

# Oracle® Hospitality Oracle Payment Interface for OPERA Cloud Services **Installation Guide**



Release 19.1  
F22924-01  
July 2020



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# Preface

## Purpose

This document describes how to install and configure the Oracle Payment Interface for OPERA Cloud services.

## Audience

This document is intended for installers of OPI to integrate with OPERA Cloud services.

## 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
- 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/>

**Table 1 Revision History**

| Date           | Description   |
|----------------|---|
| September 2019 | <ul style="list-style-type: none"><li>• Initial Publication</li></ul>                       |
| July 2020      | <ul style="list-style-type: none"><li>• Added note in Installing the OPI section.</li></ul> |

# Pre-Installation Steps

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

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

- OPERA Cloud releases you can use to integrate with OPI:
  - OPERA Cloud 1.20.16 or higher
  - OPERA Cloud 19.2 or higher
- OPI 19.1 does not install a database. If doing a clean install of OPI, a database must be installed first.
- Upgrading to OPI 19.1 from OPI 6.1 and higher is supported but MPG versions are not supported. Prior to upgrading from OPI 6.1 to OPI 19.1 all credit card transactions must be finalized and closed as the schema upgrade will not include the migration of old transaction data to the OPI side. Finalizing and closing credit card transactions is not a requirement for upgrading from OPI 6.2 to OPI 19.1 as no schema migration is expected in this case.
- Any previous versions of MPG should be uninstalled prior to installing OPI 19.1
- The application requires the Microsoft.NET Framework version 4.0 or higher.
- Confirm that the Java Platform, Standard Edition Runtime Environment (JRE) version 1.8.152 or higher but below 1.9 is installed on the computer where OPI is installed.
- OPI requires at least 6 GB of free disk space and you must install OPI as a System Administrator. The OPI Machine also needs 4GB RAM.

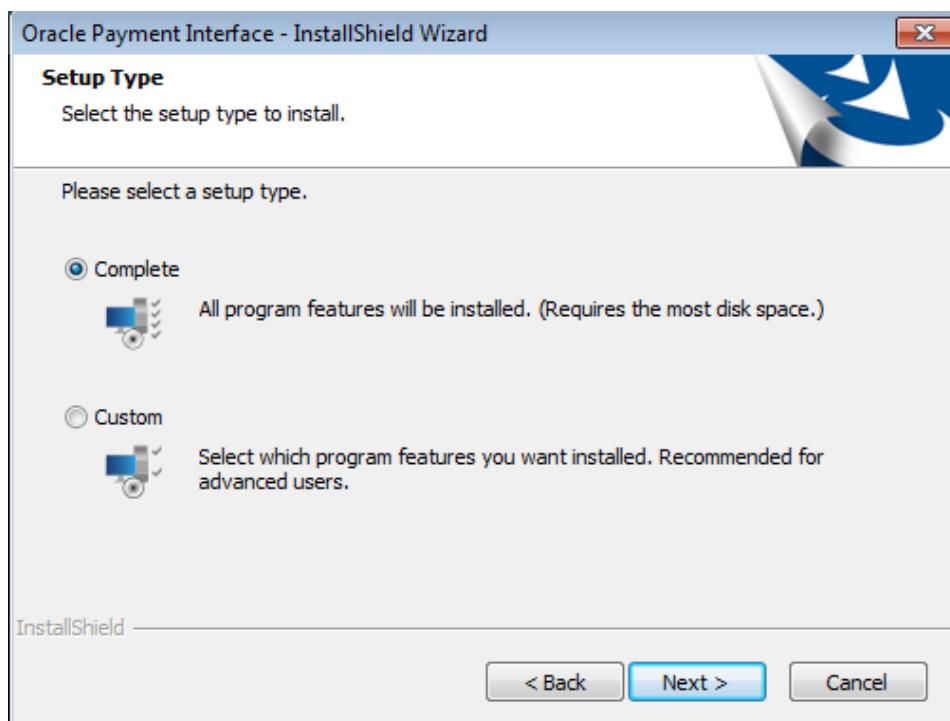
During the installation you must confirm the following:

- Merchant IDs
- IP address of the OPI Server
- If there is an existing MySQL database installed, then the SQL root password is required.
- If upgrading from OPI 6.1 to OPI 19.1 and higher, then all the OPI Credentials must be provided by hotel IT.
- Workstation IDs and IPs that integrate with the PIN pad.

## 2

# Installing the OPI

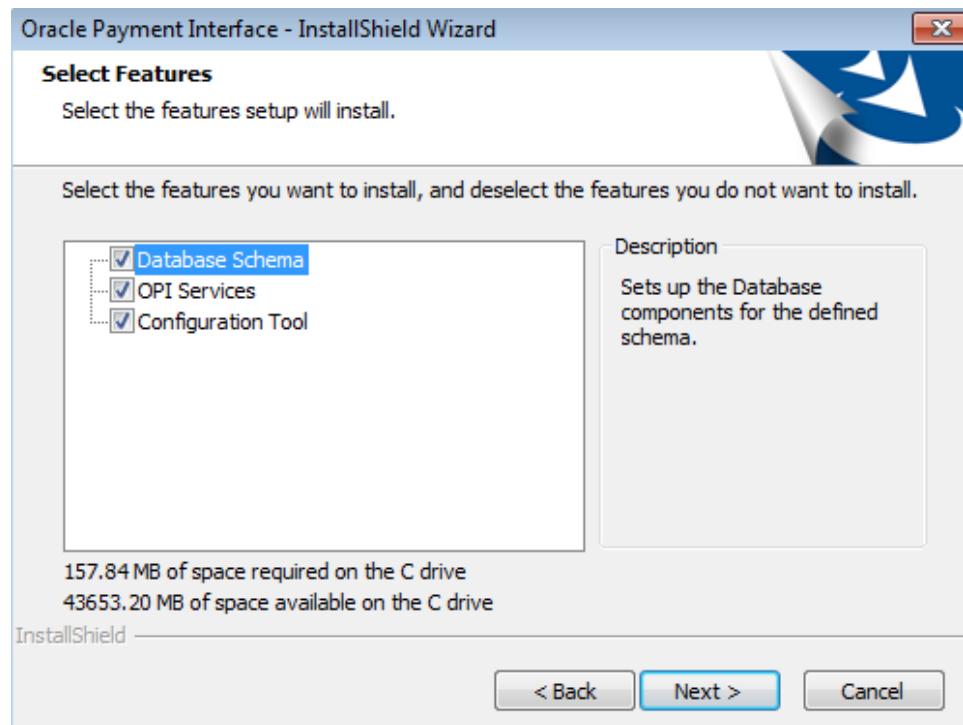
1. Copy **OraclePaymentInterfaceInstaller\_19.1.0.0.exe** to the Server. Double-click to launch the install.
2. Select a language, and then click **OK**.
3. Click **Next** on the Welcome to the InstallShield Wizard for the Oracle Payment Interface screen.
4. Click **Next** on the OPI Prerequisites screen.



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.

5. Make a selection (only for Custom install), and then click **Next**. If you select Complete Install, it will go to the Step 7 directly.

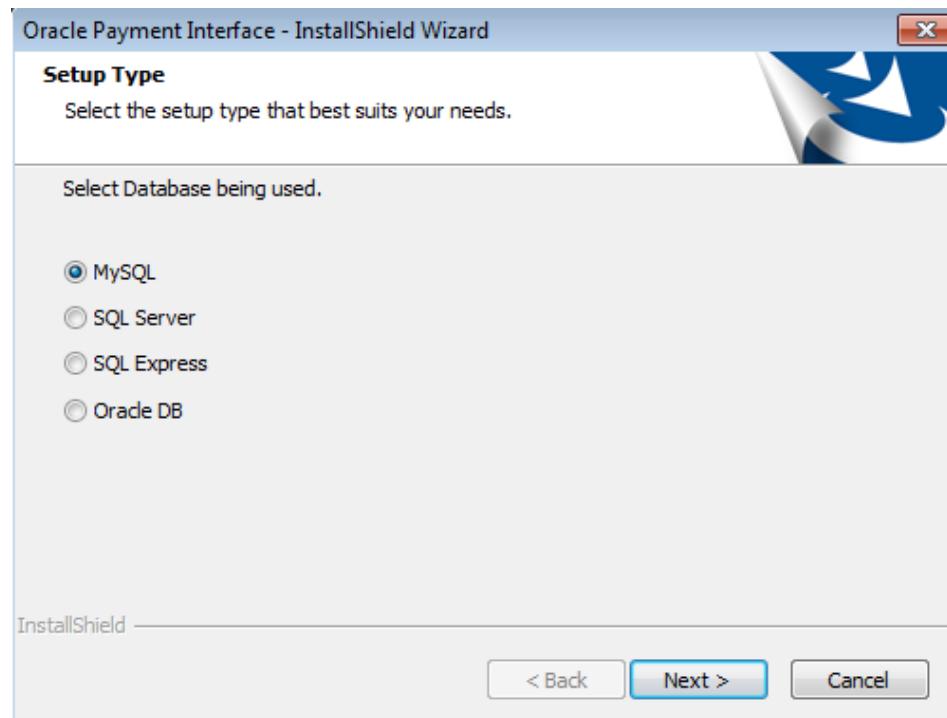


If you selected the Custom install option, the Select Features screen appears with the following options:

- 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.

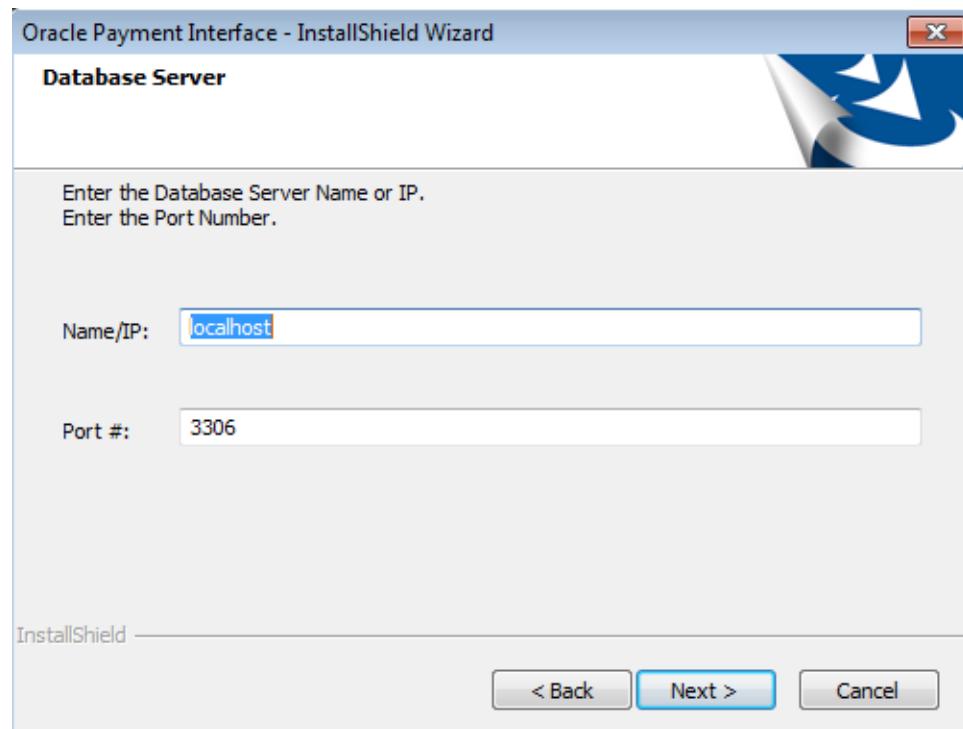
6. Select the features to install on this computer, and then click **Next**.
7. Accept the default installation location or click **Change...** to choose a different location, and then click **Next**.
8. Click **Install** on the Ready to Install the Program screen.
9. The **Setup Type** screen appears.



