

Oracle® Payment Interface

Oracle Hospitality OPERA Property Management
System Installation Guide

Release 6.1

E84798-01

February 2017

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Preface

This document describes how to install the Oracle Payment Interface (OPI) release 6.1 with Oracle Hospitality OPERA Property Management Service release 5.0.05.11 and higher and contains the configuration for both OPERA and the Oracle Payment Interface systems.

Audience

This document is intended installers and system administrators of Oracle Payment Interface (OPI) release 6.1 and Oracle Hospitality OPERA Property Management System release 5.0.05.11 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 the following URL: <http://docs.oracle.com/en/industries/hospitality/>

Revision History

Date	Description of Change
October 2016	Initial publication
February 2017	Revised formatting and edits

1 Pre-Installation

Consider the following guidelines before installing Oracle Payment Interface (OPI)

- OPERA Property Management System release 5.0.05.11 is the minimum release you can use to integrate with OPI.
- Upgrading to OPI 6.1.0.9 from any previous OPI or MPG versions is not supported.
- Any previous version of OPI or MPG should be uninstalled prior to installing OPI 6.1.0.9.
- The application requires Microsoft.NET Framework version 4.0 or higher.
- OPI requires at least 6 GB of free disk space.
- You must install OPI as a System Administrator.

Uninstalling a previous OPI or MPG version

To uninstall a previous version of OPI or MPG:

1. Save a backup of the entire existing OPI/MPG folder structure.
2. Open `%OPI_HOME%/bin/MicrosGatewayConfig.exe` and save a screenshot of the ServerXX values.
3. Save a screenshot of the PMS record as you will use the values later during the installation process.
4. Uninstall MPG/ OPI from Programs and Features.
5. Uninstall MySQL from Programs and Features if no other products are using the MySQL database.
6. Uninstall MySQL community from Programs and Features.
7. Rename the `C:\ProgramData\MySQL` folder to `MySQL_Old`.
8. You may need to Enable Microsoft Windows Explorer | Tools | Folder Options | View | "Show hidden files, folders, and drives", and then close and re-open the Microsoft Windows Explorer window to view the `C:\ProgramData` folder.
9. Restart the computer.
10. Install OPI.
11. Verify with the merchant if you need to activate the Refund functionality. The merchant needs to control the privilege for this function.

The following information is required to install the application.

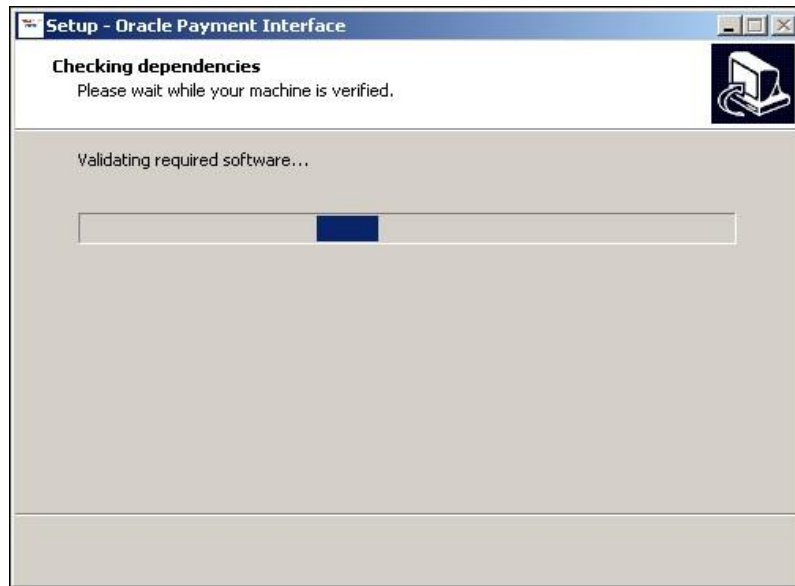
- User name and password of a Microsoft Windows local administrator
- PMS Chain Code and Property Code
- IP address of the OPI Server
- IP address of the Hotel Property Interface (IFC8) Server
- SQL root password may be needed if there is an existing MySQL database installed
- OPERA Client Workstation ID that will integrate with OPI
- Port number of terminal/host (confirm the port is open)

2 Installing OPI

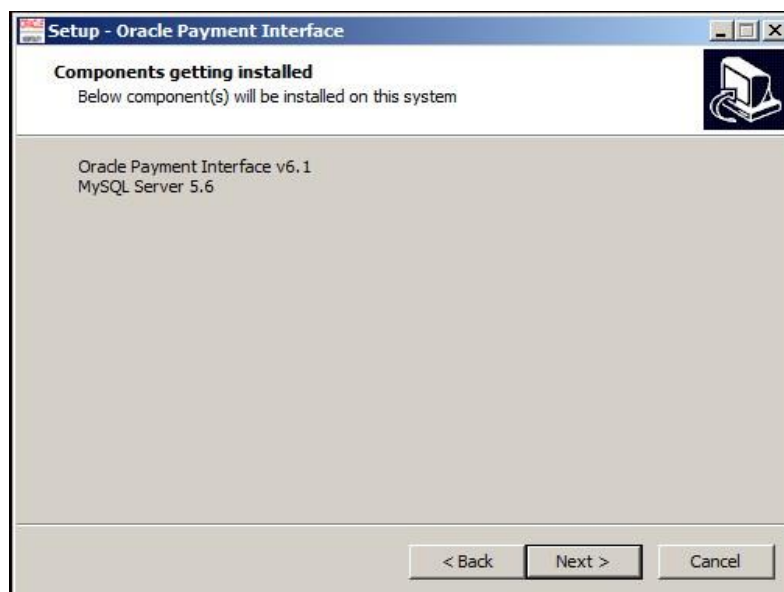
Download latest OPI installer from My Oracle Support (MOS) website and then complete the following steps to install OPI.

1. Double-click the OPI installer.

The installer validates the required Microsoft .Net Framework release 4.0. or higher. If the OPI installer does not detect the Microsoft .Net Framework software, an error message appears.



2. Next, the Oracle Payment Interface release 6.1 and the MySQL release 5.6 applications install.



3. Create a MySQL root password.

Setup - Oracle Payment Interface

Choose your MySQL Root Password
This password will be used for creating database schema

Password is case sensitive, should be at least 8 characters in length and must have at least one letter, one number and one special character from the following list !@#%^^&*

Password

Confirm Password

< Back Next > Cancel

4. Create the MySQL database user and password for OPI. OPI uses this account to connect to MySQL.

Setup - Oracle Payment Interface

Creating DB user for OPI
This user will be used by OPI to make database connections

Username and password are case sensitive.
Username should be made only using alphanumeric characters and must have at least one letter.
Password should be at least 8 characters in length and must have at least one letter, one number, and one special character from the following list !@#%^^&*

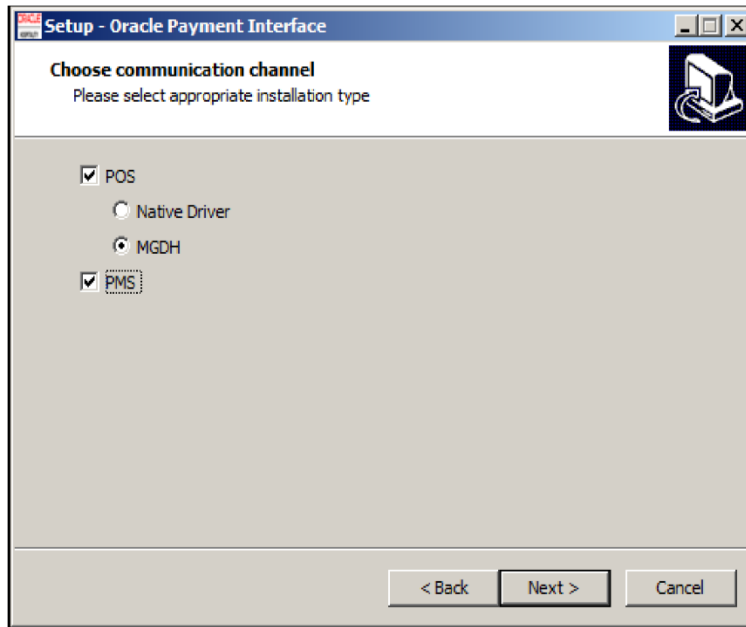
Username:

