

## **Oracle® Payment Interface**

Oracle Hospitality RES 3700 5.5.1 Native Driver  
Installation Guide

Release 6.1.1

**E85859-01**

April 2017

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# Preface

This document will cover the steps to install Oracle Payment Interface (OPI) using the RES native credit card driver. It will also cover Middleware mode vs Terminal mode and Pay@Table.

## Audience

This document is intended for installers of OPI using the RES native credit card driver in RES 5.5 MR1 and higher.

## Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL: <https://support.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received and any associated log files
- Screen shots of each step you take

## Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at <http://docs.oracle.com/en/industries/hospitality/>

## Revision History

Date	Description of Change
April 2017	<ul style="list-style-type: none"><li>• Initial publication</li></ul>

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# 1 Pre-Installation

## Important Information

- Only RES 5.5 MR1 or later support the native driver solution.
- You must install the CaOPI credit card driver.
- There is no MICROS Gateway Device Handler (MGDH) installation with the native driver solution.
- You can upgrade from OPI 6.1 (6.1.0.9) and higher to OPI 6.1 MR1.
- You cannot upgrade to OPI 6.1 MR1 from any previous MICROS Payment Gateway (MPG) version.
- You must uninstall previous versions of MPG before installing OPI 6.1.
- Batch and settle all credit transactions prior to installing or upgrading OPI.

## Uninstalling Prior OPI/MPG Versions

1. Run POSEOD and verify all previous transactions have been batched and approved in `transaction.log`.
2. Save a backup of the entire existing OPI/MPG folder structure.
3. Start `%OPI_HOME%/bin/MicrosGatewayConfig.exe`.
  - a. Take a screenshot or note of the **ServerXX** values.
  - b. Take a screenshot or note of all the values set for the POS record you will be using. For example, `posRes1`.
4. Uninstall MPG/ OPI through the Microsoft Windows Control Panel.
5. If no other applications use the database, uninstall MySQL through the Microsoft Windows Control Panel.
6. Uninstall MySQL community through the Microsoft Windows Control Panel.
7. Rename the `C:\ProgramData\MySQL` folder to `MySQL_Old`.

If you cannot see the `ProgramData` folder, you may need to configure the Windows Explorer folder options to show hidden folders.
8. Restart the server.

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## 2 OPI Native Driver

### Installation Prerequisites

OPI requires:

- Microsoft .NET Framework version 4.0 or later.
- Microsoft Visual C++ 2010.
- At least 6 GB of free disk space.

CaOPI requires Microsoft .NET Framework version 4.6.1 or later.

Before you start, make sure to know:

- Verify whether the merchant is a table service restaurant (TSR), quick service restaurant (QSR), or both. You cannot use tips in a QSR.
- Verify with the merchant whether they would like Refund functionality activated. The merchant needs to control the privilege for this function.
- Login credentials for an administrator account on the Microsoft Windows operating system.
- Login credentials to the Micros database to enable Pay@Table.
- The Pay@Table certificate password when enabling Pay@Table. The certificate password comes from the OPI partner and should be part of the partner validation process.
- A passphrase to create during the OPI install. You will enter this passphrase in `CreditCards.exe` during configuration.
- If upgrading from OPI 6.1 or later you will need to know the MySQL root user account password.

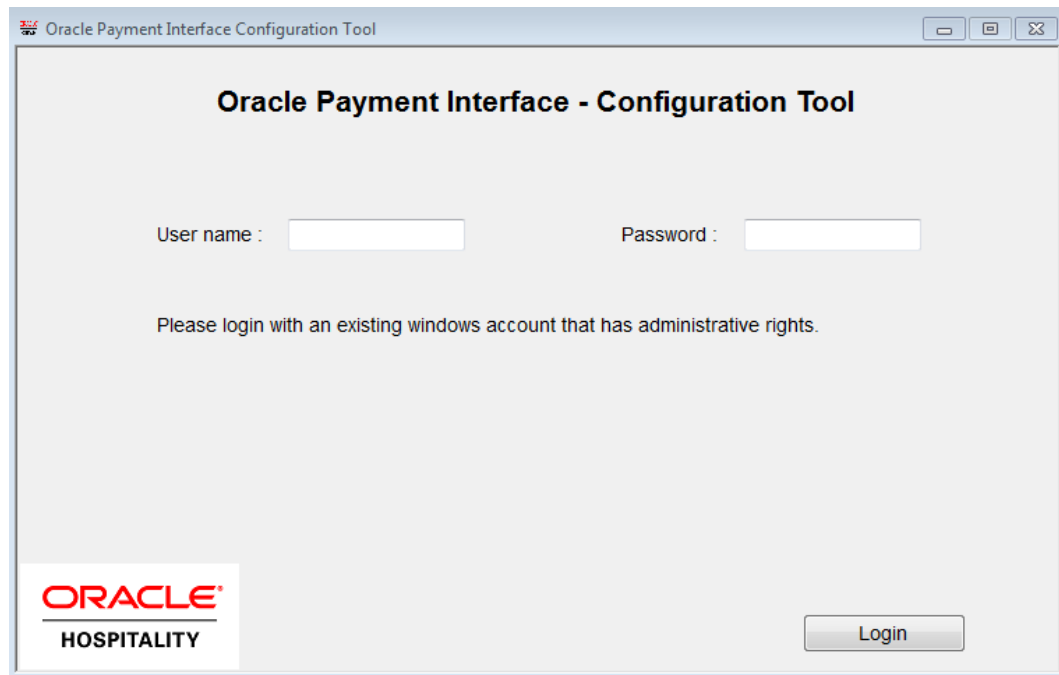
### Installation Wizard

1. Take Micros Control Panel to **off**.
2. Double-click `Oracle Payment Interface-6.1.1.9.exe` to launch the install.
3. On the **Choose your MySQL Root Password** page, create a password, confirm the password, and then click **Next**. This password will be needed for future upgrades.
4. On the **Create DB user for OPI** page, create an OPI database user name and password, confirm the password, and then click **Next**.
5. On the **Choose communication channel** page, select **POS**, select **Native Driver**, and then click **Next**.
6. On the **Configuring POS communication** page, create the passphrase, and then click **Next**. Keep the passphrase for configuring `CreditCards.exe`.



7. On the **OPI Service Restart Task Scheduler** page, enter a date and time for the OPI Service to be restarted once per week, and then click **Next**.
8. On the **Select Destination Location** page, select a location to install files, and then click **Next**.
9. On the **Select Open Source Project Source Code and License Install Folder** page, select the folders to install the source code files, and then click **Next**.
10. Follow the instructions and use the wizard to complete installation.

## Interface Configuration Tool / Wizard



1. The installation wizard launches the Oracle Payment Interface Configuration Tool. If it does not automatically start, double-click `INSTALLATION_DIR\OraclePaymentInterface\bin\OPIconfigurationWizard.exe`.
2. Enter the login credentials to an administrator account on Microsoft Windows, and then click **Login**.
3. Set **POS Interface** to **Enable**.
4. Select **Terminal** from the **OPI Mode** drop-down to allow OPI to communicate directly with the pinpads. Fill in the **Port** value to be used in communicating with the pinpads. If you want OPI to communicate directly with a 3rd-party that controls the pinpads, select **Middleware**, and then go to the [Middleware](#) section.
5. Select **POS Configuration**.
6. For each Merchant ID needed, click **Add New Property** and fill out the form:  
POS Type = POSRES

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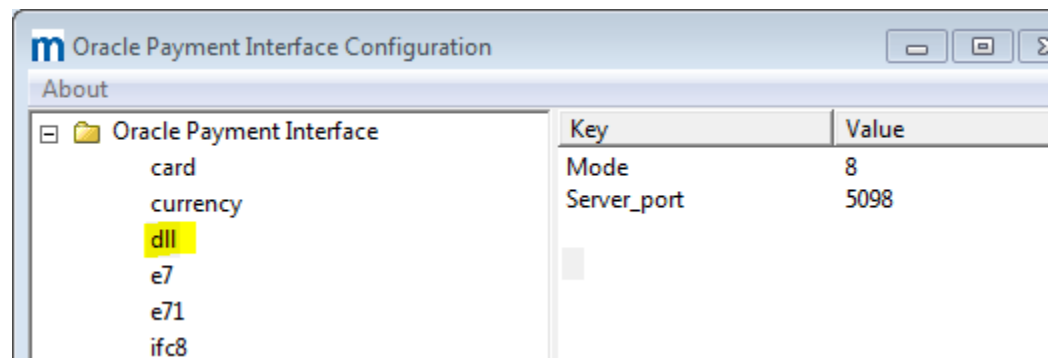
Merchant ID = Enter your Merchant ID.  
PosCrossMerchant = Disable  
PosCrossCheck = Disable  
Pay@Table = Disable  
If you want to enable Pay@Table, see the [Pay@Table](#) section.  
Port = The CaOPI driver will communicate to OPI on this port.  
Merchant Type = restaurant  
Fill in all Merchant info.

7. On the **Terminal Configuration** page, for each workstation with pinpads, click **Add Terminal**, and then fill out the form:  
Workstation ID = workstation obj\_num in POS Configurator  
IP = Pinpad IP address.  
If using a simulator instead of a PED, enter IP of the PC running the simulator.
8. To add another Merchant ID or Property, click **Continue**.
9. To finish configuration, click **Exit**, save the changes, and then restart the computer.

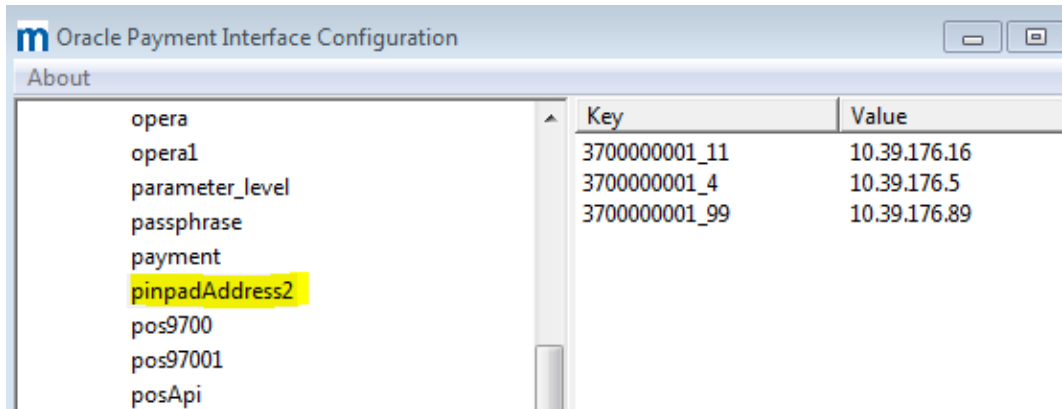
## OPI Config.exe (Terminal mode)

The following settings are for installs selecting the **Terminal** OPI Mode.

1. Double-click `\OraclePaymentInterface\bin\config.exe` to start the Oracle Payment Interface Configuration tool, and then enter the administrator credentials to the computer.

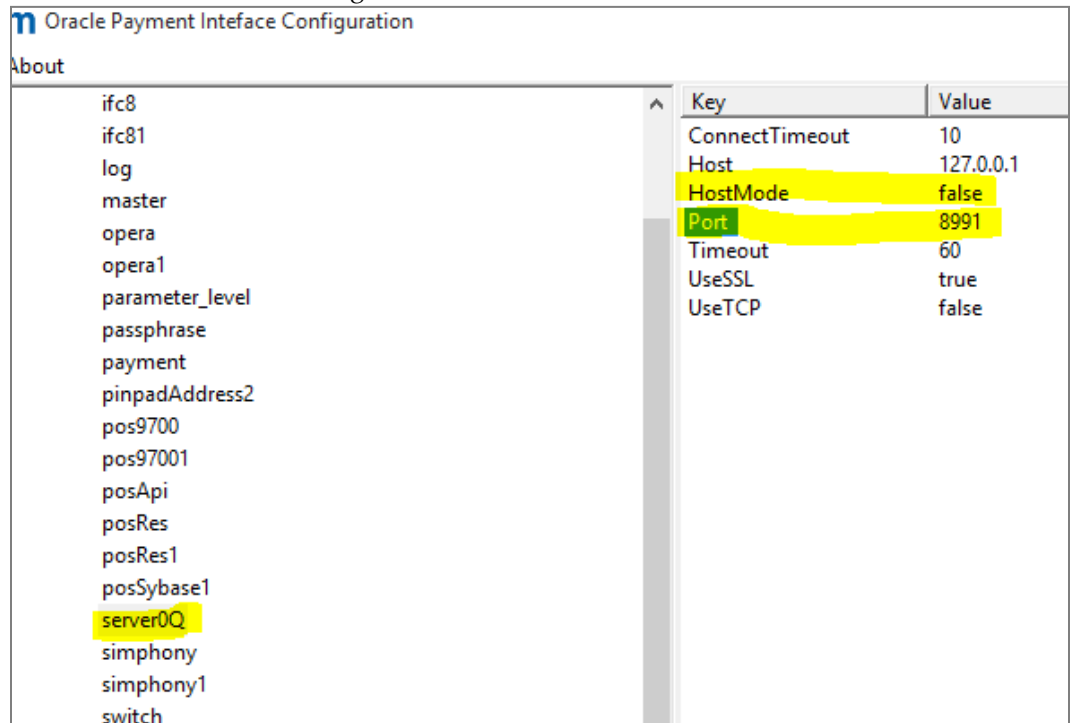


- OPI is listening on port 5098.
2. The Pay@Counter terminal records are kept in pinpadAddress2. You do not need to make changes.

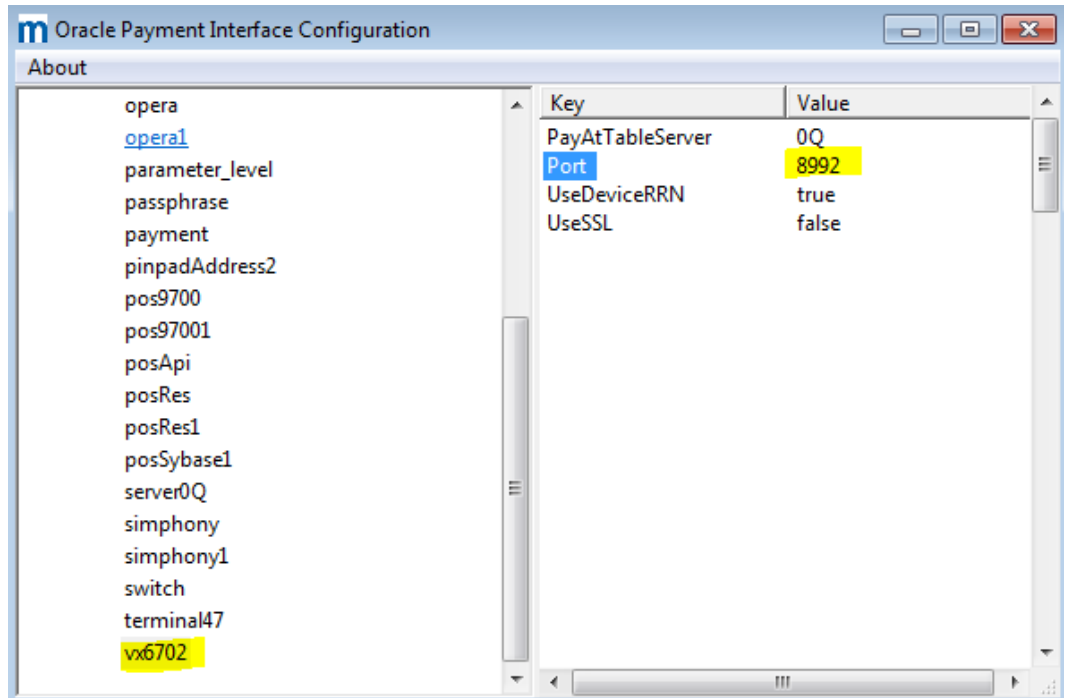


Format is MerchantID\_WSID  
IP of pinpad

- HostMode is false when using Terminal mode. The Host value is unused.



