

Oracle® Payment Interface

Oracle Hospitality RES 3700 Oracle Gateway

Device Handler Installation Guide

Release 6.2

E92145-03

March 2019

Copyright © 2017, 2019, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Preface	viii
Audience	viii
Customer Support.....	viii
Documentation.....	viii
Revision History.....	viii
1 Pre-Installation	1-1
Before You Start the Installation	1-1
2 OGDH OPI Solution	2-1
Installing OGDH	2-1
POSCFG Configuration for OGDH	2-5
Employee Class/Refund	2-5
Interfaces	2-6
ISL Files import.....	2-7
Touch Screens.....	2-8
Tender Media	2-10
Cash Back Tender	2-12
Cash Back Service Charge.....	2-15
POSEOD.....	2-17
Tax Type Settings in OGDH.....	2-19
3 OPI Installation	3-21
Uninstalling the Old Version of OPI and MPG	3-21
To Uninstall	3-21

Installing the OPI	3-21
Pay at Table Install.....	3-32
4 OPI Upgrade Install	4-36
Upgrade MGDH to OGDH.....	4-36
Upgrading the OPI.....	4-41
OPI Upgrade Steps	4-41
5 POS Workstation Procedures	5-1
TSR Transactions.....	5-1
QSR Transactions	5-3
Gift Cards	5-4
POSEOD	5-5
6 Utilities	6-1
7 Troubleshooting and FAQs.....	7-1
Troubleshooting Issues	7-1
Not Supported.....	7-3

Preface

This document describes how to install Oracle Payment Interface (OPI) Release 6.2 with the Oracle Hospitality RES 3700 Oracle Gateway Device Handler (OGDH) and it explains how to configure RES 3700 for OPI with OGDH.

Audience

This document is intended for installers and system administrators of OPI and OGDH.

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
- Screenshots 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
December 2017	Initial publication
January 2019	Add ISL files import
March 2019	Documentation updates

1 Pre-Installation

Before You Start the Installation

IF UPGRADING OPI, YOU MUST READ THE [UPGRADING THE OPI SECTION](#) FIRST.

Verify that your environment meets the following requirements:

- The application requires .NET Framework version 4.0 or higher.
- Upgrading from OPI 6.1 and higher to OPI 6.2 is supported.
- Upgrading from MGDH 6.1 and higher to OGDH 6.2 is supported.
- Upgrading from previous versions of MPG to OPI is not supported.
- If an MGDH installation prior to 6.1 exists, go to Programs and Features and uninstall the previous MGDH installation. Then install the new OGDH.
- You cannot upgrade from MGDH 6.1.1.X to Native Driver 6.2 (must upgrade then switch to Native configuration).
- You cannot run upgrade from 6.1.1.X to 6.2 as unattended/silent (due to 6.1.1.X installation program differences between 6.2).
- Verify with the merchant whether they use TSR (table service) or QSR (quick service), or both. (No tips allowed in QSR.)
- Verify with the merchant whether they would like “Refund” functionality activated or not. The merchant needs to control the privilege for this function.
- Verify with the merchant whether they would like “Sale&Cash” functionality activated. This allows a guest to get cash back with their purchase. This is only available for QSR.
- Make sure Microsoft Visual C++ 2010 is installed on the PC where OGDH and OPI will be installed.
- At least 6 GB of free disk space is required for OPI installation.
- You must install both OGDH and OPI as an Administrator.
- You will need to know a Micros database user name and password to install the Pay@Table portion of OPI.
- If upgrading OPI you will need to know the MySQL root user account password.
- The OGDH install will not connect to the RES DB. You will need to know the user name and password to open POS configurator.

Obtain the following information before installing the software:

- Confirm Merchant IDs
- Confirm receipt header details
- Tender Media numbers for each card type
- IP of OPI Server

-
- IP of POS Server
 - Workstation IDs and IPs that will integrate to a PINPAD

Note: If you run the OGDH setup software on a 3700 server with legacy MGDH files present in the CAL Files folders, you must manually remove these files before installation. Otherwise, the files deployed via the new CAL Packages will be constantly overwritten by the legacy files in the CAL Files folders and unexpected results will occur.

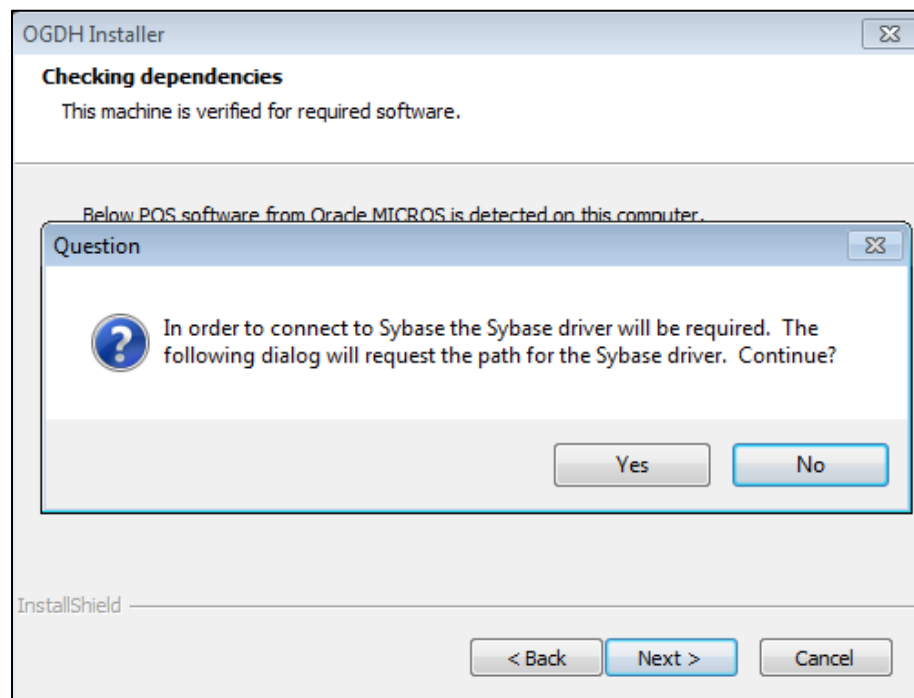
For example, check `Micros\Res\CAL\WS5A\Files\CF\Micros\Etc.` for any legacy MGDH files. If found, delete all legacy MGDH files. In addition, check in the similar location for other workstation types. Lastly, if there is a Bin folder in Files, then check that folder as well.

2 OGDH OPI Solution

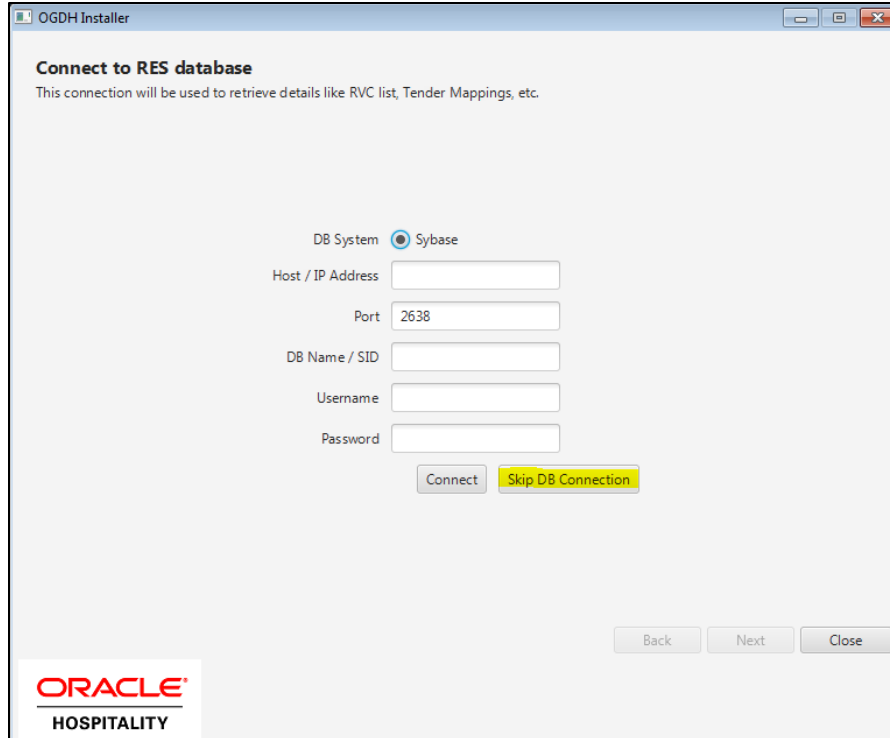
Installing OGDH

To install OGDH:

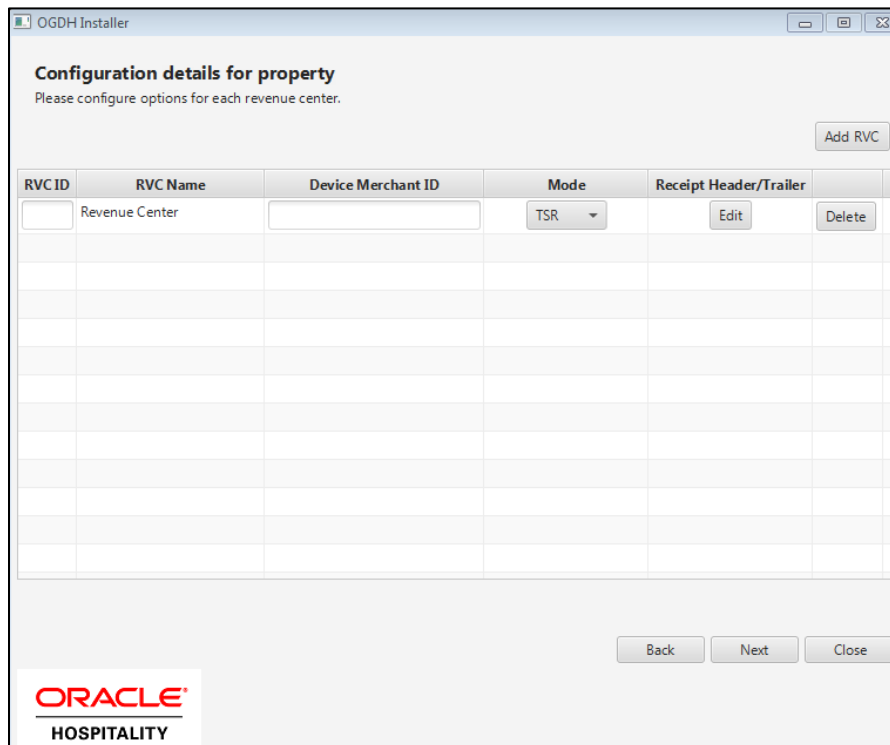
1. In Microsoft Windows, log in as an administrator, and then run the OGDH_OPI_6.2.0.0.exe file.
2. Click **Next**.
3. The *Welcome* screen displays. Click **Next**.
4. The *Checking dependencies* screen displays. Click **Next**.



5. Click **No** to the request for the Sybase driver.
6. Select the install location, and then click **Next**.
7. On the **Ready to Install the OGDH** screen, click **Install**.



8. On the *Connect to RES database* screen, click **Skip DB Connection**.
9. Select a currency from the drop-down list, and then click **Next**.



10. In Micros control panel, take Restaurant to Database level.

11. Open **POS Configurator**, select **Revenue Center**, and then select **RVC Transactions** to see the correct RVC info.

12. Click **Add RVC** to add a new record for each revenue center shown in POSCFG, and then fill in the correct revenue center information for all fields and all revenue centers:

RVC ID = Revenue center "Number"

Device Merchant ID = Merchant ID

Mode: TSR for all RVCs that allow tipping. QSR for any RVC that does not allow tipping.

Receipt Header/Trailer: Click **Edit** to add header and trailer lines for each RVC.

13. Click **Next**.

Tender Type	Revenue Center Number	Tender Type	Revenue Center Number
Debit		VISA Debit	
VISA	211	Maestro	
MasterCard	215	V Pay	
American Express	213	Alliance	
Diners Club	214	EC Chip	
JCB		GiroCard	
China UnionPay		MasterCard Debit	
Gift Card	217	WeChat Pay	
China UnionPay Debit		Alipay	
Discover	212	Sale Cash Back	
Visa Electron		GC Cash-out SVC	906

14. Open **POSCFG**, select **Sales**, and then select **Tender/Media** to see tender information.

15. Enter the correct tender number for each tender. Leave unused tenders blank.
For "GC Cash-out SVC" record number, select **POSCFG Sales**, and then select **Service Charges**.

16. Click **Next**.

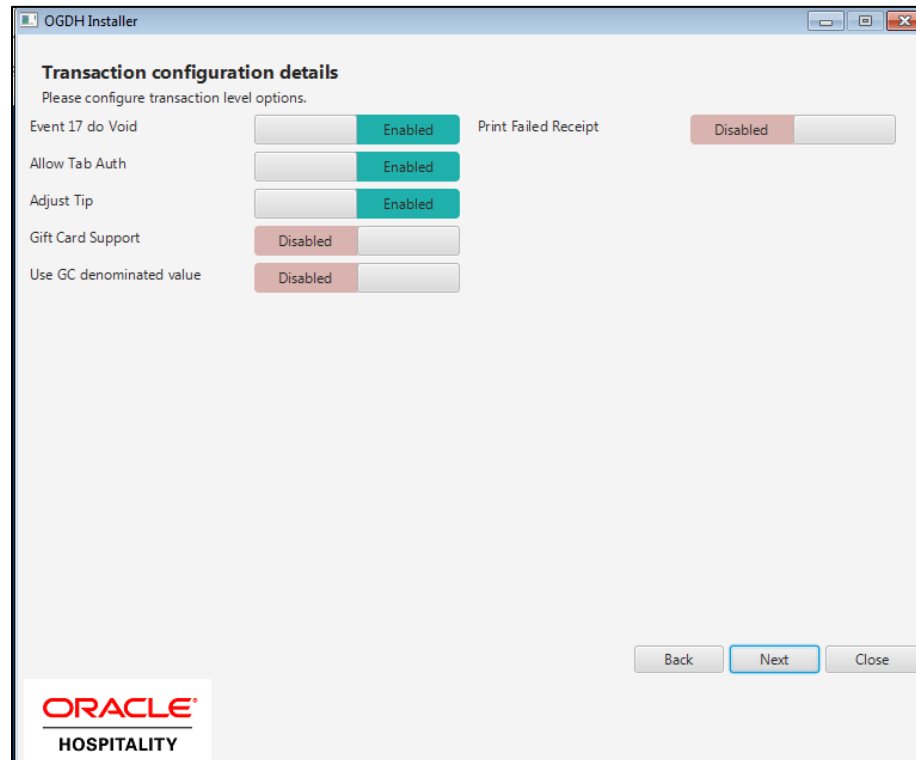
The next screen shows unused tenders in red.

17. Verify the tender settings are correct, and then click **Next**.

- The **Extra Tender mapping configuration** screen is for adding any tenders not shown on the previous tender screen.
- If you have any Extra tenders that were not listed on the previous page, you may enter them here.
- You must first select the **Enable extra tenders** option.

18. Click **Next**.

19. Verify extra tender settings are correct, and then click **Next**.



- **Event 17 do Void:** For RES only, the “must be Enabled.
- **Allow Tab Auth:** Enable if initial authorizations are allowed.
- **Adjust Tip:** Enable if that ability to adjust tip amount is needed.
- **Gift Card Support:** Enable if gift cards will be sold.
- **Use GC denominated value:** Enable if they sell gift cards that have a set price. Leave this disabled if gift cards are sold as an open amount that the operator types in.
- **Print Failed Receipt:** Enable if vouchers should print when a card is declined.

20. Click **Next**.

- **Host / IP Address:** Enter IP address of the OPI server PC.
- **Port:** Port used to communicate to OPI.
- **Tab Auth Amount:** Initial authorizations will default to this preset amount.
- **Receipt Limit Amount:** Enter the amount, below which vouchers should not print.
- Look in POSCFG | Sales | Menu Items for the **GC activation menu item** and **GC top-up menu item** record numbers, if applicable.