Password:

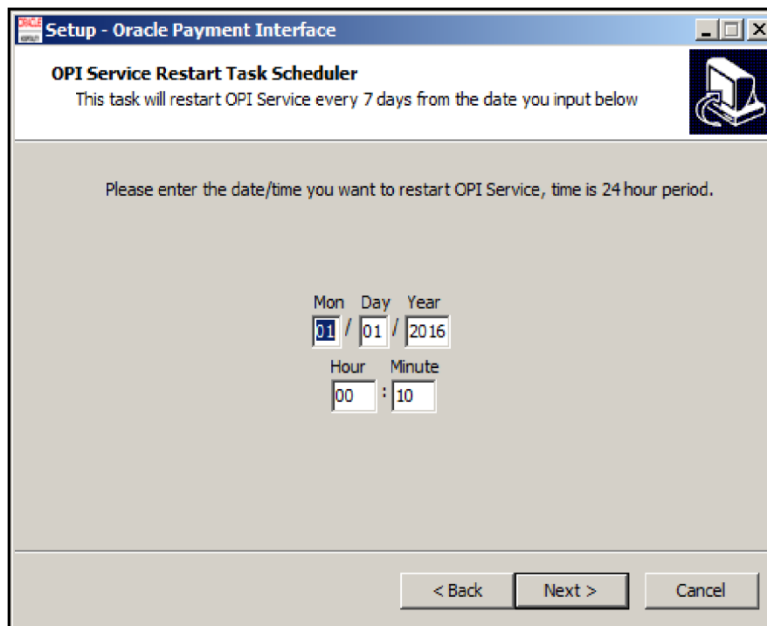
Confirm password:

< Back Next > Cancel

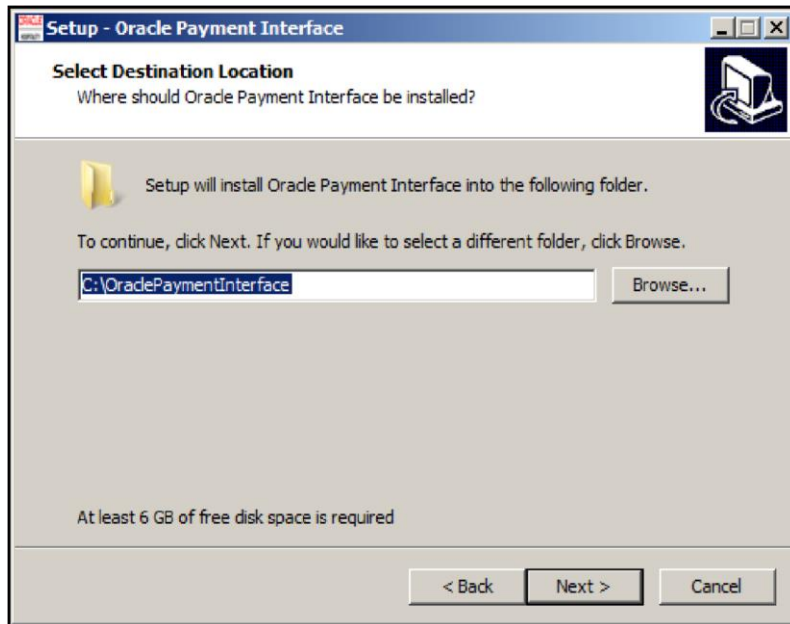
5. Select the Oracle Hospitality product integrating with this OPI installation.



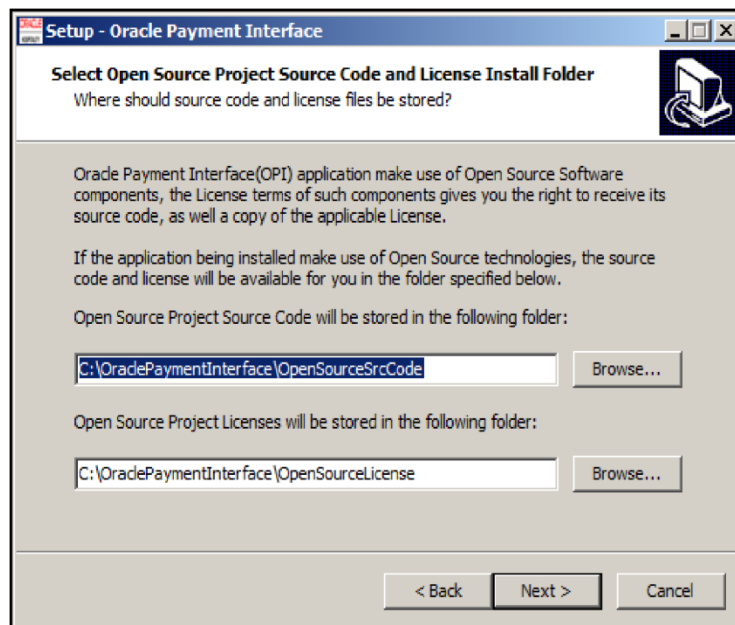
6. Setup the Microsoft Windows task scheduler to restart OPI service weekly.



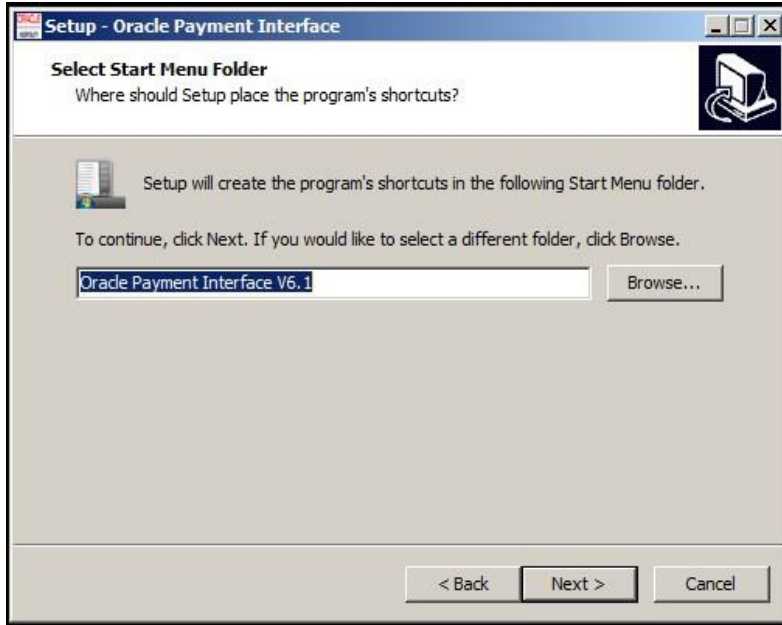
7. Select the location to install OPI. You can change the folder name or you can keep the default folder name.