- Set the **Port** to the port the PEDs are listening on.



5. Change the vx6702 port because the MICROS KDSController service uses port 5023. You must change this port even if you are not using Pay@Table. RES does not use port 8992, so it is a safe choice.
6. Exit the configuration tool and save the changes.
7. Restart OPI service.
8. Take Micros Control panel to **Front of house**. The system is ready for a test transaction.

## Middleware

Follow the instructions in this section if you select **Middleware** as the **OPI Mode** during the installation, to allow OPI to communicate to a 3<sup>rd</sup>-party that controls the pinpads.

### Middleware Wizard

**Note:** The below screens can be seen and used both during the middle of the OPI install and also AFTER the OPI install by launching OraclePaymentInterface\bin\OPIconfigurationWizard.exe.

1. The installation wizard launches the Oracle Payment Interface Configuration Tool. If it does not automatically start, double-click `INSTALLATION_DIR\OraclePaymentInterface\bin\OPIconfigurationWizard.exe`.
2. Enter the login credentials to an administrator account on Microsoft Windows, and then click **Login**.

3. Fill out the form as described:

Oracle Payment Interface Configuration Tool

### Oracle Payment Interface - Configuration Tool

PMS Interface:

POS Interface:

OPI Mode:

Primary Host:

Backup Host:

Proxy Address:

Proxy Port:

**ORACLE**  
HOSPITALITY

Next

**POS Interface** = Enable

**OPI Mode** = Middleware

**Primary Host** = URL of 3rd party that will control the pinpads, including port.

**Backup Host** = Backup URL of 3rd party

**Proxy Address** = Blank unless you must go through a proxy server.

**Proxy Port** = Blank unless you must go through a proxy server.

4. Select **POS Configuration**, and then click **Show Summary**.
5. Double-click the existing property, or if none yet click **Add New Property** and then configure the form as shown in the following image. If you are using

Pay@Table, skip to the [Pay@Table](#) section.

Oracle Payment Interface Configuration Tool

**Oracle Payment Interface - POS Configuration Tool**

POS Type : POSRES Port : 5098

Merchant ID : 3700000001 Merchant Type : restaurant

PosCrossMerchant : Disable

PosCrossCheck : Disable

Pay@Table : Disable

**Merchant Configuration :**

Merchant Name : Clean6.1.1Merchant

Merchant City : Pocono

Merchant Country : United States of America

ORACLE  
HOSPITALITY

Previous Next

6. Click **Next**, confirm the configuration summary, click **Exit**, and then save the changes.

## Middleware Config.exe

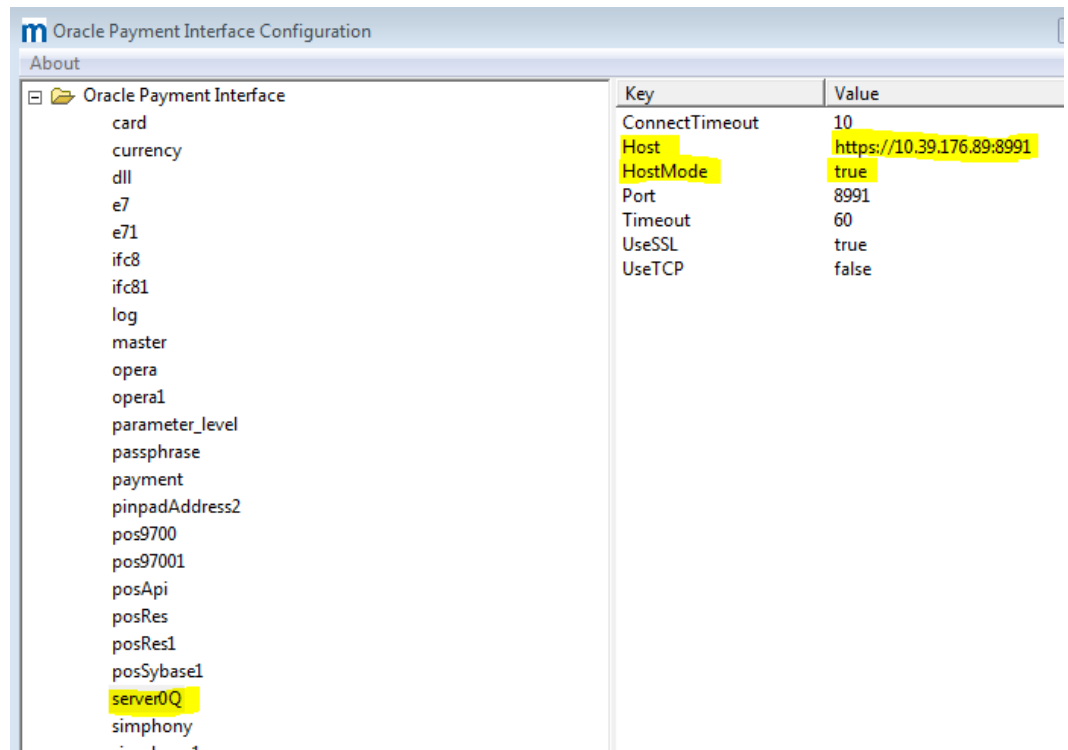
The following settings are for installs selecting the **Middleware** OPI Mode and disabling Pay@Table.

1. Double-click `\OraclePaymentInterface\bin\config.exe` to start the Oracle Payment Interface Configuration tool, and then enter the administrator credentials to the computer.

Key	Value
Mode	8
Server_port	5098

8 is for the Native driver OPI solution.  
OPI is listening on port 5098.

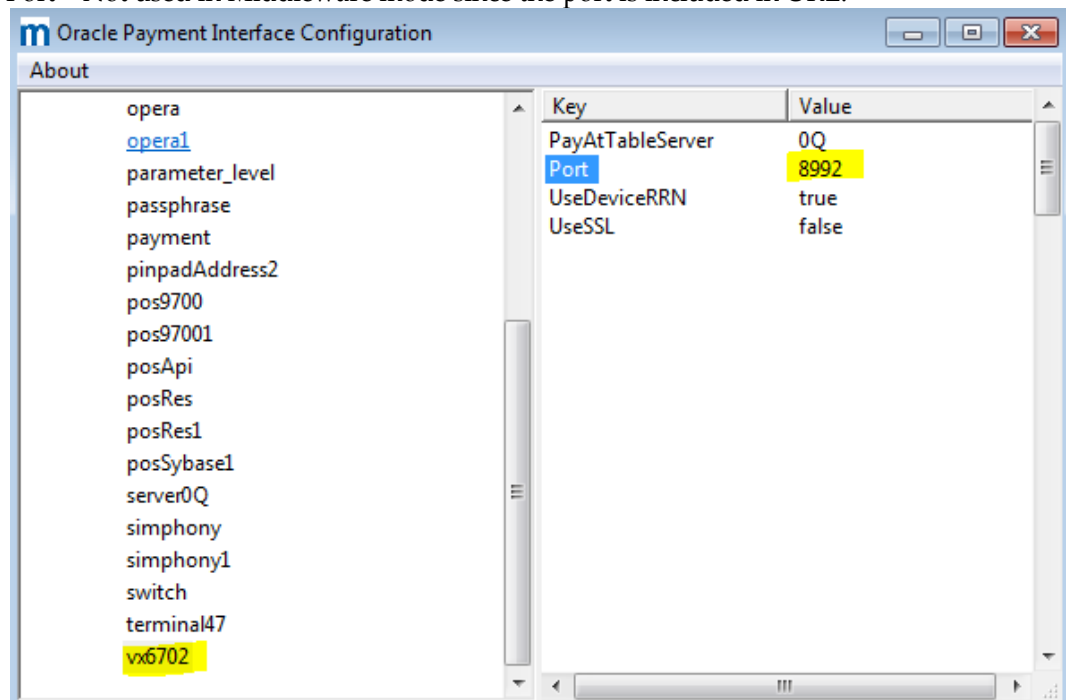
## 2. Configure server0Q



HostMode = true.

Host = The URL of PrimaryHost set using the wizard. Including the port.

Port = Not used in Middleware mode since the port is included in URL.



3. **You must change the vx6702 Port** to the port used for connecting to the 3rd party. The MICROS KDSController service uses port 5023. You must change this

---

port even if you are not using Pay@Table. RES does not use port 8992.

4. Exit the configuration tool and save the changes.
5. Restart OPI service.
6. Take Micros Control panel to **Front of house**. The system is ready for a test transaction in Middleware mode.

## Pay@Table

### POSCFG Create Pay@Table Tender

With the RES Native driver solution, there must be separate tenders for Pay@Counter transactions and Pay@Table (P@T) transactions. You can:

- Create one P@T tender for all P@T transactions.
- Create a P@T tender for each card type.

If you create a separate P@T tender for each card type, make sure to use easily-identifiable names such as **P@T Visa** and **P@T M.C.**

If the merchant wants to use the 3<sup>rd</sup> party processor's reports, all transactions will be reported by card type and will not be separated into P@T vs P@C.

If the merchant wants to use local RES reports to show just 1 total for each card type, they can have a custom report made that combines the Pay@Counter and Pay@Table tenders for each card type.

The following example provides instructions for creating one P@T tender for all P@T transactions.

1. **Poscfg | Sales | Tender Media**, copy **Cash Tender** and paste it.
2. Rename it to P@T.
3. Configure P@T tender according to the following screenshots.



Tender / Media  
File Edit Record Help

### Tender / Media

106 P@T      Sort By: Number

Record View | Table View

General | Tender | Presets | CC Tender | Credit Auth | PMS | Service TTL | Printing | Personal Check

Number	Name
102	Traveler Chk
103	Personal Chk
104	GC Redeem
105	Cash w/place
106	P@T
200	- CreditCard
201	
202	
203	
204	
205	
206	
210	*** OPI ***
211	OPI Visa
212	OPI Discover

Icon

Type: Payment      Effective From:      Effective To:      20

Exempted Tax Class:      SLU:      20

Print Class: 101 Guest Check      Menu Level Class: 101 All Levels

Privilege: 0      Category: 1      NLU:      Key Code:

The Manager: Joe      9/15/2016 12:

Tender / Media  
File Edit Record Help

### Tender / Media

106 P@T      Sort By: Number

Record View | Table View

General | Tender | Presets | CC Tender | Credit Auth | PMS | Service TTL | Printing | Personal C

Number	Name
102	Traveler Chk
103	Personal Chk
104	GC Redeem
105	Cash w/place
106	P@T
200	- CreditCard
201	
202	
203	
204	
205	
206	
210	*** OPI ***
211	OPI Visa
212	OPI Discover
213	OPI Amex
214	OPI Diners
215	OPI M.C.
216	CashBack Tdr
217	OPI Default

General Options

- Open drawer
- Use with currency conversion
- Reference required
- Exempt auto service charge
- Exempt inclusive service charge
- Employee meal
- Assume paid in full
- Require amount entry
- Declare tips paid
- Item is shareable
- Post to gross receipts
- Post to charge receipts
- Post fiscal cash register credit
- Tax exempt coupon
- Allow with Euro
- Use with Tip Check
- Check for Placeholders
- Persist Auto Discounts
- Prompt for Promise Time
- Open drawer before prompt
- Enforce beverage control

Charged Tip:      20

High Amount Lockout

Enable HALO

HALO limits overtender  
HALO limits amount tendered

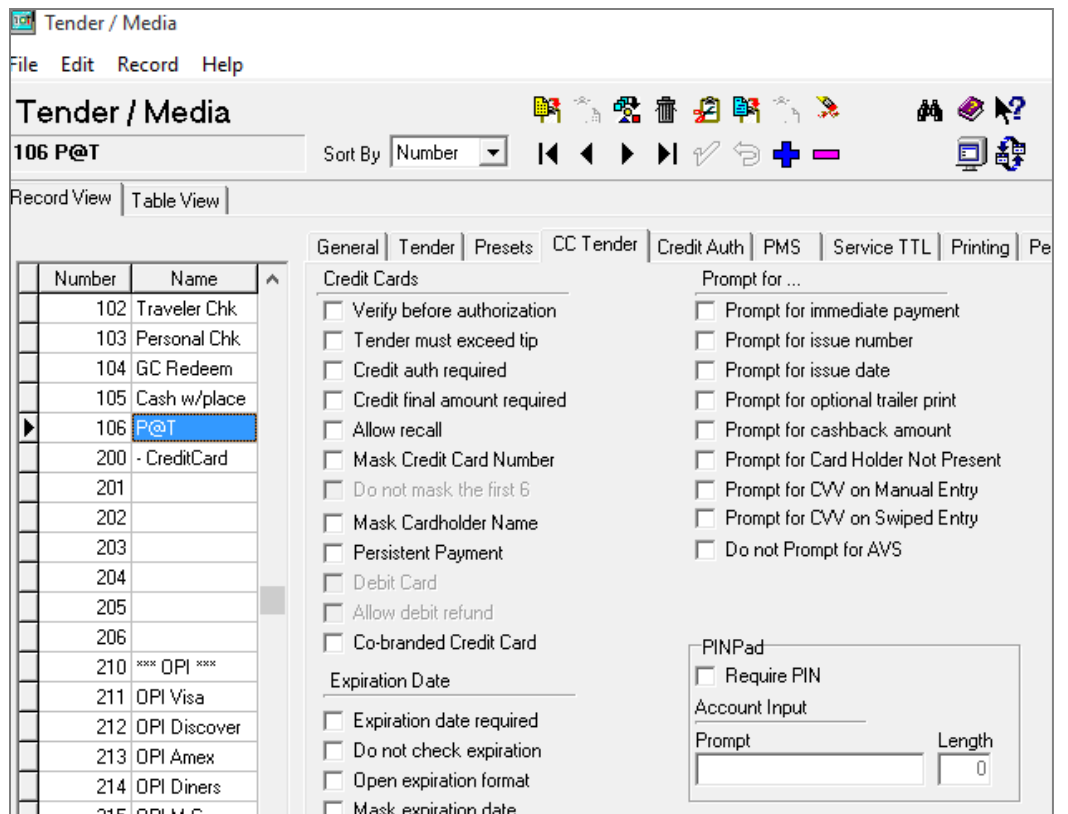
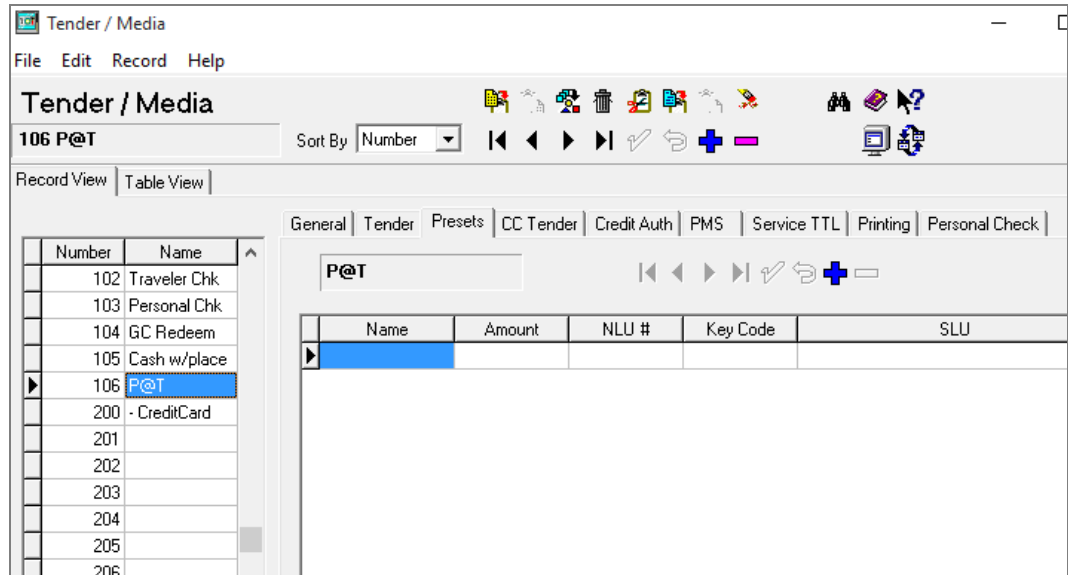
Options

