

Oracle Hospitality Payment Interface OPERA Cloud OPI Installation Guide



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ORACLE®

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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 the Customer Support Portal at the following URL:

<https://iccp.custhelp.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
June 2024	<ul style="list-style-type: none">• Initial Publication
July 2024	<ul style="list-style-type: none">• Removed Microsoft Windows Server 2012 R2 across all chapters as it has reached EOL.

1

Pre-Installation Steps

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

- OPERA Cloud releases you can integrate with OPI:
 - OPERA Cloud 1.20.16 or higher
 - OPERA Cloud 19.4 or higher
- OPI 20.4 does not install a database. If doing a clean install of OPI, a database must be installed first.
- OPI upgrade functionality supports:
 - Upgrading OPI 19.1 (include patch releases) to OPI 20.4
 - Upgrading OPI 20.1 (include patch releases) to OPI 20.4
 - Upgrading OPI 20.2 (include patch releases) to OPI 20.4
 - Upgrading OPI 20.3 (include patch releases) to OPI 20.4
- OPI requires at least 6 GB of free disk space and you must install OPI as a System Administrator.
- OPI requires 64bit Operating System only.
- The Oracle Payment Interface Installer release 20.4 supports the following database connections:
 - MySQL Database 5.7 and 8.0
 - Oracle Database 11g / 12c / 19c

NOTE:

Stay current by upgrading your Java version as [Oracle CPUs/Alerts](#) are announced.

- The Oracle Payment Interface release 20.4 is compatible with the following operating systems:
 - Microsoft Windows 10 Professional
 - Microsoft Windows 10 Enterprise
 - Microsoft Windows 11 Professional
 - Microsoft Windows 11 Enterprise
 - Microsoft Windows Server 2016
 - Microsoft Windows Server 2019

– Microsoft Windows Server 2022

- Ensure all OPERA Cloud Workstations are setup following the correct OPERA Cloud Browser Setup guidance as outlined here:

https://docs.oracle.com/cd/F18689_01/doc.193/f38312/c_getting_started_browser_setup.htm#OCSUH-BrowserSetup-A8150A51

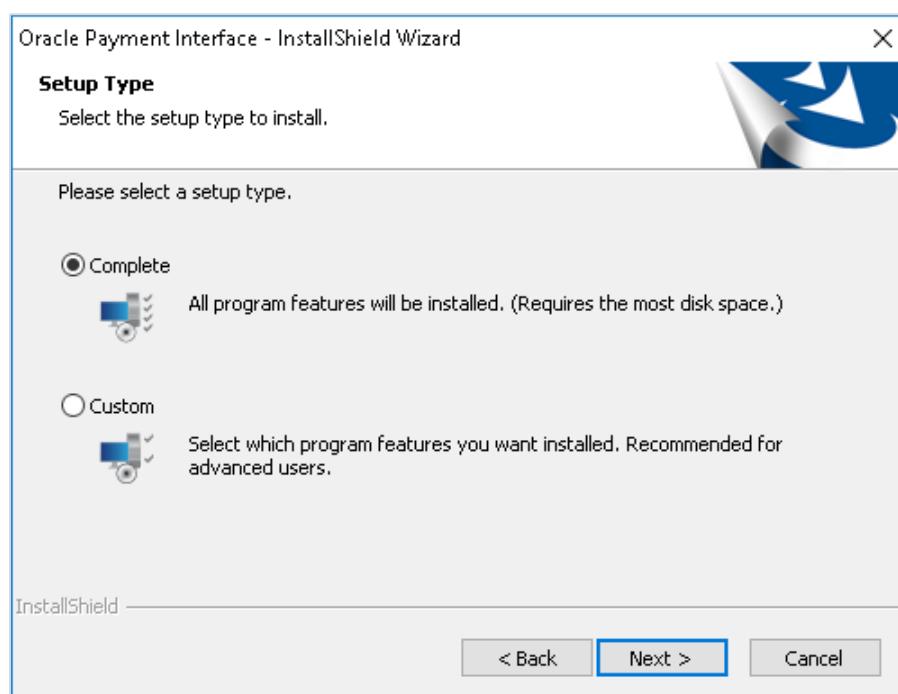
During the installation you must confirm the following:

- Merchant IDs
- IP address of the OPI Server
- The machine running the OPI Service must have a static IP Address
- The machine name running the OPI Service and IFC8 must not contain any special characters.
- If there is an existing MySQL database installed, then the SQL root password is required.
- If there is an existing database installed, the root password is required.
- Workstation IDs and IPs that integrate with the PIN pad.

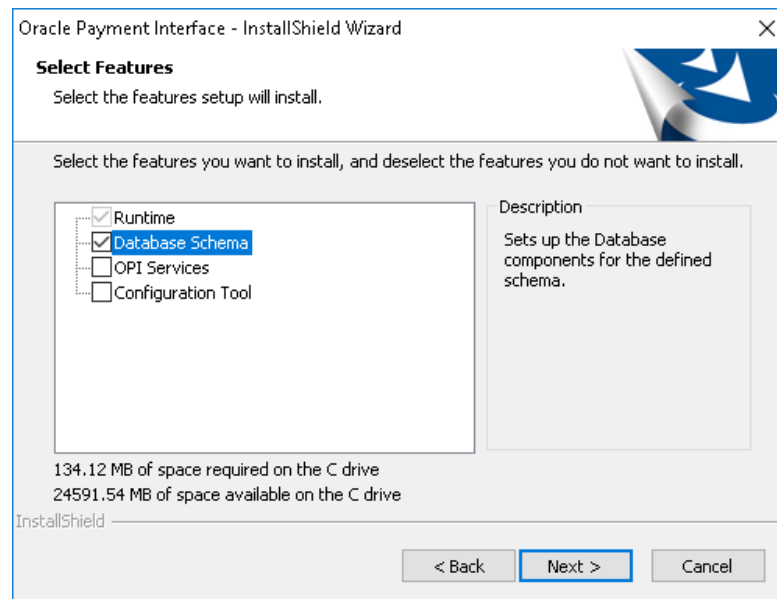
2

Installing the OPI

1. Right-click **OraclePaymentInterfaceInstaller_20.4.0.0.exe** file and select **Run as Administrator** to perform an installation.
2. Select your Language for the installation and then click **OK**.
3. Click **Next** twice.
4. Ensure all the prerequisites for the OPI installation are met.