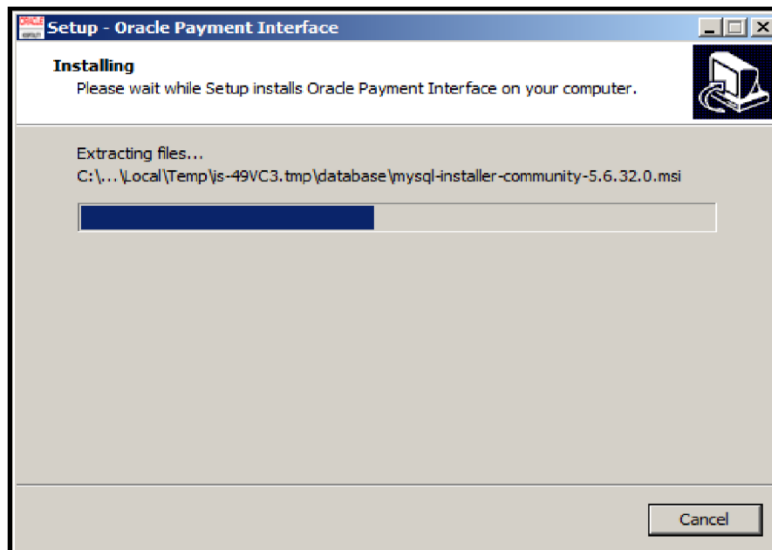
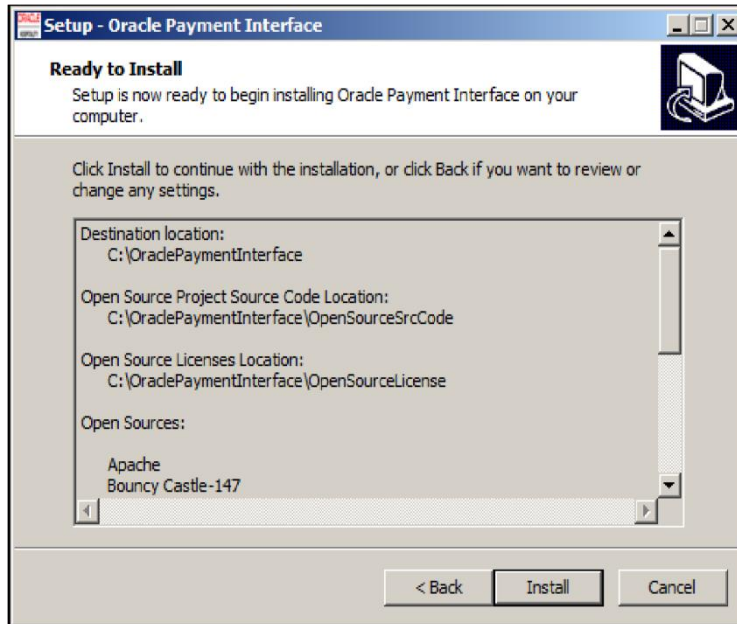
9. Select the open source project source code and license installation folder. You can keep the default location inside the OPI folder.



10. Select the Start Menu folder for OPI, you can keep the default location.



11. Select **Install** to begin installing OPI.



Configuring OPI

After the OPI installation completes, configure OPI.

1. Log in to the configuration tool as local administrator or as domain administrator account.

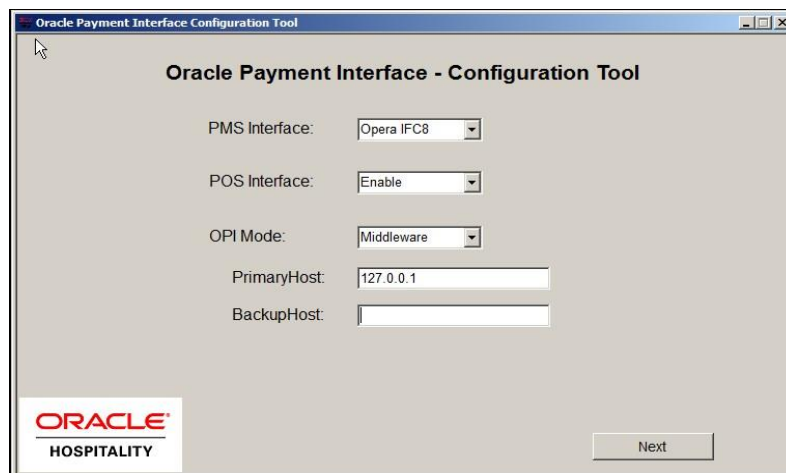
The `OPIConfigurationWizard.exe` is located in the `OraclePaymentInterface` folder - then select the `bin` folder.



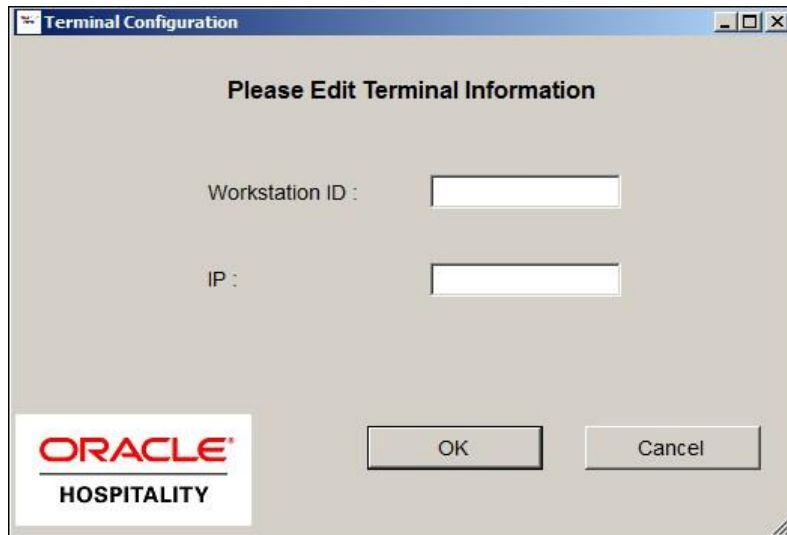
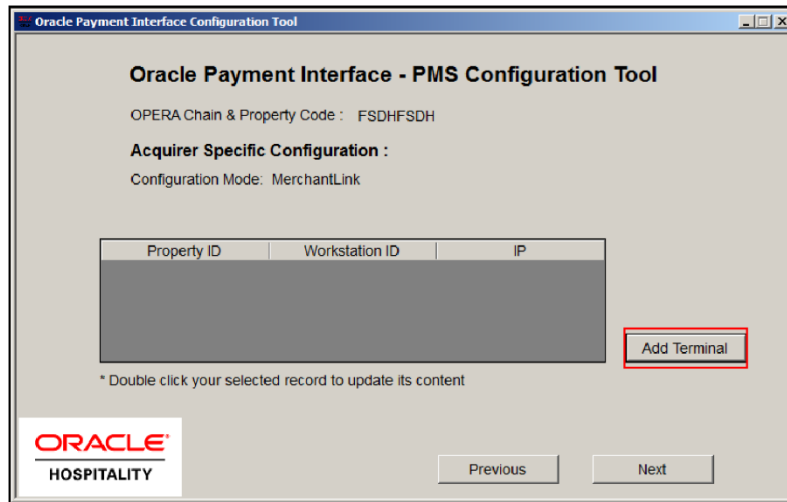
2. Select the type of PMS Interface and the POS Interface, then click Next.

To configure OPI follow these guidelines:

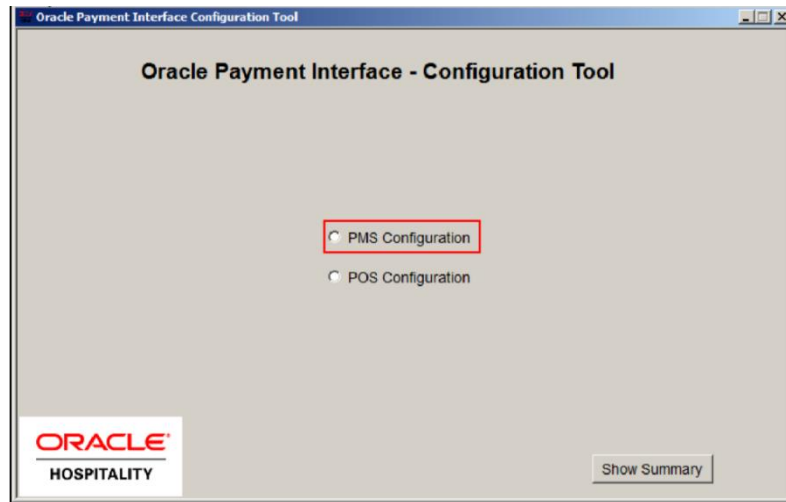
- If the merchant uses Oracle Hospitality OPERA Property Management System, select **OPERA IFC8** from the **PMS interface** drop-down list.
- If the merchant uses a POS, then from the **POS Interface** drop-down list select **Enable**.
- From the **OPI Mode** drop-down list, select the **Terminal** for the PED direct connection or select **Middleware** for middleware connection.
- Enter the third-party payment service provider middleware Host IP address.



