micros®

Restaurant Enterprise Solution
Version 4.1
Hot Fix 1 Documentation

About This Document

This document contains updates to the Version 4.1 release of the MICROS Restaurant Enterprise Solution (RES) software. The changes are not cumulative, but describe additions and revisions relevant to Hot Fix 1 only.

Declarations

Warranties

Although the best efforts are made to ensure that the information in this document is complete and correct, MICROS Systems, Inc. makes no warranty of any kind with regard to this material, including but not limited to the implied warranties of marketability and fitness for a particular purpose.

Information in this document is subject to change without notice.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or information recording and retrieval systems, for any purpose other than for personal use, without the express written permission of MICROS Systems, Inc.

MICROS Systems, Inc. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this document.

Trademarks

FrameMaker is a registered trademark of Adobe Corporation.

Microsoft, Microsoft Excel, Win32, Windows, Windows®95, Windows 2000 (Win2K), and Windows NT are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries.

Visio is a registered trademark of Visio Corporation.

All other trademarks are the property of their respective owners.

3700 POS New Features and Enhancements

Module	Feature
Database	**DM Support Added for EM 4.1** Database Manager now supports Enterprise Manager Version 4.1 or higher. This change includes support for concept databases. **Logging for Concept Databases** Logging has been enhanced to support concept databases: ◆ If the database is identified as a concept database, then the *Security Log Backup Path* in Database Manager will be disabled. All activity will be logged at the master database server. ◆ The concept names will now be recorded in the MICROS Security Log, which will allow the user to track which database(s) were accessed via MICROS software.
	Two New Columns Added to the mi_dtl Table The **mi_dtl.ob_is_condiment** and the **mi_dtl.parent_dtl.seq** columns have been added to the **mi_dtl** table to track condiments and their parent items. This information will be available in *mymicros.net* in the future.

Module	Feature
Order Confirmation Board (OCB)	**Support Added for Everbrite Interface** With this release, RES supports the Everbrite Order Confirmation Board (OCB) Interface. The Everbrite system allows a drive-thru customer to view a list of the items and prices for their order. The Everbrite OCB can display up to 99 lines of text for a single order. **Tray Totals** **Tray Totals** are supported but with limited functionality. Everbrite supports multiple orders per visit by assigning *Seat Numbers*. If the Seat Number is incremented, the Everbrite OCB will record it as a new order, and will clear the screen to begin displaying new items. Everbrite can display a maximum of 4 tray totals per order. However, once the tray totals are incremented, any previous tray totals should not be modified and new items should not be added to a previous seat. If this occurs the Tax and order Total will no longer display properly. After service totalling the order the OCB will display the order totals separately for each seat number. At this time TCP/IP communication is not supported for this device.

Module	Feature
Order Confirmation Board (OCB) Cont'd	**Configuration** Configuration for the Everbrite device is done in the **OCBServer.ini** file. This file defines the OCB devices attached to the system and their settings. If a change is made to the **OCBServer.ini** file, the service must be restarted for the changes to take effect. Follow these steps to enable the Everbrite OCB interface: 1. Double click on the **OCBServer.ini** file (*Micros\Res\Pos\Scripts*). 2. Enter a value of **4** in the **Device Type** option to select the *Everbrite SNS Display.* 3. Once the Everbrite Device Type is selected, the OCBServer will ignore the Display Options and default to the ones listed below. Any changes to these settings will be ignored. DisplayMenuItems = 1 DisplayDiscounts = 1 DisplayServiceCharges = 1 DisplayTenders = 1 DisplayVoids = 0 DisplayMenuLevelPrefix = 1 DisplayTaxAndTotalLine = 1 DisplayTotalScreen = 1 4. Configure other options as necessary. The default OCB Display options are necessary to accommodate the new OCB Interface. With previous interfaces, when an update occurred (an item is either added or voided) the entire order would be refreshed. With the Everbrite Interface, when an update occurs, only the detail added or deleted will display. When changing an order for all items besides the last item on the display, the user can only void the item. Changing the item will result in it being appended to the end of the order.

Module	Feature
POS Operations	**Increase the Number of Seats to 99** With this release, RES will support a maximum of 99 seats at a restaurant. However, tray totals for seats greater than 32 are not supported in this release.
	Check Tip Percentage Feature This feature allows the user to verify that a server has declared a minimum percentage of their sales as tips. If the declared tip amount (direct or indirect) does not meet the minimum requirements, operations will prompt the user to change the entered amount. If the employee chooses not to change the tip amount, then manager authorization may be required. This feature allows a restaurant to adhere to taxation law, and ensure that employees are correctly entering their taxable income. To enable this feature, configure the following fields in POS Configurator: 1. Go to the *System	Order Types* form and enable the **Use with Tip Check** option. This will enable tip checking for a specific order type. Enable this option for all affected order types (e.g., dine in). 2. Go to the *System	Restaurant	Options* tab and configure the following options: ◆ Enter a number in the **Clock Out Tip Check Percent** value box. This number is the minimum tip amount that a server can declare without requiring authorization. 3. Go to the *Employee Classes	Clock In Sign In* form and highlight the employee class (e.g., manager) that will be able to authorize an employee to enter a tip check percentage below the required value. Enable the **Override Clock Out Tip Check** option for this class.

Module	Feature

POS Operations Cont'd	4. Go to the *Employees	Jobs	General* form and highlight the Server employee class. Configure the following options:
			
			    ◆ Enable the **Declare direct tips on clock out** option.
			
			    ◆ Enable the **Declare indirect tips on clock out** option.
			
			5. Go to *Employee Classes
				Clock In Sign In* and enable the **Increment shift on Clock In** for the Server employee class.
				
				6. Go to the *Sales
					Tender Media	Tender* form and enable the **Use with Tip Check** option for all of the appropriate tenders.
						
						7. Save the record. The feature is now fully operational.
						
						Employees can declare a higher tip percentage than the configured Tip Check Percent, if desired.

	CustomIcons.dll has Been Enhanced to Support 1024 x 768 Resolution The **CustomIcons.dll** file, that permits customers to add and modify their own icons, has been enhanced to support 1024 x 768 screen resolution. The customicons.dll's are not installed with the hotfix but are available on the MICROS website at *Product Support	MICROS Products	RES	RES Software	Version 4*.

Module	Feature
POS Operations Cont'd	**Enhancements to Fixed Price Meals** With this release, RES has enhanced the Fixed Price Meal feature. ◆ Prevent the user from service totalling or tendering a Fixed Price Meal unless a choice for all courses has been added. A user has the ability to prevent the tender or service total of a Fixed Price Meal if all of the courses have not yet been selected. For example, if an item is missing from the Dessert course, then the server will be unable to tender the order. To support this feature two new options have been added in POS Configurator. 1. **Require complete FPM course selection** (*Sales | Tender Media | Service TTL*) — Enabling this option will force all fixed price meal courses to be added before being accepted. 2. **FPM auto cycle through courses** (*RVC | RVC Transactions | General*) — Enabling this option will allow the user to cycle to the next course by pressing the **Course** key, when all items have been added to the current course. ◆ Increased the number of Fixed Price Meal courses to **64**. ◆ If a course name is entered with the "**&**" symbol, the name will no longer be formatted to include an underline.
	Added Prompt for Issue Date and Issue Number when Manual Authorizations Performed Now, when a manual authorization is performed on a system that has the *POS Configurator | Sales | Tender/Media | CC Tender |* **Prompt for issue date** and **Prompt for issue Number** options enabled the system will prompt for issue date and issue number.

Module	Feature
POS Operations Cont'd	**Option Added to Ignore Condiment Pricing When Rung as Part of a Combo Meal** The user now has the ability to determine whether a condiment's price, when rung up as part of a combo meal, will be ignored or added to the price of the meal. To ignore the condiment price when included in a combo meal enable the **Suppress Price w/Combo Meal** option (*POS Configurator | Sales | Menu Item Classes | Price / Totals*). This option is only available if the Menu Item Class is identified as a condiment. This option is disabled by default. If the menu item class is not identified as a condiment, this field will be disabled.
	Option Added to Retain Guest Check Detail When a Macro is Run The user now has the ability to keep the highlighted items in the Guest Check Detail from being unselected when a Macro begins. In the past operations would clear all check detail when a Macro was run. Enable the **Retain Selected Detail** option (*POS Configurator | System | Macros*) to retain the highlighted items once the Macro runs. This option is disabled by default.
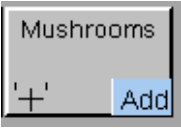
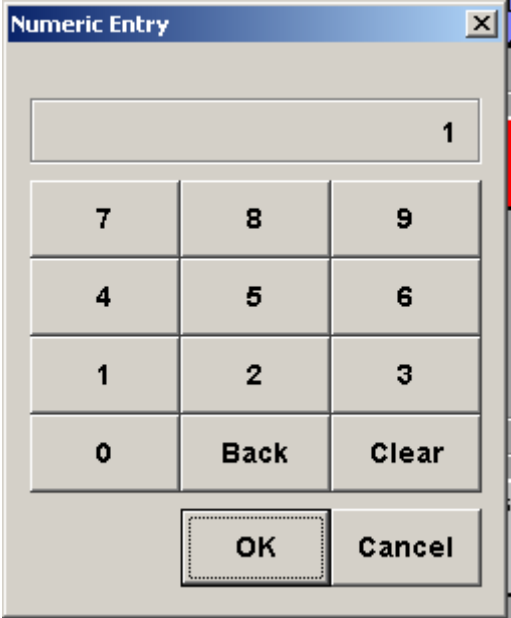| Module	Feature
POS Operations Cont'd	**Ordering Module** The Ordering Module (OM) is an innovative way to place and modify orders in a RES environment. OM simplifies the ordering process for complicated menu items such as pizzas that have several different topping, crust type, and size combinations to choose from. The goal of OM is to improve efficiency and customer satisfaction by providing servers with the tools to process orders more timely and accurately. Operationally, this resulted in the creation of the OM Graphical User Interface (GUI), used for placing and modifying orders. The GUI allows the user to build an order from the bottom up, beginning with the base and continuing with the selected sizes and toppings. The GUI contains buttons and shapes that become highlighted when a particular option is chosen. For some items, such as pizzas, the customer can decide to split the item into sections with different topping combinations. The OM GUI improves the way that a server places a sectioned order. In the past, customizing an order in this way would involve adding and subtracting items from the list of items in the guest check detail. Without a visual reference to see what they are adding the server could easily lose track of the order. The new display allows the user to see exactly which items have or have not been selected. OM can be configured for a variety of items (OM Configurations) including but not limited to pizza, sandwiches, calzones. Several different OM Configurations can be created for a single store. OM combo meals can also be configured. Inventory or food cost tools (such as Product Management) are supported by the Ordering Module. OM uses menu items which can be linked to recipes. OM uses menu levels to reflect the sizing of the item.

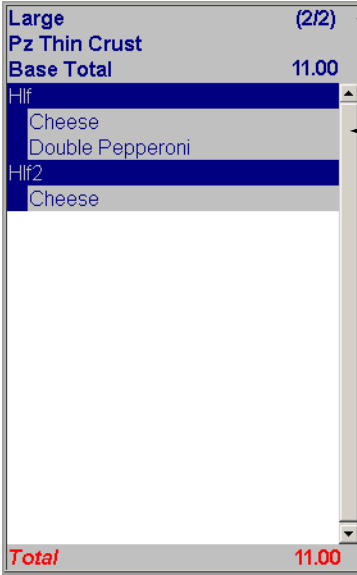| Module	Feature
POS Operations Cont'd	**Ordering Module Components** Each OM Configuration contains three basic building blocks, Base, Section, and Specialty. Topping Types are used to modify an order to reflect the specific requests of the customer. This section contains a discussion of each item. ◆ **Base** — The primary building block of an OM Configuration. If the OM Configuration is pizza, then the base is the crust. When entering an order in Operations, the user must begin with their base selection. All additional order configurations are added to the base selection. A single order may offer a variety of bases to choose from, such as stuffed crust, thin crust and thick crust. A separate menu item must be configured for each type of base available. Default base items can be configured so that the user will only need to change the default setting. ◆ **Sections** — The available subdivision(s) of an OM Configuration (e.g., halves). For this release, OM will only allow Whole, Half, Third and Quarter sections. Sections are used when a customer requests different item varieties on the same base. For example, if a customer wanted to order a pizza with half pepperoni and half cheese, the user would separate the pizza into two sections, one half with cheese and the other half with pepperoni. The restaurant can configure the amount of variety that they will offer to the customer. OM can be configured to limit the specialties and bases that can be divided into sections. Default sections can be configured so that the user will only need to change the default setting. **NOTE:** Thirds and Quarters are not allowed on the same base/size combination unless the .xml configuration file is modified to allow them to occupy the same area of the screen.

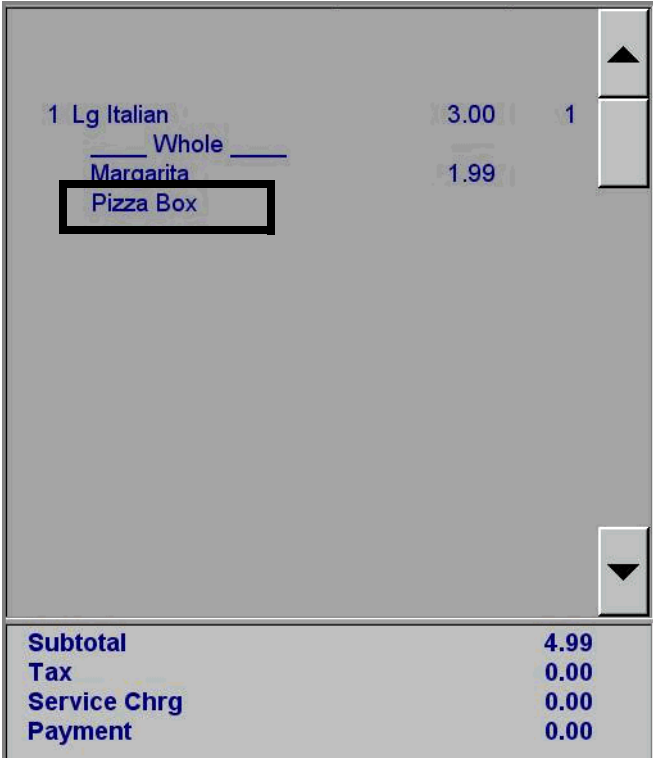| Module	Feature
POS Operations Cont'd	◆ **Specialty** — The combination of toppings added to the OM base. A specialty can be defined as a frequently ordered combination of items. Specialty items allow the user to rapidly place and modify orders. The user can limit the selection of bases, toppings and sizes available for each specialty. A default specialty item can be configured so that the user will only need to change the default setting. ◆ **Topping** — A special type of menu item that allows servers to customize their orders to meet a customer's specific request. For example, when ordering a pizza, a customer can add a Pepperoni topping. In OM, toppings are used to modify specialty items. Toppings can be included, omitted, priced or non-priced. Toppings can be modified using a topping modifier. Modifiers determine if and how much of the topping should be used in a particular order (e.g., Double Pepperoni). For example, a customer may order a meat lover's pizza but requests that no pepperoni be added. In this case the pepperoni is the topping and the "No" is the modifier. When applied to a specialty that uses a certain topping, the *double* topping modifier will assume a slightly different meaning. Instead of applying the *double* modifier, the user can select *Add* to indicates that a double portion should be included with the specialty. All other modifiers will behave normally. If a topping is not part of the specialty recipe then the modifiers will behave normally. A separate menu item must be configured for every available base, section, specialty, and topping selection. A separate menu item must be added for every modified topping (e.g., extra pepperoni, no mushrooms). Pricing may vary depending on the OM components selected. Pricing is configurable.