5. Select either the **Complete** or **Custom** installation option:
 - a. **Complete:** All program features will be installed.
 - b. **Custom:** Select which program features you want to install. Recommended for advanced users only.
6. Make a selection (only for Custom install), and then click **Next**. If you select Complete Install, it will go to the Step 8 directly.



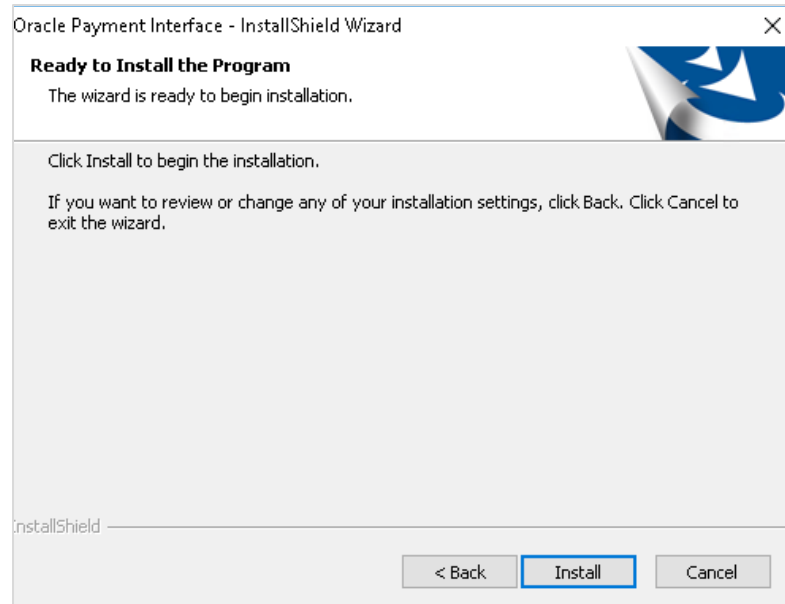
If you selected the Custom install option, the Select Features screen appears with the following options:

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

All these three features must be installed. Ensure whether they all are installed on the same computer or on separate computers.

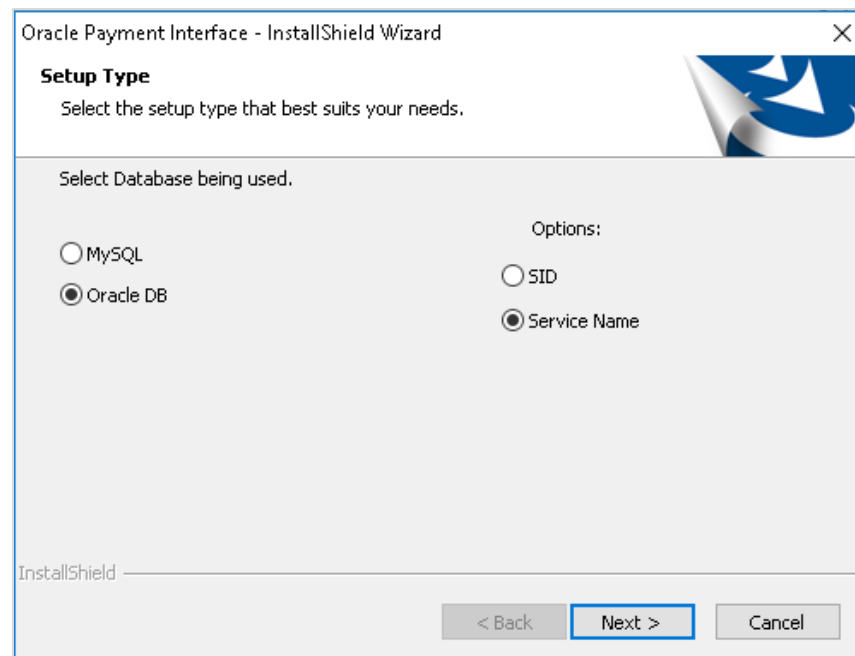
7. Select the features to install on this computer, and then click **Next**.
8. Click **Change** to amend the installation drive or path, if required and click **Next**.
9. Click **Install** to begin the installation.

When the file transfer is finished, Setup prompts for the next set of configuration settings.



10. Select your Database type:

- My SQL
- Oracle DB



11. Enter the relevant connection details for your database type. Details are provided by the individual who installed or configured the database software.

 **NOTE:**

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

MySQL

- **Name/IP:** The Hostname or IP Address used for communication to the database. If you are using MySQL, then this can be left as localhost as the default value. If you cannot use localhost for the Name/IP field (because you have installed the database schema on another computer), then you should run some commands manually on the MySQL database before proceeding. See the **Granting Permission in MySQL** section in the OPI Installation and Reference guide for instructions. Setup will not be complete if this step is missed.
- **Port #:** The Port number used for communication to the database.

Oracle DB

SID

- **Name/IP:** The Hostname or IP Address used for communication to the database.
- **Port #:** The Port number used for communication to the database.
- **SID:** The unique name that uniquely identifies the Oracle database.

Service Name

- **Name/IP:** The Hostname or IP Address used for communication to the database.
- **Port #:** The Port number used for communication to the database.
- **Service:** The TNS alias used to connect to the Oracle database.

12. Confirm the database admin user used to connect to the database. The database admin user is used to create an OPI database user, which is used once the installation completes.
13. Enter the username and password to create a new database user account. If the username already exists in the database, you are prompted to select a different username.
 - a. When creating the username for the database, the installer allows only alphanumeric characters and should start only with an alphabetic character, NOT a number.
 - b. Enter a password according to the requirements specified.

The installer attempts to connect to the database using the admin credentials provided and creates the OPI database user.