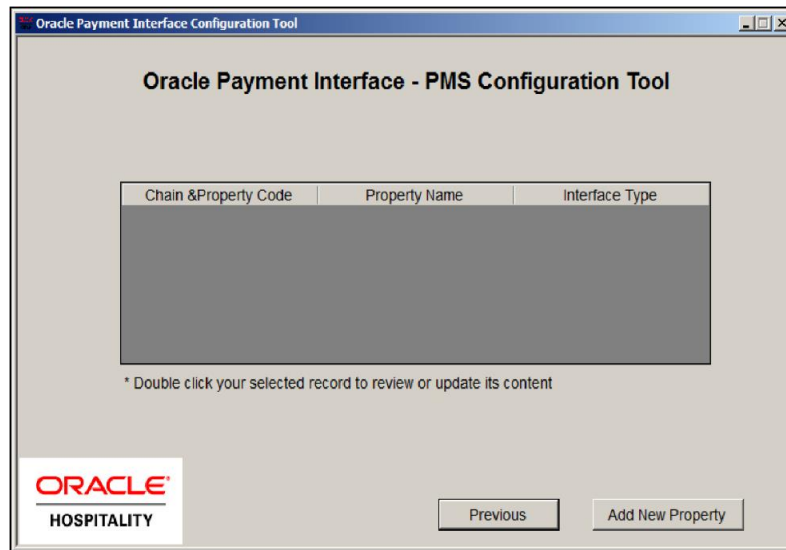
- To establish a direct connection, select **Add terminal** to map the OPERA workstation ID with terminal IP for PED.



-
3. Select PMS Configuration.



4. Select **Add New Property** to add a new merchant configuration for OPERA.



5. To configure the OPERA merchant, enter the following information.
 - Enter the OPERA Chain and Property Code.
 - Select **Generate Key**. You must use this key to configure the Hotel Property Interface (IFC8).
 - Enter the **IFC8 IP address** and **port** number for the Hotel Property Interface (IFC8) server.
 - Enter the **Merchant name, city, and country** information.
 - Select **Next**.

The screenshot shows the 'Oracle Payment Interface - PMS Configuration Tool' window. The 'Merchant Configuration' section includes the following fields:

- OPERA Chain & Property Code: FSDHFSDH
- OPERA Interface Type: IFC8
- IFC8 Key: rGGp10iaezs+EEzZk044lzQMXp8Y8wm (with a 'Generate Key' button)
- IFC8 IP: 172.29.141.51
- Port: 1234
- Merchant Name: OPI Test Merchant
- Merchant City: Columbia
- Merchant Country: United States of America

Buttons for 'Previous' and 'Next' are visible at the bottom right. The Oracle Hospitality logo is in the bottom left.

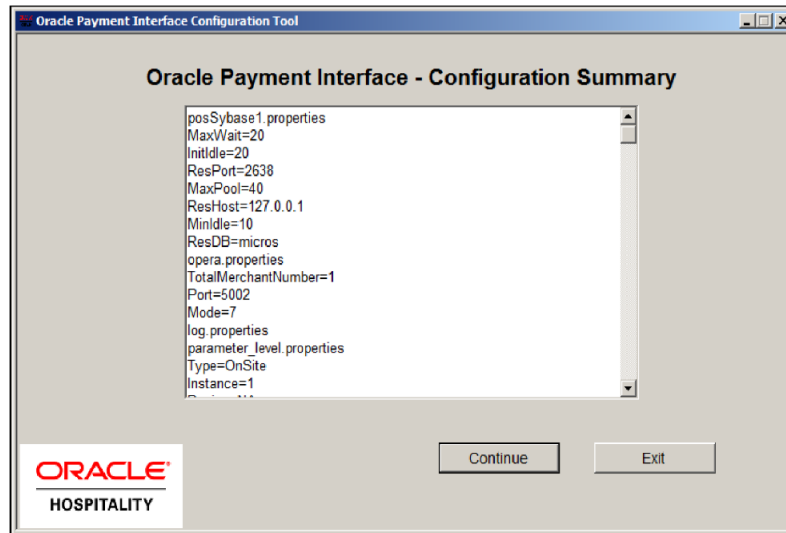
6. Enter the OPERA payment code for each card type.

The screenshot shows the 'Oracle Payment Interface - PMS Configuration' window. The 'Tender Configuration' section includes the following fields:

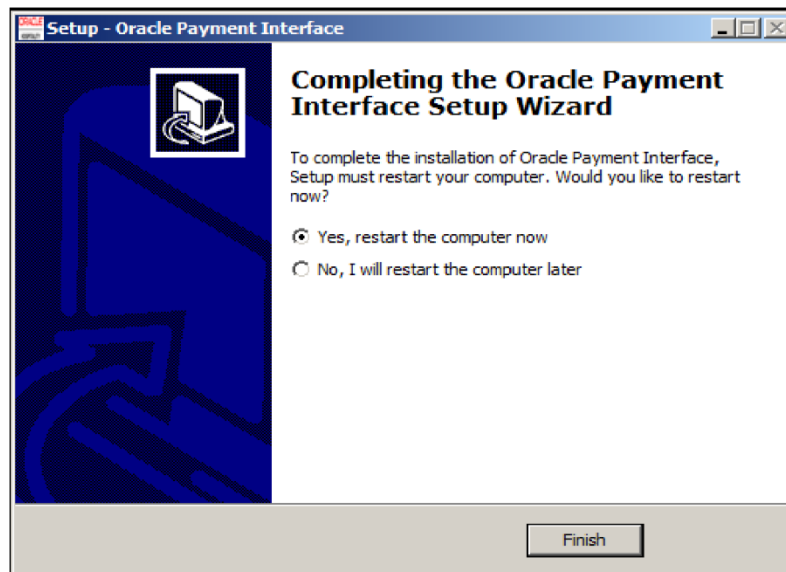
- OPERA Chain & Property Code: FSDHFSDH
- Visa: VA
- MasterCard: MC
- AMEX: AX
- DinersClub: DC
- MasterCard Debit: MD
- JCB: JC
- CUP: CU
- GiftCard: GC
- CUP Debit: CU
- Debit: DD
- Visa Debit: MD
- Visa Electron: VE
- Switch: SD
- Local Debit: DL
- Paypal Card: PC
- Maestro: ME
- VPAY: VP
- Alliance: AL
- EC Chip: EC
- BC Card: BC

Buttons for 'Previous' and 'Next' are visible at the bottom right. The Oracle Hospitality logo is in the bottom left.

7. After you complete the merchant configuration for OPERA, select Exit.



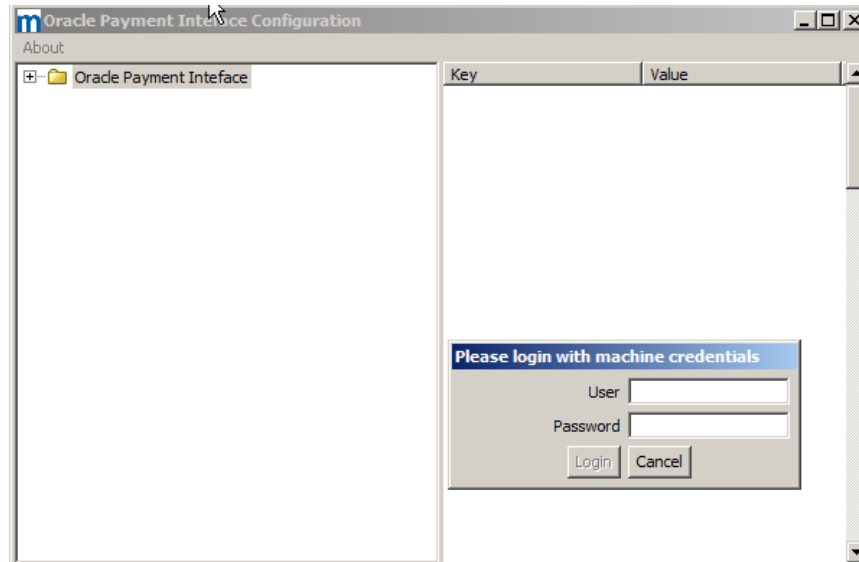
8. Click **Yes** to save the changes.
9. Select **Finish** to restart the computer and complete the OPI installation.