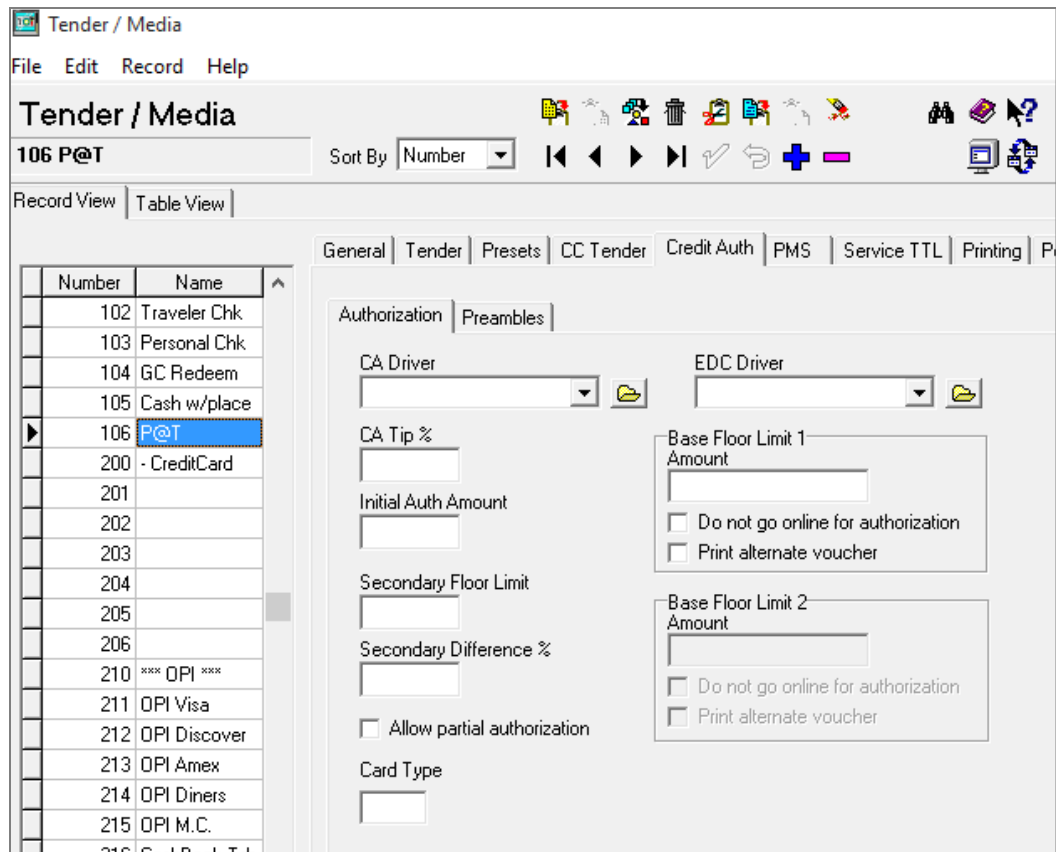
- Enable Tender Truncation
- Enable Tender Rounding
  - Round Tender to Nearest 10
  - Rounding Based on Tens Digit

Insignificant Digits: 0

External Type:      20

SRM Payment Type:      20





4. **Preambles** tab = No Preambles.
5. **PMS** tab = Allow 19 reference characters.

## Pay@Table Wizard

1. The installation wizard launches the Oracle Payment Interface Configuration Tool. If it does not automatically start, double-click `INSTALLATION_DIR\OraclePaymentInterface\bin\OPIconfigurationWizard.exe`.
2. Enter the login credentials to an administrator account on Microsoft Windows, and then click **Login**.
3. Do not make changes to the interfaces and OPI mode. The P@T install does not change depending on the OPI Mode.
4. Select **POS Configuration**.
5. Double-click the existing property, and then configure the form as shown in the following image.

- a. Enable **Pay@Table**. The Pay@Table certificate is provided by the partner and is part of the partner validation process.
- b. Enter and confirm a **Pay@Table Cert Password**.
- c. Set correct Pay@Table Port. 8993 is just an example.

6. Fill out the **RES Pay@Table Configuration** form:

**Name:** name of the database, such as micros.

**Host:** IP of RES Server.

---

If OPI is installed on the RES server, you can enter 127.0.0.1.

If OPI is installed on a different PC, you must enter the actual IP of the RES server.

**Port:** Do not change from 2638.

**Max pool:** 40

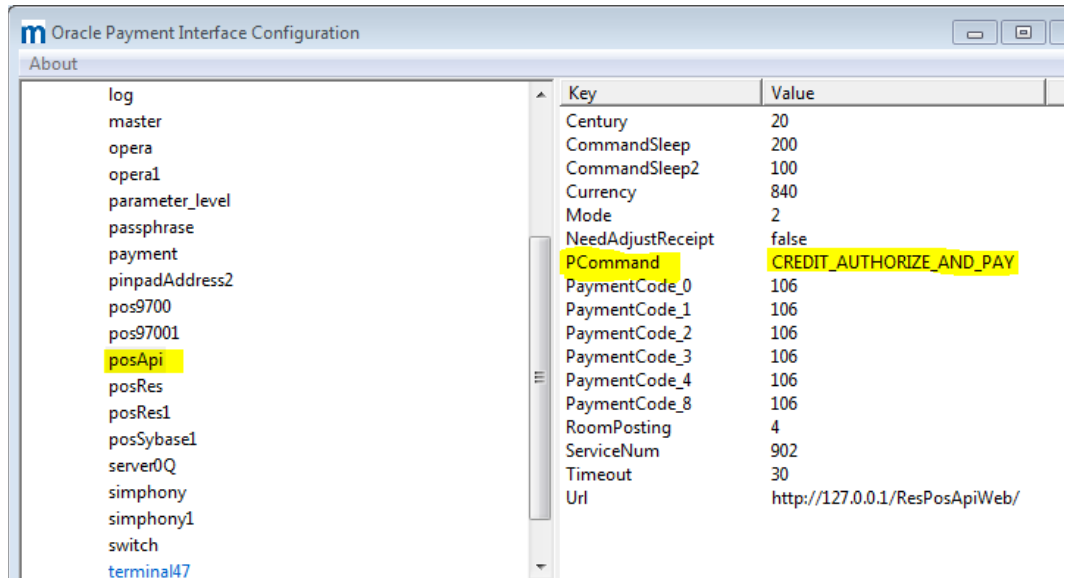
**User:** the username of a Micros.db user

**Password:** the password for the Micros.db user.

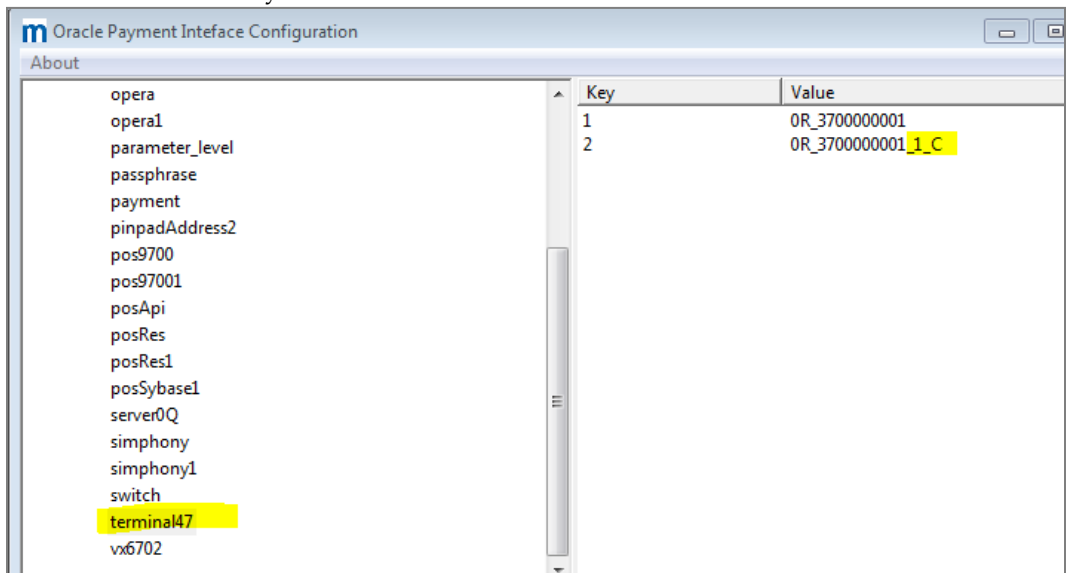
7. Fill out the **Tender Configuration** section to link each tender to the P@T tender. If you configured separate P@T tenders for each card type, make sure to enter the correct tender number.
  - a. Unused tenders: Leave the entry blank.
  - b. Gift Cards: Leave the entry blank (not supported).
  - c. ServiceNum: Enter the **Print Check** tender number.
8. For each terminal you want to add, click **Add Pay@Table Terminal**, and then enter the terminal information:
  - a. Mobile Device ID: enter and assign an ID for the P@T terminal.
  - b. Select **Query by Check** or **Query by Table**. Query by Table will bring up all checks open at that table.
9. To add another Merchant ID or Property, click **Continue**.
10. To finish configuration, click **Exit**, and then save the changes. Restart the server if prompted by the installation wizard.

## **Pay@Table Config.exe**

1. Verify all settings are as they should be in config.exe and make any changes if necessary.
2. Double-click `\OraclePaymentInterface\bin\config.exe` to start the Oracle Payment Interface Configuration tool, and then enter the administrator credentials to the computer.



3. Left click on **posApi**, then right click on **PCommand** and delete it. This will allow P@T transactions to post.
4. You do not need to make changes to **terminal47**. You can view or configure information for the Pay@Table terminals.



Key = Mobile Device ID

OR = 3700

3700000001 = Merchant ID

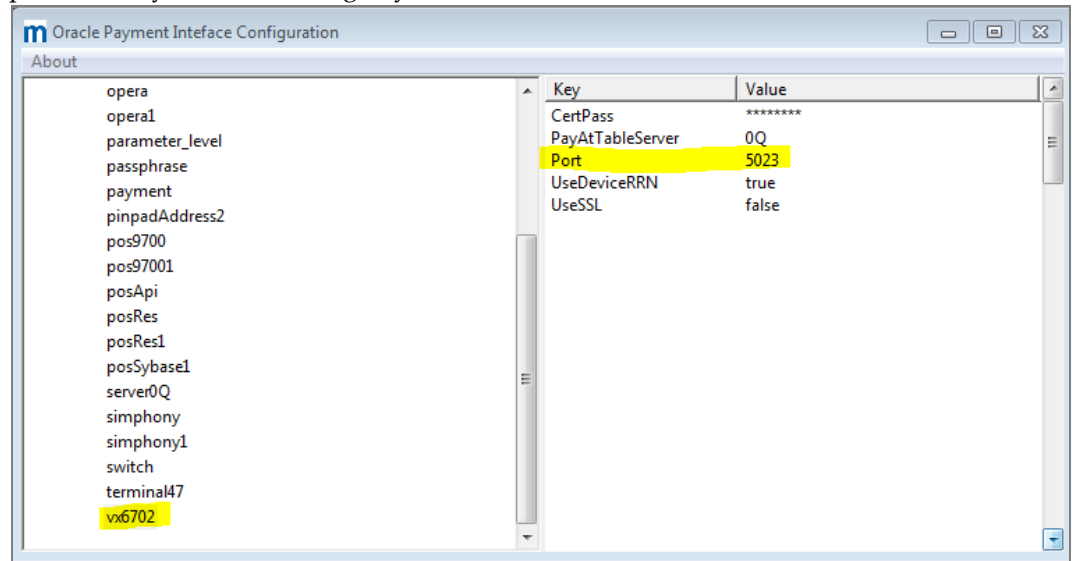
\_1\_C = The \_1 is a Revenue Center value and is unused in RES, but defaults to 1.

The \_C means this is a Query by Check terminal.

The Query by Table Terminals do not show the “\_1\_C”.

5. **You must change the vx6702 Port** to the port used for connecting to the 3rd party. The MICROS KDSController service uses port 5023. You must change this

port even if you are not using Pay@Table.



6. Exit the configuration tool and save the changes.
7. Restart OPI service.
8. System is ready to run a test transaction.

## POS Configuration for Native Driver

Credit card drivers, including CaOPI, require complex security. Ops.exe does not start if complex security is not enabled. The troubleshooting section contains instructions for enabling complex security.