14. Enter the username and password to create a Super User System Admin level account that is used for configuring and maintaining the system.
15. Enter the **Host** and **Port**.

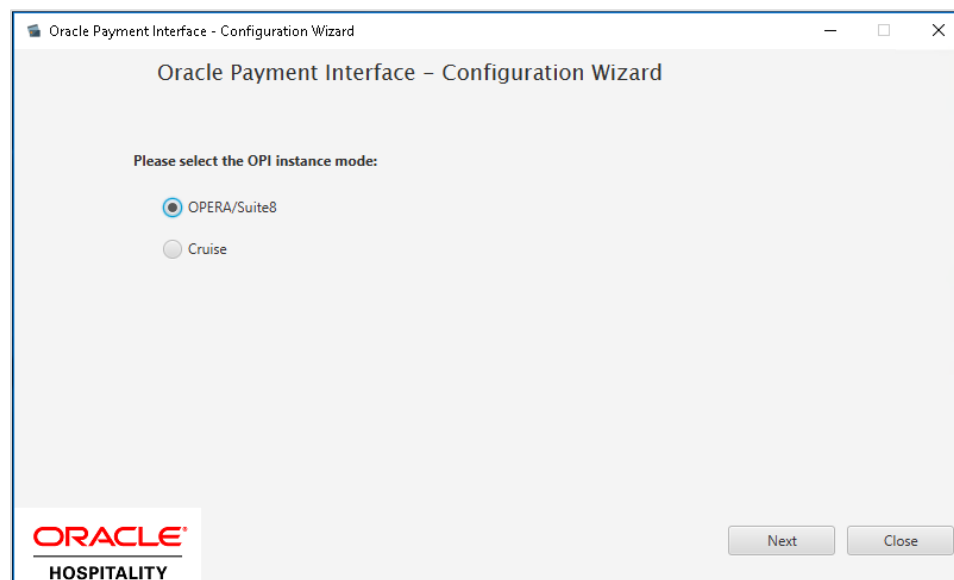
 **NOTE:**

In the previous step you are not configuring the port the service will listen on. Instead, it is prompting for the details on how to connect.

- The IP will depend on where the OPI Config Service is installed. If you are performing a complete installation, this can be left as the localhost address.
- The default port is 8090.

16. Set and confirm the passphrase value.

If the details entered for the connection to the **OPI Config Service** are correct, then the OPI installer launches the configuration wizard.



17. Select the OPI instance mode for Property Management System (PMS) merchants as **OPERA/Suite8**.

On the **OPI Interface** screen appears, the configuration screens displayed are same when the configuration wizard is launched manually.

(:\OraclePaymentInterface\v20.4\Config\LaunchWizard.bat)

18. **OPERA Token Exchange:** This option is enabled by default for all OPERA token exchange services.

OPI to PSP Communication Configuration

- From the OPI Mode drop-down list, select the **Terminal** for the PED direct connection or select **Middleware** for middleware connection.

 **NOTE:**

For Terminal Mode setup, special characters including "_", "|", and "=" cannot be used in the CHAINCODE or PROPERTYCODE. This will cause the EOD to fail in OPI.

Oracle Payment Interface - Configuration Wizard

Oracle Payment Interface – Configuration Wizard

OPI Interfaces

OPERA Token Exchange ON

OPI to PSP Communication Configuration:

OPI Mode: Terminal Enable Mutual Authentication

Terminal Port Number: 443 Enforce HTTPS

OPI Token Server Certificate

Certificate	Certificate Exists?
OPI Token Server Certificate	<input type="checkbox"/>

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Next Close

Oracle Payment Interface - Configuration Wizard

Oracle Payment Interface – Configuration Wizard

OPI Interfaces

OPERA Token Exchange ON

OPI to PSP Communication Configuration:

OPI Mode: Middleware Enable Mutual Authentication

Primary Host: https://pspsghost443 Proxy Host: Enter HTTP Proxy Host

Failover Host: https://pspsfailoverhost4 Proxy Port: Enter HTTP Proxy Port


OPI Token Server Certificate

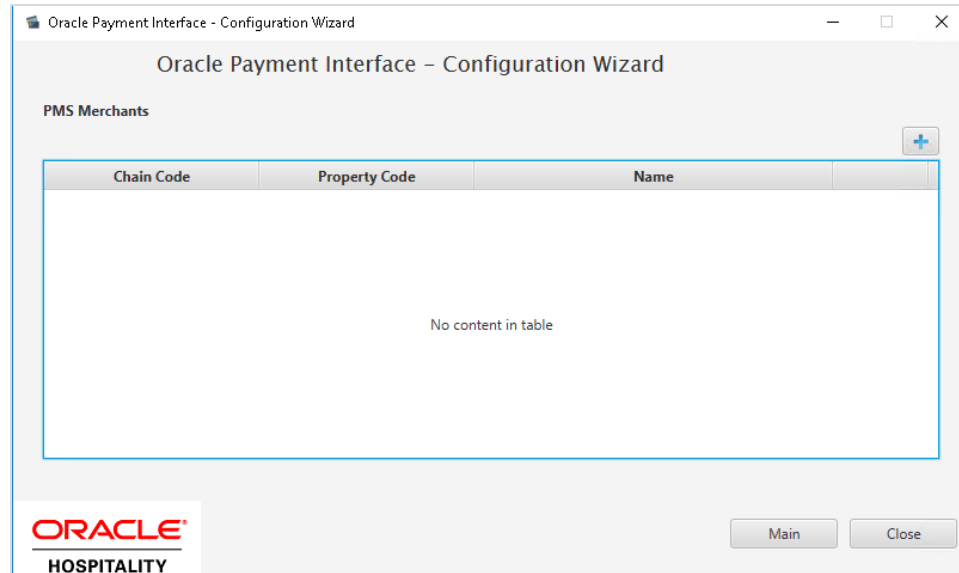
Certificate	Certificate Exists?
OPI Token Server Certificate	<input type="checkbox"/>

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Next Close

- **Enable Mutual Authentication:** Enable this option only if the PSP requests two way authentication for financial transactions and has provided the certificates and passwords for it.
- Enter the third-party payment service provider middleware Host address if **Middleware** mode is selected. If the **Terminal** mode is selected, OPI configuration will populate another window in further steps to input Workstation ID and IP address.