21. Click **Next**.

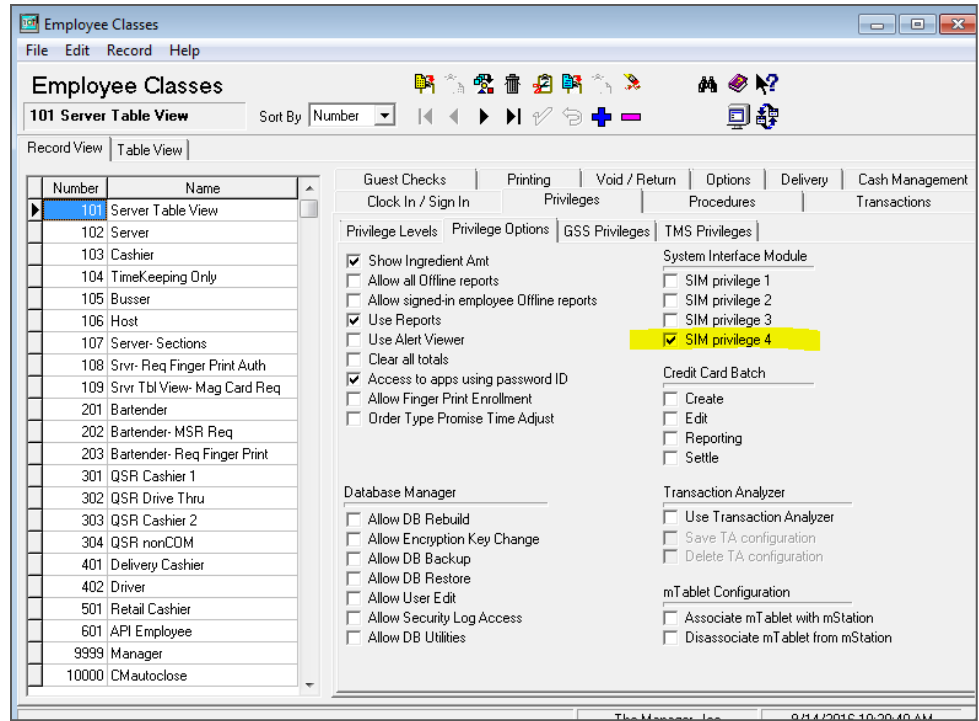
22. On the **OPI Service Configuration** screen, select the modules to install.
Note: Most environments should install all modules.

23. Click **Save**, and then click **Finish**.

POSCFG Configuration for OGDH

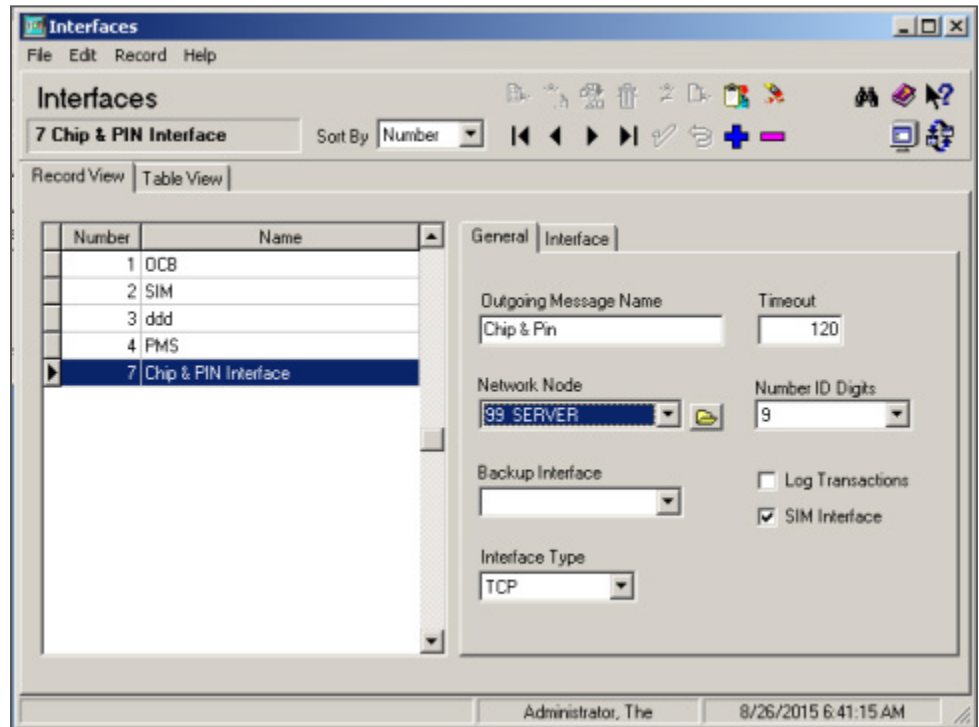
Employee Class/Refund

The ability to perform a refund is controlled by the **SIM privilege 4** option. To access this option, select **Employee Classes**, select **Privileges**, and then select **Privilege Options**. Only enable this option with the merchant's permission and only for the employee class they specify.



Interfaces

To access interfaces, select **Poscfg**, select **Devices**, and then select **Interfaces**.



Use the following parameters:

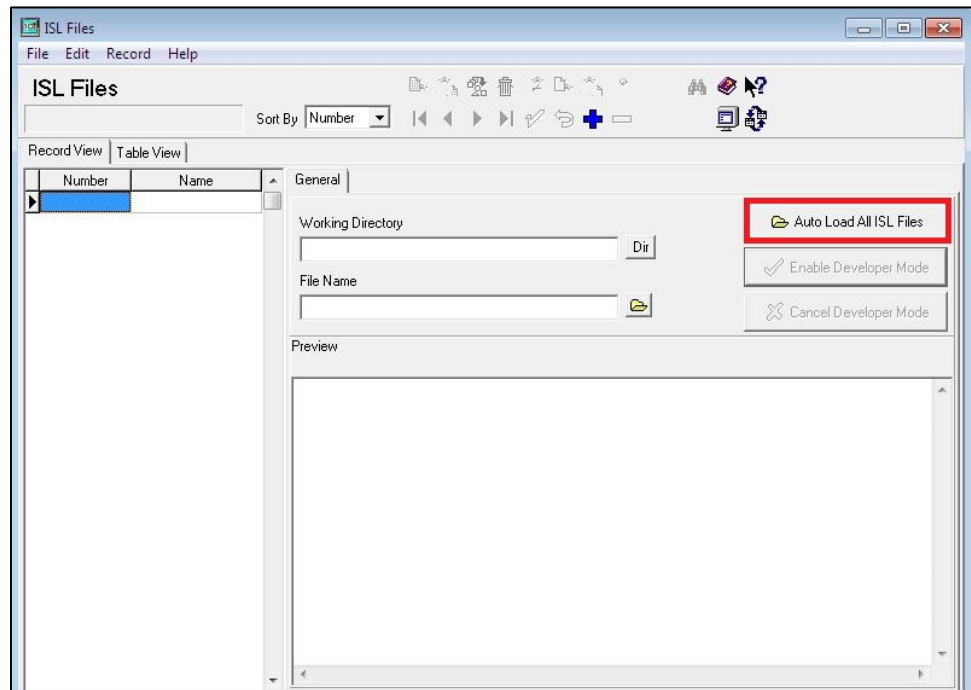
- **Number:** 7

- **System Name:** Chip&PIN Interface
- **Outgoing Message Name:** Chip&PIN
- **Timeout:** 120
- **Network Node:** RES Server
- **Number ID Digits:** 9
- **SIM Interface:** enable
- **Type:** TCP

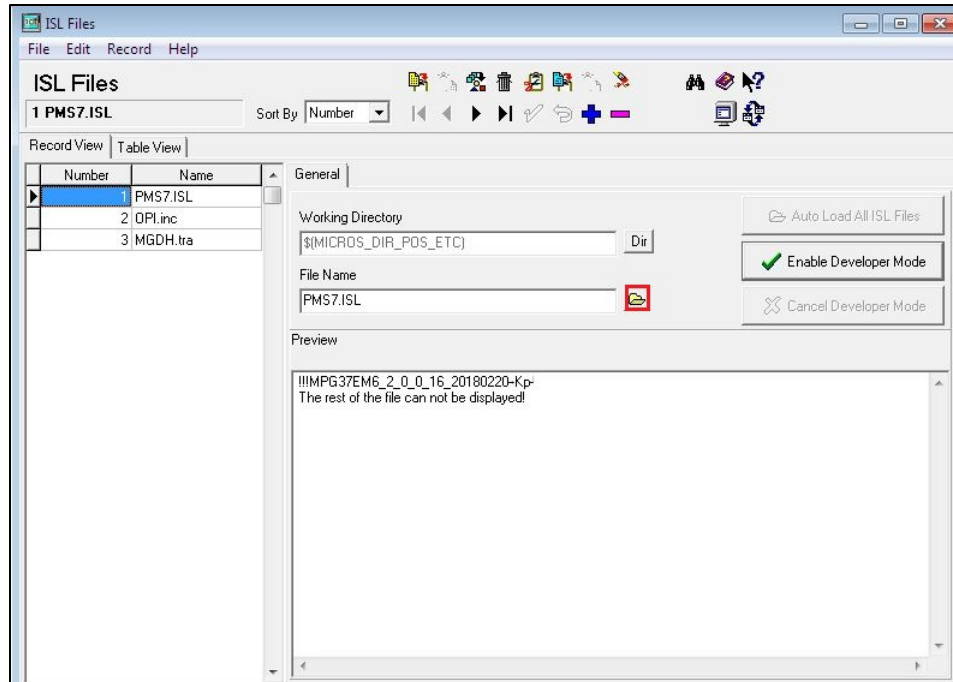
ISL Files import

RES 5.6 and higher improves security for importing and running Interface Scripting Language (ISL) scripts. If you are upgrading to this version of RES, you must use the ISL Files menu in the POS Configurator to add or update .ISL files, such as PMS.isl, OPI.inc and MGDH.tra.

1. To access ISL Files, select **POSCFG**, select **Devices**, and then select **ISL Files**.
2. Click the **Auto Load ALL ISL Files** button. The POS configurator will import ISL Files from the default path of \MICROS\Res\Pos\Etc\



3. To import a single script, click **New**, and then click the **Browse** button to select the .ISL file. Ensure the ISL file menu name is the same as the File name



4. To update .ISL files, select the ISL menu file and then click the **Browse** button to select the .ISL file.



NOTE:

You must restart OPS after you import or update .ISL files

Touch Screens

To access touch screens, select **POSCFG > Devices > Touchscreen Designer**.



- Link every Void key to SIM inquire number 17.
- Link credit card tender keys to the correct SIM inquire # using the values below.

The buttons for **TSR** are listed as the following:

- [Sale + Tip]: SIM INQ #2
(Supports tipping from the PED. Configure INQ #2 instead of INQ #1. For TSR only.)
- [Tip Adjust]: SIM INQ #3
- [CC Refund]: SIM INQ #4 (Recommended refund method.)
- [Refund(m)]: SIM INQ #11
- [CC Auth]: SIM INQ #8
- [CC Final]: SIM INQ #9
- [Tab Auth]: SIM INQ #13

-
- [Balance Inq]: SIM INQ #16
 - [Reprint]: SIM INQ #7
 - [Repost]: SIM INQ #19
 - [Void(e)]: SIM INQ #17
 - [Manual Auth] or [TSR CC Voice]: SIM INQ #18
 - [Auth + CNP]: SIM INQ #14

Auth + CNP is a way for the TSR operator to trigger at the POS side through OGDH to allow the user to manually enter credit card info on payment terminal (PinPad), for card not present transactions.

- [GC Function]: SIM INQ #10 (New for RES in OPI 6.2)

Note: [Void(e)] INQ #17 is a special button. It exists on POS 3700 only. For other POS platforms, it is not needed. All void buttons need to be replaced with it.

The buttons for QSR are listed as the following:

- [CC Sale]: SIM INQ #1
- [SALE&CASH]: SIM INQ #5
- [CC Refund]: SIM INQ #4 (Recommended refund method.)
- [Refund(m)]: SIM INQ #11
- [Balance Inq]: SIM INQ #16
- [Reprint]: SIM INQ #7
- [Repost]: SIM INQ #19
- [Void(e)]: SIM INQ #17
- [Sale + CNP]: SIM INQ #6

Sale + CNP is a way for the QSR operator to trigger at the POS side through MGDH to allow the user to manually enter credit card info on payment terminal (PinPad), for card not present transactions.

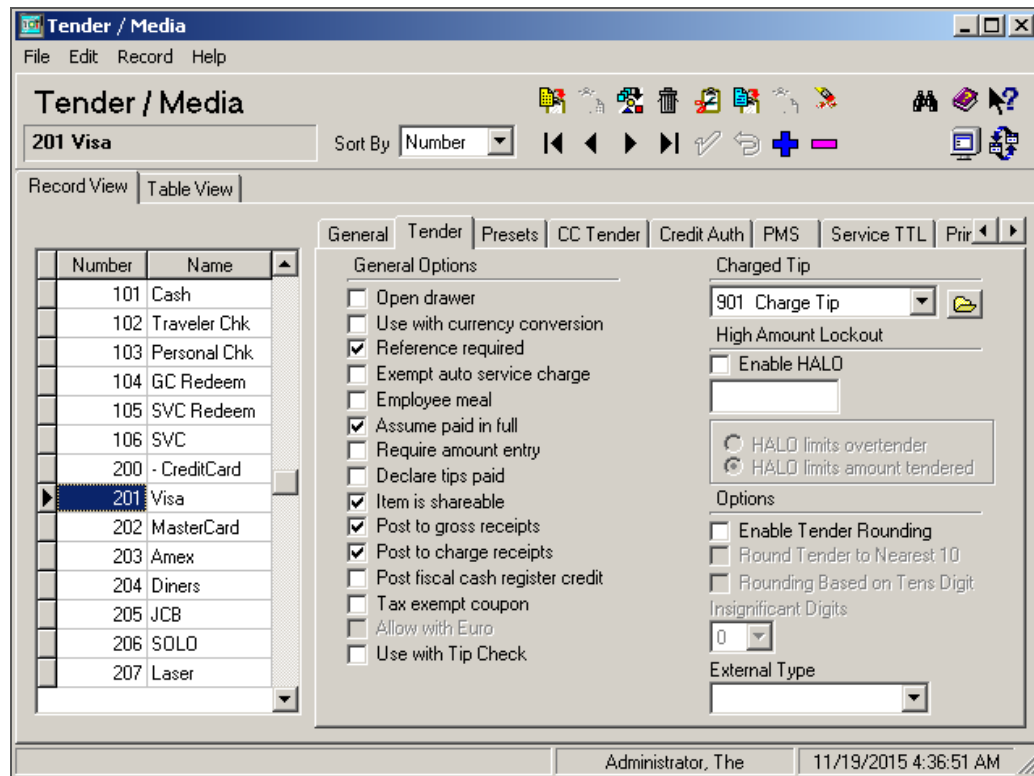
- [GC Function]: SIM INQ #10

Note: [Void(e)] is a special button. It exists on POS 3700 only. For other POS platforms, it is not needed. All void buttons need to be replaced with it.

Note: No Voice/Offline entry for QSR.

Tender Media

Set up the following for credit cards.



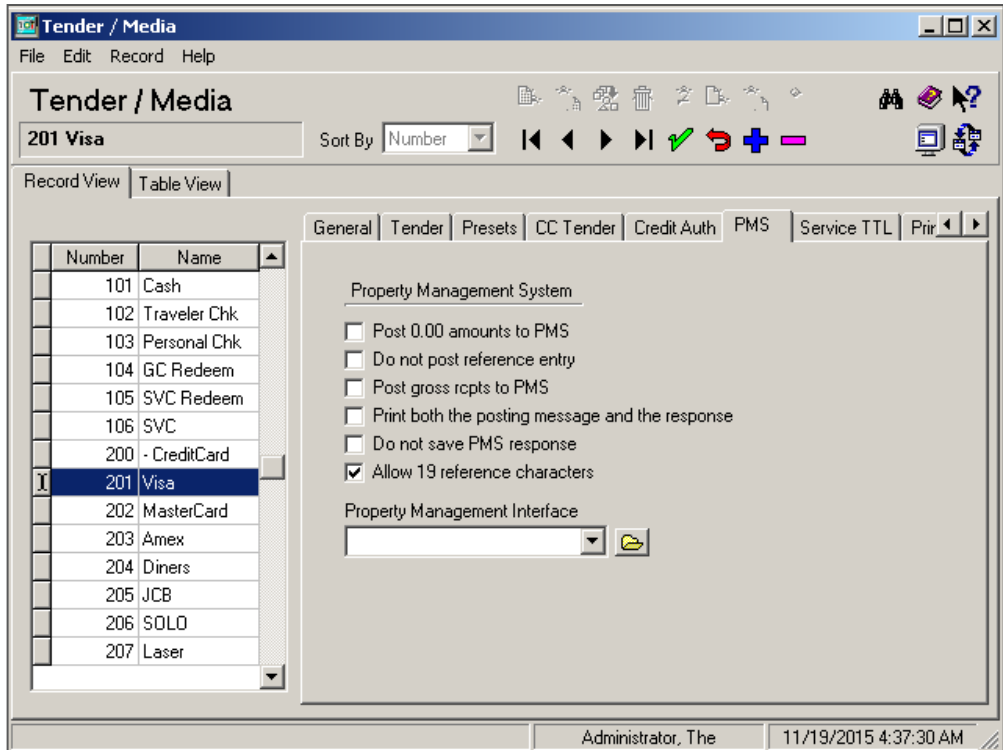
Notes:

- Assume paid in full.
- Reference required.
- Charged Tip: Set to **0 None** if all RVCs are QSR mode.
- Charged Tip: Set to **Link a Tip** service charge if some RVCs are TSR mode.

