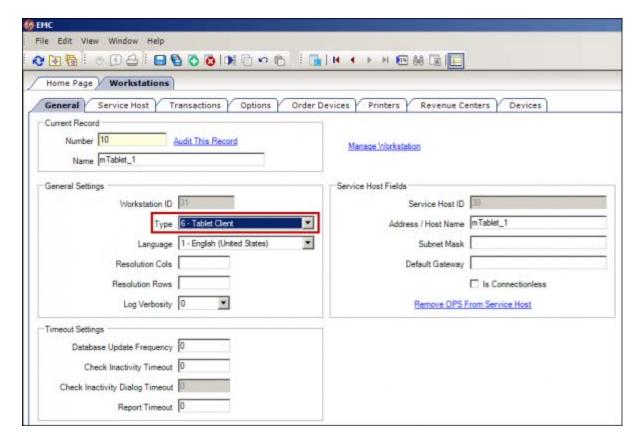
- 1 EMC Configuration
  - 1.1 Peripheral Device Support
    - 1.1.1 Configuring the MagTek Dynapro Mini
- 2 See also

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This feature or functionality was introduced in Simphony 1.6 Maintenance Release 4.

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1. In the EMC, select Property, select Workstations, select General, and then select **General Settings**.
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1. In the EMC, select Workstations, select Options, and then select **Offline/Misc**.
2. In the Miscellaneous Options section, select option **[39 - Floating Tablet]**. Unselect this option to use most common peripheral hardware devices.

> **Note:** With the release of Simphony 1.6 Maintenance Release 6 (and later), support for serially connected scales has been added for mStations. Additionally, the **Bixolon-SPP-R200II** printer is supported for Bluetooth printing on mTablets and Mobile MICROS Handhelds (MMH). See the Bluetooth Printing article for more details.

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4. Click the **Devices** tab.
5. Click **Add**.
6. In the Select Peripheral Device Type drop-down list, select **USB or Bluetooth Mag Stripe Reader** and click **OK**.
7. Save the changes.
8. Reload the workstation database and restart the Service Host.

See also

- MTablet and mStation
- MTablet and mStation Troubleshooting Tips
- Simphony 1.6 Maintenance Release 4
- Simphony 1.6 Maintenance Release 6
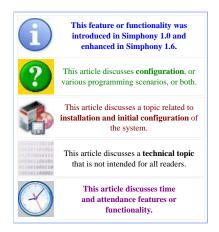
Offline Cache Service Host

With the release of Simphony v1.6, significant changes have been made to the Offline Labor Cache (OLC) and Offline Transaction Cache (OTC) feature and configuration. For versions prior to Simphony v1.6, this article's initial content remains valid.

Contents

This feature or functionality was introduced in Simphony 1.0 and enhanced in Simphony 1.6.

This article discusses **configuration**, or various programming scenarios, or both.

This article discusses a topic related to **installation and initial configuration** of the system.

This article discusses a **technical topic** that is not intended for all readers.

This article discusses time and attendance features or functionality.

Overview

The **Offline Cache Service Host**, sometimes shortened to **Offline Cache** or called the **Offline Cache Workstation**, is a workstation that is configured to collect and store timekeeping and transactional information while a property is running in yellow mode. In yellow mode, workstations in a property cannot communicate directly with the database; instead, they communicate with the workstation configured as the Offline Cache Service Host, which stores relevant information that allows users to take reports and perform other functions (such as clocking in and out) until communication with the database is restored. The workstation programmed as the Offline Cache Service Host workstation is sometimes called the **Offline Labor Cache (OLC)** or **Offline Transaction Cache (OTC)**, as these are the two primary functions of the workstation; additionally, the abbreviation **OLC/OTC** or **OTC/OLC** may be used.

Configuration

The Offline Cache Service Host is configured in Property Parameters, on the Workstations tab as shown on the right. In this example, the Service Host **5 - 25 - Bartender Left** is configured as the Offline Cache Workstation. Note that this grid displays both the Service Host number (**5**) and the workstation number (**25**); users are more accustomed to seeing the Workstation Number, however this field is actually storing the Service Host number in the database. (This field logs the Service Host number to Audit Trail.)

The Workstations tab in Property Parameters.

Online Functionality

While workstations are online, all transaction postings and labor communications are sent to the OTC/OLC in addition to the data center. This constant updating of the Offline Cache Service Host allows the OTC/OLC to fully take over in the event of a communication failure with the data center.

Yellow Mode Functionality

Labor

While in Yellow Mode, all labor operations will be directed to the OTC/OLC. When a user clocks in or out, the operation is recorded in the OLC. While in yellow mode, other workstations contact the Offline Cache Service Host workstation to determine the clock in/out status of employees. One labor report, the offline employee time card report, can be generated while in Yellow Mode. Time Card Adjustments, Schedule, and break enforcement functions will not be available while in Yellow Mode. When the connection is reestablished with the data center, the OLC will automatically synchronize its data.

Transactions

While in Yellow Mode, all transactions will be directed to the OTC/OLC. When an operator runs a report from a workstation, that workstation contacts the Offline Cache Service Host workstation which returns the appropriate figures. When connection is reestablished with the data center, the OTC will automatically synchronize with the data center.

> Unlike other offline reports, the Offline Open Check Report is not generated from the Offline Cache Service Host. When this report is run, the current workstation broadcasts a request to all relevant workstations to determine the open checks.

In general, the Offline Cache Service Host shows the most accurate reporting figures. There may be situations where the OTC is online, but other workstations are still working in Yellow Mode. (This situation is possible when the workstation option bit, **[Disable Auto-Online]** is enabled.) In this case, the OTC is aware of the other workstations' Yellow Mode checks, but the mymicros.net Reporting database is not. Thus, a report taken in mymicros.net will not contain all the checks/totals that the OTC knows about; until the other workstations return to online mode, the OTC will run reports using checks that have not been posted in the database.

Red Mode Functionality

The Offline Cache Service Host workstation is the workstation that creates the Yellow Mode environment; so there is technically no such thing as "Red Mode" for the OTC/OLC workstation. In the event of a complete network outage, users should be encouraged to use the OTC/OLC workstation for all timekeeping operations to limit the need for manual adjustments. See the Clock In/Out article's offline section for more information.

Technical Information

- All communication to and from the Offline Cache is TCP.

Recommended Configuration

- While the physical workstation configured as the Offline Cache Service Host can run on any platform, the workstation acts as a server, so faster workstations work better for this task. For instance, a 2010 workstation will likely perform better than a WS4.
- MICROS recommends that sites connect the Offline Cache Service Host to a UPS to provide against data loss during power outages.
- Often, sites configure the Offline Cache Service Host in a secure location, where users cannot interact with it. At sites where it is not in a secure location (it is being used as a workstation by employees in the property), users should be made aware of the special status of this workstation. Specifically, users should avoid power-cycling the workstation (this could cause data corruption) and they should be made aware that requests for Yellow Mode reports or Labor Updates will fail if the Offline Cache Service Host is powered off.
- A maximum limit of 300 workstations can connect to a single Offline Cache. The "Is Connectionless" setting is available to allow more WS to use the offline cache than the 10 concurrent connections in Windows XP. OLC's running Windows Server 2003 do not need this option enabled.

> One common misconception is that the Offline Cache Service Host stores checks while a property is running in Yellow Mode. This is not accurate. A check is always stored by the workstation which accessed the check most recently.

Simphony v1.6 Offline Labor and Transaction Cache Changes

> **This feature or functionality was introduced in Simphony v1.6.**

Overview

On previous versions of Simphony v1.x, when a Workstation was programmed as the Offline Cache Service Host, its two primary functions were to act as both the Offline Labor Cache (OLC) and the Offline Transaction Cache (OTC). This release (v1.6) separates those functions (from the Ops clients too) so that the OLC and OTC can communicate separately to the Enterprise. The following changes have been made;

- Changes were made to the EMC to allow users to configure the OLC and the OTC to run on different Service Hosts.
- The OLC can be configured to run on either a Service Host or a Workstation.
- The OLC has been removed from Ops and there is a now an OLC Handler Service value in the ServiceHost.xml.
- The OLC Handler runs on a Service Host as an EGateway Handler using IIS.
- The OLC should run at the Property level.
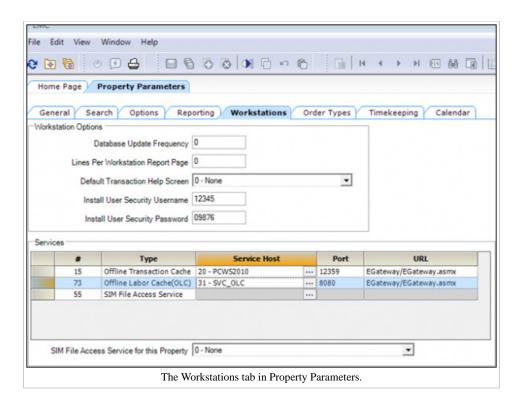- The OTC still requires Ops to run.

Simphony v1.6 Configuration

EMC

Access the EMC and select the applicable *Property-> Property Information-> Property Parameters-> **Workstations*** tab-> under the '**Services'** section there is a '**Type'** column with a row named '**Offline Labor Cache (OLC)'** that allows the user to designate the OLC Service Host.
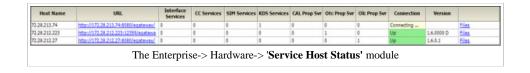
The '**Port'** field for the OLC is configurable.

- Use Port number **8080** if the OLC is running on a Service Host.
- Use Port number **12359** if the OLC is running as a part of a Workstation.

The Workstations tab in Property Parameters.

Additional changes related to this feature have been made in the EMC.

Access the *EMC-> Enterprise level-> Hardware-> Service Host Status* module and note the following;

The Enterprise-> Hardware-> '**Service Host Status**' module

- A new '**Olc Prop Svc**' column has added. Under the '**Olc Prop Svc**' column on the row of the designated 'Offline Labor Cache' Service Host machine, the column displays the number of cumulative OLC services that are configured in the EMC-> Hardware-> '**Service Hosts**' module.

From the same location in order to access the Offline Labor Cache log files;

- Click on the '**Files**' link, go to EgatewayLog folder, users can see the '**Offline Labor Cache logs**' (OlcLog.txt , OlcLog.txt.0 and etc.). The OlcLog.txt is the most recent log file.
- To read a log, highlight the row of the log file and click on the '**View**' button. Click the '**Save**' button to save a copy of a log. Click the '**Close**' button to exit the window.

The Enterprise-> Hardware-> '**Service Host Status**' module

PMC Change

From an Ops Client, access the PMC-> Diagnostics-> Services tab and note the addition of the '**Offline Transaction Cache'** and '**Offline Labor Cache'** fields.

Ops Client-> PMC-> Diagnostics-> '**Services'** tab

Simphony v1.6 MR1 Offline Labor and Transaction Cache Changes

This feature or functionality was introduced in Simphony v1.6 MR1.

Overview

With the release of Simphony 1.6 Maintenance Release 1, the Offline Labor Cache (OLC) and the Offline Transaction Cache (OTC) functions were modified so that they may be configured to run from Ops clients or from separate non-Ops machines so they can run under IIS or from a Service Host.

The formerly named 'Offline Labor Cache' and 'Offline Transaction Cache' services have been renamed and had some of their functionality realigned. The names of the services are now:

1. **Offline Open Check and Shift Cache**
2. **Offline Labor and Transaction Cache**

- For the 'Off-line Open Check Report' to be accurate, the Offline Open Check and Shift Cache must be on an Ops client that supports all of the Revenue Centers in the Property.
  - **Note:** Technically, this works both ways. That is, if the 'Offline Open Check and Shift Cache' is linked to all of the RVC's or if all of the Workstations are linked to the RVC the 'Offline Open Check and Shift Cache' is located.
- For Off-line Employee and Cashier shift increments to operate correctly, the Offline Open Check and Shift Cache Workstation must be accessible to all of the clients in the Property. This is because the shift change is broadcast from the Offline Open Check and Shift Cache.

Note: The Offline Open Check and Shift Cache can only be configured on an Ops client running on Port **12359**. The Offline Labor and Transaction Cache can be configured running on either Port **12359** (if using an Ops client) or **8080** (if using a Service Host without Ops).

Additionally, in order for the Offline Check and Shift Cache to allow shift increments, the Workstation designated as the cache needs to be in an Off-line state. Otherwise, users will receive an '**Offline Server Unavailable'** message when they attempt to increment a shift from the PMC Procedure.

Offline Cache Service Host
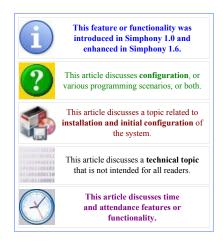
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- **To navigate to the Simphony v1.6 section of this article, click here.**
- **To navigate to the Simphony v1.6 MR1 section of this article, click here.**

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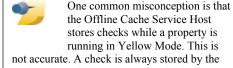
Technical Information

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Recommended Configuration

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This feature or functionality was introduced in Simphony v1.6.

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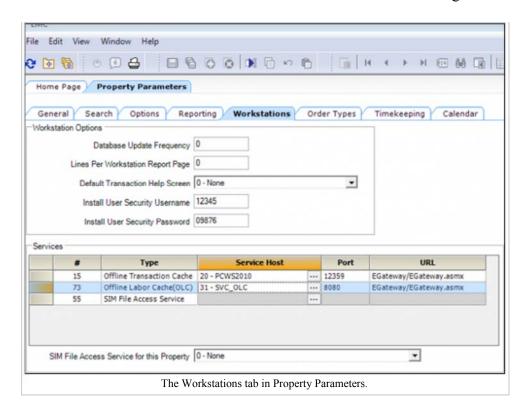- The OTC still requires Ops to run.

Simphony v1.6 Configuration

EMC

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The '**Port**' field for the OLC is configurable.

- Use Port number **8080** if the OLC is running on a Service Host.
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Additional changes related to this feature have been made in the EMC.

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PMC Change

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Ops Client-> PMC-> Diagnostics-> '**Services'** tab

Simphony v1.6 MR1 Offline Labor and Transaction Cache Changes

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With the release of Simphony 1.6 Maintenance Release 1, the Offline Labor Cache (OLC) and the Offline Transaction Cache (OTC) functions were modified so that they may be configured to run from Ops clients or from separate non-Ops machines so they can run under IIS or from a Service Host.

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2. **Offline Labor and Transaction Cache**

   - For the 'Off-line Open Check Report' to be accurate, the Offline Open Check and Shift Cache must be on an Ops client that supports all of the Revenue Centers in the Property.
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Offline Transaction File (OTF) Handling

This article reviews the Offline Transaction File (OTF) Handling process from SarOps clients and the EMC

Contents

- 1 Overview
    - 1.1 Usage
    - 1.2 EMC Configuration
        - 1.2.1 Enterprise Roles
        - 1.2.2 Purge Job
    - 1.3 OTF Handling Flow Chart
- 2 See also

	This article relates to programming of an EMC module.
	This feature or functionality was introduced in Simphony v1.6 MR7.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses a **technical topic** that is not intended for all readers.
	This article discusses a **troubleshooting topic** that is not intended for all readers.

Overview

The handling of OTF files and their replay has been enhanced to improve troubleshooting and supportability. SarOps clients have a new directory structure to store OTF files that are created when Workstations lose communication with the Enterprise application server. Each Workstation currently has an OTF folder. Within the OTF folder, three additional folders will be created. The folders and their purpose are listed below:

- **OTF_CURRENT** folder – This folder will store the Offline transaction files. One OTF file is created for each day at Midnight based on the systems UTC Time Zone settings. The file's naming convention will resemble the following syntax: **OTF_YYYYMMDD.bin**

So, for example, if a Workstation is in an Offline state for three days, there will be three separate OTF files created (one for each day). This should help prevent OTF files from becoming too large.

- Once communication to the Enterprise application server has been re-established, replay of the Offline transactions will begin automatically. Users will see the percentage of completion during the replay of Offline transactions on the Workstation's display. If for some reason a transaction fails to replay successfully, the system will move on to replay the next transaction until its finished replaying all of the records. Any failed replay records will be moved to the OTF_REPLAY folder and the successfully replayed contents of the OTF_CURRENT folder will be deleted.
- **OTF_REPLAY** folder – This folder is where failed replay records from the OTF_CURRENT folder will be stored. Once the Ops client is brought Online, the failed OTF file will try to replay again. If that attempt fails, the records will be moved to the OTF_ERROR folder.
- **OTF_ERROR** folder – If the records fail to replay from the OTF_CURRENT folder, the files will be sent to the Enterprise. Large files will be broken into small data blocks (so that network resources are not overly taxed) and sent to the Enterprise.
- Any pre-existing (legacy version) OTF.bin files will be moved to the OTF_CURRENT folder after performing an upgrade of the SarOps client to this version. OTFMsg.Err files will be left in place for manual replay, review or removal.
- When a check is being picked up on an Offline (Yellow mode) Workstation, all associated records (stated as below) will be marked as **'DRH_PICKEDUP'** in the original OTF.bin file. Then they will be added to the OTF.bin file of the Workstation that actually picks up the check.
    - **CSMD_POST_SALE_WRITE_CHECK**
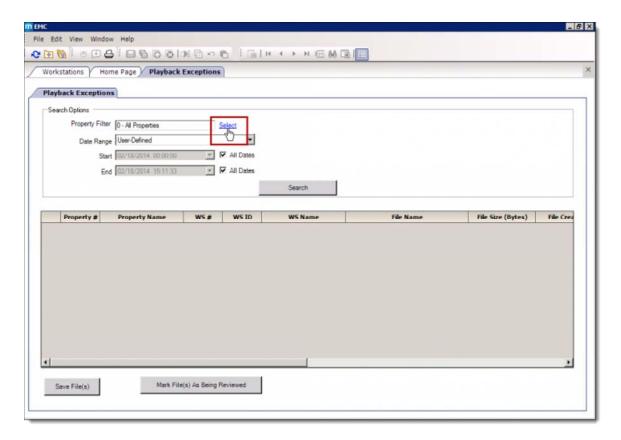   - **CSMD_WRITE_CHECK**
    - **CSMD_CANCEL_TRANS**

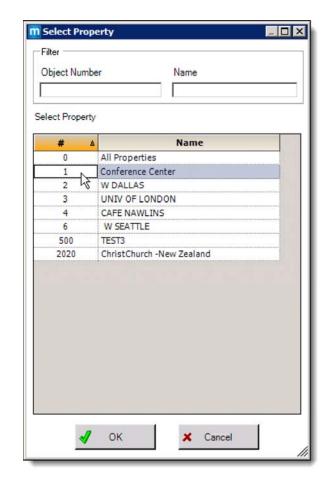Replay will skip the records marked as 'DRH_PICKEDUP'.

Usage

A new module to assist in troubleshooting failed OTF Playback files has been added to the EMC and may be located by accessing the *EMC-> Enterprise level-> Enterprise Information-> **Playback Exceptions*** module. This module will allow privileged users to search for and download failed replay OTF files.

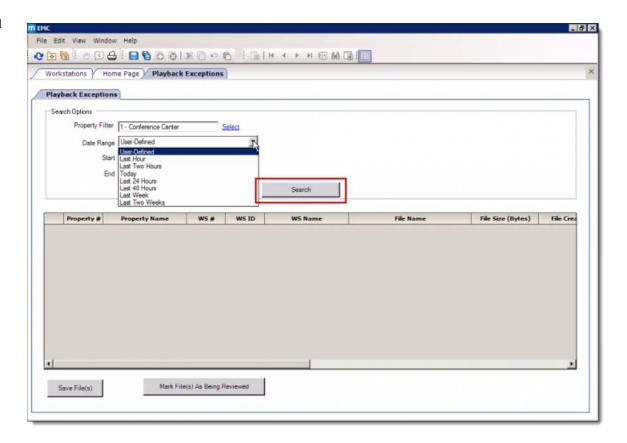When users want to review the system for failed replay files, follow the steps below:

1. Open the Playback Exceptions module.
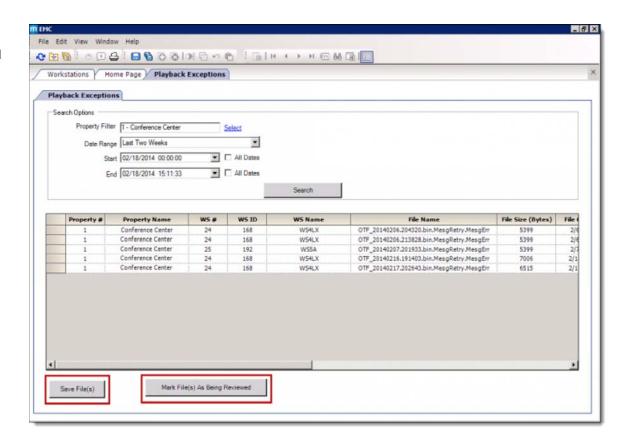2. Next to the **'Property Filter'** field, click on the **'Select'** link.

3. All of the Properties will display. One option allows users to select **'0 - All Properties'**. Otherwise, users can select one Property at a time. Once a Property has been selected, click **OK** to continue or **Cancel** to exit.

# ▲	Name
0	All Properties
1	Conference Center
2	W DALLAS
3	UNIV OF LONDON
4	CAFE NAWLINS
6	W SEATTLE
500	TEST3
2020	ChristChurch -New Zealand

4. From the '**Date Range**' field, users can choose a timeframe for the OTF files that they'd like to save and review. If the '**User Defined**' option is selected, the '**Start**' and '**End**' fields become enabled and can have specific Dates and Times entered by the user.

5. When the desired '**Date Range**' has been set, click the '**Search**' button.

6. OTF files that meet the search options criteria will display.

7. The displayed OTF files can be downloaded and saved to the user's Remote EMC computer. Files can be selected individually or in multiples. When users select more than 5 files at one time, they'll receive a message prompt that reads as follows:
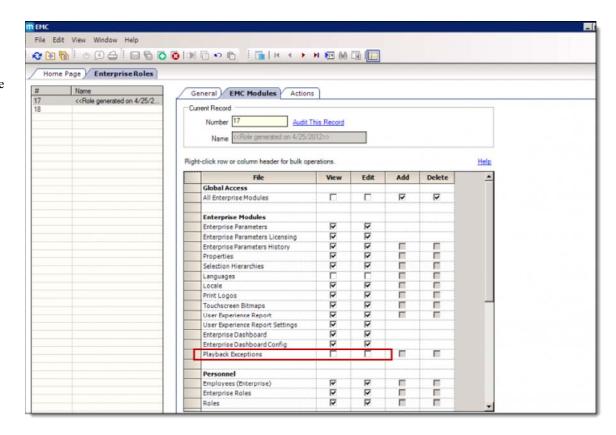
> **The files you try to save will be more than X files. Continue?**

X = 5, 10, 15 and 20. Once more than twenty records have been selected, users will no longer receive the message prompt to continue.
8. To save OTF files to a local computer, highlight the desired files and click the **'Save File(s)'** button. Users will have a choice as to where to save the OTF files on the local computer.
9. After the OTF files have been saved to a local computer, they can be accessed and reviewed with the OTFEdit.exe tool. The OTFEdit.exe tool has been enhanced to display the newly added 'DRH_PICKEDUP' status.
10. Once a file has been reviewed, users can mark the files as having been reviewed by highlighting the records and then clicking the **'Mark Files(s) As Being Reviewed'** button. This flags the OTF files to be purged from the database via the new **'Playback Exception Data'** Purge Job that has been added to the system.

EMC Configuration
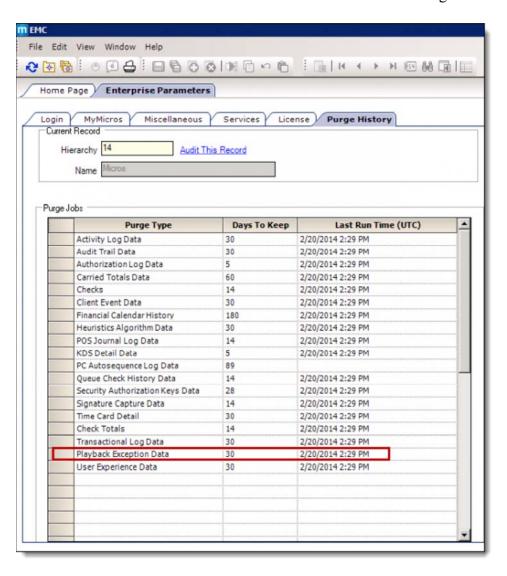
Enterprise Roles

In order to access the **'Playback Exceptions'** module, users must first have the privileges assigned to their Employee Enterprise Role. Access the *EMC-> Enterprise level-> Personnel-> Enterprise Roles-> EMC Modules tab-> **Playback Exceptions***. Users can be granted **View** and\or **Edit** privileges.
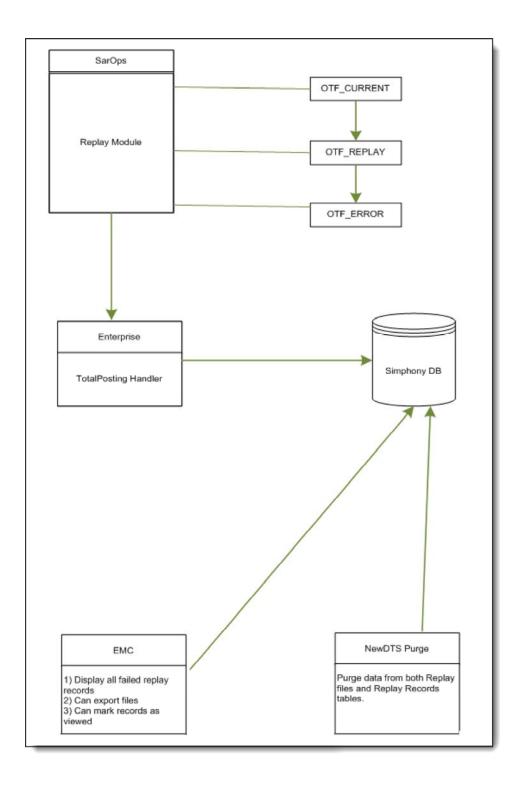
Purge Job

A Purge Job has been added to the *EMC-> Enterprise level-> Enterprise Information-> Enterprise Parameters-> **Purge History tab**->* Purge Jobs. The Purge Job is named **'Playback Exception Data'**. Enter the number of days under the **'Days to Keep'** column to establish when the 'Playback Exception Data' will be purged from the database.
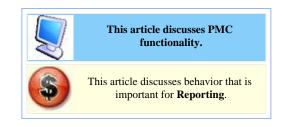
Note: Regardless of the **Playback Exception Data** Purge job setting, it is important to note that OTF files that have been pushed to and reside at the Enterprise, will *not* be deleted or purged until they have been flagged as having already been reviewed (via the **Mark File(s) As Being Reviewed** button). This may be particularly true for those locations that have Workstations that currently have OTF files that have failed to replay prior to upgrading to this version (Simphony 1.6 MR7). Users will need to access the 'Playback Exceptions' module in EMC to search for and highlight each undesired OTF file record and click the **Mark Files(s) As Being Reviewed** button. When the *Purge Job-> Playback Exception Data-> Days to Keep* setting is reached, the OTF file data will be deleted from the database.

OTF Handling Flow Chart

Offline Cashier Financial Report

The **Offline Cashier Financial Report** provides financial information for each cashier, including tenders and tips paid. This report is taken in the PMC and it is only available when working in Offline Mode.

This article discusses PMC functionality.

This article discusses behavior that is important for **Reporting**.

Contents
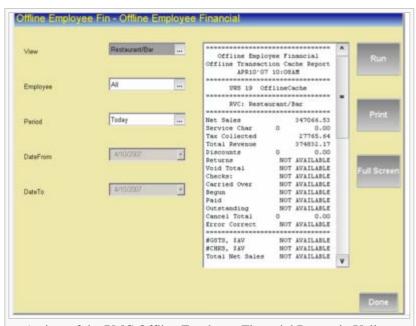
- 1 Autosequence Configuration
- 2 Yellow Mode
- 3 Red Mode
- 4 Report Examples
- 5 See also
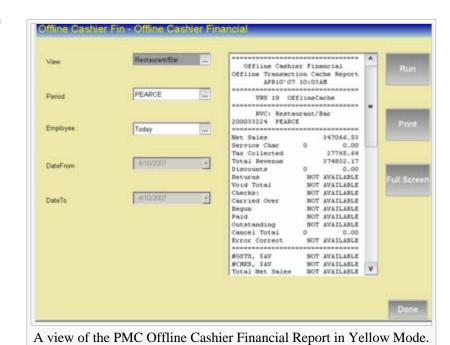
Autosequence Configuration

The Offline Cashier Financial Report (#33) is a different WS Autosequence report than the online version (#14). When a workstation is operating in Offline Mode, there is no way to run the online version of the report; therefore two separate autosequences must be programmed. When in offline mode, PMC displays only the autosequences that can be run offline. Similarly, when in online mode, PMC does not display autosequences that can be run offline.

Yellow Mode

In Yellow Mode, Offline Cashier Financial Reports are available for "Current Shift", "Previous Shift", "Today", "Yesterday" or a date range. Like all Yellow Mode Financial Reports, there are some limitations when the Offline Cashier Report is taken. See the Yellow Mode Financial Report Limitations article for more information.

A view of the PMC Offline Cashier Financial Report in Yellow Mode.

Red Mode

In Red Mode, the Offline Cashier Financial Report pulls report information from the local workstation totals only. Like all Red Mode Financial Reports, there are some limitations when the Offline Cashier Report is taken. See the Red Mode Financial Report Limitations article for more information.
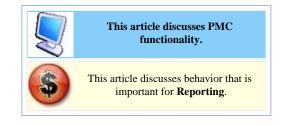
Report Examples

- PMC Yellow Mode Cashier Financial
- PMC Red Mode Cashier Financial

See also

- Cashier Financial Report
- PMC Reports
- WS Autosequences
- List of PMC Reports
- Online Mode vs. Offline Mode
- Financial Reports

Offline Employee Financial Report

The **Offline Employee Financial Report** provides financial reporting by Employee. This report is taken in the PMC and it is only available when working in Offline Mode. This report can be used to balance the server's bank, to determine Tips Paid, and to track individual performance.

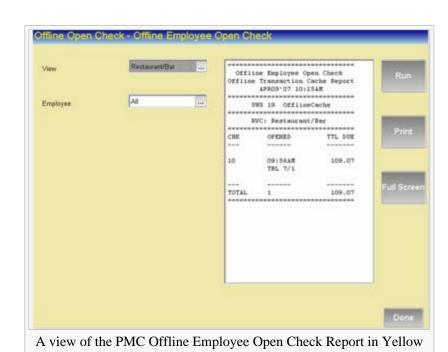| |
|---|
| 🖥️ **This article discusses PMC functionality.** |
| 💲 This article discusses behavior that is important for **Reporting**. |

Contents

- 1 Autosequence Configuration
- 2 Yellow Mode
- 3 Red Mode
- 4 Report Examples
- 5 See also

Autosequence Configuration

The Offline Employee Financial Report (#32) is a different WS Autosequence report than the online version (#7). When a workstation is operating in Offline Mode, there is no way to run the online version of the report; therefore two separate autosequences must be programmed. When in offline mode, PMC displays only the autosequences that can be run offline. Similarly, when in online mode, PMC does not display autosequences that can be run offline.

Yellow Mode

In Yellow Mode, Offline Employee Financial Reports are available for "Current Shift", "Previous Shift", "Today", "Yesterday" or a date range. Like all Yellow Mode Financial Reports, there are some limitations when the Offline Employee Report is taken. See the Yellow Mode Financial Report Limitations article for more information.

A view of the PMC Offline Employee Financial Report in Yellow

Red Mode

In Red Mode, the Offline Employee Financial Report pulls report information from the local workstation totals only. Like all Red Mode Financial Reports, there are some limitations when the Offline Employee Report is taken. See the Red Mode Financial Report Limitations article for more information.

Report Examples

- PMC Yellow Mode Employee Financial
- PMC Red Mode Employee Financial

See also

- Employee Financial Report
- PMC Reports
- WS Autosequences
- List of PMC Reports
- Online Mode vs. Offline Mode
- Financial Reports

Offline Employee Open Check Report

The **Offline Open Check Report** is a report that is generated from the PMC, listing all open checks belonging to an employee at the time this report is taken. Unlike the online version of this report, the offline version functions only for a Revenue Center; it is not possible to take a report for the property.

> **This article discusses PMC functionality.**
>
> This article discusses behavior that is important for **Reporting**.

Contents

Autosequence Configuration

The Offline Open Check Report (#35) is a different WS Autosequence report than the online version (#8). When a workstation is operating in Offline Mode, there is no way to run the online version of the report; therefore two separate autosequences must be programmed. When in offline mode, PMC displays only the autosequences that can be run offline. Similarly, when in online mode, PMC does not display autosequences that can be run offline.

Yellow Mode

In Yellow Mode, the Offline Employee Open Check Report is created by broadcasting a request for data to all workstations in the Revenue Center. Workstations that have relevant open check data return data that is used in the report.

A view of the PMC Offline Employee Open Check Report in Yellow

Red Mode

The Red Mode Offline Employee Open Check Report only includes open checks on the current workstation. Open checks for the selected employee on other workstations will not be included in the report.

Report Examples
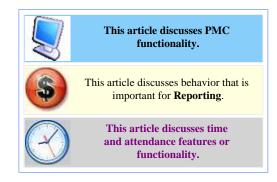
- PMC Yellow Mode Employee Open Check Financial
- PMC Red Mode Employee Open Check Financial

See also

- Employee Open Check Report
- PMC Reports
- WS Autosequences
- List of PMC Reports
- Online Mode vs. Offline Mode

Offline Employee Time Card Report

The **Offline Employee Time Card Report** displays employee time card entry information similar to the Employee Labor Detail Report but with certain limitations. The Offline Employee Time Card Report does not display the total regular hours worked, total overtime hours worked, the grand total of hours worked, or any time clock scheduling information.

🖥️	**This article discusses PMC functionality.**
💲	This article discusses behavior that is important for **Reporting**.
🕐	**This article discusses time and attendance features or functionality.**
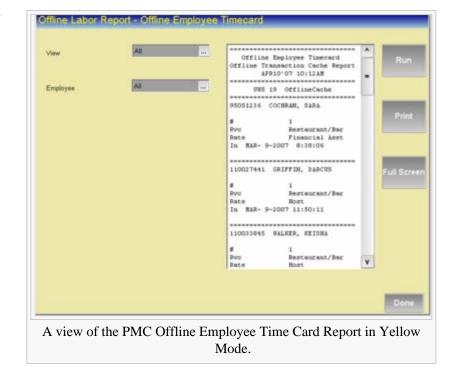
Contents

- 1 Yellow Mode
- 2 Red Mode
- 3 Report Examples
- 4 See Also

Yellow Mode

The Yellow Mode Offline Employee Time card Report displays the following information for each time card entry per employee:

- Employee Name
- Revenue Center where the employee worked
- Rate used for the shift.
- Day/Time
- Type (In or Out)

A view of the PMC Offline Employee Time Card Report in Yellow Mode.

Red Mode

The Red Mode Offline Employee Time Card Report only includes time card entries from the current workstation. Time card entries recorded on other workstations will not be included in the report.

Report Examples
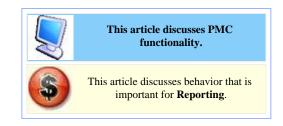
- PMC Yellow Mode Employee Time Card
- PMC Red Mode Employee Time Card

See Also

- PMC Reports
- WS Autosequence
- List of PMC Reports
- Online Mode vs. Offline Mode

Offline Revenue Center Financial Report

The **Offline Revenue Center Financial Report** provides financial reporting by Revenue Center. This report is taken in the PMC and it is only available when working in Offline Mode.

Contents
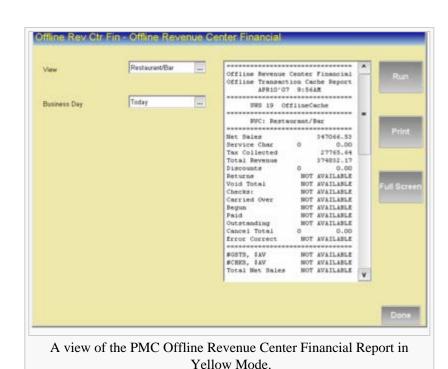
- 1 Autosequence Configuration
- 2 Yellow Mode
- 3 Red Mode
- 4 Report Examples
- 5 See also

Autosequence Configuration

The Offline Revenue Center Financial Report (#31) is a different WS Autosequence report than the online version (#2). When a workstation is operating in Offline Mode, there is no way to run the online version of the report; therefore two separate autosequences must be programmed. When in offline mode, PMC displays only the autosequences that can be run offline. Similarly, when in online mode, PMC does not display autosequences that can be run offline.

Yellow Mode

In Yellow Mode, Offline Revenue Center Financial Reports offer a choice of **View** and **Business Day**. Like all Yellow Mode Financial Reports, there are some limitations when the Offline Revenue Center Report is taken. See the Yellow Mode Financial Report Limitations article for more information.

A view of the PMC Offline Revenue Center Financial Report in Yellow Mode.

Red Mode

In Red Mode, the Offline Revenue Center Financial Report pulls report information from the local workstation totals only. Like all Red Mode Financial Reports, there are some limitations when the Offline Revenue Center Report is taken. See the Red Mode Financial Report Limitations article for more information.

Report Examples

- PMC Yellow Mode Revenue Center Financial
- PMC Red Mode Revenue Center Financial

See also

- Revenue Center Financial Report
- PMC Reports
- WS Autosequences
- List of PMC Reports
- Online Mode vs. Offline Mode
- Financial Reports

Open-Priced Menu Item

An **Open-Priced Menu Item** is a menu item that will prompt the operator to enter the amount to be charged for the item. Open-Priced items are typically used for menu items that change price frequently and for special requests from customers that the restaurant agrees to sell.

abc ✓	This article belongs to the MICROS **Important concepts** category.
?	This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Example Scenarios
- 2 EMC Configuration
    - 2.1 Menu Item Definitions
    - 2.2 Typical Programming
    - 2.3 Privileges
- 3 Workstation Operations
- 4 See also

Example Scenarios

There are four typical cases when Open Items are used:

- The manager on duty forgot to program the special menu item of the day. To order this, the operators will use "Open Food" and enter the proper sales amount of the item.
- The customer orders an item that is not on the menu (such as "Plain Chicken Breast on toast"). In this example, the server typically asks the chef the amount that should be charged for such an item; and then the item is ordered as "Open Food".
- An item frequently changes prices. For example, a menu may list Maine Lobster as "Market Price."
- A Banquets RVC (or other similar environment) may negotiate different prices for the same items, for different contracts or customers.

EMC Configuration

The programming of a menu item's Menu Item Class determines if an item is an open-priced or fixed-price item. If a Menu Item Definition belongs to a Menu Item Class with option #1, **[ON = Open-Priced Menu Items; OFF = Preset Menu Items]** enabled, the operator will be prompted to enter a price.

In addition, the following options are almost always enabled for Open-Priced Menu Item Classes:

5 - Reference Entry Required
    When this option is enabled, the user will be required to enter a Reference Entry; this is generally enabled for Open

The **[Reference Entry Required]** and **[Print Price on Order Chit]** options are generally disabled for classes in Banquets-type environments where none of the items print to Order Devices.

Items so that the person preparing the item knows what to prepare.

13 - Print Price on Order Chit

Select this option to print the menu item price on order printers. This option is often used for open-priced menu items, to ensure the chef that a reasonable price is being charged for the special menu item to be prepared. Note that the "Wrap Condiments" option in the Order Devices module overrides this option when both are enabled.

HALO

The HALO field exists to prevent users from entering large amounts. Programmers sometimes enable this option for open-priced classes. For more information, see HALO.

Menu Item Definitions

If a Menu Item Definition is in an "Open" class, it must also have at least one Menu Item Price record. If not, the Open Item will return an error when ordered; the workstation will display the error, `Menu Item Price not found`.

Typical Programming

In most databases, one or more menu items are programmed as an "open" menu item. Typically, there is one "open-priced item" per Major Group. For instance, these items are common to most databases: "Open Food", "Open Liquor", "Open Wine".

By programming open items per major group, sales numbers remain accurate; if a customer orders a special bottle of wine that is not on the menu, "Open Wine" (which is in the Wine Major Group) is ordered. Without the "Open Wine" item, the operator may be forced to use "Open Food", which reports to the Food Major Group, and then sales reports will become incorrect.

Privileges

There are no privileges specifically associated with Open Items. However, because the Menu Item Class is what determines if an item is "open" or not, it is possible to set the Menu Item Class with a Privilege Group that is not available to most users. See Privilege Group for more information.

Workstation Operations

To order an Open Item on a workstation, the steps are usually:

1. The operator selects the item.
2. BOB prompts, `Menu Item Group: Authorization, enter ID number`.
3. A manager authorization is given.
4. BOB prompts, `Enter Open Food Amount` (where "Open Food" is the name of the item).
5. The operator enters the amount to be charged for the item.
6. BOB prompts, `Enter Open Food Info` (where "Open Food" is the name of the item).
7. The operator types a description for the item.

> Steps 2 and 3 are not always necessary. These steps occur only when the operator does not have the correct Privilege Group for the item. As discussed above, this is the typical configuration. In addition, Step 6 occurs only when "Reference Entry Required" is enabled; again, this is the typical configuration.

In addition, it is possible to order a quantity of items using similar steps. For example, to order three Open Items that are $200 each, the steps are:

1. The operator enters **[3]**
2. The operator uses the **[@/For]** function key (600)
3. The steps from above (starting at #1) are followed. The user enters "$200" for step 5.

Operations Client User Interface Themes

This article provides examples of several pre-configured Operations Client User Interface Theme files that may be be downloaded and utilized for locations running Simphony v1.6 MR4 up to v1.6 MR8 and Simphony v1.6 MR9 higher.

Contents

- 1 Overview
    - 1.1 Installing Operations Client Themes
    - 1.2 Theme Examples
        - 1.2.1 Baby Blue Simphony Theme
        - 1.2.2 Curved Simphony Theme
        - 1.2.3 Gradient Simphony Theme
        - 1.2.4 High Tech Simphony Theme
        - 1.2.5 Simphony Theme
        - 1.2.6 Swirled Simphony Theme
    - 1.3 Theme Designer Utility & Documentation
- 2 See also

	This feature or functionality was introduced in Simphony 1.x and enhanced in Simphony 1.6 MR4 & 1.6 MR9.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses a topic related to **installation and initial configuration** of the system.
	This article discusses a **technical topic** that is not intended for all readers.

Overview

Contained here are several examples of Operations Client Themes that may downloaded using the links provided directly adjacent to the screen images. Additionally, installation and deployment instructions are provided.

Installing Operations Client Themes

Once the desired Operations Client Theme file(s) have been downloaded, compete the following steps:

1. Save the downloaded Theme files to the Simphony Application Server(s).
2. In *each* applicable Workstation Model's CAL Package folder, manually create a new folder named **Themes**.
3. Copy and Paste the downloaded *.thm file into the CAL Package-> 'Themes' folder.
4. Add a Setup.dat file to the CAL Package-> 'Themes' folder.
5. The Setup.dat file should be edited to include the name of the Theme file that will be utilized by the clients.

> **Note:** The desired Theme file name *must* be added to the Setup.dat file for each differing Theme and CAL Package that will be deployed.