19. Click the **Add** () icon to add a new merchant configuration for OPERA.



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

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

 **NOTE:**

Chain Code and **Property Code** values need to be in upper case.

- b. Select **Generate Key**. Use to generate an IFC8 Communication key. The generated key will have the prefix **FidCrypt0S|** that is automatically added. Use this generated key when configuring the key in IFC8 software.
- c. Enter the **IFC8 IP address** and **Port** number for the Hotel Property Interface (IFC8) server.
- d. Enter the Merchant **Name**, **City**, **State/Province** and **Country/Region** information.
- e. **Currency**: The currency selection by the merchant in which the transactions are to be processed. Merchants can override selected transaction currency irrespective of country/region selection. For example: If a merchant's selects country as 'United States of America', then they can select the currency from the list of all available currencies (AUD, AED, AFN and so on) and this currency is used for transaction currency. **Reset**: To reset the currency back to use country/region currency.
- f. Select the option **Only Do Refund** if you want to disable differentiating between void and refund from OPERA.
- g. Click **Next**.

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

Oracle Payment Interface - Configuration Wizard

PMS Merchant

Chain Code: FSDH

Property Code: HOTEL1

Name:

City: Houston

State/Province: Texas

Country/Region: United States of America

Currency: AUD - Australian ...

IFC8 Key: Generate

IFC8 Host IP:

IFC8 Host Port: 7009

☐ Only Do Refund

Reset

Next Cancel

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

Oracle Payment Interface - Configuration Wizard

Merchant Payment Type Configuration

Chain Code: FSDH

Property Code: HOTEL1

Payment Types:

Card Type	Payment Code
Gift Card	GC
GiroCard	BC
JCB	JC
Maestro	ME
MasterCard	MC
MasterCard Debit	MD
MIR	MI
Paypal	PC
Reserve-01	ZZ

Hint: Double-click to edit a cell and then press Enter to submit your change or, Escape to cancel it

Back Next Cancel

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Below is the terminal mapping if you select Terminal mode.

Oracle Payment Interface - Configuration Wizard

Merchant Terminal Configuration

Workstation ID	Terminal IP/Host Name	
		+

Hint: Double-click to edit a cell and then press Enter to submit your change or, Escape to cancel it

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Back Next Cancel

22. 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**.

Oracle Payment Interface - Configuration Wizard

Payment Service Provider Configuration for Token Exchange

Host URL:

Failover URL:

Communication Timeout:

Connect Timeout:

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Back Next Cancel

23. 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' form in the OPERA Cloud interface. The breadcrumb trail at the top is 'Home / Financial / Transaction Management / Transaction Codes'. The form is titled 'Transaction Codes' and has tabs for 'Property' and 'Template'. The 'Property' tab is active.

Manage Transaction Code

Required Field

Ownership: **Property**
 Property: **ABHI**
 Code: **90002**
 Description: **Visa**
 Manage Translations

Subgroup: **CCARD**
 Credit Cards
 Group: **PAY PAYMENT**
 Transaction Type: **PAYMENT**
 Tax Code: **---**

Fiscal Transaction Code: **---**
Adjustment Transaction Code: **---**
Default Price: **---**

Minimum Amount: **---**
Maximum Amount: **---**
UPC: **---**

Service Type: **---**
Accounting Code: **---**
Quantity Code: **---**

Payment Details

Payment Type: **Credit Card**
Cash
Check
Others

Processing Type: **EFT**
Manual

CC Code: **VA**

Account Number: **---**

Options

☐ 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

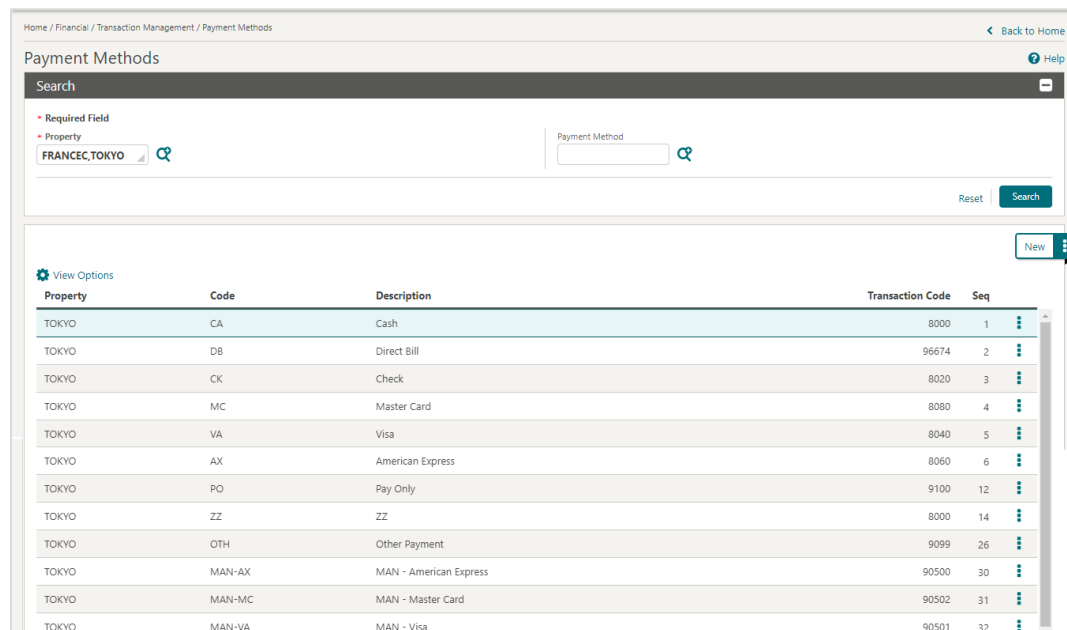
Buttons: **Cancel** **Save**

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.