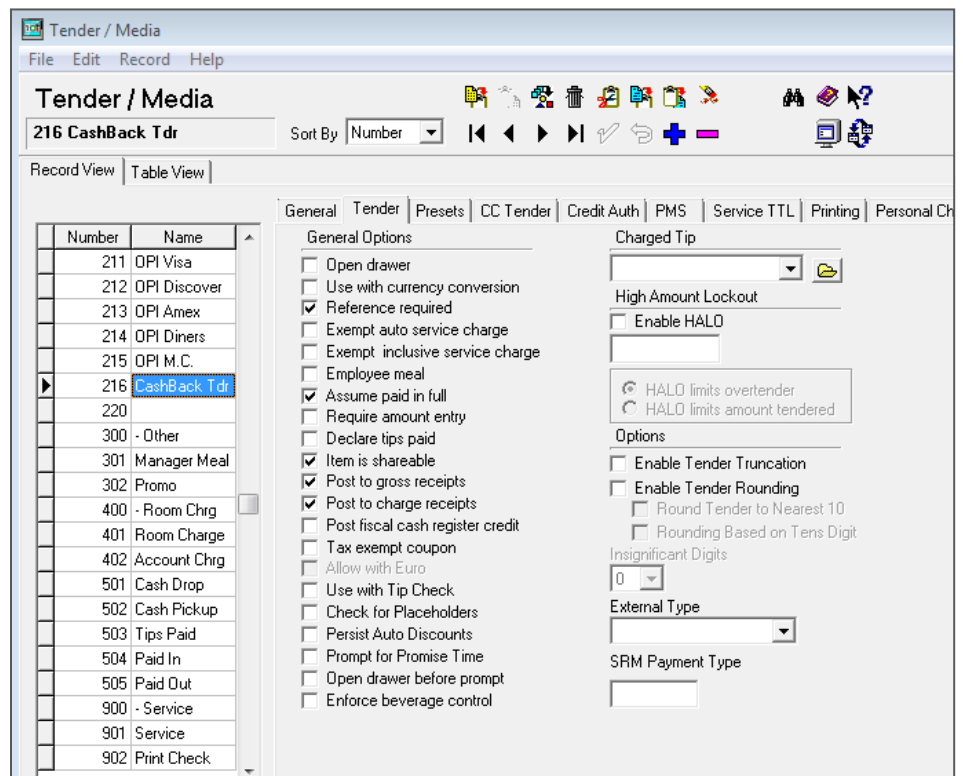
The following Tender / Media Tabs should be left blank (no options enabled):

- Presets
- CC Tender
- Credit Auth | Authorization
- Credit Auth | Preambles

On the PMS tab, enable **Allow 19 reference characters**.



Cash Back Tender

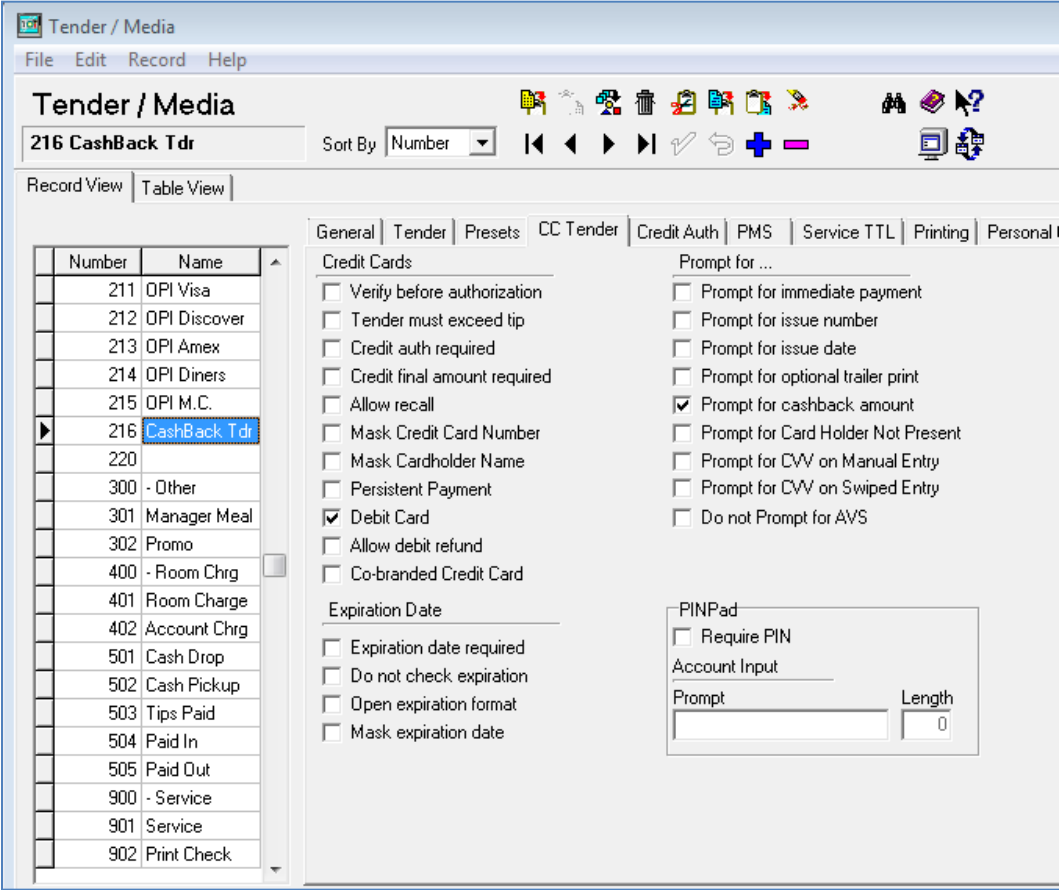


Verify the merchant wants cash back functionality before configuring this option.

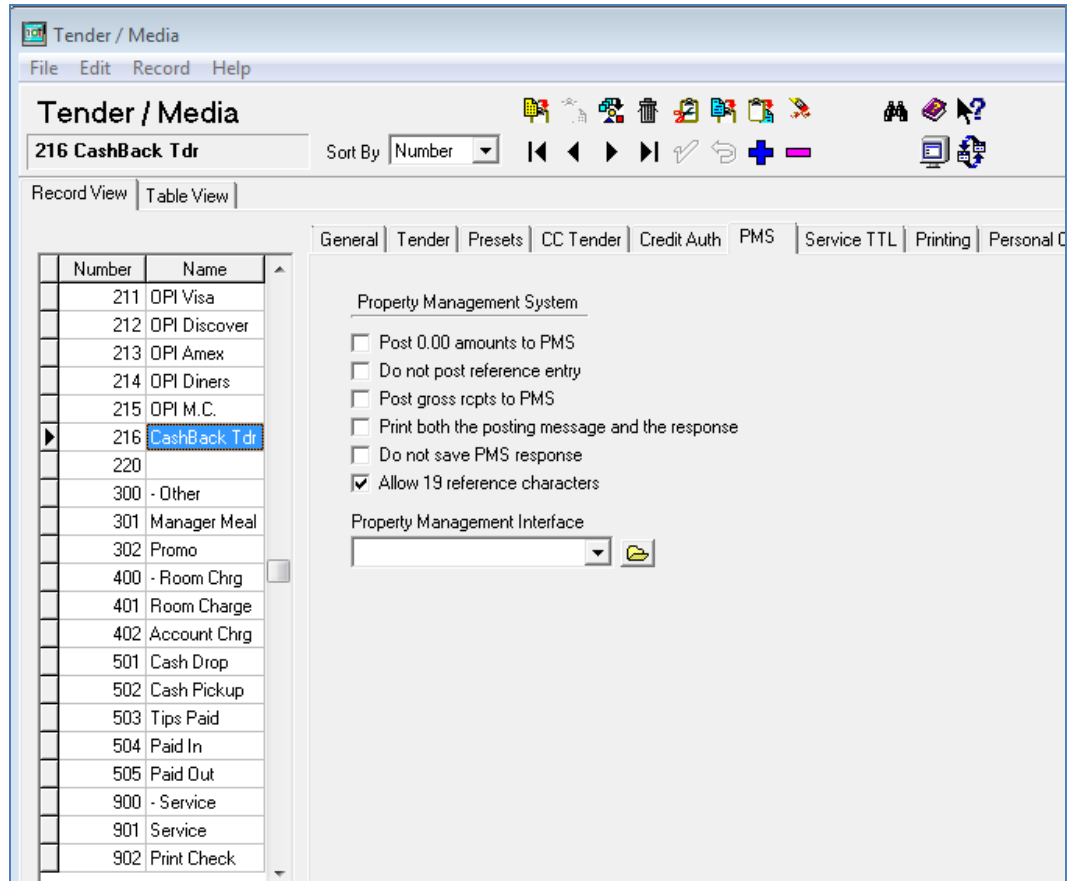
Cash back is supported for QSR revenue centers only.

Sales | Tender / Media | Tender:

- Assume paid in full.
- Reference required.
- Charged Tip - 0 None.



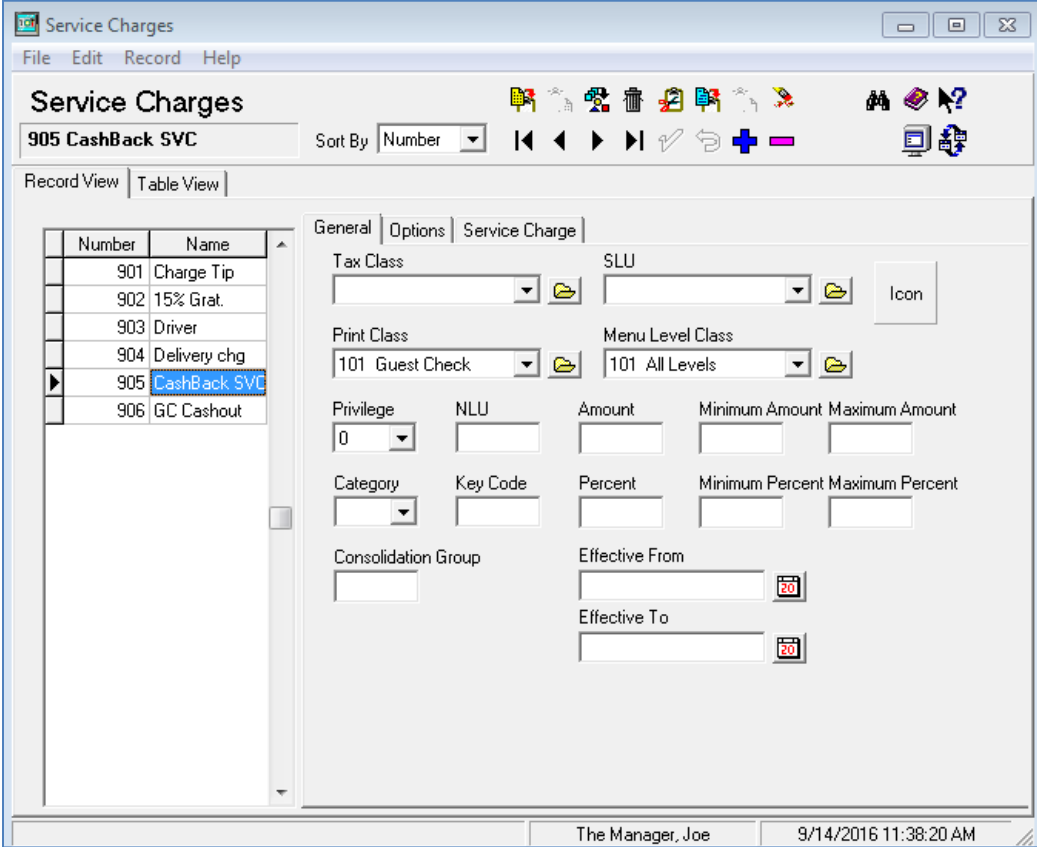
- Debit Card
- Prompt for Cashback Amount



- Allow 19 reference characters.
- OPI.inc must have this value:
Promptcashback = True

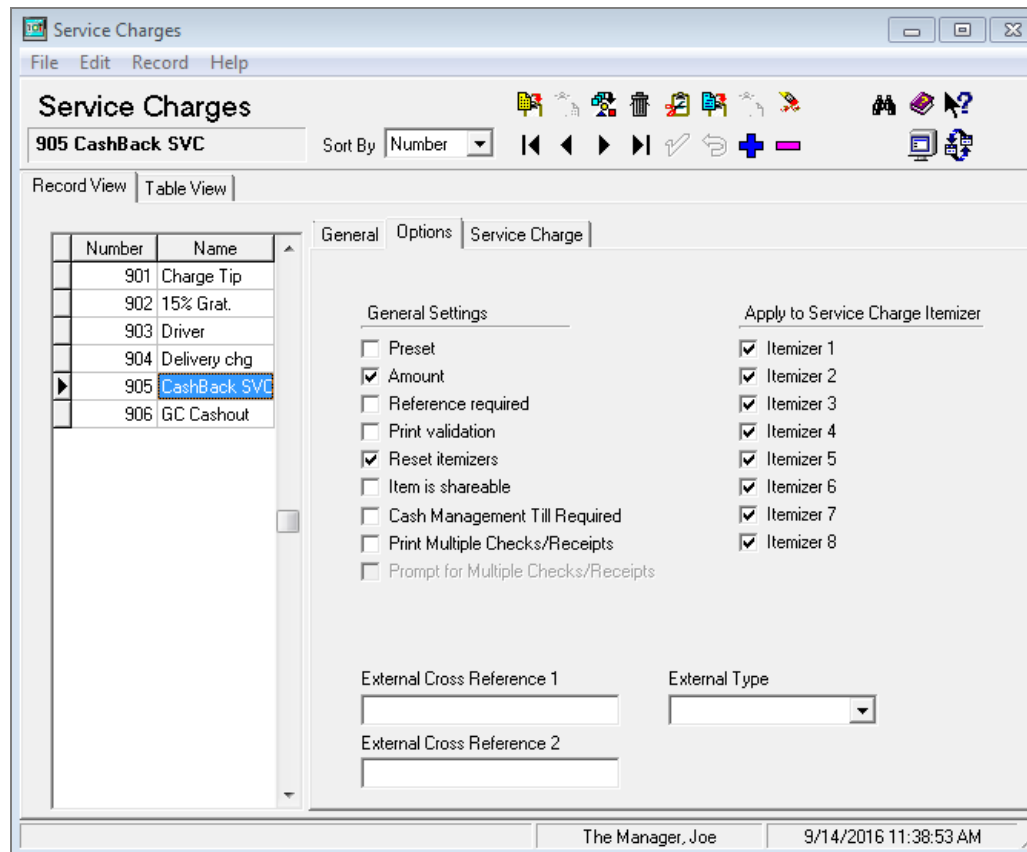
Cash Back Service Charge

The cash back tender also requires a cash back service charge, though it is not directly linked to the cash back tender.

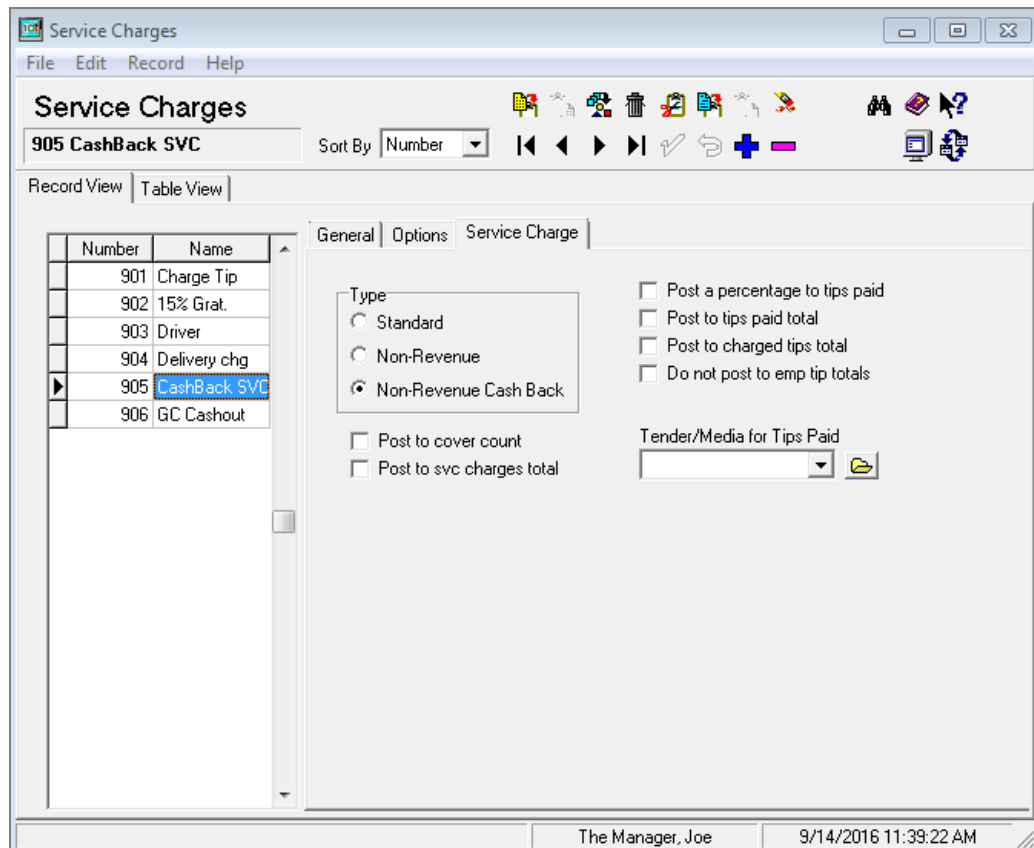


Setup the following service charge.