Module	Feature
POS Operations Cont'd	**Display** For the user's convenience, MICROS has created the OM display. Once the key is linked the display will automatically generate. No further design or configuration is required. The OM GUI layout is specified in an **.xml** file located at the following path: *MICROS\Res\Pos\Etc\OrderingModule.xml*. The .xml file allows the user to change the location of different sections on the GUI (e.g., Sizes, Specialties). Changes to the **.xml** file should be handled by a qualified administrator only. When accessed, the screen will display all of the available ordering options for the selected OM Configuration. The layout integrates traditional RES Operations with a graphical ordering component. The GUI uses a combination of color differentiation, shapes, OM component grouping, and spacing to provide the user with a visual representation of the order being placed.
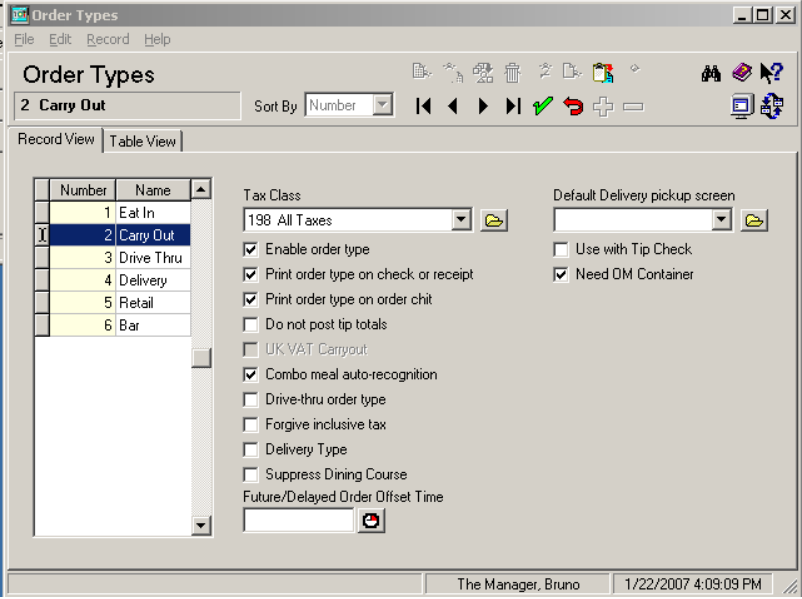
Module	Feature
POS Operations Cont'd	The OM GUI contains the following features aimed at simplifying the ordering process: ◆ The display is created for conversational ordering. The user can enter the order in any sequence so that items can be selected as the customer requests them ◆ Selecting an option will cause the button's color to change, allowing the user to visually differentiate it from the options left unselected. ◆ The available sections will display in their appropriate shape. Sections can display as either round or square. ◆ Configurable headings listed above each section allow the user to tailor the interface to suit their restaurant's needs. ◆ Default settings are configurable for specific bases and specialty items to represent commonly requested items. This can save the user time when placing an order. *Functionality* The format and contents of the OM GUI is preconfigured to include the options listed below: ◆ **Sizes** — Listed across the left hand side of the display (e.g., Small, Large). Sizing availability with certain specialty and topping selections is configurable. ◆ **Sections** — Listed across the top of the display. Section available for certain bases is configurable. ◆ **Bases** — Display along the bottom left-hand side of the GUI. Section and specialty availability is determined by the selected base. This is configurable.

Module	Feature
POS Operations Cont'd	◆ **Toppings and topping modifiers** — Toppings and their available modifiers are integrated into a single button. Selecting the topping button multiple times will cause that item to cycle through the available topping modifiers. The color of the button will also change based on the topping modifier selected. The modifier selected will also be listed on the bottom left-hand side of the topping button. A configurable indicator (e.g., a plus sign) is displayed on the button to indicate that the topping is included in the ordered specialty item. This field will be automatically populated with the **Caption** entered for the Add Modifier (*POS Configurator | Ordering Module | Topping Modifiers | Select Add Modifier*). ◆ **Function Keys** — By default the keys are located at the top-right hand side of the screen above the OM Detail Display. The function keys provide the user with all of the basic functionality required to place and modify orders in a RES environment. The location and order of the keys can be configured via the .xml file or left as the default. The following functions are built into the OM display: ◆ **Accept** – Sends the order to the Guest Check Detail. Without pressing this button the order will not be recorded in the main Guest Check Detail. Before the item(s) are posted to the Guest Check Detail the system will verify that the Transaction Detail file is not full. If it is, the user can only add as many items as will fit in the remaining space. This does not take into account any containers that may be added with each item. ◆ **New** – Adds a new item to the OM Detail Display. The user has the ability to add an unlimited number of OM Configuration items. ◆ **Clear** – Resets the current item back to its configured defaults. ◆ **Cancel** – Deletes all items ordered in OM and returns the user to the previous touchscreen.

Module	Feature
POS Operations Cont'd	◆ **[Number]** – Lists the number of items that have been ordered. This number will change as more items are added. Selecting this option will open a quantity dialog box.

◆ **Remove** – Removes the previously entered item from the OM Detail Display. Pressing this button twice will remove the entire OM order.

◆ **Back** – Takes the user back to the previous item in the order. If there is only one item then this button will be grayed out.

◆ **Next** – Moves the user to the next item in the order. If there is only one item then this button will be grayed out.

Module	Feature

POS Operations Cont'd	◆ **OM Detail Display** —Located on the right-hand side of the OM GUI. The Detail Display shows the current OM Configuration item being modified in detail and lists the total number of OM Configuration items in the order in the top right-hand side. The user can scroll backwards, forwards, edit and clear the item information in the check using the function keys.
	
	Large {2/2} ← **Number of OM items ordered**
	Pz Thin Crust
	Base Total 11.00
	Hlf
	  Cheese ← **Check Detail**
	  Double Pepperoni
	Hlf2
	  Cheese
	
	Total 11.00 ← **Total Due**
	
	The check display will only show the items ordered via OM. Once the order is complete, the OM Configuration items will be transferred to the main Check Detail in RES Operations along with the rest of the transaction activity.
	
	The items in the GUI are highly customizable. The availability of certain items is determined by the base and specialties selected.

Module	Feature
POS Operations Cont'd	_Container Support for To-Go Orders_ Often a site that offers orders to-go will package the order using a container item. For example, when a pizza is ordered to-go, the container is the pizza box. Sites that implement this functionality can track the number of containers they distribute for inventory and pricing purposes. If the Product Management application is used, OM will deduct the contained from the site's inventory, however a separate menu item should be created. If Product Management is not used at the site, users can still track the use of containers via reports. If the order type does not require containers then the report count for the container will be set to 0. When a container item is included in an order, it is added to the end of each applicable item to the Guest Check Detail. The container item will not be visible in the OM Detail Display. 1 Lg Italian 3.00 1 ____ Whole ____ Margarita 1.99 Pizza Box Subtotal 4.99 Tax 0.00 Service Chrg 0.00 Payment 0.00

Module	Feature
POS Operations Cont'd	Follow these steps to enable this feature: 1. Create a menu item for each container item on the *POS Configurator / Sales / Menu Items* form. The container must be associated with a menu item group that is identified as a condiment. 2. In the **Menu Level Class** option on the *General* tab, select the level that corresponds to the applicable size (small, medium and large). 3. Go to the *POS Configurator / Ordering Module / OM Base* form, and select the appropriate container from the Container Menu Item drop down for all applicable bases. Only condiments will appear in the drop down. If one does not already exist, add an order type record (*POS Configurator / System / Order Types*) for the to-go order type that will require the user of this container item. 4. Enable the **Need OM Container** option. 5. Save all records.
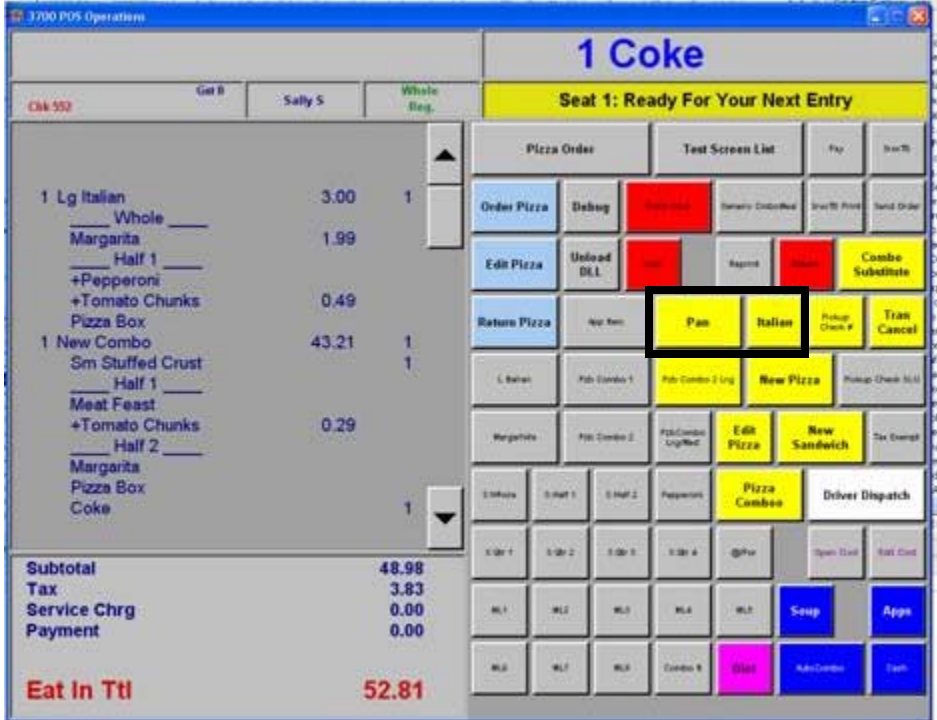
Module	Feature
POS Operations Cont'd	*Voiding Items* An order can often change after a user has entered it into the Ordering Module. The user has the ability to delete an item after the order has been placed and has exited out of OM. The user has the following options when voiding an item in OM: ◆ **Remove an individual item from the order**. The user can edit an order placed through the ordering module by selecting the item and pressing **[Edit Order]** key to reopen the OM GUI. Make the necessary changes and hit the **[Accept]** key. If the item being changed is the last item entered on the check then you can simply select the **[Edit Order]** key to open the OM GUI. For more information on inserting the **[Edit Order]** button, see the *Touchscreen Keys* section beginning on page 76. ◆ **Void the Entire Order**. This will delete the entire item (e.g., a whole pizza) from the Guest Check Detail. This step should be performed directly from the Guest Check Detail. To void an item highlight the desired item and select the **[Void]** key. If the item being changed is the last item entered on the check then you can simply select the **[Void]** key twice. Selecting the **[Edit]** key in the Guest Detail Display will display an error message. Error ❌ Not Allowed To Void An Ordering Module Condiment OK ◆
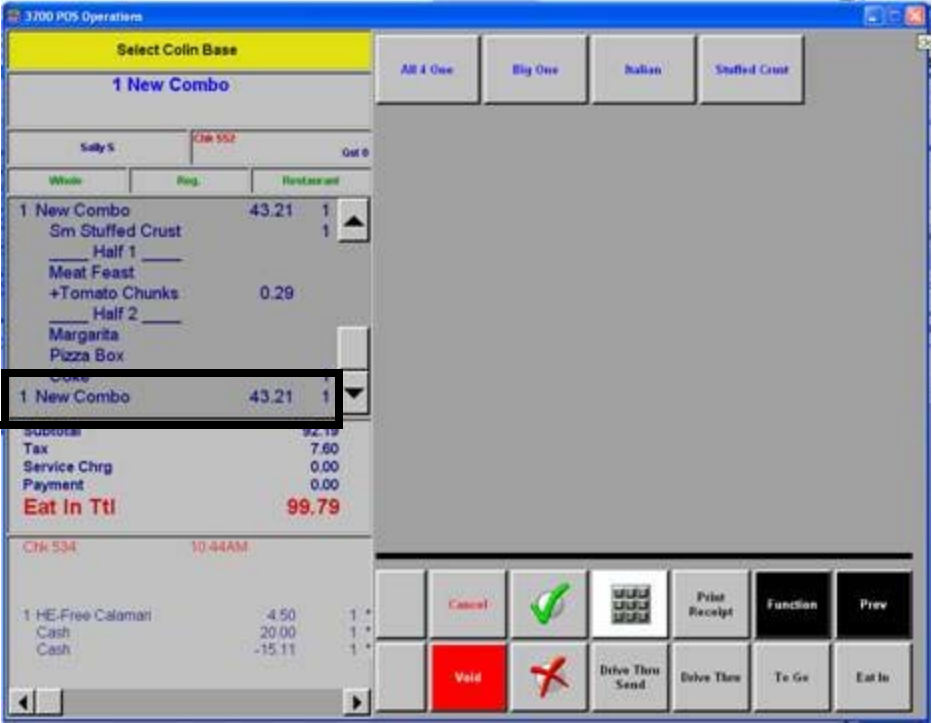
Module	Feature
POS Operations Cont'd	*Selecting a Sold Out Item* As with other menu items in RES, there are safeguards in place to prevent the user from inadvertently placing an order from an out of stock item. If a base is sold out before the user begins to ring an order, the base will appear an unavailable. If a base is selected and becomes sold out while the user is ringing the order then the following error message will appear: `This menu item is sold out.` After the message is received the user cannot ring any additional items until the sold out item is replaced. As with regular combo meals, decrementing specials cannot be included as part of a OM combo meal.

Module	Feature
POS Operations Cont'd **Select the touchkey to access a specific OM Configuration**	*Accessing the OM GUI* The Ordering Module GUI can be accessed via a touchkey programmed into the desired touchscreen. Depending on how the ordering module is used at the site, there are three ways to access the ordering module GUI via touchkeys programmed into a central touchscreen. More information on programming OM touchkeys can be found in the *Touchscreen Keys* section on page 76. The user can program multiple touchkeys of different types into a single touchscreen. In the examples below the main ordering touchscreen is used, however, these touchkeys can be programmed into any touchscreen. 1. The touchkey can be embedded inside the main ordering touchscreen. When selected the user will have access to the selected OM Configuration. In the example below selecting the **[Pizza]** button will bring the user to the OM Configuration for pizzas.

Module	Feature
POS Operations Cont'd	2. The user can program a touchkey into to main ordering touchscreen for a specific base menu item. When selected, the GUI will appear with the requested base items already selected. The size of the base item will be set according to the menu level of the selected base item. If desired the user could setup multiple touchscreen keys for different base sizes (e.g., Medium Italian, Large Pan). When the key is selected, the size and base will already be configured. In this case these items cannot be edited once the OM GUI is opened. Programming a touchkey in this way works best if there is a frequently ordered base menu item. This will save the user a step when placing the order. Keep in mind that if the same base item is linked to multiple OM Configurations (e.g., pizzas and subs), linking a key in this way will only open the OM GUI to one of them. This shortcut is ideal for a site where a base is not linked to more than one OM Configuration.

Module	Feature
POS Operations Cont'd	3. The user can also program a touchkey for an OM combo meal, where a base menu item is part of the combo meal. Selecting the combo meal key will prompt the user to select the base and size associated with the combo meal. When finished the OM GUI will appear prompting the user to enter additional settings. Because the base and size have already been identified in a previous step, these fields cannot be changed via the OM GUI. The ability to change an OM Combo Meal's Specialty and Topping Type is subject to programming. When finished select the **[Accept]** key to return to the Guest Check Detail. The combo meal will display directly on the Guest Check.

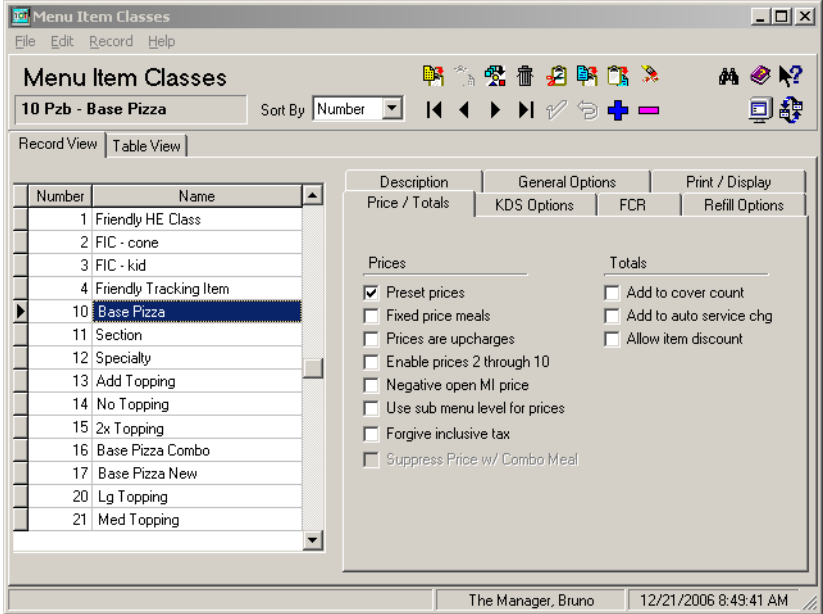| Module	Feature
POS Operations Cont'd	**Pricing Options** There are several factors that influence to way that an item created in the Ordering Module is priced. The list below provides a description of the different pricing variables. Each site can implement pricing differently. ◆ **Pricing by menu item**. Pricing options for each menu item are configured in POS Configurator on the Menu Items form (*POS Configurato*r | *Sales* | *Menu Items* | *Fixed Pricing*). These prices will be used by default when adding items in the ordering module. The menu items and their prices will be linked to the appropriate bases, toppings, and specialties. Menu item pricing will vary based on whether inventory management is utilized at the restaurant. For more information and examples see the *Usage: OM Pricing Models* section beginning on page 80. ◆ **Pricing when an item is split into sections**. If sectioning is available for this menu item, the user must determine how this will affect the overall price. Prices by section are configured on the *POS Configurator*	*Ordering Module*	*General* form. The user can select between the following pricing options: ◆ **Most expensive section** — The price is calculated as if the entire item was composed entirely of the most expensive section. If a non-zero value is entered, the GUI will show the prices of each topping added to the specialty (toppings included with a specialty will not show). If the specialty comes with free toppings, those toppings will display with no price. ◆ **Actual value** — The price is calculated by adding the cost of all of the ordered sections together. For example, the Mike Rose Cafe charges $4.00 for a half of a large cheese pizza, and $6.00 for half of a large Pepperoni pizza. A customer orders a pizza with half cheese and half Pepperoni. If the price was calculated by the most expensive section then the price would be $12.00 ($6.00 + $6.00). If the price was calculated by the actual value then the price would be $10.00 ($4.00 + $6.00).