Below is an example of a Setup.dat file that's configured to use the Curved Simphony Theme ('Curved.thm' file names displayed in red):

Example **Setup.dat** file text:

```
NAME,Themes,

VERSION,1.6.4.1,

TRANSFERFILES,Curved.thm,CF\POSClient\themes\Curved.thm

REBOOT,1,
```

After all of the applicable CAL Packages folders have had the 'Themes' folder created and their contents inserted, follow the proscribed method of configuring and deploying CAL Packages per the usual method as outlined in the CAL Package article. MICROS recommends that the 'Themes' CAL Package be scheduled to be deployed last or after all other CAL Package deployment. A reboot of each Workstation Client(s) *must* be performed after the Theme CAL Package has been deployed in order for the new Theme to take affect (as shown in the example Setup.dat file above). Workstation client reboots should be performed either before an upgrade or outside of normal business hours.
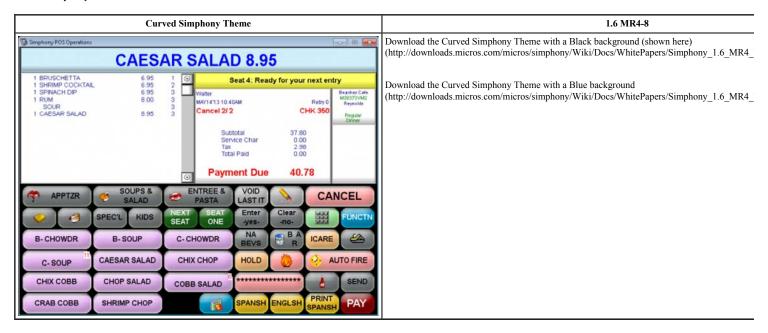
Theme Examples

Baby Blue Simphony Theme

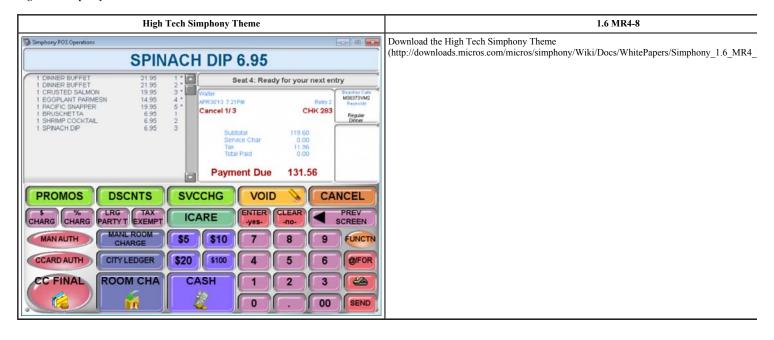| Baby Blue Simphony Theme	1.6 MR4-8
	Download the Baby Blue Simphony Theme (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_

Curved Simphony Theme

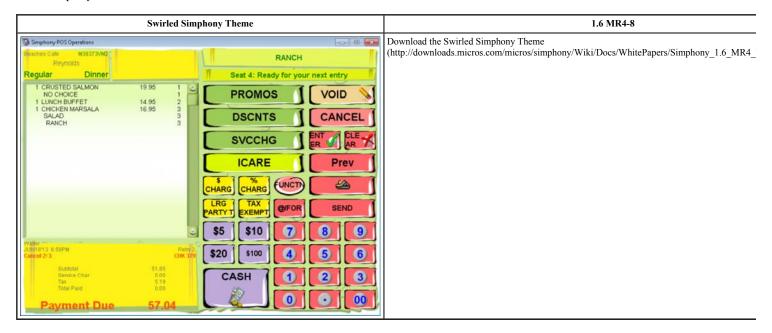| Curved Simphony Theme	1.6 MR4-8
	Download the Curved Simphony Theme with a Black background (shown here) (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_

Download the Curved Simphony Theme with a Blue background (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_ |

Gradient Simphony Theme

Gradient Simphony Theme	1.6 MR4-8
	Download the Gradient Simphony Theme (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_

High Tech Simphony Theme

High Tech Simphony Theme	1.6 MR4-8
	Download the High Tech Simphony Theme (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_

Simphony Theme

Simphony Theme	1.6 MR4-8
	Download the Simphony Theme (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_

Swirled Simphony Theme

Swirled Simphony Theme	1.6 MR4-8
	Download the Swirled Simphony Theme (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_
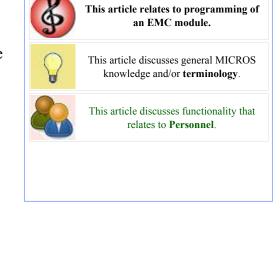
Theme Designer Utility & Documentation

1.6 MR4 through MR8	1.6 MR9 or
Download the 1.6 MR4-8 Theme Designer Utility (http://downloads.micros.com/micros/simphony/Wiki/Docs/WhitePapers/Simphony_1.6_MR4_Themes/ThemeDesigner.zip)	Download the 1.6 MR9 Th (http://downloads.micros.com/micros/simphony/Wiki/Docs/Whi

Operator

The term **Operator** generally means two things: an actual human being who is using a workstation, or a record in the database, referring to an Employee in a Revenue Center, configurable through EMC. Throughout this documentation, the term "operator" is used to describe any employee accessing a workstation. This article will discuss the Operator Record in EMC, how it is used and configured, and why it is necessary.
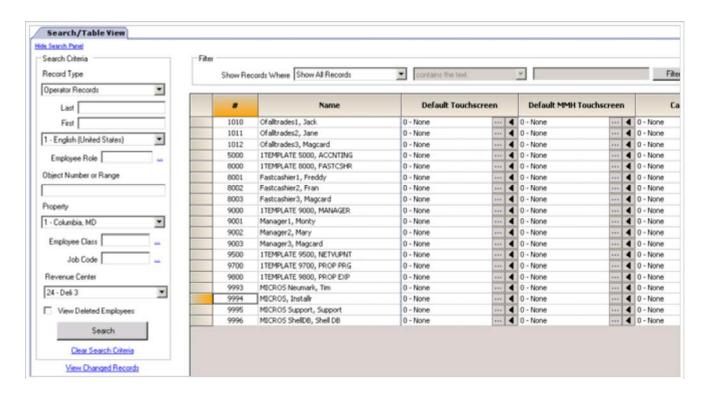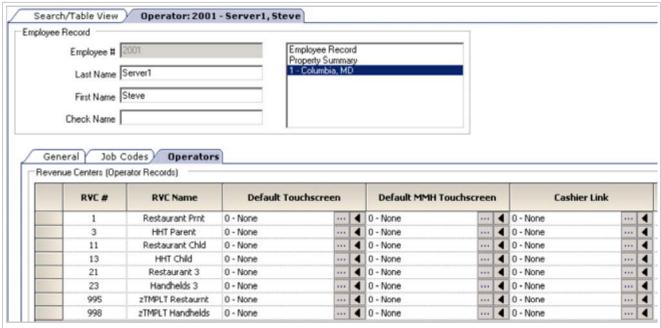
	This article relates to programming of an EMC module.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses functionality that relates to **Personnel**.

Contents

EMC Configuration

Main article: Employee Maintenance; specifically, see Navigating Operator Records

Table View in Employee Maintenance displaying Operator Records.

Form View in Employee Maintenance displaying Operator Records. Form View for Operator Records is the "Operators" tab while looking at a Property Employee Record. In the example image, the user sees all Operators for Steve Server1 in the Columbia, MD Property.

Operator Records are configured in Employee Maintenance. Operators may be edited in bulk by using Table View; they are also displayed in Form View from the Property Employee form. Operator records contain the following fields:

Number
    This field represents the Employee Record Number. (This field is not configurable.)
Default Touchscreen (NOT in use in 2x. See Page Design & Touchscreens vs. Page Design Pages)
    This field represents the Default Transaction Touchscreen that appears when the operator signs in to a workstation. See also, Default Transaction Touchscreen.
Default MMH Touchscreen (NOT in use in 2x. See Page Design)
    This field represents the Default Transaction Touchscreen that appears when the operator signs in to a Mobile MICROS workstation. See also, Default Transaction Touchscreen.
Cashier Link
    This field represents the Cashier Link, if any, assigned to the operator.
Override Class Options
    This field determines if the Operator Record should use Employee Class Options or Operator Options to determine transaction behavior. If this column is checked, the Options column becomes enabled and the Operator will use options configured here. If this column is unchecked, the Operator will use options configured in the Employee Class module.
Options
    This field contains option bits for the operator record when "Override Class Options" is not enabled. See the Operator Options section, below.
Cash Drawer
    This field displays the Cash Drawer, 0, 1, or 2, that is permanently assigned to each operator. This field is used when the workstation option, **[Assign Cash Drawer by Workstation]** is not enabled.
Table Count
    This field displays the number of tables that an operator serves. This field is used in calculating the "$ per Table" field in the profile section of Operator Financial Reports.

Adding Records
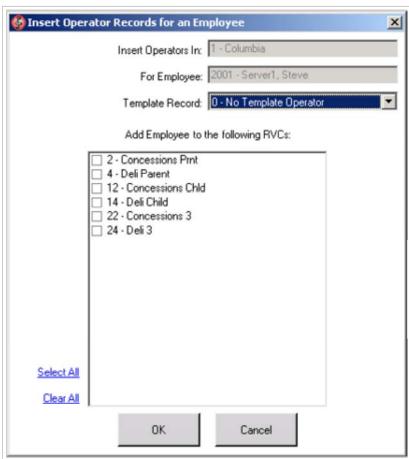
This section discusses adding Operator Records to existing Property Employee records. For information on adding Employees, Property Employee Records, and Operators at the same time (Employee Wizard), see Adding an Employee

In Employee Maintenance, two different dialogs exist to add Operator Records, based on the location (Table View or Form View) within Employee Maintenance when the Insert button is pressed.

Form View

While viewing a Property Employee Record in Form View, the **Insert Operator Record(s)** dialog displays. (There are no other choices for inserting records from this view.) This insert dialog allows the user to add Operator Records to the current Property Employee Record only. This dialog is very basic; the user is only able to select the Revenue Center(s) where the Operator Records will be added, and to specify if a template Operator Record should be used to create the new records. The Template Operator list displays all Operator Records currently assigned to the Employee.

The **Insert Operator Records** dialog from Employee Maintenance, while viewing Property Employee Records in Form View.

Table View

The **Add Employees to a RVC** dialog is available in Table View. In this dialog, the programmer selects the RVC where the the

new records will be created, the template record (if any) to be used when creating the records, and a list of employees who currently do not belong to the selected RVC.

The **Add Employees to a RVC** dialog from Employee Maintenance, while in Table View.

Select Property
> Select a property; this field is used to select the RVC where the Operator Records will be created. When Employee Maintenance is opened from the Property Scope, this box is locked at the current property.

Select Revenue Center
> Select the Revenue Center where Operator Records will be added. When Employee Maintenance is opened from the Revenue Center Scope, this box is locked at the current RVC.

Template Record
> Select an Operator Record to be used as a template, or choose **[0 - No Template]** to create records with default settings. This list displays all Operator Records in the selected RVC.

Option Bits

The following option bits apply to each Operator Record:

1 - Table Number Entry Required to Begin/Pickup Checks
> Select this option to require an operator to enter a table number when beginning a guest check.

2 - Number of Guests Entry Required for New Checks
> Select this option to require an operator to enter the number of guests when beginning a guest check. The setting of this option is overridden if **[Use Number of Seats for Guest Count]** is enabled in RVC Parameters.

3 - Require Check Employee Number with New Checks
> Select this option to require this operator to assign a "check employee" when a guest check is begun. This is used for cashiers who place carry-out orders, banquet charges, or checks for other employees. If this option is selected, sales totals posting and tender posting are determined by the setting of the following posting options in the RVC Parameters Module: "Post Totals to Transaction Operator" and "Post Tender to Transaction Operator". If this option is selected, the system will require an Employee ID (if the "Use

The term **Operator Options** is used throughout this documentation; it does not necessarily refer to the option bits *per operator record*. Instead, the term "Operator Options" refers to the set of options that is configured both per Employee Class and optionally overridden per Operator. In most cases, the term refers to the Employee Class options, as it is infrequent that an operator is programmed to Override Class Options.

Employee Number to Open Check for Another Employee" option is not enabled) or the Employee Number (if the "Use Employee Number to Open Check for Another Employee" option is enabled). See also, Check Operator vs. Transaction Operator.

4 - Use Employee Number to Open Check for Another Employee

This option is active only if the **[Require Check Employee Number with New Checks]** option, or the Workstation option, **[Auto begin Check when Check Operator Number or ID is Entered Outside of a Transaction]**, is selected, or when using Open Check Block Settlement to close another operator's open checks. When this option is selected, this operator will be required to enter the employee number of the operator for whom the check is being started. When this option is not selected, this operator will be required to enter the Employee ID of the other operator.

5 - ON = On-Demand; OFF = By-Round

This option controls guest check printing for this operator. If this option is selected, a buffered guest check prints only when the operator presses a Service Total or Payment Tender/Media that is programmed to print an On-Demand check. If this option is not selected, the buffered guest check prints at the end of every service round.

6 - Special By-Round; "Temporary on Demand"

This option affects By-round operators only if **[On = On-Demand; OFF = By-round]** is disabled. Select this option to allow this operator to act as an on-demand operator until the guest check is service totaled and printed. At that point, the operator becomes a By-round operator, adding guest check detail as needed. Each succeeding service round prints by-round.

7 - Cannot Perform Fast Transactions

Select this option to require this operator to begin each transaction by opening a guest check. Do not select this option to allow this operator to perform fast transactions.

8 - ON = Popup Operator; OFF = Stay Down Operator

Select this option to cause this operator to be signed out of the workstation at the end of a transaction (e.g., a server or manager). Do not select this option to cause this operator to remain signed in to the workstation (stay down) after each transaction (e.g., a bartender). See also, Pop Up and Stay Down.

9 - Line by Line Customer Receipt

Select this option to cause this operator's customer receipts to print line-by-line. Do not select this option to cause this operator's customer receipts to remain buffered until a tendering key is pressed. If this option is selected, the operator may service total a fast transaction. (Note: Line-by-line printing is not available for Mobile MICROS clients.)

10 - Display Menu Item NLU Number

Select this option to cause menu item NLU numbers to display on the operator display and to print on guest checks and customer receipts for this operator. Do not select this option to suppress display and printing of menu item NLU numbers for this operator.

11 - NLU List is Stay Down

Select this option to cause the NLU list to remain on the display when this operator presses an NLU key. This allows the operator to select multiple items from the NLU list. Do not select this option to cause the NLU list to clear after this operator selects each NLU item.

12 - Display Condiment Help

Select this option to cause a help window of required condiments to display when this operator orders a menu item that requires a condiment. Uncheck this option to suppress display of the required condiment list.

13 - Bank Entry Required at Beginning of Shift

Select this option to require this operator to enter the amount of their opening bank (e.g., the cash in the cash drawer or the cash provided for a server bank) when signing in. See Bank Entry Required for more information.

14 - Require Seat Number Entry

Select this option to require this operator to have a seat number active when beginning a transaction.

15 - If Staydown Operator, Enable the Auto Popup Timeout

Select this option to cause a Staydown Operator to be automatically signed out based on the **[Automatic Operator Popup Interval]** setting in Revenue Center Parameters. Do not select this option to allow staydown operators to remain signed in to the workstation.

16 - Require Guest Check ID
> Select this option to require any guest checks opened or picked up by this operator to have a Guest Check ID.

17 - Mobile MICROS Popup Operator
> Select this option to cause this operator to be signed out of the Mobile MICROS at the end of a transaction. Do not select this option to cause this operator to remain signed in to the Mobile MICROS after each transaction.

18 - Display Menu Item NLU Number on MMH
> Select this option to cause menu item NLU numbers to display on the Mobile MICROS display. Uncheck this option to suppress this display.

20 - Require Authorization for Cash Drawer Reconnection
> Select this option if this employee requires authorization to disconnect/reconnect a cash drawer cable. The Cash Drawer Reconnect event, the name of the employee who disconnected the cash drawer cables, and the name of the authorizing employee are logged in the electronic journal and error log files.

21 - Require Authorization for Power Cycle of UWS during Operations
> Select this option if this employee requires authorization to power cycle a workstation (turn it off and back on). The Power Cycle Detected event, the name of the employee who performed the power cycle, and the name of the authorizing employee are logged in the electronic journal and error log files.

Revenue Center-Level Security

Each Role contains the option, **[Enable Revenue Center-Level Security]**. This option, found on the View Tab of the Employee Role module, limits EMC and Workstation users to viewing only the RVCs where they contain an Operator Record. The functionality of this option is as follows:

- If any Role assigned to an Employee has this option enabled, Revenue Center-Level Security is considered "enabled" for that employee.
- If Operator-Level Security is enabled for an EMC user, the user will only be able to view RVCs where he has an Operator Record.
- If Operator-Level Security is enabled for a workstation user, the user will be able to sign in to RVCs where the user has an Operator Record. Further, it is not possible for an employee to perform an authorization in RVCs where the employee does not have an Operator Record.

Best Practices

The average EMC user should be associated with a Role where this option is enabled; this bit should not be enabled for Administrator-type EMC users. (Often, a specific Role called "Revenue Center-Level Security" is created, and only this option is enabled. This Role is then assigned to the "average EMC user" as appropriate.)

Oracle® Simphony 1.6 Documentation Library
Overview

April 2015

ORACLE®

Introduction

This library contains articles describing how to use Simphony 1.6 features and functionality. These articles are PDF versions of articles originally published on the MICROS Members or Wiki pages. They reflect the MICROS branding associated to the product for that release. PDF renderings may cause some distortion in the content.

Order Device

The term **Order Device** generally refers to any piece of hardware used to print orders that need to be prepared, such as hot/cold items to the kitchen, or alcoholic beverages that print to a bar. Often, an Order Device is a Roll Printer, but it may also be a KDS display. The term **Remote Printers** or **Remote Kitchen Printers** is often used interchangeably with "Order Device", and they essentially mean the same thing.

	This article relates to programming of an EMC module.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses functionality that relates to **Printing**.

Contents

- 1 EMC Configuration
    - 1.1 General
    - 1.2 KDS
    - 1.3 Options
        - 1.3.1 Printer Options
        - 1.3.2 KDS Options
- 2 How Things Print

EMC Configuration

The **Order Devices** module is accessed from the RVC Scope. There are three configurable tabs, General, KDS, and Options.

General

The following fields are configurable on the General tab:

Name
> Enter a name for the Order Device. This name is used as the header on order chits. Common names are "Hot Printer" or "Bar Printer", etc.

Device Type
> If this is a "Remote Device", the user must select the device where orders sent to this Order Device will print, from the "Device" field below. If this is a "Local Device", orders will print at the "Local Order Receipt" printer defined for the workstation from which the order is placed. When "Local" is chosen, the Device and Backup Device fields are disabled. For more information, see Local Order Receipt.

Primary Device Type
> Select the Primary Device Type (Printer or KDS) for this Order Device. If this device is a Printer, the Backup Device Type field becomes disabled and set to Printer. (A Printer cannot back up to a KDS.)

Device
> If this is a "Remote Device" select the physical device where this order will print.

Backup Device Type

Select the Backup Device Type (Printer or KDS) for this Order Device. If the Primary Device Type is Printer, this field is disabled and set to Printer by default.

Backup Device

Select a backup device where orders will print if the primary device fails.

Order Device Redirect

In this field, a programmer determines one of the Order Devices where orders sent to this Order Device will be printed. For more information, see Order Device Redirection.

Max # Lines per Chit

Enter the maximum number of lines (0-99) to be printed on each page of an order chit. *Note: Roll Printers print 6 lines per inch.*

Sort/Consolidation Method

Select the sort and consolidation method for this Order Device.

> The following fields do not apply to KDS Display order devices: Max # Lines per Chit, Sort/Consolidation Method, and the Line Feeds Before/After Order fields.

Language

Select the primary language for this Order Device. This field displays the Languages that are assigned to the Property in the Property Parameters module.

Line Feeds Before Order

Enter the number of Line Feeds (blank lines) that will appear on the top of Order Chits. This field does not apply for KDS Displays.

Line Feeds After Order

Enter the number of Line Feeds (blank lines) that will appear on the bottom of Order Chits. This field does not apply for KDS Displays.

KDS

The KDS tab is enabled only when the **Primary Device Type** field on the General tab is set to "KDS". The following fields are configurable for KDS order devices:

Course 1 First Alert Timeout

Set the time (in seconds) when Course 1 items will display the First Alert. Chits showing a first alert are shaded yellow.

> For more information on KDS Courses, see KDS Programming Scenarios: Menu Item Coursing.

Course 1 Second Alert Timeout

Set the time (in seconds) when Course 1 items will display the Second Alert. Chits showing a second alert are shaded red.

Other Course First Alert Timeout

Set the time (in seconds) when Other Courses (any course but Course 1) will display the First Alert. Chits showing a first alert are shaded yellow.

Other Course Second Alert Timeout

Set the time (in seconds) when Other Courses (any course but Course 1) will display the Second Alert. Chits showing a second alert are shaded red.

Primary Runner Chit Printer

Select a printer where Runner Chits will print when orders are bumped from this KDS device.

Backup Runner Chit Printer

Select a printer where Runner Chits will print when orders are bumped from this KDS device. This field is only used if communication to the Primary Runner Chit Printer cannot be established.

Send To Panel
> This field is only enabled if the device used for this Order Device contains two panels. Choose the panel (1 or 2) where orders sent to this device should display.

Dynamic Order Mode
> For information about the Dynamic Order Mode settings, see DOM.

Options

The Options tab includes two different sets of options; one for Printer Order Devices and one for KDS Order Devices.

Printer Options

Options 16-20 discuss Secondary Printing behavior. See Secondary Printing for more information.

These are the configurable option bits for Printer Order Devices:

1 - ON = Print Trans Emp Name and #; OFF = Print Chk Emp Name and #
> Enable this option to cause this order device to print the Employee Name and Number of the Transaction Operator. Disable this option to cause this order device to print the Employee Name and Number of the Check Operator. The operator beginning the guest check is the check operator; the operator who picks it up (or for whom it was begun) is the transaction operator. For more information, see Check Operator vs. Transaction Operator.

2 - Print Seat Number in Red
> Enable this option to cause this order device to print seat numbers in red (on printers with two-color ribbons) or in inverse (on thermal printers). If this option is disabled, seat numbers will print in black.

3 - Print Dopplebon
> Enable this option to print output in dopplebon style (a separate order chit for each menu item in the current service round). If this option is disabled, the default printing style applies (one order chit for all menu items in the current service round).

> For more information about Dopplebon Printing, see Dopplebon Printing.

4 - Print Dopplebon Summary
> Enable this option to print an order summary chit before printing an order's dopplebon order chits. If this option is disabled, a dopplebon summary chit will not print.

5 - Backup Without Prompting
> Enable this option to suppress the display of a prompt at the workstation when order information is sent to a backup device. If this option is disabled, the workstation will prompt and require an end-user response before sending orders to the backup device.

6 - Print Seat Numbers with Individual Items
> Select this option to print seat numbers with each individual menu item in the current transaction round. Consolidation will take place when this option is selected, however if sort method "3-Print Group, Consolidated" is selected, seat numbers will not print.

7 - Print Revenue Center Name on Orders
> Select this option to display the Revenue Center name with each order sent to this order device. The name prints in double-wide characters. If this option is disabled, display of the Revenue Center name is suppressed.

8 - Partial Cut on Autocut Printer

    Select this option to cause autocut Roll Printers to partially cut (perforate) the roll printer paper between order chits. If this option is disabled, the autocut printer will perform a full cut between order chits.

9 - ON = Print "VV VOID VV" before Void; OFF = Print Void in Red

    Select this option to print a `vv void vv` line (in red or inverse) before a voided menu item (which will print in black). Disable this option to print voided items in Red, without the `vv void vv` line.

10 - Print Condiments in Red (Overrides MI Class Output settings)

    Select this option to print condiments in red ink (or in inverse). If this option is disabled, condiments will print in red/inverse or black, depending on the Menu Item Class Red/Black option setting.

11 - Print Both Menu Item Names

    Select this option to cause both names entered for a Menu Item Definition to output to this order device. If this option is disabled, only one name will print. Note that when this option is disabled, the name printed is determined by the Menu Item Definition's Menu Item Class option, **[18 - Print Name 2 on Order Output Instead of Name 1]**.

12 - Wrap Condiments

    Select this option to force as many condiments as possible to print together on each line of this order device. When selected, this option overrides Menu Item Class option, **[13 - Print Price on Order Chit]**. If this option is disabled, each condiment will print on a separate line.

13 - Print Guest Check Info Lines Before Header on Order Device

    Select this option to print Guest Check Information Lines before the order device header. If this option is disabled, these lines will be suppressed.

14 - Print Guest Check Info Lines After Header on Order Device

    Select this option to print Guest Check Information Lines after the order device header. If this option is disabled, these lines will be suppressed.

15 - Print Guest Check Info Lines After Trailer on Order Device

    Select this option to print Guest Check Information Lines after the order device trailer. If this option is disabled, these lines will be suppressed.

KDS Options

These are the configurable option bits for KDS Order Devices:

1 - Enable KDS Consolidation

    Enable this option to consolidate items. Do not enable this option to display items unconsolidated.

2 - Sort Voids to Top (not DOM)

    Enable this option to sort voided items to the top of the screen. This option does not apply to Order Devices configured for DOM.

3 - Single Item Per Sub-Order

    Enable this option to show every item on an order on its own chit. This option is enabled for KDS Menu Item Prep Timing. When enabled, menu items will print to this KDS Display based on prep time, so that all items are finished at the same time.

4 - Print on Prep Done

    Enable this option to print a Runner Chit when the order is marked "done" at a Prep Station. Only items from this prep station will print. (This option is only intended to be used on a Prep Display and it is only intended to be used in environments where there is no Expo Display.)

5 - Print on Expo Done

    Enable this option to print a Runner Chit when the order is marked "done" at the Expo Station. (This option is only intended to be used at a KDS Display that is an Expo Station.)

6 - Print on All Prep Done

> Enable this option to print a Runner Chit when an order is complete at all prep stations and before the order is bumped from the KDS Expo Display. This option should only be used at Expo or SOS KDS stations.

7 - Sort by Seat

> Enable this option to sort check detail area by Seat Number. If this option is not enabled, items will display in the order in which they were ordered.

8 - Re-sort when All Prep Done

> This option only applies to this Order Device if this is a KDS Expo Display. Enable this option to cause the KDS Expo display to re-sort a chit to the beginning of the list of KDS chits on the Expo Display, when all prep displays for the chit are complete.

9 - Display Subtotal

> Enable this option to cause the KDS to display the order subtotal.

Options 9-12 were implemented in Simphony 2.0.

10 - Do Not Display Voids

> Enable this option to cause the KDS to suppress the display of voids.

11 - Display Menu Item Count

> Enable this option to cause the KDS to display the menu item count.

12 - No Expo Done Before Paid

> Enable this option to cause the KDS to not allow the order to be expedited before the order is paid.

How Things Print

Menu Items, Tender/Media, Service Charges and Discounts all have a configuration for Order Device Output. The choices here are one of 32 Order Devices that are available in the Revenue Center.

Order Device Redirection

The term **Order Device Redirect** means that a printer will *redirect* an order to another Order Device. When order device #1 is "redirected" to order device #1, this means that orders sent to order device #1 will print at the physical printer programmed for order device #1. (This is "redirecting to itself".) If order device #1 is redirected to order device #2, orders set to order device #1 will print at the physical printer programmed for order device #2.

Order Devices can be redirected in EMC's Order Device module, via the Order Device PMC Procedure, or by using the order device redirect function keys.

⭐	This article contains a **best practices** section.
🖱️	This article discusses the usage of one or more **Function Keys**. (867-898)
💡	This article discusses general MICROS knowledge and/or **terminology**.
🖨️	This article discusses functionality that relates to **Printing**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

Backup vs. Redirect

Backup

An order device has a "Device" field, and also a "Backup Device" field. It is fairly obvious that the Backup Device is used to *back up* the primary device. So, the following happens:

1. An order is sent to this device
2. The device cannot be reached (it is broken or powered off; or the network is down to that device)
3. The order prints to the **Backup Device**

Redirect

An order device has a "Order Device Redirect" field also. In this field, the options are to select one of the 32 order devices in the RVC where the order will be sent. The field can also be set to 0, which means that orders sent to that order device will not print anywhere!

- **Please tell me what this means!** - To explain what an Order Device Redirect field is, you need to first know how it is configured, then you'll have an idea.
- **Typical Configuration** - Typically this field is set "to itself," meaning that Order Device #1 will be "Redirected" to Order Device #1, and Order Device #2 will be "Redirected" to Order Device #2, etc. However, there are times when this field may hold a different value.
- **Finally: Why we have Order Device Redirection** - This field is often used as a "Permanent Backup." For instance, let's suppose that Order Device #3 is the Pizza Printer, and the power outlet for this printer has become non-functional. Being aware of this situation, a programmer can set the Order Device Redirect for the Pizza Printer to "Order Device #1", which is the Hot Printer. This way, any time a pizza is ordered, the Order Chit will automatically print to the Hot Printer, instead of attempting to print to the Pizza Printer. Check out the flow of redirection, and see how it differs from "backup":
  1. An order is sent to this device
  2. Instead of attempting to print to the device programmed as the "Device", the print job will instead print immediately to Order Device #1.

To summarize this section, you can see that the system didn't waste time trying (and then failing) to print before printing at the other printer — it just printed right away.

Function Keys

Function keys 867-898 correspond to Order Devices 1-32. These keys allow a user to quickly redirect order devices. These keys can be used in one of two ways:

> Function Keys 867-898 were introduced in Simphony 1.0 Service Pack 7.

- Press the **[Redirect Order Device #]** key, then the number of the order device where orders will print (0-32), then **[Enter]**
- Press the number of the order device where orders will print (0-32), then press the **[Redirect Order Device #]** key

Often, these keys are used as part of macros. Some sites routinely redirect order devices (perhaps at closing time, all kitchen order devices redirect to the same printer), and thus implementing these keys as a macro saves operational time for the RVC. For more information, see Macros: Redirecting Order Devices.

Note: These keys can be used while in a transaction, however in most cases a site should program these keys so that they are not accessible from transaction screens unless there is a logical business reason to do so.

Best Practices

If the Order Device Redirect field is set to 0-No Output, there will be no Order Device Output. In some good databases, every Menu Item Class is programmed so that printer failures are not a big deal:

1. The Menu Item Classes are all set to print to Order Device #4, which is a Local Order Receipt device.
2. Order Device #4 is redirected to 0-No Output.

If all the printers fail (because a printer controller failed or the network went down), a smart manager can redirect Order Device #4 to Order Device #4, and then all orders will print to the Local Receipt printer. This way, the order prints immediately to the server at the workstation, who can then physically take the order chit to the kitchen or bartender for preparation. See Local Order Receipt for more information.

Note

Because the Order Device Redirect field changes the *physical printer* where an order prints, there is no double-redirecting. Consider this situation:

- Order Device #2 is redirected to Order Device #3
- Order Device #1 is redirected to Order Device #2

In this scenario, order device #1 will not redirect to #3. There is no "double redirection". When order device #1 is redirected to order device #2, it will print at the physical printer programmed for #2.

Pay Rates

The term **Pay Rate**, sometimes called **Job Rate**, refers to one of the Job Codes assigned to a Property Employee Record. The terms "pay rate" and "job rate" are often considered interchangeable with "Job Code," but the terms have a slightly different meaning. A pay rate refers to the Job Codes and the associated regular/overtime pay as they are assigned to employees, whereas a Job Code simply refers to the categorization of labor groups (server/bartender/cashier). For a further description, read Job Codes vs. Pay Rates, below.
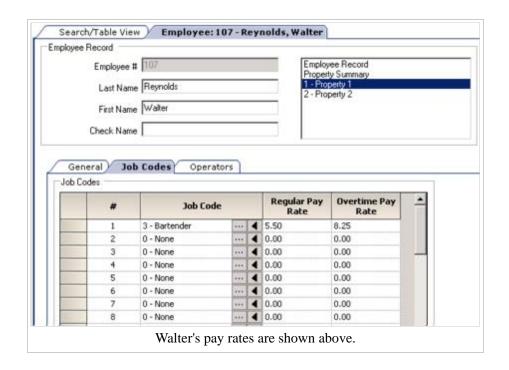
This article discusses time and attendance features or functionality.

Contents

Job Codes vs. Pay Rates

Job Codes are programmed in the EMC in the Job Code module. An employee has job codes assigned in the Employee Maintenance module (displayed), where they are then considered "Pay Rates." Some example programming:

- In the Job Codes module, the following records are programmed:
    1. Server
    2. Bartender
- Two employees are programmed:
    1. Walter is a bartender only
    2. Kim is both a bartender and a server
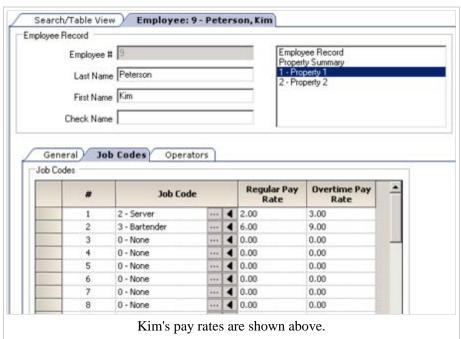
Walter's pay rates are shown above.

Also note that while both employees are bartenders, the regular/overtime rates differ between employees. Therefore, the actual amount being paid to the employee is not based on Job Codes; instead, it is based on the Job Code as it is programmed for the employee. (Thus, the *pay rate*.)

How Configuration Affects the Workstation

With this configuration, when Walter clocks in, he will not be prompted for his job code, because there is only one assigned to him. However, Kim will be prompted to select either the server or bartender job code.

How Configuration Affects Privileges

Employee Role privileges allow a user to "Clock In at Rate 1" or "Clock in at Rate 2". (See Clock in for a full description of bits.) For Kim to clock in as a bartender, she requires the "Clock in at Rate 2"

Kim's pay rates are shown above.

option to be enabled; Walter requires "Clock In at Rate 1". So even though both employees are clocking in as a "bartender" Job Code, because "bartender" is a different Pay Rate, option bits affect these employees differently.

Per-Shift Pay Rates

Pay Rates are assigned to employees in Employee Maintenance, however those pay rates can be overridden per Clock-In Cycle from PMC's Timecard Adjustment procedure. Therefore, the pay rates assigned in EMC are actually the *default pay rates* that an employee will be paid. See Adjust Employee Time Card for more information.

Pickup and Loan

For information on picking up Guest Checks, see Guest Check Pickup

Pickup and **Loan** are two types of Tender/Media records. These tender types are non-payment tendering keys, which means that they are not used in transactions. These tender types are used to record operations that add or remove cash to/from a cash drawer.

	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses behavior that is important for **Reporting**.

Contents

Pickup

A Tender/Media record is a **Pickup** when it is configured as Tender Type #3, Pickup. A pickup is used to record instances where money is removed from a cash drawer. Some examples include:

- Cash used to pay servers for charged tips
- Cash removed during a shift to reduce the amount of money in the drawer (often called a "Drop", or a "Bleed")
- Cash removed from the drawer to purchase supplies (often called a "Paid Out")

Option Bits

There are seven option bits for Pickup Tender Media Records:

	Option Bit #82 was introduced in Simphony 2.0.

1 - Open Drawer
> Select this option to cause the workstation's cash drawer to open when this key is used.

2 - Cash Tips Paid
> Select this option to establish a pickup key that is used to record cash tips that are paid to a server from the cash drawer (e.g., charged tips earned by a server). This option is often checked for Pickup Tenders that are linked to Service Charges.

4 - Use with Currency Conversion
> Select this option to allow this pickup tender to be used with Currency Conversion.

5 - Reference Entry Required
> Select this option to require the workstation to prompt for Reference Entry when this key is used.

6 - Validation Required
> Select this option to cause a Validation Chit to print when this key is used.

66 - Tender Media is used for Stored Value Transactions
> Enable this option if this pickup tender is used for Stored Value Transactions.

82 - Prompt for Reason
> When this option is enabled, the workstation will prompt the user for the reason why the tender was used. When this option is not enabled, no reason is required.

Loan

A Tender/Media record is a **Loan** when it is configured as Tender Type #4, Loan. A loan is used to record instances where money is added to a cash drawer. Some examples include:

- Cash placed in a drawer at the beginning of a shift (often called an "Opening Bank")
- Cash added during a shift to provide additional funds used for making change.
- Cash added to the drawer via miscellaneous transactions or deposits by owner of the establishment (often called a "Paid In")

Option Bits

There are five option bits for Loan Tender Media Records:

> Option Bit #82 was introduced in Simphony 2.0.

1 - Open Drawer
> Select this option to cause the workstation's cash drawer to open when this key is used.

4 - Use with Currency Conversion
> Select this option to allow this pickup tender to be used with Currency Conversion.

5 - Reference Entry Required
> Select this option to require the workstation to prompt for Reference Entry when this key is used.

6 - Validation Required
> Select this option to cause a Validation Chit to print when this key is used.

82 - Prompt for Reason
> When this option is enabled, the workstation will prompt the user for the reason why the tender was used. When this option is not enabled, no reason is required.
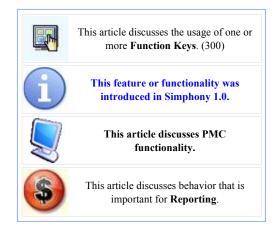
Reporting

The Pickup and Loan tender types are typically added to Report Groups so that they can be tracked on reports. See the "typical configuration" section of the Report Groups article; specifically, the "Cash In" (Loan) and "Cash Out" (Pickup) types discuss functionality relating to Pickups and Loans.

PMC

The **PMC**, or **Property Management Console**, is an application started within Ops that allows users to run reports and to perform procedures such as changing an employee's ID or redirecting an order device.

	This article discusses the usage of one or more **Function Keys**. (300)
	This feature or functionality was introduced in Simphony 1.0.
	This article discusses PMC functionality.
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 Launching PMC
- 2 Functions available in PMC
- 3 PMC versus EMC
- 4 Database note
- 5 See also

Launching PMC

You can only start the PMC through a Simphony workstation client. The following must be true for an employee to run the PMC:

- The operator must be associated with an employee role with privileges to **Run PMC**.
- The operator cannot be in a transaction (the operator must be on the Default Transaction Screen).

You can start PMC using the **[Launch PMC]** function key, #300.

Functions available in PMC

The initial PMC window shows options based on the user's employee role privilege settings. There are three basic categories of functionality:

1. **Reports** - The user can run any autosequences for which he is privileged.
2. **Procedures** - The user can perform procedures based on employee role settings. See the PMC Procedures article for a complete list of available procedures.
3. **Diagnostics** - Users associated with an employee role with the **[Run**

Diagnostics] option set can access this link. See PMC Diagnostics.

On a touchscreen-based workstation, the initial PMC window shows the list of PMC Procedures, as well as a link to Reports and Diagnostics. On a Keyboard Workstation, the limited screen size makes it unreasonable to display all information at once. Due to this display limitation, Keyboard Workstations show a dialog box with the following selections after opening PMC: 1-Reports, 2-Procedures, and 3-Diagnostics. A user must then make a selection to enter the specific section of PMC.

PMC versus EMC

Although you can perform many procedures in both the EMC and PMC, there are advantages to using the PMC:

The first page shown after PMC opens. The procedures (left column) vary based on the operator's employee role privileges.

- PMC Procedures and PMC Reports are easy to use. A manager can perform tasks that require more comprehensive training and understanding to reliably perform in the EMC.
- Procedures and Reports may be easier to access because you can open PMC from any workstation. Typically, a property has more workstations than it has PCs with EMC installed.
- You can assign a magnetic card (via swipe) to an employee only through PMC.

Database note

PMC and EMC reference the same database. Thus, changes made using either the EMC or PMC affect the same data. If a user edits a record through the PMC and at the same time a different user edits the same record through the EMC (or two PMC users save the same record), the changes will be saved for the user who saved the record last.

PMC Diagnostics

PMC Diagnostics is a module within PMC that provides general information about the Workstation that can be used for troubleshooting. The module tests connections to devices, the database, and to various services.

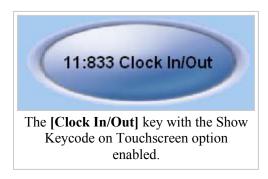|	
🖥️	**This article discusses PMC functionality.**
ℹ️	The Printers functionality was introduced in Simphony 1.2.
ℹ️	The **Certifications** tab functionality was introduced in Simphony 1.6 Maintenance Release 6.

Contents

General Tab

The **General Tab** displays the following information: workstation name, workstation number, Client ID, Gateway address, version, time, current business date, and previous business date. The time the business day starts is also displayed, in UTC format.

When the **Show Keycode on Touchscreen** option is enabled, the workstation will display each key's type and number on the touchscreen, followed by the text label that is programmed to display. This functionality is designed for troubleshooting purposes; it allows the user to know exactly what function key is being
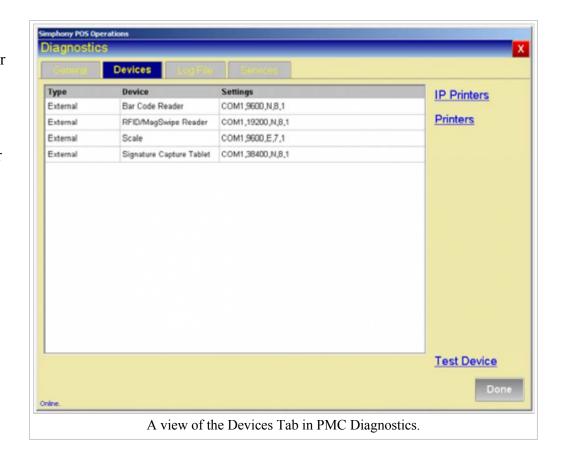

General tab

pressed. An example is shown

on below.

The **[Clock In/Out]** key with the Show
Keycode on Touchscreen option
enabled.

Devices Tab

The **Devices tab** displays the
type, device name, and settings
for each device programmed for
the workstation. To test a
device, select *Test Device*. A
Test Device page appears
specific to the type of device
being tested. For example, after
selecting a Barcode Reader
device, a "Test Barcode
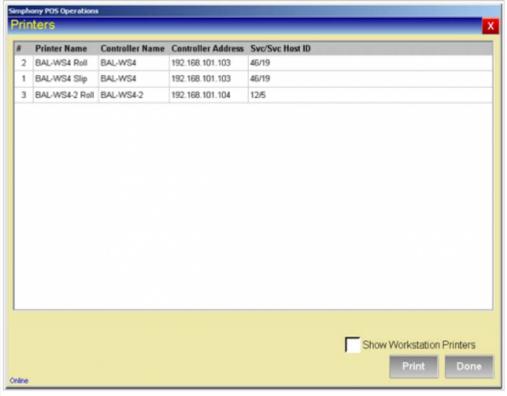Reader" page displays (see
Barcode Format Set for an
example).

A view of the Devices Tab in PMC Diagnostics.

Printers

From the Devices Tab, the
Printers link on the right side
of the screen lets the user test
printers in the Property and for
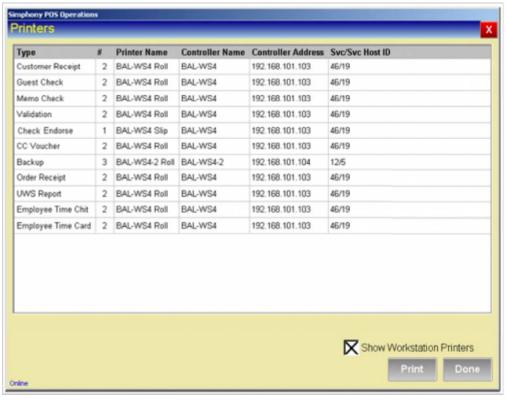the selected workstation.

The default displays all the
printers configured in the

Property. The logged-in user can select any printer and press **[Print]** to test the printer.

If the user selects the "Show Workstation Printers" checkbox, the different print types for the current workstation are displayed. The logged-in user can select any printer and press **[Print]** to test the printer.

#	Printer Name	Controller Name	Controller Address	Svc/Svc Host ID
2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
1	BAL-WS4 Slip	BAL-WS4	192.168.101.103	46/19
3	BAL-WS4-2 Roll	BAL-WS4-2	192.168.101.104	12/5

The Printers tab in PMC Diagnostics. This view displays all printers in the Property, sorted by Printer Name.