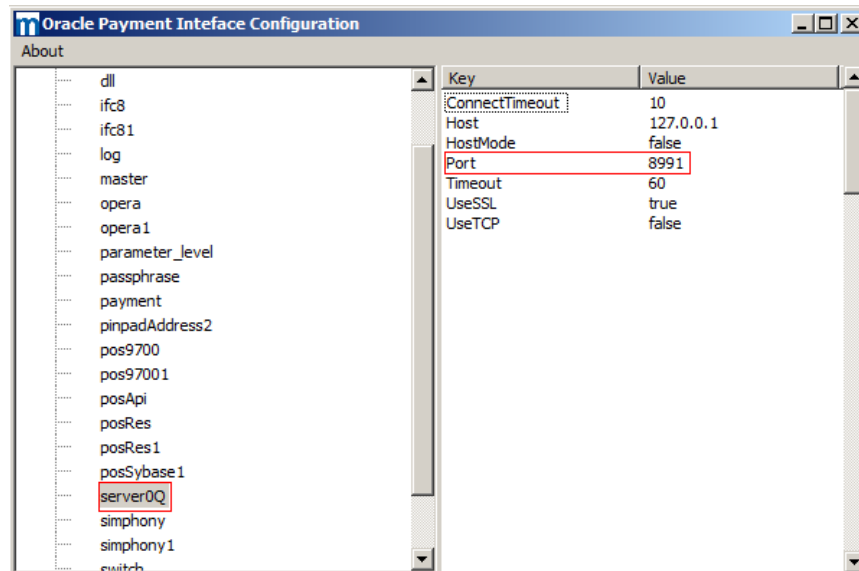
Configuring the OPI Port

After completing the OPI install and restarting the computer, go to the OraclePaymentInterface\bin folder, and double-click the config.exe file.

1. Log in using the local or the domain administrator account.

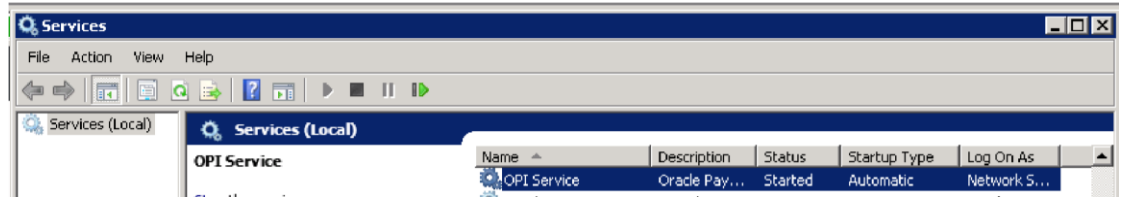


2. Update the port value for the **server0Q** property.
3. Restart the OPI Service.



Restarting the OPI Service

After the installation completes you must restart the computer for the OPI Service to be available. You must restart the OPI Service each time you change the Oracle Payment Interface configuration.



3 Configuring OPERA

Configuring the EFT Interface

Creating an EFT Interface

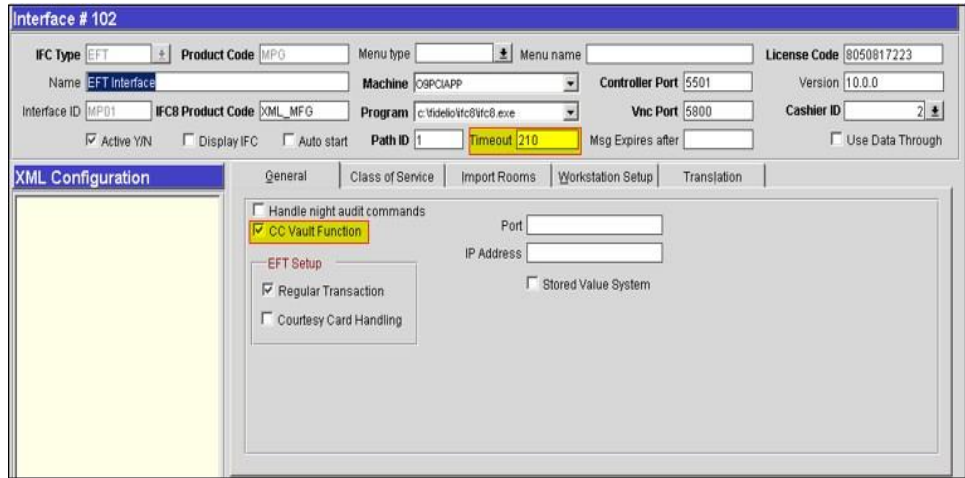
Log in to OPERA and start a session with Configuration setup, select the menu option Setup > Property Interfaces > Interface Configuration > and select **New** to add configuration for new EFT interface.

1. Enter the following options, and then select OK:
 - **IFC Type:** EFT
 - **Name:** Oracle Payment Interface
 - **Product Code:** MFG
 - **Machine:** Select the machine
 - **License Code:** License code for interface
 - **IFC8 Prod Cd:** XML_MFG

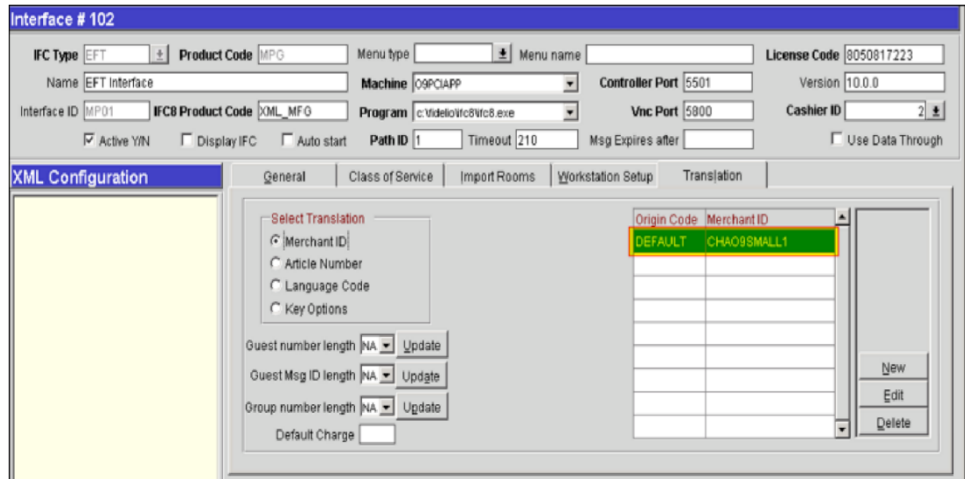
IFC Web Configuration - New

IFC Type: EFT	Name: []	Communication	
Product Code: MFG	Machine: O9PCIAPP	<input type="radio"/> TCP/IP	<input checked="" type="radio"/> Serial
License Code: 8050817223	IFC8 Prod Cd: XML_MFG	Com Port: []	
<input type="checkbox"/> Generate XML		Baud Rate: 9600	Parity: None
		Data Bits: 8	Stop Bits: 1
			OK
			Close

2. Select the check box to enable the **CC Vault Function**.
3. Define the **Timeout** value as 210.



4. Go to the Translation tab and select **Merchant ID**.
5. Select **New** to add the Merchant ID. This must be the same as previously configured in OPI (MPG) Configuration.