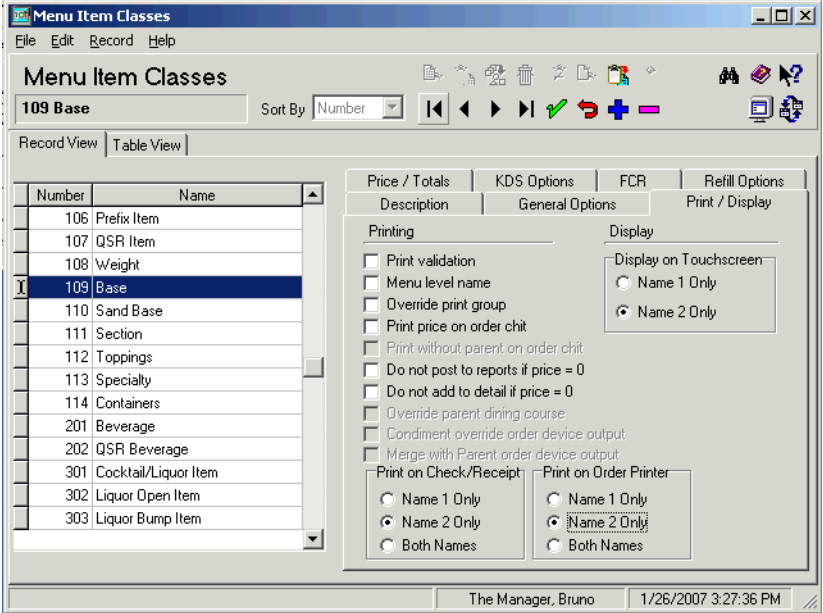| Module	Feature
POS Operations Cont'd	◆ **Number of free toppings allowed**. The user must determine the number of free toppings, if any, that can be ordered with a specialty before the customer is charged. This is determined by the ATC number (Allowed Toppings Count) located on the *POS Configurator	Ordering Module	Specialties* form. If a value higher than this number is entered, the customer will be charged for the additional toppings. After the number of free toppings has been exceeded, the price of toppings will be calculated based on the most expensive topping. For example, suppose that a customer orders a 2 topping pizza and adds one additional topping. The three toppings are Pepperoni priced at 75 cents, Mushrooms priced at 75 cents, and Sausage priced at $1.00. The price of the additional topping will thus be charged at $1.00. When the ATC is applied to pizza sections (e.g., Halves), the sections will inherit the number of free toppings that can be added. When applied to sections, the ATC will behave as follows: Pizza A Pizza B 1/2 Pep. / 1/2 Sausage 1/2 Sausage / 1/2 Pep. If the ATC count is 1, and toppings are equally spread over the entire pizza to equal 1, then the customer will not be charged for additional toppings. If the ATC count is 1 and toppings are distributed over a single section of the pizza then the customer will be charged for additional toppings.

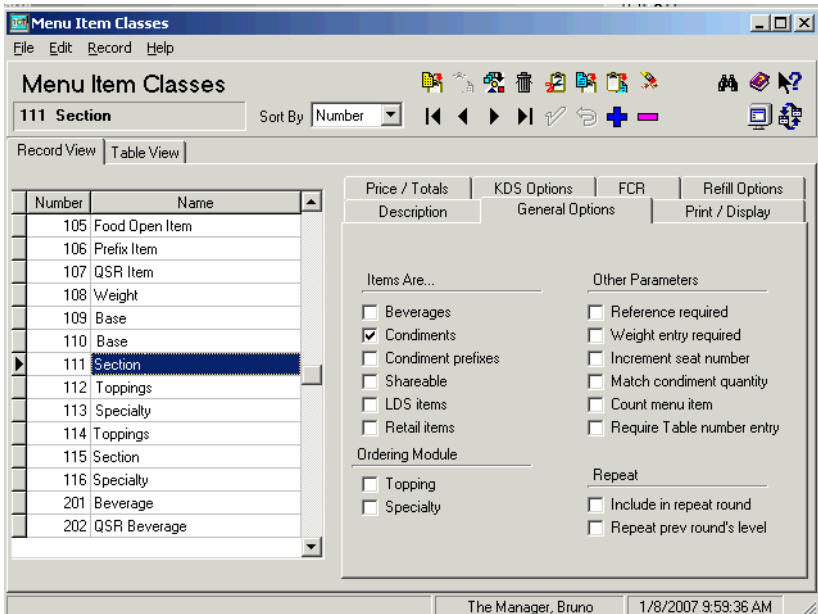| Module	Feature
POS Operations Cont'd	The ATC is only applied to priced toppings. Toppings that are free (e.g., priced at $0.00) will not be included in the ATC count. For example, with the purchase of a cheese pizza, the Mike Rose Cafe allows the customer to order 1 topping for free. The Cafe does not charge the customer for Oregano. Customer A orders a cheese pizza with Oregano, and Pepperoni. In this situation Customer A will not be charged for additional toppings.

Module	Feature
POS Operations Cont'd	**Configuration** OM Configuration requires additional setup through POS Configurator to prepare the system for operations. A new OM category was created, comprising multiple forms. In addition, new options have been added to the Menu Item Classes, Menu Items and Order Type forms. OM Configuration requires the setup of the base, sections, specialties, and topping selections so that they may be ordered in operations. OM Configuration is cyclical, and not all information on a single form can be completed at once. The user will frequently have to return to a form to configure additional fields. The additions and changes can be divided into the following areas. These sections contain information on the forms and field to be configured only. Because OM Configuration is cyclical, the configuration steps cannot be described in a strict linear fashion, and the user will not always be able to program entire forms at once. The steps below are represent the most efficient way to program OM. ◆ Menu Item Class Setup ◆ Menu Item Setup: Bases and Sections ◆ OM Configuration ◆ Setup Sections ◆ Setup the OM Base ◆ Setup the OM Topping Type ◆ Setup Specialties ◆ Setup Topping Modifiers

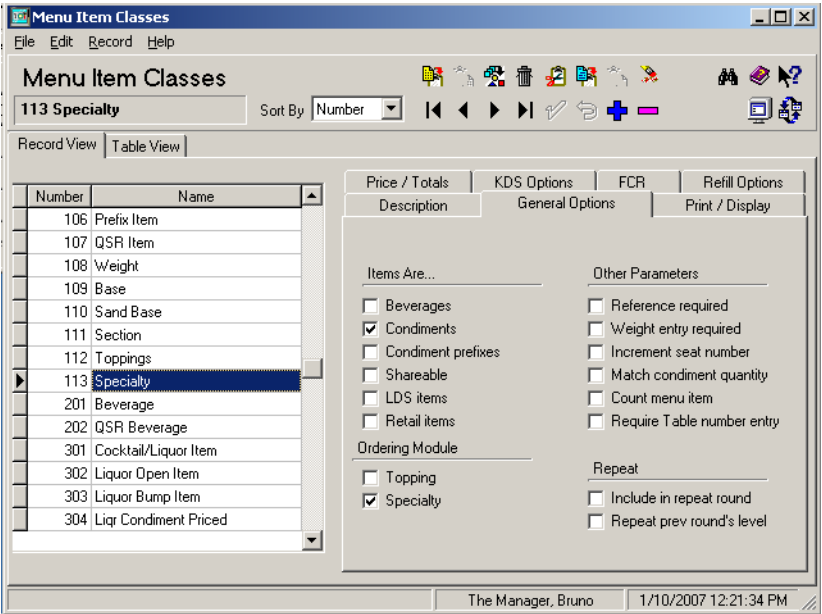| Module	Feature

POS Operations Cont'd	◆ OM Linking
	
	    ◆ Creating Topping Menu Items
	
	    ◆ Adding the OM Topping Links
	
	    ◆ Adding the Topping Modifier Links
	
	    ◆ Creating Specialty Menu Items
	
	    ◆ Adding the Specialty Item Links
	
	◆ Ordering Module Combo Meal Configuration
	
	◆ Touchscreen Keys
	
	◆ Printing Options

Module	Feature
POS Operations Cont'd	*Menu Item Class Setup* This section is divided as follows: ◆ Adding an OM Base Class ◆ Adding an OM Section Class ◆ Adding an OM Specialty Class ◆ Adding an OM Topping Class If implementing OM for the first time, the user will most likely have to add new menu item classes associated with each of the items bulleted above. If these sections already exist, then they will need to be modified for OM to function correctly. If OM Containers are used, the user should create a menu item class for containers. For more information including how to configure a container see the *Container Support for To-Go Orders* section on page 18. These instructions describe the configuration necessary of OM only. Configure additional fields as needed. All menu item classes besides the OM Base will be identified as condiments.

Module	Feature
POS Operations Cont'd	◆ **Adding an OM Base Class** 1. Go to the *POS Configurator/ Sales / Menu Item Classes* form and add or edit a record. This record will be the menu item class for all bases. 2. Enter a descriptor for this Menu Item Class in the *Name* column (e.g., Bases). 3. Go to the *Price/Totals* tab and enable the **Preset prices** option.

Module	Feature
POS Operations Cont'd	4. Because the user needs to be able to identify the appropriate menu item to link in OM, the naming conventions in OM can become extremely descriptive (e.g., Pan Whole Cheese). For this reason, MICROS recommends that the user program 2 names for each menu item, a descriptive item for configuration purposes as the Name 1, and a simpler name (e.g., Pan) as the Name 2 field. This configuration will occur on the *POS Configurator	Sales	Menu Items* form, however some preliminary setup is required on the *Menu Item Classes* form. To simplify the menu item as it appears in operations and what prints on the guest check, MICROS strongly recommends that the user configure the following fields on the *Print/Display* tab: ♦ **Display on Touchscreen** – Select the Name 2 Only option. ♦ **Print on Check/Receipt** – Select the Name 2 Only option. ♦ **Print on Order Printer** – Select the Name 2 Only option. 5. Save all records.

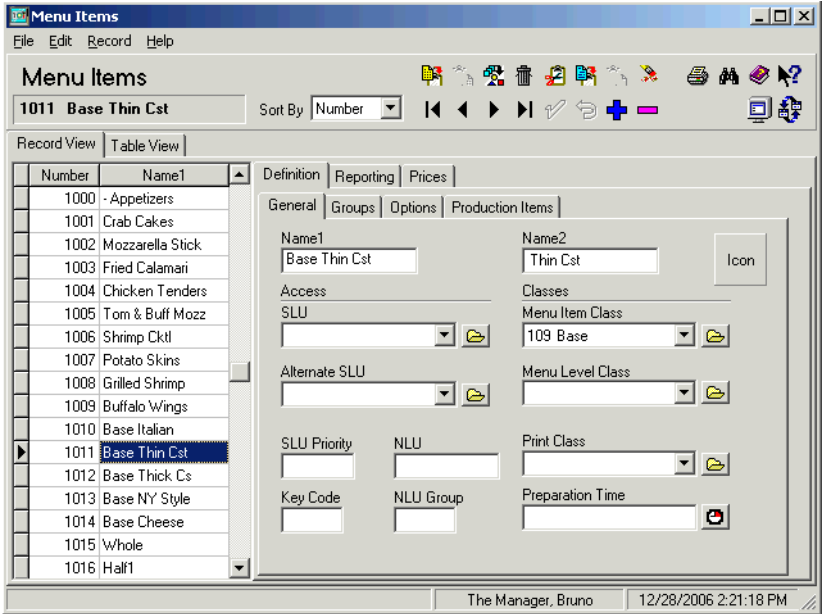| Module	Feature
POS Operations Cont'd	◆ **Adding an OM Section Class** 1. Add or select a record to be edited. This will be the menu item class associated with OM Sections. Typically sections are not priced. 2. Enter a descriptor for this Menu Item Class in the Name column (e.g., Sections). 3. Go to the *General Options* tab and select the **Condiments** option.

Module	Feature
POS Operations Cont'd	4. Go to the *Price/Totals* tab and configure the following fields and enable the **Preset prices** option. 5. Because the user needs to be able to identify the appropriate menu item to link in OM, the naming conventions in OM can become extremely descriptive (e.g., Pan Whole Cheese). For this reason, MICROS recommends that the user program 2 names for each menu item, a descriptive item for configuration purposes as the Name 1, and a simpler name (e.g., Pan) as the Name 2 field. This configuration will occur on the *POS Configurator	Sales	Menu Items* form, however some preliminary setup is required on the *Menu Item Classes* form. To simplify the menu item as it appears in operations and what prints on the guest check, MICROS strongly recommends that the user configure the following fields on the Print/Display tab: ◆ **Display on Touchscreen** – Select the Name 2 Only option. ◆ **Print on Check/Receipt** – Select the Name 2 Only option. ◆ **Print on Order Printer** – Select the Name 2 Only option. 6. Save all records.

Module	Feature
POS Operations Cont'd	◆ **Adding an OM Specialty Class** 1. Add or select a record to be edited. This will be the menu item class associated with OM Specialties. 2. Enter a descriptor for this Menu Item Class in the *Name* column (e.g., Specialties). 3. Go to the *General Options* tab and configure the following fields: ◆ Enable the **Condiments** option. ◆ Enable the **Specialty** option. This is a new option that has been added to support the Ordering Module. This option denotes that the menu item class is a specialty item that will be linked in OM.

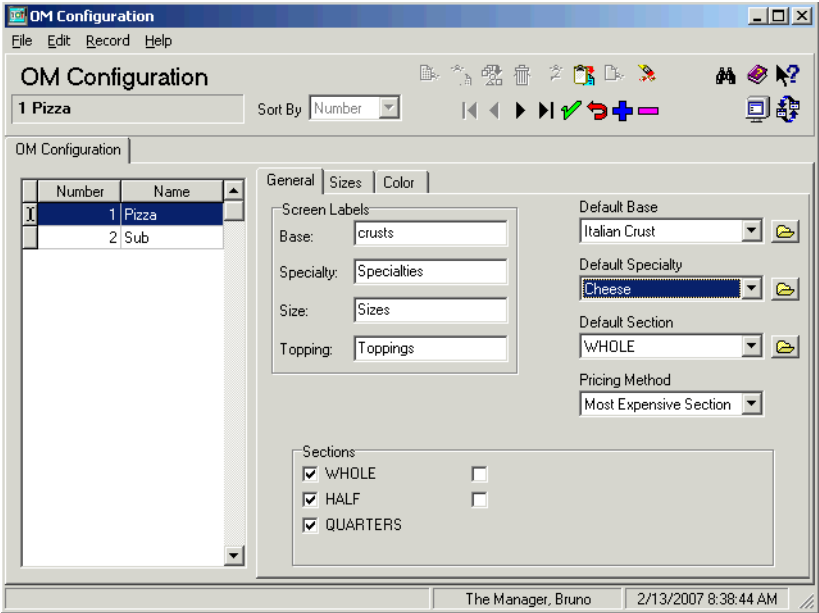| Module	Feature
POS Operations Cont'd	4. Go to the *Price/Totals* tab and configure the following fields and enable the **Preset prices** option. 5. Because the user needs to be able to identify the appropriate menu item to link in OM, the naming conventions in OM can become extremely descriptive (e.g., Meat Lover's Whole Pan). For this reason, MICROS recommends that the user program 2 names for each menu item, a descriptive item for configuration purposes as the Name 1, and a simpler name (e.g., Meat Lover's) as the Name 2 field. This configuration will occur on the *POS Configurator	Sales	Menu Items* form, however some preliminary setup is required on the *Menu Item Classes* form. To simplify the menu item as it appears in operations and what prints on the guest check, MICROS strongly recommends that the user configure the following fields on the Print/Display tab: ◆ **Display on Touchscreen** – Select the Name 2 Only option. ◆ **Print on Check/Receipt** – Select the Name 2 Only option. ◆ **Print on Order Printer** – Select the Name 2 Only option. 6. Save all records.

Module	Feature

POS Operations Cont'd	◆ **Adding an OM Topping Class**
	
	1. Add or select a record to be edited. This will be the menu item class associated with OM toppings.
	
	2. Enter a descriptor for this Menu Item Class in the *Name* column. The name should reflect (e.g., Toppings).
	
	3. Go to the *Price/Totals* tab and configure the following fields and enable the **Preset prices** option.
	
	4. Go to the *General Options* tab and configure the following options:
	
	   ◆ Enable the **Condiments** option.
	
	   ◆ Enable the new **Topping** option to identify this class as a topping in the Ordering Module.
	