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

 **NOTE:**

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

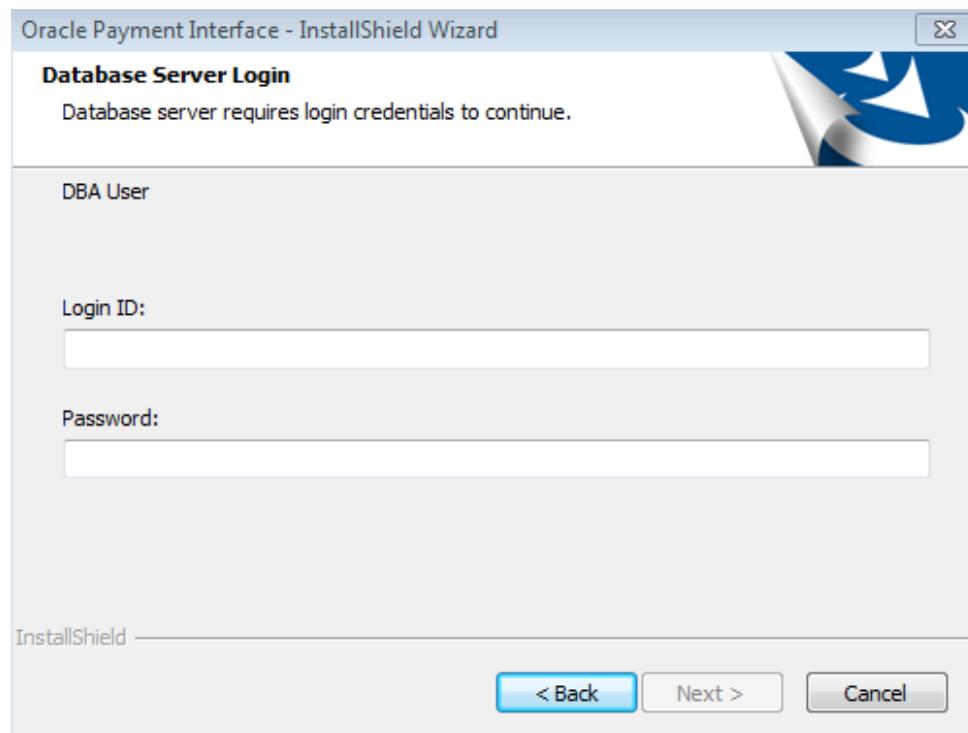


11. On the **Database Server** screen, enter the database details.
  - a. The **Name/IP** field defaults to localhost. This should be left as localhost if the OPI database is installed on the same computer. If the database is installed on another computer, the Name or IP address of that machine should be entered here.

 **NOTE:**

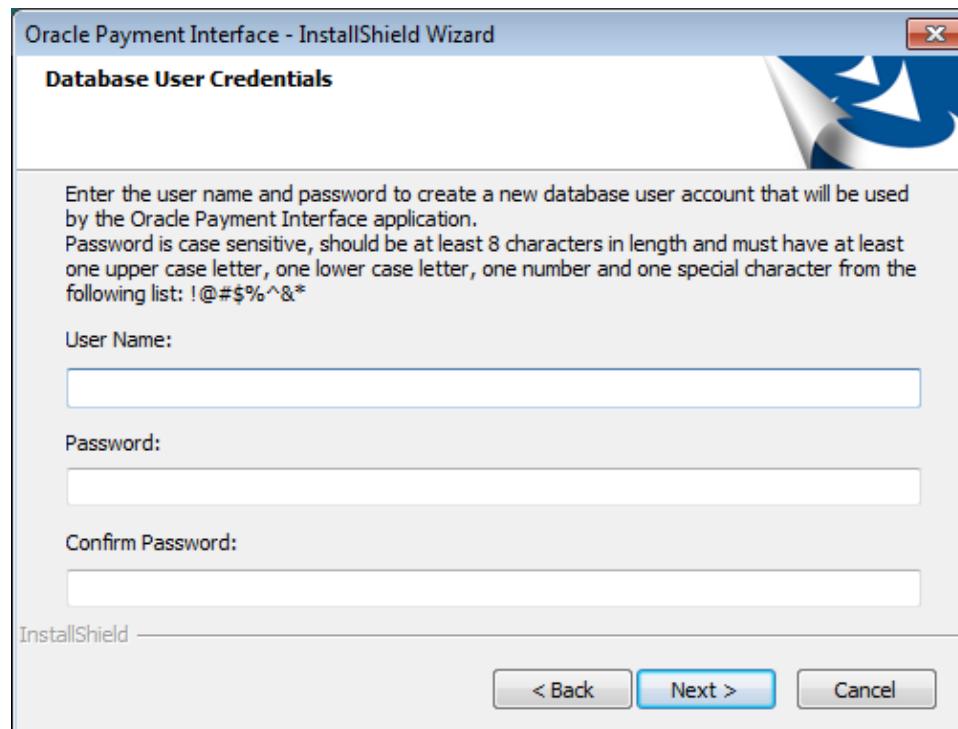
If the database type is MySQL, and you cannot use localhost for the Name/IP field, then some commands must be run manually on that MySQL database before proceeding. See MySQL command link in the OPI Basic Install doc for instructions. Setup will not complete if this is not done.

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

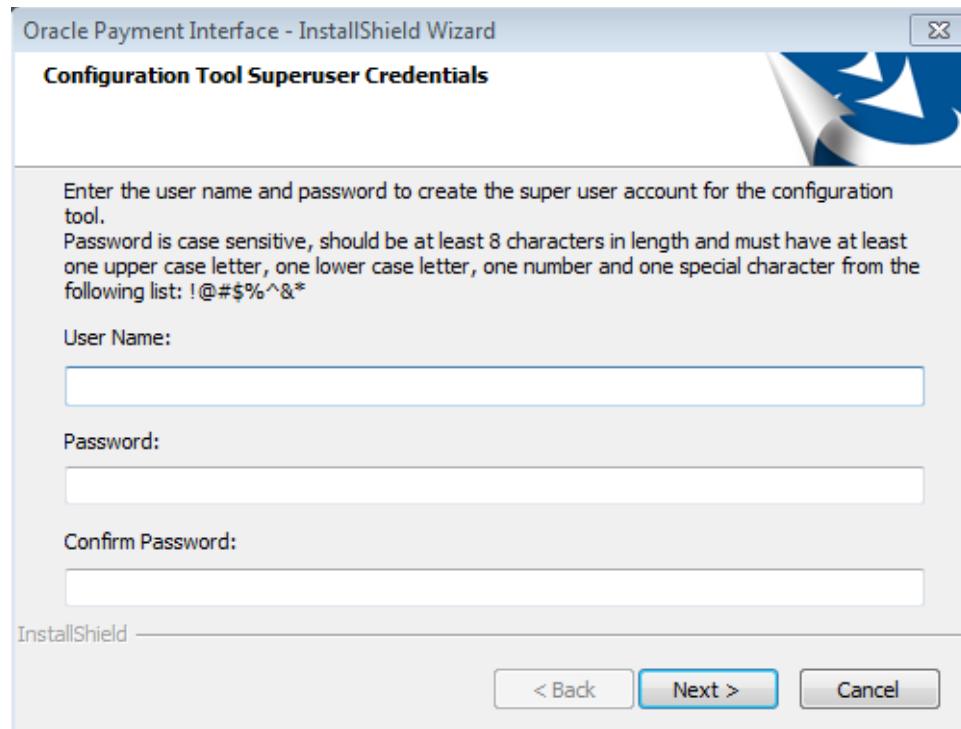


12. On the **Database Server Login** screen, enter the credentials for the DBA user of the database type selected, and then click **Next**.

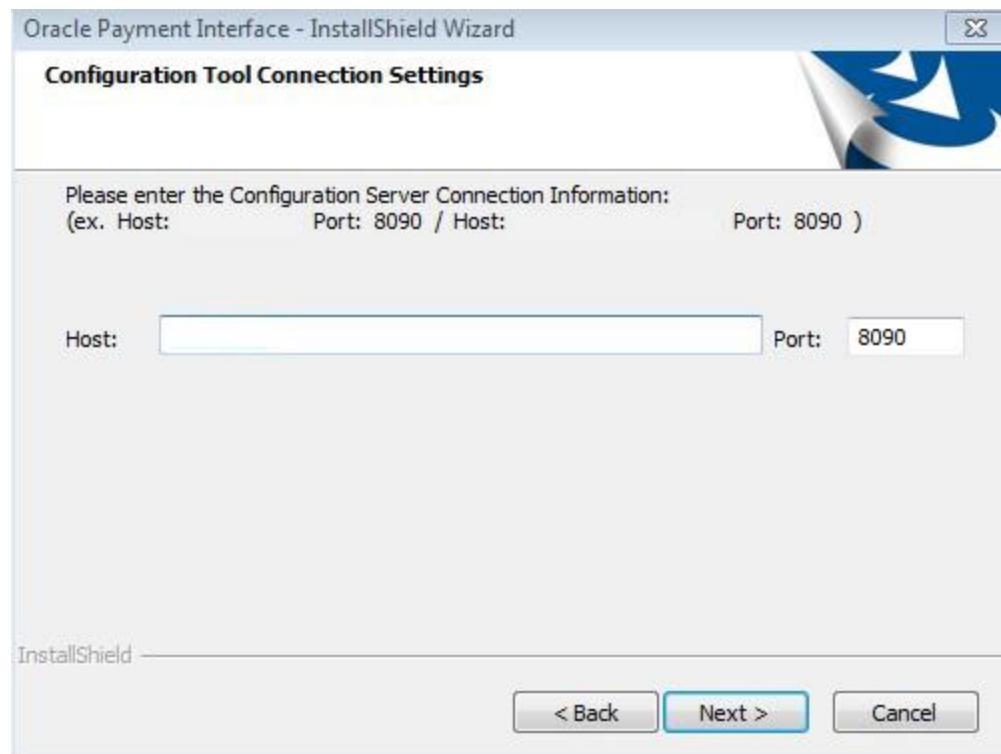
- For MySQL the Login ID: = root
- For other database types the DBA user name/Login ID may be different.
- Enter the correct password for the DBA user.