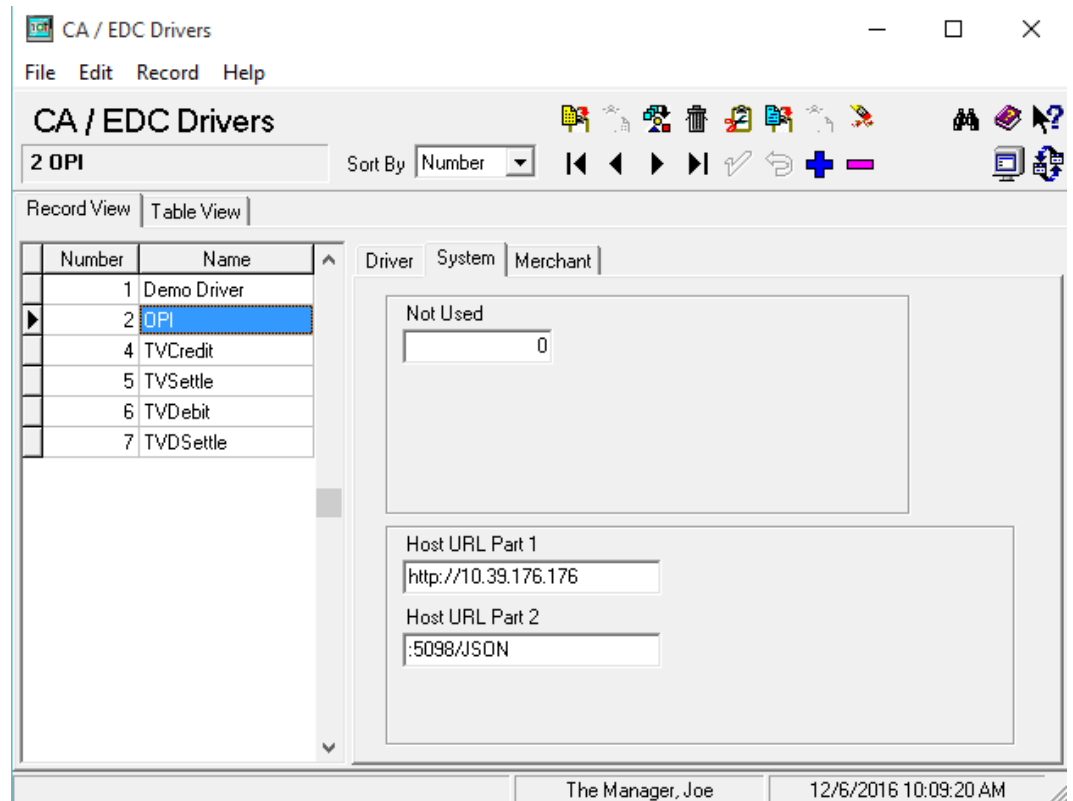
### Install and Configure CaOPI driver

1. Batch and Settle all current transactions.
2. Take Micros Control panel to **off**.
3. Verify Microsoft .NET Framework 4.6.1 is installed.
4. On the RES Server, double-click CaOPI.exe and follow the installation instructions.
5. You must run the CaOPI.exe installation on RES backup servers because it must register OpiProxy.dll. You cannot only copy the file to the backup servers. Make sure the to install Microsoft .NET Framework 4.6.1 on the backup server.

### Configure CaOPI Driver

1. Take Micros Control Panel to **Back of house**.
2. Open Poscfg | Devices | CA/EDC Drivers.
3. Create a new record named OPI.
4. On the **Driver** tab, enter OPI as the **Driver Code**.

5. On the **System** tab, enter the **Host URL Part 1** and **Host URL Part 2**:

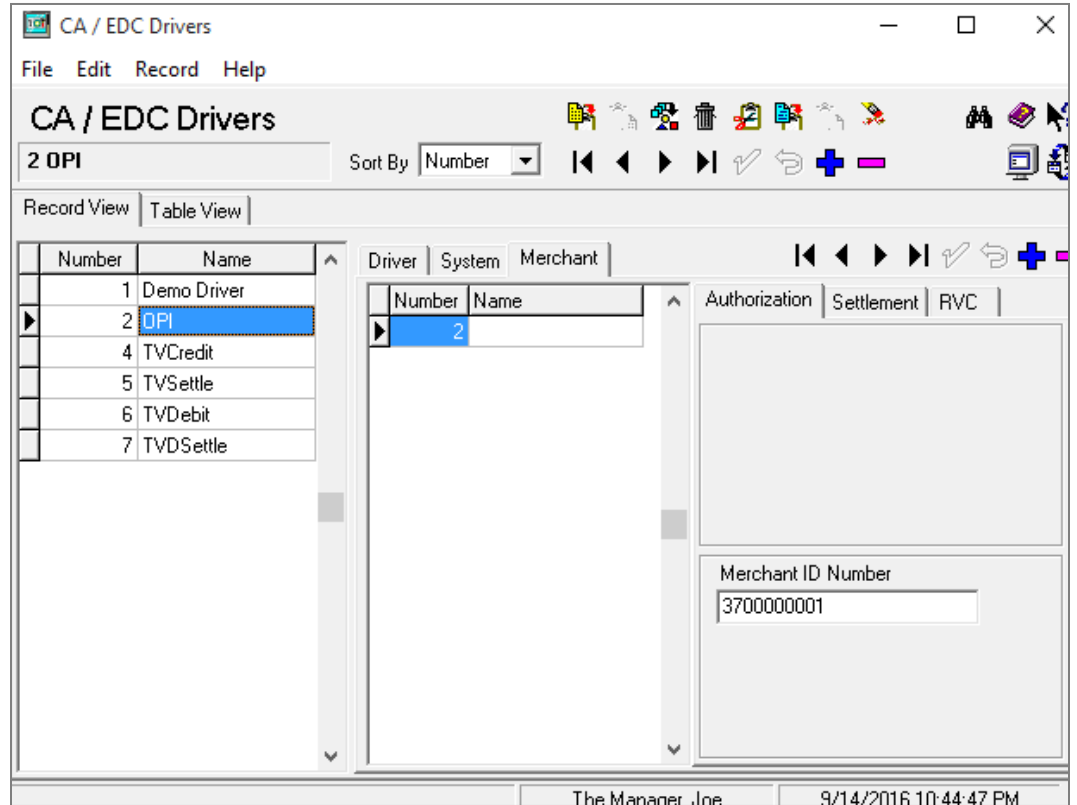


Use the IP of the PC where OPI is installed.

Do not use 127.0.0.1 even if OPI is installed on the RES server.

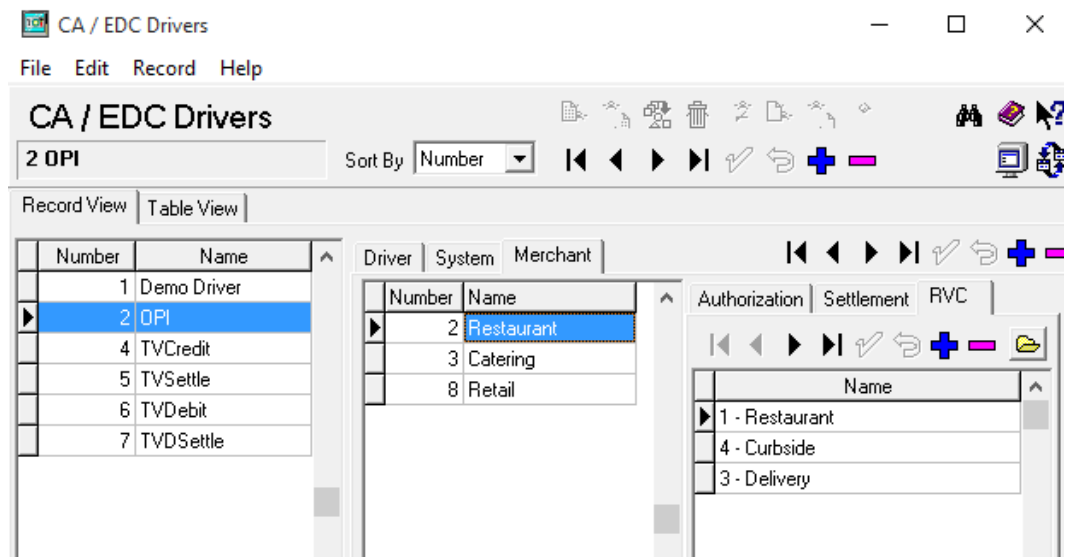


- On the **Merchant** tab, enter the Merchant ID Number.



If you are using multiple merchant IDs, click the lower blue plus symbol to add another Merchant record. Use the record Number that Poscfg defaults to even if it is not in sequence. Add a Name for each Merchant record and the correct Merchant ID Number.

- Link each revenue center to the correct Merchant.

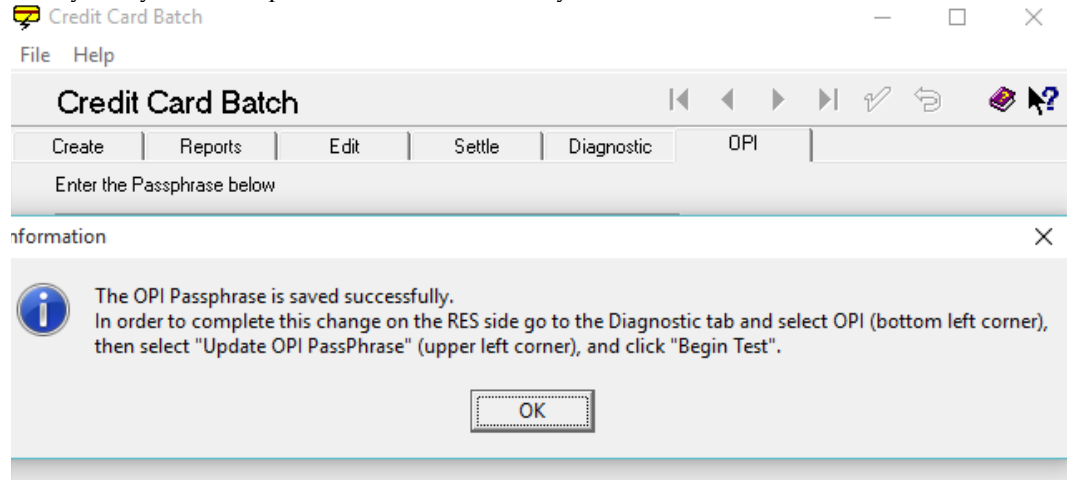


Every revenue center must be linked to a Merchant. Checks should not be transferred between revenue centers with different Merchant IDs.

8. In Micros Control Panel, highlight **Restaurant**, and then click **Reload DB**. No driver configuration changes are complete until the DB has been reloaded.

## Credit Card Batch Configuration


1. **Start | Run | CreditCards.exe | OPI.**
2. Enter the passphrase created during the OPI installation, and then click **Save**.
3. Verify it says the Passphrase saved successfully.



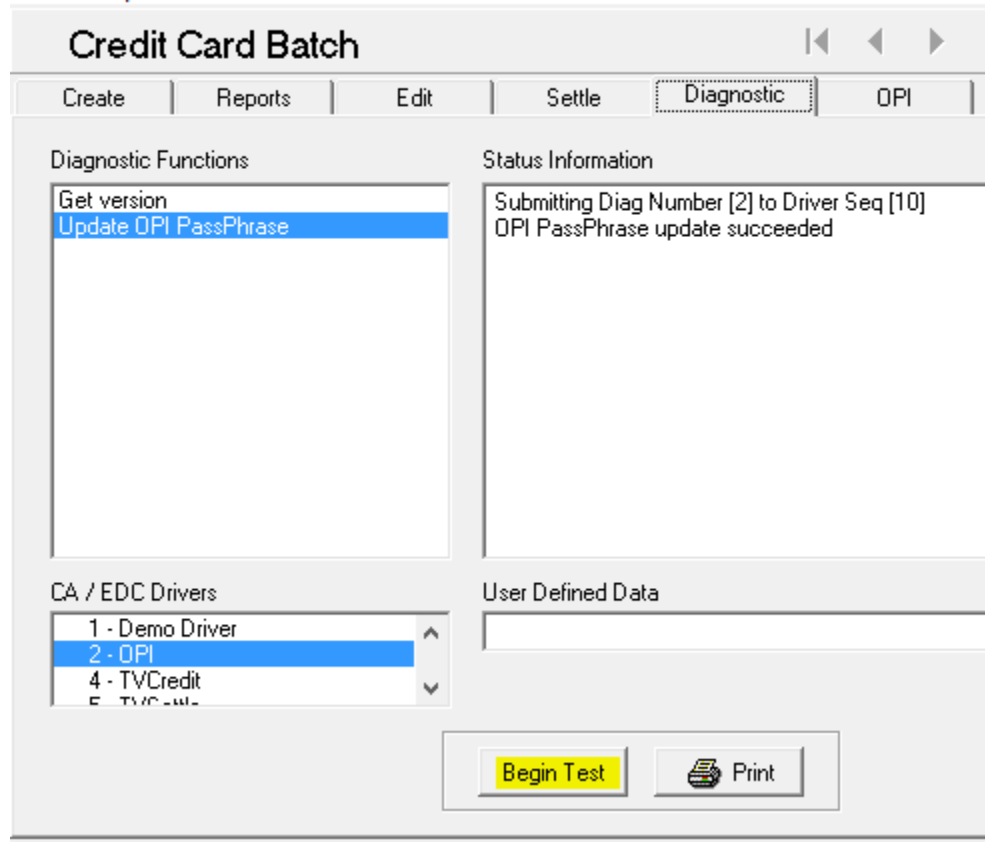
If you have a backup server configured and the Passphrase cannot be written to that PC, the passphrase will not save.

**Note:** If a new backup server workstation is added after the OPI passphrase is entered in CreditCards.exe, you must re-enter the passphrase in CreditCards.exe again, so that the passphrase can be saved to the backup server.

4. **CreditCards.exe | diagnostics**, select **OPI** from **CA/EDC Drivers**, select **Update OPI PassPhrase**, and then click **Begin Test**.

 Credit Card Batch

File Help



5. Result = "OPI Passphrase update succeeded"

If the OPI Passphrase is changed to something other than what was used during the OPI installation, you must also change the value on the OPI side. See the **Utilities | RWregistry** section for more information.

## Employee Class Configuration

**Poscfg | Employees | Employee Classes | Options:**

Enable **Tender with initial authorization** for the manager employee class or the class that can authorize special transactions for servers.

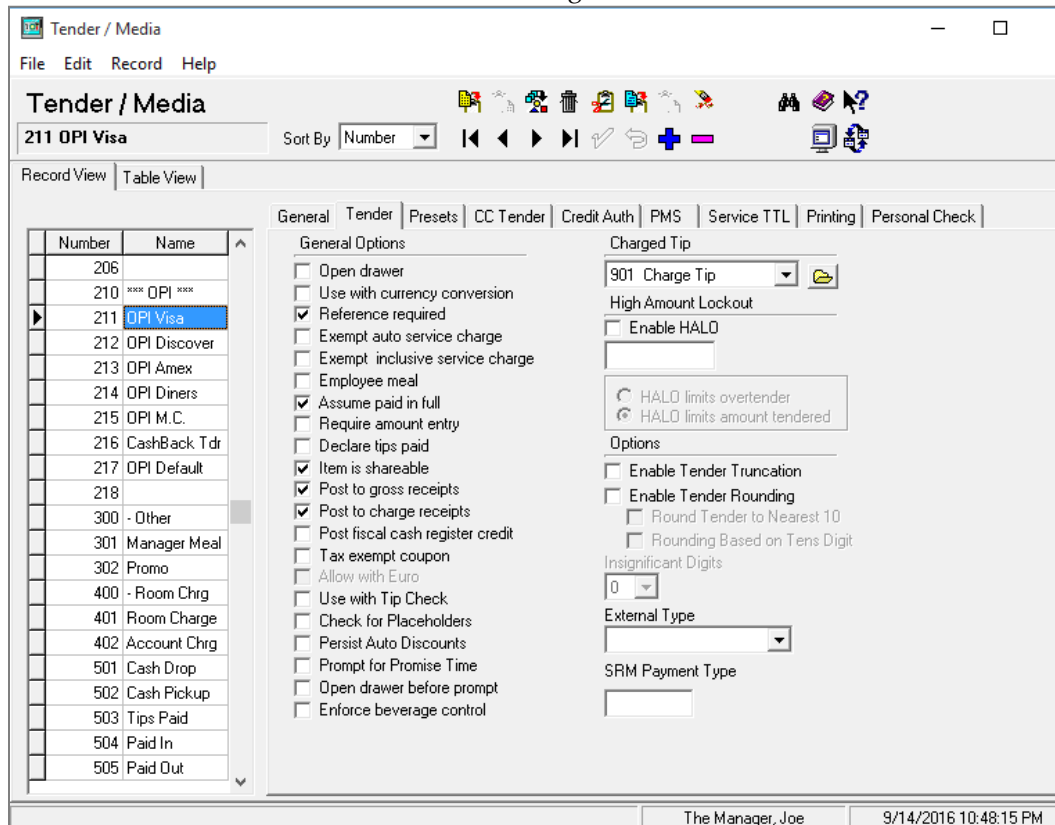
This option is only needed for and only applies to OPI transactions.