Home / Financial / Transaction Management / Payment Methods

Payment Methods

Search

Required Field

Property

FRANCEC,TOKYO

Payment Method

Reset Search

View Options

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

To link the Card Types, the Credit Cards types mentioned below should be created and available in OPERA PMS.

Sample List of Card Types

Payment Types - Customer Present (Chip and PIN)	Description	Capture Method
VA	Visa	CP can be used. Transaction will go to the EMV (Chip and PIN) device.
MC	Mastercard	CP can be used. Transaction will go to the EMV (Chip and PIN) device.

Payment Types - Customer Present (Chip and PIN)	Description	Capture Method
AX	American Express	CP can be used. Transaction will go to the EMV (Chip and PIN) device.
DC	Diners Club	CP can be used. Transaction will go to the EMV (Chip and PIN) device.
JC	JCB	CP can be used. Transaction will go to the EMV (Chip and PIN) device.
CU	China Union Pay	CP can be used. Transaction will go to the EMV (Chip and PIN) device.
VD	Visa Debit	CP cannot be used, manual card type selection is required. If CP is used, OPERA will default to Visa. Transaction will go to the EMV (Chip and PIN) device.
MD	Mastercard Debit	CP cannot be used, manual card type selection is required. If CP is used, OPERA will default to Mastercard. Transaction will go to the EMV (Chip and PIN) device.
CD	China Union Pay Debit	CP cannot be used, manual card type selection is required. If CP is used, OPERA will default to China Union Pay. Transaction will go to the EMV (Chip and PIN) device.
MS	Maestro	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip and PIN) device. Customer present ONLY!
VP	V-Pay	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip and PIN) device. Customer present ONLY!
BC	GiroCard	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip and PIN) device. Customer present ONLY!
AB	AliPay	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip and PIN) device. Customer present ONLY!
MI	MIR (National Card for Russia)	CP can be used. Transaction will go to the EMV (Chip and PIN) device.

Payment Types – Customer NOT Present (Keyed)	Description	Capture Method
KVA	Visa Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KMC	Mastercard Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KAX	American Express Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KDC	Diners Club Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KJC	JCB Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KCU	China Union Pay Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KVD	Visa Debit Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KMD	Mastercard Debit	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KCD	China Union Pay Debit	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
Payment Types – One Shot Cards (Keyed) OPTIONAL!!!	Description	Capture Method
VVA	Visa Virtual	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
VMC	Mastercard Virtual	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
VAX	American Express Virtual	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)

Individual Card Functions

Payment Types - Customer Present (Chip and PIN)	Authorization at Check-in	Pay Only (no Authorization)	Deposit Y/N	Cashier Payment Y/N	A/R Payment Y/N
VA	Y	N	N	Y	N
MC	Y	N	N	Y	N
AX	Y	N	N	Y	N
DC	Y	N	N	Y	N
JC	Y	N	N	Y	N
CU	Y	N	N	Y	N
VD	N	Y	N	Y	N
MD	N	Y	N	Y	N
CD	N	Y	N	Y	N
MS	N	Y	N	Y	N
VP	N	Y	N	Y	N
BC	N	Y	N	Y	N
AB	N	Y	N	Y	N
MI	Y	N	Y	Y	Y

Payment Types - Customer NOT Present (Keyed)	Authorization at Check-in	Pay Only (no Authorization)	Deposit Y/N	Cashier Payment Y/N	A/R Payment Y/N
KVA	Y	N	Y	Y	Y
KMC	Y	N	Y	Y	Y
KAX	Y	N	Y	Y	Y
KDC	Y	N	Y	Y	Y

Payment Types - Customer NOT Present (Keyed)	Authorization at Check-in	Pay Only (no Authorization)	Deposit Y/N	Cashier Payment Y/N	A/R Payment Y/N
KJC	Y	N	Y	Y	Y
KCU	Y	N	Y	Y	Y
KVD	N	Y	Y	Y	Y
KMD	N	Y	Y	Y	Y
KCD	N	Y	Y	Y	Y

Payment Types – One Shot Cards (Keyed) OPTIONAL!!!	Authorization at Check-in	Pay Only (no Authorization)	Deposit Y/N	Cashier Payment Y/N	A/R Payment Y/N
VVA	N	Y	N	Y	N
VMC	N	Y	N	Y	N
VAX	N	Y	N	Y	N

Important Considerations

- Transaction codes for Chip and PIN, KEYED and VIRTUAL cannot be the same.
- SOLO cards does not exist anymore, and cannot be used.
- VISA ELECTRON and VISA DELTA should not be created as separate transaction / payments codes, these cards will fall under VISA.
- DISCOVER cards now fall under DINERS CLUB.
- VIRTUAL cards can only be VISA, MASTERCARD and AMERICAN EXPRESS.
- V-Pay, GiroCard and AliPay can only be Chip and PIN.