- Name = "CashBack SVC"
- General Tab:
 Menu Level Class = all levels
 Print Class = Guest check



- Options Tab:
Amount
Reset Itemizers



- Service Charge
Non-Revenue Cash Back

POSEOD

To verify POSEOD files are properly configured, go to `Micros\Res\Pos\Scripts\poseod\` and verify the contents of the following files:

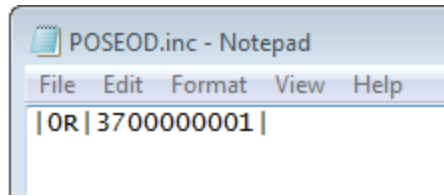
- MGDH.inc

Verify the server IP address and port are correct for the computer that hosts OPI.

- POSEOD.inc

Verify 0R is the code for RES 3700. Other POS types use a different code.

Verify the Merchant ID is correct. The following example shows a merchant ID and code. Separate multiple merchant IDs with the pipe symbol and no spaces (for example, `|0R|3700000001|370000002|`).



To run POSEOD manually, double-click the
 Micros\Res\Pos\Scripts\poseod\poseod.exe file.

A DOS CMD window flashes briefly.

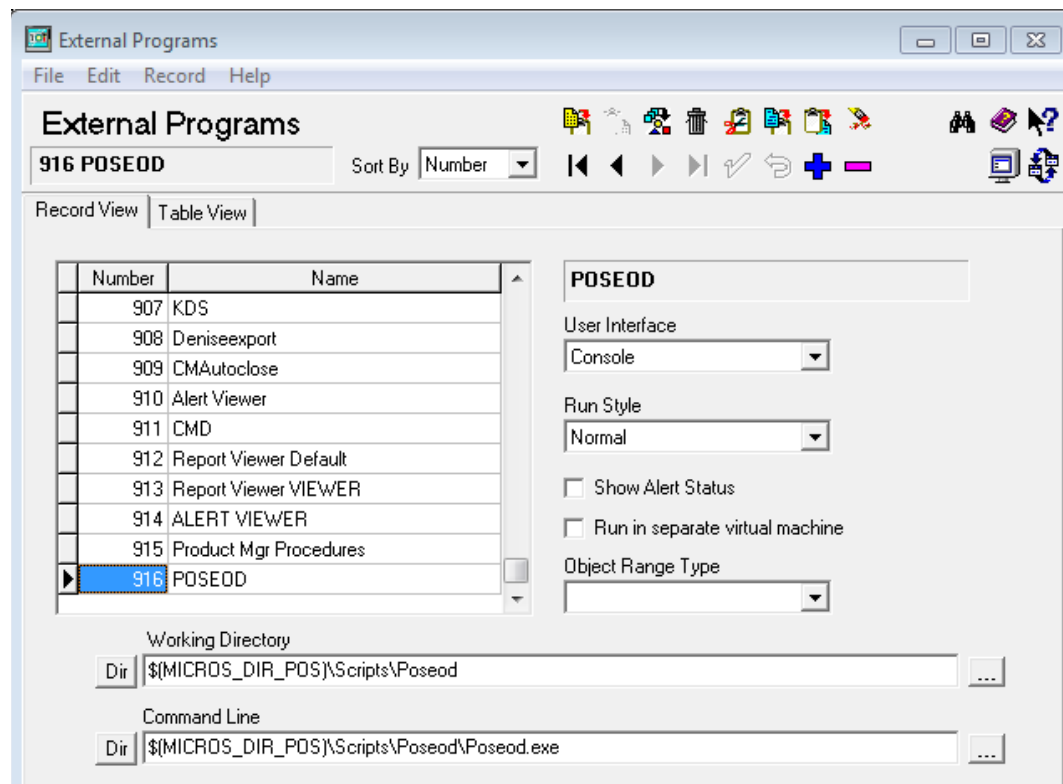
To verify POSEOD ran successfully, open the
 OraclePaymentInterface\log\transaction.log file and confirm BATCH and
 APPROVAL appear with the correct time stamp at the bottom of the file.

```

BATCH                00 APPROVAL
MGM RSA              00 APPROVED
MGM RSA              00 APPROVED
MGM RSA              00 APPROVED
  
```

Configuring POSEOD to run as part of a scheduled RES autosequence:

Autosequences



1. Poscfg | System | External Programs

- New record named: POSEOD
- User Interface: Console
- Run Style: Normal
- Working directory: \$(MICROS_DIR_POS)\Scripts\Poseod
- Command line: \$(MICROS_DIR_POS)\Scripts\Poseod\Poseod.exe

2. Call the above external program during the End of Night autosequence, but before printing occurs. (So that if printing fails, it will not prevent POSEOD from running.)

Note: You can schedule POSEOD using Windows Task Scheduler.

Tax Type Settings in OGDH

Verify your RES database tax types match what OGDH is set to.

Percent and Breakpoint taxes are sent as part of the <TaxAmount> to OPI.

Inclusive and Full inclusive tax amounts are not sent to OPI and this is by design.

But if a percent or breakpoint tax is assumed by OGDH to be inclusive, that tax amount will not be included in the <TaxAmount> sent to OPI.

There is no visible "TaxType" entry in OPI.inc, but the default taxtype setting is as follows.

TaxType = "PIPIIPPP"

The above default setting assumes in Poscfg | Sales | Tax Rates | General that:

Tax 1 = P = Type (percent or breakpoint)

Tax 2 = I = Type (inclusive or Full inclusive)

Tax 3 = P = Type (percent or breakpoint)

Tax 4 = I = Type (inclusive or Full inclusive)

Tax 5 = I = Type (inclusive or Full inclusive)

Tax 6 = P = Type (percent or breakpoint)

Tax 7 = P = Type (percent or breakpoint)

Tax 8 = P = Type (percent or breakpoint)

If the tax rates being used by the RES database do not match the types listed above, you can correct that by either:

1) Moving tax rates in RES to match the OGDH defaults.

Or

2) Add a line to OPI.inc that tells OGDH your actual tax types.

Ex: If your tax types are:

Tax 1 = percent

Tax 2 = breakpoint

Tax 3 = inclusive

Tax 4 = full inclusive

Tax 5 thru 8 unused

Add this line to OPI.inc:

```
TaxType = "PPIIPPPP"
```

The "quotes" shown above are necessary.

3 OPI Installation

Uninstalling the Old Version of OPI and MPG

Upgrading from OPI version 6.1 and later to OPI 6.2 is supported.

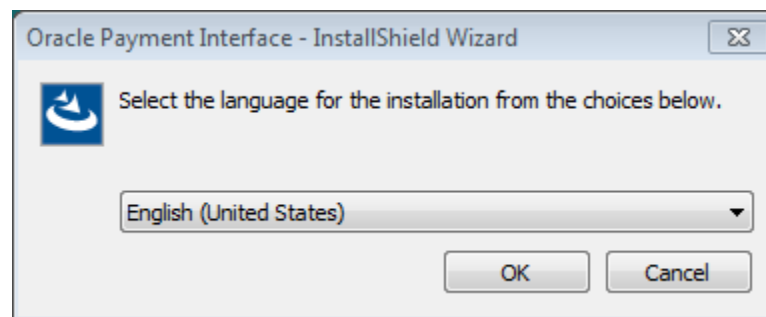
Upgrading anything earlier than OPI 6.1 is **not** supported. Remove earlier versions of the software before installing OPI 6.2.

To Uninstall

1. Run POSEOD with the old version to verify all previous transactions have been batched. Verify the batch was approved in the transaction.log.
2. Save a backup of the current OPI and MPG folder structure.
3. Open the `%OPI_HOME%/bin/MicrosGatewayConfig.exe` file and save a screen capture of the ServerXX values.
4. Save a screen shot of the POS record you are using and its values (for example, posRes1).
5. Uninstall these components through Microsoft Programs and Features:
 - MPG
 - MySQL if no other products are using it
 - MySQL community
6. Rename the `C:\ProgramData\MySQL` folder to `MySQL_Old`.
If you do not see the `C:\ProgramData` folder, enable Windows Explorer > Tools > Folder Options > View > Show hidden files, folders, and drives, and then close and re-open Windows Explorer.
7. Restart the computer.
8. Install OPI.

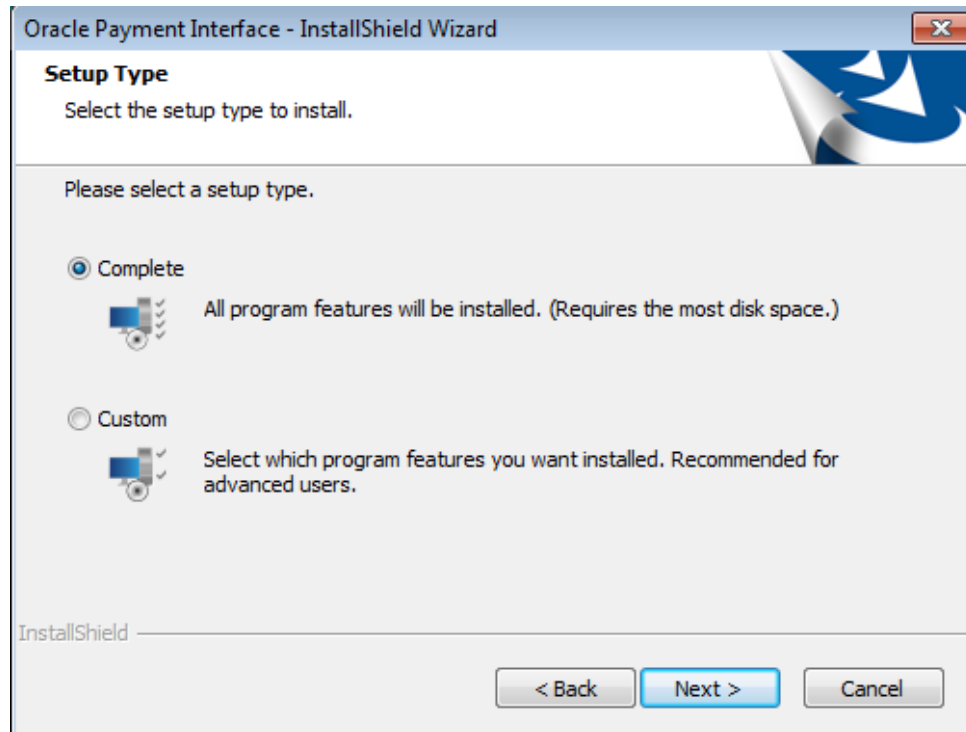
Installing the OPI

1. Take Micros Control Panel to **off**.
2. Copy `OraclePaymentInterfaceInstaller-6.2.0.0.exe` to the RES Server and double click it to launch the install.



3. Select your language, and then click **OK**.
4. Click **Next** on the *Welcome to the InstallShield Wizard for Oracle Payment Interface* screen.

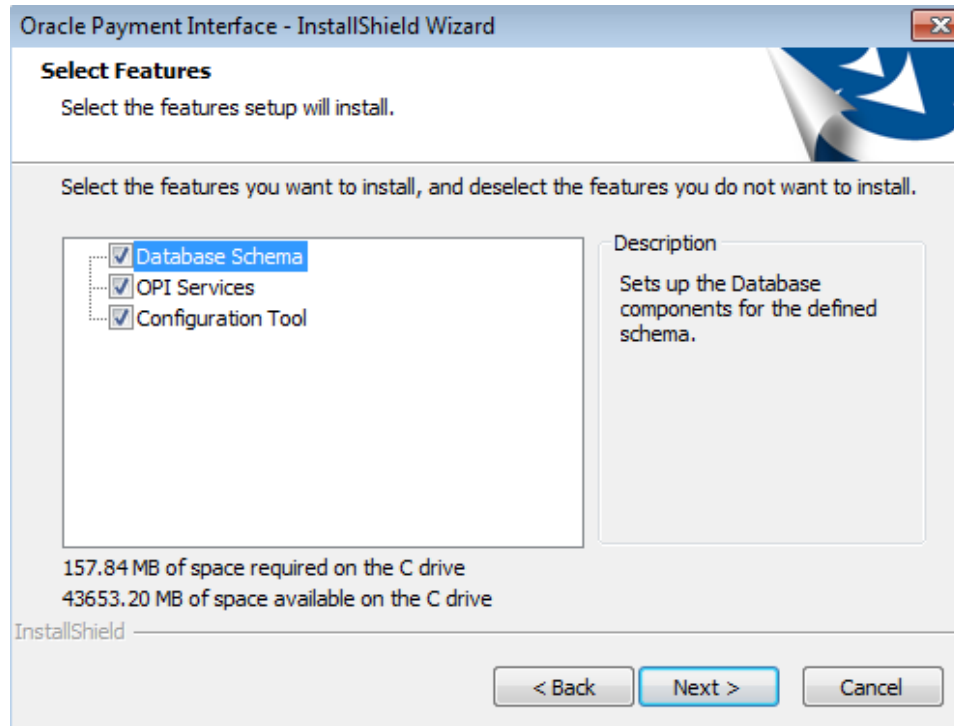
5. Click **Next** on the *OPI Prerequisites* screen appears.



The **Setup Type** screen appears.

- Complete: All program features will be installed.
- Custom: Select which program features you want installed. Recommended for advanced users only.

6. Make a selection, and then click **Next**.



If you selected the Custom install option, the *Select Features* screen appears with the following options:

- a. Database Schema
- b. OPI Services
- c. Configuration Tool

All three of these features must be installed. It is just a matter of whether they are all installed on the same computer or on separate computers.

7. Select the features to install on this computer, and then click **Next**.

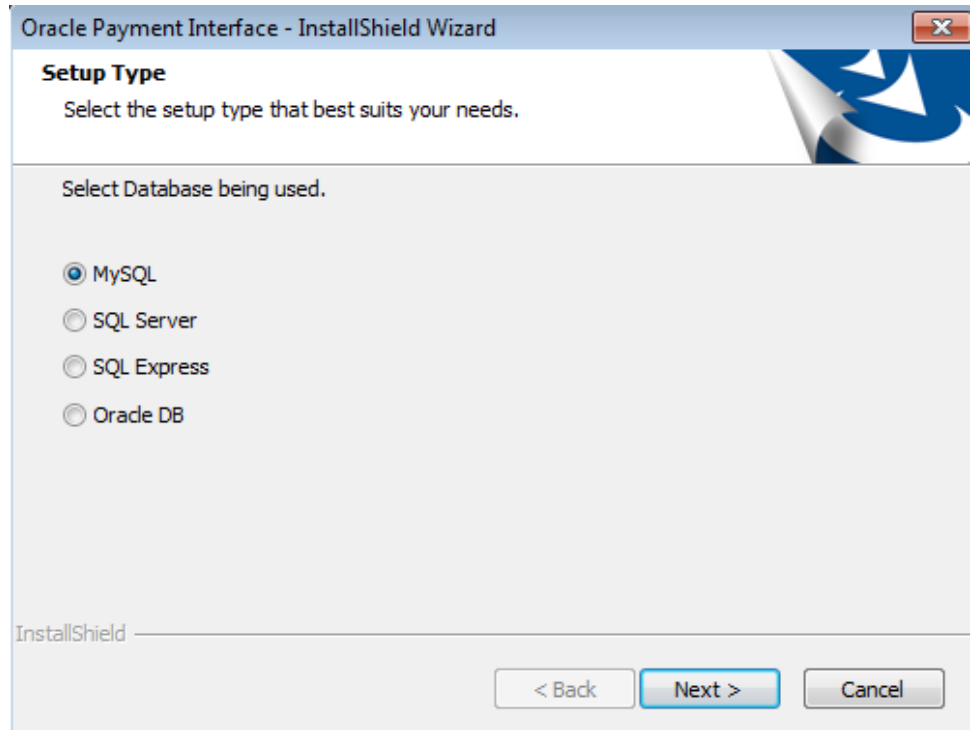
The *Choose Destination Location* screen appears.

8. Accept the default installation location or click **Change...** to choose a different location, and then click **Next**.