Configuring General Parameters

To configure the General Parameters:

1. Go to **Setup**, then **Property Interface**, and select the **Credit Card Interface**.
2. Go to **General Parameters**.
3. Enter the property ID in the **Hotel ID** field.
4. If the **OPP_MHT2 Multi-Property Cross Reservation** add-on license is active, then you can select a **Property** from a list of values.

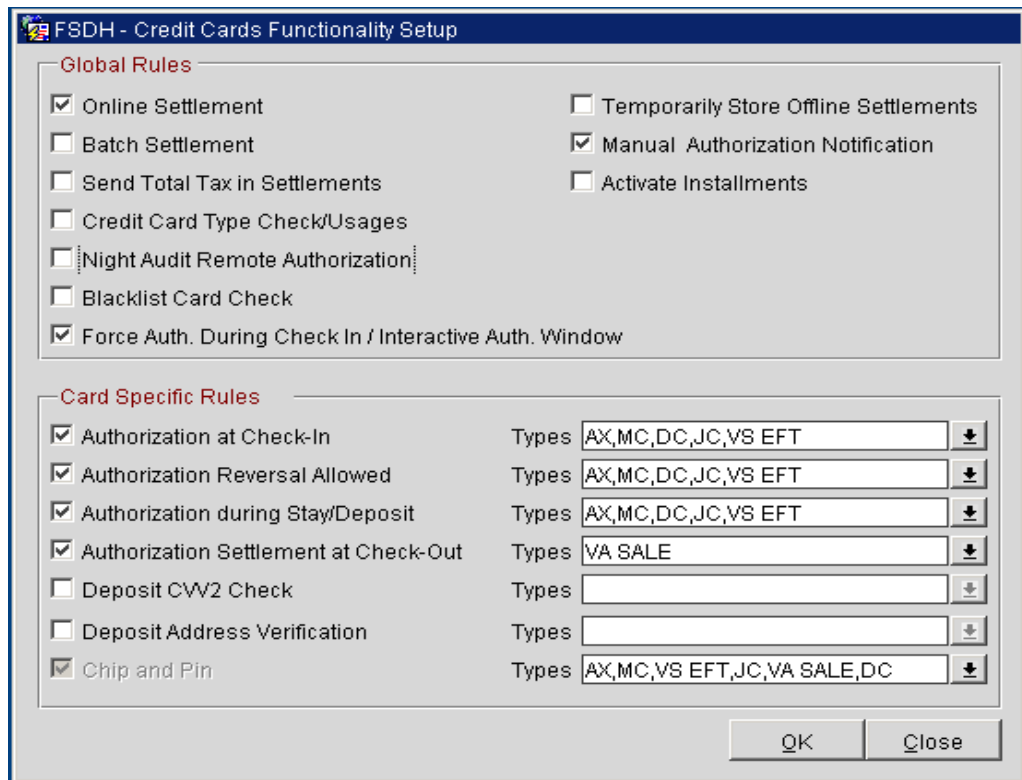
The screenshot shows the 'FSDH - Credit Card Configuration Setup' dialog box. It has a title bar with a small icon and the text 'FSDH - Credit Card Configuration Setup'. The main area contains several fields: 'Hotel ID' with the value 'FSDH', 'Property' with a dropdown menu showing 'FSDH', 'CC Reader' with a dropdown menu showing '1' and the text 'Magtek' next to it. Below these fields are symbols for semicolon, equals, caret, and question mark. A section titled 'Automatic Authorization Schedule' contains an 'Active' checkbox (unchecked) and an 'Interval' field with a dropdown menu and the text 'Minutes'. On the right side, there are 'OK' and 'Close' buttons.

To configure the Functionality Setup:

5. Go to **Setup** then **Application Settings**, **IFC**, **Parameters**, and enable **CHIP AND PIN**.

The screenshot shows the 'FSDH - Application Settings' dialog box. It has a title bar with a small icon and the text 'FSDH - Application Settings'. The main area is divided into three tabs: 'Functions', 'Parameters', and 'Settings'. The 'Parameters' tab is selected. On the left, there is a 'Property' dropdown menu showing 'FSDH' and a 'Group' list with items like ACTIVITY, AR, BLOCKS, CASHIERING, CATERING, COMMISSION, END OF DAY, EXPORTS, FRONT DESK, GENERAL, GRC, IFC (highlighted), MEMBERSHIP, NAVIGATOR, PREVENTATIVE MAINT, PRIORITY, PROFILES, PTM, RATES, RESERVATIONS, ROOMS MANAGEMENT, and SELLING SCREEN. The main area contains a list of parameters with checkboxes: 'Name', 'ADVANCED AUTHORIZATION RULES', 'ALLOW GIFT CARD CASHOUT', 'CC NUMBER NOT MANDATORY FOR RESERVATIONS', 'CHIP AND PIN' (checked and highlighted), 'DISPLAY HOUSE BOOTH CALLS', 'DISPLAY KEY SCREEN', 'DISPLAY KEY SCREEN UPON CHECKIN', 'DISPLAY VALUED PROGRAM DURING CHECKIN', 'GIFT CARDS', 'IFC POST EXCLUSIVE TAX AS ITEMIZER', 'MULTIPLE GUEST ROOM KEY', 'RESTRICT KEYDATACHANGE AT CHECKIN', 'RESTRICT KEYS FOR RESERVATIONS NOT CHECKED-IN', 'STORE CHECK DETAILS BY CHECK NUMBER ONLY', and 'SWAP REFERENCE AND SUPPLEMENT'. Below the list is a section titled 'Activate Chip and Pin Functionality.' with a text area. At the bottom, there are 'Copy', 'Find', 'Edit', and 'Close' buttons.

6. Go to **Setup, Property Interfaces, Credit Card Interface, Functionality setup.**



- **Online Settlement.** Select this check box to allow online settlement. OPI is an online settlement. You must check this check box to use the Chip and PIN payment method.
- **Authorization at Check In.** Select the payment methods that will trigger an automatic credit card authorization at check-in.
- **Authorization Reversal Allowed.** Select the payment methods that can process authorization reversals. This allows the property to remove a hold on a customer's credit card or debit card if they check-out using a different payment method. For example, assume a customer checks-in on a reservation for a 5-night stay using a Visa credit card. At the time of authorization, a hold is put on the Visa credit card for the total cost of the stay. If the customer checks-out using cash or a different brand of credit card, the hold on the originally selected Visa credit card is reversed. A partial reverse authorization is not supported.
- **Authorization During Stay/Deposit.** Select the payment methods that allow manual and automatic authorization checks following check-in and prior to check-out and settlement. This option must be enabled in order to allow authorizations by the end-of-day routine.

- **Authorization Settlement at Check-Out.** Select the payment types that can use credit card authorization and settlement at check-out. For example, select payment types that do not allow an authorization to complete separate from the settlement and the authorization, the settlement must happen at the same time. The payment types that are available in the multi-select list of values are only payment types configured as EFT payment types. Any payment types selected here cannot be selected for other credit card specific rules such as Authorization at check-in, Authorization Reversal, or Authorization during Stay/Deposit and if they are selected for any of these card specific rules, then the payment types are not available to select and apply this rule.
- **Chip and PIN Enabled Payment Types.** When the IFC > Chip and PIN application parameter is set to Y this option is visible and selected by default. You may not unselect the check box. Select the down arrow to choose a credit card payment type that offers the Chip and PIN functionality when used at a Chip and PIN enabled terminal. The same payment type can also be selected in the Authorization Settlement at Check-out payment types. Payment types that are configured in both options will not require that a credit card number or expiration date to be entered when selected as a payment method on the Reservation screen or on the Payment screen. This information is contained in the response message from the interface.

Configuring the Authorization Rules

Go to **Setup, Property Interfaces, Credit Card Interface, Authorization Rules** to specify the authorization rule or rules for the property credit card authorizations.

The screenshot shows a software window titled "FSDH - Authorization Rule". It is divided into two main sections: "Main" and "Other Windows".