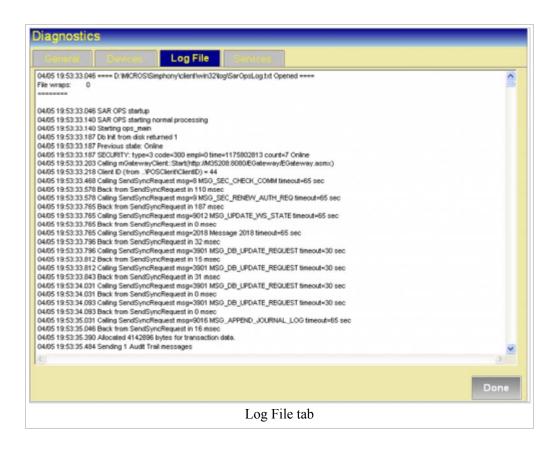| Type	#	Printer Name	Controller Name	Controller Address	Svc/Svc Host ID
Customer Receipt	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
Guest Check	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
Memo Check	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
Validation	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
Check Endorse	1	BAL-WS4 Slip	BAL-WS4	192.168.101.103	46/19
CC Voucher	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
Backup	3	BAL-WS4-2 Roll	BAL-WS4-2	192.168.101.104	12/5
Order Receipt	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
UWS Report	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
Employee Time Chit	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19
Employee Time Card	2	BAL-WS4 Roll	BAL-WS4	192.168.101.103	46/19

The Workstation Printers tab in PMC Diagnostics. This view displays the printers that will be used for the various print jobs for the current workstation.

Log File Tab

The **Log File tab** displays logging information used for troubleshooting.

Log File tab

Services Tab

The **Services tab** displays all services and service addresses associated with this workstation.

Use the [Ping] button to verify the connection of each service to the Internet.

Services tab

Certifications Tab

With the release of Simphony 1.6 Maintenance Release 6, the **Certifications tab** displays "Weights and Measures Information" that includes the version of software that's running on the client and the National Type Evaluation Program (NTEP) Certificate number that displays adjacent to the '**NTEP CC:**' field. NTEP Certificate numbers will vary based on the model of Workstation that's using the PMC Diagnostics utility.

Certifications tab

Other Tabs

Two more tabs exist but they are hidden by default:

- Database - Displays the last time the workstation received an updated version of each module (Discounts, Serving Periods, etc.)
- Comms - Displays messages, response codes, and response times.

For these tabs to display, the user should enter 1-7-0-2 before pressing the **[Launch PMC]** function key (300) when opening PMC.

Privileges
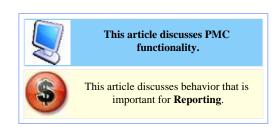
Operators can access the Diagnostics section of the PMC only when associated with an Employee Role with the PMC General/Reports option **[Run Diagnostics]** enabled.

PMC Report

*This article discusses general functionality for PMC Reports. To get specific information about a report, see List of PMC Reports. A **PMC Report** is a report taken at a workstation, via the PMC module.*

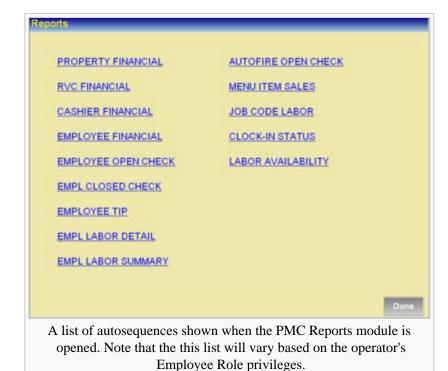|	
	This article discusses PMC functionality.
	This article discusses behavior that is important for **Reporting**.

Contents

Report Screen

After a user has signed opened the PMC, pressing the "Reports" link displays all the WS Autosequences available to the user, based on Employee Role privileges and the privilege group of the autosequence itself. After an autosequence is selected, the Report Screen displays (shown below). The report screen has three basic sections:

- Report parameters, such as the Business Day, View, Range, or Employee
- Report window where the information will display
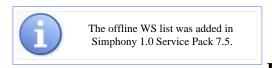- Buttons to generate the report.

A list of autosequences shown when the PMC Reports module is opened. Note that the this list will vary based on the operator's Employee Role privileges.

Running a Report

After the parameters are selected, press "Run" to run the report. The report displays in the window.

When Workstations are Offline

When a workstation is able to communicate with the database for a report, the report will list all the workstations in the Property that are considered to be offline. (This list displays on the printed report and the chit view, but not the Full Screen report). This list includes the time since the workstation was last contacted, in Days:Hours:Minutes format.

The offline WS list was added in Simphony 1.0 Service Pack 7.5.

A view of the Property Financial Report in the PMC. A Property Financial Report has only one optional field, the Business Day selection; other reports will have other options on the left side of the screen. Also note that this image shows the report window after "Run" has already been pressed.

User Languages

Each Employee is associated with a Language; the Language determines the text that the user will see when using a workstation. In addition, the user's Language determines the text to be displayed on PMC Reports. In the Languages module of EMC, each Language has a configurable "PMC Language" field. This field lists all the configured languages within the mymicros.net databases. When a user takes a PMC Report the following steps occur (these steps are transparent to the user):
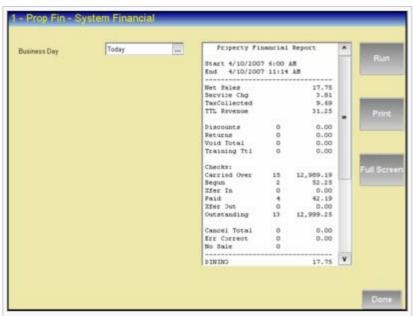
1. The request for the report includes the user's language.
2. Based on the user's language, the mymicros.net language can be determined.
3. The request is sent to mymicros.net to get the report. The report is generated using the mymicros.net language from the request.
4. The report is returned to the workstation; it displays using the language configured in the mymicros.net database.

Full Screen

Reports display in the report window initially; this view is similar to the report that will print to the workstation's printer. To display the report using the entire workstation screen, press the **[Full Screen]** button.

The full screen view provides an easy-to-read layout. Shown on the right is an example of a Property Financial Report in full screen view.

Full screen view of a Property Financial Report.

Offline Reports

When workstations can communicate directly with the database, report information will be obtained from the database. There may be situations when the database cannot be reached due to network outages or other problems. When this occurs, workstations are still able to generate reports.

Yellow Mode

The term "yellow mode" is used to describe a workstation that can communicate with other workstations and 1.x Services, but not to the database.

When a workstation is in Yellow Mode, workstations generate reports using data from the Offline Transaction Cache workstation.

Yellow Mode Reports will print with a special header indicating that the workstation is offline. Also, as seen on the right, the second header line of Yellow Mode Reports reads, "Offline Transaction Cache Report."

This chit displays a report taken when in yellow mode.

Red Mode

The term "red mode" is used to describe a workstation that has no communication with other workstations or services. In short, a red mode workstation is a workstation without any network communication. A workstation may enter red mode intentionally (a remote concession stand) or unintentionally (a bad network port on a router or hub).

When a workstation is in Red Mode, it will generate reports using data from its local database only. *Note: A workstation knows when it is offline, but it does not immediately distinguish between Red and Yellow modes. Therefore, a Red Mode workstation will prompt, "Offline Transaction Cache not available. Run report locally?" before attempting to use the local workstation data for the report.*

Red Mode Reports will print with a special header indicating that the workstation is offline. Also, as seen on the right, the second header line of Red Mode Reports reads, "Offline UWS Report."

```
=================================
  Offline Employee Open Check
        Offline UWS Report
        APR10'07  9:39AM
=================================
            UWS 8   RS7
=================================
            RVC: RVC 1
=================================
CHK        OPENED          TTL DUE
---        ------          -------

322        09:02AM           25.08
           TBL 4/4

326        09:05AM           54.49
           TBL 0/0

330        09:06AM           71.72
           TBL 7/1

---        ------          -------
TOTAL      3               151.29
=================================
```

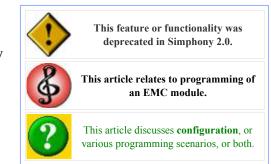This chit displays a report taken when in red mode.

See also

- Offline Mode

PMC	PMC · Autosequence Function Key · List of PMC Reports · PMC Diagnostics · PMC Procedure · **PMC Report** · Reporting Period · Workstation Listing Report · WS Autosequence
Learning series: PMC	

Price Assignment

Price Assignment is an EMC module that is used for Enterprise-Level Menu Item Pricing functionality. In this module, prices are assigned to Price Tiers and Price Tiers are assigned to Price Groups; this is ultimately the most important module for Enterprise Pricing, because this is where the prices are actually declared.
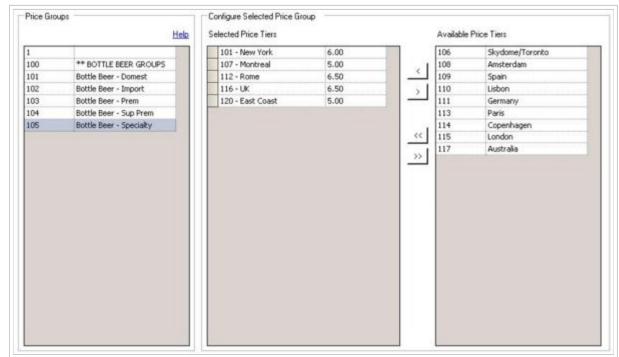
⚠	**This feature or functionality was deprecated in Simphony 2.0.**
🎼	**This article relates to programming of an EMC module.**
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 EMC Configuration
    - 1.1 Configuring a Price Group
- 2 See also

EMC Configuration

The Price Assignment module is opened from the enterprise scope of the EMC. *Note: If no Price Groups or Price Tiers have been programmed in the system, the module will display an error message and it will not open.*

The module consists of two group boxes:

The Price Assignment module of EMC. In this module, Price Tiers are assigned prices per Price Group. The example image shows the Price Tier configuration for Specialty Bottle Beer.

Price Groups
> This grid
displays all the Price Groups that are configured in the system. When a Price Group is selected, the grids in the "Configure Selected Price Group" group box are populated with relevant information.
Configure Selected Price Group

In this group box, the two grids display the Price Tiers and their configuration based on the selected Price Group.

- **Selected Price Tiers** - This grid displays all the Price Tiers that have been assigned to the selected Price Group.
- **Available Price Tiers** - This grid displays all the Price Tiers that have not been assigned to the selected Price Group.
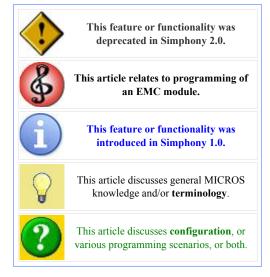
Configuring a Price Group

To configure a Price Group:

1. Select a group from the "Price Groups" grid.
2. After a group is selected, the "Selected Price Tiers" grid shows all Tiers that have been assigned to the selected Group; the "Available Price Tiers" grid shows Tiers that are not assigned to the selected Group
3. To assign a Tier or Tiers to the selected Price Group, highlight the Tier(s) in the "Available Price Tiers" grid and press **(<)** to move the selections to the "Selected Price Tiers" grid. (Similarly, press **(<<)** to move all the Tiers to the "Selected Price Tiers" grid; use **(>)** and **(>>)** to remove Tiers from the "Selected Price Tiers" grid.)
4. Once the items are in the "Selected Price Tiers" grid, assign prices for the Tiers. Note that each price cell displays the number of decimals for the Tier, as defined in the Price Tier module.

Price Groups and Price Tiers

Price Groups and **Price Tiers** are integral components of Enterprise-Level Menu Item Pricing. Price Groups and Price Tiers are both EMC modules, however most of the programming related to these concepts is performed in other modules.

This feature or functionality was deprecated in Simphony 2.0.
This article relates to programming of an EMC module.
This feature or functionality was introduced in Simphony 1.0.
This article discusses general MICROS knowledge and/or **terminology**.
This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 Terminology and Usage
    - 1.1 Price Group
    - 1.2 Price Tier
- 2 See also

Terminology and Usage

Price Group

A **Price Group** is a label that defines a group of menu items. Ultimately, each Menu Item Price record can be linked to a Price Group. By adding a Menu Item Price to a Price Group, the individual price record does not need to be configured; instead, the price configured in the Enterprise module, Price Assignment, will be used for the item.

In the Price Group module, there is no Form View; it is only possible to create a record and give it a name. MICROS recommends programming Price Groups by creating similar records in ranges. For instance, the items "Rail Liquor", "Call Liquor" and "Top-Shelf Liquor" could be programmed in the 100's range (the object numbers 101-103), whereas Beer items could be programmed in the 200's range. This type of programming allows easier configuration of the Price Assignment module.

Common Price Group records:

- Domestic Beer
- Imported Beer
- Micro-brew Beer
- Rail Liquor
- Call Liquor
- Top-Shelf Liquor

Price Tier

A **Price Tier** represents a level of pricing for similar items. Ultimately, Price Tiers can be assigned to Revenue Centers, marking the RVC a part of a certain type of tier. Price Tiers are often named based on geographic location; RVCs in New York may be associated with an "East Coast" tier while a San Diego RVC is programmed as "West Coast."

Consider the interaction between Price Tiers and Price Groups (using the "common examples" that are displayed):

Common Price Tier records:

- East Coast
- West Coast
- East Coast Upscale
- West Coast Upscale

Price Group	East Coast Price	West Coast Price	East Coast Upscale Price	West Coast Upscale Price
Rail Liquor	4.0	5.00	4.50	5.50
Call Liquor	5.00	6.00	5.50	6.50
Top-Shelf Liquor	6.00	7.00	6.50	7.50

This desired configuration is the primary purpose for the Enterprise-Level Menu Item Pricing model in Simphony. By marking an item as part of a certain "Group", and marking a RVC as part of a certain "Tier", the item will assume the price configured at the enterprise level. In the example, a user could then change "Top-Shelf Liquor" to 6.25 in the East Coast, and all RVCs marked as "East Coast" would update accordingly. This model eliminates the need to modify individual prices or to perform distribution.
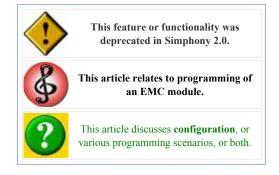
In the Price Tiers module, there is no Form View; it is only possible to create a record, give it a name, and set the number of Decimal Places. The Decimal Places field is used for determining the type of decimal input in the Price Assignment module. This functionality is necessary when properties use different types of currencies, and the number of decimal places is not the same for all currencies.

Price Tier Assignment

Price Tier Assignment is an EMC module that is used for the Enterprise-Level Menu Item Pricing functionality. In this module, Price Tiers are assigned to Revenue Centers.

⚠️	**This feature or functionality was deprecated in Simphony 2.0.**
𝄞	**This article relates to programming of an EMC module.**
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents
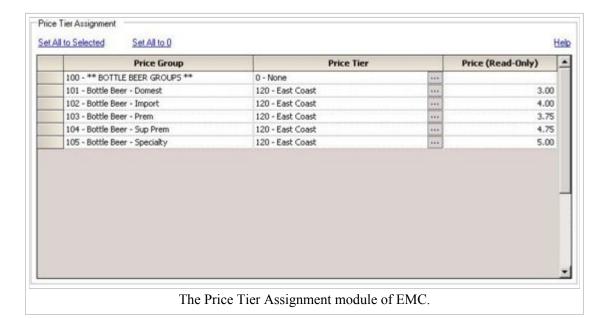
- 1 EMC Configuration
- 2 Programming Scenario
- 3 Other Considerations
- 4 See also

EMC Configuration

The Price Tier Assignment module is opened from the Revenue Center Scope of EMC. *Note: While this module looks similar to regular Table View/Form View modules, the functionality within this module is completely unrelated to Table View/Form View.*

When the module opens, a three-column grid displays.

The Price Tier Assignment module of EMC.

Price Group
> This column displays all the Price Groups assigned in the Enterprise. Note that the example image displays Price Groups that were programmed in a range; this type of programming is recommended.

Price Tier
> This is the only configurable column in the grid. In this column, assign a Price Tier to be active for the given Price Group. Often, the same Price Tier is used for all Price Groups in a RVC; see below for more details.

Price (Read-Only)
> This field cannot be edited; it displays the price that will be charged for items in the given Price Group/Price Tier combination. The text "unassigned" displays in this column when the Price Tier has not been assigned to the selected Price Group (in the Price Assignment module).

Two links at the top of the page allow for easy programming:

Set All to Selected
>   When one row is active, clicking this link will make the Price Tier column for all rows be set to the value of the current row.

Set All to 0
>   When this is clicked, all Price Tiers will be set to 0.

Programming Scenario

In general, the same Price Tier is assigned to all Price Groups in a single RVC, as the example image displays. However, this is not always the case. Using the example image as a starting point, consider a scenario where a new "Specialty Beer Promotional" offer will be rolled out to all sites on the East Coast for one month. After programming the new Price Tier and its prices, the following series of events could occur:

- To test the promotional pricing and its popularity, a single site on the East Coast could have its RVCs set for the "Specialty Beer Promotional" pricing.
- At this point, all the Price Groups for the RVCs are set to "East Coast" except the "Bottle Beer Specialty" group, which is set for the "Specialty Beer Promotional" tier.
- After determining that the promotional pricing will be a success, all other East Coast RVCs can be set for the "Specialty Beer Promotional" tier.
- When the promotional month is over, all the RVCs can be reverted to the regular setting of "East Coast."

This is just one scenario describing why all Price Groups in a single RVC may not have the same Price Tiers assigned. There may be other situations as well, such as:

- Liquor pricing is based on geography (East/West Coast), but Wine pricing is based on type of location (small hotels vs. spas and resorts)
- There may also be situations where Price Groups are not assigned a Price Tier at all, and the price configured in Menu Item Maintenance for the MI Price is the price that will be active.

Other Considerations

- In the Price Groups module, when a Price Group record is deleted, the Price Tier Assignment information for that Price Group is automatically deleted for all RVCs. (However, it is not possible to delete a Price Group when a Menu Item Price is assigned to it.)
- In the Price Tier module, when a Price Tier record is being deleted, the deletion will not be allowed when at least one RVC is assigned to the tier.

Production Items for KDS

*This article reviews the functionality and configuration steps to enable **Production Items for KDS Systems**.*
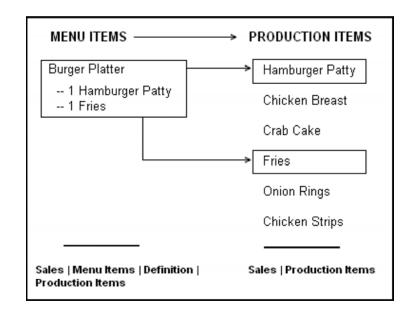
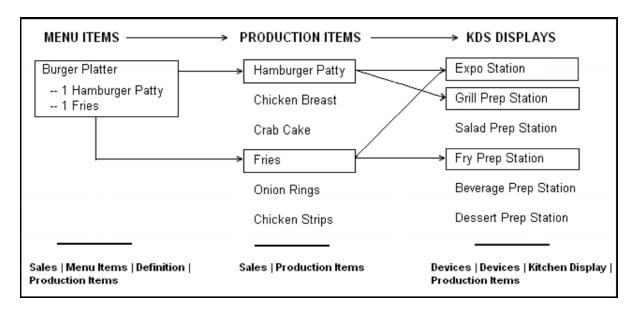|	
♪	**This article relates to programming of an EMC module.**
ⓘ	**This feature or functionality was introduced in Simphony v1.6 MR4 and higher.**
💡	This article discusses general MICROS knowledge and/or **terminology**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

Overview

The Production Item feature allows users to link Menu Items that are prepared in a similar manner (e.g., French Fries, Hamburger Patties) and send them to pre-selected KDS prep stations. These items can then be grouped together and displayed in bars either above or below the order chits. The Production Item feature was designed for the kitchen environment that has staff working in an assembly-line fashion. It allows the cooks to concentrate on their specialties or portions of an order. Production items can be used in either Dynamic Order Mode (DOM) or non-DOM environments.

How It Works

During setup, users create an unlimited number of Production Item records. The production items represent portions of menu items that can be prepared in batches (e.g., Fries) or in lots (e.g., Burgers). A menu item can include one or more production items. For example, a Burger Platter can be linked to both the Burger and the Fries production items.

MENU ITEMS ⟶ PRODUCTION ITEMS

Burger Platter
-- 1 Hamburger Patty
-- 1 Fries

Hamburger Patty

Chicken Breast

Crab Cake

Fries

Onion Rings

Chicken Strips

Sales | Menu Items | Definition | Production Items

Sales | Production Items

Once defined, users specify which production items will be displayed at each KDS prep station. This is done by linking them to the station's order device. Each production item may be shown on more than one KDS display. In the following diagram, both the Burger and Fries production items are sent to the Expo station as well as their respective prep stations.

MENU ITEMS ⟶ PRODUCTION ITEMS ⟶ KDS DISPLAYS

Burger Platter
-- 1 Hamburger Patty
-- 1 Fries

Hamburger Patty

Chicken Breast

Crab Cake

Fries

Onion Rings

Chicken Strips

Expo Station

Grill Prep Station

Salad Prep Station

Fry Prep Station

Beverage Prep Station

Dessert Prep Station

Sales | Menu Items | Definition | Production Items

Sales | Production Items

Devices | Devices | Kitchen Display | Production Items

Note: Since it is a system-wide variable, the Production Item total represents the sum of all such items currently in the kitchen. To view only those items relevant to the local device, operators can add a touch key to display a **Production Summary** for that station.

Production Summary

Occasionally, operators will need to review the status of their own production items. To do this, a Production Summary key may be added to the KDS Tool bar or Bump bar. The key

acts as a toggle switch to open and close a device-specific list of current production items.

Production Item Summary | × |

Production Item	Count
Hamburger Patty	1
Fries	2
Chicken Breast	1

✓   ✗

KDS Production Item Summary

Production Bars
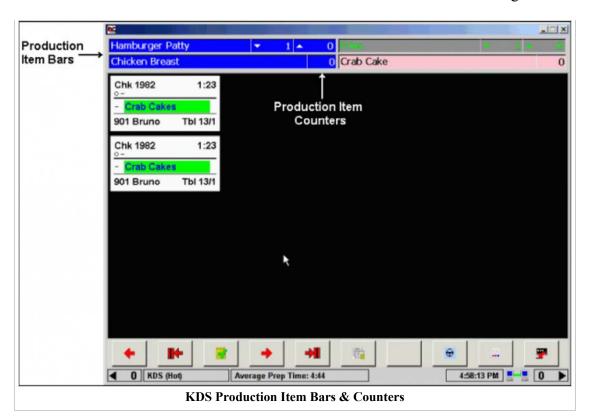
On the KDS device, production items are grouped together in bars that span the width of the screen. As part of setup, users specify whether the bars will display above or below the order chits. To conserve space, up to 5 production items can be shown per Production Bar, with the following guidelines:

- If the number of columns configured is less than the number of production items sent, the system will simply start another production bar.
- If the number of columns configured is greater than the number of production items sent, the system will fill the bar with the number of columns that it has.

For example, if the device allows up to 5 production items to display per production bar, but only 3 production items are sent to the display, the system will space the three bars to fill out the entire horizontal width of the display. It will not insert blank columns just to fulfill the 5-column maximum. Similarly, if the defined maximum is 4 production items, and the

number sent is 7 production items, the system will display 4 columns in the first line, then the remaining 3 on the second line. The columns on the second line will retain the column widths from the first row, inserting (in this case) a blank 4th column to complete the bar.

- Production names may be truncated to allow adequate spacing for the production item counters.
- The number of production items per bar is set at the KDS device level.

KDS Production Item Bars & Counters

To differentiate between them, users can set the foreground and background colors for each production item in the KDS display. This is a system-wide option and cannot be changed at the device level.

Production Item Counters

The production items listed on the KDS display include a name and at least one counter to track the number of portions that the prep cook must make. The number of counters depends on whether the production items are tracked individually or relative to other items on the check (i.e., using item prep times).

Single Counter

A single counter is used when a simple count of production items is required. All items are started immediately and the count is incremented and decremented when those production items are added or bumped from the screen. This is the method described in **Example 1** below. It can be used in both DOM and non-DOM environments.

> **EXAMPLE 1**
> The kitchen in the Mike Rose Grill has a designated grill station that is responsible for making hamburgers. The restaurant offers several menu items made with a grilled hamburger patties, including:
>
> - #1 Burger Combo (1 patty)
> - Cheeseburger Deluxe (1 patty)
> - Burger Platter (1 patty)
> - Double Burger Platter (2 patties)
>
> All of these menu items are linked to a production item called "Hamburger Patty". The option '**Single Item Per Suborder'** (**Devices** | **Order Devices** | **KDS** | **Options**) is also enabled.
>
> During lunch, a check is started that includes one of each item. When the order is sent to the kitchen, chits for each menu items appear on the Grill station's KDS display. At the top of the screen, the Hamburger Patty production item counter is automatically incremented by 5.

The prep cook responds by putting 5 patties on the broiler. When the burgers are finished, the prep cook bumps them from his display and the production count is decremented by 5. At this point, the expediter makes the sandwiches and plates the rest of the orders for the server.

Over/Under Counters

When item prep times are used, a single counter is no longer sufficient. This is because the production items are no longer tracked as individual events, but as part of a larger order. To ensure that all parts of the order are served at their best, it may be necessary to wait before starting the production item while other parts of the order are prepared. In this case, two counters are required. These are referred to as Under/Over counters. During operations, the Over counter shows how many portions should be started immediately, while the Under counter indicates how many will be needed soon. This method works best in a non-DOM environment.

Shelf Life

The mechanism for determining when a production item should be started is the item's shelf life. This is similar to an item prep time, in that it specifies the amount of time needed to prepare the production item before the order is plated. The difference, in this case, is that the production item is not a separate menu item, per se. It is part of another menu item. In this sense, the shelf life represents a portion of the menu item's prep time. It is the amount of time needed to prepare the production item before its parent item is completed.

EXAMPLE 2
The Mike Rose Bar & Grill offers several menu items that include a single portion of fries, among them are:

- Burger Platter — Item Prep Time = 5 minutes
- Chicken Sandwich Deluxe — Item Prep Time = 6 minutes
- Rib-Eye Special — Item Prep Time = 10 minutes

All of these menu items are linked to a production item called "Fries", which have a shelf life of 4 minutes. The option '**Single Item Per Suborder'** (**Devices** | **Order Devices** | **KDS** | **Options**) is also enabled.

During dinner, a check is started containing all three of these menu items. When the check is service totaled, the system calculates the **Target Done Time (TDT)** for the order by looking for the longest item prep time. In this case, the longest prep time is 10 minutes (Rib-Eye Special). This becomes the 'TDT' for the entire order.

When the order is sent to the Fry prep station, the system compares the shelf life of the Fries to the 'TDT' and determines that it is too soon to start cooking. The 'Over' counter is incremented by 3 portions. At the 6-minute mark, the order is 4 minutes from being plated, which means the threshold for preparing the Fries has been reached.

The system subtracts 3 Fries from the 'Over' counter and adds them to the 'Under' counter. This is the fry cook's alert to drop 3 portions of Fries. When finished, the cook bumps the chits, subtracting 3 portions from the 'Under' counter.

Incrementing/Decrementing the Counters

In the preceding examples, production counters were incremented as soon as the check was service totaled and decremented when the suborder was bumped from the display. Other options are available. These options are set by accessing the **EMC** |

Property level | **Property Hardware** | **KDS Controller** | **'General'** tab | **Production Count** section. These settings will apply to all of the KDS devices for the Property.

Production Count Increment Type

- **Incrementing Counters** — Users have two ways to increase the production item counters on a KDS display:
  - **Sent from POS** — The production counters increase as soon as the check is service totaled. If an order contained two or more production items (e.g., Burger Platter = hamburger patty, portion of fries), the chits would display on all prep stations (and could be started) simultaneously.
  - **Fired from Expo** — The production counters increase when the check is sent to the KDS. This option is used with the item timing feature, and is recommended for use in a non-DOM environment. When applied to checks with two or more menu items, each having its own production items, it controls when the production item over/under counters will actually be incremented.

For example, using the item prep times listed in **Example 2**, you would expect the Rib-Eye Special to be fired as soon as the check is service totaled.

Four minutes later, the Chicken Sandwich should be fired, and one minute after that — at the 5-minute mark — the Burger Platter should display.

This is, in fact, what occurs. When the order is sent to the KDS, the chit for the Rib-Eye Special is displayed immediately — along with its portion of Fries. Notice that a separate chit is not provided for the Fries. In this scenario, Fries are simply an attribute of the Rib-Eye Special, more than a condiment, but not exactly a side item.

When the chit is displayed at the KDS stations, the 'Over' counter for Fries production items increments by 1. Four minutes later, the chit for the Chicken Sandwich displays, increasing the Fries 'Over' counter to 2. At the five-minute mark, the chit for the Burger Patter appears. Once again, the Fries 'Over' counter increments, indicating that 3 portions of Fries will be needed soon.

At the 7-minute mark, the Fries need to be started and the count of three Fries is deleted from the 'Over' counter and added to the 'Under' counter.

Production Count Decrement Type

- **Decrementing Counters** — There are three methods for decreasing production item counters on a KDS display. For illustration purposes, the following descriptions refer to a single menu item (Burger Platter) with two production items (hamburger patty, fries), displayed on three prep stations (Grill, Fries, Expo):
  - **First Prep Done** — The production counters decrement on all three devices when any of the three prep station bumps the chit from his display. This only affects the production counter -- not the chit itself.

For example, if the fries are finished first, the production counters will be decremented on all stations as soon as the Fry prep cook "*dones*" his chit. The chit will continue to display on the Grill and Expo stations until "*doned*" at those stations.

If the Fries are bumped first, the system will...	Grill	Fries	Expo
Clears Chit	No	Yes	No
Decrements Counter	Yes	Yes	Yes

- **All Prep Done** — The production counters will not decrement on any of the stations until all the prep stations have bumped the item. The chits remain visible at each KDS station until bumped from their respective displays.

If the Fries are bumped...	Grill	Fries	Expo
Clears Chit	No	Yes	No
Decrements Counter	No	No	No
Once the Burger is bumped...	-	-	-
Clears Chit	Yes	Yes	No
Decrements Counter	Yes	Yes	Yes

> **Note:** When using '**All Prep Done'** to decrement the production counters, the Revenue Center and Order Devices must be configured consistently with regard to Dynamic Order Mode (DOM). That is, all order devices must be set to DOM when the Revenue Center is in DOM and all Order Devices must be set to non-DOM when the Revenue Center is in non-DOM.

- **Expo Done** — The production counters will not decrement on any station until bumped from the Expo station. Once again, the chits remain visible at each KDS station until bumped from their respective displays.

If the Fries are bumped...	Grill	Fries	Expo
Clears Chit	No	Yes	No
Decrements Counter	No	No	No
Once the Burger is bumped...	-	-	-
Clears Chit	Yes	Yes	No
Decrements Counter	No	No	No

Voiding Production Items

Menu item voids can also decrement the production counters — but only if the item is still in the kitchen at the time of the void. Once the menu item is done and bumped from the display, the production count decrements naturally. Since production counters only track the number to be prepared, they are not affected by completed items or previous round voids.

For example, a user starts a check by ringing up a void of a Burger Platter. The Burger Platter menu item includes two production items — 1 Burger Patty and 1 Fries.

When the void is fired, the KDS Controller attempts to match the Burger Platter item with an existing item in the kitchen. If a match is found, the production count is decremented by one Burger Patty and one Fries.

If match is not found, the void is recorded, but the production counters are not changed. Decrementing is unnecessary because the system assumes that the Burger Platter is already done. At this point, the void may be required to correct the check total, but it does not affect what items need to be made at this time.

Using Production Items

Throughout this description, the examples have defined production items within the context of their parent menu items. This is the primary use for the feature. It is by no means the only application.

Production items can also be linked to defined menu items (an order of fries, for example) or to condiments (the side of fries that completes a combo meal). The table shown here provides a list of considerations when linking each to production items in KDS.

Included with Parent Item	A la carte Menu Item	Condiment or Side Item
• Always prints on same chit as parent item – even in a *SIPS environment. • Included in cost of parent. • Included in the parent menu item prep time. • Uses shelf life value to determine when the production item will be started, relative to the parent item and/or other menu items on the check.	• Will display on own chit in a *SIPS environment. • Priced separately. • Uses own menu item prep time. • Shelf life entry should be set to 0.	• Can be displayed with or without parent item in a *SIPS environment. • If priced, the amount is added (subtracted) from the parent item price. • May have own item prep time. If defined, adds (subtracts) from the parent item prep time. • Shelf life entry should be set to 0.

*(SIPS)= Single Item Per Sub-Order – KDS Option

Step-by-Step Procedures
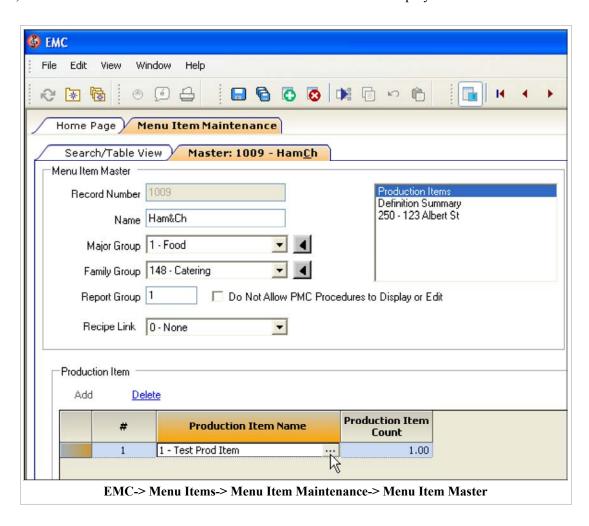
This section describes the procedures required to create Production Items and display them on the KDS devices.

Define the Production Items

Follow these steps to define production items and link them to the appropriate menu items:

1. Open the EMC | **Property** level and select **Sales** | **Production Items**.
2. Click the '**Insert**' icon to add a new record to the table.
3. Enter a **Name** for the production item (e.g., Hamburger Patty). The name should clearly identify what is being prepared for each menu item that is being tracked.
4. From the **KDS Highlight Scheme** drop-down list, select the style to be used when displaying the text and background colors for this production item on KDS devices.
5. In the **Shelf Life** field, specify the amount of time needed to prepare this production item portion before the order is plated. This option controls whether one or two counters will be displayed with the production item. If the value is set to '**0**', a single counter is displayed. The prep cook starts the item as soon as it is displayed and bumps when finished. If the value is greater than '**0**', an 'Over/Under' counter is used. The 'Over' counter indicates how many items should be started immediately, while the 'Under' counter indicates how many will be needed soon. The counts are based on the production item's shelf life, relative to the longest prep time in the order. As the order times progress, the system uses this shelf life value to determine when to move the items from the 'Over' counter (prepare soon) to the 'Under' counter (prepare now).
6. Click the '**Save**' icon to save the record.
7. Open the **Menu Items** | **Menu Item Maintenance** module and search the **Menu Item Master** record type.
8. Highlight and open the desired **Menu Item Master** record and toggle to Form view. From under the **Menu Item Master** header select the, **Production Items** filter and a **Production Item** window will display below.

EMC-> Menu Items-> Menu Item Maintenance-> Menu Item Master

Complete the table as follows:

- Click the '**Add**' link.

- Click in the **Production Item Name** field to open the drop-down list of defined production items. Select the appropriate entry (e.g., Hamburger Patty).
- In the **Production Item Count** field, enter the number of portions that will be needed to complete this menu item. For example, a Hamburger would require a single hamburger patty, while a double-cheeseburger would need 2 of them.
- Click the '**Save**' icon to save the record.

9. More than one production item may be linked to the same menu item. For example, a Hamburger Platter might be linked to two production items — to Hamburger Patty and to Fries. To add another production item, click the '**Insert**' icon and complete the **Production Item Name** and **Production Item Count** fields for each additional item.

10. Click the '**Save**' icon to save the record and close the form.

Link to the KDS Devices

Follow these steps to specify which production items will be displayed on each KDS device:

1. Open EMC and select the **Property** | **Property Hardware** | **KDS Displays**.

2. Highlight a KDS device and toggle to Form view.

3. Go to the **General** tab | **Production Item** tab.

4. From the **KDS Production Location** drop-down box, specify where to place the production items on the KDS display. The options are:

- **1 - Top** = above the order chits
- **2 - Bottom** = below the order chits and above the KDS tool bar, if used.

5. From the **KDS Production Columns** drop-down box, specify the number of production items that will be included per line or production bar. Up to '**5**' are allowed.

> **Note:** Where possible, the system will display the maximum number of items in each bar. If there are not enough items to fill the last bar, the remaining items will be evenly distributed across the line.

6. Go to the **Production Item** area.

7. In the **Production Item Name** field, click the '**Add**' link and select a production item to display on the highlighted KDS device. Click the '**Save**' icon to save the record. To add additional item(s), click the '**Add**' link and repeat the select/save process until all of the production items to be displayed at this KDS station have been added to the list.

8. Repeat Steps 3-7 until all of the KDS devices have been configured.

9. Click the '**Save**' icon to save the record.

Set the System Options

Follow these steps to specify how production items will be handled on all KDS devices:

1. Open EMC and select the **Property** | **Property Hardware** | **KDS Controllers**.

2. Go to the **General** tab.

3. From the **Production Count Increment Type** drop-down list, specify when an ordered item will be added to the production counter. The options are:

- Sent from POS
- Fired from Expo (This option is **not** recommended for use in DOM).

4. From the **Production Count Decrement Type** drop-down list, specify when a "*doned*" item will be subtracted from the production counter. The options are:

- **First Prep Done** — For menu items that appear on two or more prep stations, decrements the count when the item is bumped from any of the prep stations.
- **All Prep Done** — Decrements the count when all prep stations have bumped the item. To work, the revenue center and all of its order devices must be set to either DOM or non-DOM mode.
- **Expo Done** — Decrements the count when the order is bumped from the expo station.

5. Click the '**Save'** icon to save the record.

Configure the Tool Bar

Follow these steps add a touch key to display a summary of production items specific to the KDS device.

1. From the EMC | **Property** level | **Property Hardware** | select **KDS Tool Bars**.
2. Select a KDS Tool Bar record from the **Name** list and toggle to Form view.
3. Highlight an existing **KDS Function** key or click the '**Add'** button to add a new button, if appropriate.
4. Click in the **Function** field and select **Production Summary** from the list.
5. From the drop-down list, specify the **Background Color** for the button.
6. From the **Foreground Color** drop-down list, specify the text color to be used to identify this button (i.e., the **Legend**).
7. In the **Legend** field, enter a name for this button.
8. Click the '**Save'** icon to save the record.

Configure the Bump Bar

Follow these steps add a touch key to display a summary of production items specific to the KDS device.
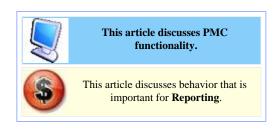
1. From the EMC | **Property level** | **Property Hardware** | select **KDS Bump Bars**.
2. Select a bump bar configuration from the **Name** list and toggle to Form view.
3. Highlight an existing **Scan Code Value /Function** key or click the '**Add'** button to add a new button, if appropriate.
4. Click in the '**Function** field and select **Production Summary** from the list.
5. Enter the appropriate **Scan Code Value** to indicate the location of the button on the Bump Bar.
6. Click the '**Save'** icon to save the record.

Property Financial Report

The **Property Financial Report** provides financial reporting for an entire property.
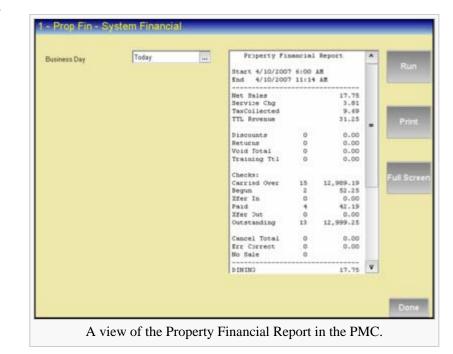
This article discusses PMC functionality.

This article discusses behavior that is important for **Reporting**.

Contents

- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report

The PMC version of the report allows only a choice of **Business Day**; with "Today" and "Yesterday" choices only.

For general information about PMC Reports, see WS Autosequences.

A view of the Property Financial Report in the PMC.

mymicros.net Report

The **Property Financial Report** is available online at mymicros.net for anyone who has access. The report can be run per Location, as well as for a specific date or range of dates. This allows users at the Enterprise Level to see the report outside of the store.

A view of the Property Financial Report in mymicros.net.

Report Examples

- PMC Property Financial

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports

Remote Distribution

	This article relates to general EMC functionality or knowledge.
	This feature or functionality was introduced in Simphony 1.0.
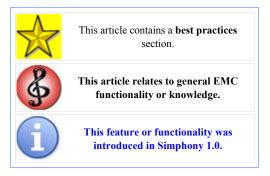
Understanding remote distribution

Remote distribution allows you to distribute data between two different databases. Remote distribution is database independent. Therefore, you can distribute from a Microsoft SQL database into an Oracle database.

Remote distribution is helpful in the following two scenarios:

- Moving data from the development system into the production system. This allows testing in development before moving to production.
- Distributing a new revenue center into the production system. This reduces the total time required to program the live system as the installer can perform much of the programming on a different system in advance.

Remote Distribution Best Practices

This article contains a **best practices** section.

This article relates to general EMC functionality or knowledge.

This feature or functionality was introduced in Simphony 1.0.

Remote distribution best practices

When using remote distribution, the signed in user can see all properties, revenue centers, and modules in the remote system. Therefore, MICROS recommends that you:

1. Create an employee named *Remote Distribution In*.
2. Give this employee a single enterprise role and select only option **[Remote Distribute In]**.

With this configuration, the employee can only perform distribution.

Reopen Closed Check

Reopen Closed Check is a function key that allows a closed check to be opened and used again, at which point tenders, menu items, discounts, and service charges may then be added or removed; the check is a regular guest check. If there was change due when the check was closed, the last tender entry must be removed (voided) before any other changes are made to the check.

	This article discusses the usage of one or more **Function Keys**. (423, 443)
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 Example Usage
- 2 Reporting
- 3 Reopening from Previous Business Days
    - 3.1 Workstation Usage
    - 3.2 Reporting
- 4 EMC Configuration
- 5 Other Considerations
- 6 Privileges
- 7 See also

Example Usage

A guest check is closed with a tendering key. The customer then decides that he will have that piece of pie for dessert after all. The server presses the **[Reopen Closed Check]** key. The workstation prompts for the check number, which the server enters. The check is reopened. The server enters the pie and tenders the check to close it for (probably) the last time.

Reporting

For Report Writer reports, a "j" prints in the status field for any check that has been reopened. The PMC Reports use a capital letter ("J").

Reopening from Previous Business Days

While the **[Reopen Closed Check]** function key (423) only allows checks from the current business day to be adjusted, another function, 443, **[Reopen Closed Check (Prev. Days)]** allows check adjustments to occur for the current business day *and* previous business days, for a predefined number of days. The number of days allowed for reopening closed checks is configured in RVC Parameters on the Posting and Control tab.

Workstation Usage

To use this key at the Workstation:

1. Press the **[Reopen Closed Check (Previous Days)]** function key (443)
2. When the key is pressed, the workstation will allow checks to be reopened for the current Revenue Center, for the number of days specified in the RVC Parameter field.
   - If the field is set to 0, only the current business day's checks will be accessible.

Reporting

Reporting numbers for a previous day cannot be changed by use of the **[Reopen Closed Check from Previous Business Days]** function keys. When a check is reopened from a previous day, only the current day's checks and totals are affected. It should be noted that reopening from a previous day will make reports seem "out of balance" for a day. However, when reports are taken for a larger period of days (including the date of the original check and the date of the reopening), the reports are indeed "in balance." Please reference the following example:

- Scenario: Check #1000 from April 10, closed for $10.00. To make this example simple to follow, no other checks are opened in the system. The check is reopened on April 15.

The user reopens the check, voids the payment, and service totals the check, a report will show the following figures:

```
Checks Begun    1    0.00
Checks Paid     0  -10.00
Outstanding     1   10.00
```

Tender totals will show -10.00 (cash tender, for example).

If the user then adds $2.00 to the check and pays it, the report will show the following figures:

```
Checks Begun    1    2.00
Checks Paid     1    2.00
Outstanding     0    0.00
```

Tender totals will show 2.00.