	5. Because the user needs to be able to identify the appropriate menu item to link in OM, the naming conventions in OM can become extremely descriptive (e.g., Pepperoni Pan Meat Lover's Whole Cheese). For this reason, MICROS recommends that the user program 2 names for each menu item, a descriptive item for configuration purposes as the Name 1, and a simpler name (e.g., Pepperoni) as the Name 2 field. This configuration will occur on the *POS Configurator
		Sales	Menu Items* form, however some preliminary setup is required on the *Menu Item Classes* form.
			
			To simplify the menu item as it appears in operations and what prints on the guest check, MICROS strongly recommends that the user configure the following fields on the Print/Display tab:
			
			   ◆ **Display on Touchscreen** – Select the Name 2 Only option.
			
			   ◆ **Print on Check/Receipt** – Select the Name 2 Only option.
			
			   ◆ **Print on Order Printer** – Select the Name 2 Only option.
			
			6. Save all records.

Module	Feature
POS Operations Cont'd	*Menu Item Setup Part 1: Bases and Sections* This form is where the menu items that will be used in OM are created and modified. Although the user must create Base, Section, Specialty and Topping menu items, this section will only describe the configuration of the following sections: ◆ Adding Base Menu Items ◆ Adding Section Menu Items Specialty and Topping menu items should not be created at this time. These sections will be discussed in the *OM Linking* section later on in the configuration process. The menu item form is also where the user will program basic menu item pricing. With OM, there are several different ways that a menu item may be priced. For additional information see the *Pricing Options* section on page 25.
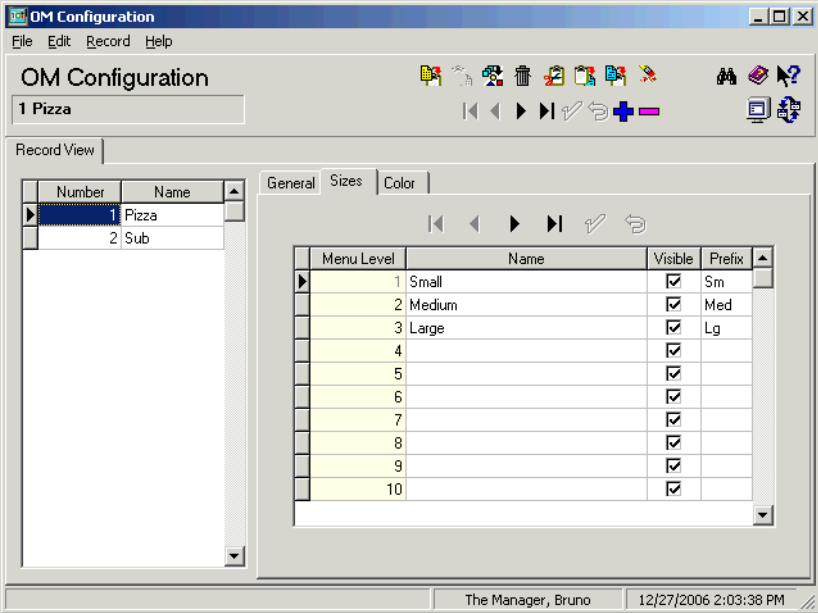
Module	Feature
POS Operations Cont'd	◆ **Adding Base Menu Items** Bases are the most fundamental part of an OM Configuration item. The limitations of an order, the available sections, sizes and specialties depend on the selected base. Follow these steps to add base menu items: 1. Go to the *POS Configurator/ Sales / Menu Items* form and add a menu item record, or select a record to be edited. 2. In the **Name1** field enter the primary name for this base record (e.g., Italian Thin Crust). This name will be used in POS Configurator to link the appropriate menu items in OM, therefore make sure that you use a descriptive name for this field. A unique name must be created for each record. If an inventory tracking application is used at the site this will include a unique name for records with different recipes, so that the user can differentiate between them (e.g., Thin Crust Pepperoni Whole).
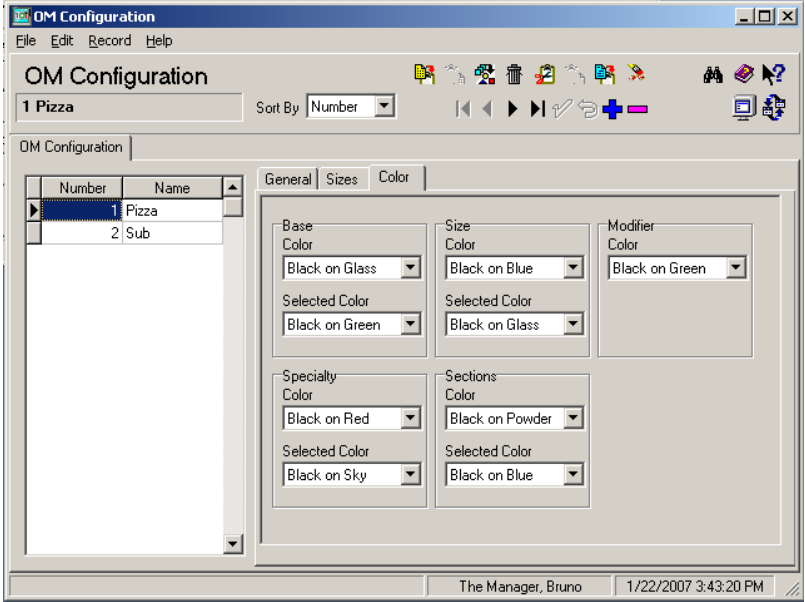
Module	Feature
POS Operations Cont'd	3. The **Name2** should be configured to be the name of the menu item record as it will appear on the Guest Check Detail and in the GUI (e.g. Thin Crust). 4. Link the record with the appropriate **Menu Item Class** (e.g., Pizza Base) associated with this menu item. 5. Use the *Prices* tab to configure the prices for this menu item. Configure the following field(s): **NOTE**: Menu item sizes are based on menu levels. If sizes are used, a second set of prices should be configured for each size. ◆ **Fixed Pricing** – Enter the amount that a customer will be charged when ordering this menu item.

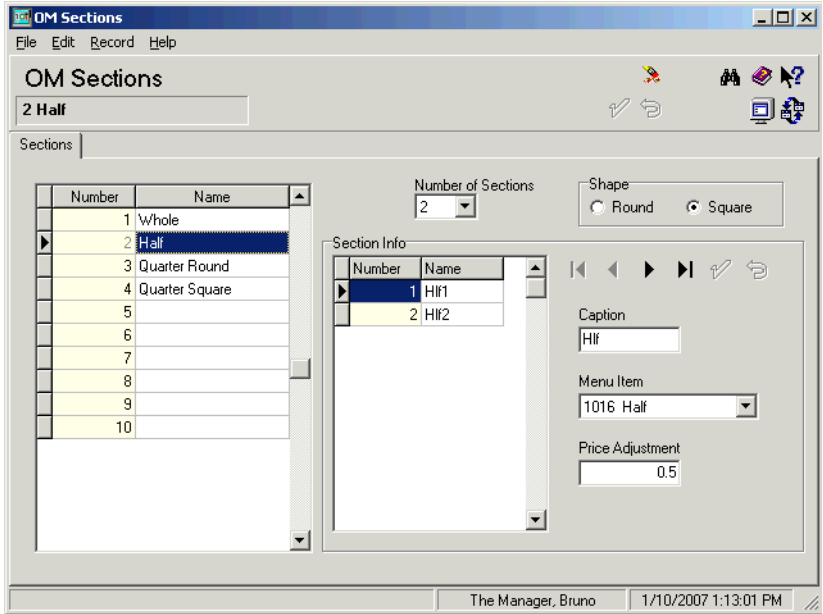| Module	Feature
POS Operations Cont'd	6. Repeat steps 1-4 for every base available for this OM Configuration item. Only bases that are configured here will be listed in the OM display. If several records are needed for each specialty, then the block copy feature may be useful. To block copy select the ⬛ icon at the top of the screen. 7. Save all records. ♦ **Adding Section Menu Item** The menu item sections are used to define the configurable subdivisions of an OM Configuration item. Sections are typically not priced. 1. Go to the *POS Configurator/ Sales / Menu Items* form and add a menu item record, or select a record to be edited. 2. In the **Name1** field enter the primary name for this section. This name will be used in POS Configurator. The name for each section should be descriptive to distinguish between different sections with the same name (e.g., Whole, Half, Quarter, Thirds). 3. The **Name2** should be configured to be the name of the menu item record as it will appear on the Guest Check Detail and in the GUI (e.g., half). 4. Link the record with the appropriate **Menu Item Class** (e.g., Sections) associated with this menu item. 5. Repeat steps 1-4 for every available section for this OM item. If several records are needed for each specialty, then the block copy feature may be useful. To block copy select the ⬛ icon at the top of the screen. 6. Save all records.

Module	Feature
POS Operations Cont'd	*OM Configuration* The OM Configuration form is where the basic OM configuration items are identified and defined (e.g., pizza, subs). A single restaurant can have multiple OM Configurations. The user must complete work on this form before configuring the *Base*, *Specialties*, or *Topping Types* forms. Each of these forms must be correctly linked to an OM Configuration in order to be saved. 1. Go to the *POS Configurator	Ordering Module	OM Configuration	General* tab. 2. Add a record. In the *Name* column identify this OM Configuration type (e.g., Pizza).

Module	Feature
POS Operations Cont'd	3. Configure the following fields on the *General* tab. ◆ **Screen Labels** – Use the fields to identify the label that will be listed above the Base, Specialty, Section, and Toppings components of the OM GUI for this OM Configuration. This will be how the server identifies different areas of the GUI. ◆ **Pricing Method** – Use the drop down menu to determine the pricing method for this ordering module configuration record. The options are: ◆ **Actual Value:** The price is calculated by adding the value of all of the included items in the order (e.g., Base + Specialty + Topping Prices). ◆ **Most Expensive Section**: The price is the same as the most expensive section of the item. For example, suppose that Restaurant A sells a large half section of a Pepperoni Pizza for $6.00, and a large half section of a Veggie Pizza for $7.00. If a customer orders a large pizza that is half Pepperoni and half Veggie, then the price for each half would be $7.00. The **Default Base, Default Specialty, Default Section** and the **Sections** fields will be left blank until the user configures the available options in POS Configurator. The user will return to the OM Configuration tab later to define these options.

Module	Feature
POS Operations Cont'd	4. Go to the *Sizes* tab and use the table to define the item sizes available for this OM Configuration. Complete the following columns in the table for each size: ◆ **Menu Level** – This column is pre-defined in the system. A maximum of 10 levels are available. Make note of the level assigned to each size, you will be required to identify this number later in the Configuration instructions. ◆ **Name** – Identify the name of this size definition (e.g., small, medium, large). ◆ **Visible** – Enabling this feature will make this size definition visible to the user when performing operations via the GUI. If this option is disabled, this size will not be visible to the user in Operations. ◆ **Prefix** – Use this field to identify a prefix associated with this size record (e.g., sm = small, med = medium). The prefix will be printed with the base item on all guest checks (e.g., Sm Italian). ◆ Save all records.
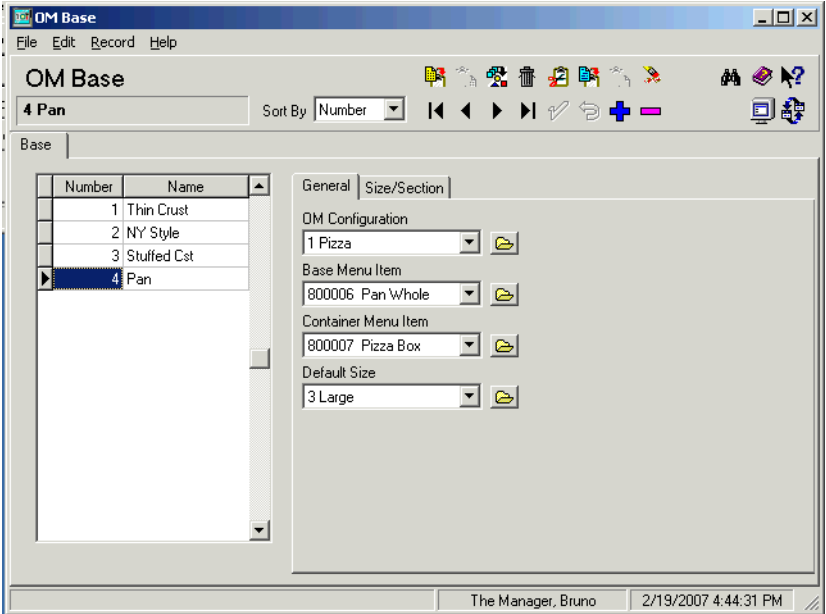
Module	Feature

POS Operations Cont'd	5. Go to the *Color* tab to identify the colors associated with each OM Configuration component (e.g., base, specialty) on the GUI. This form allows you to configure how each option will appear in the GUI. Complete the following fields:
	
	NOTE: MICROS recommends that the user select a different color for the Color and Selection Color fields so that the user will see a contrast when a certain item is selected.
	
	◆ **Base** – Use this section to identify the colors associated with both selected and unselected Bases in Operations. Configure the following fields:
	
	    ◆ **Color:** Use the drop down box to select the default color that will display for all available Bases.
	
	    ◆ **Selected Color**: Use the drop down box to select the color that will display when a specific Base is selected for an order.

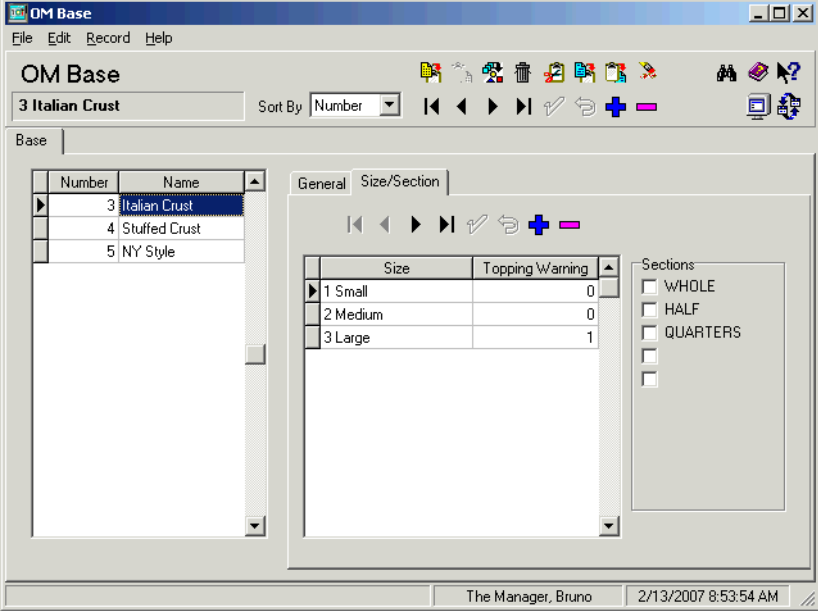| Module	Feature

POS Operations Cont'd	◆ **Size** – Use this area to identify the colors associated with both selected and unselected Sizes in Operations. Configure the following fields:
	
	    ◆ **Color:** Use the drop down box to select the default color that will display for all available Sizes.
	
	    ◆ **Selected Color**: Use the drop down box to select the color that will display when a specific Size is selected for an order.
	
	◆ **Modifier** – Use this area to identify the colors associated with both Topping Modifiers in Operations. Configure the following fields:
	
	    ◆ **Color**: Use the drop down box to select the default color that will display for all available Topping Modifiers.
	
	◆ **Specialty** – Use this section to identify the colors associated with both selected and unselected Specialties in Operations. Configure the following fields:
	
	    ◆ **Color:** Use the drop down box to select the default color that will display for all available Bases.
	
	    ◆ **Selected Color**: Use the drop down box to select the color that will display when a specific Specialty is selected for an order.
	
	◆ **Sections** – Use this area to identify the colors associated with both selected and unselected Section choices in Operations. Configure the following fields:
	
	    ◆ **Color:** Use the drop down box to select the default color that will display for all available Sections.
	
	    ◆ **Selected Color**: Use the drop down box to select the color that will display when a specific Section is selected for an order.
	
	◆ Save all records.
	
	6. Repeat steps 2-5 for each OM Configuration item.

Module	Feature
POS Operations Cont'd	*Setup Sections* This section is used to identify all of the available Sections for this OM Configuration. At this time only the Whole, Half, Third, and Quarter sectioning options are available. For example, if a restaurant allows a customer to order a pizza with half Pepperoni and half Cheese, they would create two sectioning records, one for each half of the pizza. **NOTE:** Thirds and Quarters are not allowed on the same base/size combination unless the .xml configuration file is modified to allow them to occupy the same area of the screen. Different sectioning options should be created if the restaurant offers the same menu item in different shapes. For example, if the customer can order either a round or square pizza. The user would have to create a unique record for each section and shape combination (e.g., half round, half square). Follow these steps to configure sections: 1. Go to the *POS Configurator	Ordering Module	OM Sections* form.