Main Section:

- Authorization Rule:** A dropdown menu currently showing the value "7". To its right is the formula: $\text{Nights} * (\text{Daily Rate} + \text{Amount} - \text{Daily Rate})$.
- Amount:** A text input field containing "1.00".
- Percentage:** An empty text input field.
- Max. Days to Authorize:** A text input field containing "7".
- Ignore Advance Payments:** An unchecked checkbox.

Other Windows Section:

- Auth. Rule:** A dropdown menu.
- Auth. Amount:** An empty text input field.
- Auth. Percentage:** An empty text input field.

At the bottom right of the window are two buttons: "OK" and "Close".

Configuring Cashiering

Setting up Credit Card Payment Transaction Codes

1. In OPERA go to **System Configuration, Cashiering, Codes, Transaction Codes** and then select **New** to create a transaction code.

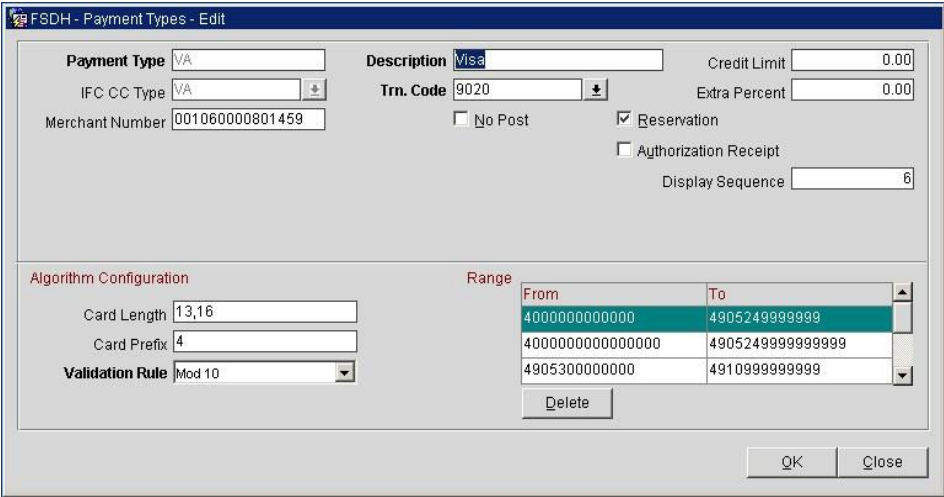
The screenshot shows the 'FSDH - Transaction Codes - Edit' window. The 'Code' field contains '9020'. The 'Description' field contains 'Visa'. The 'Subgroup' dropdown is set to 'CC' and is labeled 'Credit Card'. The 'Group' dropdown is set to 'Payment'. The 'Trm. Type' dropdown is empty. The 'Adjustment Code' dropdown is empty. There are empty fields for 'Minimum Amount' and 'Maximum Amount'. Below these are radio buttons for 'Credit Card', 'Cash', 'Check', and 'Others'. Underneath, there are radio buttons for 'EFT' and 'Manual'. The 'EFT' radio button is selected and highlighted with a red box. Below the radio buttons is the 'AR Account' dropdown set to 'CCC123' and labeled 'Credit Cards'. There are several checkboxes: 'Revenue Group', 'Payout', 'Cashier Payments (1-8)', 'Include In Deposit/CXL Rule', 'Inactive', 'Membership', 'Generates Inclusive', 'AR Payments', 'Manual Posting', and 'Deposit Payments'. The 'Deposit Payments' checkbox is checked. The 'Display Code' field contains 'VA'. At the bottom are buttons for 'Generates', 'OK', and 'Close'.

2. Follow these guidelines to setup credit card payment transaction codes:
 - If you use this credit card transaction code interface with the gateway, you must select **EFT**.
 - If this credit card transaction code does not interface with the gateway, you must select **Manual**.
 - An **AR Account** must be linked to the correct credit card accounts receivable account.

Setting up the Credit Card Payment Type

To setup the credit card payments create the payment type link with transaction code:

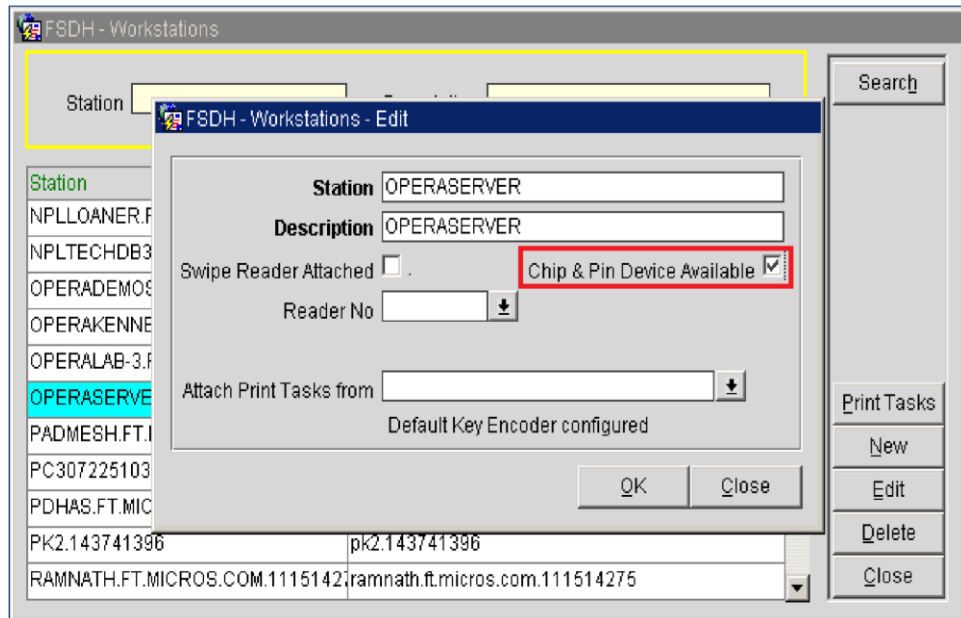
1. In OPERA, go to **System Configuration**.
2. Go to **Cashiering**, and then **Payment Types**.
 - In the **IFC CC Type** field, select the credit card code.
 - In the **Trn Code** field, select the credit card transaction code.



Configuring the Workstation

If the workstation is connected to a terminal, the **Chip & Pin Device Available** check box must be enabled.

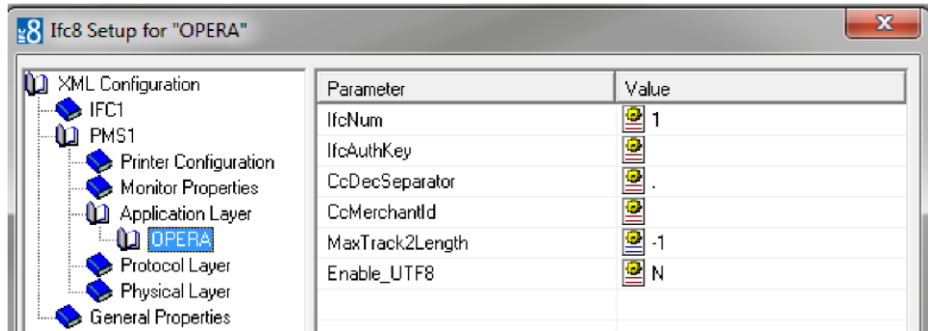
1. In OPERA, go to **Setup**, and select **Workstations**.
2. Select the **Chip & Pin Device Available** check box to enable the device for this workstation.