For example, if a bartender begins a check and does an initial authorization and then the customer leaves without paying their bill, the bartender will not be able to do another authorization without having the credit card. If they select CC final and an employee with this option enabled authorizes it, the check can be closed to the initial auth.

See [POS Workstation Procedures](#).

## Tender Configuration

1. Navigate to **Sales | Tender/Media | Tender**, and then create a tender for a card using OPI. The following example uses an OPI tender for Visa. To create a default tender, follow the same instructions or make a copy of an existing tender, clear the card type ID field, and then name the tender accordingly.
2. Edit the **Tender** tab as described in the following:



**Reference required**

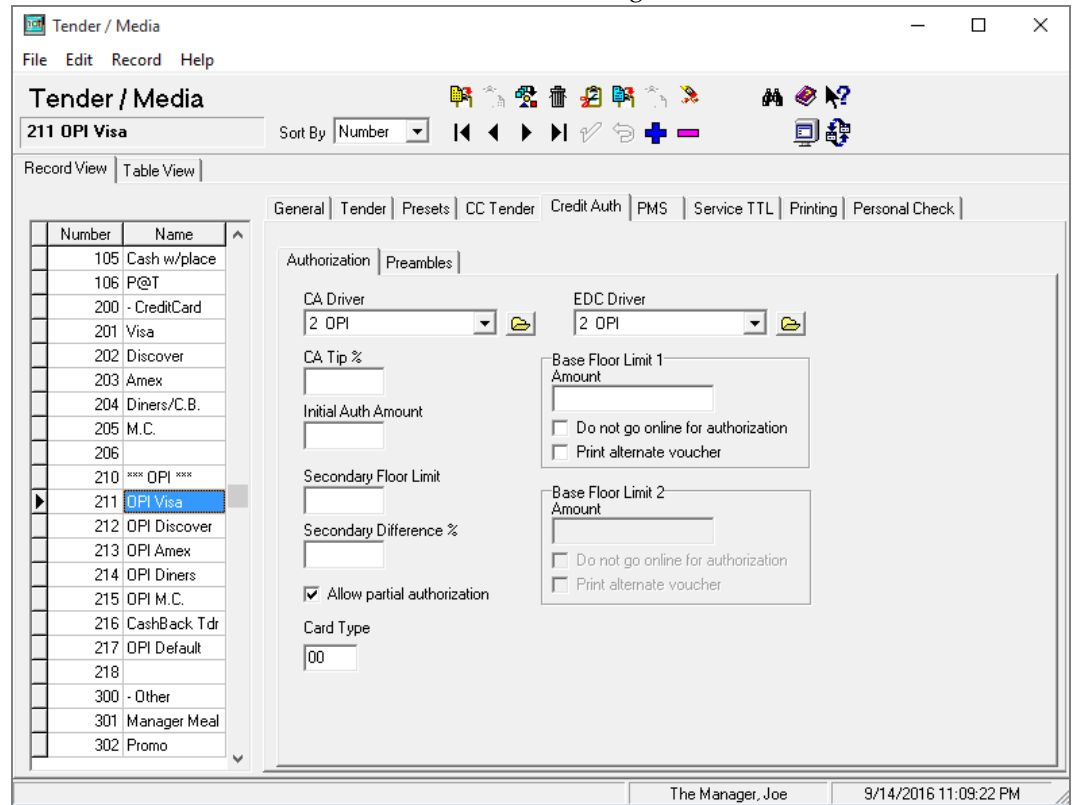
**Assume paid in full**

**Charged Tip linked if any TSR Revenue Centers.**

**Empty if only QSR Revenue Centers.**

3. Make sure the **Presets** tab is empty.
4. Enable the following options on the **CC Tender** tab:
  - Credit Auth required.**
  - Mask Credit Card Number.**
  - Mask expiration date.**

5. Edit the **Credit Auth** tab as described in the following:



- CA Driver = OPI
- EDC Driver = OPI
- Allow partial authorization = Enable (unless 3rd party does not support it.)
- Card Type = Enter the card type ID, in this case 00 for Visa. [Card Type ID Reference](#) contains a reference of the ID for each card type.

**Note:** Some of the card type values have changed from OPI 6.1 to 6.1 MR1. The new values must be entered in Tender/Media | Credit Auth | Authorization, "Card Type".

6. Make sure the **Preambles** tab is empty.
7. On the **PMS** tab, select **Allow 19 reference characters**.

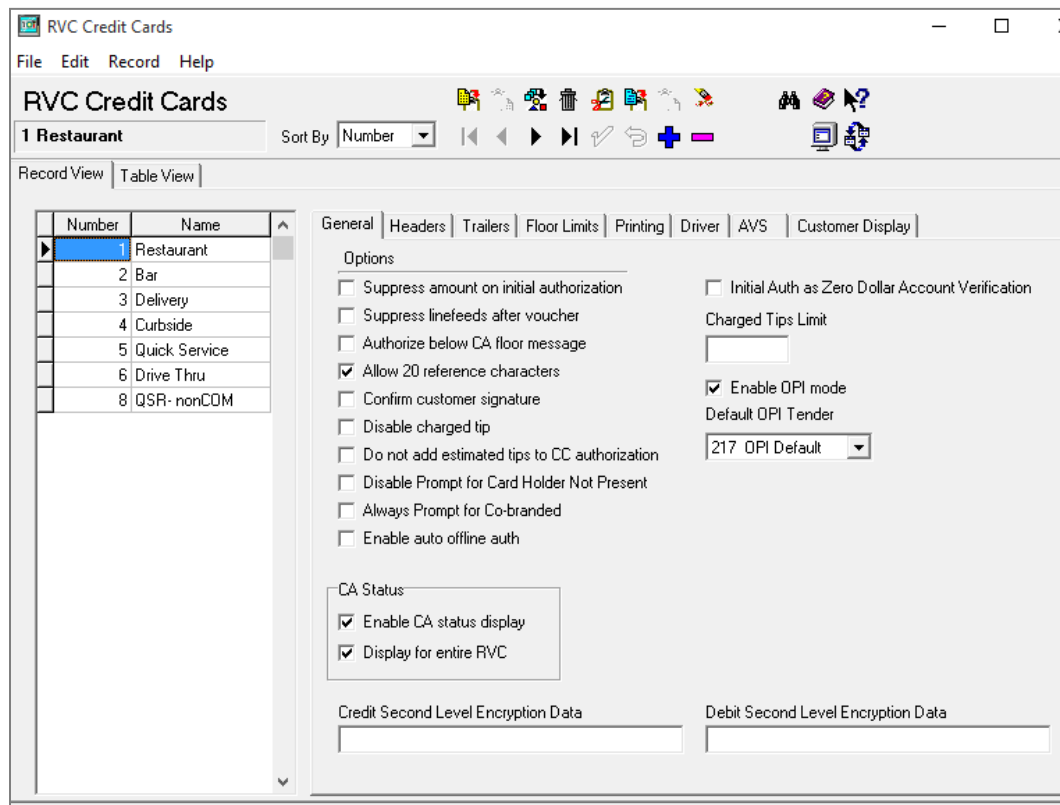
- On the **Personal Check** tab, select **Authorization required**, and then select **OPI** from the **Check Driver** drop-down list.

The screenshot shows the 'Tender / Media' application window. The 'Personal Check' tab is active, and the 'Authorization' sub-tab is selected. The 'CA Driver' and 'EDC Driver' are both set to '2 OPI'. The 'Allow partial authorization' checkbox is checked. The 'Card Type' field is empty. The 'Base Floor Limit 1' and 'Base Floor Limit 2' sections are visible, each with an 'Amount' field and two checkboxes: 'Do not go online for authorization' and 'Print alternate voucher'. The 'Initial Auth Amount' and 'Secondary Floor Limit' fields are also present. On the left, a list of tender types is shown, with '217 OPI Default' selected.

Number	Name
206	
210	*** OPI ***
211	OPI Visa
212	OPI Discover
213	OPI Amex
214	OPI Diners
215	OPI M.C.
216	CashBack Tdr
217	OPI Default
218	
300	- Other
301	Manager Meal
302	Promo
400	- Room Chrg
401	Room Charge
402	Account Chrg
501	Cash Drop
502	Cash Pickup
503	Tips Paid
504	Paid In
505	Paid Out

- Save the tender.

## Revenue Center Configuration



Navigate to **Revenue Center | RVC Credit Cards | General**. For each applicable revenue center, on the **General** tab:

- Select **Allow 20 reference characters**.
- Select **Enable OPI mode**.
- Set the **Default OPI Tender**.

If OPI is not enabled for all revenue centers, you cannot transfer checks with Credit auths between the differing revenue centers.

## Upgrade Installation

### Before upgrading

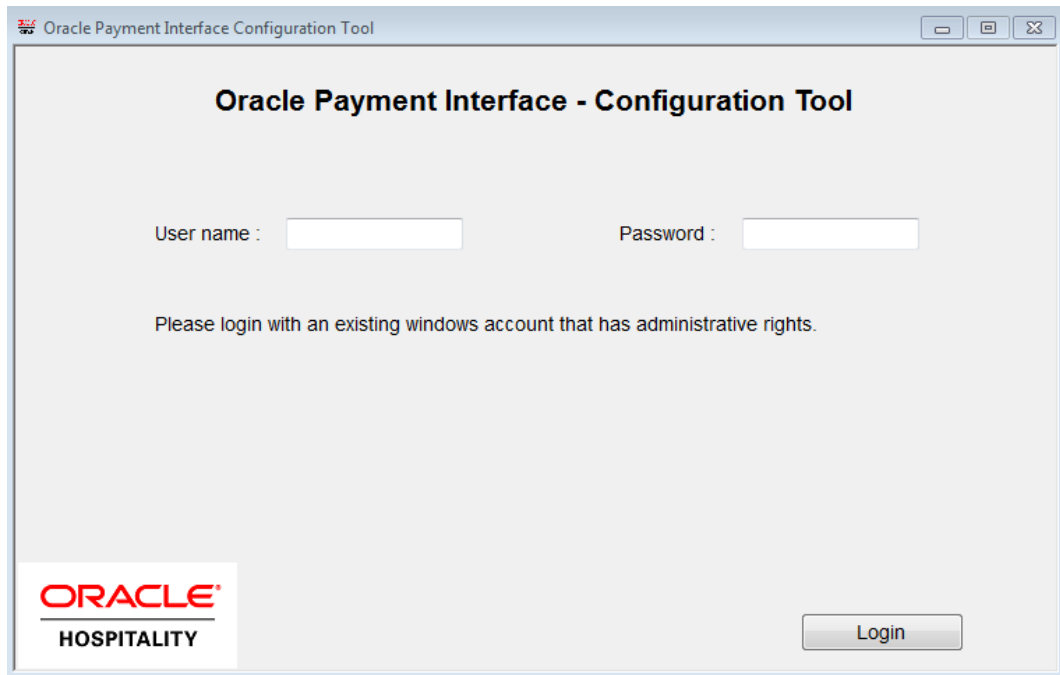
1. Batch and settle all credit transactions.
2. Know the MySQL root user account password.

**Note:** Some of the card type values have changed from OPI 6.1 to 6.1 MR1. The new values must be entered in **Tender/Media | Credit Auth | Authorization, "Card Type"**.

---

## Steps to upgrade from OPI 6.1

1. Take Micros Control Panel to **off**.
2. Double-click Oracle Payment Interface-6.1.1.9.exe to launch the install.
3. On the **Missing dependency** screen read the message and follow the instructions to copy a backup of the MySQL Server 5.6.35 installation files.
4. Exit the OPI installer.
5. Double click **mysql-installer-community-5.6.35.0.msi** and follow prompts to upgrade the MySQL version.
6. When the MySQL upgrade is complete, double-click Oracle Payment Interface-6.1.1.9.exe to launch the installer again.
7. Follow the on screen instructions.



8. The installation wizard launches the Oracle Payment Interface Configuration Tool.  
If it does not automatically start, (you do not see the screen above), double-click `INSTALLATION_DIR\OraclePaymentInterface\bin\OPIconfigurationWizard.exe`.
9. Verify all settings are correct or update them if needed.
10. On Configuration Summary screen, to add another Merchant ID or Property, click **Continue**.
11. To finish configuration, click **Exit**, save the changes, and then restart the computer.



---

---

## 3 POS Workstation Procedures

Credit card transactions with OPI and the RES native CaOPI driver function the same as existing native drivers. You can now use the following features that were not supported by MGDH:

- Beverage control
- Place holders
- Splitting checks with auths.
- Adding checks with auths.
- Not limited to 5 auths per check.
- Auths can be associated with a specific seat.
- Can void a CC tender (before batch and settle).
- Credit auths print to the CA Voucher printer.

### TSR

#### CC Auth

Button configuration = Function Transaction: Credit Authorize.

1. Begin check, ring food, and service total.
2. Pick up check, select **Auth CC**, and service total.

#### CC Final

Button configuration = Function Transaction: Credit Finalize.

1. Pick up check with a CC auth and select **CC Final**.
2. Select **No** to "Chg tip amount is 0.00".
3. Enter total amount including tip and select **CC Final**.
4. Click **OK** at the tip amount prompt.