Taking a report for the entire period (for instance, the week including April 10 and April 15), the report shows:

```
Checks Begun    2   12.00
Checks Paid     2   12.00
Outstanding     0    0.00
```

Tender totals will show $12; and this information is correct. Two checks were begun (the reopened check counts as another check entry), and both were paid. The $12.00 total includes checks from both days.

EMC Configuration

Revenue Center Parameters contains a few options that relate to reopening closed checks. These options can be enabled or disabled based on site preferences:

Keep the Same Check Number When a Check is Reopened

Select this option (#37 in Options/General) to cause a reopened guest check to retain its original guest check number. Disable this option to cause a reopened check to be assigned a new check number.

Allow Changes to Menu Items on Closed Checks

Select this option (#14 in Posting and Control) to allow privileged operators to make changes (additions, voids, etc.) to the menu item postings on closed checks, after they have been reopened.

Allow Service Total of Closed checks

Enable this option (#15 in Posting and Control) to allow privileged operators to service total closed checks.

Other Considerations

Generally, the Reopen Closed Check function keys should be programmed on the Default Transaction Screen. Additionally, there are considerations to keep in mind when reopening checks from a previous day:

- While the maximum value of the RVC Parameter fields "Number of Days to Reopen Closed Checks" is 999 days, checks are purged from the Simphony system after approximately six weeks. Therefore, it is typically not possible to reopen checks that are more than six weeks old.
- It is not possible to void a credit card payment on a check when that credit card payment has already been batched by the Simphony system.

Privileges

An operator has access to the Reopen function keys only when associated with an Employee Role with the proper privileges:

- Authorize/Perform Reopen Closed Check
- Auth/Perform Reopen Closed Check from Previous Business Days

Three other options relating to reopening checks are found in the Employee Role module:

- Authorize/Perform Void of Menu Items on a Closed Check
- Authorize/Perform Void of Discounts on a Closed Check
- Authorize/Perform Void of Service Charges on a Closed Check

Report Group (reports)

This article as about Report Groups used to group Tender/Media records on Reports. For information on Report Groups used for Menu Items and Job Codes, see Report Group (sorting)

A **Report Group** is a group of Tender/Media records; report groups allow programmers to combine similar tenders when displayed on reports. By programming report groups properly, users can immediately determine important cash-out information such as the number of credit card payments received, and the amount of cash due.

	This article relates to programming of an EMC module.
	This feature or functionality was introduced in Simphony 1.0.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 EMC Configuration
    - 1.1 Typical Configuration
    - 1.2 Tender/Media Configuration
- 2 Report Output
    - 2.1 Tender Breakdown
    - 2.2 Bank Due
- 3 See also

EMC Configuration

The **Report Groups** module is opened from the property scope of the EMC. There is no form view for this module. The configurable fields are as follows:

The Report Groups module in EMC. Currently, the only "Type" available is Tender/Media.

Type

Currently, Tender/Media is the only Report Group Type available.

Options

There are four Tender/Media options available:

1. **Include in Bank Due Section**: Select this option to show tenders in this group in the "Bank Due" section of reports. This option is typically enabled for tenders that include incoming or outgoing "cash" payments.
2. **Subtract In Bank Due Section**: This option applies only if the "Include in Bank Due Section" is enabled. Select this option for tenders in this group to be subtracted in the "Bank Due" section of reports. This option is typically enabled for outgoing "cash" payments, such as "Tips Paid" or pickup Tender Media types.

3. **Do Not Include in Tender Breakdown Section**: This option prevents this tender group from showing in the "Tender Breakdown" section of reports. This option is typically enabled for non-sales types of tenders, such as Loans, Pickups, and "Tips Paid" tenders. The "Tender Breakdown" section of the report has a "Total Receipts" line that should equal the Total Checks Paid amount. Therefore, tenders such as Loans, Pickups, and "Tips Paid" should be excluded from that section.
4. **Do Not Display for Blind Drop Reports**: This option will be used to prevent tenders in this group from showing on reports. An employee cannot see Blind Drop Tenders if the Employee Role option, "Do Not Show Blind Drop Tender Groups" is enabled.

Typical Configuration

Typical report groups in a property are:

Cash Tenders
> Used for cash received for transactions. This group typically has options #1 enabled.

Credit Card Tenders
> Used for credit card payments. Usually, these Report Groups are configured with none of the Report Group options enabled.

Comps
> Used for "comp" tenders, such as "Manager Discount." Usually, these Report Groups are configured with none of the Report Group options enabled.

Tips Paid
> Used for Tips Paid Tender/Media records. This type of tender is typically linked to Service Charges for calculating Tips. This group typically has options 1, 2, and 3 enabled.

Cash In
> Used for non-transaction types of deposits, such as Loans. This group usually has options 1 and 3 enabled.

#	Name	Report Group
1	Cash	1 - Cash Tenders
2	Gift Certificate	1 - Cash Tenders
3	Check	1 - Cash Tenders
4	Cash No Receipt	1 - Cash Tenders
8	Paid In	5 - Cash In
9	Paid Out	6 - Cash Out
10	Tips Paid	4 - Tips Paid
11	Banquet Deposit	5 - Cash In
20	Visa	2 - Credit Cards
25	MasterCard	2 - Credit Cards
30	American Express	2 - Credit Cards
36	Diner's	2 - Credit Cards
40	Discover	2 - Credit Cards
45	JCB	2 - Credit Cards
47	Enroute	2 - Credit Cards
101	Manager Comp	3 - Comps
102	Waste / Spillage	3 - Comps
103	Walk-Out	3 - Comps
104	Coupon	3 - Comps
110	iCare - Tender	3 - Comps
113	S & P	3 - Comps
114	A & G	3 - Comps
115	Duty Meal	3 - Comps
116	Employee Meal	3 - Comps
301	Room Charge	7 - Direct Bill

In the Tender/Media module, each Tender can be linked to an appropriate Report Group.

Cash Out
> Used for non-transaction types of pay-outs, such as Pickups or Tips Paid to another employee. This group typically has options 1, 2, and 3 enabled.

Direct Bill
> Used for "room charge" and "city ledger" types of Tender/Media records. Usually, these Report Groups are configured with none of the Report Group options enabled.

Tender/Media Configuration

After report groups are configured in the Report Groups module, Tender/Media records are linked to the appropriate Report Group, as shown in the image to the right.

Report Output

On Financial Reports, Report Group information displays at the bottom of the report. The Report Group information is broken into two sections, Tender Breakdown and Bank Due.

Tender Breakdown

The Tender Breakdown section of the report lists all the tenders in their respective Report Groups where the Report Group Option #3, **[Do Not Include In Tender Breakdown Section]**, is disabled. Each Report Group section lists the Tenders, then the Report Group name (with an "=" sign in front of it), followed by a blank line. In the example on the right, there are four Report Groups listed. *Note: This example shows several $0.00 items, but 0.00 items do not display on reports. The $0.00 items are shown for documentation purposes only.* The Total Receipts line is a total of all the Report Groups.

Misconfigured Tenders

If a tender that is configured with a Report Group of "0-None" is used by an operator, the tender will display on the report in an "Uncategorized" Report Group, just above the "Total Receipts" line. This occurs automatically to prevent a programming error from causing an out-of-balance report.

Bank Due

The Bank Due section of the report lists all tenders that are in Report Groups where the Report Group Option #1, **[Include in Bank Due Section]**, is enabled. If a Tender is configured with Option #2, **[Subtract in Bank Due Section]**, it will appear as a negative value (common for tips).

The "Cash Due" line is a total of all Report Groups in the Bank Due section of the report. In the example, the operator collected $10.50 in tenders, but gets to keep $4.00 of Tips; the Cash Due is therefore $6.50.

```
----------------------------
Tender Breakdown

Room Charge      0        0.00
City Ledger      0        0.00
=PMS CHARGES     0        0.00

Visa             1       22.00
MasterCard       0        0.00
AMEX             0        0.00
=CREDIT CARDS    1       22.00

Cash             1       10.50
Cash No Rcpt     0        0.00
=CASH            1       10.50

Manager Comp     0        0.00
Casino Comp      0        0.00
Poker Comp       0        0.00
=COMP            0        0.00

Total Receipts   2       32.50

----------------------------
Bank Due

Cash                     10.50
=Cash Tenders            10.50

Tips Paid                 4.00-
=Tips                     4.00-

Cash Due                  6.50
```

Report Group (sorting)

This article is about Report Groups used to sort Menu Items and other reports. For the Simphony reporting feature that replaced Tracking Groups, see Report Group (reports)

A **Report Group** is used to consolidate items within a report. *Note: This article mainly discusses report groups as they relate to menu items, but the concepts are still the same for Job Codes and other modules containing report groups.*

	This article contains a **best practices** section.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses behavior that is important for **Reporting**.

Contents

- 1 Reporting
- 2 Best Practices
- 3 Other Notes About Report Groups

Reporting

A Menu Item Sales Report will print all items from record 1-999999999, in order from the first item to the last item. Example:

```
Menu Item Number        Report Group Number     Example Sales
101001                  1                       $30
101002                  1                       $40
201001                  2                       $50
202001                  2                       $50
303004                  3                       $60
904004                  0                       $0
927001                  1                       $10
927003                  1                       $40
977001                  2                       $60
```

The Menu Item Report will not print in the above order, however, as the report will consolidate all items in Report Group 1, then all items in Report Group 2, and so on… The next example is how the menu item report will actually look.

```
Menu Item Number        Report Group Number     Example Sales
101001                  1                       $30
101002                  1                       $40
927001                  1                       $10
927003                  1                       $40
     Report Group Subtotal:                     $120

201001                  2                       $50
202001                  2                       $50
977001                  2                       $60
     Report Group Subtotal:                     $160
```

```
303004                3                    $60
     Report Group Subtotal:              $60
```

Since item 904004 is in Report Group 0, it did not appear on the Menu Item Sales Report. Generally, all non-priced condiment items should be in Report Group 0. (Typically, programmers and sites do not care how many times "Without Tomato" was rung in.) All other items are listed numerically, sorted within their Report Group.

Best Practices

Often, installers program the Report Group number to match the Major Group number of the menu item. By matching the Report Group with the Major Group, the Report Group Subtotal will match the Major Group Sales. For instance, in the example above we will assume that Major Group 1 is Food, Major Group 2 is Liquor and Major Group 3 is Beer. Looking at Major Group Sales, we would see:

```
         Food                 $120
         Liquor               $160
         Beer                 $60
```
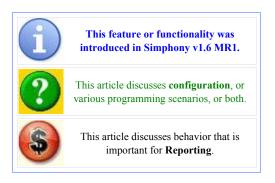
This "typical DB configuration" is a generalization that is quite common, however one problem is that there are only 99 report groups (1-99) that will show on reports for menu items. Thus, if a site has more than 99 major groups, it would not be possible to match the major group number and the report group number for a menu item.

Other Notes About Report Groups

Family Groups and Major Groups also have Report Groups associated with them, however they have 100 possibilities (0-99). Once again the typical DB configuration is where all Family Groups associated with Food are "1", all liquor Family Groups are "2" and so on, but with 100 possibilities the installers and sites have more freedom to organize things in different ways. As always, Report Group 0 means that it will not show on reports.

Reporting Gaps

The Reporting Gaps feature has been implemented to address the discrepancies in reporting from 9700 HMS to Simphony v1.x. This feature is not intended to add reports that are exactly the same as they were in 9700 HMS, but it does bridge the gap between the two products.

	This feature or functionality was introduced in Simphony v1.6 MR1.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses behavior that is important for **Reporting**.

With the release of **Simphony 1.6 Maintenance Release 1**, enhancements have been made to many of the Simphony specific reports in mymicros.net. This article includes all of the enhancements that were made as well as the changes to existing functionality.

Contents

Overview

The following were modified as part of the Reporting Gaps feature:

- Report Groups capabilities
- Report Template XMLs

- ▪ Report Mail functions

Service Charges and Discounts were added as a support type to Report Groups. This allows Report Groups to be created for Service Charges and Discounts and link them to individual service charges and discounts, so that they are subtotaled on reports. This functionality was previously only supported for Tender Media records.

Many report template XML files were modified to include Major Group and Family Group breakdowns on them. They have also been updated for use with the new Report Groups capabilities.

Report Mail has been modified to allow reports to be generated in either a consolidated or individual manner for a range of records.
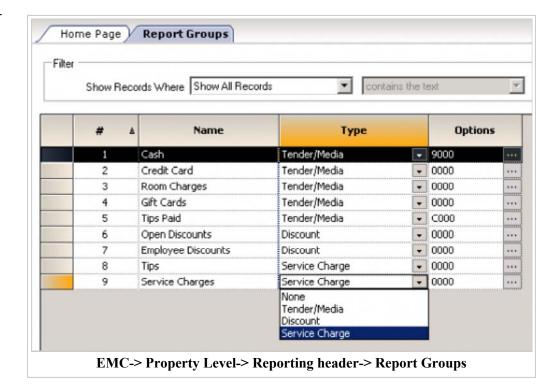
Report Group Modifications

Report groups have been modified to include two new types: Service Charge and Discount. Report Groups can now be added for service charges and discounts. Adding report groups to a service charge or discount gives the ability to group similar service charges and discounts together, in order to get a subtotal amount by that report group.

To configure Report Groups for Service Charges and Discounts:

In EMC, navigate to Property Level-> under the Reporting header-> Report Groups

- ▪ Insert a new Report Group using the green plus symbol icon on the toolbar
- ▪ Choose an Object Number for the new Report Group
- ▪ Choose to use a template or not, if using a template, select the template
- ▪ Assign a Record Name
- ▪ Click '**OK**' to add the Report Group

EMC-> Property Level-> Reporting header-> Report Groups

There are now three options to choose from in the '**Type**' drop-down: Tender/Media, Discount, Service Charge

Choose the 'Type' for the newly created Report Group.

Each Report Group added with the 'Type' of Service Charge has this option available:

[3 - Do Not Include in Service Charge Breakdown Section]

This option prevents this Service Charge group from showing in the '**Service Charge Breakdown**' section of reports.

Each Report Group added with the 'Type' of Discount has this option available:

[3 - Do Not Include in Discount Breakdown Section]
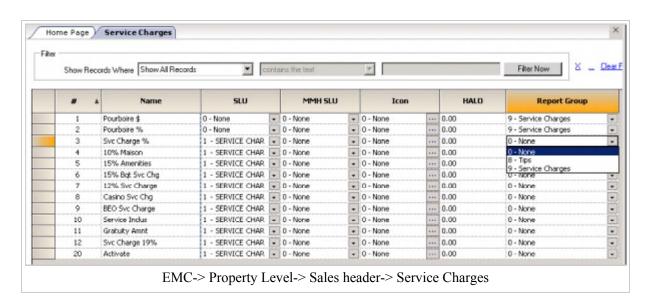
This option prevents this Discount group from showing in the **'Discount Breakdown'** section of reports.

The Report Group then needs to be linked to either a Service Charge or a Discount:

To link the newly created report group to a Service Charge:

In EMC, navigate to Property Level-> under the Sales header-> Service Charges

There is now a **'Report Group'** drop-down to choose one of the Report Groups configured for Service Charges.

EMC-> Property Level-> Sales header-> Service Charges
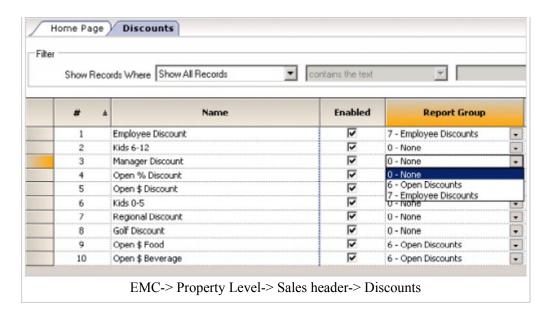
To link the newly created Report Group to a Discount:

In EMC, navigate to Property Level-> under the Sales header-> Discounts

There is now a **'Report Group'** drop-down to choose one of the Report Groups configured for Discounts.

EMC-> Property Level-> Sales header-> Discounts

There are also two new options that control whether Discounts and Service Charges breakdown should be displayed on the reports.

They can be accessed from the following:

In EMC, navigate to Property Level-> under the Property Information header-> Property Parameters-> Reporting tab

- **[Option 25 – Do Not Print the Discount Breakdown on Financial Rpts]**

Enable this option to suppress the printing of the Discount section on Financial Reports. The Discount section prints a line for each active Discount that includes the Discount Name, Percent, Total and Count, sorted by Report Group. Disable this option to print the Discount section.

- **[Option 26 – Do Not Print the Service Charge Breakdown on Financial Rpts]**

Enable this option to suppress the printing of the Service Charge section on Financial Reports. The Service Charge section prints a line for each active Service Charge that includes the Service Charge Name, Total and Count, sorted by Report Group. Disable this option to print the Service Charge section.

Enabling these options will suppress printing of the Discount and Service Charge breakdown on the following financial report templates:

MMSystemFin.xml, MMRevCtrFinXtra.xml, MMEmpFinXtra.xml, MMCashierFinXtra.xml

Report Template Modifications

The following is a list of report templates that were added or modified in Simphony v1.6 MR1:

- MMSystemFin.xml
- MMRevCtrFinXtra.xml
- MMEmpFinXtra.xml
- MMCashierFinXtra.xml

- MMEmployeeTip.xml
- MMEmployeeTipUWS.xml
- MMEmployeeTipRangeUWS.xml
- ServingPeriodList-Drill.xml
- MMServPdFin.xml
- MMRevCtrFin-ReportMail.xml
- MMCashierFin-ReportMail.xml
- MMEmpFin-ReportMail.xml
- MMMajGrpSales.xml
- MMFamGrpSales.xml

Report Mail Specific Templates

The report mail specific templates are to be used for emailing reports through the Report Mail feature in mymicros. In order to email a Revenue Center, Employee, or Cashier Financial Report, the Report Mail specific templates must be used.

MMRevCtrFin-ReportMail.xml, MMCashierFin-ReportMail.xml, and MMEmpFin-ReportMail.xml all need to be added in Warehouse-> Reports-> Portal Reports. Only these templates will work with the Report Mail feature.

Existing Templates

MMSystemFin.xml, MMMajGrpSales.xml, and MMFamGrpSales.xml are in Warehouse-> Reports-> Portal Reports by default and do not need to be edited to display the newly modified reports.

MMRevCtrFinXtra.xml can either be added new in Warehouse-> Reports-> Portal Reports, or the existing Revenue Center Financial Report can be edited to add the "Xtra" part of the path.

Existing Templates with Prerequisite Reports

MMEmpFinXtra.xml has a prerequisite report of EmployeeFinancialList.xml. EmployeeFinancialList.xml must be edited to include the correct path for the drilldown.

MMCashierFinXtra.xml has a prerequisite report of MMCashierList.xml. MMCashierList.xml must be edited to include the correct path for the drilldown.

MMEmployeeTip.xml has a prerequisite report of EmployeeTipList.xml. EmployeeTipList.xml must be edited to include the correct path for the drilldown.

Please refer to the **Configuring Updated Report Templates** section of this article for instructions on how to edit the prerequisite reports.

New Templates in 1.6 MR1

ServingPeriodList-Drill.xml must be added in Warehouse-> Reports-> Portal Reports. MMServPdFin is the first level drilldown included in the ServingPeriodList-Drill report template.

Report Mail Modifications

Modifications have been made to Report Mail to allow emailing of Simphony Revenue Center, Employee, and Cashier financial reports.

When configuring a Report Mail job for emailing the Revenue Center Financial report, there is now a new option for emailing reports "By Revenue Center". Enabling this option will send a report for each revenue center that has been selected.

When configuring a Report Mail job for emailing Employee Financial reports, there is now a new option for emailing reports "By Employee ID". Enabling this option will send a report for each employee that has been selected.

When configuring a Report Mail job for emailing Cashier Financial reports, there is now a new option for emailing reports "By Cashier ID". Enabling this option will send a report for each cashier that has been selected.

To enable Report Mail in mymicros, the Portlet needs to be added first.

To add the Report Mail Portlet:

- Sign into mymicros with Administrator rights
- Access the Portal portlet
- In the Portal portlet, click on Portlets-> Portlets
- Choose Action: Add
    - Fill in the Name field with what the Report Mail portlet will be named
    - Type: Menu
    - URL: Report Mail Admin
    - Description: Add a description of the Report Mail portlet - this is optional
    - myPage Title:
    - Options
    - Effective Dates:
    - to:
- Choose Action: Save

All fields in Blue must be filled in to continue

Configuring Report Mail

The following lines are missing from the db.xml file on an upgrade from a previous version of Simphony v1.x, that does not have Report Mail configured. The file is located at this path:
<drive>:\Micros\Simphony\MyMicros\infoDelivery

They must be manually added to the db.xml file in order for Report Mail to function properly.

SQL Server

```
<database name="jdbc/simphonyDS" url="jdbc:jtds:sqlserver://localhost:1433;databaseName=MCRSPOS" userName="microsdb
```

Oracle

```
<database name="jdbc/simphonyDS" url="jdbc:oracle:thin:@QA1XORADB:1521:SIMPHONY" userName="microsdb" password="453f
```

⟨   ⟩

> **Note:** simphonyDS is case-sensitive. If the **'S'** is capitalized, Report Mail will not function properly.

The password for the microsdb user can be encrypted using the instructions provided in the microsconfig.properties file located here: < drive>:\MICROS\Simphony\MyMicros\myPortal

Note: To determine the encrypted value for a password, use the utility embedded bin/ConfigClient.jar with the following command line:

java -cp bin/ConfigClient.jar com.micros.config.common.CE password

Configuring Updated Report Templates

In order for the new report templates to be used, specific templates must be edited to call the new templates.
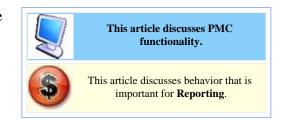
- MMCashierList.xml
- EmployeeFinancialList.xml

The above XML files must be edited to include the template name for the reports modified.

There is a line in each XML that contains the name of the drilldown report. Below is an example of that line:

```
<drilldowns>
    <drilldown name="DrillEmployeeFin" report="MMEmpFinXtra">
        <drilldownparm type="parm" value="organizationid"></drilldownparm>
        <drilldownparm type="parm" value="revenuecenterid"></drilldownparm>
        <drilldownparm type="parm" value="locationid"></drilldownparm>
        <drilldownparm type="parm" value="businessdate"></drilldownparm>
        <drilldownparm type="attribute" value="employeeobj"></drilldownparm>
    </drilldown>
</drilldowns>
```

Revenue Center Financial Report

The **Revenue Center Financial Report** provides financial reporting by Revenue Center.
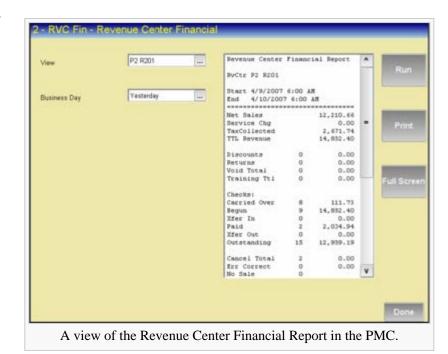
🖥️	**This article discusses PMC functionality.**
💲	This article discusses behavior that is important for **Reporting**.

Contents

- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report
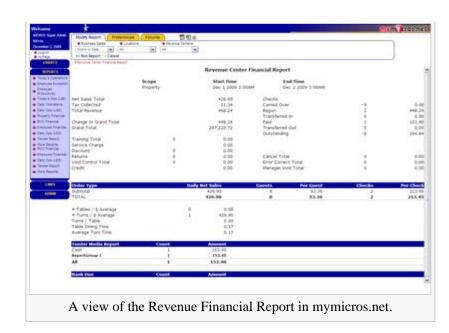
The PMC version of the report allows a choice of **View** and **Business Day.** "Business Day" choices allow "Today" and "Yesterday" only. The report can be taken for a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Revenue Center Financial Report in the PMC.

mymicros.net Report

The **Revenue Financial Report** is available online at mymicros.net for anyone who has access. The report can be run per Location and Revenue Center, as well as for a specific date or range of dates. This allows users at the Enterprise Level to see the report outside of the store.

A view of the Revenue Financial Report in mymicros.net.

Report Examples

- PMC Revenue Center Financial

See also
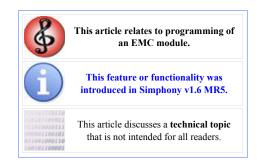
- PMC Reports
- WS Autosequences
- List of PMC Reports
- Offline Revenue Center Financial Report

SarOps Online/Offline Heuristic Algorithm Setup

The setup steps for the SarOps Online/Offline Heuristic Algorithm introduced in Simphony 1.6 MR5 will be reviewed in this article.

Contents

This article relates to programming of an EMC module.

This feature or functionality was introduced in Simphony v1.6 MR5.

This article discusses a **technical topic** that is not intended for all readers.

Overview

A SarOps client's Online status is determined by an application ping between SarOps clients and the Enterprise EGateway. The default values that SarOps uses are 3 bad pings at a 7 second interval to go Offline and one good ping to go back Online. While these settings will not address poor network connections to the EGateway, slow connections between the EGateway and the database, or poor performance on either the EGateway or Database servers, they will mitigate the issue of bouncing clients Online and Offline where network connectivity was inconsistent. Simphony has been enhanced with a new **Online/Offline Heuristic Algorithm** that is configurable via the EMC. The Heuristic Algorithm will help users to better determine whether or when to take a SarOps client Online or Offline based on the site's specific network performance. Once configured, the SarOps clients will adhere to the Online/Offline settings that have been implemented.

How it Works
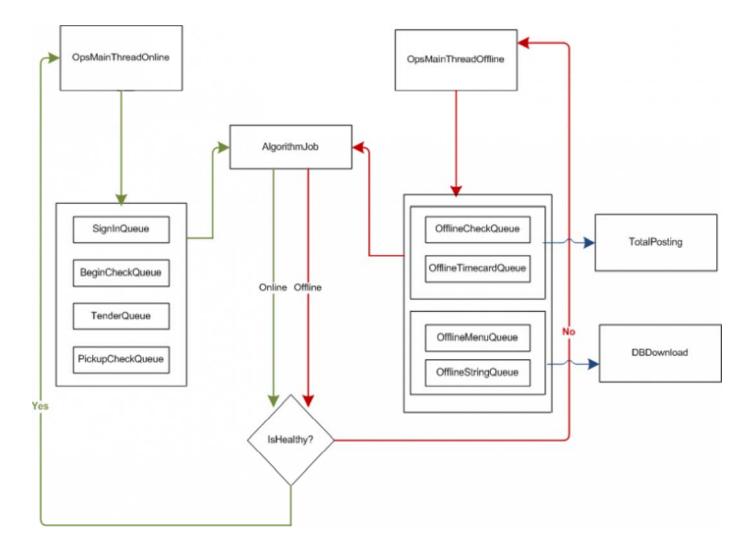
When enabled, the Heuristic Algorithm collects the start time and duration data for the following POS operations (each operation has its own queue of data) and may be viewed when a **Heuristic Algorithm Report** is generated:

- Sign In
- Begin Check

- Pick up Check
- Tender a Check

The Heuristic Algorithm assesses the overall "health" of a network based on the amount of time it takes to start and successfully complete the listed POS operations. The Heuristic Algorithm then periodically compares the average time it took for those operations over a length of time (last 2 minutes when online, last 4 minutes when offline) against a configured baseline to determine whether to force a WS offline or allow it to come back online. Using the **Heuristic Algorithm Report** users can make a more educated decision as to how the optimal Online/Offline threshold baseline settings should be configured for each specific property.

Online/Offline Heuristic Algorithm Flow Chart
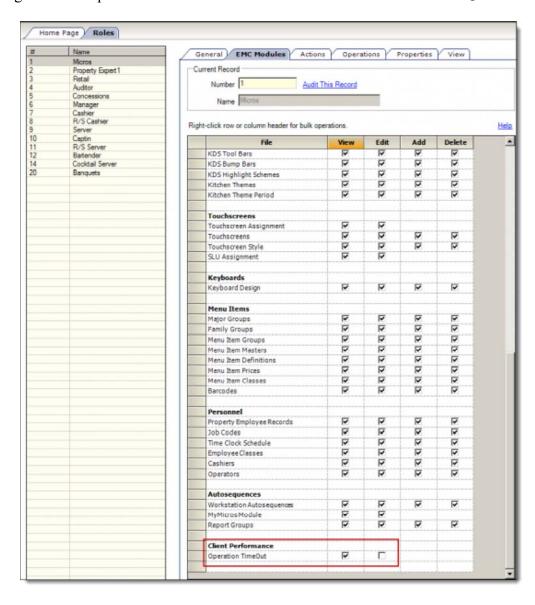
EMC Configuration

Employee Roles

Users must be assigned the privilege to access the **Operation Timeout** module. Access each applicable Employee Role(s) in the *EMC-> Personnel-> Roles-> EMC Modules tab-> Client*
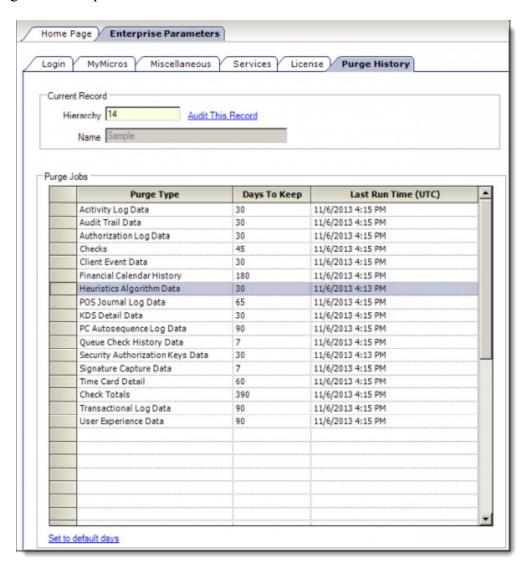
*Performance-> **Operation Timeout**->* and select the appropriate **View** and **Edit** privilege settings and save all changes.

Purge Jobs

A new **Purge Type** has been added named **Heuristics Algorithm Data** that allows users to determine how many days to keep Heuristics data. Access the *EMC-> Enterprise-> Enterprise Information-> Enterprise Parameters-> Purge History tab-> **Purge Jobs***. MICROS recommends keeping 30-90 days of Heuristics Algorithm data. Enter the number of days to keep the Heuristics Algorithm data under the **Days to Keep** column and save all changes.

Purge Type	Days To Keep	Last Run Time (UTC)
Acitivity Log Data	30	11/6/2013 4:15 PM
Audit Trail Data	30	11/6/2013 4:15 PM
Authorization Log Data	30	11/6/2013 4:15 PM
Checks	45	11/6/2013 4:15 PM
Client Event Data	30	11/6/2013 4:15 PM
Financial Calendar History	180	11/6/2013 4:15 PM
Heuristics Algorithm Data	30	11/6/2013 4:13 PM
POS Journal Log Data	65	11/6/2013 4:15 PM
KDS Detail Data	30	11/6/2013 4:15 PM
PC Autosequence Log Data	90	11/6/2013 4:15 PM
Queue Check History Data	7	11/6/2013 4:15 PM
Security Authorization Keys Data	30	11/6/2013 4:13 PM
Signature Capture Data	7	11/6/2013 4:15 PM
Time Card Detail	60	11/6/2013 4:15 PM
Check Totals	390	11/6/2013 4:15 PM
Transactional Log Data	90	11/6/2013 4:15 PM
User Experience Data	90	11/6/2013 4:15 PM

Operation Timeout module – Data Collection

To configure and utilize the Online/Offline Heuristic Algorithm, follow the steps outlined below:

1. Access the *EMC-> Property-> Client Performance-> Operation Timeout tab*.
2. For each desired Property, select the **Enable Operation** check box and save all changes.

The Context Sensitive Help (CSH) text for the Enable Operation check box reads as follows:

- **Enable Operation**

  Enable this option to enable online offline heuristic algorithm

Note: Selecting the **Enable Operation** check box enables the Data Collection mode by default.

There are two radio buttons under the **Mode** section that are available to be selected. The mode names and Context Sensitive Help (CSH) text for the two modes read as follows:

- **Data Collection**

  This mode only supports the data collection; online offline decision making feature is disabled
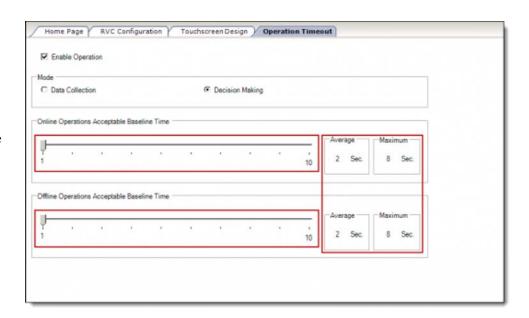
The **Data Collection** mode should be enabled before setting the **Decision Making** mode. The collected data and compiled statistics can be viewed on the Heuristic Algorithm Report. Data is collected in real time and moving forward, the report will only display data from the moment that the Data Collection mode is enabled for a Property. Data collection (per Property) will continue as long as the **Enable Operation** check box remains enabled.

Operation Timeout module – Decision Making

- **Decision Making**

  This mode supports both data collection and online offline decision making feature

Users can adjust the **Online** or **Offline Operations Acceptable Baseline Times** sliders to establish the baseline that is used for the Online/Offline Heuristic Algorithm. The sliders can be set at a level between 1 and 10. For every level that the sliders are increased, the value of the Average and Maximum box values will also increase.

After the baseline is set, the Online/Offline Heuristic Algorithm will compare the data it collects about the live operations against the baseline configured by the sliders to determine the health status of the SarOps client. If the Decision Making mode is enabled, the SarOps client will be forced Offline if the algorithm detects that the client has an "unhealthy" status and will not come back online until the algorithm detects that SarOps client has a "healthy" status. If the Data Collection mode is enabled, the health status that the algorithm detects will not affect a SarOps client's Online/Offline status. For either mode, the data that the algorithm collects and the health status that the algorithm detects will be posted to the Enterprise.

Heuristic Algorithm Conditions

The Heuristic Algorithm will detect if SarOps has an **"unhealthy"** status if *ANY* of following occurs:

- The average duration of a list of an operation that occurs during data collection for every defined time frame window (the default is every 2 minutes when SarOps is Online and 4 minutes when SarOps is Offline) is equal to or above the Baseline Time Average.
- The maximum duration of a list of an operation that occurs during data collection for every defined time frame window (the default is every 2 minutes when SarOps is Online and 4 minutes when SarOps is Offline) is equal to or above the Baseline Time Maximum.

The Heuristic Algorithm will detect if SarOps has a "**healthy**" status if *ALL* of following occurs:

- The average duration of a list of an operation that occurs during data collection for every defined time frame window (the default is every 2 minutes when SarOps is Online and 4 minutes when SarOps is Offline) is below the Baseline Time Average.
- The maximum duration of a list of an operation that occurs during data collection for every defined time frame window (the default is every 2 minutes when SarOps is Online and 4 minutes when SarOps is Offline) is below the Baseline Time Maximum.

Running the Heuristic Algorithm Report
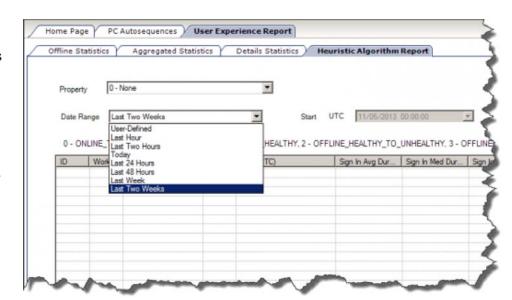
The **Heuristic Algorithm Report** can be generated to review the **Average**, **Median** and **Maximum** duration times for each of the POS operations that were previously identified. Each POS operation has three columns that display the applicable POS operation duration times.
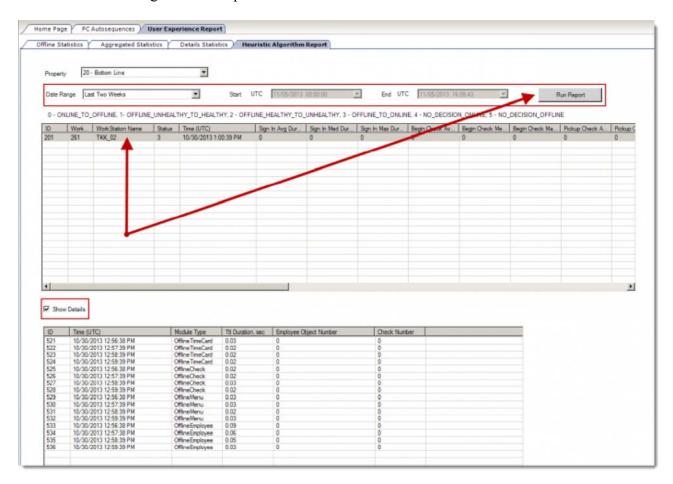
1. Access the *EMC-> Enterprise-> Enterprise Information-> User Experience Report-> **Heuristic Algorithm Report*** tab.
2. To run the Heuristic Algorithm Report, first select a Property where the **Data Collection** mode has already been enabled.
3. From the **Date Range** drop down menu, select one of the available choices that will determine the extent of the performance data that has been collected and will display when the report is generated. The available date ranges are:

- User-Defined
- Last Hour
- Last Two Hours
- Today
- Last 24 Hours
- Last 48 hours
- Last Week
- Last Two Weeks

> **Note:** If the **User-Defined** choice is selected, a Calendar window will display when the **Start UTC** and **End UTC** time drop down fields are utilized. This allows users to make date range selections of their choice up until the day that the Heuristics Algorithm Data Purge job deletes the data.

4. Once all selections have been made, click the **Run Report** button.

Report Data

When the data displays, there are several columns included in the report. The following columns display on the upper section of the report. They are as follows:
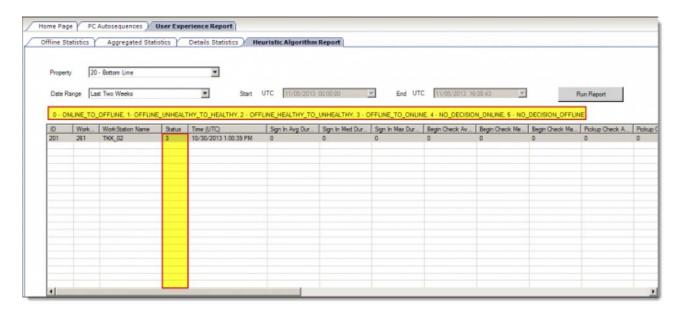
- **ID** – This represents the database record ID
- **Workstation ID** – This is each Workstation ID as assigned in the EMC.
- **Work Station Name** - This is each Workstation Name as assigned in the EMC.
- **Status** – This column holds key information. It contains digits ranging from 0-5.

Below is the Legend for what the numeric entries represent within the **Status** column:

0 - ONLINE_TO_OFFLINE - When a Workstation is Online the Heuristic Algorithm job detects that Ops is not healthy and forces Ops to go Offline from the Online state.

1 - OFFLINE_UNHEALTHY_TO_HEALTHY - When a Workstation is Offline and unhealthy the Heuristic Algorithm job detects that the connection is healthy and notifies the Workstation main thread that it is healthy and can go back Online.

2 - OFFLINE_HEALTHY_TO_UNHEALTHY - When a Workstation is Offline and healthy (which means that users have decided to remain Offline even though the connection is healthy), the Algorithm job detects the status of the connection has changed from Offline healthy to Offline unhealthy.

3 - OFFLINE_TO_ONLINE - When users decide to wait to manually take a Workstation back Online after the Heuristic Algorithm job detects the Workstation changed its status from Offline unhealthy to healthy.

4 – NO_DECISION_ONLINE - When the Heuristic Algorithm job is enabled, but the *Operation Timeout*-> **Decision Making** mode option is turned off, the Heuristic Algorithm job detects that the Workstation has changed its status from healthy to unhealthy.

5 – NO_DECISION_OFFLINE - If the Heuristic Algorithm job is enabled, but the *Operation Timeout*-> **Decision Making** mode option is turned off, when the Heuristic Algorithm detects that the Workstation has changed its status from healthy to unhealthy, it collects one set of data that simulates the data that the job would collect if a Workstation was forced Offline by the job. The purpose of this type of data collection is to assist users in setting an Offline operation baseline when the job is in **Data Collection** mode.

The Legend for the **Status** column described above is also displayed on the **Heuristic Algorithm Report** page in the highlighted area as shown here:

Report Data Continued...

- **Time (UTC)** – This is the date and time that the POS operation occurred.
- The balance of the columns display the **Average**, **Median** and **Maximum** duration times for each of the following POS operations:

  - **Sign In**
  - **Begin Check**
  - **Pick up Check**
  - **Tender a Check**

A review of the content of each of these columns is shown below:

- **Sign In Average** - Is the sum of the total duration of all Sign In operations on the list divided by the number of Sign In operations on the list
- **Sign In Median** – Is the duration number separating the higher half of all Sign In operations on the list from the lower half
- **Sign In Maximum** – Is the highest duration number among all Sign In operations on the list
- **Begin Check Average** - Is the sum of the total duration of all Begin Check operations on the list divided by the number of Begin Check operations on the list
- **Begin Check Median** - Is the duration number separating the higher half of all Begin Check operations on the list from the lower half
- **Begin Check Maximum** - Is the highest duration number among all Begin Check operations on the list
- **Pickup Check Average** - Is the sum of the total duration of all Pickup Check operations on the list divided by the number of Begin Check operations on the list

- **Pickup Check Median** - Is the duration number separating the higher half of all Pickup Check operations on the list from the lower half
- **Pickup Check Maximum** - Is the highest duration number among all Pickup Check operations on the list
- **Tender Average** - Is the sum of the total duration of all Tender operations on the list divided by the number of Tender operations on the list
- **Tender Median** - Is the duration number separating the higher half of all Tender operations on the list from the lower half
- **Tender Maximum** - Is the highest duration number among all Tender operations on the list

If more detail is desired, select the **Show Details** check box and then select the desired record from the upper display window. The record's detail will display in the lower section of the report. A breakdown of the content of the additional report columns is provided below:

- **ID** - This represents the database record ID
- **Time (UTC)** – This is the date and time that the POS operation occurred.
- **Module Type** – This is the name of the POS operation that was performed. All of the possible **Module Type** entries are as follows:
  - BeginCheck
  - SignIn
  - Tender
  - PickupCheck
  - Offline_Check
  - Offline_Timecard
  - Offline_Menu
  - Offline_Employee
- **Ttl Duration, sec** – This is the amount of time (in seconds) that it took to complete the performed POS operation from start to finish
- **Sign In Employee ID** – This is the ID number of the Employee as assigned in the EMC that performed the POS operation
- **Check ID** – This is the number of the check that had the POS operation performed upon

Scale

From Wiki

This article reviews Scales that are supported for Simphony installations.

This article discusses a topic related to **hardware**.

This feature or functionality was introduced in Simphony 1.6 Maintenance Release 6.

Contents

- 1 Overview
    - 1.1 EMC Configuration
    - 1.2 Installation
    - 1.3 Supported Scales
    - 1.4 EMC Configuration
        - 1.4.1 National Type Evaluation Program (NTEP) Certificates
- 2 See also

Overview

The Simphony system allows you to integrate a scale to be used with Menu Items that are priced by weight. The Simphony software can be configured to calculate weight in ounces, pounds or kilograms. A scale connects to the RS232 port on the Workstation (WS). Currently, only Serial connections are supported.

Refer to the scale's documentation for details on installation and use.
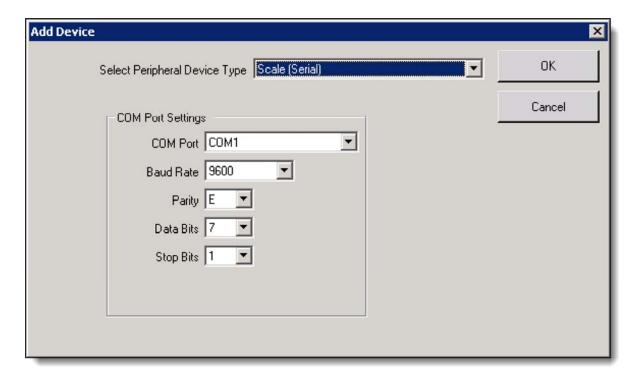
EMC Configuration

Follow the steps outlined below to configure a scale in the EMC:

1. Access and navigate to the *EMC->*

Property->

Workstations module.