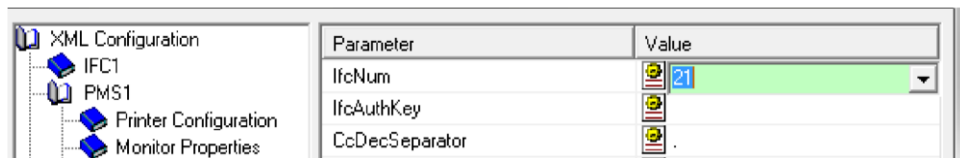
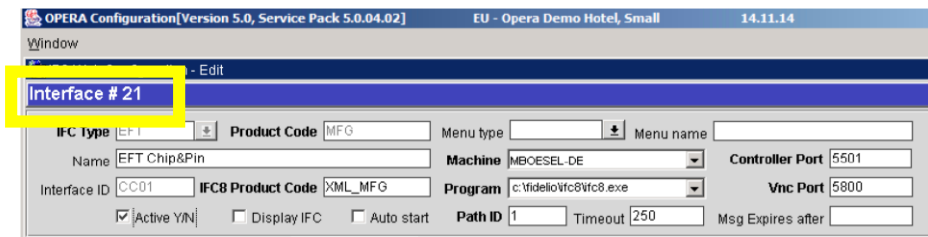
Configuring the Hotel Property Interface (IFC8) instance to the OPERA Hotel Property Interface (IFC)

To configure the link between the interfaces:

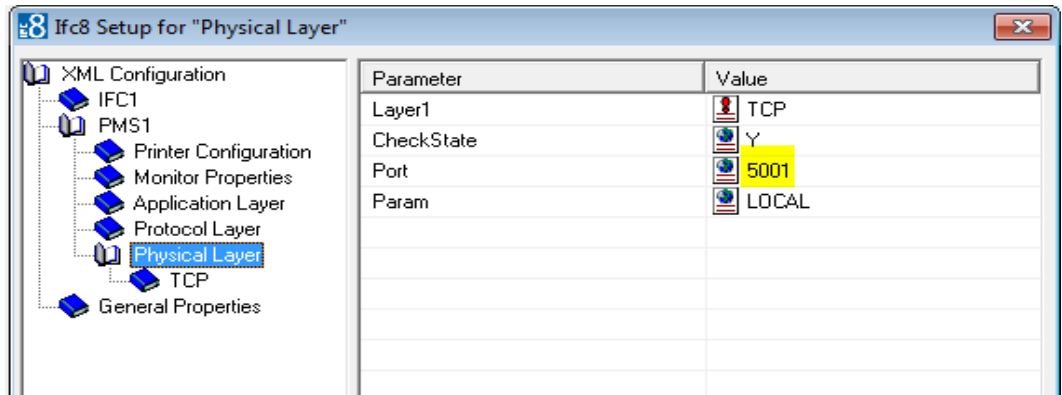
1. In the **Hotel Property Interface**, go to the **PMS1** tree and select **OPERA** in the application layer.
2. Enter the **OPERA IFC** number in the parameter **IfcNum** value.



- You can find the OPERA IFC number in OPERA on the IFC Configuration of the related Hotel Property Interface (IFC) (related interface controller number).



3. Go to the **PMS1** tree in the **Physical Layer**.
4. Enter the port number into Parameter value **Port**. This is the port IFC8 uses to communicate with the opera IFC controller.
5. Select **Enter** and **Apply** to re-initiate IFC8, and then click **Save**.

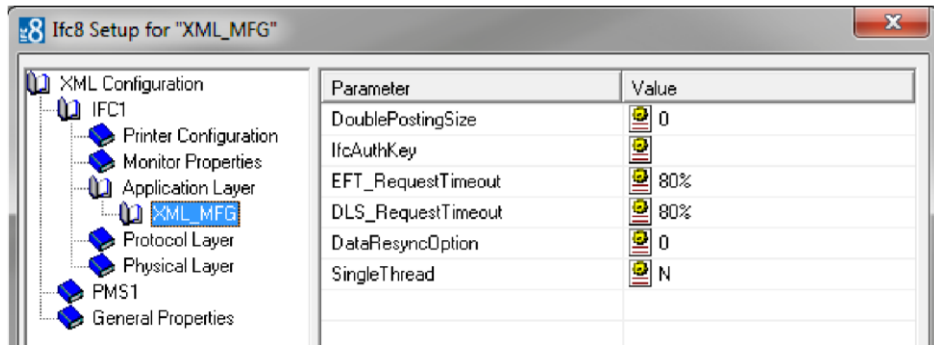


Configuring Authentication for the Hotel Property Interface (IFC8) with OPI

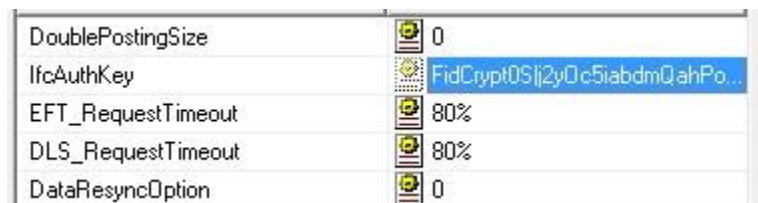
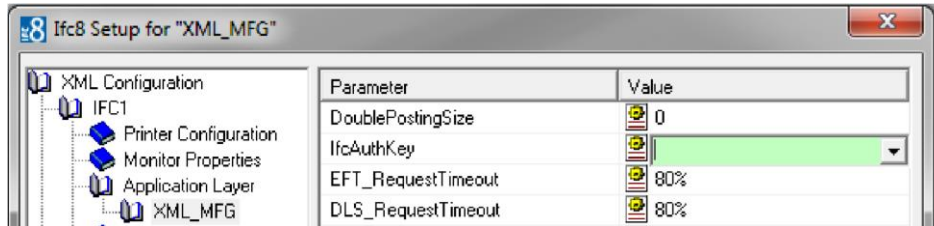
You must secure the connection between OPI and Hotel Property Interface (IFC8) by exchanging encryption keys at startup.

This authentication key must be defined by OPI. The corresponding key must be entered in the Hotel Property Interface (IFC8) configuration.

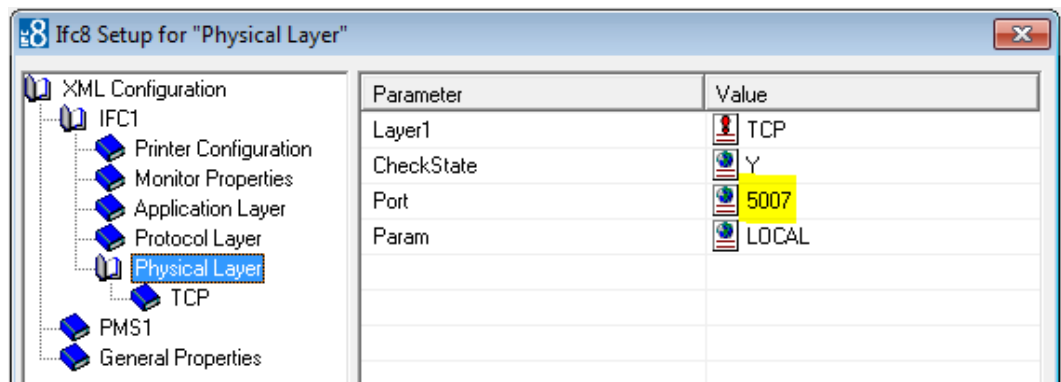
1. In the Hotel Property Interface (IFC8) configuration, go to the **IFC1** tree, and then in the **Application Layer**, select the **XML_MFG** option.



2. Copy the [generated key](#) from Configuring OPI - OPERA merchant step 5, and add "FidCrypt0S|" to the generated key as prefix.
For example: FidCrypt0S|xxxxxxxxxxxxxxxxxxxxxxxxxxxx
3. Copy this string into IFC8 Parameter **IfcAuthKey** value field.



4. Go to **IFC1** tree and select the **Physical Layer**.
5. Enter the port number in port value. This is the same port that was configured in OPI.



6. Click **Apply**, IFC8 reinitiates.
7. The **IfcAuthKey** value now shows an encrypted key and the entered string is now encrypted by IFC8.
8. Click **Save**, and then click **OK** to close the IFC8 Configuration form.

IFC8 now connects with OPI and OPERA IFC Controller.

To verify IFC8 successful status, confirm that all 6 status indicators are green.