#### Void CC Tender

1. Re-open the closed check.
2. Select **CC tender payment**.

3700 POS Operations

Tbl 30/1	Gst 1 Chk 797	Sally S	Restaurant SubREST	Seat 1: Ready For Your Next Entry
1 Crab Cakes		10.00	1 *	<div style="display: flex; flex-wrap: wrap; justify-content: space-between;"> <div style="width: 45%;"> <p>Debit Debit EXT GC Redeem Discou nt \$10 \$20 Prev</p> <p>Manu al CC Refund Prev Tend CC Bal \$ Inq OnDmnd C Vouch Cash HC Disc</p> <p>Auth C.C. Travelers Check Personal Check PMS Inquire Toggle AutoDisc Functn</p> <p>C.C. Final Auth &amp; Pay P@T Remove AutoDisc Void</p> <p>15% Grat Chrg Tip Macro TEST DISC Add autodisc Cancel Order Trans Cancel</p> <p>MPG Pay screen Enter Clear @/For Seat #</p> <p>7 8 9 Filter Seat</p> <p>4 5 6 Re Print</p> <p>1 2 3 Print</p> <p>0 . 00 Service</p> </div> </div>
Charge Tip		3.00	1 *	
XXXXXXXXXXXX4659				
OPI Visa		13.00		
# XXXXXXXXXXXXXXX659 XX/XX			1 *	
OPI Visa:100569				
Authorization		10.00		
# XXXXXXXXXXXXXXX659 /			1 *	
OPI Visa:				
Authorization		3.00		
<b>Subtotal</b>		<b>10.00</b>		
Tax		0.00		
Service Chrg		3.00		
Payment		13.00		
<b>Eat In Ttl</b>		<b>0.00</b>		

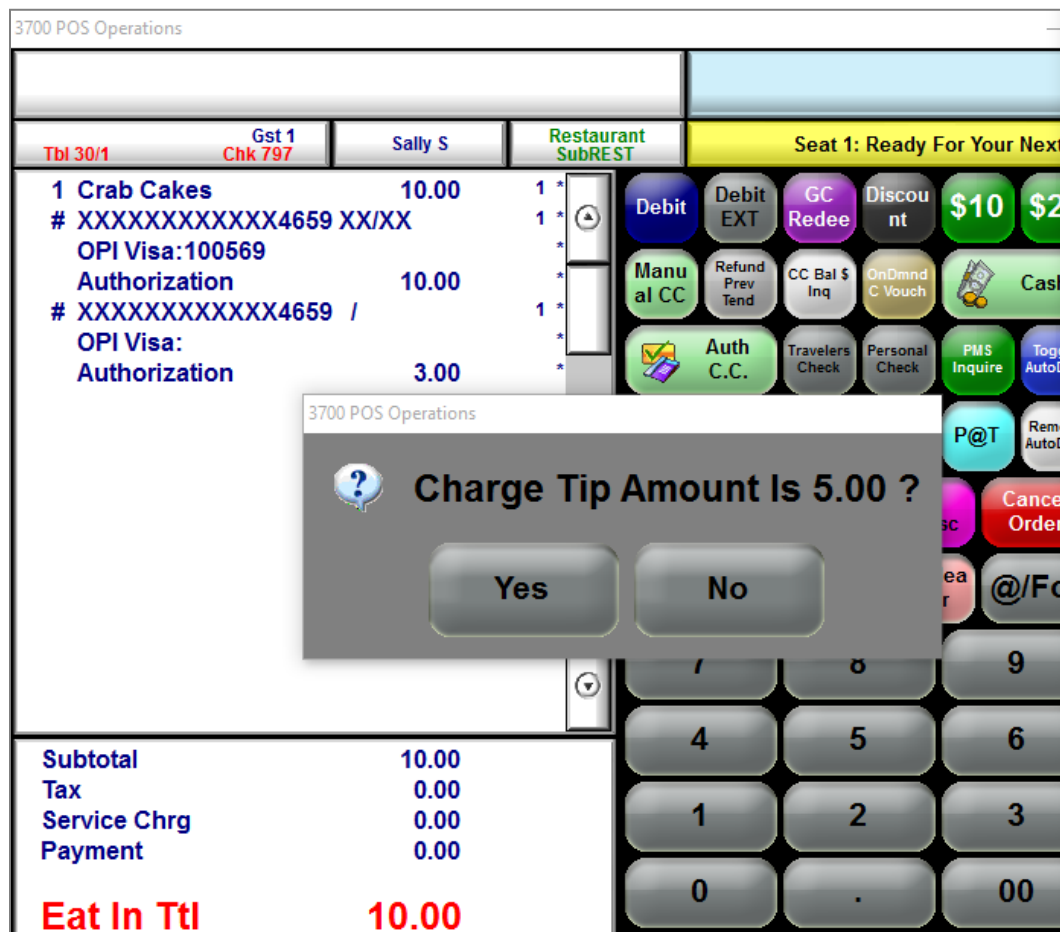
3. Click the **Void** button. (Normal RES void button. No SIM.)

3700 POS Operations

Tbl 30/1	Gst 1 Chk 797	Sally S	Restaurant SubREST	OPI Visa 13.00-	
1 Crab Cakes		10.00	1 *	<div style="display: flex; flex-wrap: wrap; justify-content: space-between;"> <div style="width: 45%;"> <p>Debit Debit EXT GC Redeem Discou nt \$10 \$20 Prev</p> <p>Manu al CC Refund Prev Tend CC Bal \$ Inq OnDmnd C Vouch Cash HC Disc</p> <p>Auth C.C. Travelers Check Personal Check PMS Inquire Toggle AutoDisc Functn</p> <p>C.C. Final Auth &amp; Pay P@T Remove AutoDisc Void</p> <p>15% Grat Chrg Tip Macro TEST DISC Add autodisc Cancel Order Trans Cancel</p> <p>MPG Pay screen Enter Clear @/For Seat #</p> <p>7 8 9 Filter Seat</p> <p>4 5 6 Re Print</p> <p>1 2 3 Print</p> <p>0 . 00 Service</p> </div> </div>	
# XXXXXXXXXXXXXXX659 XX/XX			1 *		
OPI Visa:100569					
Authorization		10.00			
# XXXXXXXXXXXXXXX659 /			1 *		
OPI Visa:					
Authorization		3.00			
<b>Subtotal</b>		<b>10.00</b>			
Tax		0.00			
Service Chrg		0.00			
Payment		0.00			
<b>Eat In Ttl</b>		<b>10.00</b>			

## Adjust tip

1. Starting from the steps above with the CC tender already voided, enter 15.00 and select **CC Final**. This applies 10.00 to the amount due and raises the tip from 3.00 to 5.00.
2. Click **Yes** to tip prompt.



## Voice / Manual Auth

This is only supported in TSR.

Button configuration = Function Transaction: Manual Authorize.

1. Begin check, ring food, and service total.
2. Pick up check, and select **Manual CC**.
3. Enter the voice auth code when Ops prompts for it.

## Refund

1. Begin check, and then select **Void**.
2. Ring up \$10.00 food, and then select **CC auth**.

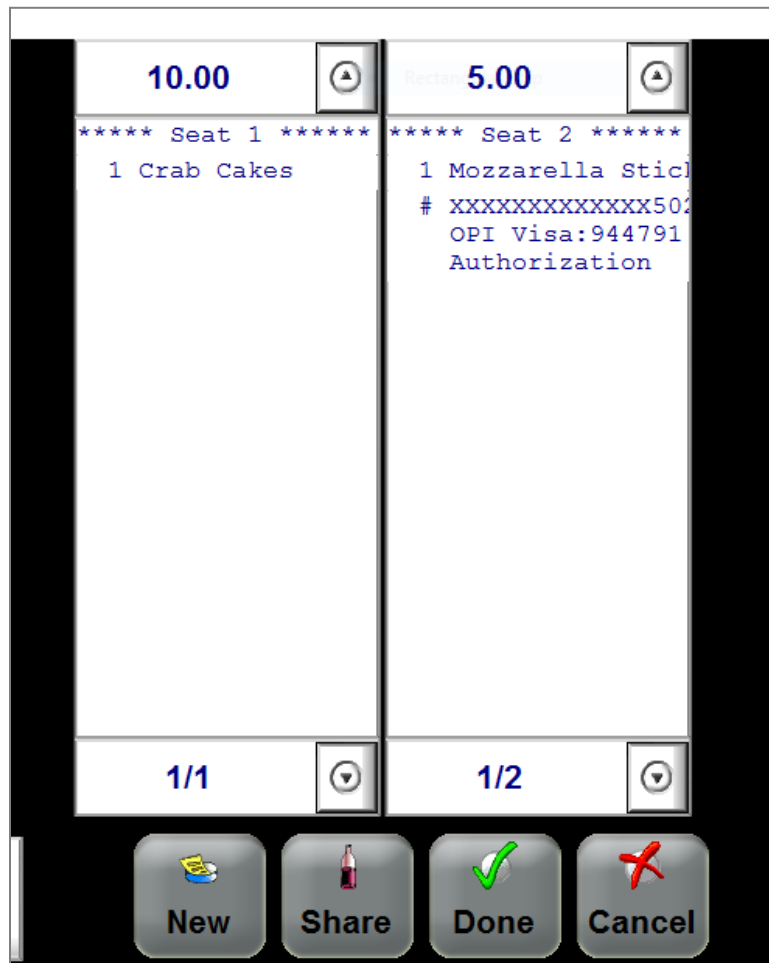
Result = A \$10.00 refund is applied to the card and the check closes without having to hitting CC final.

Customer and Merchant copies of Refund voucher print.

## Move Auth

Pick up a check with food rung on seats 1 and 2 and a CC auth on seat 2.

1. Click **Split Check** and select the food and auth on Seat 2.
2. Click in the Check 2 window.



## CC Reprint

CC Reprint cannot be used from within a check.

Button configuration = Function Transaction: On Demand CC Voucher.

Vouchers can be reprinted for open or closed checks.

1. Sign into Ops, but do not begin a check.
2. Enter a check # and select **CC Reprint**.
3. The vouchers will reprint showing **\*\*\*Reprint\*\*\*** at the top.
4. If just **CC Reprint** is hit, the auth from the last check that was open on that specific workstation will be reprinted. If it has multiple auths on it, a list of those auths will be shown so the user can select one. If there were no CC auths on the last check then it will show: "No CC Voucher Found to Print".

## Initial Auth

Button configuration = Function Transaction: Initial Authorize

- 
1. Sign into Ops, begin check, enter an amount and select **Initial Auth**.
  2. That amount will be authorized, but no vouchers will print.
  3. To close the check later, do a **CC auth** and **CC final** with the card.
  4. If the patron has left without paying (card not present), select **CC Final**.
  5. Ops will prompt: "Use initial authorization to finalize the check?"
  6. Click **Yes** to prompt.
  7. Ops will prompt for a user with this privilege to authorize the transaction. (Employee Classes | Options, "Tender with initial authorization)

## QSR

### CC Sale

Button configuration = Function Transaction: Credit Card Lookup.

1. Sign into QSR revenue center and ring in order.
2. Select **CC Sale**.

### Void CC Tender

1. Re-open the closed check and select **CC tender payment**.
2. Click the **Void** button. This is a normal RES void button and not SIM.

### CC Reprint

Button configuration = Function Transaction: On Demand CC Voucher.

CC Reprint cannot be used from within a check.

Vouchers can be reprinted for open or closed checks.

1. Sign into Ops, but do not begin a check.
2. Enter a check # and select **CC Reprint**.
3. The vouchers will reprint showing **\*\*\*Reprint\*\*\*** at the top.
4. If just CC Reprint is hit, the auth from the last check that was open on that specific workstation will be reprinted. If it has multiple auths on it, a list of those auths will be shown so the user can select one. If there were no CC auths on the last check then it will show: "No CC Voucher Found to Print".

### Refund

1. Select **Void**, and then ring \$10.00 food.
2. Select **CC sale**.

Result = A \$10.00 refund is applied to the card and the check closes.

Customer and Merchant copies of Refund voucher print.

---

---

## 4 Utilities

### OPI Configuration Wizard

The OPI wizard is installed to

`INSTALLATION_DIR\OraclePaymentInterface\bin\OPIconfigurationWizard.exe`

and can be used to:

- Enable or Disable PMS or POS interfaces.
- Change from Terminal mode to Middleware mode and vice versa.
- Enable Pay@Table
- Add Pay@Table terminals
- Add Pay@Counter terminals
- Add a new Merchant ID
- Edit an existing Merchant ID

### RWregistry.exe

**Q: How can I edit the Native Driver Passphrase in OPI?**

A: Use the RWregistry tool:

1. Navigate to `C:\OraclePaymentInterface\Bin\RWregistry.exe`.
2. Right click `rwregistry.exe` and run as administrator.
3. Log in with Windows admin user and password.
4. Select **Update POS passphrase** from drop box.
5. Enter new password twice, and then click **Confirm**.
6. Restart OPI service.

**Q: Where do I change the corresponding passphrase on the RES side?**

A: Use the CreditCards.exe tool:

1. Navigate to **CreditCards.exe | OPI**, change the password, and then click **Save**.
2. Navigate to **CreditCards.exe | diagnostics**, select **OPI**, select **Update OPI PassPhrase**, and click **Begin Test**.
3. Wait for the operation to complete and verify that you get the message: OPI Passphrase update succeeded.

**Q: How do I update the OPI DB user password?**

A: **First change the pw in MySQL.**

1. Stop OPI service.
2. Start | All programs | MySQL | MySQL Server 5.6 | MySQL 5.6 Command line Client.
3. Enter the MySQL root user account pw at the prompt.
4. Select `user,password,host` from `mysql.user`;  
Result = shows root user 3 times and OPIDBuser 2 times.  
The following commands use a DB user name of 'OPIDBuser' as an example.

5. Update mysql.user set password=PASSWORD('YourNewPWgoesHere') where user='OPIDBuser';  
Result = When successful it shows: 'Query OK, 2 rows affected'
6. Select user,password,host from mysql.user;  
Result = the hashed PW for OPIDBuser should now be different than in step 3 above.
7. Exit MySQL.

Then, change it to match on the OPI side in rwregistry.

1. Go to OraclePaymentInterface\Bin\ and right click rwregistry.exe and "Run as Administrator".
2. Login using the administrative user credentials given during install.
3. From the drop-down, select **Update Database Creds**.  
User: Enter the OPIDBuser name given during install (and changed in MySQL).  
Password: Enter new PW. Same as used in MySQL.
  - a. Confirm pw: confirm pw.
  - b. Click **Commit**.
  - c. Result: "Committed update successfully"
4. Close rwregistry.
5. Restart MySQL svc
6. Restart OPI svc
7. If using an OPI simulator, restart the simulator.

## Config.exe

1. Double-click \OraclePaymentInterface\bin\config.exe to start the Oracle Payment Interface Configuration tool, and then enter the administrator credentials to the computer.
2. Settings can be viewed and or updated here.
3. After making changes, save and exit.
4. Restart the OPI service.

## card

Key	Value	Description
Amex	2 3400000000 3499999999 13 0 0	AMEX card schema.
JCB	4 3528000000 3589999999 16 0 0	JCB card schema.
Mastercard	1 5100000000 5599999999 16 1 0	MasterCard card schema.
Visa	0 4000000000 4999999999 16 1 0	Visa card schema.

---

## currency

Key	Value	Description
036	036 AUD 2 4 Australia Dollar	Currency list, refer to chapter 4.

## dll

Key	Value	Description
Mode	8	8 = Native, 3 = MGDH
Port	5098	Default port for POS request.

## ifc8

Key	Value	Description
CpPolicy	3	
Dp_pms_connection_check	true	
Pms_check_inactive_interval	73	
Pms_inactive_gate	313	
TotalMerchantNumber	0-n	Total merchant number for OPERA, depends on merchant configuration.