2. Select the Workstation (WS) that the scale will be connected to and click on the **Devices** tab.
3. Add a new device (for the mTablet, be sure that the *Options-> Offline/Misc tab* **[39-Floating tablet]** option is *not* enabled.
4. Select the "**Scale (Serial)**" device and assign the COM port to which the scale will be connected.
5. Use the following default settings:

   - **Baud Rate: 9600**
   - **Parity: (E)ven**
   - **Data Bits: 7**
   - **Stop Bits: 1**

5. Navigate back to the Options tab and select the **'Hardware/Cash Drawer'** sub-tab.
6. Enable option bit **[13 - Enable Scale Interface]**.
7. **Save** all changes.
8. Connect the Scale to the WSs Serial COM port that was assigned in the EMC and ensure that the Scale's power cord is plugged in.
9. Reboot the WS to be sure that the COM port detects the Scale's connection.
10. Sign into SarOps and ring up a Weighed Menu Item to test.

Installation

1. Configure a scale in the EMC
2. Configure and setup the scale using the documentation supplied with the unit.
3. Connect the scale cable to the WS. Tighten the screws on the side of the WS.
4. Power on the WS and the scale.

Supported Scales

The following scales are supported on the Simphony system:

- **Mettler Toledo VIVA Scale**

- **Mettler Toledo 8217 Scale**

Mettler Toledo VIVA Scale

EMC Configuration

Configuration of this feature is performed in the EMC. See the Scale Configuration for Simphony Clients article for more information.

National Type Evaluation Program (NTEP) Certificates

The NTEP Certificate number for the attached Workstation may be viewed by utilizing PMC Diagnostics from the **'Certificates'** tab. See the PMC Diagnostics article for more information.

See also

- PMC Diagnostics
- Scale Configuration for Simphony Clients
- Simphony 1.6 Maintenance Release 6
- Weighed Menu Item

Need a question answered about the **Scale** article? Want to offer a suggestion or a correction?
Click here to discuss this page.
Retrieved from "http://wiki.micros.com/wiki/index.php?title=Scale"
Categories: Hardware | All pages
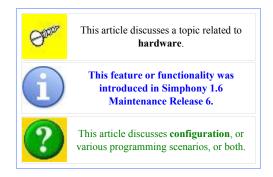
- This page was last modified on December 20, 2013, at 15:39.

Scale Configuration for Simphony Clients

This article reviews the setup steps for configuring scales in the EMC for weighed Menu Items.

Contents

- 1 EMC Configuration
    - 1.1 Weight Amount Displays
    - 1.2 Supported Scales
- 2 See also

This article discusses a topic related to **hardware**.

This feature or functionality was introduced in Simphony 1.6 Maintenance Release 6.

This article discusses **configuration**, or various programming scenarios, or both.

EMC Configuration

1. Access the *EMC-> Property-> Property Parameters-> Options* and enable the **[42 - Use Item Weight in Ounces]** option.

The Context Sensitive Help (CSH) text for this option reads as follows:

Select this option to cause the weight of weighed menu items to be printed and displayed in ounces.

2. For those sites (non-US customers) that may require scale weight conversions, access the *EMC-> Property-> Property Parameters-> Options* and enable the **[45 – Allow Scale Weight Conversions]** option.

The Context Sensitive Help (CSH) text for this option reads as follows:

Set this option if you are using a scale that is not using the same unit of measurement as the system. The scale weight will be converted to the configured unit of measurement. This option should only be set in jurisdictions that allow scale weight conversions.

3. Access the *EMC-> Property-> Workstations* file. When using mTablet devices, ensure that the **[39 – Floating tablet]** option is *disabled* .

4. Navigate back to the '**Options'** tab and select the '**Hardware/Cash Drawer'** sub-tab and enable the **[13 - Enable Scale Interface]** option and save all changes.

- All remaining EMC Scale device and Weighed MI configuration steps remain the same as in legacy versions of Simphony.

Note: The following additional control measures have been added:

- Use of the **[Item Weight]** function key will not be allowed if the scale is not first zeroed.

- Posting non-weighed MI's will be allowed when the scale is not zeroed.

- Workstations will detect if a different scale has been connected (e.g., Pound to Ounce) and will display an error message to users.

Weight Amount Displays

Depending on the configured unit of measurement (Ounces, Pounds or Kilograms), the weighed MI's weights will display and print as shown below:

- **Oz. = 0.1**
- **Lb. = 0.01**
- **Kg. = 0.001**

Supported Scales

- **Mettler Toledo-VIVA**
- **Mettler Toledo 8217**

See the Scale article for more details.

Seat Function Keys

Seat Function Keys are function keys that allow a user to change the active seat of a workstation and/or to change the seat of one or more menu items.

This article discusses the usage of one or more **Function Keys**. (535, 700-702, 707)

Contents

- 1 Function Keys
- 2 See also

Function Keys

535 - Split Check
    This key is used to split checks during seat filtering operations.
700 - Seat #/Next Seat
    This key is used to advance the current seat to the next seat number. This key is also used to go directly to a seat number by pressing the number, then this function key. For instance, pressing **[4] [Seat #/Next Seat]** will make Seat 4 the current seat.
701 - Edit Seat
    This key is used to move a seat number's menu items to another seat number. For example, if Seat 3 is the active seat, a user can change an item's seat to Seat 3 by highlighting an item in the Check Detail Area of the workstation, and pressing this key.
702 - Filter Seat
    This key allows a user to filter seats. See Filter Seat for more information.
707 - Toggle Seat View
    This key is used to toggle the Seat View displayed in the Check Detail Area. If the Seat View is set to On, each seat will be separated by a header (`**** Seat 1 ****`); if the Seat View is set to Off, the header will be suppressed.

Seat Handling

Many restaurants assign **Seat Numbers** to positions at a table. This way, food can be delivered to the guest by a food runner without asking the guest to identify their food. The system allows operators to assign seat numbers (up to 63 seats) as each menu item is ordered. The seat numbers

This article discusses **configuration**, or various programming scenarios, or both.

are then printed on Remote Order Chits to aid in preparation timing and in assembling orders for delivery. By using seat numbers, service is improved for groups of guests and checks can be easily split and printed for any combination of guests at time of payment. Seat numbers may also be used to sort items on the workstation's check detail area, guest checks, and order devices.

Contents

Methods of Seat Handling

There are various methods of using seats with the Simphony product.

No Seat Handling

At many sites and revenue center types, our installation groups don't even configure a system with seat numbers. Why? Well, at stadiums for instance, concession stands don't really need seat numbers. Also, some chefs like to use other methods of seat handling, which isn't true to the MICROS functionality of handling seats (see condiment

seats, below). To use no seats, the RVC Parameters option, **[Default Seat Number to 1 at Beginning of a Transaction]**, should be disabled.

- When this option is disabled, BOB shows the text `Ready for your next entry` when a transaction is started.
- When this option is enabled, BOB shows `Seat 1: Ready for your next entry`

Condiments as Seats

Often, installers program revenue centers to use Condiments as seat numbers. In this type of environment, they aren't actually using MICROS seat functionality. To use this method of seat handling, the following configuration is necessary:

Configuration

1. The same as the no seat handling, the "Default Seat to 1" option is disabled.
2. Each Menu Item Class is programmed to require a condiment group (often #64 or #1).
3. Each time an operator rings an item, he/she is prompted for the seat number. The seat number in this example is actually a condiment menu item. The item is simply named "Seat 1" or "Seat 2", etc.

Order Flow

1. If using condiment group #1 for the seat number, this is the first item for which the operator is prompted. The flow would be:
    1. Filet Mignon
    2. Seat 1
    3. Medium Rare
    4. Mashed Potatoes
2. If using condiment group #64 for the seat number, this is the last item for which the operator is prompted. The flow would be:
    1. Filet Mignon
    2. Medium Rare
    3. Mashed Potatoes
    4. Seat 1

More about this method

Chefs at high-end restaurants seem to prefer this method, primarily for the flexibility given to the naming of seats. Often, the database is programmed with the following "seat" menu items:

- Seat 1
- Seat 1 Lady
- Seat 2
- Seat 2 Lady
- etc.

This type of configuration allows the operator to declare if the guest is a lady or not. The food runner(s) will then be able to know which guests are served first. (Women are served first in this type of establishment.)

Operator Entry

The "casual method" of using seats is to allow operators to enter the seat number for each item. In this method, operators declare the seat number before entering an item. This is the "casual method" because there is one

problem with this: often, operators forget to enter a seat, and all the items end up on the same seat. (This forgetfulness is usually corrected by management at the property, but it cannot be corrected by MICROS functionality.) To use this method of seat handling, the following configuration is usually in place:

Configuration

1. Enable the RVC Parameters option, **[Default Seat Number to 1 at Beginning of a Transaction]**.
2. On the touchscreens:
    1. The **[Seat #/Next Seat]** function key is programmed on food and/or beverage ordering screens.
        - When pressed, this button increments to the next seat number.
    2. Typically, a macro key named "Seat 1" is also programmed, with the purpose of allowing a one-touch key that returns the active seat to seat #1. This macro is programmed with two steps:
        1. **[1]**
        2. **[Seat Number]**

Order Flow

1. The operator begins a check and starts the check at Seat #1.
2. The operator orders a Reuben Sandwich.
3. The operator presses the **[Seat #/Next Seat]** key, which means that the current active seat is Seat #2. (This is displayed on BOB.)
4. The operator orders a Meatball Sub.
5. This continues for each guest at the table.
6. At any point, if the operator needs to order something on seat 1 again, he/she presses the **[Seat 1]** key.

More about this method

One problem with this method is that it is currently not possible to match seat numbers with tables. For example, if a table is a two-top, there's nothing to stop the operator from ringing items on seats 3, 4, 5, and 6! The RVC Parameters option, **[Number of Seats may not Exceed Number of Guests]** can be used to prevent the seat count from exceeding the guest count, but it does not enforce the seat numbers. (When this option is on, a check with two guests can contain seat numbers 17 and 34, for instance.)

Menu Item Class: Seat Incrementing

Another method of using seats is similar to the operator entry method discussed on this page, with one advantage: instead of the operator pressing the **[Seat #/Next Seat]** after every item, the item itself increments the seat number. This is advantageous for end-users because they have to press fewer keys. Configuration and flow instructions for this method are here:

Configuration

1. The configuration is the same configuration as the operator entry section.
2. Additionally, Menu Item Classes are configured with the option enabled: **[4 - Increment Seat Number With Sale of these Menu Items]**

Order Flow

1. The operator begins a check, which defaults to seat #1.
2. The operator orders a Reuben sandwich.
3. The workstation automatically increments the seat number to Seat #2. (This is displayed on BOB.)
4. The operator orders a Meatball Sub.
5. This continues for each guest at the table.
6. At any point, if the operator needs to order something on seat 1 again, he/she presses the **[Seat 1]** key.

More about this method

> This method has the same problem as the operator entry method: it's possible for a user to continuously increment the seat just by adding items, therefore adding seat numbers to a table that doesn't contain the seat number(s)! The option bit from RVC Parameters, **[Number of Seats may not Exceed Number of Guests]**, can applies as a way to prevent this issue.
>
> One benefit of this method is that it is easy to train operators — new employees are trained to always ring items in seat-number order. This helps the end-user to follow a standard operational procedure for the RVC, and it also helps them to associate seat numbers with tables.

Menu Item Class: Prompt for Seat

Another method of using seats is similar in end-user functionality to the condiments as seats method described above. The difference, however, is that you're actually using MICROS seat handling functionality. With this method, the Menu Item Class is programmed to prompt the operator. To use this method, the following configuration is necessary:

Configuration

1. In this type of environment, the RVC Parameters option, **[26 - Default Seat Number to 1 at Beginning of a transaction]** will probably be disabled. (There's no need to start at a specific seat number if we're just going to prompt for every item!)
2. The Menu Item Class option, **[31 - Prompt for Seat Number with Each Menu Item]**, should be enabled.

Order Flow

Every item (assuming every class has the option enabled) will prompt the user, so the flow will be:

1. Ring the item
2. BOB prompts, **`Enter Seat Number`**.
3. The user presses the seat number
4. The user presses **[Enter]**
5. Then the workstation prompts the operator for forced modifiers (if any exist)

More about this method

> The primary complaint about this method is the number of keystrokes required per transaction. Every menu item requires *at least two additional keystrokes* — the seat number and the **[Enter]** key. This is very time-consuming. However, there are still sites that use this method because it provides the control that they want — it makes sure that the employees always enter a seat number with the items.

General Configuration

In addition to the specific options in the methods of seat handling section, there are some configuration settings that apply to all types of functionality.

RVC Parameters

The format tab of RVC Parameters includes a "Sorting" section. This is where a user can determine how the Check Detail Area on a screen displays and how customer receipts and guest checks sort. The seat-related sort options are:

- 0 - Do Not Sort
- 1 - Seat, Consolidated

- 2 - Seat, No Consolidation
- 5 - Seat & Print Group, Consolidated
- 6 - Seat & Print Group, No Consolidation
- 7 - Print Group & Seat
- 8 - Print Group & Seat, No Consolidation

RVC Descriptors

The general tab of RVC Descriptors includes a "Seat Descriptors" section. This is where a user can enter descriptor names for:

- Seat
- Shared
- All Seats

This configuration allows for translation, and it can also be configured to allow the kitchen to know the revenue center from which the order originated. While Order Device output can be configured to show the RVC name at the top of the order chit (this is usually enabled), one site used the "Seat" field to further help the kitchen distinguish between its two revenue centers. This site had a dining room and an outside deck. Their configuration was:

- Dining Room - Seat descriptor programmed to say `Seat`
- Outside Deck - Seat descriptor programmed to say `Outside`

Order Device Settings

1. Order Devices may be programmed to consolidate items based on seat number. The seat-related sort options are:
   - 0 - Do Not Sort
   - 1 - Seat, Consolidated
   - 2 - Seat, No Consolidation
   - 5 - Seat & Print Group, Consolidated
   - 6 - Seat & Print Group, No Consolidation
   - 7 - Print Group & Seat
   - 8 - Print Group & Seat, No Consolidation
2. Seat Numbers may be configured to print with individual items (when using one of the sort methods that shows seat) by enabling **[6 - Print Seat Numbers with Individual Items]**. Select this option to print seat numbers with each individual menu item in the current transaction round. Consolidation will take place when this option is selected, however if sort method "3-Print Group, Consolidated" is selected, seat numbers will not print.
3. Seat Numbers can be configured to print in Red or Black font, based on the setting of **[2 - Print Seat Number in Red]**

Optional Seat Settings

In addition to the general configuration settings, there are some option bits that can optionally be enabled/disabled as they relate to seat handling:

Operators

Require Seat Number Entry

>Select this option to require this operator to have a seat number active when beginning a transaction. Note that if this is enabled, the user will not be prompted if the RVC Parameter option, **[Default Seat Number to 1 at Beginning of a transaction]** is enabled. (The transaction is defaulting the operator to seat #1, so a prompt for the operator to enter a seat number would be redundant redundant.)

RVC Parameters

Confirmation Required for Seat Number Changes

>Select this option to force operators to perform changes to a guest check's seat numbers with two presses of the **[Edit Seat]** key. Disable this option to allow operators to press the key only once to change seat numbers.

Use Number of Seats for Guest Count

>The context sensitive help for this option states: Select this option to cause the guest count for a transaction to be determined by the number of seats entered on the guest check. If this option is enabled, it overrides the setting of the Service Charge option "Add to Guest Count". It also overrides the Menu Item Class option "Add to Guest Count". If the operator presses the **[Number of Guest]** key during a transaction, the guest count will no longer increment when seats are added to the check. The operator must maintain the guest count manually from that point.

> - Usage with the methods of seat handling: This is often used in the prompt for seat method, and sometimes in the operator entry method.

Enable Display of Seats in Transaction Detail Display

>Select this option to display the seat number in the display check screen. If this option is not selected, seat numbers will not be displayed.

Display Seats on Initial Callup of Transaction Detail Display

>This option is only active if the **[Enable Display of Seats in Transaction Detail Display]** is enabled. Select this option to display the seat numbers on the touchscreen when a check is initially displayed after being picked up. Regardless of this setting, the user can toggle the display of seats by touching any part of the check detail displayed.

Function Keys

See both Seat Function Keys and filter seat for more information about function keys relating to seats.

Split Check

When a Revenue Center is configured to use one of the seat handling methods, some function keys can be used to easily split checks. In these Revenue Centers, the touch split method may not be used; instead, one of the older filter seat methods is used. Visit the Filter Seat page for information about splitting checks based on seat numbers.

Other Uses for Seat Numbers

This section lists other "non-standard" uses for Seat Numbers, as R&D has seen them in the field.

Keyboard Workstation

On a keyboard workstation, it can be difficult to tell when an item has been ordered, because the display only shows one item at a time. For instance, if a concession stand cashier presses the "Hot Dog" key, and then again

presses the "Hot Dog" key, how does he/she know that two have been ordered? On a touchscreen, the Check Detail Area would show all the items, but with one line, there's no way to tell. To give the cashier a way to distinguish between the first hot dog and the second, the following steps can be implemented:

Configuration

1. Enable the RVC Parameters option, **[Default Seat Number to 1 at Beginning of a Transaction]**.
2. For every Menu Item Class, enable the option **[Increment Seat Number With Sale of these Menu Items]**

Transaction Flow
Items appear on the screen like this:
```
Hot Dog 1.00 1
Hot Dog 1.00 2
```
If an item happens to be voided, the seat number doesn't decrement. (If "Hot Dog #2" is voided, the next item will be on seat #3.) This doesn't really matter to the end-user, however. The only goal with this configuration is to show the user that they are on a different item than the one before.

Courses

Another use for seats is to use them as courses. This allows a programmer to have an operator ring all items on the first "course" which is actually a seat. This configuration is used when the following is requested by the site:

- The chef wants to see the entire order at once, sorted by course.
- The chef may *also* want to see seat numbers. (This is a time to use the condiment method of seat handling).

In this type of setting, the following configuration would be implemented:

Configuration

1. All the configuration from the condiments as seats section of this page.
2. RVC Descriptors: The "seat" label would be renamed "Course".

Transaction Flow
Users ring in all items for all courses during the same round, using steps similar to this:

1. Begin a table, start ringing items for course 1 (probably appetizers)
2. Each item prompts for the seat number (using the condiment method)
3. The user presses **[Seat #/Next Seat]** which increments the "course"
4. The user presses rings in items again, for course 2 (probably entrees)
5. When the order is service totaled , the order device is probably configured to sort by seat. In this configuration, "sorting by seat" is actually "sorting by course", so the kitchen will see course 1, then course 2, etc.

With this configuration, a user can forget to ring an item in course 1, but press the **[Seat 1]** macro, which will return the transaction to "course 1", where the user can enter the item he/she forgot.
Notes about this method
The advantage to this is described in the last step: if a user forgets to ring an item in a course, he/she can add it later. When using the Course Line Ordering Method, this is not possible.
One disadvantage to this method is that the site could not use real MICROS seat handling functionality, if it were so desired.
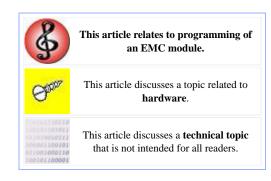
Service Host

A **Service Host** is an IP-addressable Windows-based computer that runs one or more Simphony services; in short, it is a physical piece of hardware that runs one or more pieces of Simphony software. In EMC, a programmer determines the Service Host to be used for each KDS Controller record, Interface record and Credit Card Driver record. In addition, the Offline Cache Service Host and SIM File Access Service Host are configured in each Property, in the Property Parameters module.

<table>
<tr><td></td><td>**This article relates to programming of an EMC module.**</td></tr>
<tr><td></td><td>This article discusses a topic related to **hardware**.</td></tr>
<tr><td></td><td>This article discusses a **technical topic** that is not intended for all readers.</td></tr>
</table>

Contents

EMC Configuration

From a configuration standpoint, there are two locations where Service Hosts can be configured: The Service Hosts module and the Workstations module. (When a workstation record is created, a Service Host record for that physical workstation is created as well.)

When should a programmer use the Service Host module vs. the Workstation module to create Service Hosts? The answer is simple: if a computer is intended to run an OPS process, it should be created in the Workstations module. If a computer is intended to be a standalone PC (running only a KDS Controller or Credit Card Driver, perhaps), it should be created in the Service Hosts module. Note that if a programmer creates a standalone Service Host and realizes later that there should be an OPS process configured, EMC provides functionality to make this change. In addition, EMC lets a user delete a workstation record while keeping the Service Host on which it is configured. Both of these scenarios are discussed in more detail, below.[1][2]

Service Hosts Module

The **Service Hosts** module is accessed from the Enterprise Scope and contains the following configurable fields:

Name
    A

Form View of the Service Host module from EMC.

user-defined name that describes the computer. An example may be: "Property 1 KDS Controller".

Host Name
    The name or IP Address of the physical computer.

Subnet Mask
    Enter the Subnet Mask of this Service Host.

Default Gateway
    Enter the Default Gateway of this Service Host.

Is Connectionless
    When this option is enabled, this service host will open and close a new connection for each web service call. While slightly slower than leaving this option unchecked, enabling this option helps to prevent computers from reaching the maximum number of web connections allowed. This option should be enabled for Service Hosts running on the Windows XP operating system.

Services
    This grid lists each service that is running on the selected Service Host. This grid is informational only; it is not possible to add or remove Services from a Service Host via this view.
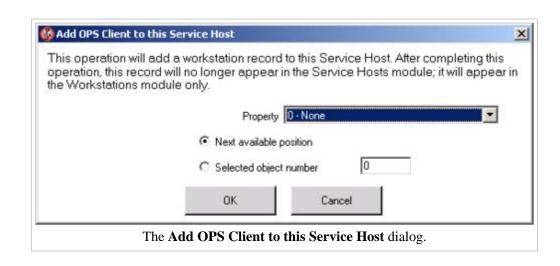
Add OPS Client to this Service Host

From Form View of the Service Hosts module, there is a link that lets the user "Add OPS Client to this Service Host". This link lets the user add a workstation record to the Service Host, essentially "converting" a Service Host record to a Workstation record. After this action is performed, the record will no longer appear in the Service Hosts module; it will appear in the Workstation module.
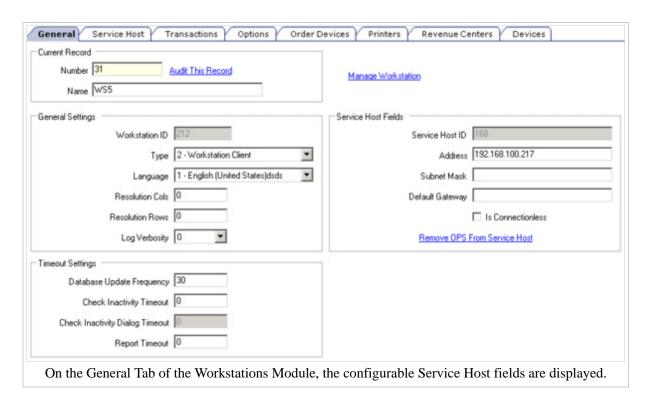
When the link is clicked, the add dialog appears. From this view, the user selects the Property where the workstation will be created, and the object number to be used. (The user may select "Next available position" to

have the object number created automatically.) The logged-in user can add workstations only to the properties where privileged, as determined by Employee Role permissions.

The **Add OPS Client to this Service Host** dialog.

Workstations Module

On the General Tab of the **Workstations Module**, the configurable Service Host fields are displayed. The Address, Subnet Mask, Default Gateway, and Is

On the General Tab of the Workstations Module, the configurable Service Host fields are displayed.

Connectionless fields allow the same configuration as the fields from the Service Host module.

In addition to the General Tab, the Workstations Module includes a Service Host tab. This tab displays all the services that are programmed for the Service Host. More information about this tab is available below.

Remove OPS From Service Host

From Form View of the Workstations module, there is a link that lets the user "Remove OPS From Service Host". This link lets the user delete the workstation record without deleting the Service Host on which it runs. This operation is designed for situations where a PC is running an OPS client in addition to other services, but the OPS client is no longer necessary.

After clicking the link, the user is prompted to confirm; after pressing Yes, the record is deleted and removed from the list of workstations. Note that this link is accessible only by users who have the ability to delete workstations in the current property.

Interaction with CAL Packages

When Service Hosts are configured throughout EMC, records in the CAL Packages module are updated.

> These CAL Package modifications occur automatically in the background during add/save/delete operations as appropriate. They are logged in Audit Trail as changes to the CAL Packages module.

- In the Service Hosts module:
    - A "skip" deployment is added to the SimphonyClient package for the Service Host. This ensures that the Service Host will not receive an OPS client.
    - Deployments for the EGateway and EGatewayPrereqs packages are added when a Service Host is added.
    - Deployments for the EGateway and EGatewayPrereqs packages are removed when a Service Host is deleted.
- In the Credit Card Drivers and Interfaces modules:
    - Deployments for the EGateway or EGatewayPrereqs packages are added when a Service Host is selected for the record, and the selected records does not include the EGateway or EGatewayPrereqs package already.
    - Deployments for the EGateway or EGatewayPrereqs packages are removed when the Service Host for the record is set to "0" and no more services remain on the Service Host.
    - Deployments for the EGateway or EGatewayPrereqs packages are removed when the selected record is deleted and no more services remain on the Service Host.
- In the KDS Controllers module, the behavior is the same as the CC Drivers and Interface modules. In addition, the PosToKdsHandler package is updated accordingly.

Service Host Tab

After creating a Service Host or workstation, the record becomes available in other modules that require a Service Host. For example, a KDS Controller requires a Service Host; in the KDS

The Service Host tab from EMC. This tab is used in modules to configure the Service Host on which the selected record will run. In this example image, no Service Host has been selected for the current record.

Controllers module, the Service Host Tab lets the programmer determine the Service Host on which the KDS

Controller record will run.

Using the Tab

The Service Host tab contains the following fields:

Service Host
>   Select the Service Host for this record. This list displays all the workstations in the Property, in addition to any Service Host records configured for the property.

Configuration
>   After a Service Host is selected, the configuration of the service host (IP Address, Gateway, and Net Mask) will be displayed.
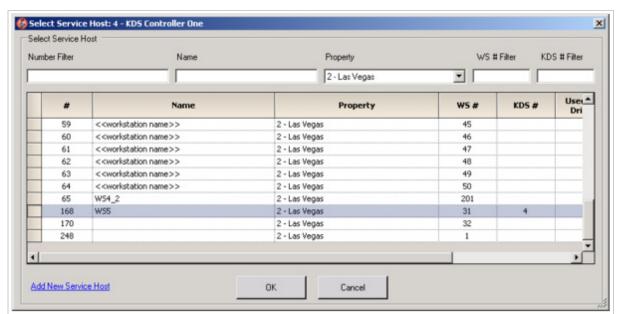
Services List
>   When a Service Host is selected, all its services display in the grid; the fields in the grid are all read-only except for the service of the currently-selected record.

Selecting a Record

When the user presses the "select" link, the Service Host Selection dialog displays. This dialog is simply a selection dialog, but the grid displays additional columns to give the programmer more information about the

When a user selects the "Select" link to select a Service Host, this is the dialog that displays. When the dialog opens, the Service Host that is currently configured for this record is selected.

records. In addition, there are five fields above the grid that let the user filter the data.

The grid consists of the following columns:

#
>   This column displays the Service Host ID of each Service Host.

Name
>   This column displays the name of each Service Host. For records that are workstations, the Service Host name is always the name of the Workstation.

Property
>   This column displays the Property to which the Service Host belongs. This column should only be used as

a guide; it is possible (however unlikely) that a Service Host runs a Workstation from one Property but a KDS Controller from another property. The value displayed in this column is determined by this order: if the Service Host is a workstation, the Property of that Workstation Record will be displayed; if the Service Host is a KDS Controller, the Property of that KDS Controller Record will be displayed; otherwise, the text "Enterprise" will be displayed.

WS #

For each Service Host, this column will display the Object Number of the Workstation Record for the Service Host, if one exists.

KDS #

For each Service Host, this column will display the Object Number of the KDS Controller Record for the Service Host, if one exists.

Used By CC Drivers?

This column displays a checked cell if the selected Service Host is being used by one or more Credit Card Driver Records. Unlike WS and KDS, multiple Credit Card Driver Records can be linked to the same Service Host.

Used By Interfaces?

This column displays a checked cell if the selected Service Host is being used by one or more Interface Records. Unlike WS and KDS, multiple Interface Records can be linked to the same Service Host.

OLC/OTC?

This column displays a checked cell if the selected Service Host is being used as an Offline Labor/Transaction Cache.

SIM?

This column displays a checked cell if the selected Service Host is being used as a SIM File Access Service Host.

Add New Service Host

It is possible that the programmer entered this dialog prior to creating the Service Host (this may be intentional, see below). If this is the case, the programmer can click the "Add New Service Host" link. This action will display the add dialog, which lets the user enter the name and address information for the new Service Host. After pressing "OK", EMC will create the new Service Host and link the record to it.

Note: The "Add New Service Host" link displays only for users who have role permissions to add Service Hosts.

The **Add New Service Host** dialog displays when the user presses the "Add New Service Host" link from the Service Host Dialog.
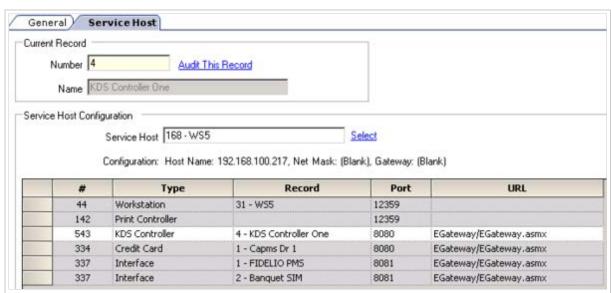
Viewing the Selected Record

In the example image, the user selected Service Host 168. After selecting this Service Host, the grid displays all the records that are configured to use the selected Service Host. The columns of the grid display the following

data:

The Service Host tab from EMC. This tab is used in modules to configure the Service Host on which the selected record will run. In this example image, the current record is a KDS Controller; it is running on Service Host 168. The grid displays all the services running on this Service Host.

#

This column displays the ServiceID of the service record. This column is not configurable, and it is displayed for troubleshooting purposes only.

Type

This column displays the type of Service Record for each service.

Record

This column displays the object number and Name of the Service Record. For example, if a Workstation, KDS Controller, and Credit Card Driver are all running on the same Service Host, this column will display the object number and name of the Workstation, KDS Controller, and CC Driver.

Port

This column displays the Port number for each service on the selected Service Host. This is the only configurable column of the grid.

URL

The URL of a service is used when constructing the full path to be used to connect to the service. For example, Simphony Services are connected using a path like: **http://ServiceHostName:Port/URL**. This field displays for informational purposes only; it cannot be edited.

Once a Service Host record has been selected, the panel displays the configuration of the Service Host (its IP Address, Gateway, and Net Mask) and the grid displays all the services that are running on the selected Service Host. In the example, the following services are running on Service Host 168:

- Workstation record #31
- A Print Controller Service. A Print Controller runs on every Workstation client.
- The service for the selected KDS Controller record.
- Credit Card Driver record #1.
- Interface records #1 and #2.

All rows in the service grid are disabled except the row containing the service for the selected record. In the example image, the KDS Controller row is enabled, because the record is a KDS Controller. The only configurable field for the enabled row is the port number. Note that a double-click on any row will take the user to the module of the selected record.

More about Configuration

Rules and Guidelines

Only one type of service is able to run on any Service Host. This limits a single computer to running:

- One OPS client
- One Print Controller
- One KDS Controller
- One SIM File Access Service
- One Offline Cache Service
- One Credit Card Driver Service - Multiple Credit Card Driver Records can be configured to use the same Service Host.
- One Interface Service - Multiple Interface Records can be configured to use the same Service Host.

The Selection Dialog prevents a user from adding an invalid Service to a Service Host. For example, it is not possible to add two KDS Controller records to the same Service Host.

Configuration Scenarios

EMC allows a number of different ways to view, edit, and add Service Hosts. In most cases, a privileged user can configure Service Hosts without actually entering the Service Host module! This section describes common scenarios for Service Host configuration and the best methods for addressing them:

These instructions should be used as guidelines; they assume the logged-in user has full permissions on EMC.

I have a computer that I want to configure to be a Service Host for a KDS Controller (or CC Driver, or Interface).
1. Enter the KDS Controller (or CC Driver, or Interface) module.
2. Add a new record.
3. After the record has been created, press "Select" on the Service Host Tab.
4. From the Service Host Dialog, click "Add New Service Host". Enter the information and press OK.
5. Save the record.

I have a computer that I want to configure to be a Service Host for a KDS Controller, CC Driver, and Interface.
1. Continuing from step #5 above, the user would then...
2. Enter the CC Driver module and create or select a record.
3. Configure the CC Driver to use the Service Host created in #4 from above. Save the record.
4. Enter the Interface module and create or select a record.
5. Configure the Interface to use the Service Host created in #4 from above. Save the record.

I have an existing Service Host that runs a KDS Controller, and now I want it to run a CC Driver as well.
1. Enter the Credit Card Driver module.
2. Create or select the Credit Card Driver that needs to be configured.
3. From the Service Host Tab, select the existing Service Host.
4. Save the record.

I have an existing Service Host that runs a KDS Controller and an Interface Service. I want to add an OPS client to this computer.
1. Enter the Service Hosts module.

2. Select the Service Host.
3. Click the "Add OPS Client to this Service Host" link, and configure the information.
4. Press OK.

Service Pack 10 Configuration Changes

The information on this article discusses the configuration for Service Hosts in Simphony 1.0 Service Pack 10 and later versions. In earlier versions, configuration was different; the differences are summarized below:

- Any reference to "bind to service host" or public/private service hosts has been removed. Starting with Service Pack 10, each workstation will always be linked to one Service Host, and this one-to-one relationship will not change.
- The Services module has been removed. There is no longer a need to add/remove services because EMC handles this automatically:
  - When a KDS Controller record is created, a service for that record is created automatically. This one-to-one relationship will not change.
  - A SIM File Access Service record is created when a Property is created.
  - For Credit Card Driver and Interface records, a service record is created when necessary. Unlike KDS Controllers records, it is possible to link multiple CC and Interface Records to the same Service Host. When these records are, a Service record is not created at the same time. EMC will create the Service Record when the interface is saved and its Service Host is not zero.

Installing a Service Host

Each Service Host uses CAL to be configured, however the Service Host must first have CAL installed to receive automatic CAL updates. To install CAL on a Service Host, follow these steps:
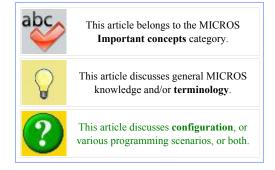
1. Browse to `http://AppServerName:8080/egateway/download/cal/win32/setup.exe`. (AppServerName is the name of your application server.)
2. The installation prompts "Install Simphony to (directory)". The default is `C:\Micros`. Keep the default or press "Change" to enter a different directory, then press "Next".
3. CAL will run; follow the standard CAL steps:
   1. At the list of Simphony servers, select the appropriate server.
   2. At the Property selection dialog, select the appropriate Property.
   3. Select the appropriate Workstation or Service Host.

Service Total

The term **Service Total** means to end the current service round, triggering output to order devices. The act of Service Totalling temporarily removes a guest check from the workstation display, and saves the check information in the database for recall.

abc ✓	This article belongs to the MICROS **Important concepts** category.
💡	This article discusses general MICROS knowledge and/or **terminology**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

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- 1 Transaction Flow
- 2 EMC Configuration
    - 2.1 Send Key
    - 2.2 Print Key
    - 2.3 Hold & Fire
    - 2.4 Autofire
- 3 See also

Transaction Flow

The flow of a transaction in a restaurant may be:

1. Waiter/waitress takes the drink order for customers
2. Waiter/waitress begins a check on the MICROS Workstation
3. Waiter/waitress adds two drinks
4. Waiter/waitress presses a Service Total key (often labeled SEND)
5. The drinks print at the bartender's Order Device
6. Waiter/waitress takes the drinks from the bar to the guests
7. Waiter/waitress takes the food order
8. Check is picked up on the MICROS Workstation and service totalled again
9. etc...

Service Total is typically the most-used tender type, as seen here. It basically means "I'm done adding to this order at this time." While a payment is usually added to a check only once, a service total is performed any time a user is done accessing the check.

EMC Configuration

A few of the typical Service Total tenders are described below. Each of these tender examples are programmed in the Tender Media module with a Tender Type of **2-Service Total**.

Send Key

Behavior

When this key is pressed, this is a "pure" service total. As described above, it basically means "I'm done adding to this order at this time." Menu Items will print to Order Devices as appropriate.

Options

No options are enabled

Menu Levels

Typically, all Menu Levels are enabled

Output

Tender Output: You will find that these are often all checked, but they don't actually apply to Service Total tenders

Order Output Disable

These should never be enabled for Service Total key types.

Print Key

Behavior

This key is similar to the SEND key described above.. it basically means "I'm done adding to this order at this time." Menu Items will print to Order Devices as appropriate. Unlike the Send Key, the "Print Key" causes a Guest Check to print. Often, the Print key is the last Service Total tender applied to a check — the waiter/waitress uses this key to print the check and show the customer the amount due.

Options

Typically, these options are enabled:

1. Print Check on Demand
2. Print Memo Check
3. Print Summary Totals
4. Print Sales Itemizers

Menu Levels

Typically, all Menu Levels are enabled

Output

Tender Output: You will find that these are often all checked, but they don't actually apply to Service Total tenders

Order Output Disable: These should never be enabled for Service Total key types.

Hold & Fire

See the Hold and Fire article for more information about configuring these Tender Types.

Serving Period Financial Report

The **Serving Period Financial Report** provides financial reporting by Serving Period.

<table>
<tr><td>🖥️</td><td>This article discusses PMC functionality.</td></tr>
<tr><td>🔴$</td><td>This article discusses behavior that is important for Reporting.</td></tr>
</table>

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- 1 PMC Report
- 2 mymicros.net Report
- 3 Report Examples
- 4 See also

PMC Report
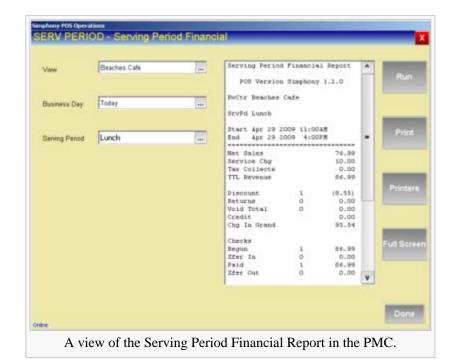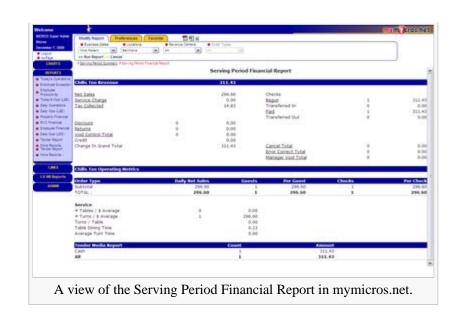
The PMC version of the report allows a choice of **View**, **Business Day**, and **Serving Period**. "Business Day" choices allow "Today" and "Yesterday" only. The report can be taken for a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Serving Period Financial Report in the PMC.

mymicros.net Report

The **Serving Period Financial Report** is available online at mymicros.net for anyone who has access. The report can be run per Location and Revenue Center, as well as for a specific date or range of dates. This allows users at the Enterprise Level to see the report outside of the store.

A view of the Serving Period Financial Report in mymicros.net.

Report Examples

- Serving Period Financial

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports
- Offline Employee Open Check Report

Simphony 1.x Oracle Client Side Configuration for Load Balancing and Failover

This article discusses MICROS Systems, Inc recommendations for enabling the Oracle® Client Side Load Balancing and Failover for Simphony v1.x systems. It is intended for environments that use Oracle RAC for Simphony v1.x systems running on either the Oracle 10g R2/ 11g database platforms.

This article discusses a topic related to **installation and initial configuration** of the system.

This article discusses a **technical topic** that is not intended for all readers.

Overview

For Simphony v1.x systems utilizing either the Oracle 10g R2/ 11g database platforms, we reviewed the setup steps for an Oracle RAC Configuration in order to improve the database connection recovery time and to enable Load Balancing and automatic Transparent Application Failover (TAF) if and when TCP network timeouts occur.

Oracle RAC Configuration

1. From the Simphony v1.x application server, adding multiple (comma separated) database servers' Virtual IP Addresses (VIP) in the <Drive letter>:\Micros\Simphony\EGatewayService\DBSettings.xml-> **dataSource** setting, the Load Balance and Transparent Application Failover (TAF) capabilities will automatically be enabled. See the example provided below:

DBSettings.xml example settings:

```
<db alias="default" dataSource="NODE1VIP,NODE2VIP" dbType="oracle"
catalog="SIMPHONY" uid="uid" pwd="pwd" />
```

- When the VIP IP Addresses are added to the DBSettings.xml, the **Simphony OraDBHelper** will build the Connection String as shown here:

```
Data Source=(DESCRIPTION=(TRANSPORT_CONNECT_TIMEOUT=10)(ADDRESS_LIST=
(ADDRESS=(PROTOCOL=TCP)(HOST=NODE1VIP)(PORT=1521))(ADDRESS=
(PROTOCOL=TCP)(HOST=NODE2VIP)(PORT=1521)))(LOAD_BALANCE=yes)
(FAILOVER=yes)(CONNECT_DATA=(SERVICE_NAME=SIMPHONY)(FAILOVER_MODE=
(TYPE=session)(METHOD=basic))));User Id=uid;Password=pwd;
```

- Within Transparent Application Failover (TAF) only environments, the client may experience a longer delay (which may vary between systems) because application threads may remain blocked until the TCP timeout expires. For more information, refer to the document using the link provided below:

http://www.oracle.com/technetwork/database/app-failover-oracle-database-11g-173323.pdf

- To eliminate or avoid issues described above within TAF only environments, Fast Application Notification (FAN) can be configured. The **HA Events=true** setting can be added to the DBSettings.xml. The database service being connected to *must* be configured for AQ_HA_NOTIFICATIONS. See the following documents for more information:

  http://docs.oracle.com/cd/B19306_01/win.102/b14307/featConnecting.htm

  http://docs.oracle.com/cd/B28359_01/rac.111/b28254/hafeats.htm

2. AQ_HA_NOTIFICATIONS are enabled when the **HA Events=true** setting is added to the ODP.NET Connection String. Once enabled, when TCP network timeouts occur, new connections are switched to a live node within approximately 25 seconds. Previously, it could take anywhere from 5 to 8 minutes for new connections to switch over when the **HA Events** setting was *not* set to **true**. See the example provided below.

DBSettings.xml example settings:

```
<db alias="default" dataSource="NODE1VIP,NODE2VIP" dbType="oracle"
catalog="SIMPHONY" uid="uid; HA Events=true" pwd="pwd" />
```

- For more information about the '**HA Events**' setting, refer to the document using the link provided below:

  http://docs.oracle.com/cd/E11882_01/rac.112/e17264/configwlm.htm

3. The Virtual IP Address (VIP) of each node should be added to the **listener.ora** file on each Simphony Database server.

Simphony 1.x PC Autosequence

This article reviews the purpose and configuration of PC Autosequences for Simphony v1.x. A PC Autosequence is a programmable automatic series of steps that are typically initiated by the execution of the Start of Day (SOD). If necessary, privileged users may also run PC Autosequences manually.

	This article relates to programming of an EMC module.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses a **technical topic** that is not intended for all readers.

Contents

Description

A PC Autosequence is a pre-defined set of steps that can be configured to run automatically. Autosequences can be started automatically by the Start of Day. Autosequences can also be scheduled to run on a date and time of the users choosing. They can be run while Workstations are operating, without interfering with transactions. There is no limit to the number of Autosequences that can be defined. Each Autosequence has a set of steps that can be configured to perform specific functions. Autosequence Steps can be used to:

- Create and Settle Credit Card (CC) Batches
- Run an external program (i.e., non-Simphony application)
- Call (execute) another autosequence in the midst of the current one.