9. Click **Install** on the *Ready to Install the Program* screen.

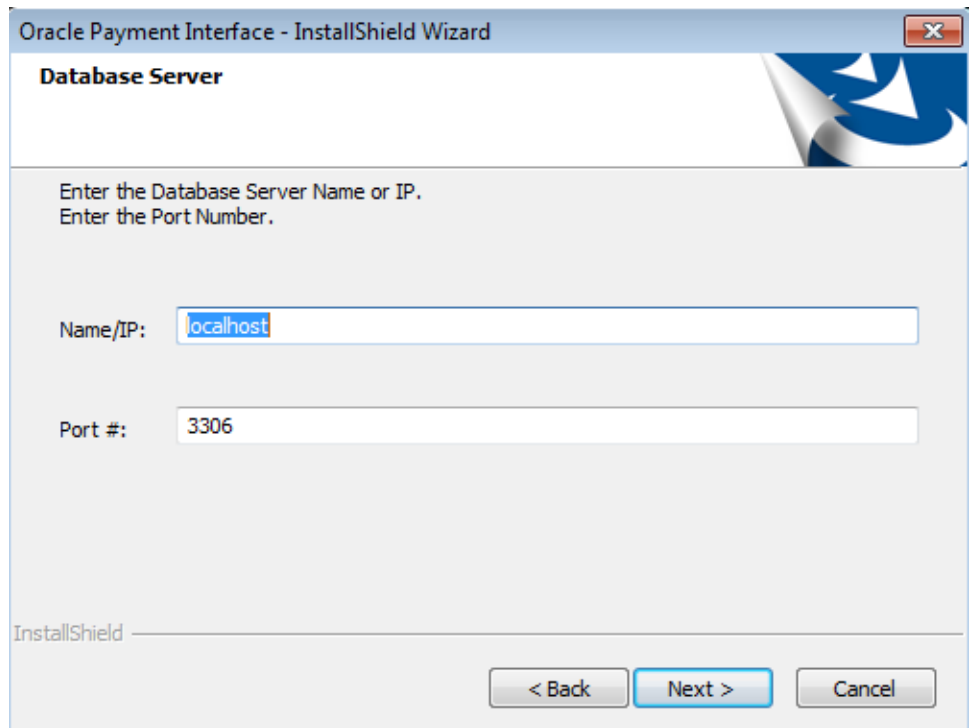
The *Setup Status* screen displays for a few minutes.

10. The *Setup Type* screen appears.



11. Select the database type being used, and then click **Next**.

Note: OPI does not install any database, so the database must already be installed.



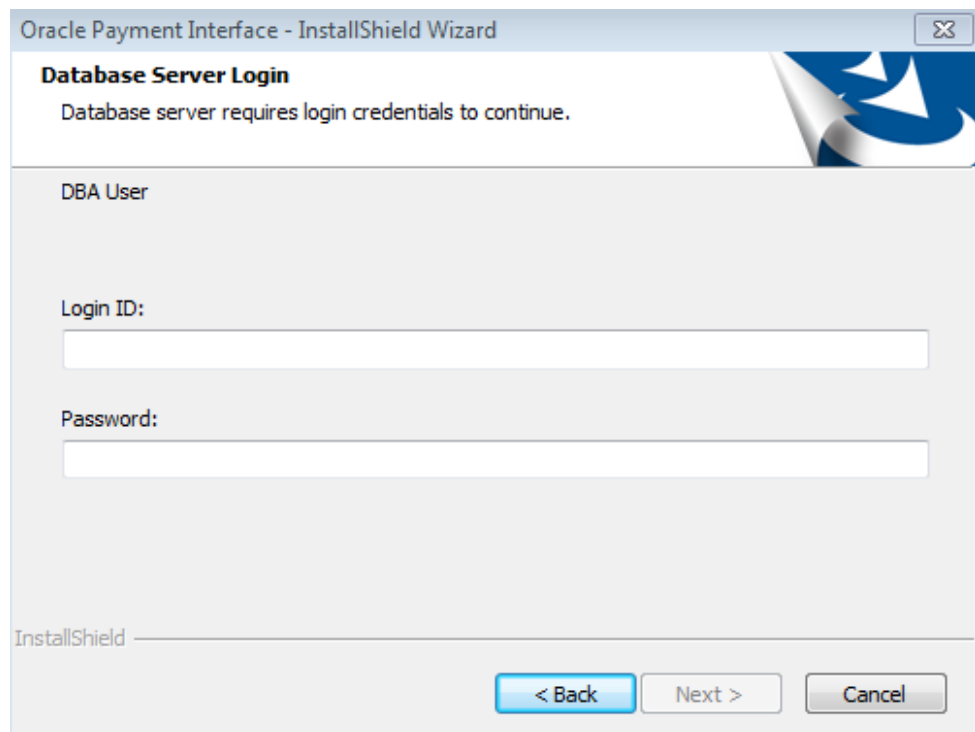
The *Database Server* screen appears.

The **Name/IP:** field defaults to `localhost`. This should be left as `localhost` if the OPI database is installed on the same computer. If the database is installed on another computer, the Name or IP address of that machine should be entered here.

Note: If the database type is MySQL, and you cannot use `localhost` for the Name/IP field, then some commands must be run manually on that MySQL database before proceeding. See **MySQL Grant Permission** in the **OPI Installation and Reference Guide** for instructions. Setup will not complete if this is not done.

12. Accept the default **Port #** of 3306 (for MySQL), and then click **Next**.

The *Database Server Login* screen appears.



The screenshot shows a window titled "Oracle Payment Interface - InstallShield Wizard". The main heading is "Database Server Login" with a sub-message: "Database server requires login credentials to continue." Below this, there is a section labeled "DBA User" containing two input fields: "Login ID:" and "Password:". At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel". The "InstallShield" logo is visible in the bottom left corner of the window.

13. Enter the credentials for the DBA user of the database type selected, and then click **Next**.
 - For MySQL the Login ID: = root
 - For other database types the DBA user name/Login ID may be different.
 - Enter the correct password for the DBA user.

The *Database User Credentials* screen appears.

The screenshot shows a Windows-style dialog box titled "Oracle Payment Interface - InstallShield Wizard". The main heading is "Database User Credentials". Below the heading, there is a blue graphic with a white arrow pointing right. The text inside the dialog reads: "Enter the user name and password to create a new database user account that will be used by the Oracle Payment Interface application. Password is case sensitive, should be at least 8 characters in length and must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#%&^*". There are three input fields: "User Name:", "Password:", and "Confirm Password:". At the bottom, there are three buttons: "< Back", "Next >" (highlighted in blue), and "Cancel". The "InstallShield" logo is visible in the bottom left corner of the dialog.

- **User Name:** Create a new user.
 - **Password:** Create a password.
 - Password is case sensitive
 - Should be at least 8 characters in length
 - Must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#%&^*
14. Confirm the password, and then click **Next**.
 15. Click **OK** on the *Database connection successful* dialog.
 16. Click **OK** on the *Database Configuration operation successful* dialog.

The *Configuration Tool Superuser Credentials* screen appears.

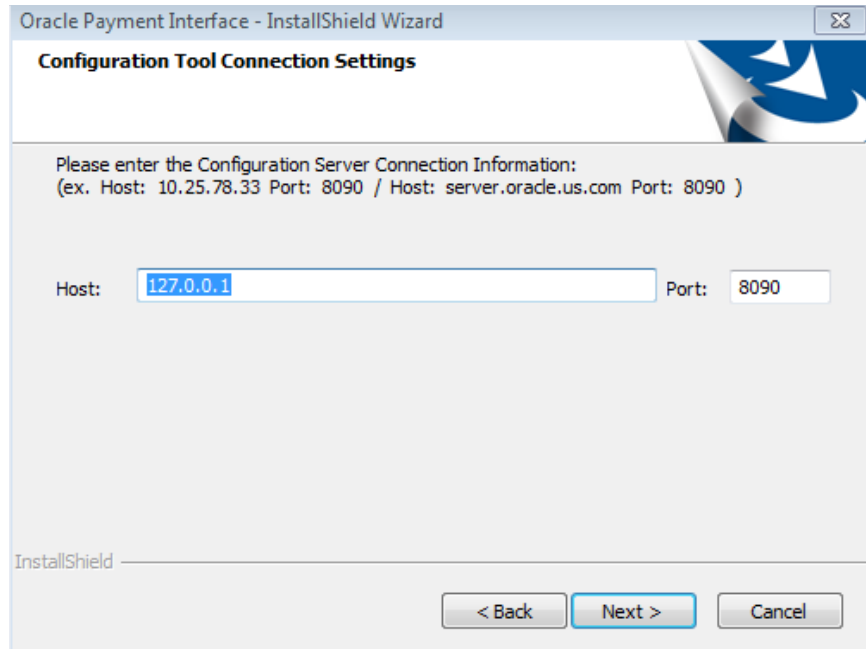
The screenshot shows a Windows-style dialog box titled "Oracle Payment Interface - InstallShield Wizard". The main heading is "Configuration Tool Superuser Credentials". Below the heading, there is a blue graphic of a shield with a white arrow. The text inside the dialog reads: "Enter the user name and password to create the super user account for the configuration tool. Password is case sensitive, should be at least 8 characters in length and must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#\$\$%^&*". There are three input fields: "User Name:", "Password:", and "Confirm Password:". At the bottom, there are three buttons: "< Back", "Next >" (highlighted in blue), and "Cancel". The "InstallShield" logo is visible in the bottom left corner of the dialog.

- **User Name:** This can be any user name. It does not have to be a Windows account user.
- **Password:** Create a password.
 - Password is case sensitive
 - Should be at least 8 characters in length
 - Must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#\$\$%^&*

17. Confirm the password, and then click **Next**.

18. Click **OK** on the *Create SuperUser operation successful* dialog.

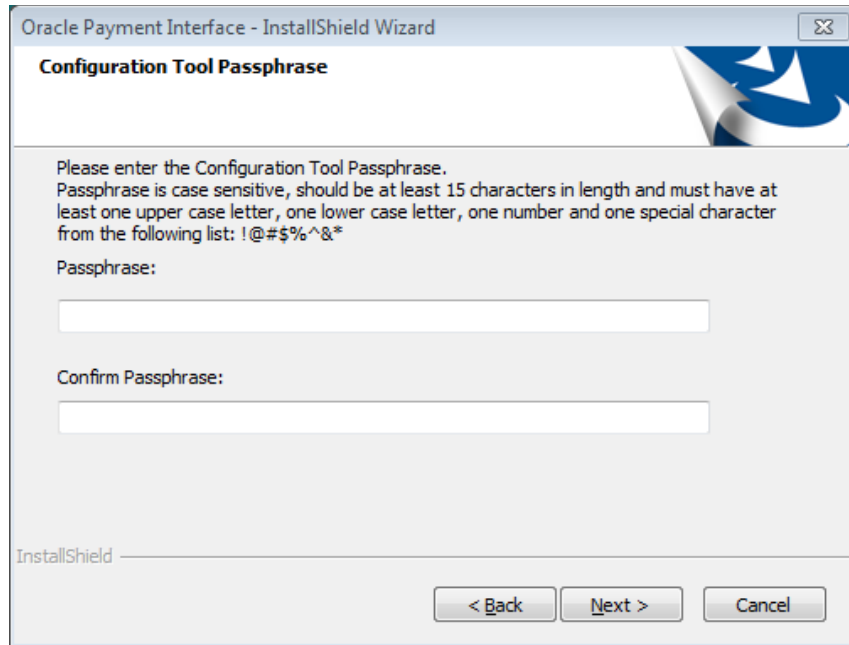
The *Configuration Tool Connection Settings* screen appears.



- **Host:** May be left at 127.0.0.1 if the OPI configuration server is installed on this PC. Otherwise, specify the name or IP address of the PC where the OPI configuration server will be installed.
- Leave the default **Port** of 8090.

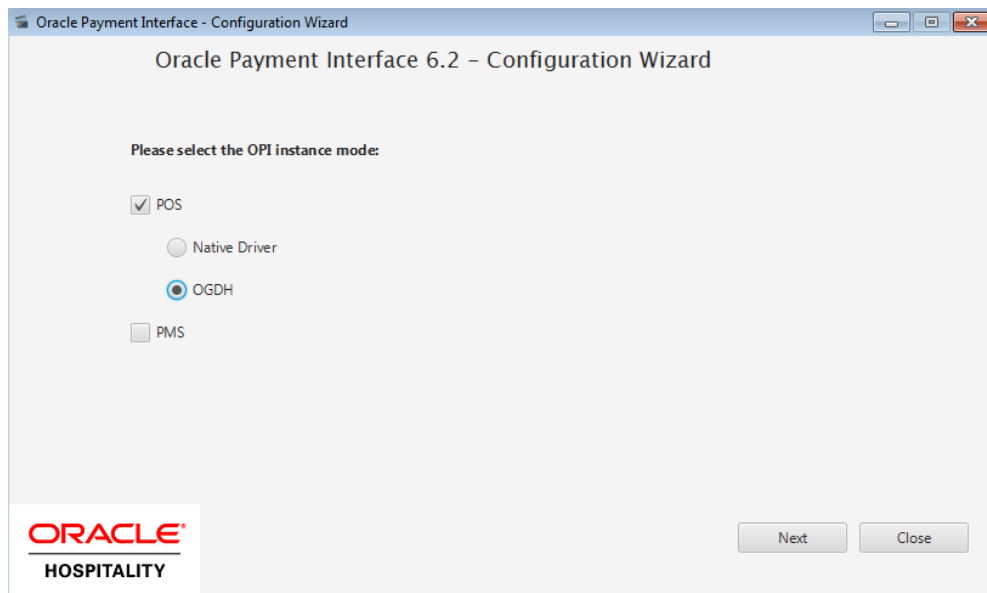
19. Click **Next**.

The *Configuration Tool Passphrase* screen appears.



20. Enter a passphrase, confirm it, and then click **Next**.

After a brief pause, the *Configuration Wizard* launches.

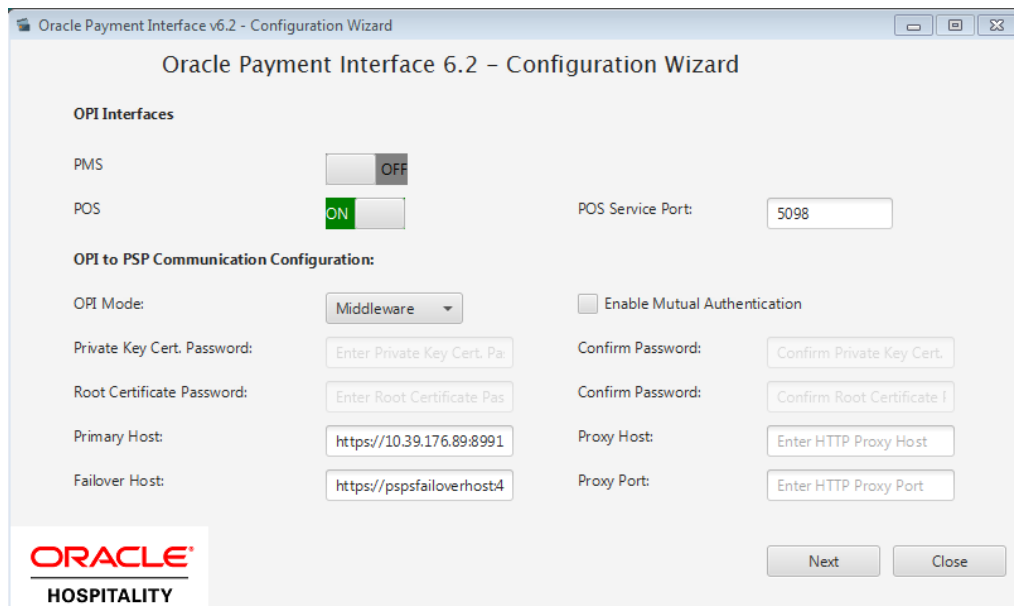


21. Select **POS**, Select **OGDH**, and then click **Next**.

The *POS OGDH Configuration* screen appears.

22. Enter and confirm the passphrase, and then click **Next**.

Passphrase must be at least 15 characters in length and include at least one uppercase letter, one lower case letter, one number and one special character from the following list: !@#\$\$%^&*



The *OPI Interfaces* screen appears.

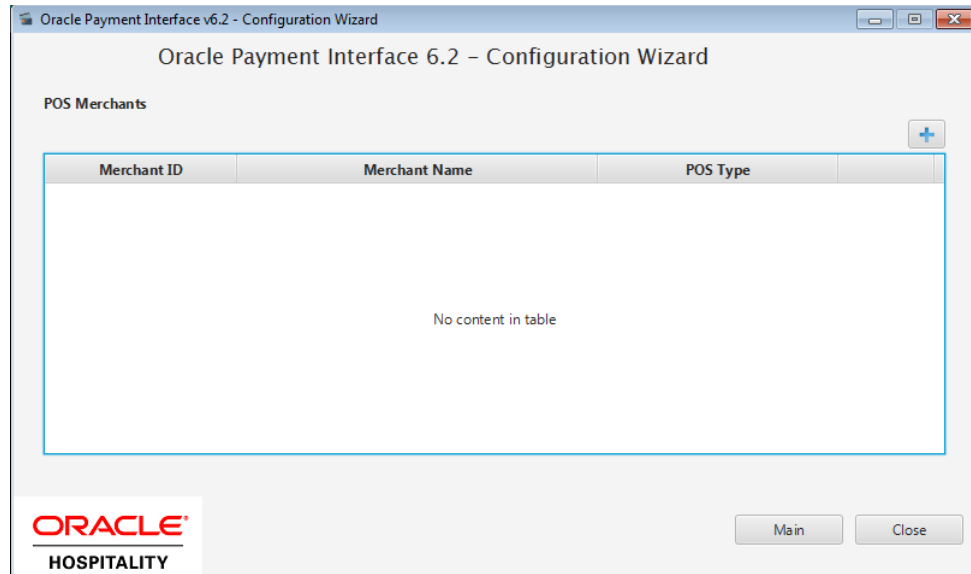
Enable Mutual Authentication: Enable this option only if the PSP has provided the certificates and passwords for it.