## ifc8X

Key	Value	Description
Condition_code	42	Default value.
Currency_code	840	Merchant currency code, please refer to chapter 4.
Currency_code_decimal	2	Currency decimal.
Device_merchant_id	xxxxxxxx	OPERA Chain and Property ID.
ExternalMode	true	Default value.
Merchant_city	xxxxxx	Merchant city, maximum is 13 characters.
Merchant_country	xx	Merchant country, please refer chapter 4.
Merchant_id	MGS-OPERA	Default value.



Merchant_name	xxxxxxxx	Merchant name, maximum is 25 characters.
Merchant_type	7011	Merchant MCC code.
PaymentCode_0	VA	Visa transaction code in OPERA.
PaymentCode_1	MC	MasterCard transaction code in OPERA.
PaymentCode_10	CU	
PaymentCode_11	DD	
PaymentCode_12	DL	
PaymentCode_15	GC	
PaymentCode_17	MD	
PaymentCode_18	ME	
PaymentCode_19	VE	
PaymentCode_2	AX	AMEX transaction code in OPERA.
PaymentCode_21	SD	
PaymentCode_24	VP	
PaymentCode_25	AL	
PaymentCode_26	EC	
PaymentCode_29	MX	
PaymentCode_3	DC	Diners transaction code in OPERA.
PaymentCode_32	PC	
PaymentCode_4	JC	JCB transaction code in OPERA.
PaymentCode_40	BC	
PaymentCode_9	CC	
Pms_server_ip	xx.xx.xx.xx	OPERA IFC8 server IP.
Pms_server_port	xxxx	OPERA IFC8 server port.
SwitchID	0Q	Default value.
Terminal_id	OPERA1	Default value.
User3	*****	OPERA IFC8 encryption key.

---

## master

Key	Value	Description
systemType	1	Default value.

## parameter\_level

Key	Value	Description
Country	US	
Instance	1	
Region	NA	
Solution	OPI	
Type	OnSite	

## payment

Key	Value	Description
Country	US	
Dll	0/1	Enable or disable port for POS. 0 is disable port, 1 is enable port.
Opera	0	Default value.
Opera2	0	Default value.
OptionByte2	true	Default value.
OptionByte4	true	Default value.
Pos	0	Default value.
Pos9700	0	Default value.
RefreshTime	0 29 0 * * ?	OPI refresh time to reload merchant configuration and purge history transaction data.
RemoveDevice4	0/1	Enable or disable port for Pay@Table device. 0 is disable port, 1 is enable port.
Running_mode	0	Default value.
Server	0Q	Default value.

TimeZone	America/New_York	Merchant time zone, follow Java time zone format.
Ifc8	0/1	Enable or disable function for OPERA IFC8 interface. 0 is disable function, 1 is enable function.

## pinpadAddress2

Key	Value	Description
Xxxxxxxxx_xx	TID IP	PED mapping list, please refer to chapter 4.

## posApi

Key	Value	Description
Century	20	
CommandSleep	200	
CommandSleep2	100	
Currency	840	Merchant currency code, please refer to chapter 4.
Mode	2	RES IIS mode, default value.
NeedAdjustReceipt	false	Default value, doesn't allow Pay@Table modify exist check.
PCommand	CREDIT_AUTHORIZE _AND_PAY	This PCommand value must be deleted for Pay@Table to be able to post with RES Native in OPI 6.1.1.9.  It should remain for MGDH solution. PCommand is re-created every time the Wizard is run and any change is saved.
PaymentCode_0	xxx	Visa tender number in POS configuration.
PaymentCode_1	xxx	MasterCard tender number in POS configuration.
PaymentCode_10	xxx	
PaymentCode_11	xxx	
PaymentCode_12	xxx	

PaymentCode_15	xxx	
PaymentCode_18	xxx	
PaymentCode_19	xxx	
PaymentCode_2	xxx	AMEX tender number in POS configuration.
PaymentCode_21	xxx	
PaymentCode_24	xxx	
PaymentCode_25	xxx	
PaymentCode_26	xxx	
PaymentCode_29	xxx	
PaymentCode_3	xxx	Diners tender number in POS configuration.
PaymentCode_32	xxx	
PaymentCode_4	xxx	JCB tender number in POS configuration.
PaymentCode_40	xxx	
PaymentCode_9	xxx	
RoomPosting	xxx	Room posting tender number in POS configuration.
ServiceNum	xxx	"Save check" tender number in POS configuration.
SimphonyVersion	2.5	Simphony version definition.
Timeout	30	Timeout value for OPI connect to POS transaction service.
Url	http://xxxx	RES transaction service URL.

### posRes

Key	Value	Description
TotalMerchantNumber	0-n	Total merchant number for RES, depend by merchant configuration.

---

## posResX

Key	Value	Description
Condition_code	42	Default value.
Currency_code	840	Merchant currency code, please refer to chapter 4.
Currency_code_decimal	2	Currency decimal.
Device_merchant_id	xxxxxxxx	CMID, assign by OPI installer.
Merchant_city	xxxxxx	Merchant city, maximum is 13 characters.
Merchant_country	xx	Merchant country, please refer to chapter 4.
Merchant_id	MGS-POS 3700	Default value.
Merchant_type	5812	Merchant MCC code.
Pos_type	posRES	POS version definition.
SwitchID	0Q	Default value.
Terminal_id	POS3700	Default value.

## posSybase1

Key	Value	Description
InitIdle	20	
MaxPool	40	
MaxWait	20	
MinIdle	10	
ResDB	Micros	RES DB name, default value.
ResHost	xx.xx.xx.xx	RES Server IP.
ResPassword	*****	RES DB user password.
ResPort	2638	RES Server Sybase database port, default value.
ResUser	*****	RES DB user name.

---

## server0Q

Key	Value	Description
ConnectTimeout	10	
Host	https://xx.xx.xx.xx:port	3 <sup>rd</sup> PSP middleware URL.
HostMode	true/false	Terminal mode (PED direct connection) = false. Middleware mode = true.
Port	8080	Port for 3 <sup>rd</sup> PSP PED or middleware.
Timeout	60	Timeout value for OPI send request to 3 <sup>rd</sup> PSP PED or middleware.
UseSSL	true	Default value, OPI send request to 3 <sup>rd</sup> PSP PED or middleware by HTTPS.
UseTCP	false	Default value.
UseInquiryMode	true	This parameter must be added manually and it only affects Middleware mode. true = do transaction Inquiry. false = do reversal.

## switch

Key	Value	Description
0	0Q -1 -1	Default value.
1	0Q -1 -1	
11	0Q -1 -1	
2	0Q -1 -1	
3	0Q -1 -1	
4	0Q -1 -1	
8	0Q -1 -1	

---

## terminal47

Key	Value	Description
xxxxxxx	xx_xxxxxxx_x	Please refer to chapter 4 for Pay@Table device mapping.

## vx6702

Key	Value	Description
CertPass	*****	Pay@Table certificate password.
PayAtTableServer	0Q	Default value.
Port	5023	Default port for Pay@Table device request. The RES KDScontroller uses port 5023 so this value should always be changed.
UseDeviceRRN	true	Default value.
UseSSL	true/false	Pay@Table connection mode, default is "true" to use HTTPS for Pay@Table request.

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# 5 Troubleshooting and FAQs

## Troubleshooting

**Situation 1:** Unable to launch config.exe on Server 2008 R2.

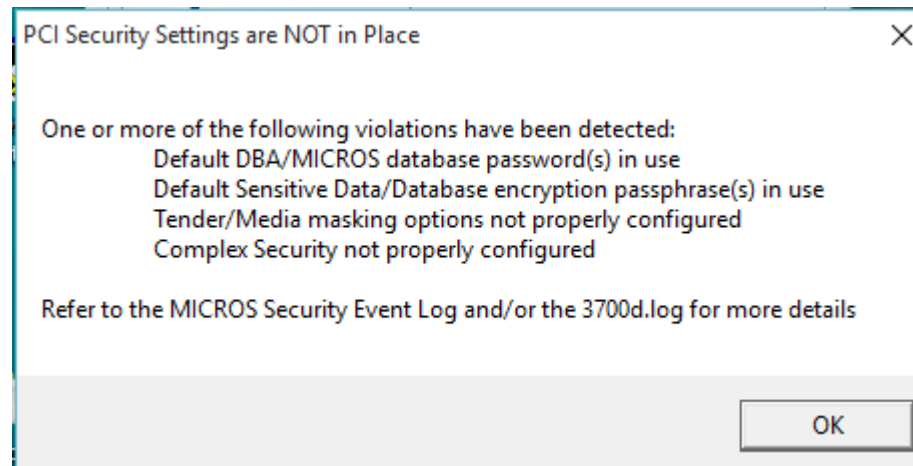
**Solution:** Right click and config.exe and select "Run as Administrator".

**Situation 2:** Cannot communicate to OPI after installation.

**Test:**

1. Verify you can telnet to the OPI PC on port 5098 from another PC.  
Ex: From CMD prompt: telnet 172.23.25.16 5098  
(Where 172.23.25.16 is the IP address of the OPI server.)  
If you cannot telnet to the OPI port, try the following:
2. Restart the OPI Service.
3. Temporarily bypass the firewall.
4. Verify OPI is listening on port 5098.
5. Open CMD prompt: C:\>netstat > c:\temp\ports.txt
6. Search ports.txt for "5098".

**Situation 3:** When starting Ops you see:



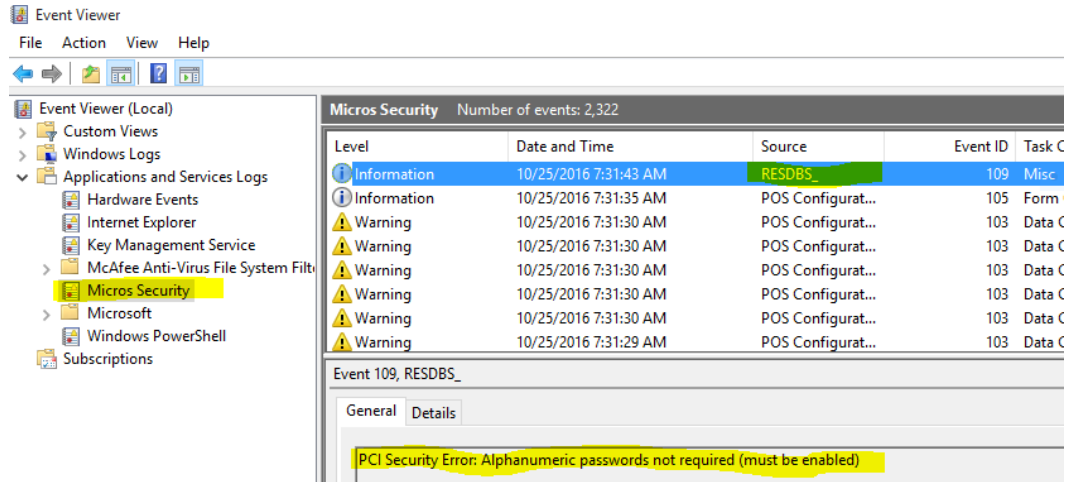
**Solution:**

- Enable Complex security.
- Look in event viewer to see what the specific issue or issues are.
- Correct the issues listed.

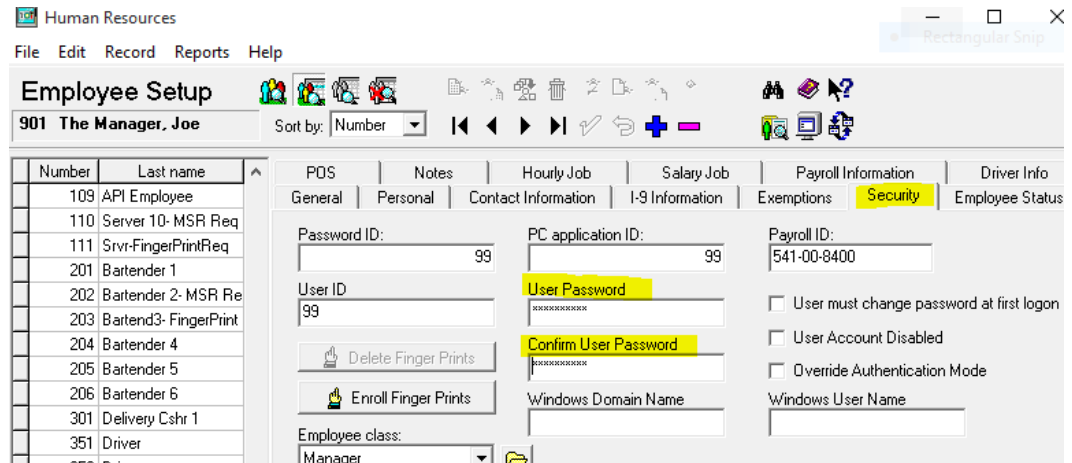
If Ops does not start, go to **Event Viewer | Applications and Services Logs | Micros Security** and see what the issue is.

Example below.



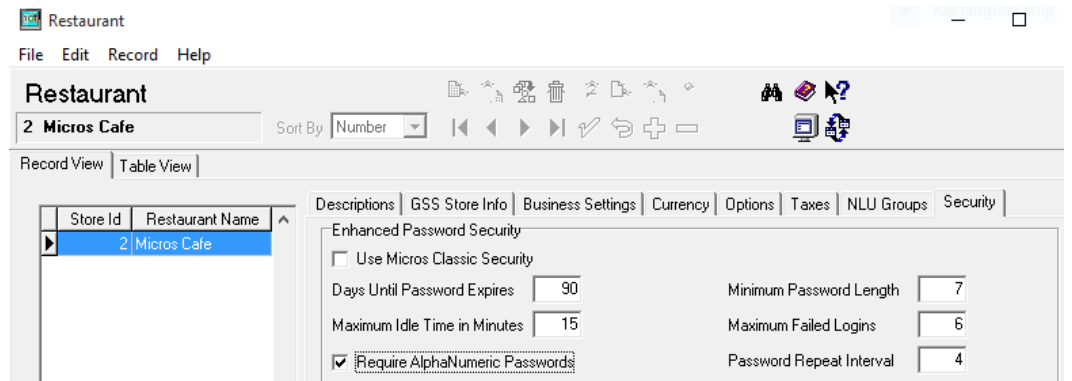


Setup a complex password for power user.



### Poscfg | Employees | Employees | Security

- Give your manager or power user a User Password with both letters and numbers and at least 7 characters.
- You will not be able to open any back office application without this complex User Password.



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**Poscfg | System | Restaurant | Security:**

- **Disable Use Micros Classic Security.**
- Days Until Password Expires = not greater than 90
- Maximum Idle Time in Minutes = 15 or less
- Require AlphaNumeric Passwords = On
- Minimum Password Length = at least 7
- Maximum Failed Logins = not greater than 6
- Password Repeat Interval = at least 4
- Before exiting Poscfg, test your new complex password by logging into another application like CreditCards.exe.

**Poscfg | Sales | Tender / Media | CC Tender, and then enable:**

- Verify before authorization
- Credit auth required
- Mask Credit Card Number
- Mask Expiration Date

The “Micros” and “DBA” user passwords must not be the defaults.

These passwords can be changed in **Database Manager | Users \ Passwords**.

The “Database Key” and “Data Key” values must not be the defaults.

These values can be changed in **Database Manager | Encryption Keys**.

After making all of the above changes, Ops should start.

If not, go back to event viewer and see what it says.