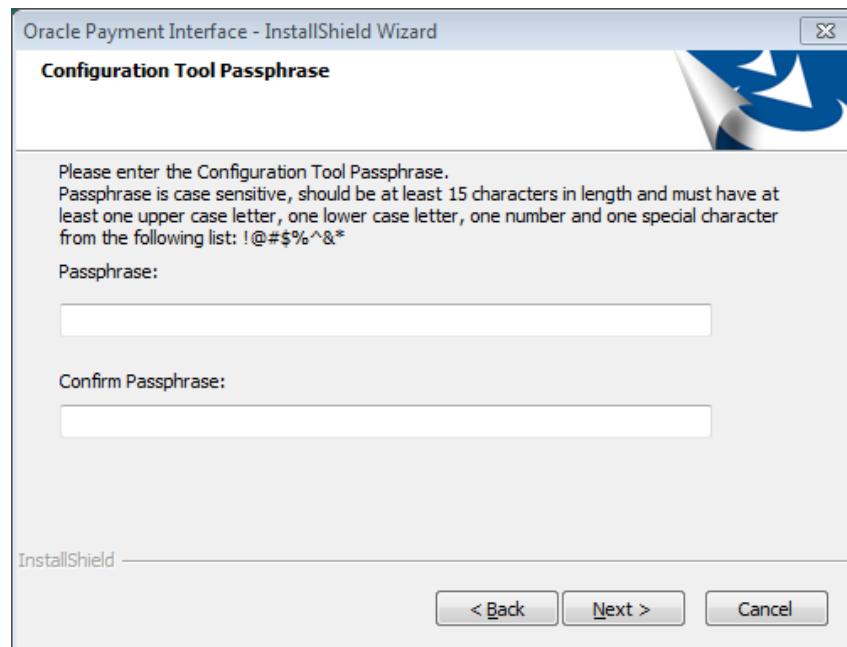
13. On the **Database User Credentials** screen, enter the following details.
  - a. **User Name:** Create a new user.
  - b. **Password:** Create a password. The Password is case sensitive, and should be at least 8 characters in length and must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#\$%^&\*.
  - c. Confirm the password, and then click **Next**.
14. Click **OK** on the Database connection successful dialog.
15. Click **OK** on the Database Configuration operation successful dialog.



16. On the **Configuration Tool Superuser Credentials** screen, enter the following details.
  - a. **User Name:** This can be any user name. It does not have to be a Windows account user.
  - b. **Password:** Create a password. The password is case sensitive and 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: !@#\$%^&\*
  - c. Confirm the password, and then click **Next**.
17. Click **OK** on the Create SuperUser operation successful dialog.



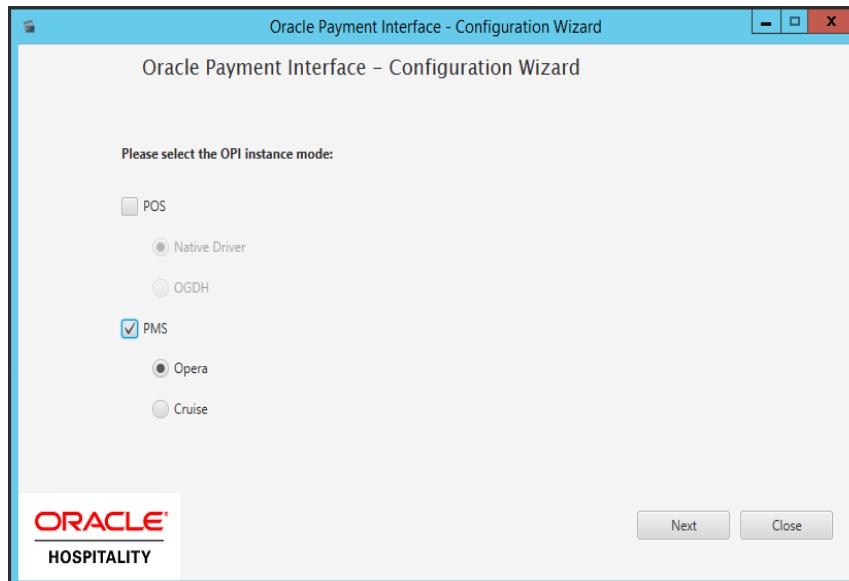
18. On the **Configuration Tool Connection Settings** screen, enter the following details.
  - a. **Host:** Enter the IP address or server name of the PC where the OPI Config Service is installed. This will be the PC where you selected "OPI Services" to be installed.
  - b. Leave the default Port of 8090.
19. Click **Next**.



20. On the **Configuration Tool Passphrase** screen, enter the following details.

- a. **Passphrase:** The passphrase is case sensitive and should be at least 15 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: !@#\$%^&\*.
- b. Enter a passphrase, confirm it, and then click **Next**.

After a brief pause, the Configuration Wizard launches.

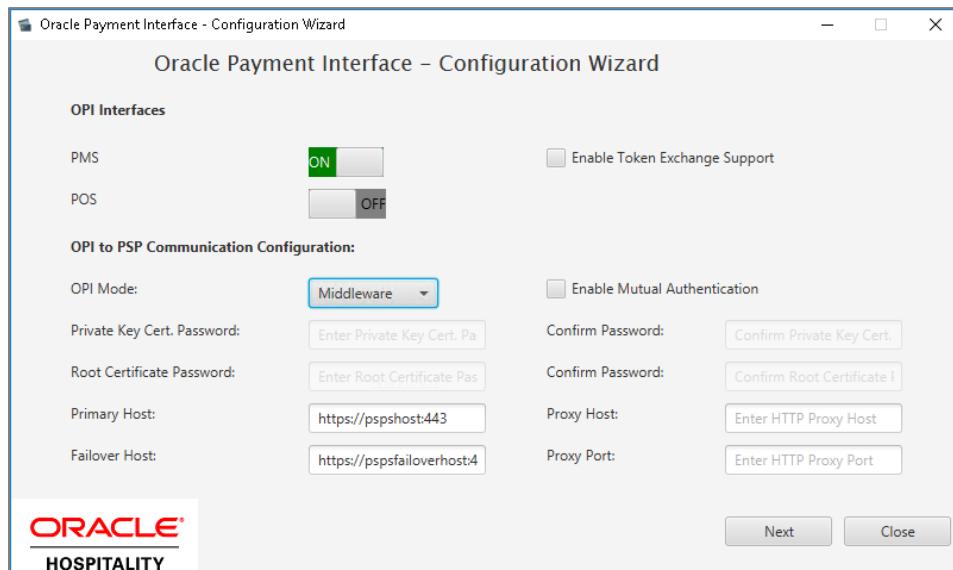


21. Select **PMS**, select **OPERA**, and then click **Next**.

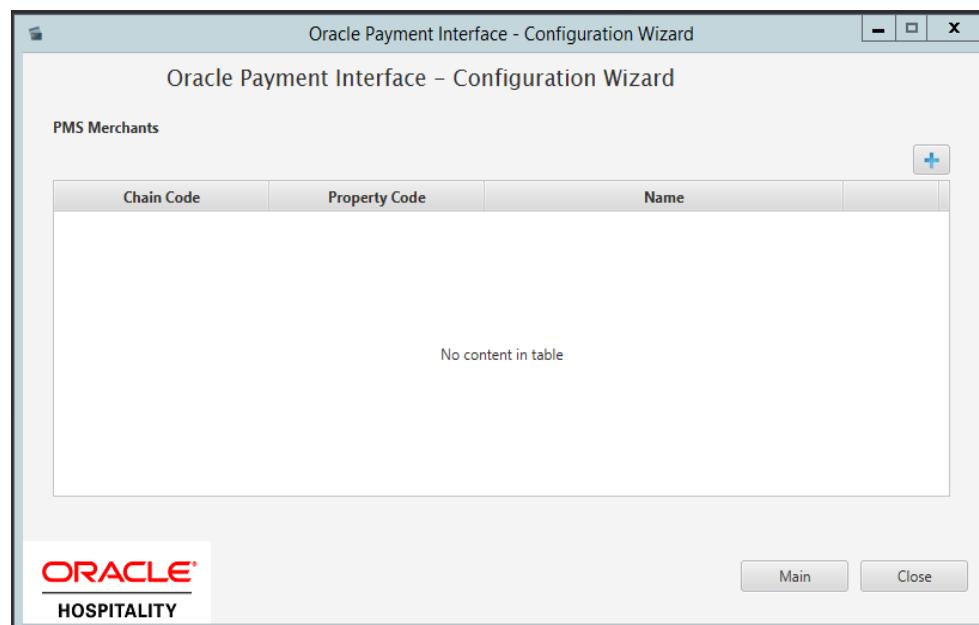
22. **OPI Interface:** Turn PMS on.

### OPI to PSP Communication Configuration

- From the OPI Mode drop-down list, select the Terminal for the PED direct connection or select Middleware for the middleware connection.
- Enter the third-party payment service provider middleware Host IP address if Middleware mode is selected. If Terminal mode is selected the OPI configuration will populate another window in further steps to input the Workstation ID and IP address.



23. Click the blue + icon to add a new merchant configuration for OPERA.

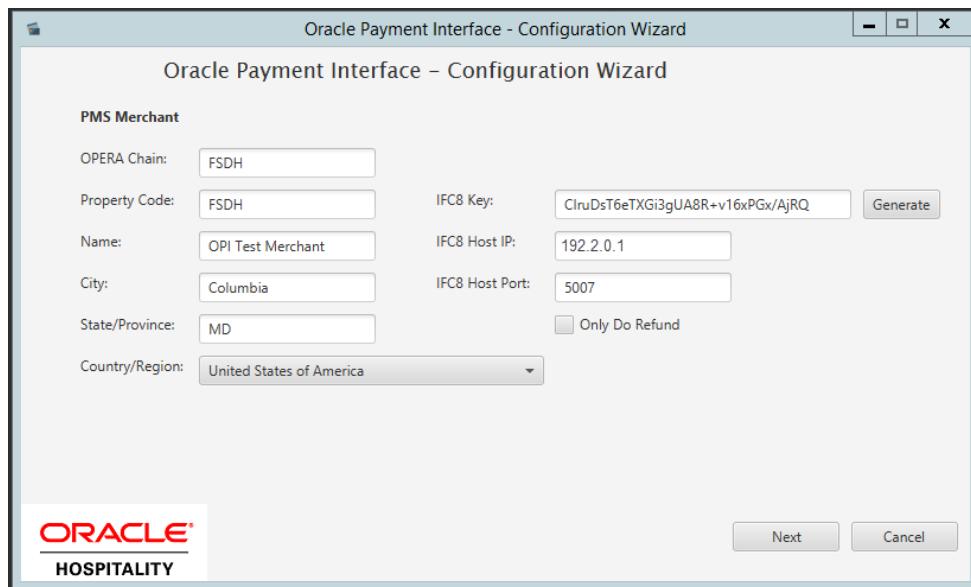


24. To configure the OPERA merchant, enter the following information:

- The OPERA Vault Chain Code and Property Code; will form the **SiteId** value in the Token request messages.