EMC Configuration

Roles
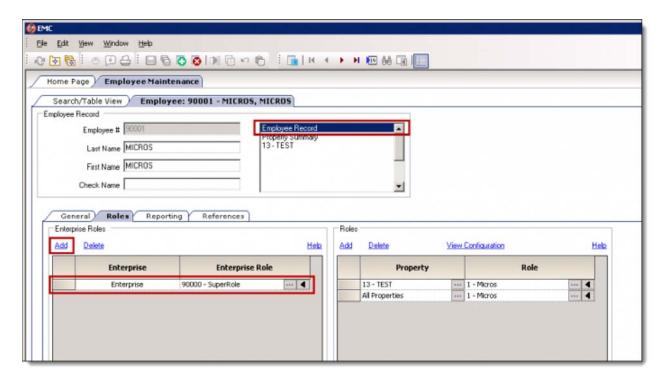
To configure
PC

Autosequences, users must first have an "**Enterprise Role**" assigned, and that role must have access privileges assigned to it.
Follow the steps outlined below:

1. Access the *EMC-> Enterprise-> Personnel-> Enterprise Roles-> EMC Modules-> Autosequences* section.
2. Enable the '**View**', '**Edit**', '**Add**' and '**Delete**' options as needed for both "**PC Autosequences**" and "**PC Autosequence Schedule**".

3.
Access
the

EMC->
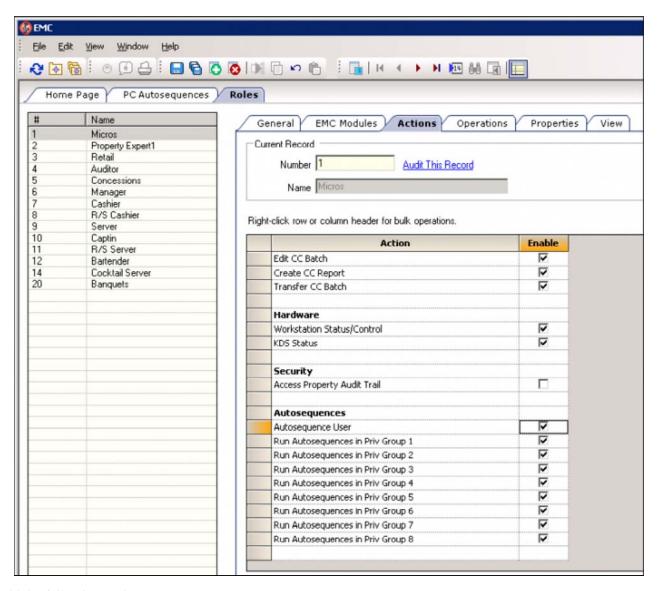
*Enterprise-> Personnel-> **Employee Maintenance*** module-> and select the employee in question.
4. Select the "**Roles**" tab and assign the "**Enterprise Role**" with the Autosequence privileges to this employee.

To run
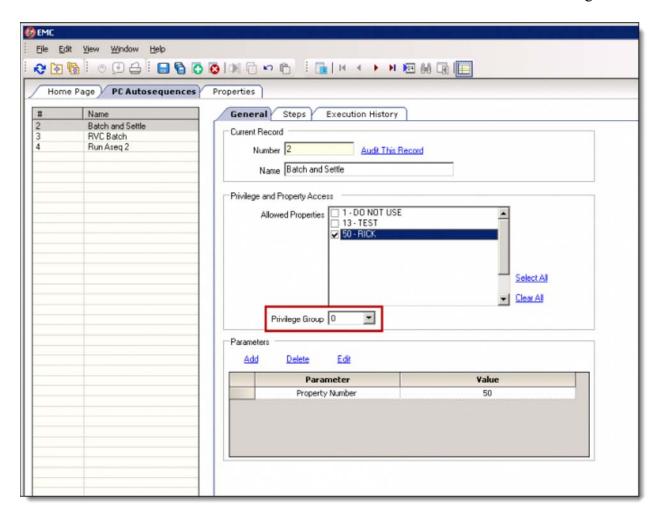
Autosequences, add the following to the users '**Employee Role**':

1. Access the *EMC-> Enterprise-> Personnel-> Roles-> Actions-> Autosequences* section and enable the '**Autosequence User**' check box.
2. If desired, users can be assigned a '**Run Autosequences in Priv Group numbering from 1-8**'.
3. The '**Run Autosequences in Priv Group**' setting corresponds to the '**Privilege Group**' field setting or each existing autosequence in the '**PC Autosequences**' module.

PC Autosequences

General tab

1. Access the *EMC->*

*Enterprise-> Tasks-> PC Autosequences-> **General tab***. A new PC Autosequence record can be inserted and named based on its purpose (e.g., "Batch and Settle" for an autosequence that handles these Credit Card actions).

2. In the '**Privilege and Property Access'** section, enter a check box next to each "Allowed Property" that needs to have a specific autosequence visible at the Property level "Run PC Autosequences" module from the EMC. The '**Select All'** or '**Clear All'** links can be utilized to help speed up the Property selection process.

3. Assign a '**Privilege Group'** if access to run the Autosequence needs to be added. The Context Sensitive Help (CSH) text for the "**Privilege Group"** field reads as follows:

> *Select the privilege group associated with this PC Autosequence. If the privilege group is "0", the user needs only the Role privilege enabled, "Autosequence User". For privileges 1-8, the user must be privileged for the specific privilege group. Role privileges are configured in the Enterprise Roles module, on the Actions tab.*

General tab-> Parameters

It is possible to add Parameter settings to individual autosequences that allow users to designate a specific Property or Revenue Center (RVC) to be included when an autosequence is run. There is also a Parameter setting that allows users to exclude specific RVC's from an autosequence as well as several e-mail Parameters.
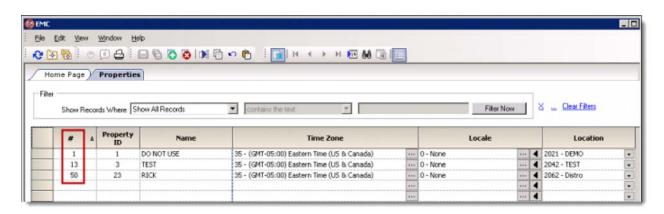
4. The General tab Parameters section can serve a number of purposes. This section contains three links named '**Add'**, '**Delete'** and '**Edit'** that can be

used to assign and manage Parameters for an autosequence.
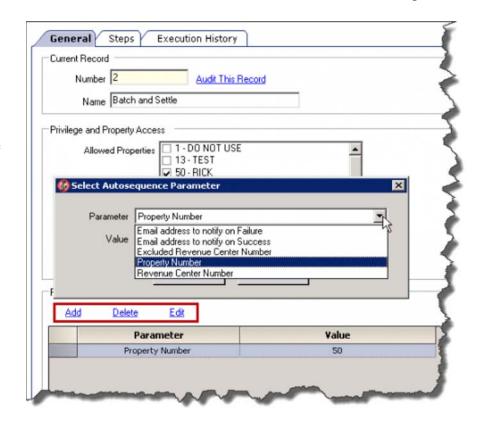
- **Add** – When clicked, a new record will be inserted.
- **Delete** – When an existing "Parameter" record is selected and the Delete link is clicked, the record will immediately disappear.
- **Edit** – When an existing Parameter record is selected and the Edit link is clicked, the '**Parameter**' or the '**Value**' entry can be changed or modified.

5. Select a Parameter and enter the applicable Value for that Parameter. The available Parameter choices are listed and reviewed below:

- **Email address to notify on Failure** – Enter e-mail addresses in the Value column to notify recipients that the autosequence failed to successfully complete
- **Email address to notify on Success** – Enter e-mail addresses in the Value column to notify recipients that the autosequence successfully completed
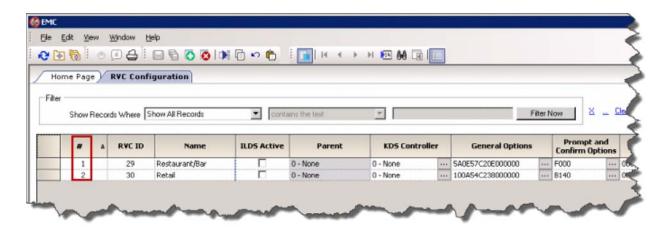
Enter one or more email addresses where the email notifications will be sent. To enter multiple email addresses, separate the addresses using a semicolon.

- **Excluded Revenue Center Number** – Enter a Revenue Center's (RVC) record number (i.e., Object number) located in the *EMC-> Property-> Property Information-> RVC Configuration* module-> as displayed under the "**#**" column so that the designated RVC will not be included when the autosequence is run.

- **Property Number** – Enter a Property's record number (i.e., Object number) located in the *EMC-> Enterprise-> Enterprise Information-> Properties* module-> as displayed under the "**#**" column so that the designated Property will be included when the autosequence is run.

- **Revenue Center Number** – Enter a Revenue Center's (RVC) record number (i.e., Object number) located in the *EMC-> Property-> Property Information-> **RVC Configuration*** module-> as displayed under the "#" column so that the designated RVC will be included when the autosequence is run.
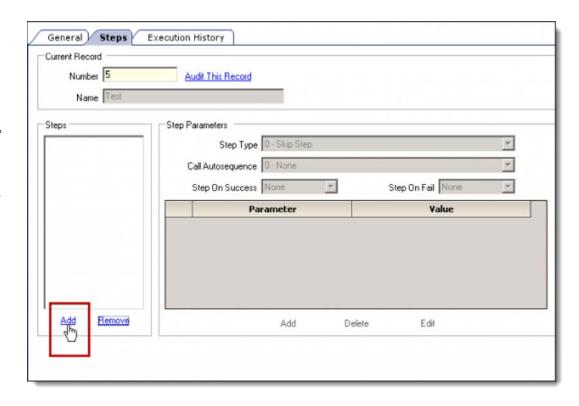
> **Note:** If PC Autosequence success or failure e-mail notifications are configured, the site must utilize an SMTP Server that is available on the network. The application server's <Drive letter>:\Micros\Simphony\EgatewayService\Web.config file must be edited to include the SMTP Server information and default "**From**" email address for the Property. Shown below is an example of the Web.config file's SMTP Mail settings.

```
<!-- PC Autosequence smtp mail settings -->
    <add key="AutosequenceMailAllowed" value="true" />
    <add key="AutosequenceMailFrom"
value="AutosequenceServer@micros.com" />
    <add key="AutosequenceSmtpClient" value="localhost" />
```
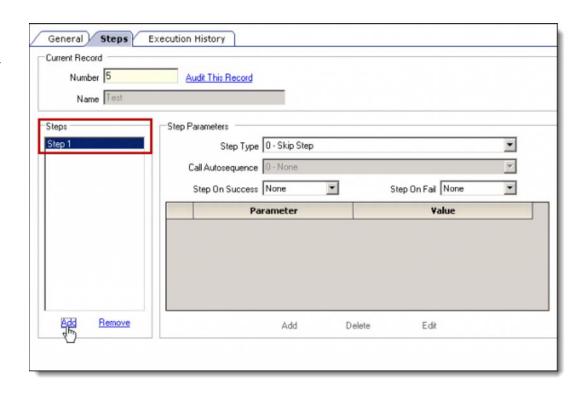
Steps tab

The "Steps" tab is where an autosequence is configured to perform tasks in a specific order. There is no limit to the number of Steps that can be defined per autosequence. To configure autosequence Steps, follow the instructions outlined below:

1. Click on the **'Steps'** tab.
2. Click on the **'Add'** link.
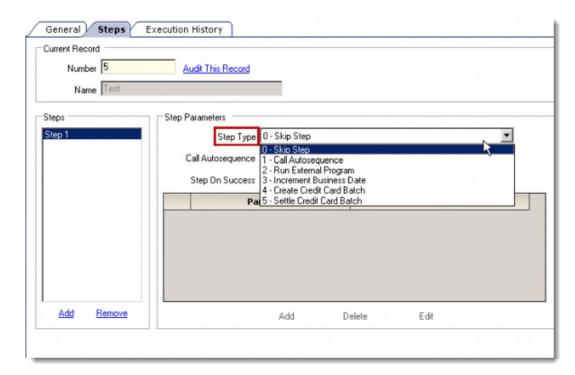
- A '**Step 1**' entry displays within the Steps section.

3. Choose and select a '**Step Type**'. The Step Type choices are:

- **0 – Skip Step** – Select this type to skip a step and move on to the next configured step
- **1 - Call Autosequence** - Select this type to cause the autosequence to execute another autosequence and upon its completion, continue with the next step in the original autosequence.
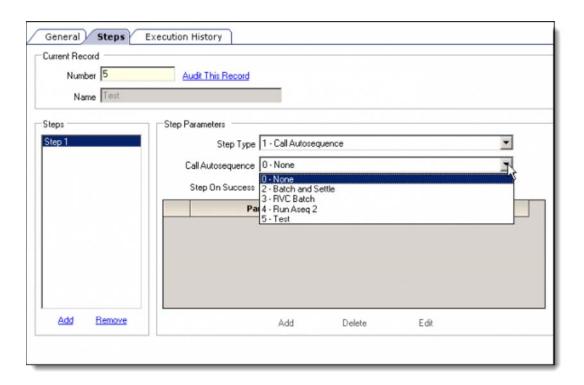
- **2 - Run External Program** - Select this type for executing tasks such as calling a custom script.
- **3 - Increment Business Date** – This type increments the business date to the next day, however is only allowed to be used for manually run Start of Day operations.
- **4 - Create Credit Card Batch** – This type creates CC Batches for all of the assigned Properties.
- **5 - Settle Credit Card Batch** – This type Transfers CC transaction records for all of the assigned Properties.

Once a Step Type has been selected, subsequent '**Step Parameter**' choices will differ from each other based on which kind of Step Type has been selected.
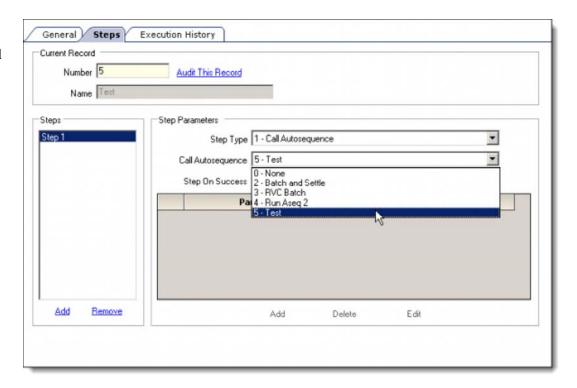
Step Type Examples

Call Autosequence

When *Step Type*-> **[1 – Call Autosequence]** is selected, it will generate a list of existing autosequences in the next field's '**Call Autosequence**' dropdown menu to allow a user to select the Autosequence that is "called" and should be run during that particular Step. Shown here is a list of all of the available Autosequences that can be called to run.
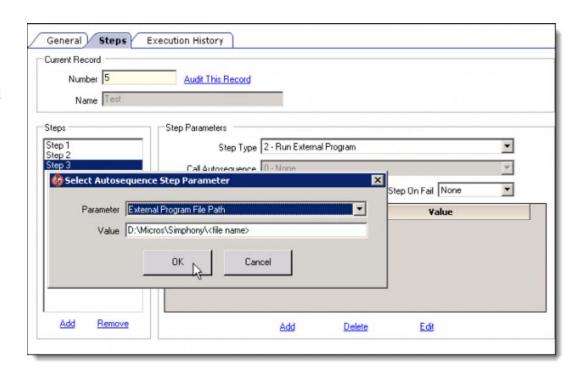
Once an Autosequence has been selected, additional '**Step Parameters**' can be added and configured. See the *Steps tab*-> '**Step Parameters**' section for more information.
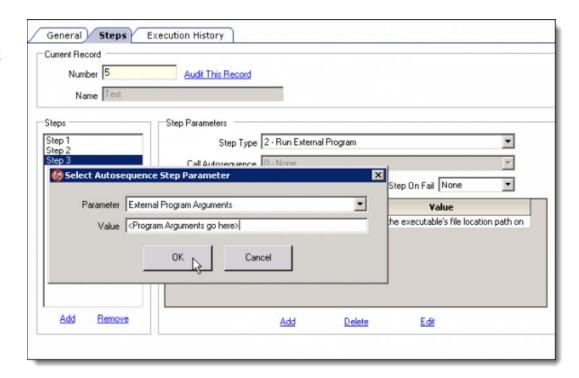
Run External Program

When *Step Type*-> **[2 – Run External Program]** is selected, users must add an '**Autosequence Step Parameter**' named **[External Program File Path]** and provide an absolute (or full) path in the '**Value**' field identifying the exact location of the program that is to be run.
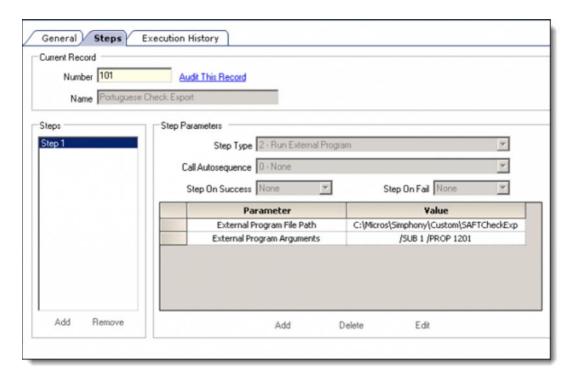
Users can also add another '**Autosequence Step Parameter**' named **[External Program Arguments]**. Arguments can be configured any way that the designated External Program has them configured and should be entered in the '**Value**' field.

Shown here is an example of an '**External Program Argument**' configuration for a Portuguese Check Export (PT_FISCAL) package. During Start of Day

operations, it performs an export (in this case for property 1201) to a SQLite database that is required by that country's government.

Increment Business Date

The *Step Type*-> **[3 - Increment Business Date]** should only be configured for Start of Day operations that are manually run. If selected, configured and executed, the designated Property or RVC's Business Date will be incremented to the next day. The standard *General tab*-> '**Parameters'** can also be configured at the step level for this type.

Create Credit Card Batch

When *Step Type*-> **[4 - Create Credit Card Batch]** is selected, it creates CC Batches for all of the designated Properties (added in the *Steps tab*-> '**Step Parameters'** configuration). See the *Steps tab*-> '**Step Parameters'** section for more information for this type. If no property is configured here, the Property configured on the '**General'** tab will be used.
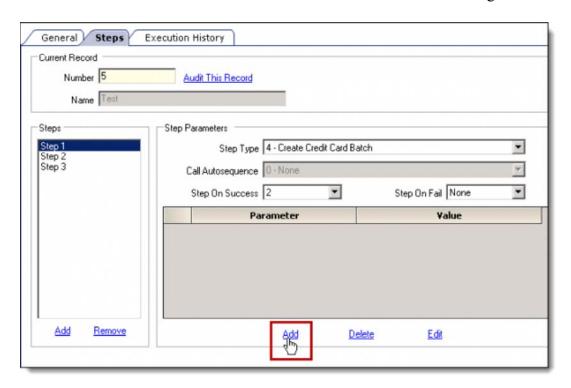
Settle Credit Card Batch

When *Step Type*-> **[5 - Settle Credit Card Batch]** is selected, CC batches will be transferred for all configured Properties (added in the *Steps tab*-> '**Step Parameters'** configuration). See the *Steps tab*-> '**Step Parameters'** section for more information for this type.

Steps tab-> Step Parameters
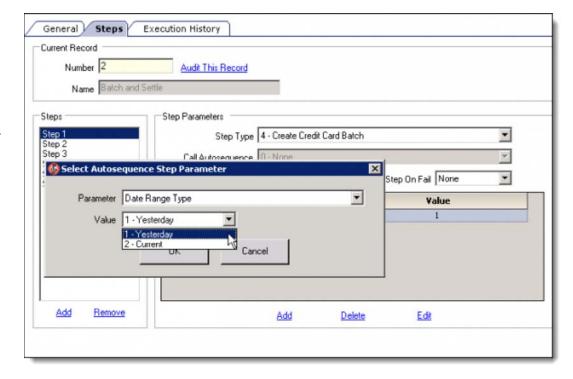
Conceptually similar to the *General tab*-> **Parameters** setup, it is possible to add '**Step Parameters'** settings to individual autosequence Steps that allow users to designate a Step to apply to a specific Property when the autosequence Step is performed. Depending on the type of Step that is being performed, different Parameters can be assigned to a Step.

1. Select a '**Step Type'**. The example shown below is using the **[4 – Create Credit Card Batch]** type.
2. Click on the '**Add'** link.

The '**Select Autosequence Step Parameter'** choices are listed here:

- **Date Range Type** – The '**Value'** dropdown menu choices are:
    - **[1 – Yesterday]** – The previous Business Day
    - **[2 – Current]** - The current or "live" sales transactions
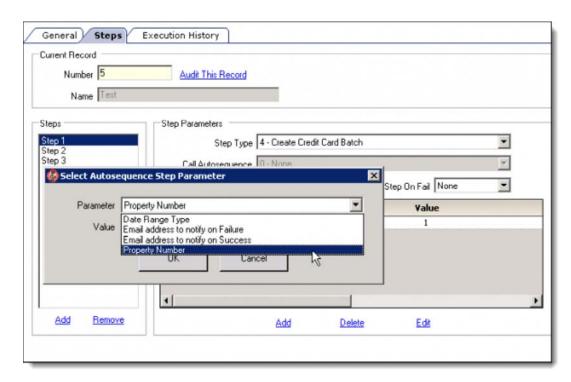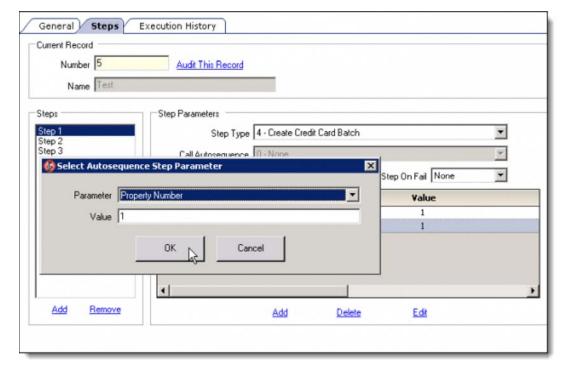
Note: It is recommended that the '**Create Credit Card Batch'** is performed using the *Date Range Type->* **[1 – Yesterday]** value setting. This creates a defined cut off point for records to be included in the batch which will usually allow the batch reports to match the other system reports for Credit Card tenders.

- **Email address to notify on Failure** – Enter e-mail addresses in the Value column to notify recipients that the autosequence failed to successfully complete
- **Email address to notify on Success** – Enter e-mail addresses in the Value column to notify recipients that the autosequence successfully completed
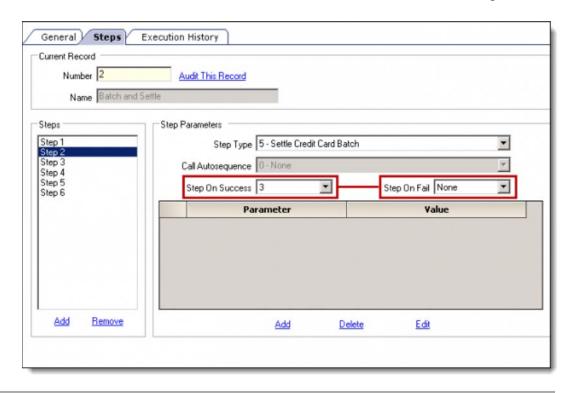
Enter one or more email addresses where the email notifications will be sent. To enter multiple email addresses, separate the addresses using a semicolon.

- **Property Number** – Enter a Property's record number (i.e. Object number) located in the *EMC-> Enterprise-> Enterprise Information-> Properties* module-> as displayed under the "**#**" column so that the designated Property will be included when the autosequence is run.

- The '**Step on Success**' and '**Step on Fail**' fields allow users to determine if a Step continues to run the next configured Step or not.
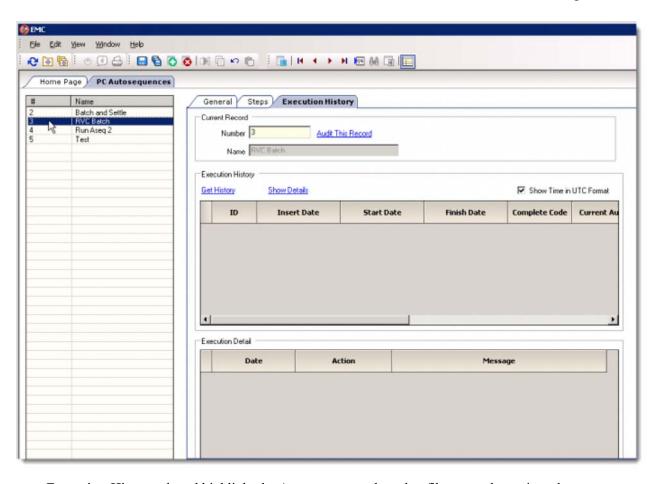
Note: Typically, it's recommended that for Steps that are configured for Batching and Settling Credits Cards should not be limited using the **Step on Fail** setting. That way if a specific CC Batch is not successfully created at one Property, the autosequence can continue running for other designated Properties.

Execution History Tab
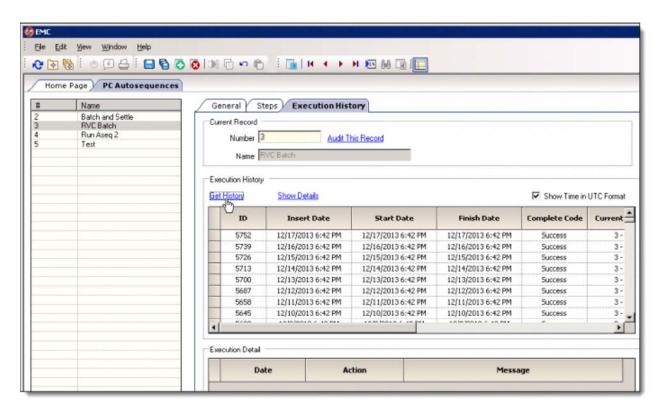
When Autosequences are manually run or scheduled to run via the **'PC Autosequence Schedules'** module, log entries are generated and may be viewed from the *PC Autosequences-> Execution History* tab. To utilize this module, follow the steps outlined below:

1. Click on the *PC*
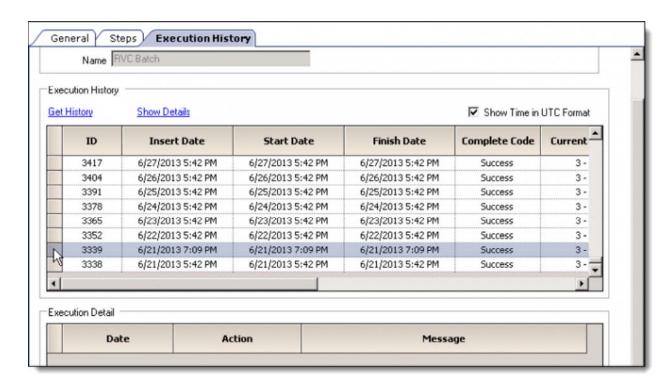
Autosequences-> Execution History tab and highlight the Autosequence whose log files are to be reviewed.

2. Under the
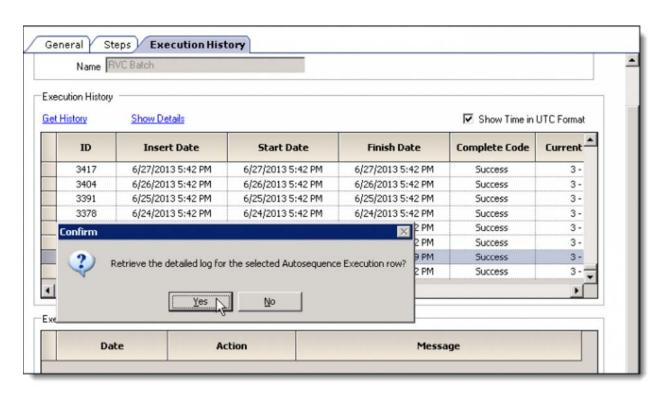
'**Execution History**' section, click on the '**Get History**' link. Listed in chronological order are the dates that the Autosequences were run as well as several columns that contain Autosequence information.

3. For more
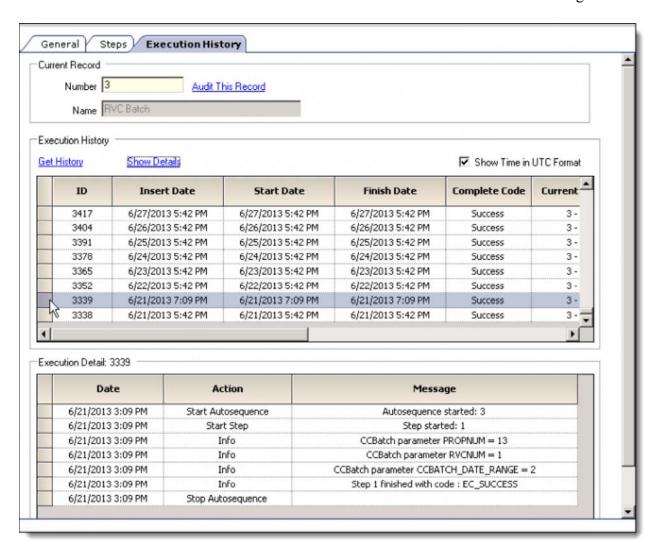
Autosequence log detail, highlight a record.

4. Click on the '**Show Details**' link. A

"Retrieve the detailed log for the selected Autosequence Execution row?" message prompt displays. Click the '**Yes**' button.

5. The
PC
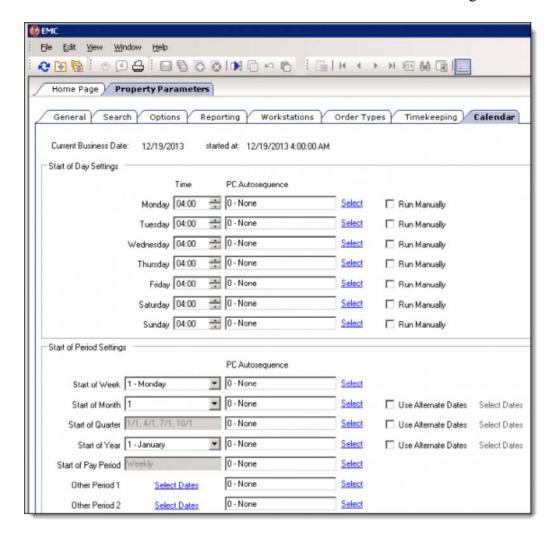
Autosequence log detail will be displayed under the '**Execution Detail**' section.

Property Parameters - Start of Day Setup

To link autosequences to the Start of Day for a Property, access the *EMC-> Property-> Property Information-> Property Parameters-> Calendar* tab. For each day of the week the Property can be configured with a start time and a PC Autosequence. There is also a '**Run Manually**' check box so that a site may launch Start of Day at a time of their choosing as opposed to it running automatically at the time specified.

PC Autosequence Schedule
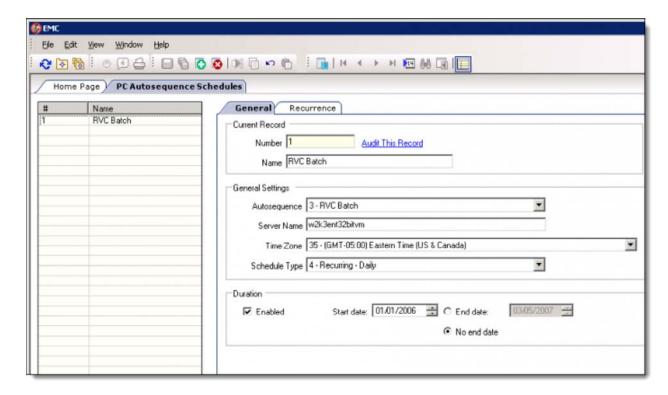
PC Autosequences can be scheduled to run by privileged users accessing the *EMC-> Enterprise-> Tasks->* **PC Autosequence Schedule** module.

PC Autosequence Schedules-> General tab

Perform the following steps to configure a schedule for a PC Autosequence:
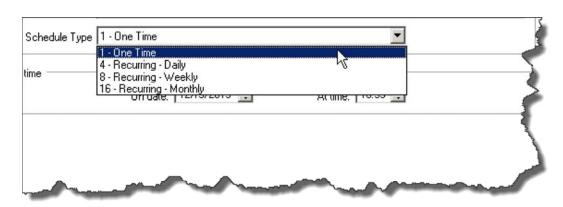
    1. Insert a new record

and

configure the following fields:

- **Name** - Enter the name of the Scheduled task.
- **Autosequence** – Select the autosequence that will be run at the scheduled time.
- **Server Name** – Select the name of the server that will run the autosequence schedule.
- **Time Zone** – Select the Time Zone for this autosequence. This field helps to determine the time of day when the autosequence will run. This list comes from the list of Time Zones listed in this PC's registry.

- **Schedule Type** –
  Select the type of
  schedule for this
  PC Autosequence.
  The available
  'Schedule Types'
  are shown here:

2. Set the **'Duration'**
settings. These settings
are:

- **Enabled** – When this checkbox is checked, this autosequence will run at the scheduled times programmed. Uncheck this box to prevent the autosequence from running.
- **Start date:** - Select the first date for this autosequence schedule to take effect.
- **End date:** - Select this radio button if the autosequence schedule will end at a specific date. When this is checked, the end date box becomes enabled.
- **No end date:** Select this radio button if this autosequence has no end date.

Note: When the **'One Time'**
Schedule Type is selected, the

changes to the this
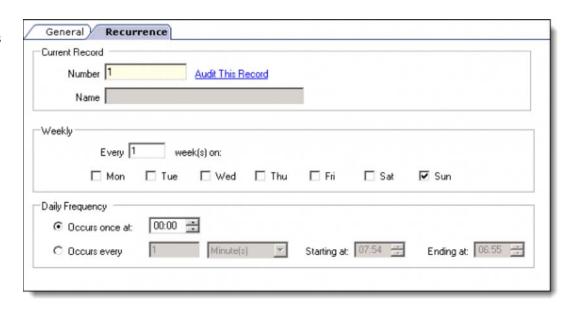
view:

PC Autosequence Schedules-> Recurrence tab

When the '**Weekly Recurrence**' Schedule Type is selected on the '**General**' tab, the '**Recurrence**' tab will appear as in the image shown here.

> 3. Click on the '**Recurrence**' tab and configure the following "Weekly" settings:

> > ▪ **Weekly** – Enter the number of weeks between occurrences of this
> > scheduled autosequence and select which day or days it should run on. The frequency with which it runs on those days must also be configured.
> > ▪ **Daily Frequency** -
> > > ▪ **Occurs once at:** - Select this radio button if the autosequence runs only once per day. When this is checked, the time box becomes enabled.
> > > ▪ **Occurs every** – Select this radio button if the autosequence runs multiple times on the day(s) it is scheduled to run.

Run PC Autosequences

Manually running PC Autosequences

PC Autosequences can be run manually from either the Enterprise level or the Property level. PC Autosequences are typically configured to run automatically. However, in some instances users may want to run an autosequence manually.
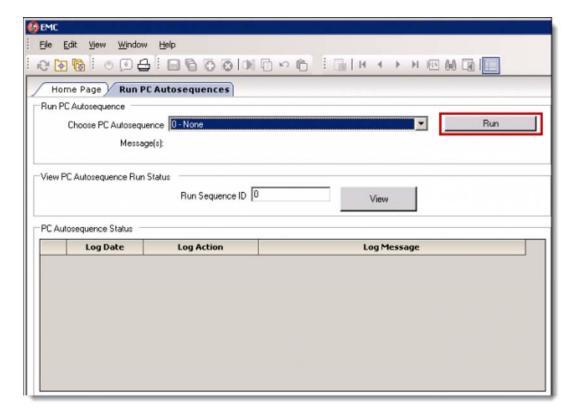
> **Note:** When manually running autosequences from the Enterprise scope, all of the Enterprise's Autosequences will be viewable and available to run. When manually running Autosequences from the Property scope, only those autosequences that are viewable for that specific Property will be available to run.

Enterprise Scope
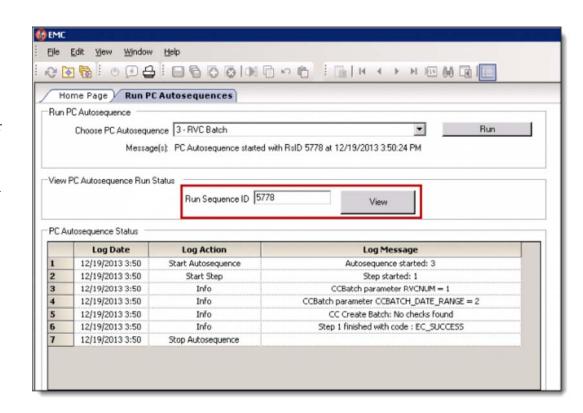
To access the '**Run PC Autosequences**' module from the Enterprise scope, perform the following steps:

1. Access the *EMC-> Enterprise-> Tasks-> **Run PC Autosequences*** module.
2. Choose '**PC Autosequence** – Select a PC Autosequence to run from the drop down.
3. Click the '**Run'** button.

4. **View PC Autosequence Run Status** –

- **Run Sequence ID** – Enter the Run Sequence ID of a previously run

autosequence and press '**View'**. This will show the status messages from the autosequence. **Note:** When clicking '**Run'** button above, this field is automatically populated with the currently running '**Autosequence's Run Sequence ID'**.

Property Scope

To access the **'Run PC Autosequences'** module from the Property scope, navigate to the *EMC-> Property-> Tasks-> **Run PC Autosequences*** module. Otherwise, the steps to manually run an autosequence are the same as the Enterprise scope.

Start of Payroll

Start of Payroll, sometimes called **Start of Pay Period** or **SOPP**, refers to the the beginning of a new pay period in a property. A pay period is a range of dates for which the employees at a property or company are paid. In Simphony, some reports can be taken for the "current pay period" or the "previous pay period". In addition, when a manager adjusts an employee time card, only some time cards may be edited, based on the settings of the Start of Payroll.

This article discusses **configuration**, or various programming scenarios, or both.

This article discusses behavior that is important for **Reporting**.

This article discusses time and attendance features or functionality.

Contents

- 1 Types of Pay Periods
- 2 Reporting
- 3 Autosequences
- 4 Timekeeping and SOPP

Types of Pay Periods

Six different types of pay periods may be configured in Simphony. Pay periods are configured per property, and thus the configuration of the payroll type is done in Property Parameters.

Biweekly

When Biweekly is chosen, a "Select Start Date" field displays, allowing the user to configure the first date of one pay period. Each pay period is two weeks long starting from the date chosen. For example, if the user chooses August 12, 2007 the pay periods will be:

- August 12 - August 25
- August 26 - September 8
- September 9 - September 22
- ... and so on.

Alternate Dates

When Alternate Dates is chosen, pay periods are completely user-defined. Alternate Dates is used for situations when the other possibilities (biweekly, weekly, monthly, $1^{st}/15^{th}$, $1^{st}/16^{th}$) are not desired. For more information, see Alternate Dates.

Weekly

When weekly is chosen, each pay period is one week long. The Start of Labor Week field determines which day of the week is the first day of a pay period.

First and 15th

When this option is chosen, pay periods begin on the 1st and 15th days of each month.

First and 16th

When this option is chosen, pay periods begin on the 1st and 16th days of each month.

Monthly

> When this option is chosen, pay periods begin on the first day of the business month. The "business month" is configured on the Calendar tab.

Reporting

When reports are taken for a Pay Period, what are the dates that will be displayed? The answer is determined by the type of Pay Period that is in use. For the following examples, suppose that the current date is January 24, 2006:

Biweekly Payroll

> If the start date is configured as 01/06/06:
> - A report run for "Previous Pay Period" will show information from the start of the January 6, 2006 business day to the end of the January 19, 2006 business date.
> - A report run for the "Current Pay Period" will show information from the start of the January 20, 2006 business day until the current second.

Alternate Dates

> For information on this configuration method, see Alternate Dates.

Weekly

> Dates are calculated using the same rules as Start of Week.

First and 15th

> - A report run for "Previous Pay Period" will show information from the start of the January 1, 2006 business day to the end of the January 14, 2006 business date.
> - A report run for "Current Pay Period" will show information from the start of the January 15, 2006 business day to the current second.

First and 16th

> - A report run for "Previous Pay Period" will show information from the start of the January 1, 2006 business day to the end of the January 15, 2006 business date.
> - A report run for "Current Pay Period" will show information from the start of the January 16, 2006 business day to the current second.

Monthly

> Dates are calculated using the same rules as Start of Month.

Autosequences

As mentioned in the Start of Day article, SOD runs its autosequence(s), and then when it is done:

> The SOPP autosequence is generally configured as **0-None** unless a property has a specific process (such as a custom application) that needs to run.

- The autosequence for SOW runs, if it is time to run SOW
- The SOPP autosequence runs, if it is time to run. SOPP autosequences run when the business day that began with SOD is the first day of a Pay Period, as calculated by the configuration for SOPP.

Timekeeping and SOPP

SOW, SOM, and other periods do not have a direct impact on any type of workstation activity, but Start of Payroll does. On a workstation, when a user uses the adjust time card procedure, only time cards from the current or previous pay period will be available for adjustment. The Property Parameters option #17, **[Enable Adjustments for the Previous Pay Period]** controls this behavior. By default, this option is OFF, meaning that time cards can be adjusted only for the current pay period.

Table Number

A **Table** is a seating location for one or more guests in a restaurant. In Simphony, tables are identified by **Table Numbers** or **Table IDs**. A table number (or table ID) is programmed in the EMC and assigned to a check by the operator.

abc ✓	This article belongs to the MICROS **Important concepts** category.
🎼	**This article relates to programming of an EMC module.**
▦	This article discusses the usage of one or more **Function Keys**. (522)
💡	This article discusses general MICROS knowledge and/or **terminology**.
❓	This article discusses **configuration**, or various programming scenarios, or both.

Contents

- 1 EMC Programming
    - 1.1 Tables Module
    - 1.2 RVC Parameters
- 2 Workstation Operations
- 3 Other Options
    - 3.1 Revenue Center Parameters
    - 3.2 Function Keys
- 4 Privileges
- 5 See also

EMC Programming

Tables can be referenced by object number or name. Typically, object number is used, but the name field is sometimes used for restaurants that use letters to represent table sections (r-1 or b-1, to represent "restaurant table 1" vs. "bar table 1").

Tables Module

Tables are programmed per Revenue Center. In the Tables module of the EMC, there are two columns that can be programmed — object number and name. The "name" of a table can be programmed as a four-digit string of numbers and/or alphanumeric characters, while the object number is always a numeric value.

# ▲	Name
1	t-1
2	t-2
3	t-3
4	
5	
6	
7	
8	
9	
10	

Tables module of the EMC. The Name column does not need to be completed unless the the RVC Parameters option, **[ON = Use 5-digit Table #; OFF = Use 4-digit Character Table ID]**, is disabled.

RVC Parameters

In RVC Parameters, the Options/General box contains option **[#18 - ON = Use 5-digit Table #; OFF = Use 4-digit Character Table ID]**. This option bit controls what should be entered when a user is prompted for Table Number on the workstation — either the "Table ID" (programmed as the "Name" in the image shown), or the "Table Number." The Context Sensitive Help for this option states:

Select this option to use the 5-digit table numbers programmed in the Tables module. Disable this option to use the 4-character Table ID entered in the Table Module. This option must be disabled when International LDS is used.

Workstation Operations

At a workstation, an operator is forced to enter a table number if the operator option, **[Table Number Entry Required to Begin/Pickup Checks]** is enabled. This option is generally enabled for servers but not for bartenders. Typically, servers have a Default Transaction Screen that has a **[Begin Table]** function key programmed on it, so why is this option even necessary? Most often, this functionality comes in to play when a check is being transferred. Consider this example:

1. The bartender begins a check for a couple who sits at the bar. The check is begun without a table number (typical for a bartender).
2. The couple has one drink each, then wants to go to the restaurant.
3. When the server transfers the check, he/she is prompted to enter the table number. If the operator option bit was disabled, this prompt would not have occurred.