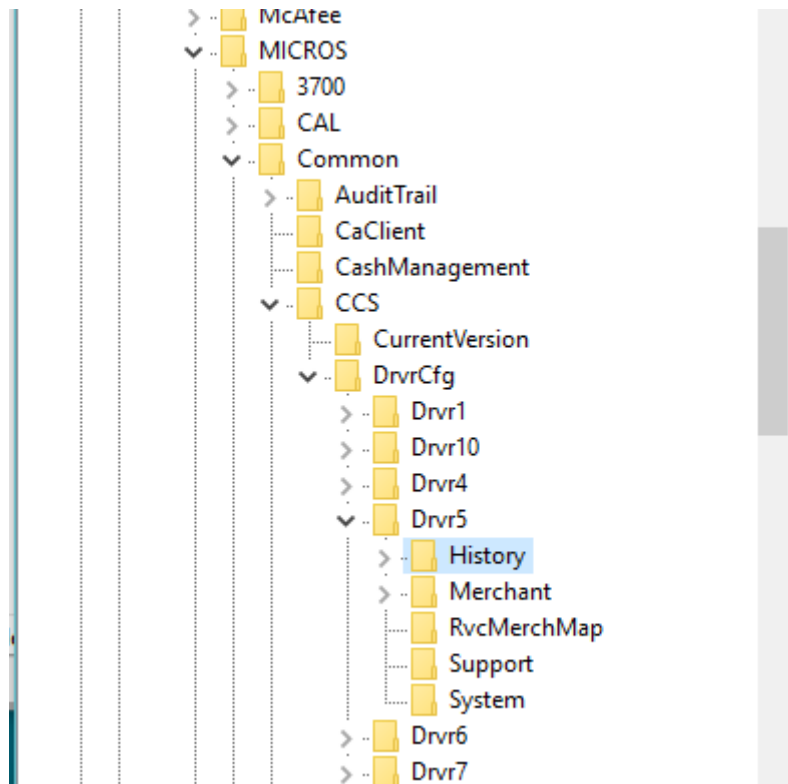
**Situation 4:**

If you have more than one card settlement driver, and you decide to clear sales totals, you will need to manually delete the batch history of those drivers to avoid future batch settlement issues. This is a very rare configuration and situation, but here are the details. When sales totals are cleared, and a new batch is created it will be batch 1. The existing batch 1 is found in batch history and all batches for that settlement driver are automatically deleted. This is by design as it prevents duplicate batch numbers. But if a 2<sup>nd</sup> settlement driver exists that does not have a batch 1, that driver’s batch history will not be automatically cleared.

**Solution:**

After clearing sales totals open the registry to

HKLM\Software\Wow6432Node\MICROS\Common\CCS\DrvrCfg\ and open each “Drvr#” record. Example: **Drvr5**



If the Drvr# folder contains a "History" folder, delete the entire History folder.  
If there is no History folder, nothing needs to be done for that driver.  
Repeat this for every Drvr# record.

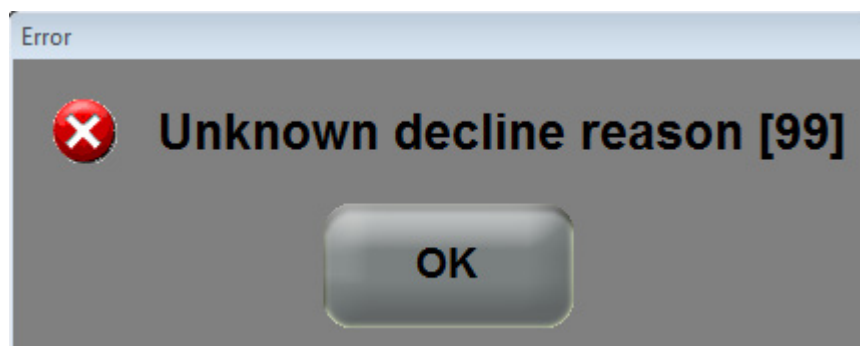
**Situation 5:**

Attempting to get an auth results in error "Failed to send OPI request [-214".

**Solution:**

Install Microsoft .NET Framework 4.6.1 on both server and backup server.

**Situation 6:**



This generic error message can be caused by several things.

**Solution 1:**

Restart the OPI Service and try again.

---

### Solution 2:

If the system.log shows the message below then the cause is likely a Java security update. (This should not be an issue in OPI 6.1 MR1, but leaving info, in case.)

```
[GATEWAY RESPONSE] GenericJSONProcessor : Can not decrypt  
java.security.InvalidKeyException: Illegal key size
```

Not all Java updates will cause this error, but security updates will. For example: Java 8 update 111 causes this issue.

1. Stop the OPI service.
2. Go to the link below and download jce\_policy-8.zip.

<http://www.oracle.com/technetwork/java/javase/downloads/jce8-download-2133166.html>

3. Unzip the file and copy the two files to your Java security folder.
  - Local\_policy.jar
  - US\_export\_policy.jar

Ex: C:\Program files\Java\jre(your current version)\lib\security\

Some systems may have Java installed in Program Files (x86). If so, update the files there also.

4. Start the OPI service.

### Solution 3:

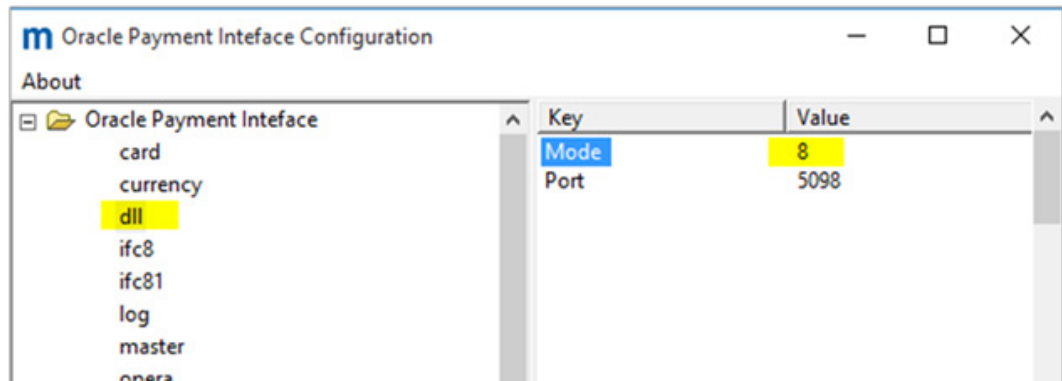
If the debug.log shows: "ht is null" and the problem was not caused by the Java security update mentioned in solution 2 above, then the cause may be that the wrong POS passphrase is in either OPI or RES.

The solution is to change the POS passphrase at both RES and OPI to be the same value. The steps to do this are in the **Utilities | RWregistry** section.

### Solution 4:

If nothing is writing to the debug.log at all when you get the "Unknown decline reason [99]" error, then you likely have the wrong dll mode setting.

1. Open **OraclePaymentInterface\Bin\config.exe | dll**
2. Change mode to **8**. (8 is for Native Driver solution. 3 is for MGDH.)



3. Save changes, and then restart OPI service.

**Situation 7: “Issuer or switch inoperative”**

**Cause 1:** Simulator is not running.

**Cause 2:** OPI service not restarted after making config change.

**Cause 3:** Java security update broke OPI by replacing files.  
This should not be an issue in OPI 6.1 MR1.

**Cause 4:** Incorrect Proxy settings.

**Cause 5:** Incorrect settings in Config | Server0Q, for Host and or Port.

**Solution For Middleware mode:**

- 1) Need to use https instead of http.
- 2) Need to append port to end of host value

**Ex: Host = https://10.39.176.175:8991**

**Cause 7:** Wrong IP address in Config | pinpadAddress2 for that terminal.

**Situation 8: “Bad Terminal ID”**

**Cause 1:** In Config | pinpadAddress2, wrong Merchant ID  
or wrong workstation number.

**Cause 2:** Config | posRes1 | Device\_merchant\_id is not set correctly.

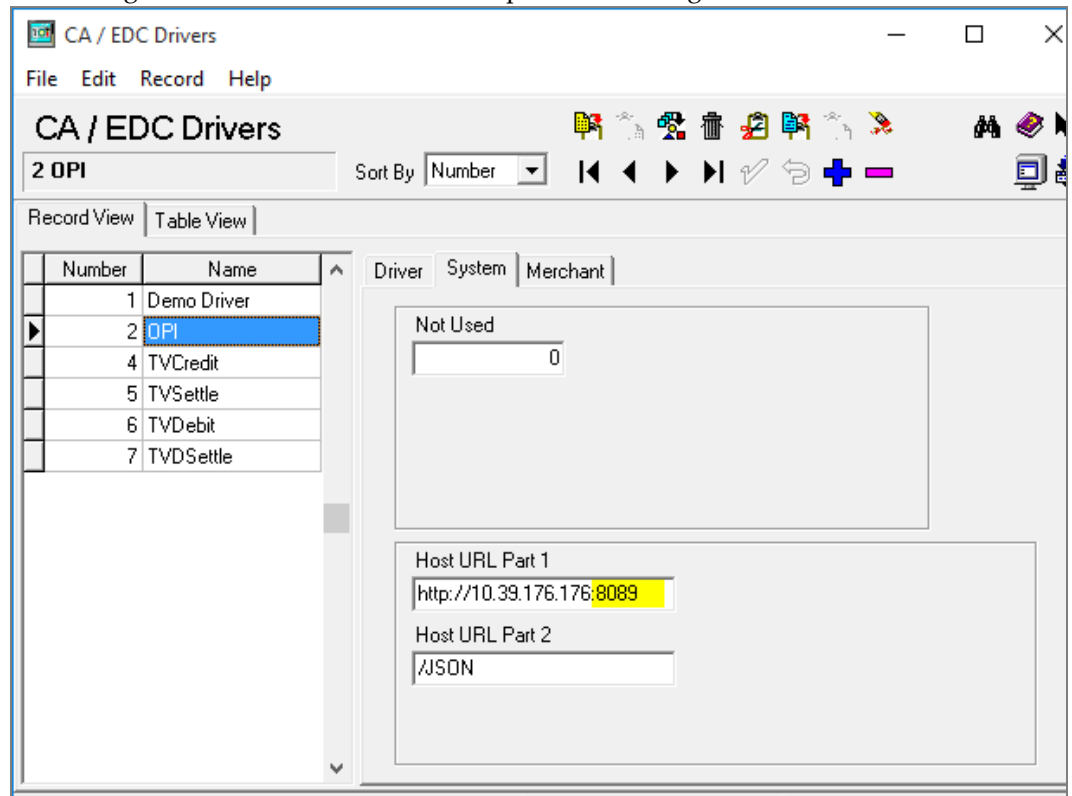
**Cause 3:** Forgot to restart OPI service after making changes in config.exe or  
the wizard.

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## Frequently Asked Questions (FAQs)

**Q1: How can I change the port that OPI listens on from 5098 to 8089 (as an example)?**

1. Open `OraclePaymentInterface\bin\OPIConfigurationWizard.exe`.
2. Login as a local admin user.
3. Go to Pos Configuration and double click on your Merchant.
4. Change the **Port:** value to 8089
5. Click Next to final screen and Exit Config.exe, saving changes.
6. Restart OPI Service.
7. Open **Poscfg | Devices | CA / EDC Drivers | System**, select the **OPI** driver, and then change the **Host URL** to use the new port. Save changes.



8. In Micros Control Panel, select **Restaurant** and click **Reload DB**.

**Q2: If a transaction can't finish for some reason. (for example, your network is shutdown), how does OPI handle it?**

A: If HostMode is false, (Terminal mode) OPI automatically sends a reversal transaction to void the previous one.

If HostMode is true, (Middleware mode) OPI automatically sends an inquiry transaction every 3 minutes until bank give a response (decline or approve).

This can be changed by adding the `UseInquiryMode` parameter:

1. Run config.exe.

2. Select server0Q from left list, right click , select add, add **UseInquiryMode**.  
**UseInquiryMode** = true, means do a transaction inquiry.  
**UseInquiryMode** = false, means do a reversal.

3. This parameter has no affect unless HostMode = true

## Not Supported

Not supported in the RES Native driver solution:

- Gift Cards
- TopUp Auth
- Balance Inquiry
- Void a refund (RES limitation)
- Debit (RES Native OPI)
- SaleCashBack (RES Native OPI)
- CC Voice/Manual CC for QSR (offline sale)
- Backup OPI Server

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# 6 Appendix

## Currency List

Key	Value
036	036 AUD 2 4 Australia Dollar
124	124 CAD 2 4 Canadian Dollar
156	156 CNY 2 4 Chinese RMB
344	344 HKD 2 4 Hong Kong Dollar
356	356 INR 2 4 India Rupee
360	360 IDR 2 4 Indonesia Rupiah
392	392 JPY 0 4 Japanese Yen
410	410 KRW 0 4 South Korean Won
446	446 MOP 2 4 Macau Pataca
458	458 MYR 2 4 Malaysian Ringgit
462	462 MVR 2 4 Rufiyaa
554	554 NZD 2 4 New Zealand Dollar
608	608 PHP 2 4 Philippine Pesos
634	634 QAR 2 4 Qatari Rial
702	702 SGD 2 4 Singapore Dollar
756	756 CHF 2 4 Swiss Francs
764	764 THB 2 4 Thai Baht
826	826 GBP 2 4 British Sterling Pound
840	840 USD 2 4 US Dollar
901	901 TWD 2 4 New Taiwan Dollar
978	978 EUR 2 4 Euro

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## Country Code

Country	Code
Australia	AU
Austria	AT
Canada	CA
Denmark	DK
Germany	DE
France	FR
Hong Kong	HK
Ireland	IE
Italy	IT
Japan	JP
Korea, Republic of	KR
Macau	MO
Malaysia	MY
Maldives	MV
Mexico	MX
New Zealand	NZ
Philippines	PE
Qatar	QA
Switzerland	CH
Thailand	TH
United Kingdom	GB
United States	US

## PED Mapping Format

Key	Value
CMID_WS	TID_IP

### POS Format

CMID: need match "Device\_merchant\_id" in merchant configuration.

WS: POS workstation number.

TID: Terminal ID.

IP: PED IP.

### OPERA Format

CMID: need match "Device\_merchant\_id" in merchant configuration.

WS: OPERA client name, can't contain "\_" and space.

TID: Terminal ID.

IP: PED IP.



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## Pay@Table Mapping Format

Key	Value
PTID	Product_CMID_RVC or Product_CMID_RVC_Option

### Format

PTID: Pay@Table device ID.

Product: POS definition, 2 characters.

OR: RES; 0F: 9700; 1Z: Symphony 1 & 2; 1N: IFC8

CMID: need match "Device\_merchant\_id" in merchant configuration.

RVC: RVC number in POS will activate Pay@Table function.

Option: by default Pay@Table pickup check by table number, if option "C" attached will allow pickup check by check number.

## Card Type ID Reference

Card Type	ID for OPI 6.1.1 and later
Visa	00
Master Card	01
American Express	02
Diners	03
JCB	04
CUP	10
Discover	26
PayPal	27
Visa Electron	17
Maestro	19
VPAY	20
Alliance	21
EC Chip	22
Bancomat Card	23