- Select **Generate Key**. You must use this key to configure the Hotel Property Interface (IFC8). Add “FidCrypt0S|” to the generated key as the prefix. For example: FidCrypt0S|xxxxxxxxxxxxxxxxxxxxxx
- Enter the **IFC8 IP address** and **port** number for the Hotel Property Interface (IFC8) server.
- Enter the **Merchant name**, **city**, and **country** information.
- Select the option of **Only Do Refund** if you want to disable differentiating between void and refund from OPERA.
- Click **Next**.

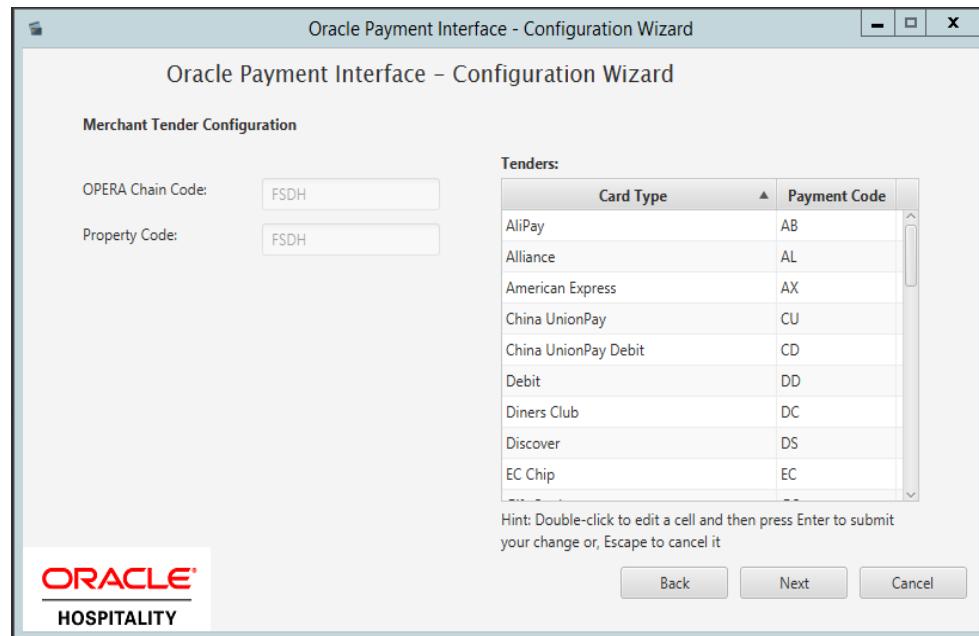
Although the other populated settings are not directly related to the Token Exchange Service configuration, Token Exchange will not be possible if the IFC8 interface is not running, as OPI will not progress past the IFC8 startup if the IFC8 connection is not possible.



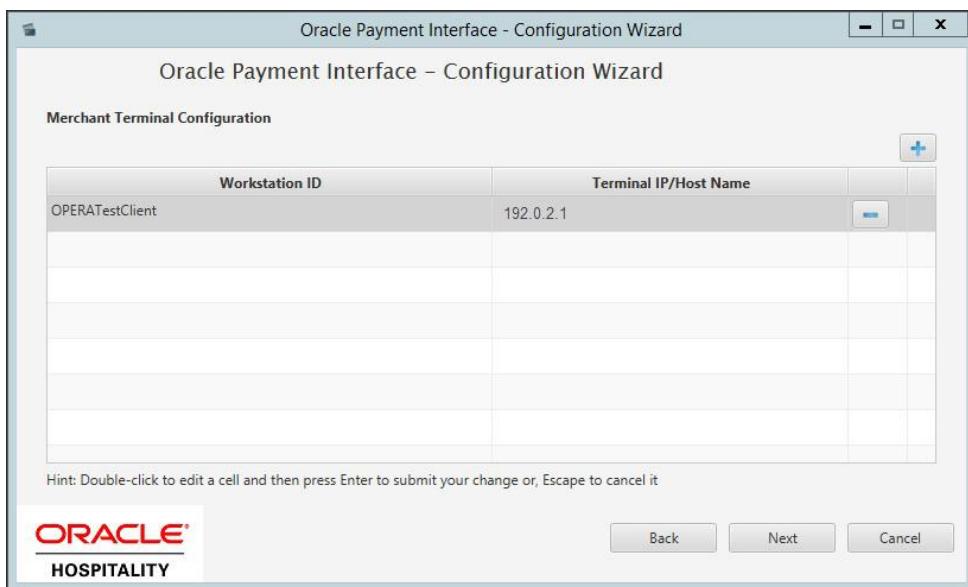
25. Enter the OPERA payment code for each card type, and then click **Next**.

 **NOTE:**

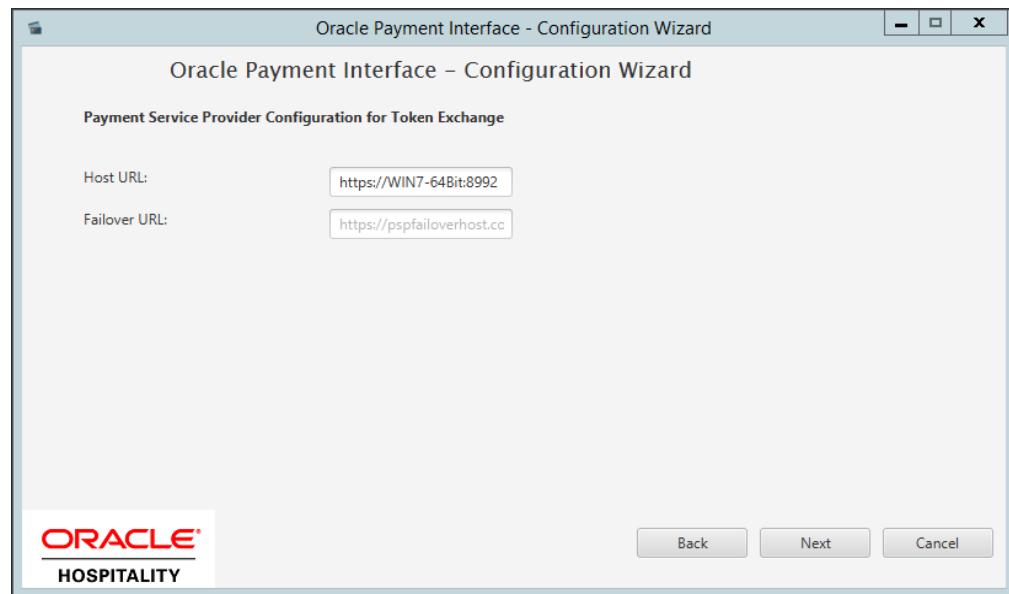
OPI Payment Code must match the IFC CC Type configured in OPERA.



Below is terminal mapping if you select terminal mode.



26. The next configuration relates to communication from OPI to the PSP host for Token Exchange. Enter the Oracle Cloud hosted token URL (this needs to be provided by the Cloud provisioning team), and then click **Next**.



27. Click **Finish** to restart.

# 3

## OPERA Cloud Configuration

### Credit Card Payment Transaction Codes

1. Log in to OPERA.
2. From the **Administration** menu, go to **Financial | Transaction Management | Transaction Codes** to view the Credit Card Payments transaction codes setup.

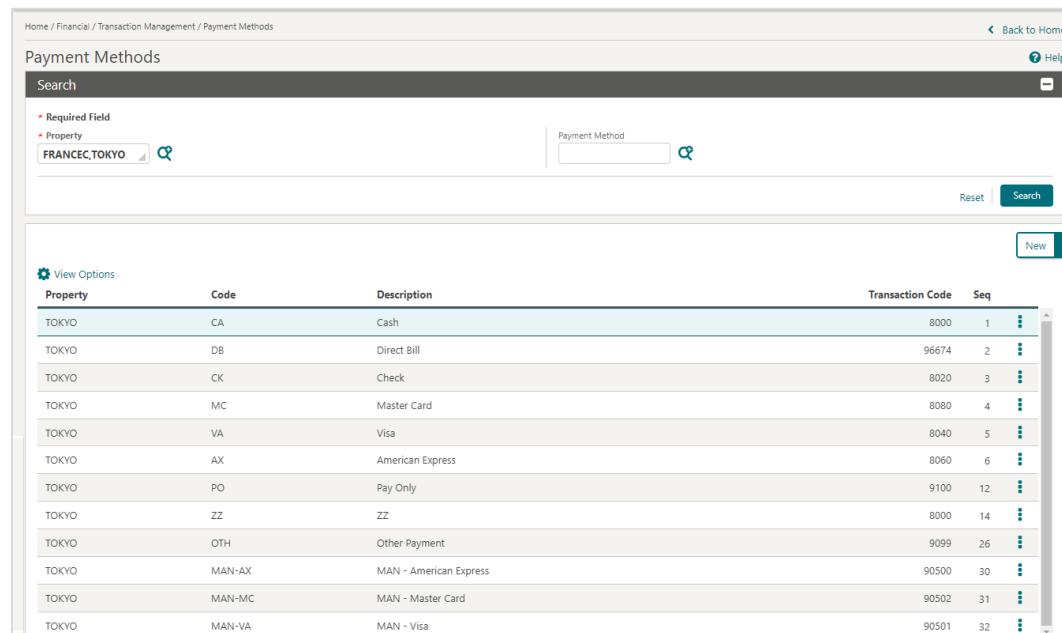
The screenshot shows the 'Manage Transaction Code' page in the OPERA Cloud interface. The page is titled 'Transaction Codes' and has a sub-header 'Manage Transaction Code'. It includes tabs for 'Property' and 'Template', with 'Property' selected. The main form is divided into several sections: 'Required Field' (Ownership: Property, Subgroup: CCARD, Group: PAY PAYMENT, Transaction Type dropdown, Tax Code dropdown), 'Payment Details' (Payment Type: Credit Card selected, Processing Type: EFT selected, CC Code: VA, Account Number search field), 'Options' (checkboxes for Revenue Group, Include in Deposit/CXL Rule, Payout, Cashier Payments, Rounding Factor, Membership, Generates Inclusive, AR Payments, Check Number Mandatory, Manual Posting, Deposit Payments, Print Receipt), and a status indicator 'Inactive' with a checkbox. At the bottom are 'Cancel' and 'Save' buttons.