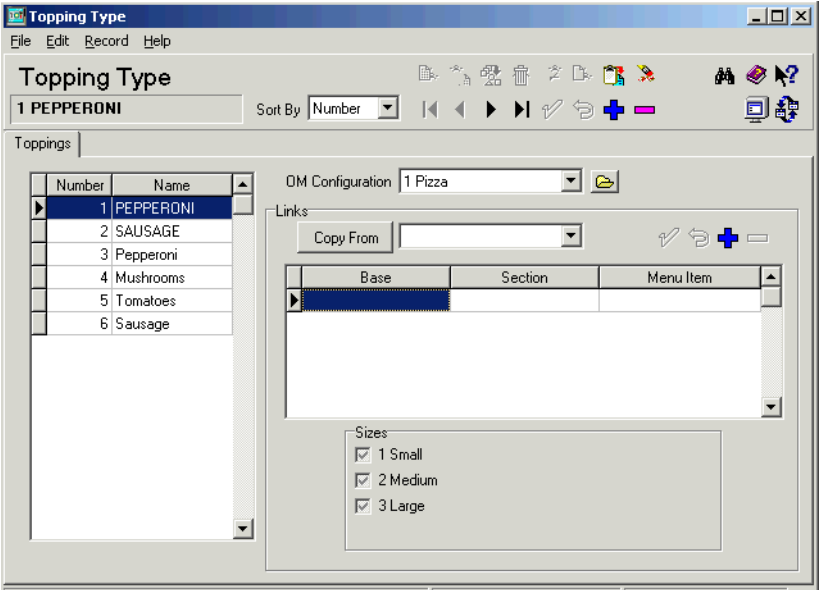| Module	Feature
POS Operations Cont'd	2. Add a record. A separate record must be created for every sectioning option. A maximum of 10 records can be added. 3. Configure the following options: ◆ **Number** – A number will be automatically assigned to the record once it is added. This number cannot be edited. ◆ **Name** – Enter the name for this OM section (e.g., Half, Whole). ◆ **Number of Sections** – Use this field to identify the number of sections that go into a whole product. For example, if the section record is *half* then the number of sections would be **2**. ◆ **Shape** – Identify if the shape of this section is round or square. This will affect the appearance of this section option in Operations. 4. Use the *Section Info* table to add records for all sectioning options within this section record. Configure the following fields for each record: ◆ **Number** – A number will be automatically assigned once a section info record is added. This number cannot be edited. This number is for configuration purposes only and will not appear on the Guest Check Detail. ◆ **Name** – Insert a name for this section info record (e.g., whole). This is the name as it will appear in Configurator. This name will not appear on the Guest Check Detail. ◆ **Caption** – Use this field to determine an abbreviation for this record. The caption will appear under the sectioning options. The caption will appear on the Guest Check Detail and will print on the Guest Check. This caption will also appear in Operations (see above).

Module	Feature
POS Operations Cont'd	◆ **Menu Item** – Use the drop down menu to select the menu item that is associated with this section. A separate menu item must be created for each sectioning option. The Name 1 for this menu item (what appear in the drop down box) will not appear on the Guest Check. The Name 2 will appear on the Guest Check Detail and will print on the check. ◆ **Price Adjustment** – An additional cost can be subtracted from the price of the specialty menu items if this sectioning option is used. If desired, enter a value to be subtracted from the base price for this item. For example, suppose that at the Mike Rose Cafe, is running a promotion that any large specialty pizza is $9.99. Normally, the price for a half section of a Meat Lover's Pizza is $5.00, and the price for a half section of a Veggie Lover's Pizza is $5.00. Customer A orders a half Meat Lover's/ half Veggie Lover's pizza. By enabling this option and applying a 1 cent Price Adjustment to the second section of the pizza, the price will correctly adjust to $9.99 total for the pizza. 5. (Optional) Go to the *POS Configurator	Ordering Module	Configuration* form. Select a **Default Section** from the drop down box. This identifies how the Ordering Module will begin every pizza unless otherwise indicated by the user. 6. Go to the *Sections* area at the bottom of the form and enable the available sectioning options (e.g., Quarters, Half) for this OM Configuration. 7. Save all records.
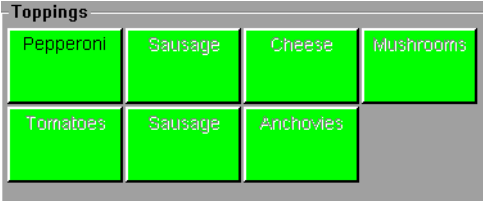
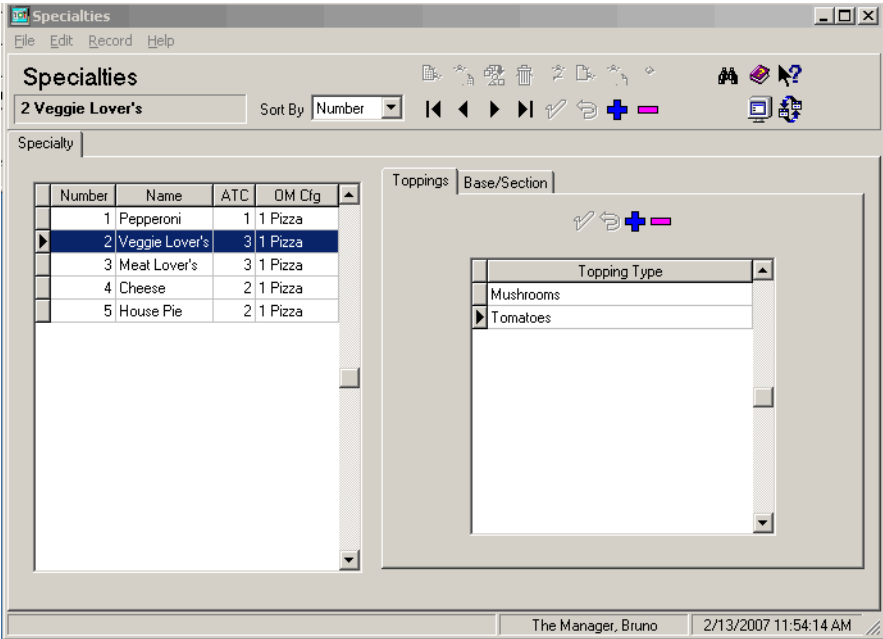| Module	Feature
POS Operations Cont'd	*Setup OM Bases* This section is used to identify and define all of the available OM Bases, and to link them to the defined menu items defined in the *Menu Item Setup* section. Follow these steps to configure OM Bases: 1. Go to the *POS Configurator	Ordering Module	OM Base* form.

Module	Feature
POS Operations Cont'd	Crusts Thin Crust NY Style Stuffed Cst Pan 2.Add a record. A separate record must be added for each OM Base. If a base is available in sections, a separate menu item must be created for each base/section combination possible (e.g., Thin Crust Half). The order in which bases are listed in the Ordering Module is determined by the order that the records are listed on this form. For example, the order of the bases listed in Step 1 would be appear as the image on the right.

3. After the record is created configure the following fields:

  ◆ **Number** – A number is automatically assigned once the record is added. This number can be edited, if desired.

  ◆ **Name** – Enter a name for this base record. This name is used to identify the base in POS Configurator and on the OM GUI. The check will display the menu item name associated with this record.

  ◆ **OM Configuration** – Use the drop down box to select the OM Configuration item (e.g., pizza) associated with this base. Only one Configuration item can be selected. If the OM Configuration is not selected for this record then the changes cannot be saved.

  ◆ **Base Menu Item** – Use this field to link the base record with its associated menu item.

  ◆ **Container Menu Item** – This is a menu item that is only needed if an inventory management package is being used. A container is used to package another item for the customer to take home. Use the drop down menu to select a container menu item associated with this OM base (e.g., Pizza to go box). This will subtract the container item from the inventory.

  ◆ **Default Size** – Select the default size associated with this base. This size will automatically appear when this base is selected.

  ◆ Save all records.

Module	Feature
POS Operations Cont'd	4. Go to the *Size/Section* tab and configure the following fields: ◆ **Size** – Use the drop down box to select the sizes available for this OM base item (e.g., small, large). Sizes are configured on the *Ordering Module	OM Configuration	Sizes* form. ◆ **Topping Warning** – Use this column to indicate the maximum number of toppings allowed for this base before the user receives a warning indicating that there are too many toppings on the pizza. The total number of toppings will display on the section button. Typically this option is used to indicate that there are physically too many toppings on the section. ◆ Select the available sectioning options for each record. Unchecked sections will not be available for this base in Operations.

Module	Feature
POS Operations Cont'd	5. Repeat steps 2-4 for all OM Bases. 6. (Optional) Go to the *POS Configurator	Ordering Module	Configuration* form. Select a **Default Base** from the drop down box. This identifies how the Ordering Module will begin every pizza unless otherwise indicated by the user. 7. Save all records
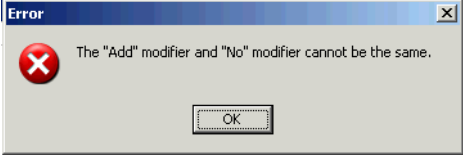
Module	Feature
POS Operations Cont'd	*Setup OM Topping Types* Toppings are a special type of menu item that allows a server to customize an order to meet a customer's specific request. In the Ordering Module, toppings are used as modifiers to a specialty item. If an inventory application is used at the site, there may be multiple menu item records configured for a single topping (e.g., Pepperoni Italian Thin Crust, Pepperoni Stuffed Crust, etc.). In order to streamline configuring specialty items, MICROS has introduced topping types. This form is used to define topping types to be linked to several menu items (e.g., multiple instances of Pepperoni). Later when configuring specialties, you will only need to link the appropriate topping type with the specialty record with that topping already configured (e.g., Pepperoni Specialty). Follow these steps to configure topping types in OM: 1. Go to the *POS Configurator	Ordering Module	Topping Type* form and add a record. A separate record must be created for each topping type (e.g., Cheese, Mushrooms).

Module	Feature
POS Operations Cont'd	Toppings will appear in the Ordering Module in the order in which they are added on this form. For example, toppings configured as above would appear as the image below. 2. Enter a descriptive **Name** for this topping in the *Name Column.* This will be used in the OM GUI to identify this topping. 3. Configure the following options for this topping record: ◆ **OM Configuration** – Select the OM Configuration (e.g., pizza) associated with this topping record. If the OM Configuration is not selected for this record then the changes cannot be saved. 4. Save all records. The *Linking* table and the available *Sizes* must be configured later in the programming process.

Module	Feature
POS Operations Cont'd	*Setup Specialties* This form is used to configure all specialty items in OM. Every item ordered using the Ordering Module must begin with a specialty. Follow these steps to configure specialties: 1. Go to the *POS Configurator	Ordering Module	Specialties* form. 2. Add a specialty record. Each specialty item must have its own record. Specialties will appear in the Ordering Module in the same order as they are configured on this form. For example. specialties configured as in the example above will appear as follows:

Module	Feature
POS Operations Cont'd	3. Highlight a specialty record and go to the *Topping Type* table. Use the Blue Plus Sign to add a topping to this specialty. These are the toppings that are included with the specialty (e.g., a Veggie Lover's Specialty includes Mushroom and Tomato toppings). 4. Repeat Steps 2 and 3 for every specialty. 5. Save all records. The *Base/Section* tab cannot be configured at this time but will be configured later in the OM Linking section. 6. (Optional) Go to the *POS Configurator	Ordering Module	OM Configuration	General* tab. Select a Default Specialty item. This will be the specialty item automatically selected when the server begins an order in OM. The server will be able to change the specialty, if desired. 7. Save the record.

Module	Feature
POS Operations Cont'd	*Setup Topping Modifiers* A Modifier provides additional instructions with how the topping should be used when preparing the order. For example, if a customer requests extra pepperoni on their pizza. Additional topping modifiers could be No, Double, Add, and Light to reflect all of the different ways that a customer may customize their order. Follow these steps to configure topping modifiers: 1. Go to the *POS Configurator	Ordering Module	Topping Modifiers* form. Automatically lists the Add and No modifier defaults 2. Add a Topping Modifier record and enter a **Name**. This should be a friendly descriptor that will easily identify how the topping will be applied to the specialty (e.g., Double). **NOTE**: Operations will transition through the modification states in the order they are configured. In order for the states to appear correctly **Add** must be configured as the first modifier and **No** must be the last modifier.

Module	Feature
POS Operations Cont'd	3. Configure the following fields: ◆ **Add Modifier** – Use this field to select the title that will be assigned to a topping type when it is being added to a specialty via the Ordering Module. This title will be listed before the topping type in the Guest Check Detail as well as on the Guest Check. Selecting the **[Change "Add" to Current Modifier]** key will replace "Add" with the name of the record currently being configured. The Add modifier and No modifiers must have unique names, otherwise an error message will appear. ◆ **No Modifier** – Use this field to select the title that will be assigned to a topping type when it is being removed from a specialty via the Ordering Module (e.g., No). This title will be listed before the topping type in the Guest Check Detail as well as on the Guest Check. Selecting the **[Change "No" to Current Modifier]** key will replace "No" with the name of the record currently being configured. The Add modifier and No modifiers must have unique names, otherwise an error message will appear.

In the Add Modifier section, an error dialog box is shown:

Error — The "Add" modifier and "No" modifier cannot be the same.

OK
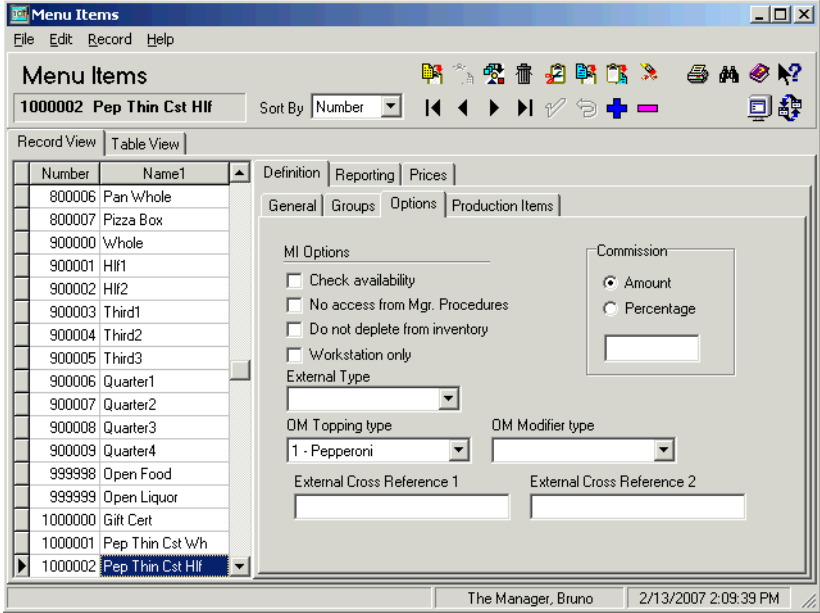
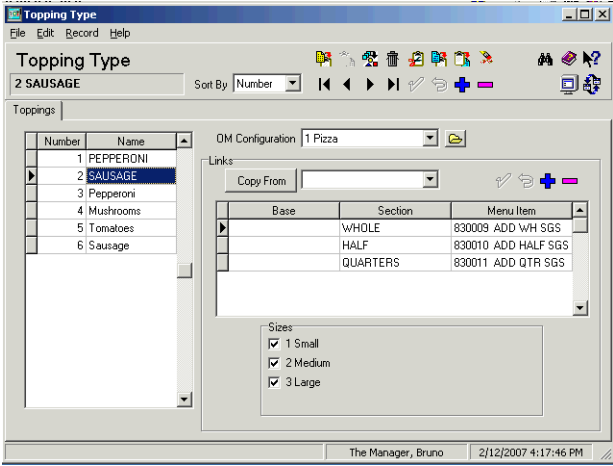| Module	Feature

POS Operations Cont'd	◆ **Count Modifier** – This identifies how the topping should be modified when this record is selected. This option only applies to free toppings in an order and is used in conjunction with the Allowed Topping Count (ATC) on the *Specialties* tab. The value selected will depend on the selected topping modifier.
	
	   ◆ If the modifier indicates that a topping should be added then enter a value of **1**.
	
	   ◆ If the modifier indicates that a topping should be eliminated from the order then enter a value of **0**.
	
	   ◆ If the modifier indicates that a topping should be doubled then enter a value of **2**.
	
	   ◆ After each number a decimal can be added to denote fractions (e.g., 1.5).
	