Private Key Cert. Password: Enter the password and confirm it.

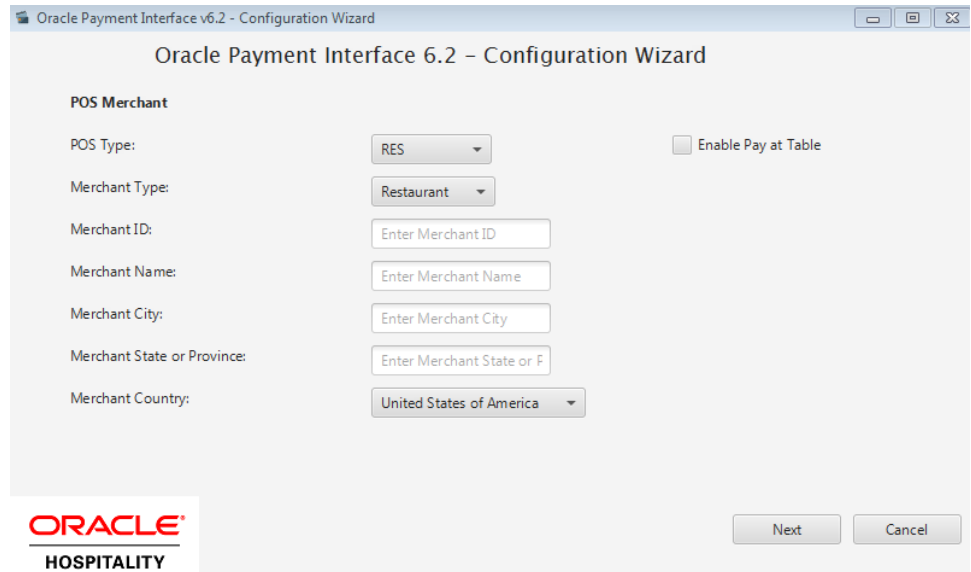
Root Certificate Password: Enter the password and confirm it.

- **OPI Mode:** Select either Middleware or Terminal.
- **Middleware:** Fill in primary host connection information and the failover Host information (if provided).
- **Terminal:** Select correct Port.
- If using Mutual Authentication, see the *Mutual Authentication* section in the **OPI Installation and Reference Guide**.

23. Click **Next**.



24. Click the blue + icon in top right corner to create new merchant record.



25. Select RES for POS Type.
26. Select Restaurant or Retail for Merchant Type.
27. Enter the Merchant ID.
28. Enter Merchant name, city, state and country.
29. Check the “Enable Pay at Table” box if the merchant will use Pay at Table.
30. Click **Next**.

Pay at Table Install

Note: If not using Pay at Table, scroll down to the end of the Pay at Table section to the **Merchant Terminal Configuration** screen.

Card Type	Tender Media ID
AliPay	0
Alliance	0
American Express	0
China UnionPay	0
China UnionPay Debit	0
Debit	0
Diners Club	0
Discover	0
EC Chip	0

31. Complete or accept the defaults for the following Pay at Table fields:

DB Host: Can remain 127.0.0.1 if OPI is installed on the RES server. Otherwise, enter the IP address of the RES server.

DB Port: Leave at 2638.

DB Name: Leave at Micros.

DB User: Enter a user name that can access the RES database, and confirm it.

DB Password: Enter the password for the DB user entered in the step above and confirm it.

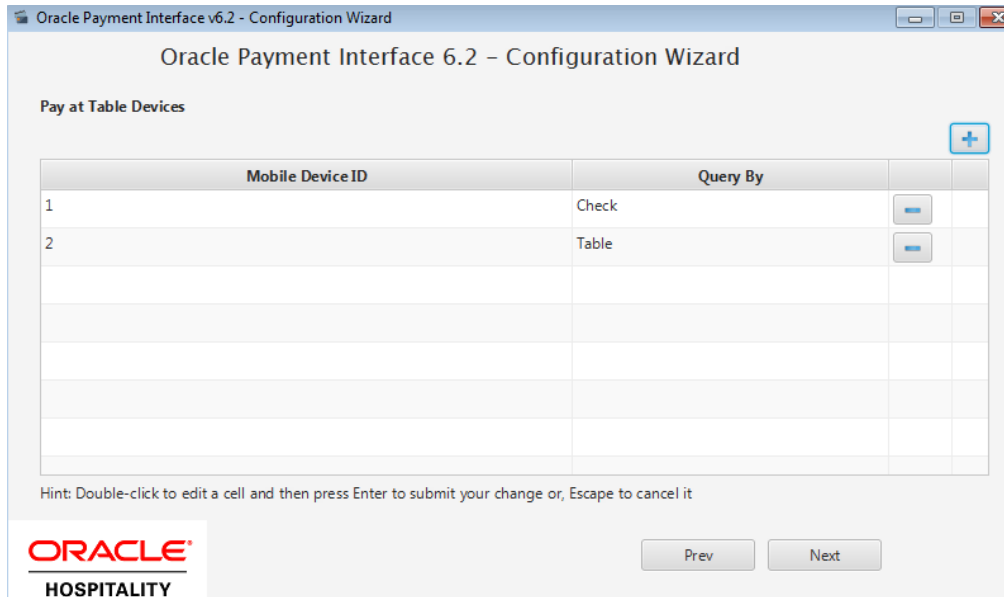
Tenders: Enter the correct Tender number for each card type used with Pay At Table.

Print Check: Enter the number of the Print check tender.

Service Charge: Enter the number of the Service Charge that is used for tips.

32. Click **Next**.

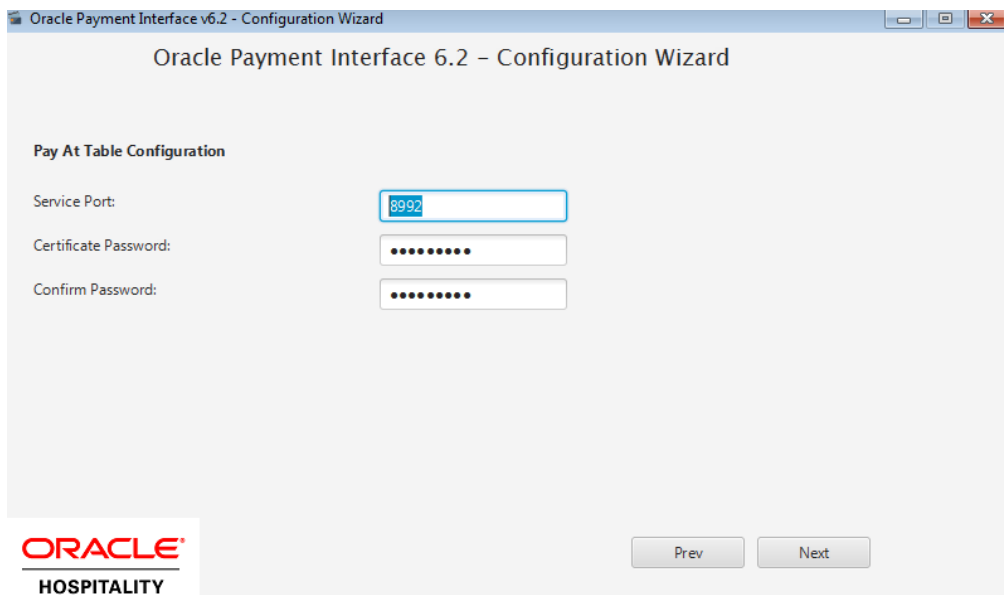
The *Pay at Table Devices* screen appears.



33. Click the blue + icon to add a Pay at Table device, and then configure each device to query by either check number or table number.

34. Click **Next**.

The *Pay at Table Configuration* screen appears.



35. Complete or accept the defaults for the following Pay at Table Configuration fields:

Service Port: Enter the correct port for use with Pay at Table terminals.

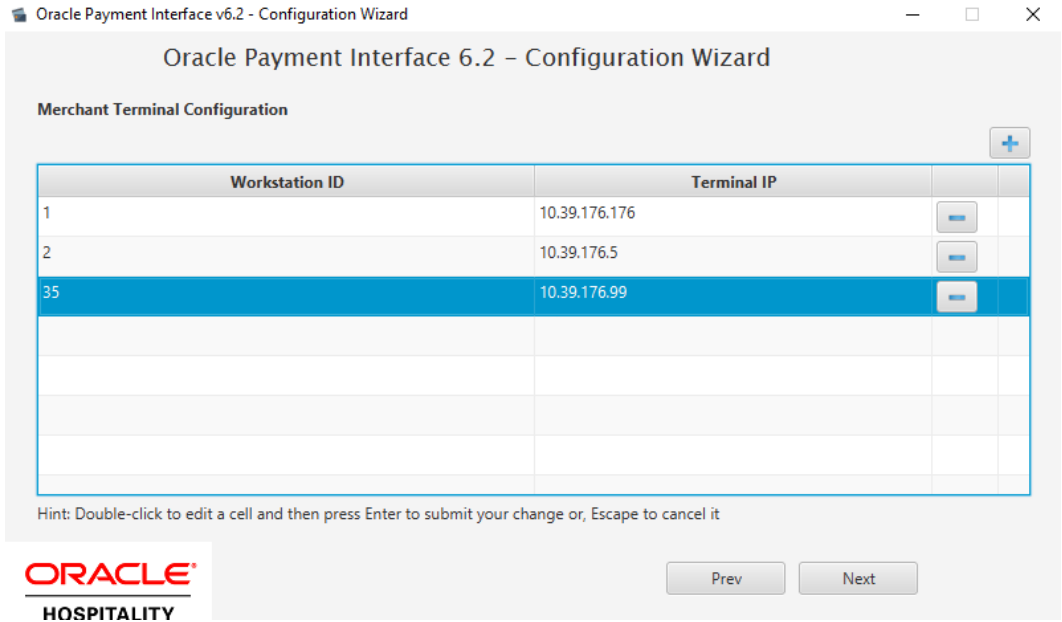
Certificate Password: If this is an OPI upgrade, leave the passwords unchanged as they will match the certificates already in use.

- If a new install, use the certificate password and port provided by the PSP.

36. Click **Next**.

Pay at Table Install section ends here.

If using Terminal mode, the *Merchant Terminal Configuration* screen appears. If using Middleware mode, this screen does not appear.



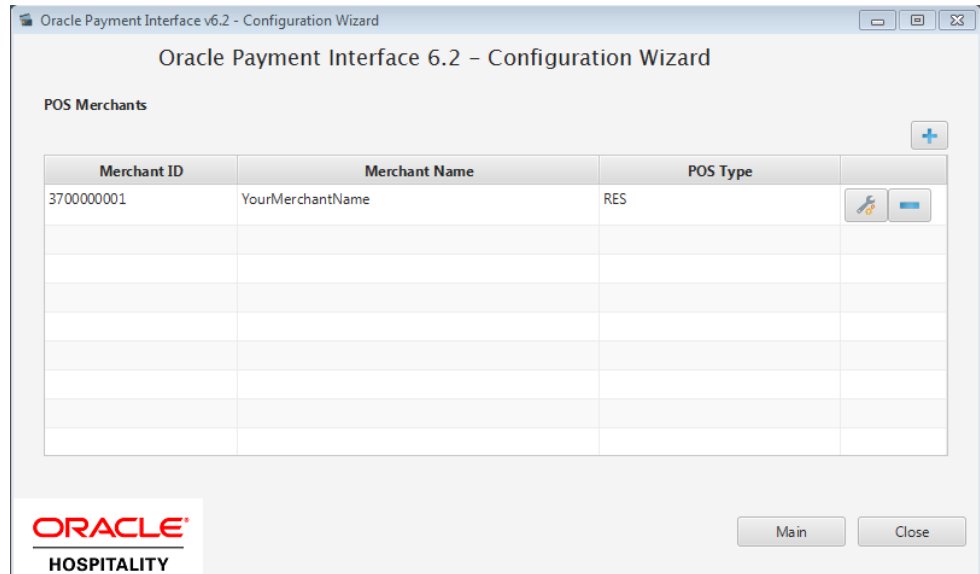
37. Complete the following Merchant Terminal Configuration fields:

Workstation ID: Enter the workstation number from the POS system.

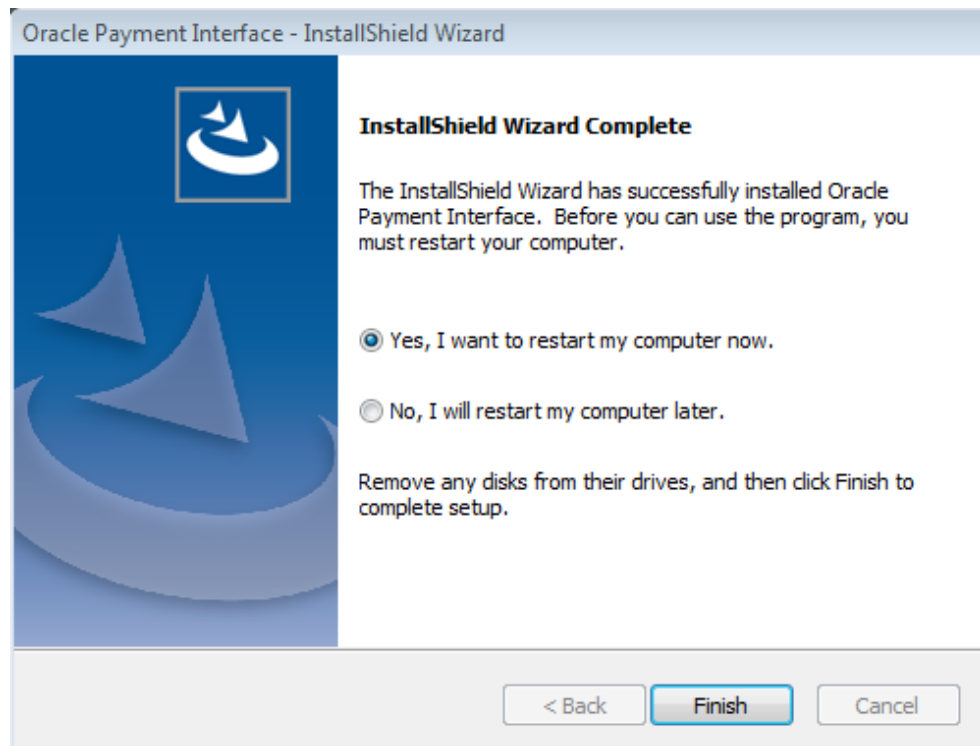
Terminal IP: Enter the IP address of the pinpad device.

38. Click **Next**.

The *POS Merchants* screen appears.



39. Click the wrench icon to edit an existing merchant record.
40. Click **Main** to go back and review settings.
41. Click **Close** to advance to final screen.



42. Click **Finish** to reboot.

If a reboot cannot be done at the moment, you must stop and then start the OPI Service for current settings to take effect.