3. Information for credit card payment transaction codes:
  - **EFT** selection is necessary to send credit card transactions out to the integrated payment partner for the specific Payment type.
  - **Manual** selection will not send out any transactions to the integrated payment partner.
  - **CC Code** will auto-populate once the transaction code is associated to a Payment Type.

# Configuring Payment Methods for Credit Card

1. Log in to OPERA.
2. From the **Administration** menu, go to **Financial | Transaction Management | Payment Methods** to configure payment methods for credit cards.
3. Setup the payment methods such as American Express, Master Card, and Visa with the transaction codes.

Payment methods that are configured here will not require any validation on the credit card number or expiration date as Chip and PIN is enabled for these payment types.



| Property | Code   | Description            | Transaction Code | Seq |
|----------|--------|------------------------|------------------|-----|
| TOKYO    | CA     | Cash                   | 8000             | 1   |
| TOKYO    | DB     | Direct Bill            | 96674            | 2   |
| TOKYO    | CK     | Check                  | 8020             | 3   |
| TOKYO    | MC     | Master Card            | 8080             | 4   |
| TOKYO    | VA     | Visa                   | 8040             | 5   |
| TOKYO    | AX     | American Express       | 8060             | 6   |
| TOKYO    | PO     | Pay Only               | 9100             | 12  |
| TOKYO    | ZZ     | ZZ                     | 8000             | 14  |
| TOKYO    | OTH    | Other Payment          | 9099             | 26  |
| TOKYO    | MAN-AX | MAN - American Express | 90500            | 30  |
| TOKYO    | MAN-MC | MAN - Master Card      | 90502            | 31  |
| TOKYO    | MAN-VA | MAN - Visa             | 90501            | 32  |

# Configuring Machines

1. Log in to OPERA.
2. From the **Administration** menu, go to **Interfaces | Machines**. Select **New** to add the configuration for a new Machine.
3. Enter the following options, and then click **OK**:
  - Machine**: Enter the machine name where the OPERA IFC Controller Service is running.
  - Controller Port**: Define the controller port.
  - Program**: Select the program from the list.
  - VNC Port**: Define the VNC port.

Home / Interfaces / Machines / Manage Machine

Manage Machine

Required Field

Machine: BCABALLO-US

Program: c:\fidelio\ifc8\ifc8.exe

Controller Port: 5001

VNC Port: 5555

Cancel Save

- Click **Save** to add the configuration for a new machine.

## Creating an EFT Interface

- Log in to OPERA.
- From the **Administration** menu, go to **Interfaces | Property Interfaces**. If there is no active EFT or CCW IFC Type, select **New** to add the configuration for a new EFT interface.
- Enter the following options, and then click **OK**:
  - Property:** Select the property name
  - IFC Type:** EFT
  - Name:** Oracle Payment Interface
  - Product Code:** OPI
  - Machine:** Select the machine where the OPERA IFC Controller Service is running.
  - License Code:** License code for interface
  - IFC8 Prod Cd:** XML\_OPI
  - Timeout:** Define the timeout value as 240.
  - Cashier ID:** Select the cashier id.
  - Path ID:** Define the path id.
  - Version:** This is auto populated once IFC8 establishes a link.

Home / Interfaces / Property Interfaces / Property Interfaces

Property Interfaces

Required Field

Property: ROSIE

Interface Type: EFT

Product Code: OPI

IFC8 Product Code: XML\_OPI

Name: Oracle Payment Interface

All Charges

Cashier ID: 8

Path ID: 1

Machine: 142

Timeout: 240

Version

Inactive

Cancel Save

- Click **Save** to add the configuration for a new EFT interface.

Home / Interfaces / Property Interfaces / Property Interface

Property Interface

EFT - Test EFT DO NOT CHANGE

Property: **ROSlE** Interface Type: **EFT** Product Code: **CC9** IFC number: **341**

View: **Style 1**

**Primary Information**

|                               |                              |   |  |
|-------------------------------|------------------------------|---|--|
| IFCB Product Code: <b>CC9</b> | Path ID: <b>1</b>            | Timeout: <b>60</b>                                    | Menu Type: <input type="button" value="Edit"/> |
| Name: <input type="text"/>    | Machine: <b>621_NPLWIN10</b> | Message Expires After (minutes): <input type="text"/> | Menu Name: <input type="text"/>                |
| Cashier ID: <b>8</b>          | Version: <b>12.1.0</b>       |   |  |

**General Information**

|  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Handle Night Audit / End of Day Commands | IP Address: <input type="text"/>              | <input type="checkbox"/> Create Prepaid during Checkin |
| <input checked="" type="checkbox"/> CC Vault Function                        | Token Provider URL: <input type="text"/>      | Device: <input type="text"/>                           |
| <input checked="" type="checkbox"/> Regular Transaction                      | Token Provider Protocol: <input type="text"/> | Prepaid Trx: <input type="text"/>                      |
| <input type="checkbox"/> Courtesy Card Handling                              | <input type="checkbox"/> Prepaid System       | OPERA TRANSACTION                                      |
| Port: <input type="text"/>   | <input type="checkbox"/> Show Prepaid Pin     | Redeem Trx: <b>8085</b>                                |

**Custom Data**

**Details**

| User Defined Field      | Value                |
|-------------------------|----------------------|
| HTTP_USERNAME           | <input type="text"/> |
| HTTP_PASSWORD           | <input type="text"/> |
| VAULT_CERT_CHAIN_CODE   | CHA                  |
| VAULT_ID                | 341                  |
| WALLET_PASSWORD         | <input type="text"/> |
| WALLET_MAX_CC_PROCESSED | <input type="text"/> |

**Class of Service**

|   |  |   |
|---|--|---|
| Voice Mail Notification: <b>Disabled</b>                | <input type="checkbox"/> Disable Room Equipment at Check In  | <input type="checkbox"/> Disable Guest Data Change at Check Out |
| Message Light: <b>Not changeable</b>                    | <input type="checkbox"/> Disable Room Equipment at Check Out | Standard Format: <input type="text"/>                           |
| Automatic Check In / Check Out: <b>Disabled</b>         | Defined Format: <input type="text"/>                         | Format Expression Table: <b>RESERVATION_GENERAL_VIEW</b>        |
| <input checked="" type="checkbox"/> User Defined Format | General  |   |
| Format Expression: <b>CREDIT_CARD_HOLDER_NAME</b>       |  |   |

**Translation**

Select Transaction:  Merchant Id  Article Number  Language Code  Key Options

| Origin Code | Merchant Id          |
|-------------|----------------------|
| DEFAULT     | <input type="text"/> |

## Configuring the CC Vault

1. From the **Administration** menu, go to **Interfaces | Property Interfaces | edit EFT IFC | General Information**.
2. Select the check box to enable the **Handle Night Audit / End of Day Commands**.
3. Select the check box to enable the **CC Vault Function**.
4. Select the check box to enable the **Regular Transaction**.
5. The **Token Provider URL** should be in the format:  
`https://OPIHostIP.example.com`
6. The **Token Provider Protocol** should be set to **One Way Handshake** which means for OPI only server side certificate is required.
7. Go to **Interfaces | Property Interfaces | edit EFT IFC | Custom Data**.
8. The **HTTP\_USERNAME** and **HTTP\_PASSWORD** should be set at the Token proxy service side that allows communication with the token proxy service URL.
9. OPERA uses the **VAULT\_CERT\_CHAIN\_CODE** for the certificate lookup and should be populated with what was entered during the OPI configuration for OPERA.
10. The **VAULT\_ID** is auto populated based on the IFC number.
11. The **WALLET\_PASSWORD** is not used for One Way Handshake.
12. The **VAULT\_MAX\_CC\_PROCESSED** is set to what the Payment Partner can support for the number of rows sent in one Token (GetID/GetCC) request. This is used during the bulk tokenization process and when multiple folio windows exist on OPERA Reservations. 50 is the default used when nothing is set here.

General Information

Custom Data

Details

| User Defined Field     | Value      |
|------------------------|------------|
| HTTP_USERNAME          | [REDACTED] |
| HTTP_PASSWORD          | [REDACTED] |
| VAULT_CERT_CHAIN_CODE  | CHA        |
| VAULT_ID               | 341        |
| WALLET_PASSWORD        | [REDACTED] |
| VAULT_MAX_CC_PROCESSED | [REDACTED] |

Class of Service

Translation

Select Transaction

Merchant Id  Article Number  Language Code  Key Options

View Options  Origin Code  Merchant Id

New

| Origin Code | Merchant Id |
|-------------|-------------|
| DEFAULT     | [REDACTED]  |

13. On the **Translation** panel, select **Merchant ID** as the DEFAULT code to run an EFT IFC8.

## Configuring CHIP AND PIN (EMV)

### To configure the Functionality Setup:

1. Log in to OPERA.
2. From the **Administration** menu, go to **Enterprise | OPERA Controls | Groups | Credit Card | Parameters**.
3. **Online Settlement:** Select this check box to allow online settlement. OPI is an online settlement. This must be checked to activate the Chip and PIN Application Setting.
4. Select this check box to enable **CHIP AND PIN** payment types.
  - **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 LOV to choose the credit card payment types that will trigger a Chip and PIN message with or without credit

card data to the EMV Device. Payment types that are configured here 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 data can be provided in the response message from the Payment Partner.