Pay Only Transaction Codes

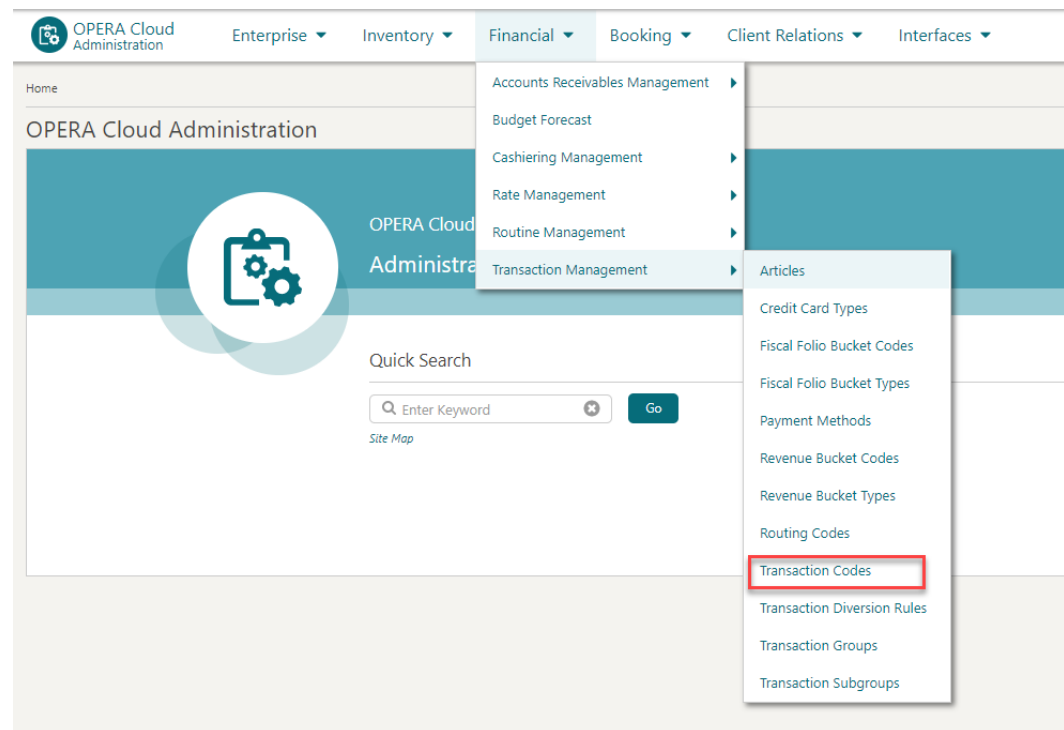
By default, OPERA will process a Pre-authorization following by a Sale Completion when processing a payment. At times, hotels will need to process transactions as a “Sale Transaction” – meaning a Sale Transaction only and no pre-authorization is processed. In OPERA we refer to this feature as “Pay Only” and this can be used to process

payments for Debit Cards, Digital Wallets, or Virtual Credit Cards that do not support Pre-Authorizations.

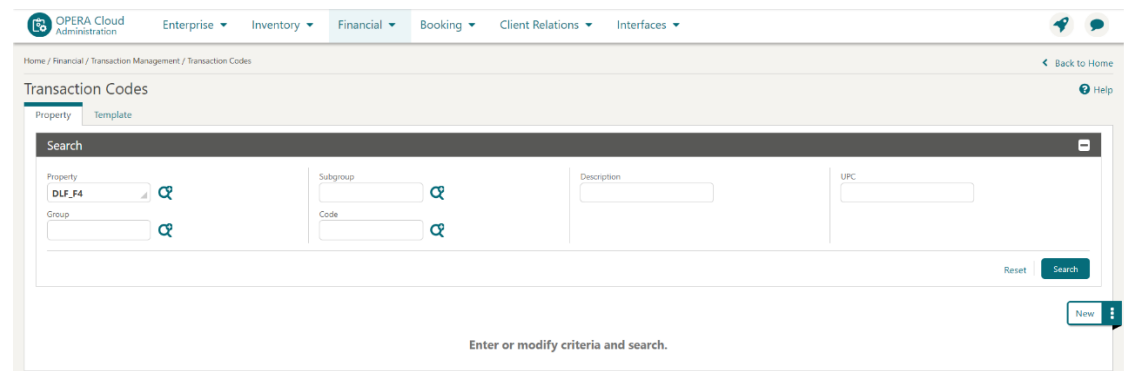
The below steps detail creating this code. In order to use the PayOnly transaction code, you will need to also set up a new Payment method and Credit Card Type (if not already setup; normally zz card Type) at a property level.

Create Transaction Code

1. Go to **OPERA Cloud Administration**.
2. Go to **Financial | Transaction Management | Transaction Codes**.



3. Click on **New**.



4. Create the new Transaction code for PAYONLY.

OPERA Cloud Administration Enterprise Inventory Financial Booking Client Relations Interfaces

Home / Financial / Transaction Management / Transaction Codes

Transaction Codes

Property Template

*** Required Field**

Property: **DLF_F4** Subgroup: **CCARD** Credit Cards Tax Code: **1** Adjustment Transaction Code: Service Recovery Code: Default Price: **USD** Minimum Amount: **USD** Maximum Amount: **USD** Accounting Code: Quantity Code: Inactive

Code: **8095** Group: **PAY PAYMENT** Transaction Type: Description: **VISA PAY ONLY** Manage Translations

Payment Details

Payment Type: ☒ Credit Card ☐ Cash ☐ Check ☐ Others Processing Type: ☒ EFT ☐ Manual CC Code: Account Number:

Options

☐ Revenue Group ☐ Payout ☐ Rounding Factor ☐ Generates Inclusive ☐ Check Number Mandatory ☒ Deposit Payments ☐ Print Receipt ☐ Include in Deposit/CXL Rule ☒ Cashier Payments ☐ Membership ☒ All Payments ☐ Manual Posting ☐ Post Covers ☐ Deposit Posting

Cancel Save Save and Add Description

5. Click **Save**.

OPERA Cloud Administration Enterprise Inventory Financial Booking Client Relations Interfaces

Home / Financial / Transaction Management / Transaction Codes

Transaction Codes

Property Template

Manage Transaction Code

Property: **DLF_F4** Subgroup: **CCARD** Credit Cards Tax Code: Adjustment Transaction Code: Default Price: **USD** Minimum Amount: **USD** Maximum Amount: **USD** Accounting Code: Quantity Code: Inactive

Code: **9998** Group: **PAY PAYMENT** Transaction Type: Description: **PAY ONLY** Manage Translations

Payment Details

Payment Type: **Credit Card** Processing Type: **EFT** CC Code: **ZZ** Account Number:

Options

☐ Revenue Group ☐ Payout ☐ Rounding Factor ☐ Generates Inclusive ☐ Check Number Mandatory ☒ Deposit Payments ☐ Print Receipt ☐ Include in Deposit/CXL Rule ☒ Cashier Payments ☐ Membership ☒ All Payments ☐ Manual Posting ☐ Post Covers ☐ Deposit Posting