4 OPI Upgrade Install

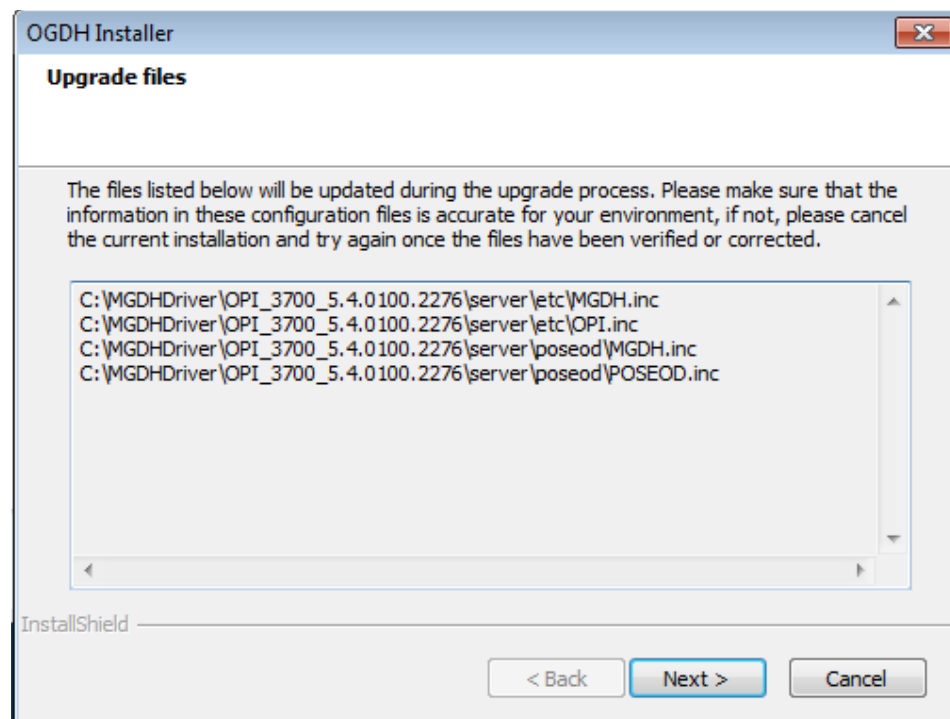
Upgrade MGDH to OGDH

Before upgrading

1. Run Poseod.exe to settle all credit transactions.
2. Know the MySQL root user account password.

Steps to upgrade from MGDH 6.1 or higher to OGDH 6.2

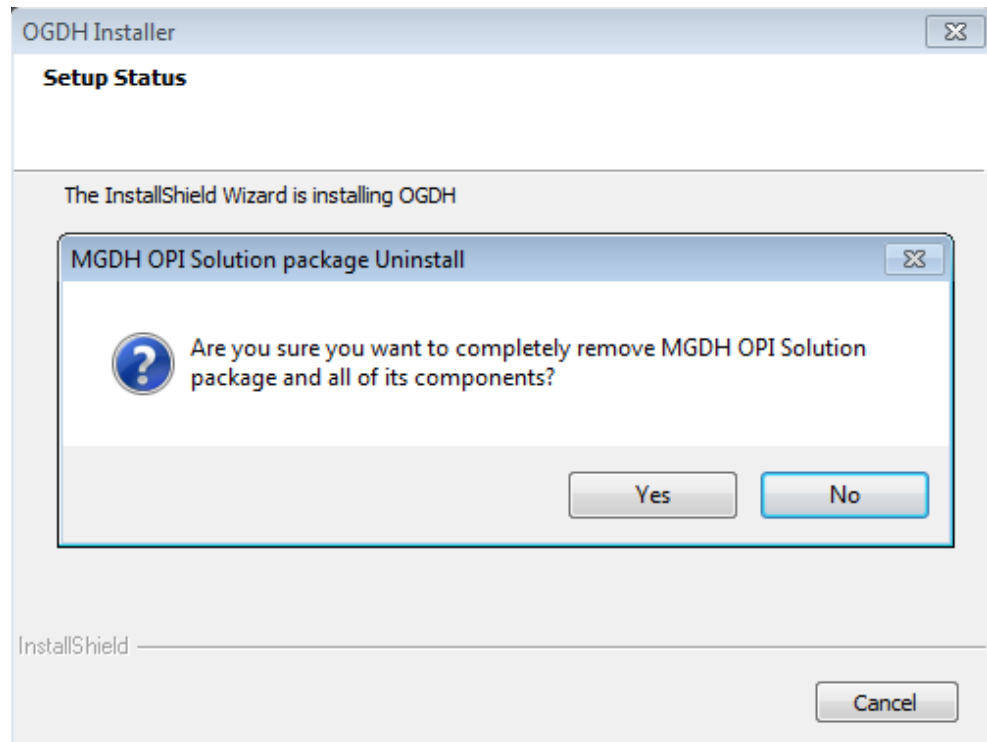
1. Take Micros Control Panel to **off**.
2. Double-click **OGDH_OPI_6.2.0.0.exe** to launch the install.
3. Click Next on the Welcome screen.



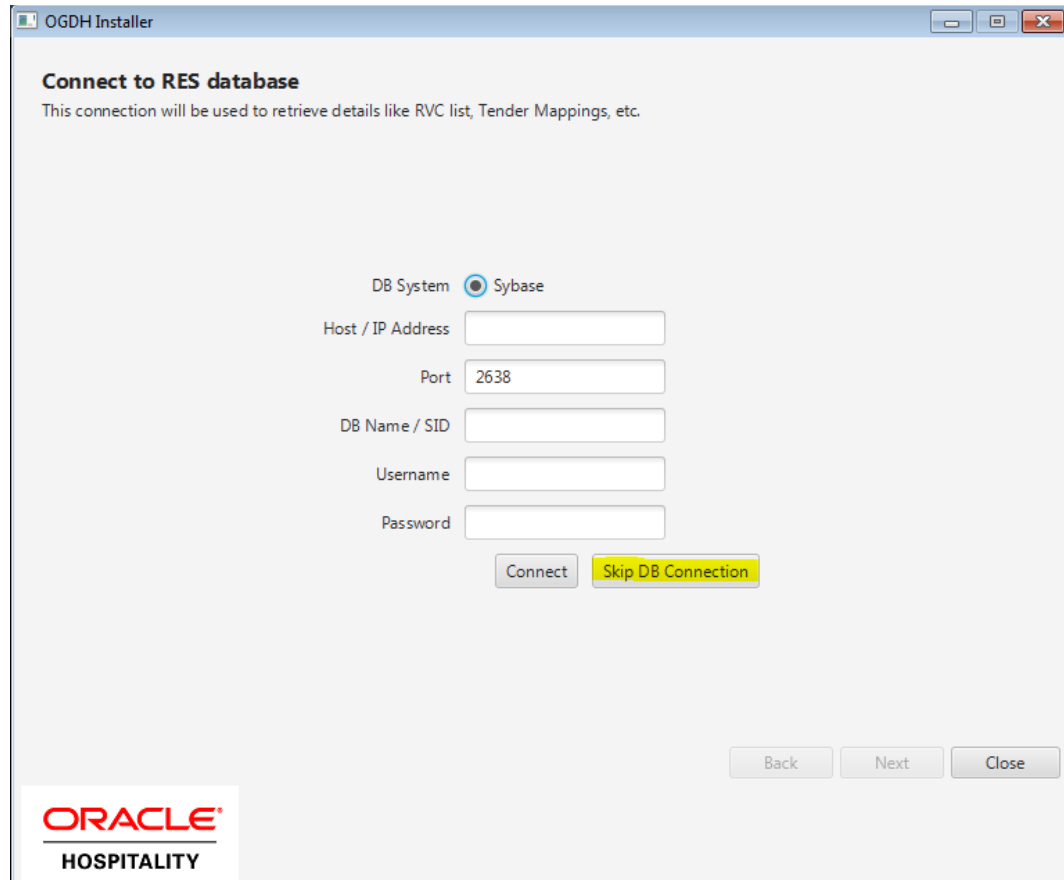
IMPORTANT: If the above files do not currently have the correct settings, those same settings will exist in the new OGDH files. Please verify those specific files in those locations are correct before continuing.

Note: If POS upgrade causes part of OGDH installed files on win32 workstation client to be lost, go to the OGDH32 CAL package and edit the setup.dat to increment the version #. For example: Change 6.2.0.7 to 6.2.0.8. This causes the package to re-install automatically to workstations

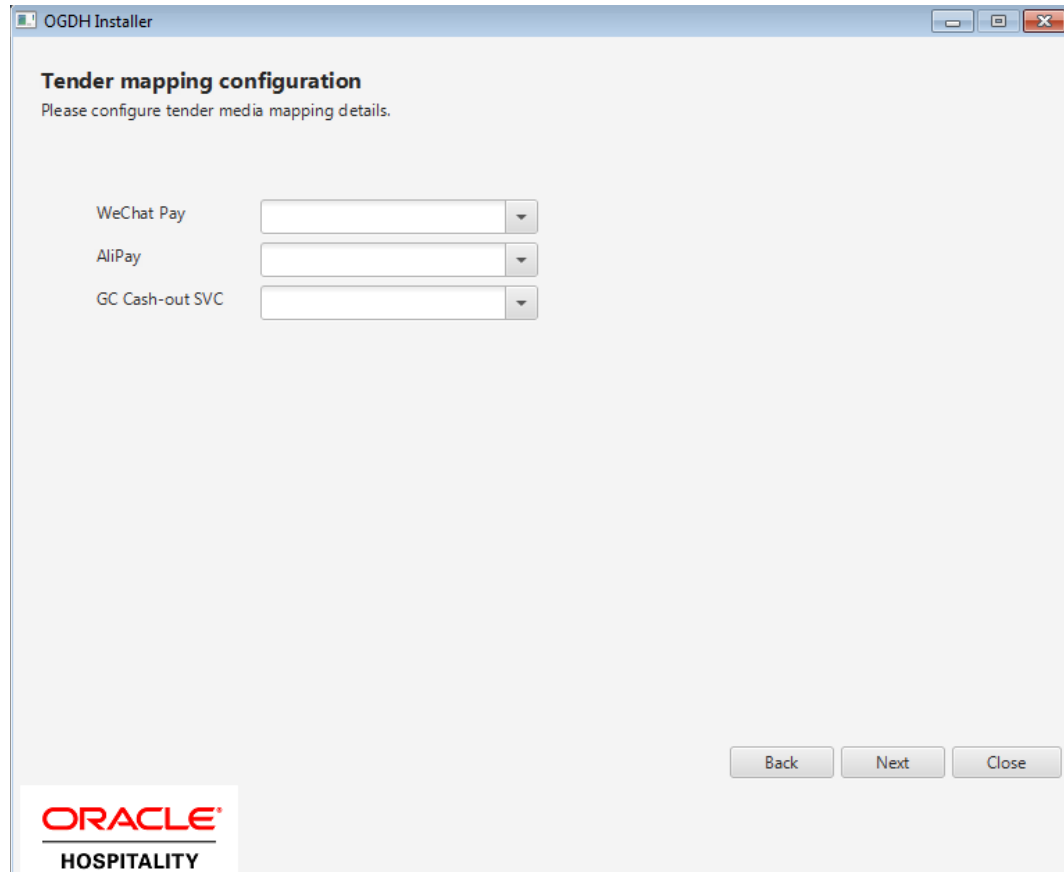
4. After verifying the files are correct, click **Next**.
5. Question dialog:
“In order to connect to Sybase the Sybase driver will be required. The following dialog will request the path for the Sybase driver. Continue?”
6. Click **No**.
7. Either accept the default install location, or click **Change** to choose a new location, and then click **Next**.
8. On the Ready to Install the OGDH screen, click **Install**.



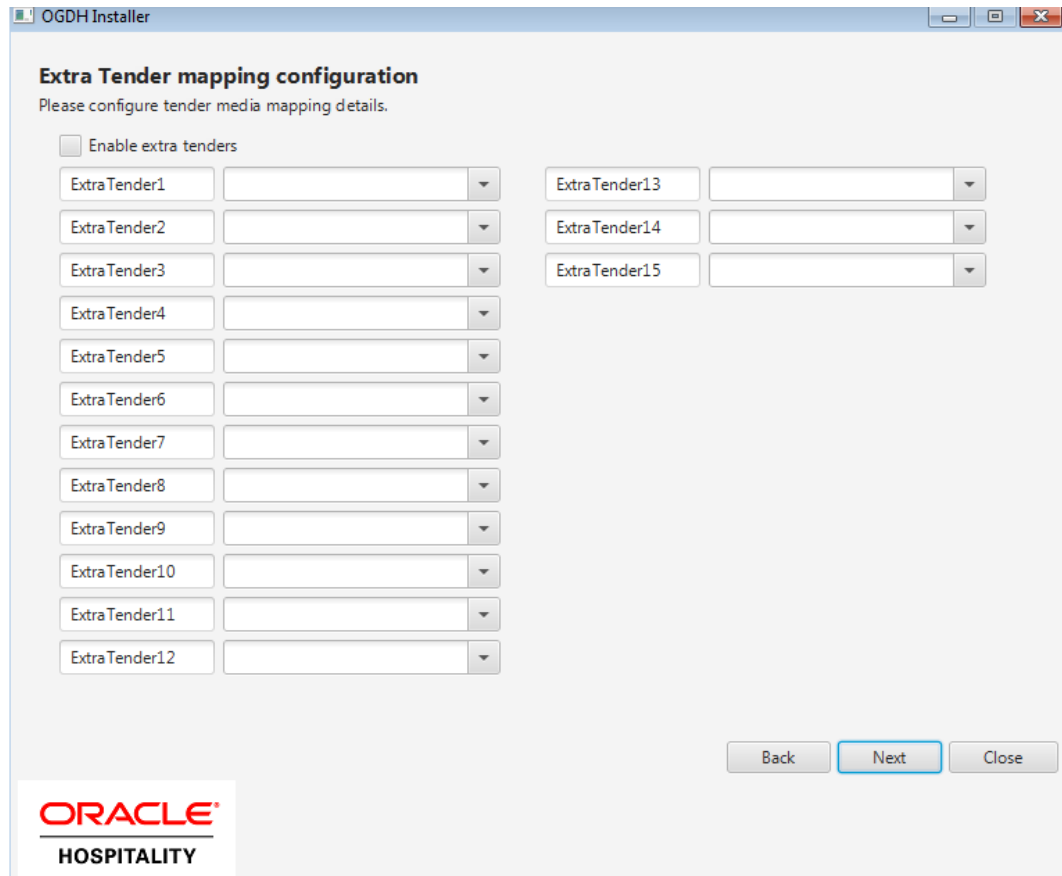
9. Click **Yes**.
The MGDH files will be uninstalled and the OGDH files installed.



10. Click **Skip DB Connection**.

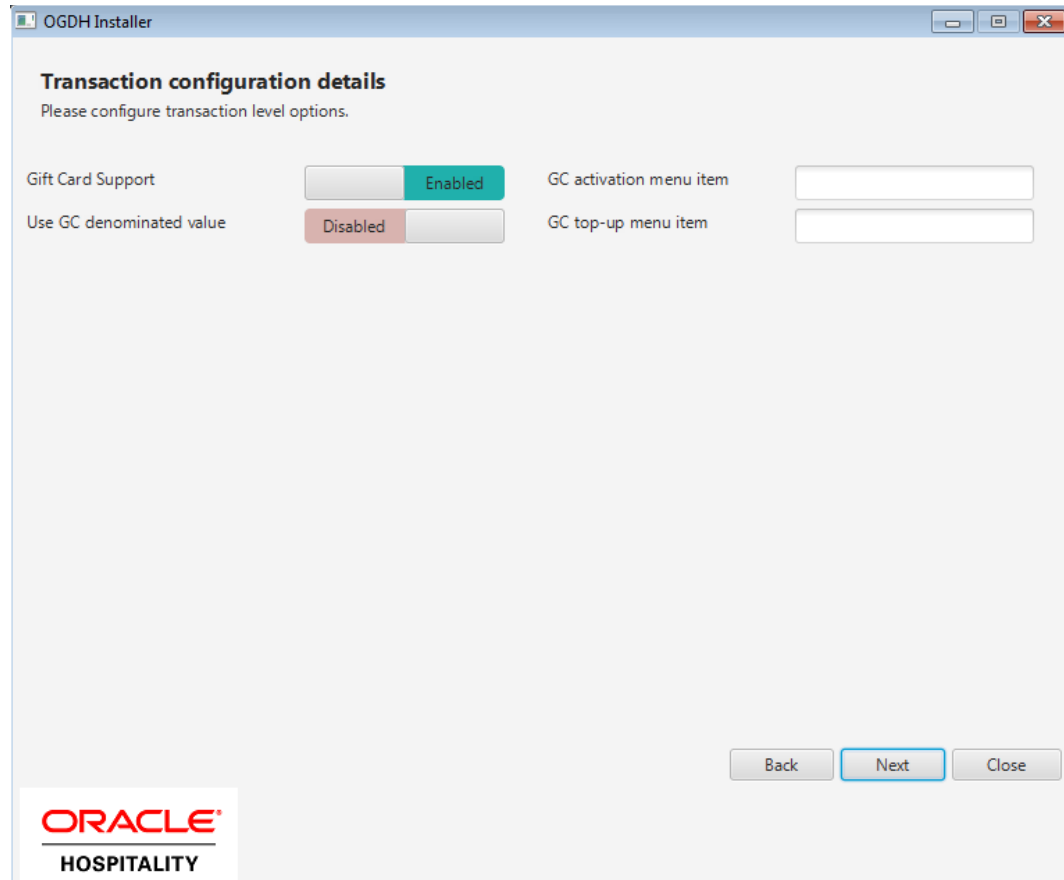


11. These three values are new in this version of OGDH.
12. In Micros control panel take Restaurant to Database level.
13. Open POSCFG | Sales | Tender/Media to see tender information.
14. Enter the correct tender number for each tender. Leave unused tenders blank.
15. For GC Cash-out SVC go to POSCFG | Sales | Service Charges.
16. Click **Next**.
17. On next Tender Mapping configuration screen, verify settings are correct, and then click **Next**.



Note that all tenders that existed in the previous MGDH installation have already been transferred to new OGDH OPI.inc file.

18. If you have any Extra tenders you may enter them here. You must first check the Enable extra tenders option.
19. Click **Next**.
20. Verify extra tender settings are correct, and then click Next.
21. For RES only, the “Event 17 do Void” must be Enabled.
22. Set the other values correctly.
23. “Use GC denominated value” means they sell gift cards that have a set price.
24. Leave this disabled if gift cards are sold as an open amount that the operator types in.