Other Options

There are other options that affect the behavior of Table functionality:

Revenue Center Parameters

Print Table Number Double Wide on Guest Checks Only
> This option, #3 in Format Parameters, causes the table number, if used, to print in double-wide format on the guest check.

Allow Only One Group per Table
> Select this option (#9 in Control options) to prevent an operator from assigning more than one group to a table, meaning that an operator can only open one check per table (if Table #11 is open, another Table #11 cannot be begun). Disable this option to allow an operator to begin a Table Number even though a Table is already open with the same number. ***Note:** When using Touch Split, multiple groups are created for the same table — this option does not affect Touch Split.*

Function Keys

Function Key #522
> The **[Table Number]** function key (522) is used to assign a Table Number to a check manually (without being prompted by the workstation). This key can only be used for checks without a Table Number or Table ID currently assigned. When this key is pressed, the operator can assign a Table Number or Table ID to the current check.

More function keys
> See the Check Begin/Pickup function keys page for a description of functions used to start and pickup checks by table number.
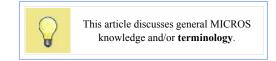
Privileges

- It is only possible to begin a multiple groups at the same table if the employee is associated with an Employee Role with the **[Authorize/Perform Open of Checks for Multiple Groups at a Table]** option enabled.

- The **[Table Number]** function key (522) can only be used by employees associated with an Employee Role with option **Authorize/Use [Table Number] key** enabled.

Tare Weight

Tare Weight is the weight of a container or wrapper that is deducted from the gross weight to obtain the net weight. Tare Weight is used to accurately measure the weight of a weighed menu item.

This article discusses general MICROS knowledge and/or **terminology**.

Example

In a restaurant with a salad bar where salad is sold by weight, the customer should not be charged for the weight of the container. To prevent this, a tare weight is programmed for the salad menu item and the weight of the salad's container is automatically subracted from the weight of the salad:
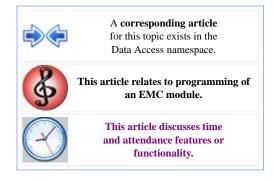
```
1.5 lb    (weight of salad and container)
0.5 lb    (weight of container; programmed in EMC)
1.0 lb    (amount the customer will be charged)
```

EMC Configuration

Tare Weight is programmed for each Menu Item Definition.

Time Clock Schedule

The **Time Clock Schedule** is an EMC module where a user configures a property to control which employees can clock in and out. When the Time Clock Schedule is enabled, an unscheduled employee cannot clok in with a manager's authorization. In addition, the Time Clock schedule restricts clock in/out times and break periods, thus making it easier to effectively manage labor costs.

	A **corresponding article** for this topic exists in the Data Access namespace.
	This article relates to programming of an EMC module.
	This article discusses time and attendance features or functionality.

Contents

Enabling

By default, properties do not use the Time Clock Schedule. With this default setting, employees are able to clock in/out without regard to a schedule.

To enable the Time Clock Schedule, the Timekeeping option, **[8 - Enable Time Clock Schedule]**, must be enabled in Property Parameters. When this option is enabled, workstations will compare clock in/out activity with the settings from the Time Clock Schedule.

EMC Configuration

Time Clock Scheduling is configured in the following Property Level modules:
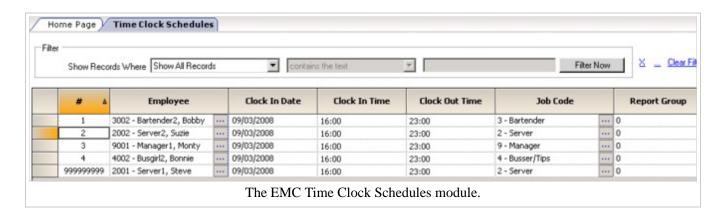
- Time Clock Schedules module
- Timekeeping tab in the Property Parameters module

Note: Because Time Clock Schedule programming requires one row for each employee's Clock-In Cycle, this module is often programmed via an import, using the Import/Export Utility.

Time Clock Schedules Module

The Time Clock Schedules module in EMC allows a programmer to schedule the dates and times at which employees may clock in and out.

In this module, a Clock-In Cycle is programmed for each employee, for each time the employee is working. For each clock-in cycle, employees may be assigned a specific Job Code, which in turn is linked to a specific Pay Rate, or employees may be allowed to select a Job Code. Refer to Job Codes for more information.

The EMC Time Clock Schedules module.

The Time Clock Schedules module, as shown on the right, contains the following configurable fields and drop-downs:
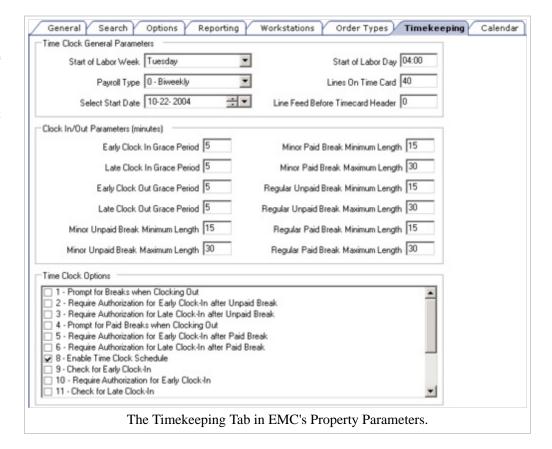
- Employee - Select the employee who will be working for the shift.
- Clock In Date - Enter the Clock In Date.
- Clock In Time - Enter the Clock In Time.
- Clock Out Time - Enter the Clock Out Time.
- Job Code - Select a Job Code to be used for the shift.
- Report Group - Enter the Report Group number.

Timekeeping in Property Parameters

The Timekeeping tab within the Property Parameters module is used to enable time clock scheduling and to check for or prevent any combination of the following:

- Clocking in earlier or later than scheduled
- Clocking in/out earlier or later than scheduled break
- Clocking out earlier or later than scheduled grace periods may be programmed to allow clocking in and out at approximate times.

On the Timekeeping tab, the following information should be configured:

The Timekeeping Tab in EMC's Property Parameters.
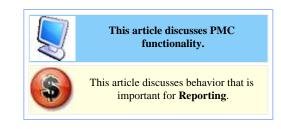
- **Start of Labor Day** -
  This is the time of day at which labor totals begin to accumulate. If possible, this field should be programmed at a time of day when all employees are clocked out. Note that this field is generally the

same as the Start of Day time and MICROS recommends that the times are consistent.

- **Start of Labor Week** - This is the day of the week on which labor totals begin to accumulate. This field is generally set to the same as the Start of Week day.
- **Line on Time Card** - This field represents the maximum number of lines to print on time cards.
- **Line Feed Before Timecard Header** - This field represents the number of lines to advance before printing the time card header section.
- **Clock In/Out Parameters** - This section includes fields relating to grace periods and breaks. For a full description of these fields, visit Grace Periods or Breaks.
- **Options** - These options generally control grace period settings. For a full description, see Grace Periods.

Time Period Detail Report

The **Time Period Detail Report** is a report that shows each time period as a full report, with a similar format to a system financial report (sales, check profiles, tracking group).

This article discusses PMC functionality.

This article discusses behavior that is important for **Reporting**.

Contents

- 1 Report Fields
- 2 PMC Report
- 3 mymicros.net Report
- 4 See also

Report Fields
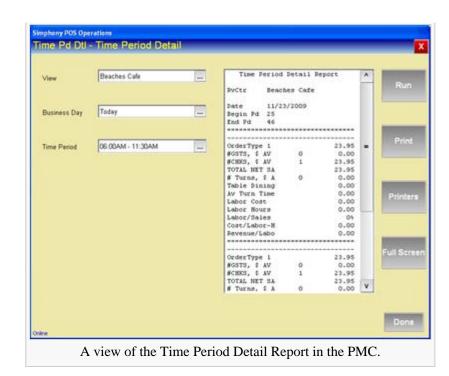
The following information is included in the Time Period Detail Report:

- Guest Average: The average dollar amount per guest.
- Check Average: The average dollar amount per check.
- Total Net Sales: The total sales, less returns, discounts, and voids.
- Table Dining
- Average Turn Time: The average time a check stays open in the system.
- Labor Cost
- Labor Hours
- Labor/Sales Percentage
- Labor Cost per Hour
- Revenue/Labor Cost

PMC Report
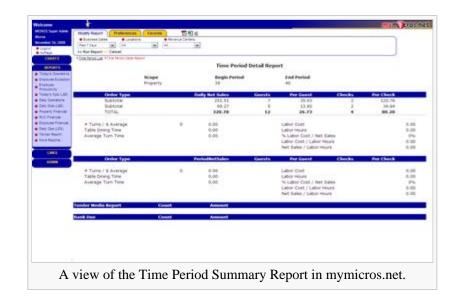
The PMC version of the report allows a choice of **View**, **Business Day** and **Time Period**. The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Time Period Detail Report in the PMC.

mymicros.net Report

The **Time Period Detail Report** is available online at mymicros.net for anyone who has access. The report can be run per Location and Revenue Center, as well as for a specific date or range of dates. This allows users at the Enterprise Level to see the report outside of the store.

A view of the Time Period Summary Report in mymicros.net.

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports

Time Period Summary Report

The **Time Period Summary Report** is a report that shows each time period on a single line with sales information.

🖥️	**This article discusses PMC functionality.**
💲	This article discusses behavior that is important for **Reporting**.

Contents

- 1 Report Fields
- 2 PMC Report
- 3 mymicros.net Report
- 4 See also

Report Fields
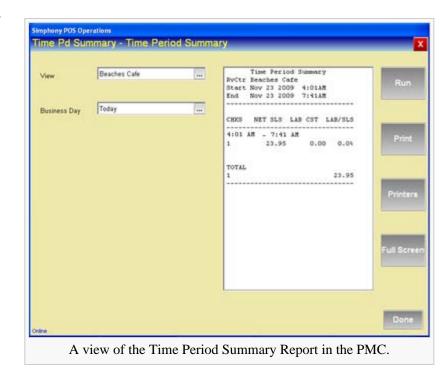
The following information is included in the Time Period Summary Report:

- Checks (CHKS): The number of checks opened in that specific time period.
- Net Sales (NET SLS): The total sales, less returns, discounts, and voids.
- Labor Cost (LAB CST): The total dollar amount labor cost.
- Labor Cost Percentage (LAB/SLS): The labor cost over net sales.

PMC Report
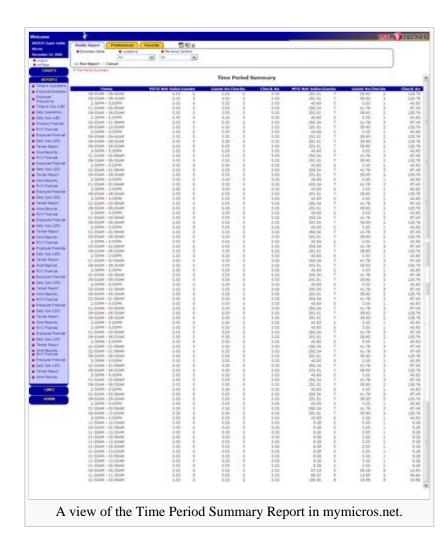
The PMC version of the report allows a choice of **View** and **Business Day**. The report can be taken for a Property, a Revenue Center, Prompt, or Inherit.

For general information about PMC Reports, see WS Autosequences.

A view of the Time Period Summary Report in the PMC.

mymicros.net Report

The **Time Period Summary Report** is available online at mymicros.net for anyone who has access. The report can be run per Location and Revenue Center, as well as for a specific date or range of dates. This allows users at the Enterprise Level to see the report outside of the store.

A view of the Time Period Summary Report in mymicros.net.

See also

- PMC Reports
- WS Autosequences
- List of PMC Reports

Upgrading a Restaurant Display Controller (RDC) for KDS v2.1

This article reviews the process for upgrading a Restaurant Display Controller (RDC) in order to run KDS v2.1. It's now available for sites utilizing Simphony v1.6 and Simphony v2.3 (or higher).

Contents

This article discusses a topic related to **hardware**.

This article discusses **configuration**, or various programming scenarios, or both.

Overview

A new version of the Kitchen Display System (KDS) software has been integrated into Simphony v1.6 and Simphony v2.3. There are many features in this version of the KDS software, some of which require that a platform update be done to the Remote Display Controller (RDC) that the KDS client software operates on. By following these instructions, the RDC will be upgraded to the new platform, returned to factory settings and then loaded with the new KDS client. There are two RDC models, and each model has a different platform. The part number on the RDC will indicate which model the unit is. The platform updates can be obtained from the **'Hardware Portal'** site. The version of the RDC Platform Update is 4.2.2.0 and it will be able to automatically identify which model of RDC is being utilized and install the correct files.

- Part Number 700876-200 is the GX model
- Part Number 700876-210 is the LX model

Upgrade Process

Upgrade the Platform

Follow these steps to upgrade the operating system to the required platform:

There were two different hardware versions of the RDC and these updates will update either device when encountered. The RDCPlatformUpdate zip File consists of two self extracting zip files that are to be executed on an existing CAL server. The files are:

- **CALClientUpdate(4.1.3.66).exe:**

Self extracting zip file that contains the updated CAL Client for both RDC's (GX/LX). This .exe will create the CAL package on the CAL server to deploy the CAL client to the RDC.

- **ClientOSUpdate(4.2.2.0).exe:**

Self extracting zip file that contains the updated RDC OS image for both RDC's (GX/LX). This .exe will create the CAL package on the CAL server to deploy the OS Update to the RDC.

How to install the updates

WARNING: It is important that these updates be installed in the order specified below.

1. Run the CALClientUpdate(4.1.3.66).exe. Note that this version of CAL client is also the version that has been shipping on newer RDC's for the past few years, so you may notice that the CAL package doesn't appear to update some RDC's. This is OK.
2. Run the ClientOSUpdate(4.2.2.0).exe. Each of these CAL packages will reboot the RDC several times during the update. Do *not* be alarmed by this behavior.

Revert to Factory Settings

Depending upon the history of the device and what was previously running on it, there could be previous configuration data that can interfere with the new platform and software. To facilitate the best possible upgrade, the unit should be returned to the factory settings prior to loading the new KDS software.

1. Start | Settings | Control Panel | Save Settings

   a. Select the '**Default Settings**' tab
   b. Select the '**Reset to Default Settings**' box
   c. Click '**Yes**'

2. The unit will reboot after resetting the configuration

Set the Correct Date and Time

Set the date and time on the unit to be current. If the date and time on the unit is not close to that of the server, then the Client Application Loader (CAL) software will not work properly. Typically, the Property list will fail to load when these values are not correct.

Configure the IP Address

Set the IP address of the RDC to be a static value that will work on the network. It has been seen that some units will not be able to pick up a DHCP issued IP address after the upgrade. This issue can be worked around by assigning a static IP address to the unit, which the KDS client software requires anyway. The unit does not require DNS or WINS entries. To test the network configuration, open up Internet Explorer on the RDC and enter in the

URL to the Simphony Egateway service that is hosting the CAL server. If this URL can be accessed, the network configured is ready for connecting to the server.

For Simphony v2.x customers that did not upgrade from Simphony v1.x, the URL typically looks like this:

http://<serverIP>:8050/egateway/egateway.asmx (http://)

For Simphony v2.x customers that have upgraded from Simphony v1.x, the URL typically looks like this:

http://<serverIP>:8080/egateway/egateway.asmx (http://)

Install the Kitchen Display System Client

Once CAL has started, follow the normal steps to load and configure the KDS client software.

The following tips may be helpful:

- If you are typing with a keyboard and nothing is going into the fields, press '**F12**' and try again.
- When selecting the RDC from the list:
  - Ensure that the '**Automatic DHCP Address**' is turned off.
  - Ensure that there are values in the '**Netmask**' and '**Default Gateway**' fields.
  - Ignore the value in '**Select Product to Install on Workstation**' field.

User Experience 1.6

Overview

The User Experience Report is a tool used in identifying system slowness in Simphony. Timed statistics can now be collected from the workstations and saved in the central database. The data that is posted to the central database can now be parsed, aggregated, and analyzed using the User Experience Report module.

	This article relates to programming of an EMC module.
	This feature or functionality was introduced in Simphony v1.6.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses a **technical topic** that is not intended for all readers.

There are two types of statistics provided by OPS:

- Aggregated offline and message statistics, referred to in EMC as "Post Message Statistics"
- Detailed logging in local workstation logs, referred to in EMC as "Archive WS Logs"

When the workstation status changes from online to offline and vice versa, the status changes and is saved in OPS memory. The saved data is then collected by a job that runs periodically. The default value for the job is every 15 minutes. The data is then sent to the URL designated for collecting statistics. Offline statistics contain the timings for when the workstation was in offline mode, online mode, or *offline* mode (when the workstation has network connection to the central server, but is still offline). OPS also captures the number of replays that were started and the number that have succeeded. Detailed logging is useful for logging the timings of different modules. Once the workstation logs are pushed to the central database, they can then be analyzed.

The following modules are integral when using the User Experience Report:

- SarOps Client – captures and sends data to the server
- EMC – provides the user interface for the User Experience Report Setting configuration
- DbDownloadHandler – implements configuration querying. The handler also handles saving data sent from the OPS client.
- NewDTS – implements parsing workstation logs and periodic purging for the new tables in the database
- EGateway Service – returns the time spent on the Application Server to process the client request

Contents

EMC Modules

Two new modules have been added at the Enterprise level in EMC:

- User Experience Report
- User Experience Report Setting

To access these modules navigate to:

- Enterprise Level -> under Enterprise Information Header -> User Experience Report
- Enterprise Level -> under Enterprise Information Header -> User Experience Report Setting

Enterprise Information
Enterprise Parameters
Properties
Selection Hierarchies
Languages
Locale
Print Logos
Touchscreen Bitmaps
User Experience Report
User Experience Report Setting
Enterprise Dashboard
Enterprise Dashboard Config

EMC -> Enterprise level ->
Enterprise Information Modules

User Experience Report Setting

The User Experience Report Setting module is used to configure the settings of what to log on the workstations to determine what will show when the User Experience Report is run. The module shows the list of workstations and their settings related for the User Experience Report.

User Experience Report

The User Experience Report module provides a data analysis tool where the data collected from the workstations can be analyzed. It also gives a quick graphical view of the health of the workstations.

There are three types of statistics that can be gathered from the workstations:

- Offline Statistics
- Aggregated Statistics
- Details Statistics
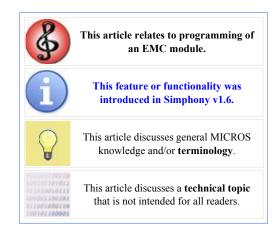
User Experience Report

Overview

The User Experience Report module provides a data analysis tool where the data collected from the workstations can be analyzed. It also gives a quick graphical view of the health of the workstations.

There are three types of statistics that can be gathered from the workstations:

- Offline Statistics
- Aggregated Statistics
- Details Statistics

Collected data can be analyzed at the Enterprise, Property, Revenue Center, or Workstation levels.

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	This feature or functionality was introduced in Simphony v1.6.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses a **technical topic** that is not intended for all readers.

Contents

Offline Statistics

This report shows statistics based on the data collected from workstations when the workstation's offline or online status changes. The default schedule collects information every 15 minutes. The Offline Statistics Report shows the offline data as a percentage value. Data for this report is pulled from the WS_LOG_OFFLINE_STATS table in the transaction database.

Offline Statistics Report Configurable Fields

The following fields are configurable when running the Offline Statistics report:

Property

Select a Property or choose "0 - All Properties." Default is "0" which means all properties

String Search

Leave it as blank to search all or put a keyword

Date Range
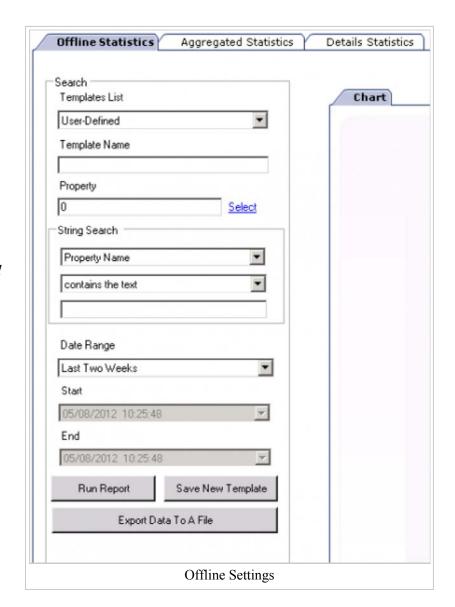
Select a predefined Date Range that will be used to query report, or select "User-Defined" to enable the start/end fields below.

Start

Select a Start date/time or choose "All Dates". This field lets a user narrow a query to a specific date or date range.

End

Select an End date/time or choose "All Dates". This field lets a user narrow a query to a specific date or date range.

Offline Settings

The following date ranges are available:

- User Defined - the user defines the date and time range for which the report is run
- Last Hour
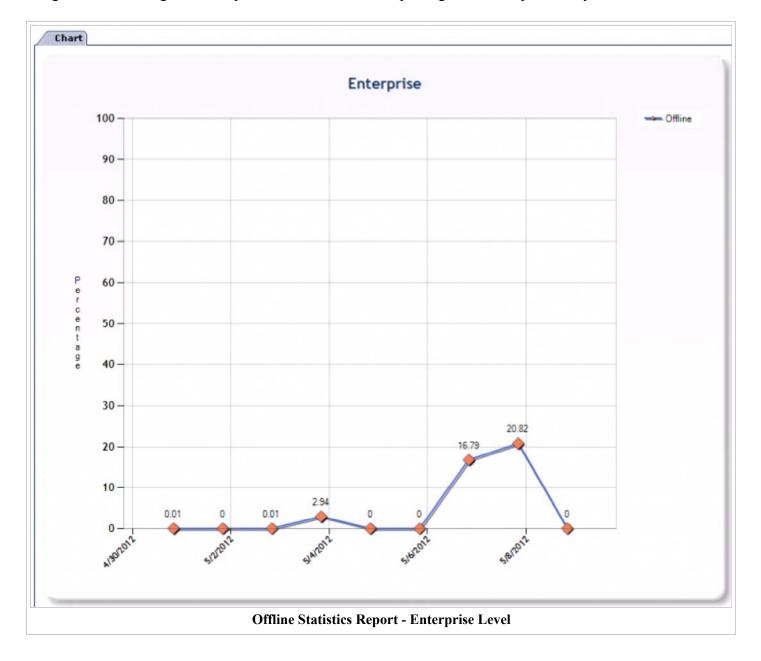- Last Two Hours
- Today
- Last 24 Hours

- Last 48 Hours
- Last Week
- Last Two Weeks

Offline Statistics Report Examples

Enterprise Level Statistics

The Enterprise Level Statistics report shows offline statistics for the entire enterprise over a user-defined period of time. The example below is run for the period of two weeks.
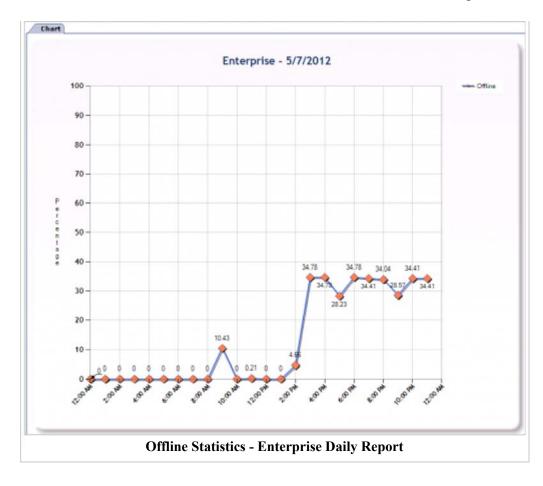
The orange diamonds act as a drill-down into more specific information. In the report example below, clicking the orange diamond will give more specific offline statistics reporting data for a specific day.

Offline Statistics Report - Enterprise Level

Enterprise Daily Statistics

The Enterprise Daily Statistics report shows offline statistics for a specific day. The report example is the first level drill-down from the Enterprise Level Statistics report.
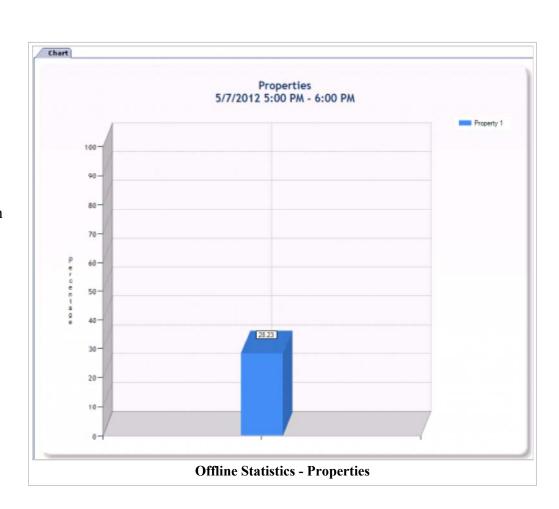
The orange diamonds act as a drill-down into more specific information. In the example report, clicking the orange diamond will give more specific offline statistics reporting data for a specific Property.

Offline Statistics - Enterprise Daily Report

Property Level Statistics

The Property Level Statistics report shows offline statistics for a specific property, broken down by hour increments. The report example is the second level drill-down from the Enterprise Level Statistics report.

Clicking the time percentage on the bar graph will drill-down into more specific information. In the example report, clicking the 28.23 will give more specific offline statistics reporting data for a specific Revenue Center.
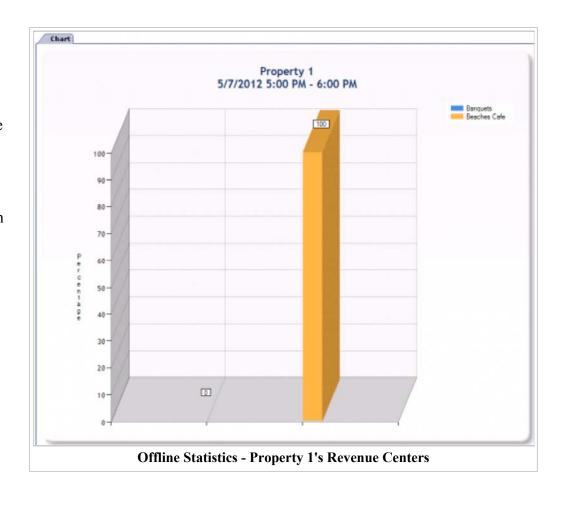

Offline Statistics - Properties

Revenue Center Level Statistics

The Revenue Center Level Statistics report shows offline statistics for each revenue center in a specific property, broken down by hour increments. The report example is the third level drill-down from the Enterprise Level Statistics report.
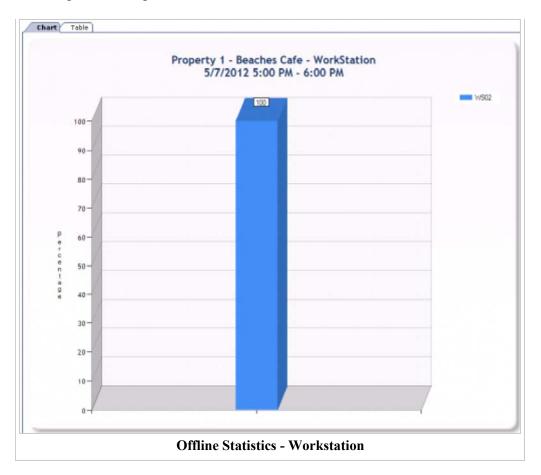
Clicking the time percentage on the bar graph will drill-down into more specific information. In the example report, clicking the 100 on the orange bar will give more specific offline statistics reporting data for specific workstations in a revenue center.
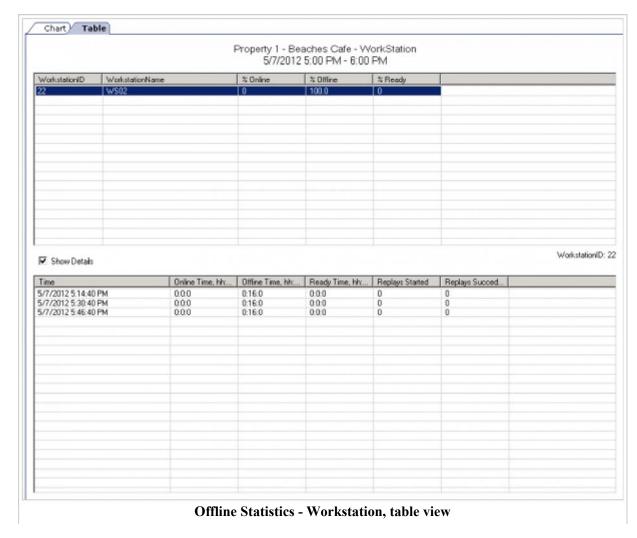

Offline Statistics - Property 1's Revenue Centers

Workstation Level Statistics

The Workstation Level Statistics report shows offline statistics for each workstation in a specific revenue center, broken down by hour increments. The report example is the fourth level drill-down from the Enterprise Level Statistics report.

This report also has a table view which shows the Workstation ID, Workstation Name, Online & Offline %, and Ready %. Enabling the "Show Details" checkbox shows each offline event for that specific workstation, by time.

Offline Statistics - Workstation

Offline Statistics - Workstation, table view

Aggregated Statistics

This report shows statistics based on the data that is collected from workstations every 15 minutes. This value is the default and is set in EMC (see User Experience Report Setting article for more information on configuring this setting). The report shows average, maximum, and minimum duration in seconds that each module takes at the Enterprise, Property, Revenue Center and Workstation levels. Data for this report is pulled from the WS_LOG_STATS table in the transaction database.

Aggregated Statistics Report Configurable Fields

The following fields are configurable when running the Aggregated Statistics report:

Property

Select a Property or choose "0 - All Properties." Default is "0" which means all properties

String Search

Leave it as blank to search all or put a keyword

Functions/Events

Select a predefined Display Modules that will be used to query report.

The following is a list of events to choose from:

- All Events
- Begin Check
- Sign In
- Tender
- Pickup Check
- Offline Labor Cache
- Activity Logger
- Offline
- Ping
- Credit Card Auth
- Discount Engine
- Credit Card Auth Under Base Limit
- Credit Card Auth Under Offline Floor Limit

▪ Manual Credit Card Auth

Report Data Type

Select a data type that will be used to query report

Duration Min (Second)

Select a predefined Duration Min that will be used to query report or leave it empty

Duration Max (Second)

Select a predefined Duration Maxthat will be used to query report or leave it empty

Online Status

Event online status

Date Range

Select a predefined Date Range that will be used to query report, or select "User-Defined" to enable the start/end fields below.
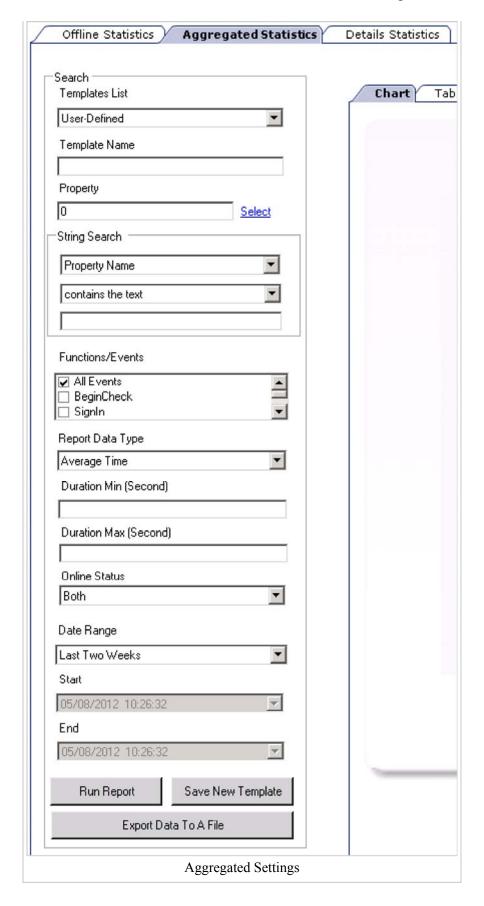
Start

Select a Start date/time or choose "All Dates". This field lets a user narrow a query to a specific date or date range.

End

Select an End date/time or choose "All Dates". This field lets a user narrow a query to a specific date or date range.

The following date ranges are available:

▪ User Defined - the user defines the date and time range for which the report is run
▪ Last Hour
▪ Last Two Hours
▪ Today
▪ Last 24 Hours
▪ Last 48 Hours
▪ Last Week
▪ Last Two Weeks

Aggregated Settings
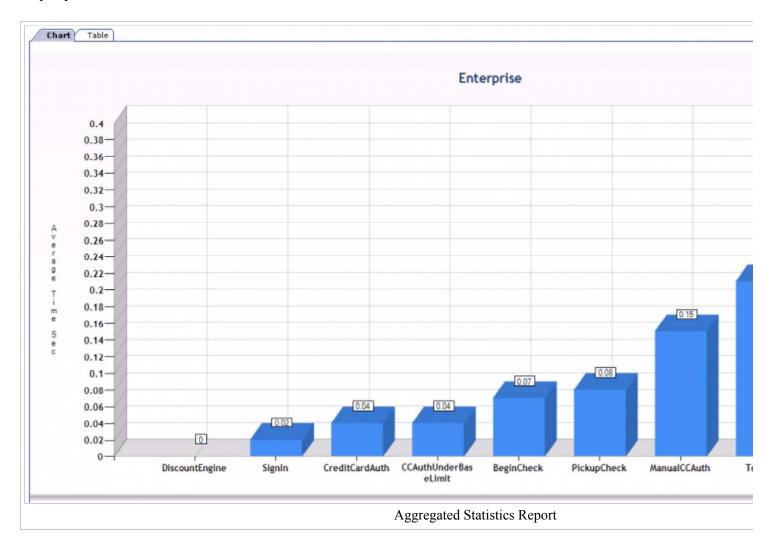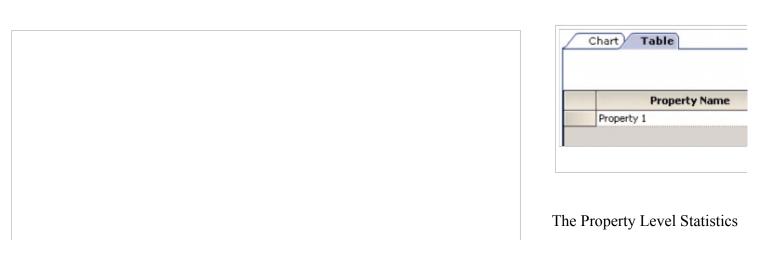
Statistics Report Examples Enterprise
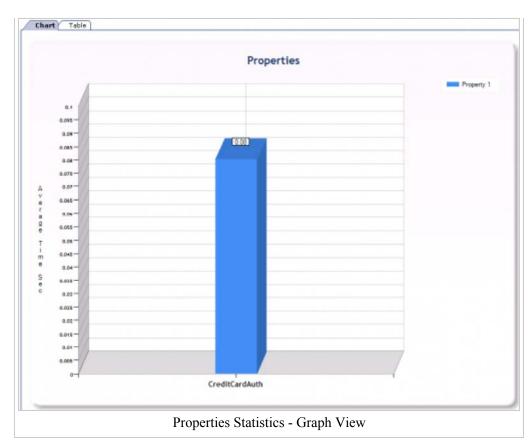
Level Statistics

The Enterprise Level Statistics report below shows the average time it takes each of the events that were logged to complete. This is over a user-defined period of time. The example is showing a two week period of time.

Clicking on the time link on the bars of the graph will show more aggregated statistic information, broken down by Property.

Aggregated Statistics Report

Property Level Statistics

The Property Level Statistics
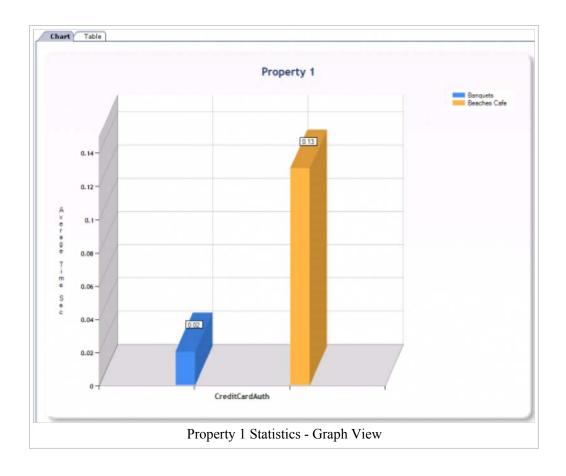
Properties Statistics - Graph View

report shows the average time in seconds that it took to complete a Credit Card Authorization operation, broken down by property.

This is the first level drill-down from the Enterprise Level Statistics report. This information is available in graphical or table view.

Clicking on the time link on the bars of the graph will show more aggregated statistic information, broken down by revenue center.

Revenue Center Level Statistics
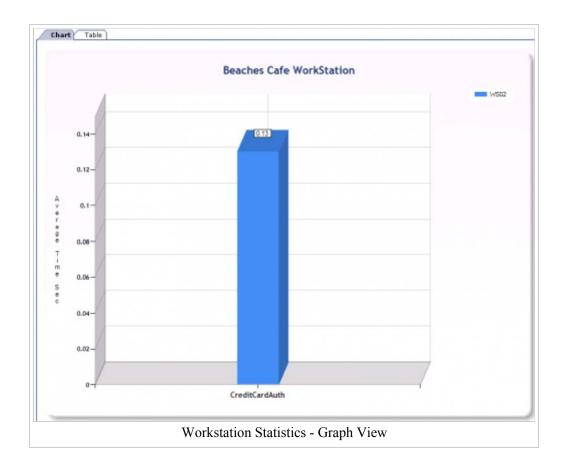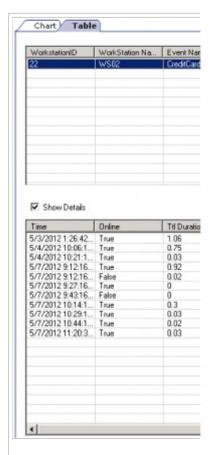

Property 1 Statistics - Graph View

The Revenue Center Level Statistics report shows average time in seconds that it took to complete a Credit Card Authorization operation, broken down by revenue center.

This is the second level drill-down from the Enterprise Level Statistics report. This information is available in graphical or table view.

Clicking on the time link on the bars of the graph will show more aggregated statistic information, broken down by workstation.

Workstation Level Statistics

Workstation Statistics - Graph View

The Workstation Level Statistics report shows the average time in seconds that it took WS02 to complete a Credit Card Authorization operation in the Beaches Cafe revenue center.

This is the third level drill-down from the Enterprise Level Statistics report. This report is broken down by workstation and is available in graphical or table view.

The table view will show event details by workstation. Details are available which show duration for the event per time of day.

Details Statistics

This report shows statistics based on the data that is collected from workstations when the workstation's local log file is rotated. The report shows average, maximum, and minimum duration that each module takes for workstation at the Enterprise, Property, Revenue Center and Workstation levels. Data for this report is pulled from the transaction database in the WS_LOG_SUBMODULES table. NewDTS parses the logs from the workstation to pull event data to the enterprise.

Details Statistics Report Configurable Fields

The following fields are configurable when running the Details Statistics report:

Property

Select a Property or choose "0 - All Properties." Default is "0" which means all properties

String Search

Leave it as blank to search all or put a keyword

Functions/Events

Select a predefined Display Modules that will be used to query report.

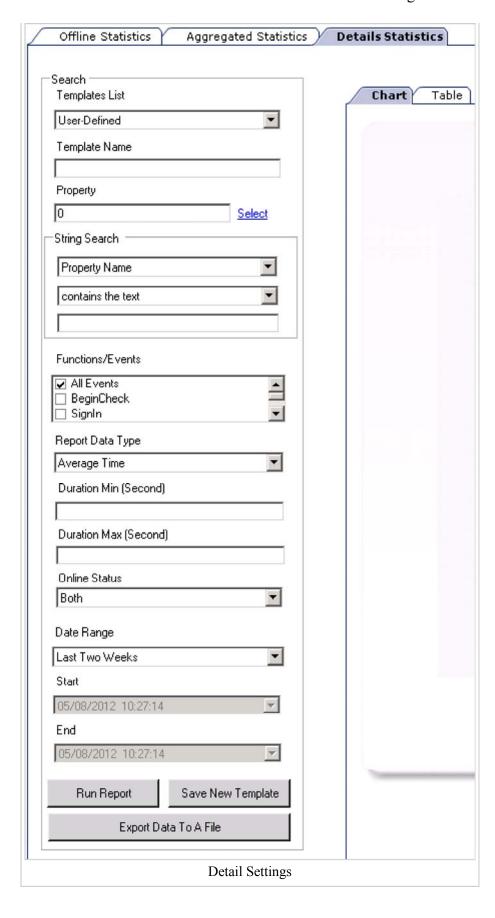The following is a list of events to choose from:

- All Events
- Begin Check
- Sign In
- Tender
- Pickup Check
- Offline Labor Cache
- Activity Logger
- Offline
- Ping
- Credit Card Auth
- Discount Engine
- Credit Card Auth Under Base Limit
- Credit Card Auth Under Offline Floor Limit
- Manual Credit Card Auth

Report Data Type

Select a data type that will be used to query report

Duration Min (Second)

Select a predefined Duration Min that will be used to query report or leave it empty

Detail Settings

Duration Max (Second)

Select a predefined Duration Maxthat will be used to query report or leave it empty

Online Status

Event online status

Date Range

Select a predefined Date Range that will be used to query report, or select "User-Defined" to enable the start/end fields below.

Start

Select a Start date/time or choose "All Dates". This field lets a user narrow a query to a specific date or date range.

End

Select an End date/time or choose "All Dates". This field lets a user narrow a query to a specific date or date range.
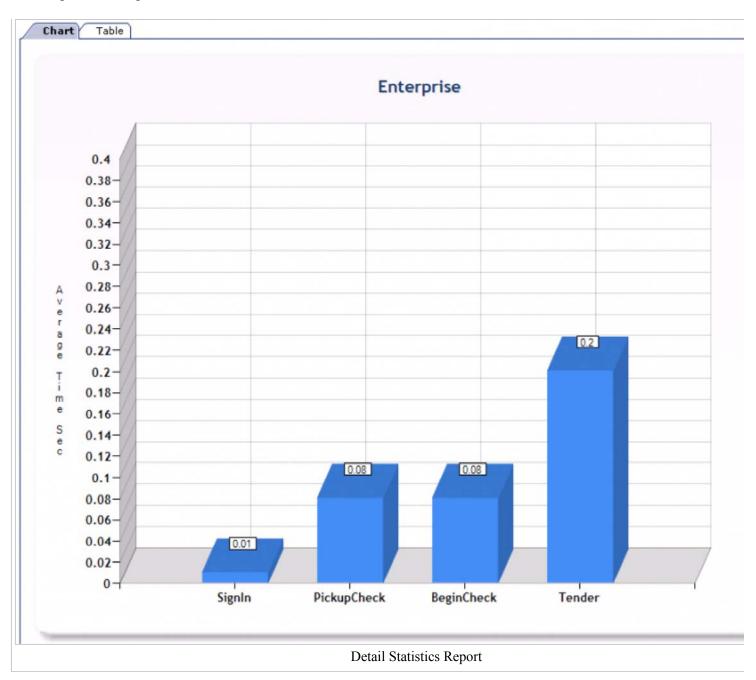
The following date ranges are available:

- User Defined - the user defines the date and time range for which the report is run
- Last Hour
- Last Two Hours
- Today
- Last 24 Hours
- Last 48 Hours
- Last Week
- Last Two Weeks

Details Statistics Report Examples
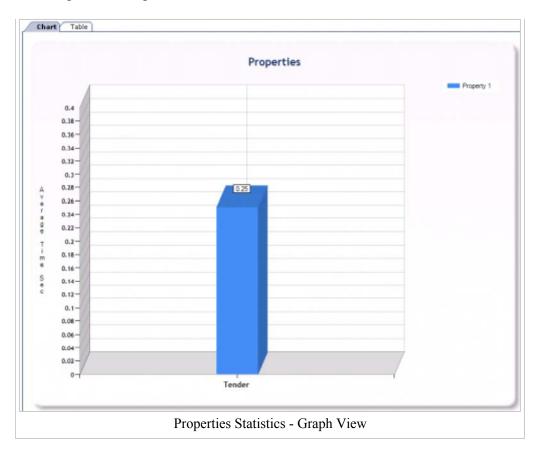
Enterprise Level Statistics

The Enterprise Level Statistics report below shows the average time it takes each of the events that were logged to complete. This is over a user-defined period of time. The example is showing a two week period of time.