Create Payment Method

1. Go to **OPERA Cloud Administration**.
2. Go to **Financial | Transaction Management | Payment Methods**.

The screenshot shows the OPERA Cloud Administration interface. The top navigation bar includes 'Enterprise', 'Inventory', 'Financial', 'Booking', 'Client Relations', and 'Interfaces'. The 'Financial' menu is open, showing options like 'Accounts Receivables Management', 'Budget Forecast', 'Cashiering Management', 'Rate Management', 'Routine Management', and 'Transaction Management'. The 'Transaction Management' option is selected, opening a sub-menu with 'Articles', 'Credit Card Types', 'Fiscal Folio Bucket Codes', 'Fiscal Folio Bucket Types', 'Payment Methods', 'Revenue Bucket Codes', 'Revenue Bucket Types', 'Routing Codes', 'Transaction Codes', 'Transaction Diversion Rules', 'Transaction Groups', and 'Transaction Subgroups'. The 'Payment Methods' option is highlighted in the sub-menu. Below the menu, the 'Payment Methods' table is visible, showing a list of payment methods with columns for 'Code' and 'Description'.

Code	Description
6000	D PAYMENT METHOD
CASH	Cash
DB	Direct Bill
DB1	Direct Bill code
MC	Master
MOOLA	Test
OTH	Prepaid commission

3. Click **New**.

The screenshot shows the OPERA Cloud Administration interface. The top navigation bar includes 'Enterprise', 'Inventory', 'Financial', 'Booking', 'Client Relations', and 'Interfaces'. The 'Financial' menu is open, showing options like 'Accounts Receivables Management', 'Budget Forecast', 'Cashiering Management', 'Rate Management', 'Routine Management', and 'Transaction Management'. The 'Transaction Management' option is selected, opening a sub-menu with 'Articles', 'Credit Card Types', 'Fiscal Folio Bucket Codes', 'Fiscal Folio Bucket Types', 'Payment Methods', 'Revenue Bucket Codes', 'Revenue Bucket Types', 'Routing Codes', 'Transaction Codes', 'Transaction Diversion Rules', 'Transaction Groups', and 'Transaction Subgroups'. The 'Payment Methods' option is highlighted in the sub-menu. Below the menu, the 'Payment Methods' table is visible, showing a list of payment methods with columns for 'Code' and 'Description'. A 'New' button is visible in the bottom right corner of the table.

4. Assign a Code to represent the Payment Method for PayOnly.

5. Enter description.

6. Select Transaction code for PayOnly created earlier.

The screenshot shows the OPERA Cloud Administration interface. The top navigation bar includes 'Enterprise', 'Inventory', 'Financial', 'Booking', 'Client Relations', and 'Interfaces'. The 'Financial' menu is open, showing options like 'Accounts Receivables Management', 'Budget Forecast', 'Cashiering Management', 'Rate Management', 'Routine Management', and 'Transaction Management'. The 'Transaction Management' option is selected, opening a sub-menu with 'Articles', 'Credit Card Types', 'Fiscal Folio Bucket Codes', 'Fiscal Folio Bucket Types', 'Payment Methods', 'Revenue Bucket Codes', 'Revenue Bucket Types', 'Routing Codes', 'Transaction Codes', 'Transaction Diversion Rules', 'Transaction Groups', and 'Transaction Subgroups'. The 'Payment Methods' option is highlighted in the sub-menu. Below the menu, the 'Manage Payment Method' form is visible. The form includes fields for 'Property' (DLP_F4), 'Code' (9998), 'Description' (Pay Only Payment), 'Transaction Code' (9998), 'Credit Card Type' (ZZ), 'Credit Limit' (USD), 'Merchant Number', and 'Sequence'. There are also checkboxes for 'No Post' and 'Reservation'. The 'Card Information' section is expanded, showing fields for 'Card Length', 'Card Prefix', and 'Validation Rule' (No Validation). A 'New' button is visible in the bottom right corner of the form.

7. Click **Save**.

The screenshot shows the 'Manage Payment Method' interface in OPERA Cloud Administration. The top navigation bar includes 'Enterprise', 'Inventory', 'Financial', 'Booking', 'Client Relations', and 'Interfaces'. The breadcrumb trail is 'Home / Financial / Transaction Management / Payment Methods / Manage Payment Method'. The main form contains several input fields: 'Property' (DLF_F4), 'Description' (PAY ONLY), 'Credit Card Type' (ZZ), 'Merchant Number', and 'Sequence'. There are also checkboxes for 'No Post' and 'Reservation'. Below these are sections for 'Card Information' and 'Card Range From' to 'Card Range To'.

Update OPERA Controls for Settlement at Checkout and Chip and Pin.

1. Go to **OPERA Cloud Administration**.
2. Go to **Enterprise | OPERA Controls**.

The screenshot shows the 'Payment Methods' page in OPERA Cloud Administration. The 'Enterprise' menu is open, displaying a list of options: 'Chain and Property Management', 'Corporate Information', 'Image Management', 'OPERA Controls', 'Track It', and 'User Interface Management'. The 'OPERA Controls' option is highlighted. The left sidebar shows a search bar and a 'Required Field' section with 'Property' set to 'DLF_F4'.

3. Select the Credit Card group.

OPERA Cloud Administration

Enterprise ▾ Inventory ▾ Financial ▾ Booking ▾ Client Relations ▾ Interfaces ▾

Home / Enterprise / OPERA Controls

OPERA Controls

Search

Property

DLF_F4 Prop_Apollo

Groups

- Accounts Receivables
- Blocks
- Cashiering
- Channel Management
- Commissions
- Country Specific
- Credit Card**
- End Of Day
- Events
- Exports
- Front Desk
- General
- IFC
- Inventory Management
- Look To Book Sales Screen
- Membership

Settings

Parameters

Credit Card

Automatic Authorization
Indicates if the Automatic Credit Card Authorization Scheduling functionality is active.

Batch Settlement
Activates Batch Settlements functionality for supported systems. This parameter and Online Settlement parameter are mutually exclusive.