25. The values above are new in this OGDH version. Set them correctly for your system.
26. Click **Next**.
27. Verify settings are correct, and then click **Next**.
28. On the Configuration Complete screen, click **Save**.
29. On the Install Wizard Complete screen click **Finish**.

Upgrading the OPI

VERY IMPORTANT: Read and follow the upgrade directions.

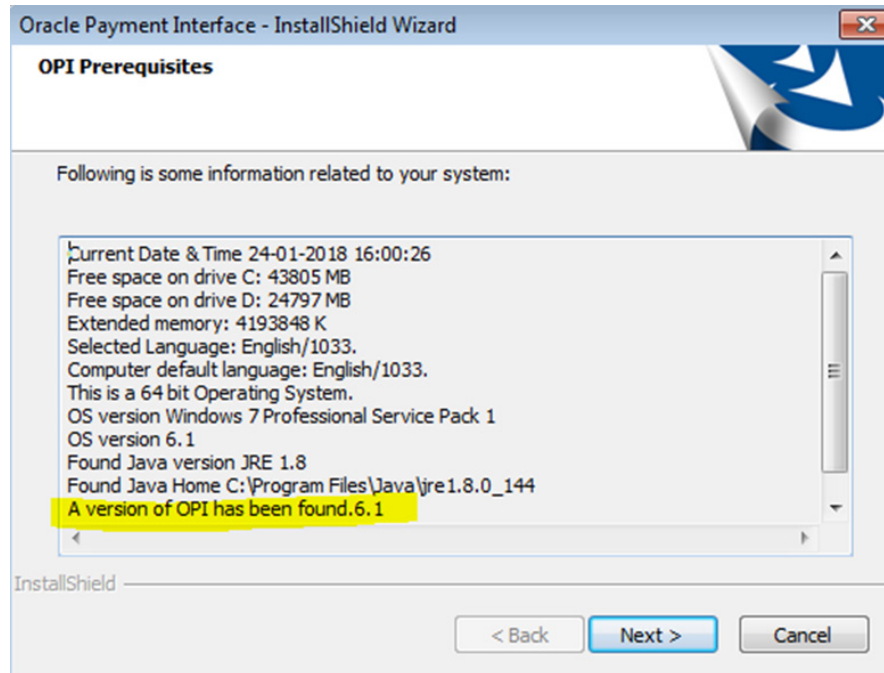
Note: OPI 6.1 and higher can be upgraded to OPI 6.2.

OPI Upgrade Steps

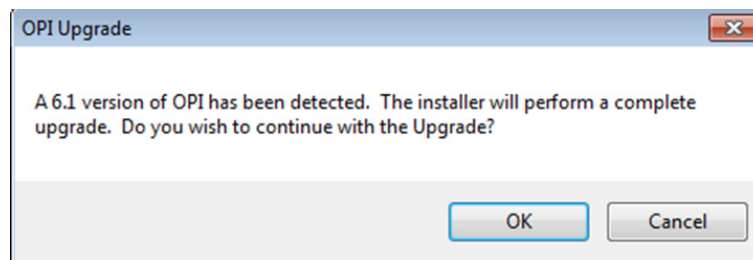
1. Right-click and Run as Administrator the OraclePaymentInterfaceInstaller_6.2.0.0.exe file to perform an upgrade.
2. Select a language from the drop-down list, and then click **OK**.

3. Click **Next** on the *Welcome* screen to proceed with the installation.

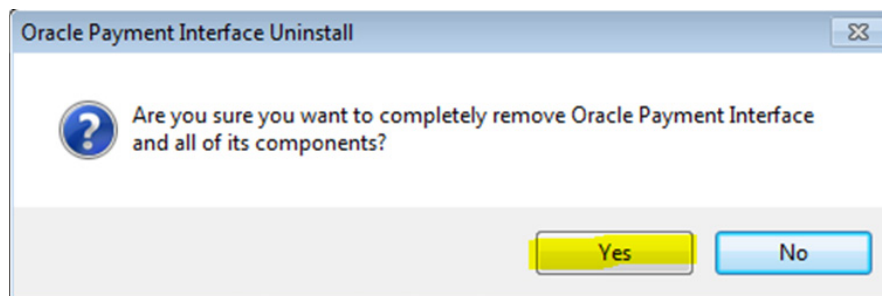
Prerequisites for the installation will be checked, including the required free drive space, details of the host environment, and the Java version that is present.



4. Click **Next** on the *OPI Prerequisites* screen.



5. Click **OK** on the *OPI Upgrade* screen.



6. **WARNING!** You must click **Yes**.

IF YOU CLICK **NO**, YOU WILL HAVE BOTH OPI 6.1 AND OPI 6.2 INSTALLED AND NEITHER WILL WORK.

Explanation: OPI will migrate the existing MySQL configuration information, but all previous OPI applications will be removed before the new files are installed.

7. Choose a Destination Location. Accept the default installation location or click **Change...** to choose a different location.

8. Click **Next**.

The *Ready to Install the Program* screen displays.

9. Click **Install**.

The *Setup Status* screen displays for a few minutes.

Setup Type

For database type, select **MySQL**. No other database type is supported for upgrades.

Database Server

Name/IP – The Hostname or IP Address used for communication to the MySQL database. This must be left at the default of localhost.

Port # – The Port number used for communication to the database

Database Server Login

DBA user

Login ID: root

Password: root user password for MySQL database.

Database User Credentials

User Name: This must be a new user name. It cannot be the same user from the 6.1 install.

Password: Password for the new database user.

Configuration Tool Superuser Credentials

User Name: This can be any user name. It does not have to be a Windows account user.

Password: Create a password, and then confirm it.

Configuration Tool Connection Settings

Host: May be left at 127.0.0.1 if the OPI configuration server is installed on this PC. Otherwise, specify the name or IP address of the PC where the OPI configuration server will be installed.

Port: Leave at 8090.

Configuration Tool Passphrase

Enter and confirm a passphrase.

Click **Next**.

The *Configuration Wizard* launches.

Continue to follow on-screen directions, verifying settings as you go.

POS Merchants

On the *Merchants* screen, click the wrench icon to the right of the existing merchant.

Verify the merchant settings are correct.

Merchant Pay At Table Configuration

If using Pay@Table, review the tender settings carefully as there are new fields that will not be pre-populated from the previous OPI install.

Continue to follow the on-screen directions.

InstallShield Wizard Complete

Click **Finish** to allow a reboot.

If you cannot immediately reboot, you must stop and then start the OPI Service for the current settings to take effect.

5 POS Workstation Procedures

TSR Transactions

CC Sale

Ring food, and then select **CC sale**.

Tip Adjust

1. Verify Micros\Res\Pos\Etc\OPI.inc has this line:

TipAdjust = TRUE

2. Re-open a closed check that was paid using credit auth and credit final.
3. Type a new tip amount (for example, 5.00), select the tender payment in Ops detail, and then select **Tip Adjust**.

The tender amount must be selected when **Tip Adjust** is clicked.

CC Refund

Begin the check, select **Void**, ring a menu item, select a reason code (if prompted), and then select **CC Refund**.

Refund (m)

1. Begin a check, add food, CC auth and CC final.

You need the RRN number from this CC voucher in step 3.

2. Begin check, select **Void**, ring a menu item, select a reason code (if prompted), and then select **Refund (m)**.
3. Enter the RRN number (when prompted) from the original Credit Card voucher from step 1.

CC Auth

1. Ring food and the service total.
2. Pick up that check and select **CC auth**. Service total.

CC Final

Pick up the CC Auth check from above and select **CC final**, and then answer the tip prompt.

CC Voice

1. Begin check, ring food, and then select **CC voice**.
2. Enter then approval code.

Tab Auth

1. Begin check, select **Tab Auth**, Service total.
2. Pick up that check, ring \$10.00 of food. Enter 13.00, and then select **CC final**.
3. Ops prompts `Tip Amount is USD 3.00?` Press the Enter key.

Balance Inquire

Begin the check, select **Bal Inq**, and swipe the card when prompted.

Reprint

Pick up an open check that already has a CC auth and select **Reprint**.

Hit enter to accept the "RePrint Auth Receipt?" prompt.

Repost

Use Repost if the final tender is interrupted. The following is an example of when to use it:

(Employee Class = Server table view)

1. Employee Classes | Guest checks | Other employee's checks, Enable "Pick up others chk"
2. Employee Classes | Guest checks | Other employee's checks, Disable "Tender Media to others chk"
3. 1, sign in, ring \$10.00 food, Auth CC, service total.
4. Sign in as a DIFFERENT employee of same Emp class (Svr table view) 104 = John
5. John picks up Sally's check, select **CC Final**.
6. OK Error mssg that kept paid check from closing.
7. Select **CC repost**. OK prompts.

Void (e)

1. Begin check, ring \$10.00 food, and select **CC Sale**.
2. Re-open that closed check, select the CC tender in Ops detail window and select Void (Inq #17).

Manual Auth

Begin check, ring \$10.00 food, select **Manual auth**, Enter approval code when prompted.

Auth + CNP

1. Begin check, ring \$10.00 food, service total.
2. Pickup check, hit Auth + CNP.
3. This is a way for the operator to trigger at POS side, through MGDH to allow the user to manually enter credit card info on payment terminal (PinPad) for card not present transactions.

Partial Auth

1. Begin check, ring \$10.00 food, enter 5.00 and select CC auth.
2. Enter 5.00 and select **CC Final**.

Selecting **CC final** pays the entire amount due even if only part of the check amount has been authorized. So an amount must be entered prior to selecting **CC final** if only a partial payment is desired.

QSR Transactions

CC Sale

Ring food, and then select **CC sale**.

SALE&CASH

1. Ring food, and then select **Sale&Cash**.
2. Answer prompt for how much cash back.

CC Refund

Begin check, select **Void**, ring a menu item, select a reason code (if prompted), and then select **CC Refund**.

Refund (m)

1. Begin a check, add food, CC auth and CC final.

You need the RRN number from this CC voucher in step 3.

2. Begin check, select **Void**, ring a menu item, select a reason code (if prompted), select **Refund (m)**.
3. Enter the RRN number (when prompted) from the original Credit Card voucher (step 1).

Balance Inquire

Begin check, select **Bal Inq**, and then swipe the card when prompted.

Reprint

Pick up an open check that already has a CC auth and select **Reprint**.

Repost

Repost is meant to be used if the final tender gets interrupted. The following is an example of when it might be used.

(Employee Class = Server table view)

1. Employee Classes | Guest checks | Other employee's checks, Enable "Pick up others chk"
2. Employee Classes | Guest checks | Other employee's checks, Disable "Tender Media to others chk"
3. 1, sign in, ring \$10.00 food, Auth CC, service total.
4. Sign in as a DIFFERENT employee of same Emp class (Svr table view) 104 = John
5. John picks up Sally's check, select **CC Final**.
6. OK Error msg that kept paid check from closing.
7. Select **CC repost**. OK prompts.

Void (e)

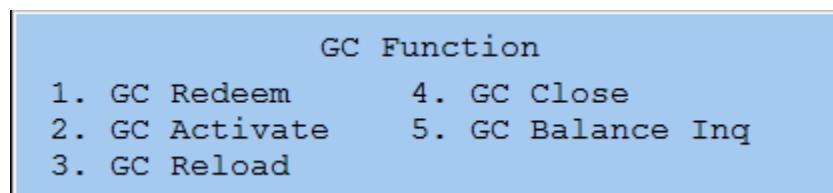
1. Begin check, ring \$10.00 food, and then select **CC Sale**.
2. Re-open the closed check, select the CC tender in Ops detail window and select Void (Inq #17).

Sale + CNP

1. Begin check, ring \$10.00 food, Sale + CNP.
2. This is a way for the operator to trigger at POS side, through MGDH to allow the user to manually enter credit card info on payment terminal (PinPad) for card not present transactions.

Gift Cards

Clicking the OGDH **GC Function** button brings up a dialog with five choices.



Gift/SVC Redeem

GC Redeem is not supported with tips in RES, and therefore should not be used in a TSR environment.

1. For TSR, use the normal Auth CC and CC final keys to pay with gift card.
2. For QSR, select the **GC Function** button and select 1 for GC redeem. Follow prompts to swipe card.

Gift/SVC Activate

Request an activate/issue transaction for a gift card or a stored value card.

1. Click GC Function and select 2 GC Activate
2. Enter the activate amount.

Gift/SVC Reload

Request a reload transaction for a gift card or a stored value card.

1. Click GC Function and select 3 GC Reload.
2. The cashier enters reload amount.

Gift/SVC Cashout or Close Card

GC Close is not supported in RES.

1. Find the balance of the gift card and pay that exact amount using normal Auth CC and CC final keys.

Gift/SVC Balance Inquiry

The balance inquiry transaction retrieves the balance amount for a pre-paid card, debit card or gift/SVC card.

1. Click GC Function and select 5 GC Balance Inq.

POSEOD

1. Verify Res\pos\scripts\poseod\MGDH.inc is pointing to OPI server IP address and correct port.
2. Verify Res\pos\scripts\poseod\POSEOD.inc has the correct POS type (RES = "0R" zero R) and Merchant ID value.
3. Double-click poseod.exe.
4. Check the Transaction.log file for "Batch" "Approval".

For more complete information on POSEOD configuration, scheduling and verification click [here](#).

6 Utilities

All OPI utilities and instructions for using them are covered in the **OPI Installation and Reference Guide**.

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.

See the **OPI Installation and Reference Guide** for how to change the database user password on the OPI side.

7 Troubleshooting and FAQs

Troubleshooting Issues

Situation 1: Cannot communicate to OPI after installation.

Test: Verify you can telnet to the OPI PC on port 5098 from another computer.

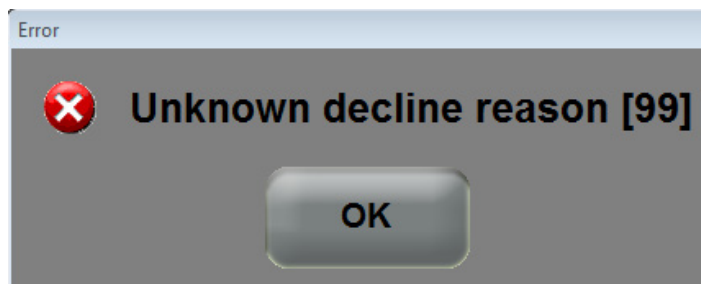
Example: From CMD prompt: telnet 172.23.25.16 5098

Where 172.23.25.16 is the IP address of the OPI server.

If you cannot telnet to the OPI port, try the following:

- Restart the OPI Service.
- Temporarily by pass the firewall.
- Verify OPI is listening on port 5098.
- Open CMD prompt: `C:\>netstat -anob > c:\temp\ports.txt` and then search for 5098.

Situation 2:



This generic error message can be caused by several things.

Solution 1:

Restart the OPI Service and try again.

Cause 2:

If the system.log shows the following message, the cause is likely a Java security update. (This should not be an issue in OPI 6.2, but leaving info, in case.)

[GATEWAY RESPONSE] GenericJSONProcessor : Can not decrypt

java.security.InvalidKeyException: Illegal key size

Not all Java updates cause this error, but security updates can cause it.

Solution 2:

Stop the OPI service.

Go to the link below and download jce_policy-8.zip.

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

Unzip the file and copy the two files to your Java security folder.

- Local_policy.jar
- US_export_policy.jar

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

- Start the OPI service.

Situation 3: “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 6.2.

Cause 4: Incorrect Proxy settings.

Cause 5: Wrong PSP configuration.

Solution LaunchConfiguration.bat | PSP Configuration

- 1) Verify using https instead of http.
- 2) Verify URL is correct. Append the port to end of host value.

Ex: Host = https://10.39.176.175:8991

Cause 5: Wrong IP address for that terminal.

Situation 6: “Bad Terminal ID”

Cause 1: In LaunchConfiguration.bat wrong Merchant ID

or wrong workstation number.

Cause 2: Wrong Merchant ID.

Cause 3: In OPI.inc if "Multi Merchant = FALSE" then the "merchantID" value below it cannot be empty.

Cause 4: In OPI.inc no mid or wrong mid. `rvc_mid[1] = ""`

Cause 5: MGDH.inc has some wrong value. These below are correct.

HOST1 = https://10.30.23.34 (Wrong URL/IP)

PORT1 = 5098 (Wrong port)

URL1 = GDIPOS (Wrong solution)

Solution 5: Verify no old OPI.inc is left over in CAL\Files\Micros\Etc.
Verify the correct values are in OPI.inc in CAL package.
Install that MGDH CAL package on that workstation again.

Cause 6: Forgot to restart OPI service after making changes in config.exe or the wizard.

Situation 7: Cannot enable/disable the signature prompt.

Solution: For live sites this should be controlled by the PSP.
For OPI 6.2.0.0.13 simulator add this value to properties\SimulatorConfig.properties: `ENTRY_MODE=05` Restart simulator.

Not Supported

- Incremental Auth
- Void a Refund (RES limitation)
- CC voice / Manual entry in QSR revenue center
- Backup OPI Server
- Voiding the tender from a SaleCashBack transaction.