5. In the **Settings** panel configure the following:

The screenshot shows the 'Settings' section of the OPERA Cloud Configuration. It includes the following configuration items:

- Authorization Reversal Allowed:** A note stating that credit card types which allow reversal are selected. A dropdown menu shows 'VA'.
- Authorization at Check In:** A note that credit card types require automatic authorization at check-in. A dropdown menu shows 'MC,VA,AX'.
- Force Auth. During Check In/Interactive Auth. Window:** A radio button is set to 'Off'. A note: 'If active, credit card authorization must be obtained to Check In a reservation, and credit card authorization window is interactively displayed and remains on screen until the authorization process is finalized. If inactive, credit card authorization is not required at Check In and the authorization screen is minimized. User does not have to wait until authorization is successfully completed.'
- Night Audit Remote Authorization:** A radio button is set to 'Off'. A note: 'This option enables End of Day remote authorization, where available.'
- Authorization during Stay/Deposit:** A note: 'Credit Card types that allow manual and automatic authorization checks for deposits, and following Check In and prior to Check Out and settlement. This option must be enabled to allow authorizations by the End of Day routine.' A dropdown menu shows 'MC,VA,AX'.
- Authorization settlement at Check-Out:** A note: 'Credit Card types for which an authorization and settlement will take place during Check Out.' A dropdown menu shows 'PO'.
- Days to Purge Credit Card Authorization Log:** A text input field with '9' and a note: 'Enter the number of days in which the credit card authorization log should be removed.'
- Days to Purge Credit Cards:** A text input field with '9' and a note: 'Enter the number of days in which the credit card information will be removed in the case where no transactions or reservations are active.'
- Deposit Address Verification:** A note: 'Credit Card types that will require to provide the credit card billing address information during payment.' A dropdown menu shows 'VA'.
- Deposit CVV2 Check:** A note: 'Credit Card types for which the Credit Card Security Code (CVV2) will be required when making a payment.' A dropdown menu shows 'VA'.
- Hotel ID:** A note: 'Authorization code to be used at Settlement, if multiple authorization codes exist.' A dropdown menu shows 'VAB181SMOKE'.
- Settlement Authorization Code:** A note: 'Authorization code to be used at Settlement, if multiple authorization codes exist.' A dropdown menu shows 'ORIG'.

- **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 provides a request transaction to the Payment Partner to remove the existing authorization on a guest credit card or debit card if the folio payment type is changed or at check-out a different payment method is used. For example, a guest checks in on a reservation for a 5-night stay using a Visa credit card for payment type. At the time of authorization, a hold is put on the Visa credit card for the total cost of the stay. If the payment type is changed to another type on the reservation or the guest checks out using cash or a different brand of credit card, OPERA will send a reversal request for the originally selected Visa credit card authorization. A partial reverse authorization is not supported.
- **Authorization During Stay/Deposit:** Select the payment methods that allow manual and automatic authorizations 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 use credit card authorization and settlement in one transaction request. These are payment types that do not allow an authorization separate from the settlement/sale.
  - The payment types that are available in the multi-select list of values are only payment types configured as EFT payment types. Any one payment type can be

selected for credit card specific rules of Authorization at check-in, Authorization Reversal, and Authorization during Stay/Deposit. If they are selected for these card specific rules, then the payment types will not be available for Authorization Settlement at Checkout.

- **Settlement Authorization Code:** Specifies the authorization code used at settlement if multiple authorization codes exist Pre authorizations and top-up authorizations before the settlement
- 6. Go to **Enterprise | OPERA Controls | Groups | IFC | Parameters**, and enable **Prompt For Terminal** to handle chip and pin EMV devices.

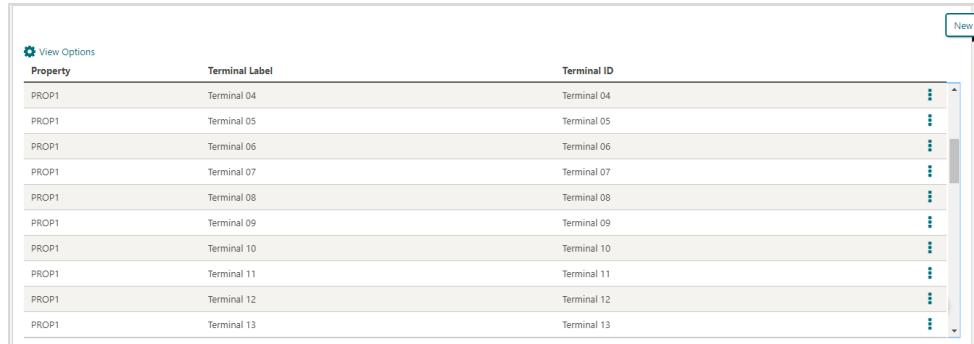
The screenshot shows the 'IFC' section of the configuration interface. Under 'Functions', 'Video Check Out' is active, with fields for 'Start Time' and 'Stop Time' and an 'Email' field. Under 'Parameters', 'Advanced Authorization Rules' is set to 'On', 'Exclusive Taxes' is set to 'Off', and 'Prompt For Terminal' is set to 'On'.

## Configure Credit Card Terminal

Configure the credit card terminals used that the payment partner will activate to have the card swiped or manually enter in.

1. Log in to OPERA.
2. From the **Administration** menu, go to **Administration | Interfaces | Interface Devices | Credit Card Terminals**.
3. Click **New**.
4. Enter the following information for the reader:
5. **Terminal ID:** The terminal ID number provided by the vendor. You can also locate this number on the actual card reader device. This data is what will populate the `WSNNum` tag in the OPERA/IFC8 messages.

6. **Terminal Label:** A label or description for the terminal/device that identifies its physical location. This helps you easily identify the terminal/device when it appears in a list of devices.
7. Click **Save**.



| Property | Terminal Label | Terminal ID |
|----------|----------------|-------------|
| PROP1    | Terminal 04    | Terminal 04 |
| PROP1    | Terminal 05    | Terminal 05 |
| PROP1    | Terminal 06    | Terminal 06 |
| PROP1    | Terminal 07    | Terminal 07 |
| PROP1    | Terminal 08    | Terminal 08 |
| PROP1    | Terminal 09    | Terminal 09 |
| PROP1    | Terminal 10    | Terminal 10 |
| PROP1    | Terminal 11    | Terminal 11 |
| PROP1    | Terminal 12    | Terminal 12 |
| PROP1    | Terminal 13    | Terminal 13 |

## Configuring the OPERA Proxy Server URL

With an OPI Installation for an OPERA Cloud Multi-property environment, Hosting may determine a Proxy Server is in place for all OPERA outbound calls. When this is provided, the Hosted Proxy Server name needs to be configured in the OPERA Controls for successful communication to the TPS endpoint.

1. Log in to OPERA.
2. From the **OPERA Cloud Administration** menu, go to **Enterprise | OPERA Controls | Groups | General Information**.  
Update the settings below. **Proxy Credentials**, **Proxy Server** and **Proxy Server ByPass** are controlled by the Hosted environment in use.
3. **Proxy Credentials:** Proxy Server's username and password. (e.g. proxyuser.password)
4. **Proxy Server:** Proxy Server for http calls from within the database server.
5. **Proxy Server ByPass:** Bypass Proxy Server for the configured Local Address and entered separated with a comma. Whole Domains can be entered in the format \*.<DOMAIN NAME>

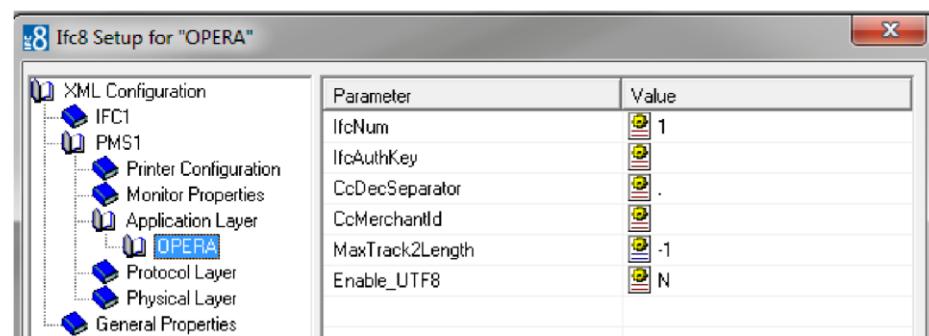
## Configuring the Hotel Property Interface (IFC8) Instance to the OPERA Hotel Property Interface (IFC)

The OPERA IFC Controller is required for communication between the OPERA PMS and IFC8. If the IFC controller is not previously installed, then refer to the OPERA IFC Controller and Hotel Property Interface (IFC8) Information and Installation Guide found at:

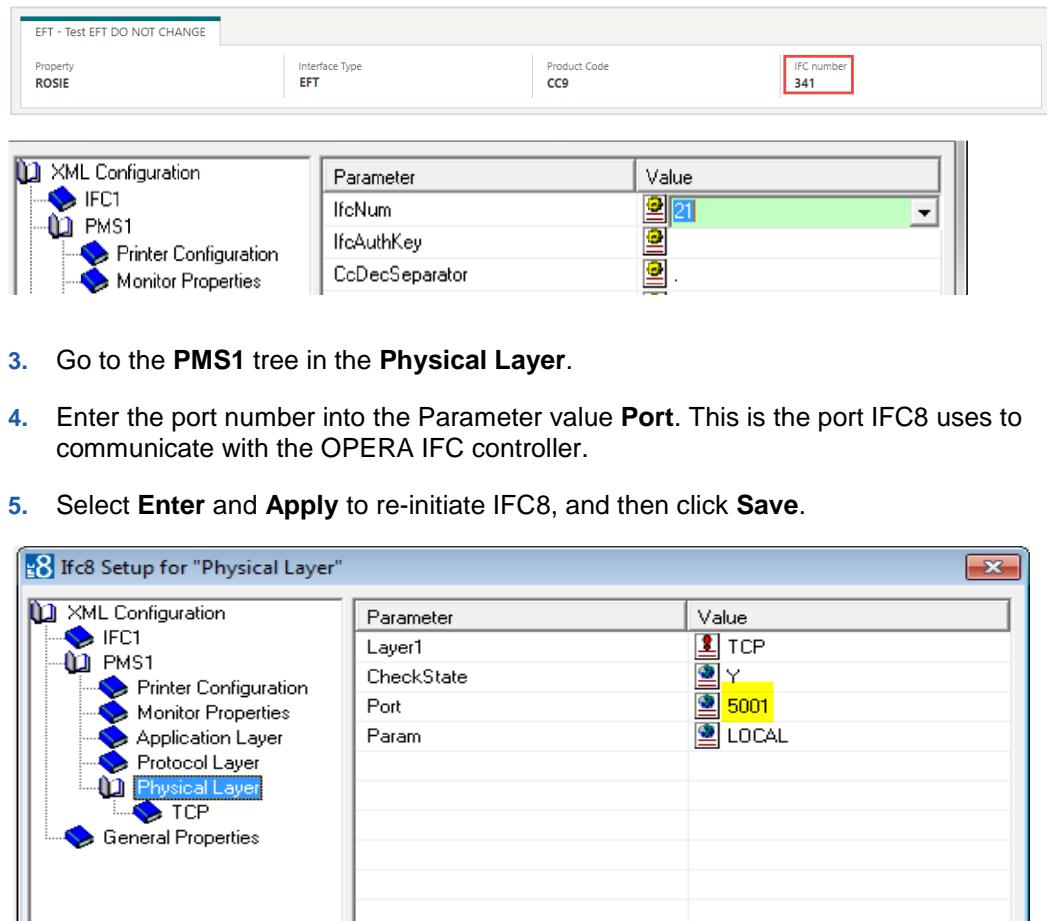
[https://docs.oracle.com/cd/E94145\\_01/docs/Oracle%20Hospitality%20OPERA%20IFC8.pdf](https://docs.oracle.com/cd/E94145_01/docs/Oracle%20Hospitality%20OPERA%20IFC8.pdf)

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.