Clicking on the time link on the bars of the graph will show more detail statistic information.

Chart | Table

Enterprise

Detail Statistics Report

Property Level Statistics

Chart | Table

	Property Name
	Property 1

The Property Level Statistics report shows the average time

Properties Statistics - Graph View

in seconds that it took to complete a Tender operation, broken down by property.

This is the first level drill-down from the Enterprise Level Statistics report. This information is available in graphical or table view.

Clicking on the time link on the bars of the graph will show more detail statistic information, broken down by revenue center.

Revenue Center Level Statistics
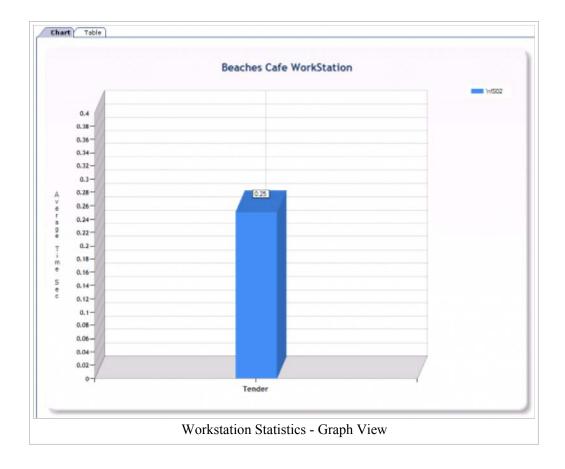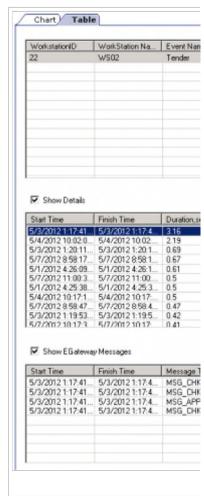

Property 1 Statistics - Graph View

The Revenue Center Level Statistics report shows average time in seconds that it took to complete a Tender operation, broken down by revenue center.

This is the second level drill-down from the Enterprise Level Statistics report. This information is available in graphical or table view.

Clicking on the time link on the bars of the graph will show more detail statistic information, broken down by workstation.

Workstation Level Statistics

Workstation Statistics - Graph View

The Workstation Level Statistics report shows the average time in seconds that it took WS02 to complete a Tender operation in the Beaches Cafe revenue center.

This is the third level drill-down from the Enterprise Level Statistics report. This report is broken down by workstation and is available in graphical or table view.

The table view will show event details by workstation. Details are available which show duration for the event per time of day. This can be enabled by clicking the "Show Details" checkbox on the Table tab.

The table view also shows EGateway Message type sent during the time of the operation. This can be enabled by clicking the "Show EGateway Messages" checkbox on the Table tab.
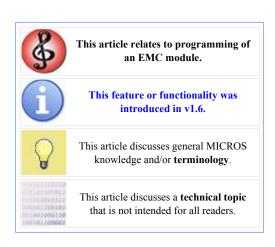
User Experience Report Setting

	This functionality was introduced in Simphony v1.6 General Release

	This article relates to programming of an EMC module.
	This feature or functionality was introduced in v1.6.
	This article discusses general MICROS knowledge and/or **terminology**.
	This article discusses a **technical topic** that is not intended for all readers.

Overview

The User Experience Report Setting module is used to configure the settings of what to log on the workstations, to determine what will show when the User Experience Report is run. The workstation list can be filtered by property. The workstation list can also be sorted on all grid columns, by double-clicking on the column name. Workstation settings can be changed from the grid directly or from the drop down menu next to the "Perform Bulk Operation" link.

Contents

- 1 Overview
    - 1.1 Configuration
    - 1.2 See Also

Configuration

To select the workstations to enable the User Experience Report Settings for, click the check box next to the Workstation ID. The "Select All" link can be used to check all workstations. The "Clear All" link can be used to uncheck all workstations.

The User Experience Report settings can be configured by each individual workstation or all at once.

To configure an individual workstation, click the check box next to the workstation. Edit the columns in the grid to the desired settings.

To configure the workstation settings in bulk, use the drop down menu next to the "Perform Bulk Operation" link.

The following operations are available to configure in EMC:

Set Archive WS Logs = Disabled

Set Archive WS Logs = Enabled

These options enable or disable detailed logging on the workstation and posting logs to the server.

Set Post Message Statistics = Disabled

Set Post Message Statistics = Enabled

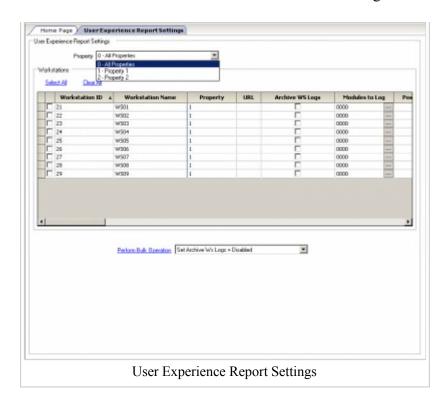These options enable or disable capturing and sending to the server aggregated offline statistics and message statistics.
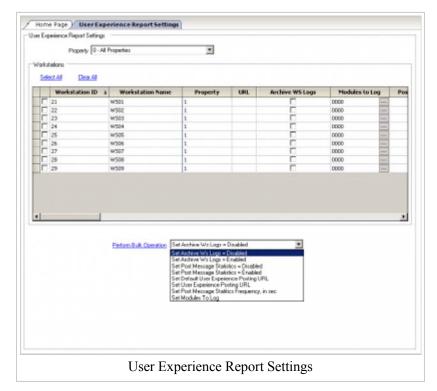
Set Default User Experience Report Posting URL

This option sets the URL for posting collected statistics and workstation logs archive to NULL (or default Check Posting URL).

Set User Experience Report Posting URL

This option sets URL for posting collected statistics and workstation logs archive to a new value.

User Experience Report Settings

User Experience Report Settings
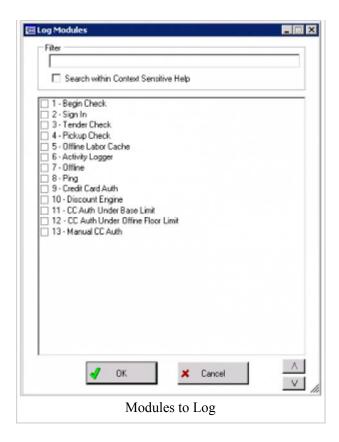
Set Post Message Statistics Frequency, in sec

This option allows changing of the post aggregated offline and message statistics interval from default 15 mins to another value.

Set Modules to Log

This option allows choosing which submodules will be tracked in the workstation logs.

The following modules can be tracked in the workstation log:

- Begin Check
- Sign In
- Tender Check
- Pickup Check
- Offline Labor Cache
- Activity Logger
- Offline
- Ping
- Credit Card Auth
- Discount Engine
- Credit Card Auth Under Base Limit
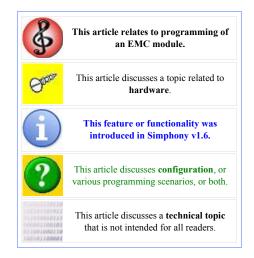- Credit Card Auth Under Offline Floor Limit
- Manual Credit Card Auth

Modules to Log

ViVOpay 4800 Reader Setup

This article reviews the configuration, setup and use of the ViVOpay® 4800 Reader as a MICROS Workstation peripheral device.

See the ViVOtech® website (http://www.vivotech.com/products/vivo_pay/vivopay_4800.asp) for more information.

	This article relates to programming of an EMC module.
	This article discusses a topic related to **hardware**.
	This feature or functionality was introduced in Simphony v1.6.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses a **technical topic** that is not intended for all readers.

Contents

Note: The ViVOpay® 4800 Reader is currently supported on Simphony v1.6 GR & v1.6 MR1 or higher.

Overview
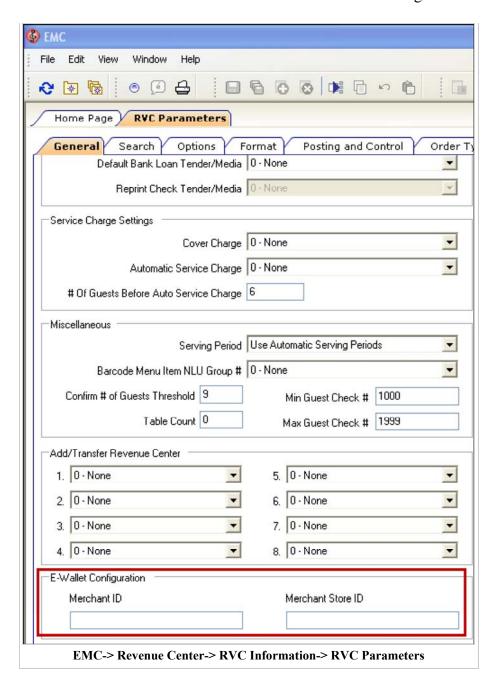
The ViVOpay® 4800 is a Radio-frequency identification (RFID) reader and supports contactless Credit Cards (CC) as well as Near Field Communication (NFC) capable smart phones. In order to accept offers (discounts) from the E-Wallet application, the terminal must be injected with the Merchant's MID key and Secret key. This injection is typically performed by ViVOtech®. Customers may use one of several capable smart phones to submit discount coupons and payments to the POS System. The customer's phone must support NFC. Only one ViVOpay® 4800 Reader may be configured for each Workstation.

ViVOpay® 4800 Reader

EMC Configuration

Revenue Center Parameters

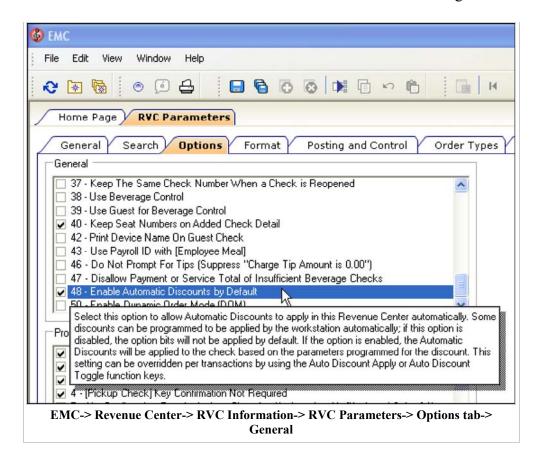1. For *each* Revenue Center utilizing a ViVOpay® 4800 Reader, access the EMC-> Revenue Center-> RVC Information-> RVC Parameters-> **'General'** tab-> under the **'E-Wallet Configuration'** header.

2. Check with your E-Wallet vendor for specific requirements and add the **'Merchant'** and **'Merchant Store ID'** in the fields shown here and **'Save'**:

EMC-> Revenue Center-> RVC Information-> RVC Parameters
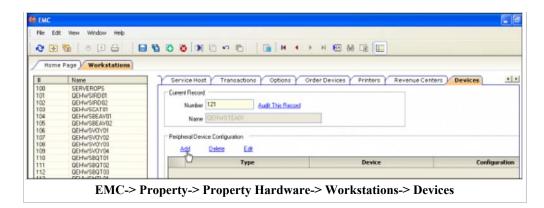
3. Click on the Revenue Center Parameters-> '**Options'** tab-> under the '**General'** header-> and enable the **[48- Enable Automatic Discounts by Default]** option and '**Save'**. Enabling this option will automatically allow eligible E-Wallet discounts, coupons or offers to be applied to a check or made available to patrons to choose from on their smart phone.

**EMC-> Revenue Center-> RVC Information-> RVC Parameters-> Options tab->
General**
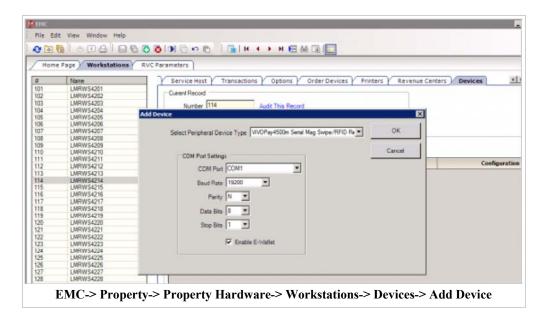
Workstation Hardware

1. For *each* Workstation that will have a ViVOpay® 4800 Reader attached, navigate to the EMC-> Property level-> Property Hardware-> Workstations-> Toggle to 'Form View' and select the **'Options'** tab-> Hardware/Cash Drawer tab-> Hardware/Interface Options-> and ensure that options **[22 – Enable Mag Card Reader]** and **[23 – Enable RFID Reader]** are enabled.

2. The ViVOpay 4800 Reader must be configured as a peripheral device in the EMC.

EMC-> Property-> Property Hardware-> Workstations-> Options
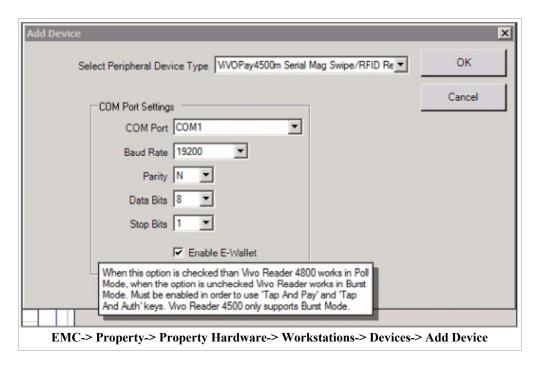
3. From the same Workstations module, select the **'Devices'** tab-> under the **'Peripheral Device Configuration'** header and select the **'Add'** link.

EMC-> Property-> Property Hardware-> Workstations-> Devices

4. With this release, add the device that is named **'ViVOpay4500m Serial Mag Swipe/RFID Reader'** (even though the ViVOpay® 4800 Reader will be utilized) and click **'OK'**. See item 5 for information about the **'Enable E-Wallet'** option.

EMC-> Property-> Property Hardware-> Workstations-> Devices-> Add Device

5. By default, the device is configured with a baud rate of 19,200 but other baud rates are supported. Click the **'OK'** button and **'Save'**.

- Note the **'Enable E-Wallet'** option. This option was introduced in Simphony v1.6 MR1. See the Simphony 1.6 Maintenance Release 1 article and search SCR #14115 for more information.

When this option is checked than Vivo Reader 4800 works in Poll Mode, when the option is unchecked Vivo Reader works in Burst Mode. Must be enabled in order to use 'Tap And Pay' and 'Tap And Auth' keys. Vivo Reader 4500 only supports Burst Mode.

EMC-> Property-> Property Hardware-> Workstations-> Devices-> Add Device

6. After configuring the Workstation(s) ViVOpay® 4800 peripheral device, the Ops Clients database must be reloaded and the Workstation must be restarted.

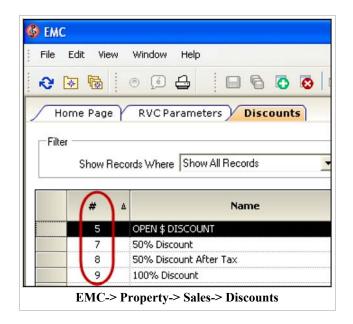> **Note:** For Win32 Clients, set the Windows® corresponding COM Port to the same Baud Rate and Parity settings as the POS Configurator Com Port settings (19200/N/8/1). From the Win32 client, in Windows navigate to: My Computer-> Properties-> Hardware-> Device Manager-> Ports. Reboot the PCWS after making any changes to re-initialize the COM Port.

7. Ensure that any Workstation with a ViVOpay® 4800 Reader attached does *not* have a printer or other device configured for the same COM Port as the ViVOpay Reader. Check in the EMC-> Property level-> Property Hardware-> 'Workstation' module-> under the Devices tab. Closely review the Property Hardware-> 'Printers' module as well.

E-Wallet Discount (Coupon) Configuration

Coupons or offers for E-Wallet applications are configured as Discounts in the EMC. Access the EMC-> Property-> Sales-> Discounts module. Check with your E-Wallet vendor for specific shared Discount (coupon) setup regarding assigned Object Number (s) and Naming conventions.

EMC-> Property-> Sales-> Discounts

Touchscreen 'Tap 'n Pay' Function Configuration

Create a '**Tap 'n Pay'** function key that users may access from the POS Workstation's payment screen. With this release, the E-Wallet Smart Tap functionality only works with the ViVOpay® 4800 Reader.

1. Access the EMC-> Revenue Center-> User Interface-> Workstations-> Touchscreen Design module. Select a touchscreen to assign the 'Tap 'n Pay' key(s).

2. Configure the key using one (or both) of the following functions:

- Configure a key for function # **[688- Tap**
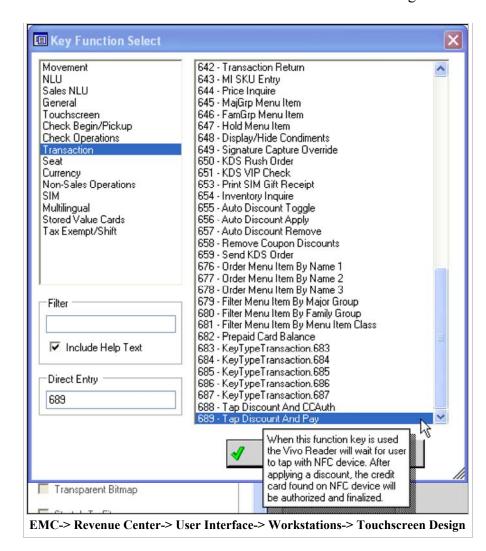
Discount and CCAuth] function and '**Save**'.

This function may be better suited for Table Service environments.
When using function key # '688 - Tap Discount and CCAuth', the Ops client will only authorize the Credit Card (CC) so that the Cashier can add a Charged tip and then finalize the payment.

- Configure a key for function # **689- [Tap Discount and Pay]** function and '**Save**'.
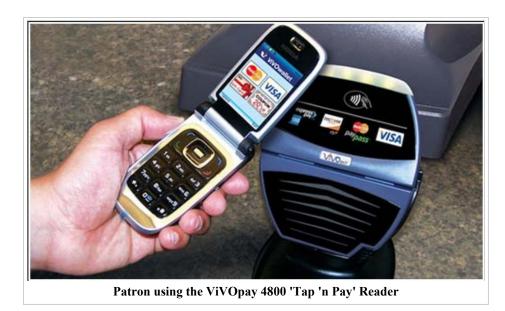
This function may be better suited for Quick Service environments.
When using function key # '689 - Tap Discount and Pay', the Ops client will authorize the CC and then close the transaction in one step.

EMC-> Revenue Center-> User Interface-> Workstations-> Touchscreen Design
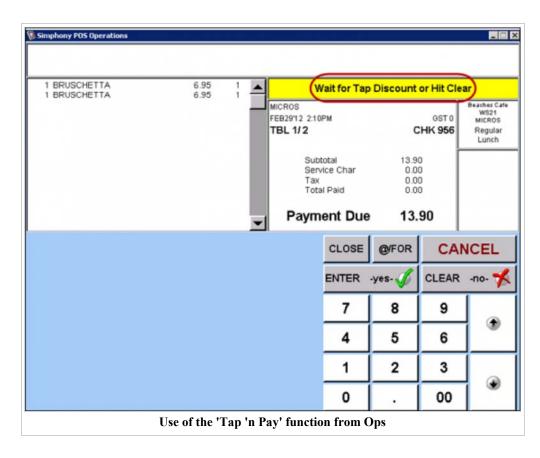
Tap 'n Pay function from Ops

When a cashier selects the 'Tap Discount and Pay' function key, the ViVOpay® 4800 Reader starts and then switches to '**Poll**' mode. When in poll mode, it gathers all of the offer codes from the NFC device and Ops compares them to the offer codes configured with the discounts for the Property and applies all of the matching discounts. The ViVOpay® 4800 waits until the customer taps the reader with their Smart Phone (NFC device). During a transaction, a customer may tap their E-Wallet enabled phone to the ViVOpay® 4800 Reader to redeem a discount stored in the Wallet and to pay a check. A single tap of the phone may contain one or more discounts, CC account information, or both discounts and account information. The discount is applied immediately to the

Patron using the ViVOpay 4800 'Tap 'n Pay' Reader
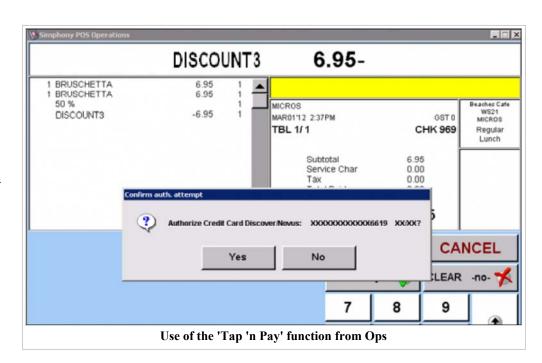
check without interrupting the cashier. When tapped, the ViVOpay® 4800 Reader will beep and its lights will flash indicating a receipt from the phone.

The Cashier can also exit the screen by selecting the **'Clear'** function key.

Use of the 'Tap 'n Pay' function from Ops

When customers tap the ViVOpay® 4800 Reader and the NFC device also contains CC payment information, Ops will prompt the cashier to authorize a CC authorization. After completing the authorization, a CC payment is added to the check.

When tapped, the reader will sound a single beep along with flashing four lights to indicate a good receipt from the phone; two beeps with one light indicates a failure reading from the phone and the customer should retry the Tap 'n Pay procedure.

Use of the 'Tap 'n Pay' function from Ops

Hardware Connection

A ViVOpay® 4800 Reader should be attached to a Serial port of a MICROS Workstation. Shown here is the Serial Port on a MICROS Workstation 5A.

Serial COM Port connection

Troubleshooting

The following messages displayed on an OPS client may indicate possible configuration problems:
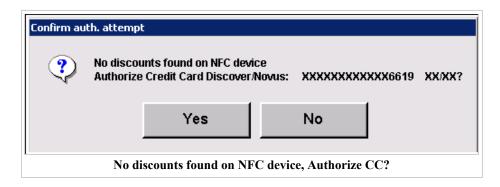
- The Merchant ID is not correctly configured in the EMC or the Workstation-> Device file is incorrectly configured.

RFID Device Configuration Error

- If the customer chooses an inappropriate discount or if the system is not properly configured to accept the discount, an error will be displayed on the Ops client. Additionally, if Ops cannot find any discounts, it is possible that the wrong Merchant ID is configured in the EMC or the card used may be a regular Credit Card (CC) without any E-Wallet information.

No discounts found on NFC device
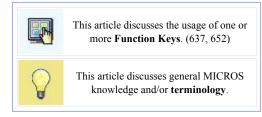
- If CC payment information is found on the CC, Ops will prompt users to continue with a CC authorization.

No discounts found on NFC device, Authorize CC?

Weighed Menu Item

A **Weighed Menu Item** is a menu item that is priced per unit of measurement (pounds or kilograms). The operator is required to enter the weight of the item and the workstation calculates the price. The weight of a menu item may be calculated automatically by a scale attached to the workstation, or the **[Item Weight]** function key (637) may be used to manually enter the weight amount.

|	
	This article discusses the usage of one or more **Function Keys**. (637, 652)
	This article discusses general MICROS knowledge and/or **terminology**.

Contents

- 1 Example
- 2 EMC Configuration
- 3 Workstation Function Keys
- 4 Workstation Procedures
    - 4.1 Using a Scale Interface
    - 4.2 Enter the Weight Manually
    - 4.3 Post a Weighed Menu Item With an Open Entry Price
- 5 Privileges
- 6 See also

Example

At George's restaurant, Maine lobster is sold by the pound. When his customer orders a 6 1/2 lb. lobster, George enters the order by pressing the following key sequence:

1. **[6.5]**
2. **[Item Weight]**
3. **[Lobster/lb]**

Note: In this entry, ".5" is the decimal fraction for 1/2 pound and does not indicate ounces.

The check detail area of the workstation will show the item's weight (less the tare weight, if programmed), price, quantity, and name post to the check detail. For example:

```
6.50 LB @ 15.00/LB
    1 LOBSTER 97.50
```

EMC Configuration

- For a menu item definition to be programmed as a weighed item, it must belong to a Menu Item Class where option bit **[15 - Weighed Items]** is enabled.

- Optionally, the menu item definition can be programmed with a Tare Weight.

Workstation Function Keys

637 - Item Weight
This key is used to manually enter a weighed item.

652 - Weight Price Override
This key is used to override the Menu Item Price of a weighed item. For instance, if an item is sold as 5 @ 6.00, using this key allows the user to change the price on the unit (6.00) instead of on the total (30.00). For instance, the price can be changed to 4.00 on the unit, overriding the original 6.00 unit price.

Workstation Procedures

Using a Scale Interface

1. Place the menu item to be sold on the scale.
2. Press the menu item key, for example, **[BBQ Ribs]**.

Enter the Weight Manually

1. Type the gross weight (weight not including tare, for example, "2").
2. Press **[Item Weight]**.
3. Press the menu item key, for example, **[BBQ Ribs]**.

Post a Weighed Menu Item With an Open Entry Price

A weighed item may also be programmed with an open price. In this instance, the steps are:

- When using a scale:
    1. Place the item to be sold on the scale.
    2. Press the menu item key, for example **[BBQ Ribs]**.
    3. When prompted, enter the menu item weight.
- When not using a scale:
    1. Type the price per unit weight, for example 9.95.
    2. Press **[Item Weight]**
    3. Press the menu item key, **[BBQ Ribs]**.
    4. When prompted, enter the menu item weight.

Privileges

An operator may use the **[Item Weight]** function key only when associated with an Employee Role where the **Authorize/Use the [Item Weight] Key** option bit is enabled.

Workstation Comparison Chart

This chart discusses the basic differences between the Workstation 4, Workstation 4 LX, Workstation 5, Workstation 5A, PCWS 2015, mTablet, and mWorkstation.

This article discusses a topic related to **hardware**.

This article discusses a **technical topic** that is not intended for all readers.

Note: Simphony version 2.6 supports the MagTeK IPAD and DynaPro Magnetic Card Readers/PIN-entry devices. These devices are *only* supported on Win32 Workstation clients, but *not* for workstation clients running Windows CE. Please consider this when reviewing the Magnetic Card Reader row in the following table.

Comparison Chart

Feature	WS4	WS4LX	WS5	WS5A	PCWS 2015	mTablet and mStation
LED Light Color	Green (rectangle)	Blue (rectangle)	Blue (circle)	White (circle)	Green (circle)	Base status LED lit up wh docked only
Form Factor	Low Profile 12.1" Touchscreen LCD with optional stand	Low Profile 12.1" Touchscreen LCD with optional stand Same casework and stand as WS4.	Low Profile 15" Touchscreen LCD with optional stand New stand not compatible with WS4LX	Low Profile 15" Touchscreen LCD with optional stand New stand not compatible with WS4LX	Low Profile 15" Touchscreen LCD with optional stand	Slim 6.9" x 11.5" profile. stand, rests 10.62" off of surface.
Processor	Geode SC3200	AMD LX800	AMD LX800	Intel Atom N450, Single Core, 1.6GHz processor with integrated memory and graphics controllers	IntelCeleron P4505 or Core i5-520	1GHz Dual Core Freescal i.MX6
BIOS	None - Custom Bootloader	General Software BIOS ■ Firmbase Application Environment	General Software BIOS ■ Firmbase Application Environment	Phoenix EB(SF) Embedded BIOS with StrongFrame® Technology, and Firmbase® Technology. version: BIOS Q1000g	Dependent on sys board: **Revision C**: O1201r. **Revision C**: O1301. **Revision D**: O1301g.	General Software BIOS
Display / User Interface	12.1" TFT Display w/ 5-Wire Resistive Touchscreen	12.1" TFT Display w/ 5-Wire Resistive Touchscreen	15" TFT Display w/ 5-Wire Resistive Touchscreen ■ Capacitive Option	15" TFT LCD (1024x768) 262K Colors Max	15" TFT LCD (1024x768) 262K Colors	10.1" WVGA (1024x600) LCD. Portrait or Landsca orientation, Auto Rotating
Magnetic Card Reader	Integrated, 3 Track Standard	Integrated, 3 Track Standard	Integrated, 3 Track Option ■ modular, field installable	3-Track ABA compatible, operates in MAGTEK and Special modes	3-Track ABA compatible	Modular Integrated 3-Tra card reader capable of encryption at the swipe
Power Supply	Internal	Internal	100W, Internal	24W Typical	35W Typical	3.7V internal Li-Ion batte
Temp Range	0-45 °C	0-45 °C	0-45 °C	0°C (32°F) to 45°C (113° F), 90% relative humidity max	0°C (32°F) to 45°C (113° F), 90% relative humidity max	-10°C (14°F) to 60 °C (14
Operating System	Windows CE .NET 4.1, 4.2	Windows Embedded CE 6.0	Windows Embedded CE 6.0 MS Windows XP Embedded WEPOS Linux (variant to be determined)	Windows Embedded CE 6.0 R3 and Windows Embedded POSReady 2009	Options of both 32 and 64-bit versions Windows 7 Professional Embedded or Windows Embedded POSReady 2009	WEC7 (windows embedd compact 7)
Mass Storage	Disk on Chip - Primary	USB Flash Dish (Internal Header)	USB Flash (Internal Header)	2 Options	Multiple Options	4GB eMMC (BOOT), 8G microSD Card (STORE)

Compact Flash - Secondary	**128 MB - 4 GB** Compact Flash - Secondary **128 MB - 8 GB** CE Config ■ 128 MB USB Flash ■ 128 MB CF Standard	**128 MB - 4 GB** Compact Flash - Secondary **128 MB - 8 GB** CE Config ■ 256 MB USB Flash ■ 256 MB CF Standard XPE/WEPOS - 4 GB USB Flash Standard	■ Windows Embedded CE 6.0 R3: USB Hard Drive of 256MB or 512MB ■ POSReady 2009: 4GB USB Hard Drive	■ 2 x 2.5" SATA Drive Bays (ships with 1 drive), SSDs available ■ eUSB Flash drive port (used for addt'l storage) ■ CF Card slot for addt'l storage or backup disk	
Memory	128 MB SDRAM (expandable to 256 MB) 1-slot	256 MB DDR RAM (expandable to 1 GB MB) 1-slot	256 MB DDR RAM (expandable to 2 GB MB) 2-slot ■ XPE/WEPOS 512 MB Standard	1GB DDR3 SDRAM ■ Windows Embedded CE 6.0 R3 are limited to 512MB ■ Windows Embedded POSReady 2009 are shipped with 1G of RAM	single 2GB DDR3 SO-DIMM (expandable to 2)	1GB DDR3 SDRAM
Cooling	Passive - No Fans	Passive - No Fans	Passive - No Fans	Passive - No Fans	Passive - No Fans ■ 60mm CPU fan ■ 30mm System fan	Passive - No Fans
Wireless Support	Optional via PCMCIA w/ External Antenna	Optional mini-PCI card w/ External Antenna	Optional mini-PCI card w/ Integrated Antenna	Optional mini-PCI w/ Wireless Options and 2010 Modem	Optional mini-PCI w/ 802.11 a/b/g/n Wireless Card	802.11 a/b/g/n WiFi with WPA WPA2, TKIP, AES support ■ Bluetooth V2.01
USB	2 USB v1.1	4 USB v2.0	6 USB v2.0 (4 available at I/O Panel)	Ten USB 2.0 ports ■ Five internal ■ Five external (Four USB type A, one optional powered USB). External USB ports can be disabled.	Fourteen USB 2.0 Ports ■ Eight Internal ■ Six external (Four USB type A, two MICROS Powered USB). External USB ports can be disabled.	4 USB 2.0 Ports
Serial Ports - Available	1 - DB9 pin RS232 2 - RJ45 RS232 ■ 1-IDN or RS232	1 - DB9 pin RS232 2 - RJ45 RS232 ■ 1-IDN or RS232	1 - DB9 pin RS232 2 - RJ45 RS232 ■ 1-IDN or RS232	4 Ports: ■ 1 DB9 RS232 Serial /w handshake ■ 2 Modular RS232 Serial /w handshake ■ 1 Modular RS422 or RS232 Serial (IDN)	4 Ports: ■ 1 DB9 RS232 Powered Serial /w handshake ■ 1 DB9 RS232 Serial /w handshake ■ 1 Modular RS232 Serial /w handshake ■ 1 Modular RS422/RS232 Serial (IDN)	4 Serial Ports. ■ 1 RS232 DB9 /w Software Selectable 5/9/12V Power. ■ 1 RS232 DB9 /w 12 Power ■ 1 IDN - Switchable RS422/RS232 ■ 1 RJ45 Serial
Cash Drawer	2 - 12V MICROS DIN	2 - 12/24V MICROS DIN ■ BIOS Selected	2 - 12/24V MICROS DIN ■ BIOS Selected	2 - 12/24V MICROS DIN ■ BIOS Selected	2 - 12/24V MICROS DIN ■ BIOS Selected	2 MICROS Series 2 Cash Drawer Ports
Network	10/100BaseT Ethernet	10/100/1000BaseT Ethernet	10/100/1000BaseT Ethernet	10/100/1000BaseT Ethernet	10/100/1000BaseT Ethernet	10/100/1000 Wired Ether (mStation base only)
Keyboard/Mouse	2 - PS2 Ports	USB	USB	USB	USB	USB
Audio	N/A	Not Standard	Standard - Integrated Speakers	Standard - Integrated Speakers	Intel High Definition Audio	
Integrated Biometric	N/A	N/A	Integrated Fingerprint Reader - Option	Integrated Fingerprint Reader - Option	Integrated Fingerprint Reader - Option	N/A
Component Intelligence	Limited	Auto-senses LCD panel, MSR and other multi-vendor components	Auto-senses LCD panel, MSR and other multi-vendor components	Auto-senses LCD panel, MSR and other multi-vendor components	Auto-senses LCD panel, MSR and other multi-vendor components	Auto-senses LCD panel, N and other multi-vendor components
Integrated Modem	N/A	N/A	Mini-PCI option - mutually exclusive with 802.11 card. *Win32 OS only. U.S. distribution only.*	The optional 2010 modem can only be used with POSReady 2009. The modem is not compatible with Windows Embedded CE 6.0.	The optional Mini-PCI Modem can be used with WIN32 operating systems, and is certified for use in North America.	N/A

| **Personality Module**	Compact Flash	Compact Flash ▪ CE Only ▪ Same as WS4	Compact Flash ▪ CE Only	CF can be used in POSReady or CE	Compact Flash ▪ CE Only	MicroSD Card
Platform SW Recovery Method	Semi-Manual	Factory image recovery available through BIOS ▪ CE Only	Factory image recovery available through BIOS ▪ CE Only Optional CF based WEPOS Recovery Tool	▪ CE: WINCE Factory Restore of POSReady Image Recovery ▪ Requires optional POSReady Recovery CF	▪ WIN32 Factory Recovery requires an optional PCWS 2015 Recovery CF for each supported operating system, currently POSReady 2009 and Windows 7 Professional.	4GB eMMC flash device, called 'BOOT'
Rear Display Support	Integrated 240x64 Graphical LCD	Integrated 240x64 Graphical LCD	Integrated 240x64 Graphical LCD	Integrated 240x64 Graphical LCD	Integrated 240x64 LCD Customer Display	240x64 Graphics LCD & text LCD
Pole Display Support	MICROS 240x64 Graphical LCD MICROS 2x20 VFD	MICROS 240x64 Graphical LCD MICROS 2x20 VFD	MICROS 240x64 Graphical LCD MICROS 2x20 VFD	6" Pole Mount LCD Customer Display	Pole mount for LCD optional	240x64 & 2x20 text-based (18" available)
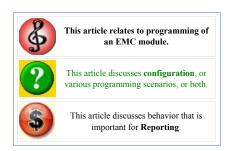
2/23/2015

WS Autosequence

A **Workstation Autosequence**, or **WS Autosequence**, is a predefined set of reports run from a workstation. Workstation Autosequences are run from PMC or via an Autosequence Function Key.

	This article relates to programming of an EMC module.
	This article discusses **configuration**, or various programming scenarios, or both.
	This article discusses behavior that is important for **Reporting**.

Contents

EMC Configuration

The **WS Autosequences** module is opened from the Property Scope of EMC. There are two tabs of this module: General and Options. The options tab contains configuration for the autosequence, whereas the General tab contains a list of the 16 configurable autosequence steps.

General Tab

On the General Tab, the autosequence name is configured. Up to 20 characters are allowed. More importantly, it is on this tab where the individual steps are configured for the autosequence. Often, only one step is in an autosequence. For example, the image shows an autosequence named "Property Financial", and this autosequence contains only a single step that runs the Property Financial Report.

The General Tab grid displays all 16 steps of the current autosequence. This view allows a programmer to easily see what each step will do. With this view, however, it can be difficult to see all the configurable fields that are available for a single step (as it is necessary to scroll to the right to see every possible column). By pressing the "Configure" button for a row, all the relevant configurable fields display in a configuration dialog.

The grid enables/disables fields based on the settings of other fields to prevent invalid step configuration. To understand why a field becomes enabled or disabled, use the Context Sensitive Help for the column, which is available by right-clicking the column header. The following fields are configurable for each Autosequence Step:

The WS Autosequence General Tab. The example image shows a common autosequence that includes only one step.

Step Type
> Select the type of step for this Autosequence Step. A step can be either a PMC Report or a Workstation Listing Report. "0-Skip" means that this step is skipped.

Report / Listing #
> Select the report to be run in this step.

Period

Select a predefined period on which this report should be run, or choose 0-Prompt for the workstation to prompt the user to select the period at the time that this autosequence is run. Note that "Current Shift" and "Previous Shift" options are available for Employee and Cashier reports only, and only when those reports are set to run for the selection type of "Signed In Employee" or "Selection".

View

Select the View type for this report. The choices are Property, Revenue Center, 0-Prompt (to be given this choice at the time that this autosequence is run), or Inherit.

Revenue Center

This field is only active if Revenue Center is chosen as the View. Select the Revenue Center for which this report will be generated.

Print/Display

Select the output type for this report. Options are to print to the report printer specified for the workstation that runs the report, to Display the report on the screen with the ability to print, to Inherit the setting from a previous autosequence step, or to Display the report without the ability to print. If this autosequence is being run from an Autosequence Function Key, this field is typically programmed as 0-Print Only.

Selection Type

Choose the type of selection allowed with this report. For Reports, the Selection field becomes active if this field is set to Selection; for Listing Reports, the Start/End range fields become active when this field is set to Selection.

Selection

This field is only enabled for Report steps that allow selections (typically, Cashier or Employee reports), and only when the "Selection Type" is set to "Selection". Choose the employee/cashier to be used when generating the report.

Start

This column applies only to Listing type steps. If the Range Type is set to 2-Range, select the start of range item in this drop-down list.

End

This column applies only to Listing type steps. If the Range Type is set to 2-Range, select the end of range item in this drop-down list.

Major Group

This column applies only to Listing steps using Menu Item Reports. Menu Item Reports will run using the Major Group selected here as a method of filtering which items display.

Family Group

This column applies only to Listing steps using Menu Item Reports. Menu Item Reports will run using the Family Group selected here as a method of filtering which items display.

Menu Item Class

This column applies only to Listing steps using Menu Item Reports. Menu Item Reports will run using the Menu Item Class selected here as a method of filtering which items display.

Menu Item SLU

This column applies only to Listing steps using Menu Item Reports. Menu Item Reports will run using the Menu Item SLU selected here as a method of filtering which items display.

Employee Class

This column applies only to Listing steps using Employee Listing Reports. Employee Listing Reports will run using the Employee Class selected here as a method of filtering which items display.
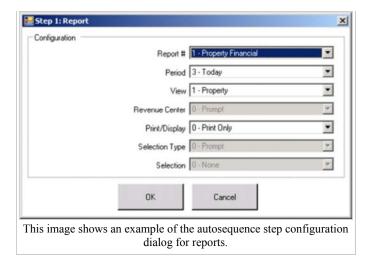
Job Code

This column applies only to Listing steps using Employee Listing Reports. Employee Listing Reports will run using the Job Code selected here as a method of filtering which items display.
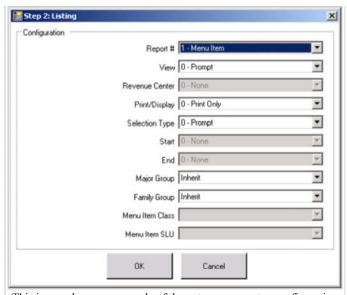
Configuration Dialog

As stated earlier, a user can configure all the relevant fields for an autosequence step by using the "Configure" button in the second column. To use this button, the Step Type cannot be "0-Skip" (as there is nothing to configure). Note that when the programmer presses OK to close the dialog, the values from the dialog will be displayed in the row of the grid.

The dialog displays relevant fields for Report steps or Listing steps, based on the type of step selected from the grid prior to using the dialog:

This image shows an example of the autosequence step configuration dialog for reports.

This image shows an example of the autosequence step configuration dialog for Listing Reports. Note that when the Report # is "Employees", the Major Group, Family Group, Menu Item Class, and Menu Item SLU fields are not displayed; instead, the Employee Class and Job Code fields will display.

Options Tab

The following fields are configurable on the Options Tab:

Privilege Group

> Select a Privilege Group (0-8) to restrict use of this autosequence to those employees who are assigned to Employee Roles with privileges to run reports in a specific privilege group. If the privilege group is set to 0, this means that all employees can run this autosequence (if the operator can access a key to run it).

The WS Autosequence Options Tab.

1 - Do not run if there are Open Checks in the Property

> Select this option to prevent this autosequence from executing if there are open guest checks in the Property.

2 - Do not run if Signed-In Employee has Open Checks

> Select this option to prevent this autosequence from executing if the employee running this autosequence has open guest checks in the system.

3 - Autosequence Does Not Appear On Run Screens

> Select this option to exclude this autosequence from the list of available autosequences that appear on UWS Autosequences screen. This definition is usually enabled for an autosequence that is called by a primary autosequence or that is chained to a primary autosequence.

4 - Do Not Run if Employees Are Clocked In

> Select this option to prevent this autosequence from executing if there are employees clocked in on the system. If Employee Groups are used, the system searches only for employees in the same Employee Group.

5 - Sign Off Employee When Autosequence is Complete

> Select this option to Sign Off the employee after the autosequence has completed.
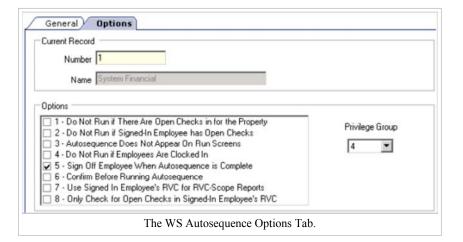
6 - Confirm Before Running Autosequence

> Select this option to cause the workstation to display a prompt before executing this autosequence. The user must then press "Enter" to continue the autosequence.

7 - Use Signed In Employee's RVC for RVC-Scope Reports

> Select this option to cause the system to assume that a report in this autosequence that is taken for a Revenue Center view must use the signed-in operator's Revenue Center as the view.

8 - Only Check for Open Checks in Signed-In Employee's RVC

Select this option to prevent this autosequence from executing if there are open checks in the signed-in employee's Revenue Center. This option is only active if the options "Do Not Run if There Are Open Checks in the Property" and "Use Signed-In Employee's Revenue Center" are disabled.

Workstation Operations

Workstation Autosequences are run from PMC or via an Autosequence Function Key.

Privileges

Once an autosequence is created in the EMC, any employee with the proper privileges may access the autosequence. For more information, see Privilege Groups: WS Autosequence Behavior.