	For example, if a customer ordered a Large 2 Topping Specialty Pizza with Mushrooms, a double order of Pepperoni, and Sausage then the count modifiers would appear as follows on the guest check:

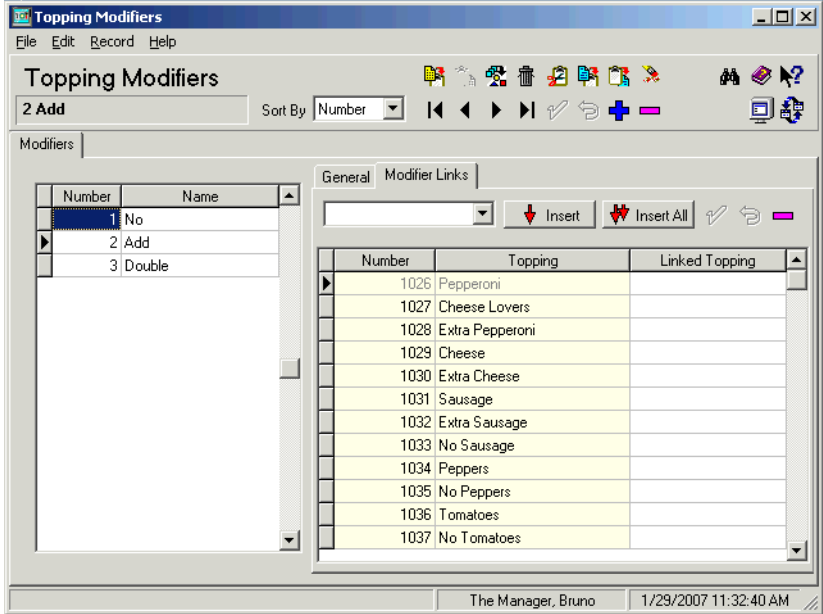| Module	Feature
POS Operations Cont'd	◆ **Caption** – This is how the modifier will be listed on the bottom on the topping button in the OM GUI. Provide an abbreviation to describe this topping modifier. Special characters such as a "+", or a "-" can be used. Be certain that the caption provides an easy to understand description of how this topping will be used. ◆ **Skip on Specialty** – Enable this option if this topping should be skipped for toppings that are part of a specialty item. For example, a Pepperoni pizza specialty by default contains a Pepperoni topping. Selecting this option would prohibit the user from modifying the Pepperoni topping with an add modifier. ◆ **Skip on Additional Toppings** – Enable this option to skip this topping modifier for a topping that is being added to the order but is not part of the selected specialty. This option can be applied to topping modifiers such as "extra" that should be applied when a topping has already been added to a specialty, but should not be applied if the topping is not already included. For example, suppose a Pepperoni specialty pizza comes with a double order of Pepperoni. A customer orders a Pepperoni pizza with **extra** Pepperoni and Tomatoes. If this option is selected the extra can be applied to the Pepperoni but not the Tomatoes. ◆ **Selected Color** – Use the drop down box to select the color that will display when a specific topping modifier is selected in Operations. 4. Repeat steps 2 and 3 for all topping modifiers. 5. Save all records. The *Modifier Links* tab cannot be configured at this time but will be done later in OM programming.

Module	Feature
POS Operations Cont'd	*OM Linking* Now that several of the basic OM configuration forms have been set up, you can now complete the process of creating menu items and linking them in the ordering module. This section is divided as follows: ◆ Creating Topping Menu Items ◆ Adding the OM Topping Links ◆ Adding the OM Topping Modifier Links ◆ Creating Specialty Menu Items ◆ Adding the OM Specialty Item Links

Module	Feature
POS Operations Cont'd	◆ **Creating Topping Menu Items** Special consideration should be made for a site using an inventory application. For example, the amount of Pepperoni used may be different for a thin crust pizza versus an Italian crust pizza. The user may need to define several menu items for Pepperoni, one for the thin crust pizza, and another for the italian crust pizza. Be aware that the amount of topping may vary by the section and specialty item. Topping distribution related to base size is taken into account with menu levels. A separate menu item must be create for each recipe tracked in the inventory application that will change the amount of topping used if the change is not based on a menu level change. For example, the amount of Pepperoni used may be different for a Thin crust pizza versus an Italian Crust pizza. Therefore, the user must define the different amount of Pepperoni required for each type of pie (e.g., Pepperoni Italian) and the name for each topping should be descriptive. The user must identify all sectioning and base combinations for that topping (e.g., Pepperoni Italian half). For example, a single pizza can be ordered as half Pepperoni, half plain. This recipe will require that less Pepperoni be used tan if the entire pizza were Pepperoni. Prices may fluctuate depending on the base and sectioning options selected, therefore you will need to create a menu item for each base/section combination. Anytime a price or recipe changes based on base, section, or topping modifier, you may need to add another menu item for that topping. For example, the pricing on a half portion of Pepperoni may differ from a whole portion of Pepperoni. Because topping setup and pricing can vary depending on whether an inventory package is used at the site, MICROS has provided three examples of different operational scenarios. For additional information and configuration examples, see the *Usage: Topping Pricing* section beginning on page 80.

Module	Feature
POS Operations Cont'd	Prices may fluctuate depending on the base and sectioning options selected, therefore you will need to create a menu item for each base/section combination. Bases are normally not priced, the exception being is a certain type of base should cost more (e.g., a Stuffed Crust is $1.00 more per pizza). The user will also need to create a menu item for each modified topping version (e.g., no, light, double, add). 1. Go to the *POS Configurator/ Sales / Menu Items* form and add a menu item record. 2. In the **Name1** field enter the name for this OM topping to be used in POS Configurator. Every topping must have an associated menu item record. Use descriptive names that can easily be identified in Operations (e.g., Whole Pepperoni Italian Thin Crust, Half Pepperoni Italian Thin Crust). A unique name must be created for each record. If an inventory application is used at the site a unique name must be created for records with different recipes, so that the user can differentiate between them. 3. The **Name2** can be configured to be the name of the menu item record as it will appear on the Guest Check Detail and in the GUI. This can be a simplified version of Name 1 (e.g., Pepperoni). 4. Link the record with the appropriate **Menu Item Class** (e.g., Pizza Toppings) associated with this menu item.

Module	Feature

POS Operations Cont'd	5. Go to the *Options* tab and use the **OM Topping Type** drop down to select the corresponding OM topping.
	
	6. Use the **OM Modifier type** drop down box to select the modifier that can be applied to this menu item. Only one modifier can be applied for topping.
	
	7. Use the *Prices* tab to configure the prices for this menu item. Configure the following field:
	
	    ◆ **Fixed Pricing** – Enter the amount that a customer will be charged when ordering this menu item. Each price level is associated with a menu level which corresponds to a size.
	
	8. Repeat steps 1-6 for every available topping for this OM item. If several records are needed for each specialty, then the block copy feature may be useful.
	
	  To block copy select the icon at the top of the screen.
	
	9. Save all records.

Module	Feature
POS Operations Cont'd	◆ **Adding the OM Topping Links** For each topping type the user must identify all of the Base, Section, Topping combinations possible. Anything not entered here cannot be added in the Ordering Module during operations. Follow these steps to complete this section: 1. Return to the *POS Configurator	Ordering Module	Topping Types* form. 2. Use the table to list all base, section, and topping combinations that can contain this topping type. The Base type can be set to NULL (e.g., left blank) for all records if the sectioning option can be universally applied to all bases. 3. Select the *Sizes* to which this topping can be applied. 4. Save the record. 5. Repeat steps 2-4 for each topping type. To copy the configuration settings from one topping into a new record select the record to be copied in the drop down box and click the **Copy From** button. This will overwrite the existing rows with those selected in the drop-down box. The *Base* and *Section* columns will be copied, however the *Menu Item* column must be linked manually.
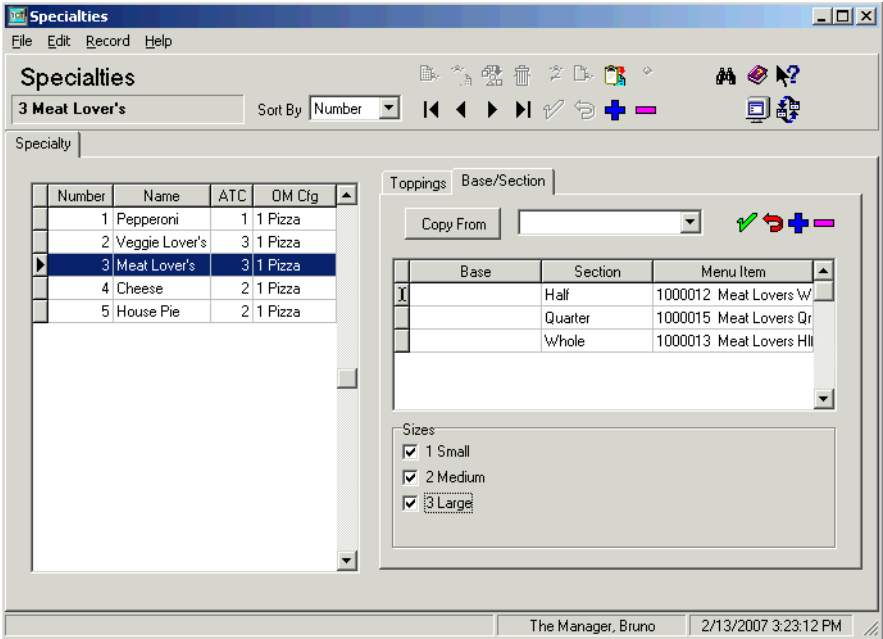
Module	Feature
POS Operations Cont'd	Nothing will happen if **Copy From** is selected but no record is selected in the drop down box. If the record selected in the drop down box contains no records then the highlighted record will not be overwritten. This feature allows you to fully configure toppings as a template. ♦ **Adding the Topping Modifier Links** Use this form to identify the ways in which a topping can be altered when adding to an order, or when modifying a topping that is part of a specialty. 1. Use the *Modifier Links* tab to associate the topping in OM with its equivalent menu item. Toppings will display by object number.

Module	Feature
POS Operations Cont'd	The yellow columns (Number and Topping columns) are read-only and are automatically populated by the toppings linked to the Add modifier (see the Setup Topping Modifiers section on page 58). If the Add modifier is deleted or changed, the system will delete the ENTIRE modifier link table for all records. Before this action is performed the user will receive an error message. Changing the No modifier will have no effect on the Links table. When a No or Add modifier is highlighted, the drop down box above the *Links* table will automatically populate with toppings associated with this modifier. These modifiers are assigned to toppings on the *POS Configurator	Sales	Menu Items	Options* tab.

Module	Feature

POS Operations Cont'd	2. Configure the following fields for each record.
	
	    ◆ **Insert / Insert All** – The system will add all of the topping that can be altered using this topping modifier. To insert a single record use the drop down box to highlight a record and select the **[Insert]** button. Select **[Insert All]** if all toppings can be altered using this modifier.
	
	      When the add, no, or double modifier record is selected, only the list of menu items that match the topping type will be listed in the drop down box.
	
	    ◆ The *Linked Topping* column is used to identify the menu items associated with the toppings listed in the table. A single topping type (e.g., Pepperoni) may be associated with several linked toppings. Some sample linked toppings include:
	
	        ◆ **Add Pepperoni** — Menu item that will be added to the check when this topping is added to a specialty.
	
	        ◆ **Double Pepperoni** — Menu item that will be added to the check when a double portion of this topping is added to a specialty.
	
	        ◆ **No Pepperoni** — Menu item that will be added to the check when the user wants to exclude a topping that is normally part of a specialty.
	
	      When a new topping is added, the *Linked Topping* will be pre-populated with the menu item that matches the new topping and modifier.
	
	3. Save all records.
	
	4. Complete steps 2 and 3 for each additional topping modifier.

Module	Feature
POS Operations Cont'd	◆ **Creating Specialty Menu Items** Specialties allow the user to configure signature menu items (e.g., pizzas) with toppings included. A specialty can be as basic as a Cheese Pizza, or much more complicated. One of OM's major enhancements over traditional RES functionality is that all of the included modifications to the order are highlighted in the GUI. If using an inventory package, the quantity of toppings required to prepare a specialty item may differ based on the recipe used. For example, the amount of Pepperoni used may be different for a Meat Lover's specialty pizza versus a Pepperoni specialty pizza. Therefore the user should create a separate menu item for each item that will require that a different amount of toppings be used. Users must identify the permitted section and base combinations for each specialty (e.g., Meat Lover's half). For example, a single pizza can ordered as half Meat Lover's, half Cheese. This recipe will be different than if the entire pizza were Meat Lover's. By configuring specialty menu items, the user must also configure the base price for each specialty. Prices may also fluctuate depending on the base and sectioning options selected, therefore you will need to have a menu item for each base/section combination. 1. Go to the *POS Configurator/ Sales / Menu Items* form and add a menu item record. 2. In the **Name1** field enter the name for this OM specialty. This name will be used in POS Configurator, therefore make sure that you use a friendly descriptor (e.g., Whole Meat Lover's Italian Thin Crust, Half Meat Lover's Italian Thin Crust). A unique name must be created for each record. If an inventory application is used at the site this will include a unique name for records with different recipes, so that the user can differentiate between them.

Module	Feature

POS Operations Cont'd	3. The **Name2** should be configured to be the name of the menu item record as it will appear on the Guest Check Detail and in the GUI.
	
	4. Link the record with the appropriate **Menu Item Class** (e.g., Pizza Specialties) associated with this menu item.
	
	5. Use the *Prices* tab to configure the prices for this menu item. Configure the following field:
	
	    ◆ **Fixed Pricing** – Enter the amount that a customer will be charged when ordering this menu item.
	
	6. Repeat steps 1-5 for every available specialty for this OM item. If several records are needed for each specialty, then the block copy feature may be useful.
	
	    To block copy select the icon at the top of the screen.
	
	7. Save all records.

Module	Feature
POS Operations Cont'd	◆ **Adding the Specialty Item Links** 1. Go to the *Base/Section* table and identify all of the combinations associated with this specialty. If neither pricing or recipes are a consideration at the site the base can be set to NULL (left blank) so that the section and topping combinations can apply to all bases. In these cases, this will result in significant less programming effort. In a situation where a particular topping is linked to a NULL base and an actual base, the link for the actual base will take precedence. For example if the following two records are configured: Record 1: Pepperoni + NULL + Whole =Whole Pepperoni Record 2: Pepperoni + Pan + Whole = Pan Pepperoni Then record number 2 will take precedence in the Ordering Module.

Module	Feature
POS Operations Cont'd	◆ If you have already configured a specialty, you can use the **[Copy From]** button and drop down menu to copy a the *Base/Section* table from another record. ◆ Use the drop down menu to select the base **Menu Item** associated with this OM Configuration. This is the menu item that will be added to the check. 2. Enable the **Sizes** that may be applied towards this specialty item. Some locations may want to limit the size availability for some items. 3. Save the record. 4. Repeat steps 1-3 for each additional specialty item. *Ordering Module Combo Meal Configuration* A combo meal is a frequently configured set of items that bundles together a group of menu items (e.g., 2 medium pizzas with 2 toppings for $9.99) to offer a price advantage over ordering the items a la carte. This is frequently As an additional advantage, selecting a single combo meal item will increase the speed of service over selecting the items separately. If a combo meal contains a base item, the Ordering Module can be used to build the item. This form is used to specify the size, default specialty, and optional specialties that can be substituted. The user cannot enter multiple quantities for an OM Combo Meal. Each combo meal must be entered separately. Attempting to configure a quantity will result in the following error message: `Quantity Not Allowed On An Ordering Module Menu Item` The selected base and quantity will then be cleared automatically.

Module	Feature
POS Operations Cont'd	Follow these steps to configure combo meals for OM. This is optional: 1. Go to the *POS Configurator	Ordering Module	OM Combo Meals* form. 2. Add a record. A separate record must be created for each combo meal. 3. Configure the following fields for this record: ◆ **Combo Group** – Use the drop down box to select the Combo Group associated with this record. If one does not already exist, create a combo group (*POS Configurator | Sales | Combo Groups*) associated with the base menu item(s). ◆ **Default Specialty** – Use the drop down box to determine the default specialty associated with this combo meal. The specialty can be changed by the user, if desired. ◆ **Size** – Identify the default size associated with this combo meal. The number corresponds to the number associated with the size record.
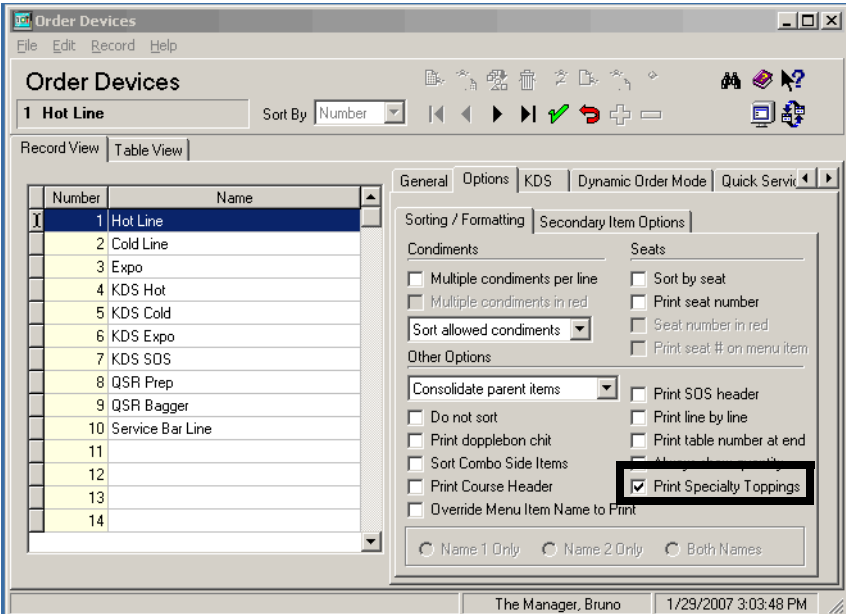
Module	Feature
POS Operations Cont'd	◆ **Toppings Priced** – Enable this option if all of the toppings added to this meal should be priced in addition to the combo meal price. Leave this box unchecked if topping prices are to be rolled into the price of the combo meal. ◆ Use the *Specialty* table to identify all of the Specialties that can be used with this combo meal. Add a separate record for each specialty. Leave this table blank if the customer cannot substitute specialties. 4. Save all records. 5. Repeat steps 2-4 for every additional combo meal that contains a base item. **NOTE:** This data is used to extend the combo group definition. Therefore the combo group name must be unique.