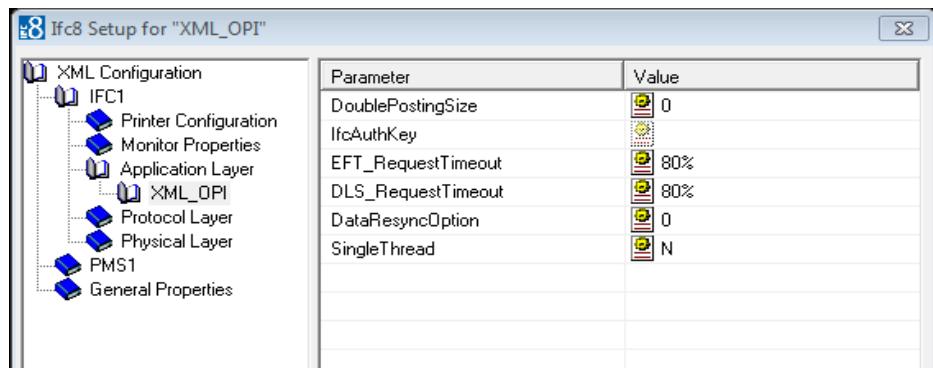
You can find the OPERA IFC number in OPERA on the IFC Configuration of the related Hotel Property Interface (IFC) (Row\_ID).



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

You must secure the connection between OPI and the 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.

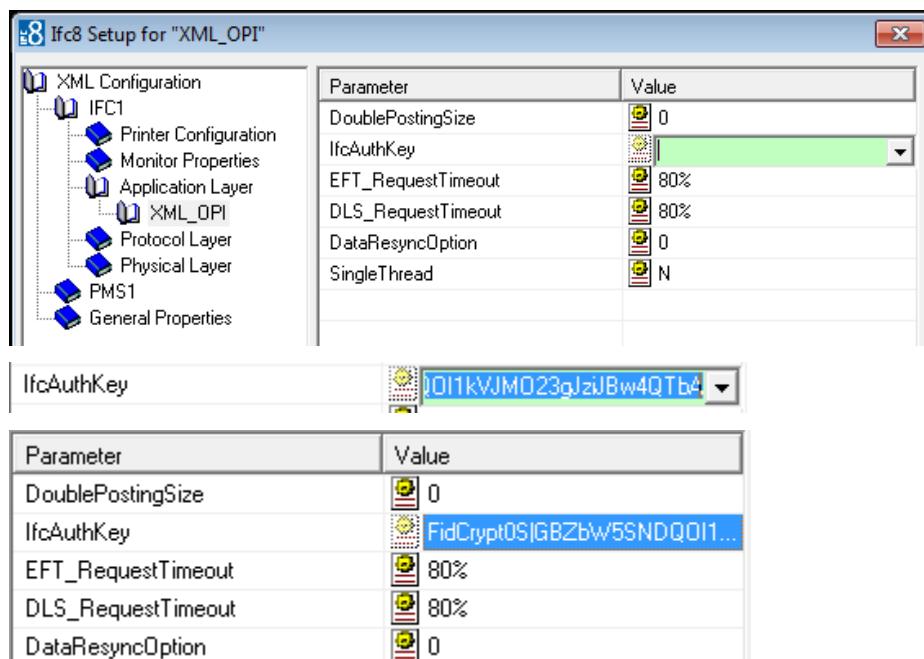
1. In the Hotel Property Interface (IFC8) configuration, go to the **IFC1** tree, and then in the **Application Layer**, select the **XML\_OPI** option.



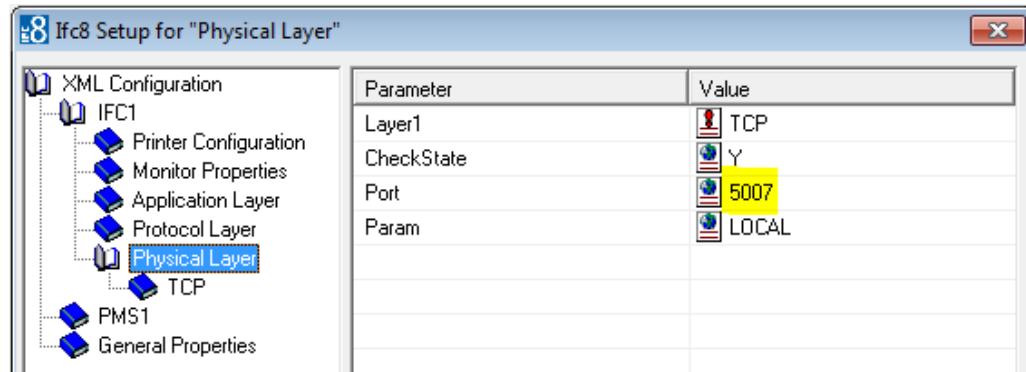
2. Copy the **generated key** from Configuring OPI - OPERA merchant step 3, and add "FidCrypt0S|" to the generated key as prefix.

For example: FidCrypt0S|xxxxxxxxxxxxxxxxxxxxxxxxxxxx

3. Copy this string into the IFC8 Parameter **IfcAuthKey** value field.



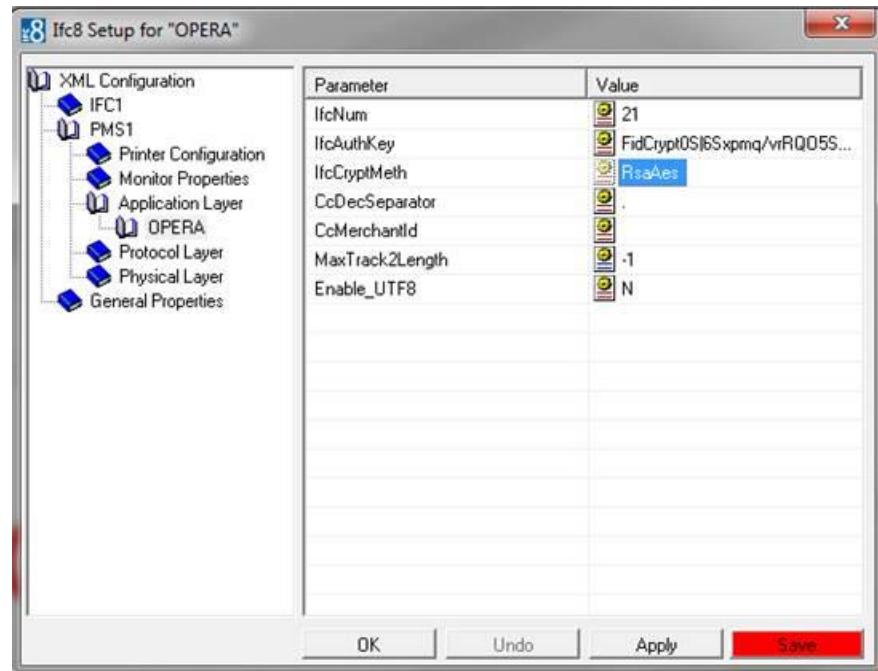
4. Go to the **IFC1** tree and select the **Physical Layer**.
5. Enter the port number in the port value. This is the same port that was configured in OPI.



6. Click **Apply**, IFC8 reinitiates.

The IfcAuthKey value now shows an encrypted key and the entered string is now encrypted by IFC8.

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



Current Opera versions do not yet support RsaAes encryption method.



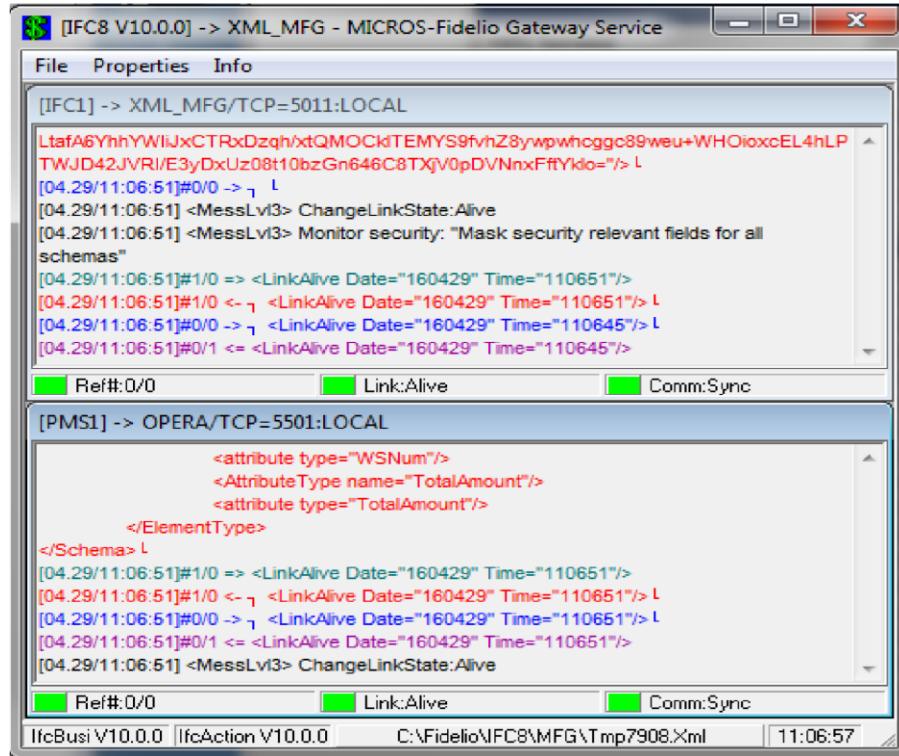
8. Change the Parameter value **IfcCryptMeth** (for IFC8 **PMS OBJECT**) from “**RsaAes**” to “**Des3Idx\_Opera\_1**”.



9. Click **Enter** and **Apply**.

10. Click **Save** and then click **OK** to close the IFC8 Configuration form.

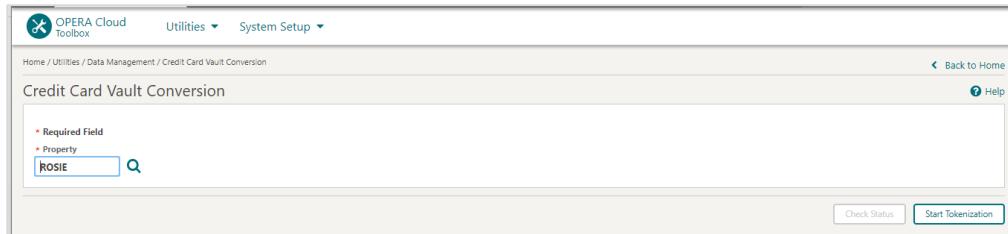
IFC8 now connects with OPI and the OPERA IFC Controller. To verify IFC8 successful status, confirm that all 6 status indicators are green.