Module	Feature

POS Operations Cont'd	*Touchscreen Keys*
	
	To access the GUI in Operations, the user must add a touchscreen key to the applicable screen. The following touchscreen keys have been added to support this feature:
	
	◆ **Build Order** – When selected opens the Ordering Module GUI, allowing the placement and modification of orders. Follow these steps to add this key:
	
	   1. Go to *POS Configurator
		Devices	Touchscreen Designer* and select the appropriate touchscreen.
			
			   2. Add a button.
			
			   3. Go to the **Category** field and select **Function: Build Order**. This will cause the GUI to automatically generate when this key is selected.
			
			   4. Go to the **Build** field and select the OM Configuration that you would like to link to on this touchscreen page. A separate key must be added for each OM Configuration.
			
			   5. Save all records.

Module	Feature
POS Operations Cont'd	◆ **Edit Order** – Allows the user to edit an order that has already been entered in OM. When editing an order the user has two options. They can either select the order and touch this key, or if the most recently ordered item in the Guest Check Detail is the OM Configuration item, then they can simply select this key. Follow these steps to add this key: 1. Go to *POS Configurator	Devices	Touchscreen Designer* and select the appropriate touchscreen. 2. Add a button. 3. Go to the **Category** field and select **Function: Transaction**. This will cause the GUI to appear when this button is selected. 4. Go to the **Function** field and select **Edit Order**. 5. Save all records.

Module	Feature
POS Operations Cont'd	*Printing Options* The user has the ability to modify how specialty items will print when they are sent to the kitchen. A new option has been added which allows the user, when printing a specialty item, to print all of its associated toppings. To enable this feature select the **Print Specialty Toppings** option on the *POS Configurator | Devices | Order Devices | Options | Sorting/Formatting* tab. This option will be especially beneficial for new employees that are learning the composition for each special. Printing the toppings will prevent errors in the kitchen.

Module	Feature
POS Operations Cont'd	If a topping is modified or added to the specialty then the modification will also print. If the **Print Specialty Toppings** option is disabled only the topping modification will print. MIKE ROSE RESTAURANT & GRILL 7031 COLUMBIA GATEWAY DR. COLUMBIA, MD 21046 410.285.6000 www.MICROS.com 1 Cheese Pizza 　Whole 　Meat Lovers 　Pepperoni 　Sausage 　Bacon 　+Anchovies Indicates that a topping has been added to the order. The "+" symbol is configurable on the *POS Configurator	Ordering Module	OM Configuration	General* tab.

Module	Feature
POS Operations Cont'd	**Usage: OM Pricing Models** There are several layers to pricing items in the ordering module. One of the areas that should be given special attention is the pricing of toppings. If an inventory management package is used at the site, configuration of this section will be affected. There are several ways to set up topping pricing. The pricing method used will depend largely on whether or not an inventory management package is used at the site. For example, the amount of Pepperoni used may be different for a Thin crust pizza versus an Italian crust pizza. Therefore the user must define different amount of Pepperoni required for each type of pie (e.g., PepperoniItalian), and the name for each topping should be descriptive. Consider the following when pricing an OM topping menu items: ◆ Sizes are controlled by Menu Level. Use Price 1 through 10 to reflect different sizes. ◆ When pricing a pizza, pricing begins with the cost of the special. All additional costs (e.g., toppings) are added to the specialty item price. ◆ Bases are not usually priced. The exception is when a crust should cost more. For example, a Stuffed Crust costs $1.00 additional per pizza. ◆ Topping are priced according to sections, portion size, and modifier type. This sections provides examples on how to configure the pricing in the ordering module. The three models listed below demonstrate different configurational scenarios depending on how inventory is tracked at the site. Each model describes when it should be used and contains a configuration scenario. This section deals with the creation relevant menu items and linking them in OM only. For additional information on configuring this feature in general, including screen shots, see the Configuration section beginning on page 28.

Module	Feature

POS Operations Cont'd	*Basic Pricing*
	
	The goal of this pricing scenario is to indicate the price for each topping type. This model does not take inventory into account. Use this model if:
	
	◆ The site does not want to take inventory into account.
	
	◆ Topping prices will remain constant regardless of the type of crust used, specialty or sectioning option selected.
	
	Example
	
	The Mike Rose Cafe sells pizzas made with two types of crusts, Thick Crust and Thin Crust. Each crust type has the same sectioning options, Half and Whole. The price for toppings is the same regardless of whether it is ordered on half of a pizza or on the entire pizza. The menu is displayed in the table above.
	
	For this situation, the user would only need to add topping menu items to reflect different topping modifiers (e.g., Add, No, Double).
	
	Follow these steps to configure the Ordering Module for the basic topping price scenario.
	
	1. Go to the *POS Configurator | Sales | Menu Items* form and configure as follows.
	
	    ◆ Add two menu item records, one for the thick crust and one for the thin crust. No price is needed for these bases.
	
	    ◆ Link both menu items to the base menu item class on the *General* tab.

Within the Feature cell, an embedded menu table appears:

	Large	Small
Cheese Pizza	$10.00	$6.00
Everything Pizza Includes: Pepperoni, Mushrooms, Onions	$16.00	$8.00
Additional Toppings: Pepperoni, Sausage, Mushrooms, Green Peppers, Onions, Black Olives	$1.50	$1.00

Module	Feature

POS Operations Cont'd	2. Add the following four specialty menu items. These four menu items will correspond to the two specialties (cheese and everything pizzas) as the two sectioning options (whole and half).
	
	♦ You will need to add 4 menu items, Cheese Whole, Cheese Half, Everything Whole, and Everything Half.
	
	♦ For all of the whole specialties, add prices 1 and 2 to reflect different pizza sizes. The prices entered in these fields are determined by the configured **Pricing Method** (*POS Configurator | Ordering Module | OM Configuration*).
	
	    ♦ If using the **Actual Price**, add the whole price of the specialty.
	
	    ♦ If using the **Most Expensive** section, use the whole price. .
	
	♦ For half specialties, add the Prices 1 and 2 to reflect different pizza sizes. The prices entered in these fields are determined by the configured **Pricing Method** (*POS Configurator | Ordering Module | OM Configuration*).
	
	    ♦ If using the **Actual Price,** add the half of the whole price of the specialty.
	
	    ♦ If using the **Most Expensive** section, use the whole price of the specialty.

Table 1 (If using the Actual Price, whole):

	Large	Small
Cheese	$10.00	$6.00
Everything	$16.00	$8.00

Table 2 (If using the Most Expensive section, whole):

	Large	Small
Cheese	$10.00	$6.00
Everything	$16.00	$8.00

Table 3 (If using the Actual Price, half):

	Large	Small
Cheese	$5.00	$3.00
Everything	$8.00	$4.00

Table 4 (If using the Most Expensive section, half):

	Large	Small
Cheese	$10.00	$6.00
Everything	$16.00	$8.00

Module	Feature

POS Operations Cont'd	3. For this pricing scenario, you will need to add 24 topping menu items. One menu item must be configured for each topping and topping modifier (e.g., No Pepperoni, Add Onions).
	
	  ◆ For each of the listed toppings you will need to create one Add topping version (8 menu items), one No topping version (8 menu items), and one Double topping version (8 menu items).
	
	  ◆ The Add topping version will contain a price level 1 and 2.
	
	  ◆ The No topping version will not be priced.
	
	  ◆ The Double topping version will contain a price level 1 and 2. These prices should be two times the prices for the Add topping version.

Module	Feature
POS Operations Cont'd	*Moderately Advanced Pricing* The goal of this pricing scenario is to indicate the price for each topping type taking into account different topping modifiers and sectioning options. This scenario is similar to the basic pricing scenario except that sections are also accounted for. Use this model if: ◆ The site wants to track inventory by topping on sections. ◆ Topping prices or portions will vary based on the sections of the pizza that they are used on. **Example** The Mike Rose Cafe sells pizzas made with two types of crusts, Thick Crust and Thin Crust. Each crust type has the same sectioning options, Half and Whole. The price for toppings will vary depending on whether the toppings are used on half of the pizza or the entire pizza. If a customer orders a thin crust pizza they will receive 4 ounces of toppings, and if they order the thick crust they will receive 6 ounces of toppings. The menu is displayed in the table below.

	Large		Small	
Cheese Pizza	$10.00		$6.00	
Everything Pizza Includes: Pepperoni, Mushrooms, Onions	$16.00		$8.00	
Additional Toppings: Pepperoni, Sausage, Mushrooms, Green Peppers, Onions, Black Olives Toppings on the Whole Pizza = 0.75	Whole $1.50	Half $0.75	Whole $1.00	Half $0.50

For this situation, the user will need to add topping menu items to reflect different topping modifiers (e.g., Add, No, Double), and sectioning options (e.g., whole, half).

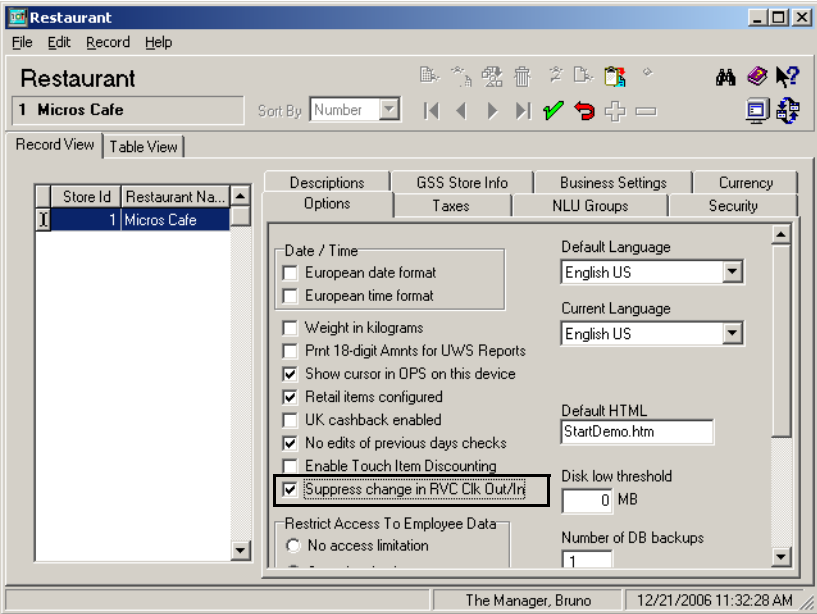| Module	Feature
POS Operations Cont'd	Because the Moderate scenario is similar to the Basic scenario, much of the configuration is the same. This example will begin where the basic scenario left off. Follow these steps to configure the Ordering Module for the basic topping price scenario: 1. For this pricing scenario 48 toppings should be created. ◆ Add 24 toppings as described in the *Basic Pricing* section. When naming these toppings, indicate that these toppings are for the whole portion of the pizza (e.g., Pepperoni Add Whole, Onions No Whole). Make sure that the names of the menu items are descriptive and can be easily identified later in the configuration process. ◆ The Add topping version will contain a price level 1 and 2. ◆ The No topping version will not be priced. ◆ The Double topping version will contain a price level 1 and 2. These prices should be two times the prices for the Add topping version.

The Add topping version will contain a price level 1 and 2.

	Price 1	Price 2
Topping 1	$1.50	$1.00
Topping 2	$1.50	$1.00

The No topping version will not be priced.

	Price 1	Price 2
Topping 1	$0.00	$0.00
Topping 2	$0.00	$0.00

The Double topping version will contain a price level 1 and 2. These prices should be two times the prices for the Add topping version.

	Price 1	Price 2
Topping 1	$3.00	$2.00
Topping 2	$3.00	$2.00

Module	Feature
POS Operations Cont'd	2. A second set of 24 menu items should be added to account for the half sectioning options. When naming these toppings indicate that these are for half portions of the pizza (e.g., Pepperoni Add Half, Onions No Half). ◆ The Add topping version will contain a price level 1 and 2. These prices should roughly be half of the price for the whole version of this topping.

<table>
<tr><td></td><td>Price 1</td><td>Price 2</td></tr>
<tr><td>Topping 1</td><td>$0.75</td><td>$0.50</td></tr>
<tr><td>Topping 2</td><td>$0.75</td><td>$0.50</td></tr>
</table>

◆ The No topping version will not be priced.

<table>
<tr><td></td><td>Price 1</td><td>Price 2</td></tr>
<tr><td>Topping 1</td><td>$0.00</td><td>$0.00</td></tr>
<tr><td>Topping 2</td><td>$0.00</td><td>$0.00</td></tr>
</table>

◆ The Double topping version will contain a price level 1 and 2. These prices should be two times the prices for the Add topping version. These prices should roughly be half of the price for the whole version of this topping.

<table>
<tr><td></td><td>Price 1</td><td>Price 2</td></tr>
<tr><td>Topping 1</td><td>$1.50</td><td>$1.00</td></tr>
<tr><td>Topping 2</td><td>$1.50</td><td>$1.00</td></tr>
</table>

Module	Feature
POS Operations Cont'd	*Advanced Pricing* This model takes into account the different portion size for each crust, size, and section combination. Use this scenario if: ♦ An inventory management package is in place. ♦ Topping prices and portions will vary based on the pizza base and sectioning options. The Advanced scenario takes some of the concepts developed in the *Moderately Advanced* pricing scenario. Just as with the Moderately advanced scenario, the user will have to create a separate menu item for each topping to account for all of the possible topping modifiers and sections. The difference is that topping prices can also vary based on the type of base used. For example, 4 ounces of green peppers are used for a thin crust pizza, but 6 ounces of green peppers are used on a thick crust pizza. Because the recipe will vary by base, separate menu items should be created for each. **Example** The Mike Rose Cafe sells pizzas made with two types of crusts, Thick Crust and Thin Crust. Each crust type has the same sectioning options, Half and Whole. The price for toppings will vary depending on whether the toppings are used on half of the pizza or the entire pizza. The menu is displayed in the table below.

	Large		Small	
Cheese Pizza – Thin Crust	$10.00		$6.00	
Cheese Pizza – Thick Crust	$10.00		$6.00	
Everything Pizza - Thin Crust Includes: Pepperoni, Mushrooms, Onions	$16.00		$8.00	
Everything Pizza - Thick Crust Includes: Pepperoni, Mushrooms, Onions	$16.00		$8.00	
Additional Toppings:	Whole	Half	Whole	Half
	$1.50	$0.75	$1.00	$0.50
Pepperoni, Sausage, Mushrooms, Green Peppers, Onions, Black Olives				
Toppings on the Whole Pizza = 0.75				

Module	Feature

POS Operations Cont'd	**For this situation, the user will need to add topping menu items to reflect different topping modifiers (e.g., Add, No, Double), sectioning options (e.g., whole, half), and bases (e.g., thin, thick).**
	
	This example begins where the Moderately Advanced scenario leaves off.
	
	1. The 48 topping menu items previously configured will be attributed to thick crust. When naming these toppings, indicate that these toppings are for the thick crust base (e.g., Pepperoni Add Thick Whole, Onions No Thick Whole). Make sure that the names of the menu items are descriptive and can be easily identified later in the configuration process.
	
	    ◆ These menu items would be linked to the thick crust recipes in the inventory management package.
	
	2. A second set of 48 menu items should be created for thin crusts.
	
	    ◆ Pricing for these menu items would be the same as for thick crust unless the site would like to charge a different amount for different bases.
	
	    ◆ This set of toppings will be linked to the thin crust recipes in the inventory management package.
	
	Note on Topping Modifiers
	Certain topping modifiers may require different setup if a different amount should be charged if the topping is included on a specialty pizza versus if it is added to a specialty. This situation may apply to topping modifiers such as light, and double. In this situation you may need to create an additional set of toppings.
	
	For example, the Everything Pizza in our example includes Mushrooms. A double order of mushrooms would indicate that one additional portion of mushrooms should be added to the already included Mushroom topping (in essence a single order of mushrooms is added to the pizza). The user may then want to charge a different price than if a double portion was added to a regular pizza where mushrooms were not included.