## Perform the Bulk Tokenization

Bulk Tokenization is used to convert all historical credit card data in the OPERA database to tokens.

### Toolbox>Utilities>Data Management>Credit Card Vault Conversion



Select the **Start Tokenization** button to initiate the process of bulk tokenization.

#### NOTE:

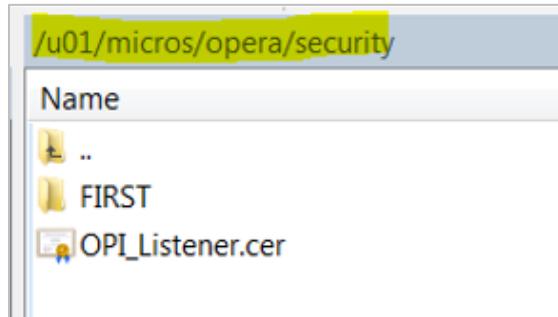
De-tokenization is not allowed in OPERA Cloud.

## Certificate

For every Cloud Server (UI and WS) OPERA has there is a deployment properties file where the application security path is located. It is in the below location where OPERA expects to find the certificate/JKS for hosted OPI TPS.

 **NOTE:**

Certificates are required on the OXI and OEDS machines.



For information about creating the certificate in OPI TPS, refer to the Self-Hosted Token Proxy Service Installation and Configuration Guide:

[https://docs.oracle.com/cd/E79534\\_01/docs/E91140-05.pdf](https://docs.oracle.com/cd/E79534_01/docs/E91140-05.pdf)

# 4

## Upgrading the OPI

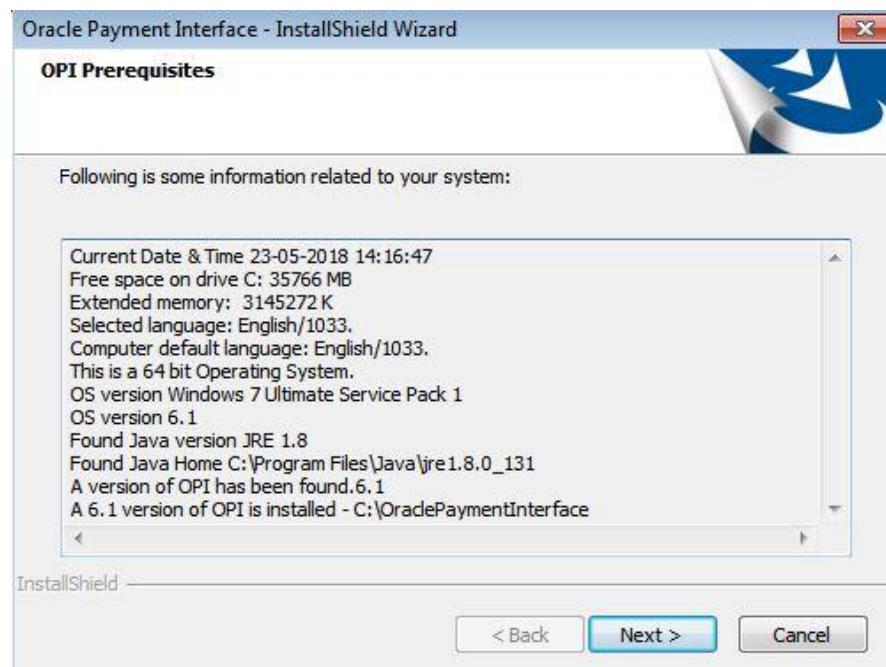
**VERY IMPORTANT:** Read and follow the upgrade directions.

 **NOTE:**

OPI 6.1 and higher can be upgraded to OPI 19.1

### OPI 6.1 to 19.1.0.0 Upgrade Steps

1. Right-click and Run as Administrator the **OraclePaymentInterfaceInstaller\_19.1.0.0.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.



### ⚠ WARNING:

You must click **Yes**.

If you click **No**, you will have both **OPI 6.1** and **OPI 19.1** 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.

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

7. Click **Next**.

The Ready to Install the Program screen displays.

8. 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: Enter the IP address or server name of the PC where the OPI Config Service is installed. This will be the PC where you selected “OPI Services” to 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.

#### PMS Merchants

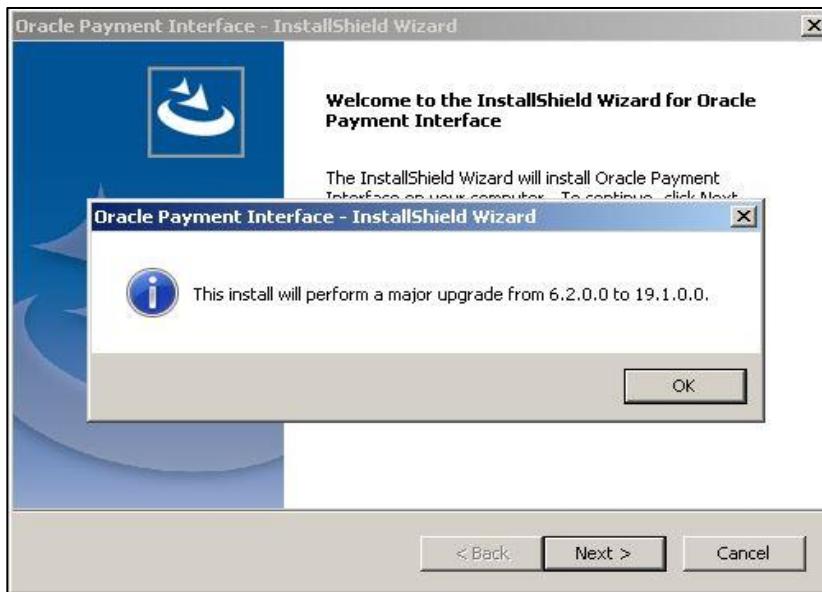
- On the Merchants screen, click the wrench icon to the right of the existing merchant.
- Verify the merchant settings are correct.

#### InstallShield Wizard Complete

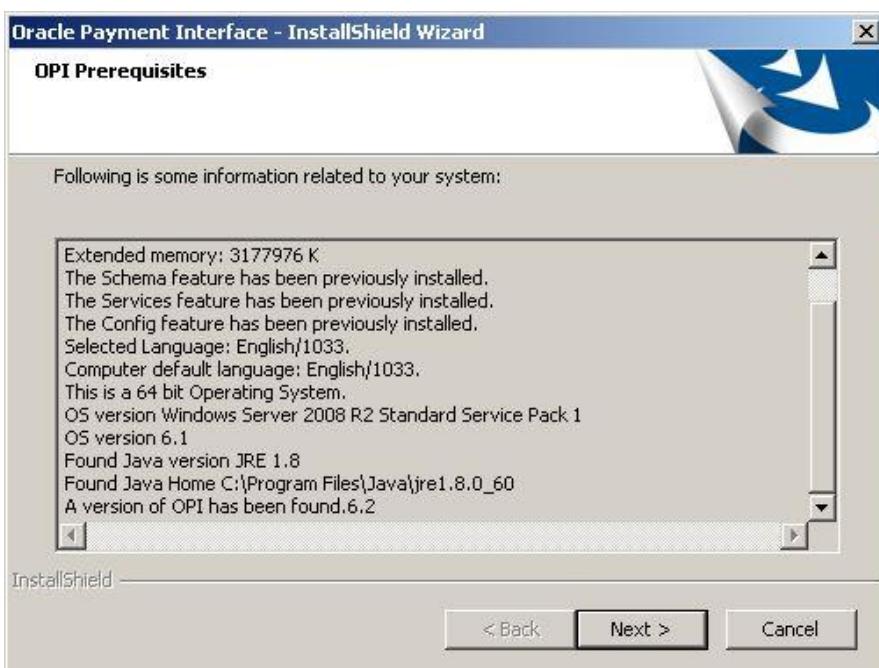
- Click **Finish** to allow a reboot.
- If you cannot immediately reboot, you must stop and then start the OPI Service for the current settings to take effect.

## OPI 6.2 to 19.1.0.0 Upgrade Steps

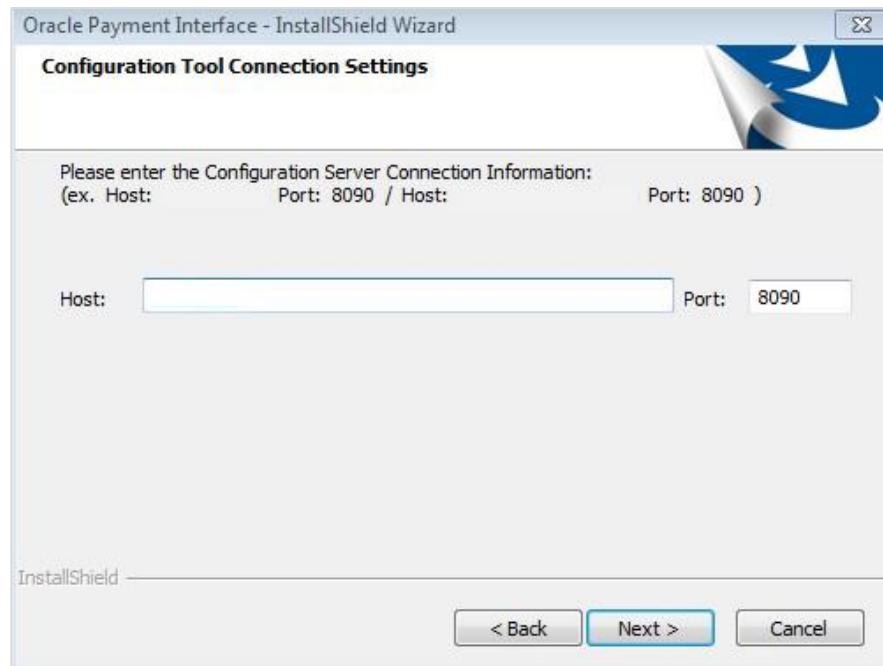
1. Right-click and Run as Administrator the **OraclePaymentInterfaceInstaller\_19.1.0.0.exe** file to perform an upgrade.
2. Select a language from the drop-down list, and then click **OK**.
3. Click **Next** on the Welcome screen to proceed with the installation.



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



5. Choose a Destination Location. Accept the default installation location or click **Change...** to choose a different location and click **Next**.
6. Click **Install** when the Ready to Install the Program screen displays.
7. Click **OK** when the Database upgrade operation was successful screen displays.
8. Enter the configuration Server connection information.



9. Click **Finish** to restart your computer.