Module	Feature
POS Operations Cont'd	In this situation the user should create two sets of Double toppings. ◆ Price the first set of the menu items as if it was a single portion of the topping. For this item configure the **Skip on Additional Toppings** option (*POS Configurator | Ordering Module | Topping Modifiers*). ◆ Price the second set of menu items at double topping prices. For this menu item configure the **Skip on Specialty** option (*POS Configurator | Ordering Module | Topping Modifiers*). ### SIM Scripts Support for OM The following SIM Variables have been added to support the Ordering Module. All of the variables below are read only detail status variables. ◆ dtl_is_om ◆ dtl_is_om_base ◆ dtl_is_om_container ◆ dtl_is_om_section ◆ dtl_is_om_specialty dtl_is_om_topping

Module	Feature
POS Operations Cont'd	**Print Cancel Voucher Function added to Transaction Services** A new function has been added to the POS Transaction Service called **GET_DEBIT_CANCEL_VOUCHER**.
	Support Added for Multiple Tender Reference Entries in POS API With this release, the POS API will support multiple tender reference entries added to the guest check detail.
	Suppress Revenue Center Clock In and Clock Out When an Employee Switches Revenue Centers The user now has the ability to suppress the clock in and clock out records when an employee switches between revenue centers. As a result the clock in and out entries will not be listed in the Employee Timecard Report and the Job Detail Report, creating a more concise report. To support this feature the **Suppress change in RVC Clk Out/In** option has been added to the *POS Configurator	System	Restaurant	Options* form. Enable the form to start this feature.

Module	Feature
POS Operations Cont'd	**TMS Abandon Waitlist Entry Report Added** With this release, RES has added the *TMS Abandoned Waitlist Report* (**tms_res_abandon.rpt**). This report tracks all manually and automatically abandoned waitlist entries, as well as no shows. The information is useful for tracking reservation trends at a restaurant. ![report image] The report contains the following information: ◆ The date and time of the reservation or walk-in. ◆ When the reservation or walk-in was abandoned, or was listed as a no show.

Module	Feature
POS Operations Cont'd	◆ The number of covers associated with the reservation or walk in. ◆ The name associated with the reservation or walk in. ◆ The reason that the reservation or walk in was abandoned, if one is available. ◆ Total number of reservations/walk ins and covers that were abandoned or did not show for the configured time period.
Setup	**Hotfix Requires Installation of New Prerequisites Version 4.1.8.566** All RES versions 4.1 HF1 or higher will require the installation of Prerequisites version **4.1.8.566** or higher. Patch installation will not work if the incorrect version of the Prerequisites is installed. The new Prerequisites will install new Sybase files (Version 9.0.2.3396) to the server and Win32 clients. The updated Prerequisites is available for download from the MICROS website.

3700 POS Revisions

Module	Feature	CR ID
CA/EDC	**MICROS Database Service Data Encryption Issue Could Cause an Error When Transfering a Batch** The MICROS Database Service (resdbs.exe) would sometimes encrypt sensitive data with the wrong encryption key. As a result, the user would receive an *Error Fetching Batch Records* when attempting to transfer a Credit Card Batch. This has been corrected.	**23620**
	Partial Debit Tenders are Authorizing for the Entire Amount When using CAEDC and ringing a debit tender to partially tender a check with two debit cards, each card would be authorized for the entire amount of the guest check. This issue has been corrected.	**N/A**
	Processing External Debit Transactions for the CaTR Driver Will Mistakenly Prompt the User to Confirm the Tip Amount When adding a tip via a pinpad for the CaTR driver, the workstation would mistakenly prompt the user to confirm the tip amount rather than automatically applying a preconfigured tip amount to the check. This has been corrected.	**N/A**

Module	Feature	CR ID
CA/EDC Cont'd	**TV Driver Does Not Send an Error Message if the RVCs Are Not Linked Properly** In previous versions of the POS Configurator, the CA/EDC Drivers form would not open if the Multiple Merchant feature was enabled and all programmed Revenue Centers were not linked under the *DEVICES	CA/EDC Drivers	Merchant	RVC* tab. This typically would occur after a database was converted to a newer version of RES. Now, when a RVC is not linked properly, the user will receive an error message indicating that the user must link the desired Revenue Center(s) to the corresponding Merchant ID.	**N/A**
	Workstation Freezes When Attempting a Credit Authorization if There is No Host Response When attempting to perform an authorization on a workstation, the screen would freeze while waiting for an authorization if a response was not received from the Host due to an error condition (e.g., "Error waiting for credit auth response"). This resulted in the user not being able to advance to the proper touchscreen to service total or tender the guest check. This issue has been corrected.	**N/A**
Database	**DSM Adapter Fails to Connect to DSM if the Server Name is 15 Characters Long** If a server name of 15 characters or more was entered into the DSM Adapter, then it would fail to connect to DSM. This has been corrected.	**N/A**
	Restoring a Database File Larger Than 4GB in Database Manager Will Not Update Properly When attempting to backup a database that was 4GB or larger, Database Manager would fail to create the MPZ file properly. As a result the function Database Restore would not work properly and the system would not start up after a restore had been performed. This issue has been corrected.	**23187**

Module	Feature	CR ID
Hand Held Device	**Symbol 2800 Prompts the User to Overwrite Files** When downloading new files, the Symbol 2800 device would prompt the user to overwrite the Hhtconfig.Ink, posloader.Ink, and loadDaemon.Ink system files. This is a result of the Pocket PC 2003 Operating System upgrade. To resolve this issue the user must upgrade the hardware platform on the Symbol 2800. Follow the instructions to upgrade the device. A single cradle charging unit is required to update successfully.	**N/A**

Module	Feature	CR ID
Hand Held Device Cont'd	1. Upgrade the Symbol 2800 Operating System to PocketPC 2003, using the utilities and instructions provided in the MICROS Upgrade Kit. **NOTE**: Only the Color Model of the Symbol 2846 (64MB RAM) is compatible with RES 4.x software. The Monochrome 2846 with 32MB RAM will not function with RES 4.x software due to memory limitations. 2. Connect via Active Sync to the handheld device and navigate to the *\Temp* directory. Select *Explorer	My Windows Mobile Device	Temp*. 3. Delete any files remaining from the MicroP image update. 4. Copy the **POSLoader.ARM.CAB** file from the Host PC *\MICROS\RES\CAL\HHT* directory to the *\Temp* folder on the hand held. 5. Disconnect the HHT from ActiveSync. 6. Using the Start menu on the HHT, select *Programs	File Explorer*. 7. Navigate to the *Temp* folder, and run the **POSLoader.ARM.CAB** file. This will install the POSLoader into the hand held's persistent memory. 8. After the CAB file extraction is complete, navigate to the *Windows* folder and select the **POSLoadInstaller**. 9. Exit the File Explorer and click on the Network Icon in the Task Tray. Select **WLAN** Profiles. 10) Select **New**, and enter all Wireless Network settings.	**N/A**

Module	Feature	CR ID
Hand Held Device Cont'd	11. Test the connection by highlighting the profile, and clicking **Connect**. Ensure that the status indicator in the Task Bar indicates that the connection has been established, then click **Close**. 12. From the Start Menu, launch Configure POS by navigating to *Start	Programs	MICROS Setup	Configure POS*.	**N/A**
POS Configurator	**Copying a Touchscreen Will Write Several Rows to the EM Change Log** When a touchscreen was copied, it would write several rows to the EM change log. If the touchscreen has multiple versions, as is the case with an Enterprise Management Corporate Database, the change log would grow even larger. As a result the database would grow to a cumbersome size. This issue has been corrected.	**23383**

Module	Feature	CR ID
POS Configurator Cont'd	**Error Message Received When Saving an EM Job Before Saving an EM Store** When adding a store to an employee without saving and then adding a job for the employee and saving on an EM Corporate database on the *POS Configurator	Employees	Employees	Store Assignment* form would produce the following error: `No primary key value for foreign key cfk2_emp_job_store_def in table emp_job_store_def.` To resolve this issue the following changes have been made to configuration for an EM Corporate database: ◆ The Database Navigation bar in the job section will be disabled if the Store in the store dataset is in Insert mode. ◆ If no stores are assigned to the employee, then the job controls are disabled. ◆ Once a store has been inserted, you cannot change the store, however, all of the other information can be edited.	**N/A**
	If Micros Desktop is Not Installed User Will Receive an Error When Attempting to Open the Back Office Classes Tab in Configurator If the Micros Desktop application was not installed, the user would receive an "Invalid Index" error when attempting to open the *Employees	Back Office Classes* form in POS Configurator. This has been corrected.	**N/A**
	POS Configurator Allows Edit of EM Corporate Controlled Menu Items After editing and saving a menu item in POS Configurator, the system would allows EM stores to change prices on corporate-controlled menu items. This problem has been corrected.	**18812**

Module	Feature	CR ID
POS Operations	**A Menu Item Split Across Multiple Checks Will not Recombine Correctly** When a menu item was split across multiple checks and then recombined into a single check, the item would fail to return to its original state. This has been corrected.	**22843**
	After Restarting Operations the Timed Fire Function Called Via a Macro Would Not Function Correctly When Operations was restarted and the Timed Fire function was called via a Macro, it would not work properly and all of the items in the Guest Check Detail would fire immediately. The issue was caused by the detail selections in the Macro automatically clearing when the Macro was run. To correct this issue a new option bit has been created. For more information see the *Option Bit Added to Retain Guest Check Detail When Macro is Run* section on page 9.	**20449**
	A Void Closed Check Does Not Appear on the Void Reason Code Report Previously, voiding a closed check would prompt the user to enter a reason code but the voided check and reason would not appear on the Reason Code Report. Now when a closed check is voided, the voided check and reason appear on the Return/ Void Reason Code Report.	**N/A**

Module	Feature	CR ID
POS Operations Cont'd	**Attempting to void a Payment From a Reopened Check Could Result in an Error Message** Attempting to void a payment after a check has been reopened could cause the following error message to appear: `Error Encrypting Data` This issue has been corrected.	**23015**
	Closing a Guest Check as a Personal Check, Reopening it and Closing it Again to Cash Will Display an Error Message When a guest check was tendered as a personal check, then reopened and tendered as cash the system would display the following error message: *Credit Card already tendered*. This has been corrected.	**N/A**
	Configuring a Bitmap in Name2 for a Menu Item Will Not Scale the Image to fit the Touchkey When the Name2 of a Menu Item was configured with the name of a bitmap (.bmp) image, the item's touchkey would not scale the image to fit the key. As a result only part of the image would display. This has been corrected.	**23314**
	DOM Cancel Order Automatically Voiding all Guest Check Detail In certain cases, when the Dynamic Order Function Cancel Order was used (e.g., when in KIOSK mode), the system would produce an error and not complete. This has been corrected.	**23185**

Module	Feature	CR ID
POS Operations Cont'd	**Guest Counts can be Inaccurate When Using the Filter Seat Function to Close Out Individual Seats** Previously, when the filter seat function was used to allow individuals at a table to pay their check separately, the guest count could be recorded inflated. This issue has been corrected.	**22192**
	Individual VAT Tax Lines Causing Printing Issues Under Some Configurations with the POS API The following issues could arise as a result of certain VAT Tax lines configurations: ◆ The VAT Tax lines could fail to print. ◆ The VAT Tax was not properly calculating the gross sales in the same way as Operations, resulting in a printer failure. ◆ The API was inaccurately printing zero totals. These issues have been corrected.	**N/A**
	Installing the 4.1 Prereq Patch Caused Menu Items With a Limited Quantity to Display Incorrectly After installing the 4.1 Prerequisites Patch, menu items with a limited quantity available would display with a red X before the item was sold out. This has been corrected.	**23460**
	Taxable Amount for Menu Items with a 0% Tax Rate Will Not Display in Check Info or on Reports When a menu item on a guest check was rung as tax free, the tax free total would not display in the check information nor would it display on a tax report. This issue has been corrected.	**22341**

Module	Feature	CR ID
POS Operations Cont'd	**Tray Total Memo Check Prints All Trays If No Trays are Selected** When a user has already closed a tray, and attempts to pay another tray from that check without selecting a specific tray total, all trays would print including the closed trays. Now, when a check is tendered but a specific tray is not selected, only the open trays will print.	**N/A**
	VAT Tax Formatting Error Causing an Internal Error Message When VAT tax was in place, tendering a check could cause the system to register an Internal Error. This issue has been corrected.	**N/A**
	When the Installation Directory Contained a Space the Bitmap Image Would Fail to Load When the installation directory contained a space in the path, the bitmap image would fail to load in Operations. This has been corrected.	**N/A**
Reports	**Cancelled Check Posting to Checks Begun Total When the System is in DOM** When the system was running in Dynamic Order Mode (DOM), certain checks, when cancelled, were posting to the Checks Begun total, rather than posting to the Void and Credit totals. This has been corrected.	**22900**
	Menu Item by Order Type and Menu Item by Family Group Reports Taking a Long Time to Process Previously, the Menu Item by Order Type and Menu Item by Family Group reports were taking an excessive amount of time to complete. This has been corrected.	**23427**

Module	Feature	CR ID
Setup	**Transaction Analyzer Will Cause An Update to 4.1 to Fail When the Prompt Option is Selected for Employees** Previously, saved Transaction Analyzer configurations that had <<**Prompt**>> selected on the *Personnel	Employee* tab would prevent the database from upgrading to version 4.1. This has been corrected.	**23488**
Transaction Services	**Transaction Services Not Printing Tender Media Reference Entries** The Transaction Services web services was not printing the tender media entries on Guest Checks. This issue has been corrected.	**N/A**
	Transaction Services Would Indent the Menu Item too Much When the Print Condiments on Menu Items Line was Enabled When the **Print Condiments on Menu Items Line** was enabled, the POS Transaction Services would print the menu items on a guest check with too much of an indent. This issue has been corrected.	**N/A**
	Transaction Services Function for Partial Pay Authorization Returns the Entire Amount of the Check The Verifone Vx670 payment device uses the POS Transaction Services to transmit authorization and transactional data to the RES Server. When submitting an authorization for partial payment, the Transaction Service would authorize the card for the entire check amount. This would only occur if the Vx670 device (ServPOS) option for Fine Dine (Auth Only Mode) was enabled. This has been corrected.	**N/A**

Cash Management (CM) New Features and Enhancements

Module	Feature

Backoffice	**Auto Closing of Open Tills**
	
	With this release, the CMAutoCloseTill application has been added. The application will close and deposit any tills that are left open at the end of the night.
	
	When run as part of an End of Night Autosequence, this application will:
	
	1. Close all tills.
	
	2. Open a new till and assign employees to it.
	
	3. Count the new till.
	
	4. If no deposits are open, the application will open a deposit.
	
	5. Deposit the till.
	
	6. After all open tills have been deposited, the deposit is finalized.
	
	Configuration
	Follow these steps to configure this feature:
	
	1. Create an employee class that has the following options enabled:
	
	    ◆ *POS Configurator
		Employees	Employee Classes	Cash Management	General Options*
					
					        ◆ **View Totals**
					
					    ◆ *POS Configurator
						Employees	Employee Classes	Cash Management	Till Options*
									
									        ◆ **Assign till to UWS**
									
									        ◆ **Assign Employee to a till**

Module	Feature
Backoffice Cont'd	◆ **Close till**
	◆ **Count till**
	◆ **Quick start till**
	◆ *POS Configurator	Employees	Employee Classes	Cash Management	Deposit Options*
	◆ **Open Deposit**
	◆ **Close Deposit**
	◆ **Deposit from Till**
	2. Create a new employee with only the above options set. Make sure this employee has a PC Application ID defined.
	◆ The following needs to be set on the *Cash Management Back Office	Options	Main* form.
	◆ The **Cash Tender Item** needs to be linked to a valid tender
	◆ The Item that is Selected needs to have a Unit with "Denominated" = **No.** This is the Unit that the AutoClosed Tills will be "Counted" in. It uses the first it finds
	3. The following needs to be set in the *Cash Management Back Office	Options	Default Templates*:
	◆ The **Default Till Template** needs to be defined.
	◆ The **Default Deposit Template** needs to be defined.
	4. Create an external program or a batch file that runs the *\micros\common\bin\cmautoclosetill.exe*. The syntax to run this is:
	\micros\res\pos\binCMAutoCloseTill.exe -ID <PC Application ID>

Module	Feature
Backoffice	5. Setup an Autosequence to run as part of your end of night. You can choose to add a step to your existing end of night autosequence or create a new autosequence that includes only this item. Make sure you add this item before the Business Date Changes.

Labor Management (LM) Revision

Module	Feature	CR ID
Reports	**The SRGvsActualDayPart Report Displays Numbers Incorrectly** If the report template was configured to display 2 decimal places, but the value did not contain any decimal characters (e.g., 1), the *SRGvsActualDayPart* Report would display a single digit integer as a value in the hundreds (e.g., 1 would display as 100). This has been corrected.	**N/A**