Chip and Pin
Activate Chip and Pin Functionality

Chip and Pin Payment Method
Credit Card types that should exhibit Chip and Pin functionality when using a Chip and Pin enabled terminal.

AX-PAYONLY,VI-PAYONLY,PAYONLY,MAESTRO,DSETTLE

Credit Card Type Check/Usages
Enable a cross check between the credit card type and usages for that card type. This feature is used for any credit card types where a separate transacti

BlackList Card Check
Flag to specify if the system should perform Bonus Check Validations.

Credit Limit Overage Payments.
Enables the processing of automatic payments for the total balance of a folio when the balance is equal or higher than the credit limit set for credit card

4. Click the edit icon in the **Authorization settlement at Check-Out** setting.

Authorization during Stay/Deposit

Credit Card types that allow manual and automatic authorization checks for deposits, and following Check In and prior to Check Out routine.

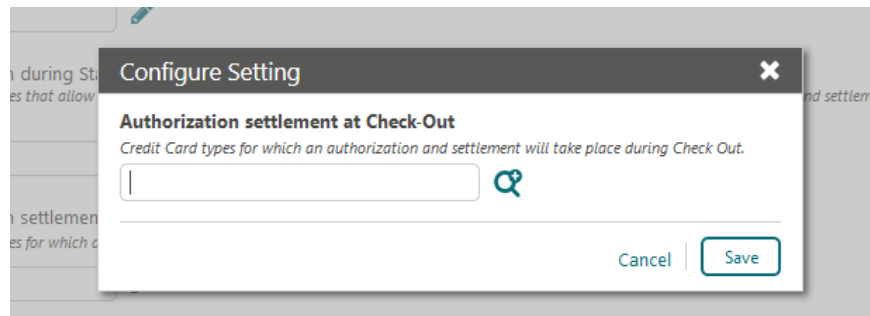
Authorization settlement at Check-Out

Credit Card types for which an authorization and settlement will take place during Check Out.

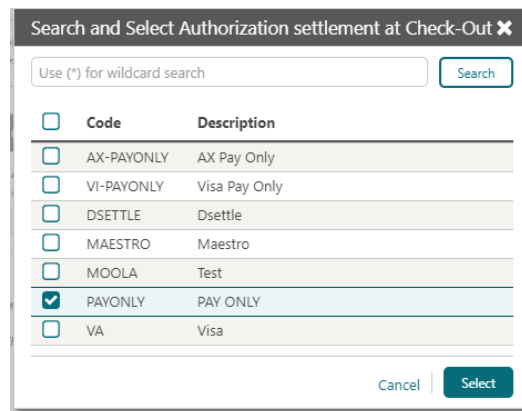
Days to Purge Credit Card Authorization Log

Enter the number of days in which the credit card authorization log should be removed. When no value is set, purging of credit

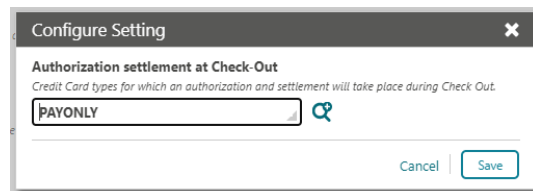
5. Click in the search icon in the **Configure Setting** screen.



6. Search and select the authorization settlement at Check-Out.
7. Click **Select**.



8. Click **Save** to confirm selection.



9. Pay only is now added.

OPERA Cloud Administration

Enterprise Inventory Financial Booking Client Relations Interfaces

Authorization at Check In
Credit Card types that require an automatic authorization at Check In.

ABN,AXAR,AX,MC

On Force Auth. During Check In/Interactive Auth. Window
If active, credit card authorization must be obtained to Check In a reservation, and credit card authorization window is interactively displayed in and the authorization screen is minimized. User does not have to wait until authorization is successfully completed.

Off Night Audit Remote Authorization
This option enables End of Day remote authorization, where available.

Authorization during Stay/Deposit
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 authorization.

ABN,AXAR,AX,MC

Authorization settlement at Check-Out
Credit Card types for which an authorization and settlement will take place during Check Out.

PAYONLY

Days to Purge Credit Card Authorization Log
Enter the number of days in which the credit card authorization log should be removed. When no value is set, purging of credit card authorization log defaults to 30 days.

Days to Purge Credit Cards.
Enter the number of days in which the credit card information will be removed in the case where no transactions or reservations are active.

9

Deposit Address Verification
Credit Card types that will require to provide the credit card billing address information during payment.

10. Click the edit icon in the **Chip and Pin Payment Method** setting.

OPERA Cloud Administration

Enterprise Inventory Financial Booking Client Relations Interfaces

Groups

- Accounts Receivables
- Blocks
- Cashiering
- Channel Management
- Commissions
- Country Specific
- Credit Card
- End Of Day
- Events

Parameters

Off Automatic Authorization
Indicates if the Automatic Credit Card Authorization Scheduling functionality is active.

Off Batch Settlement
Activates Batch Settlements functionality for supported systems. This parameter and Online Settlement parameter are mutually exclusive.

On Chip and Pin
Activate Chip and Pin Functionality

Chip and Pin Payment Method
Credit Card types that should exhibit Chip and Pin functionality when using a Chip and Pin enabled terminal.

AX-PAYONLY,MAESTRO,DSETTLE,VI-PAYONLY

11. Click the Search icon in the Configure Setting screen.

Configure Setting

Chip and Pin Payment Method
Credit Card types that should exhibit Chip and Pin functionality when using a Chip and Pin enabled terminal.

|

Cancel Save

12. Click **Select**.

Search and Select Chip and Pin Payment Method ✕

Use (*) for wildcard search

<input type="checkbox"/>	Code	Description
<input type="checkbox"/>	ABN	Payment test
<input type="checkbox"/>	AX-PAYONLY	AX Pay Only
<input type="checkbox"/>	VI-PAYONLY	Visa Pay Only
<input type="checkbox"/>	DSETTLE	Dsettle
<input type="checkbox"/>	MAESTRO	Maestro
<input type="checkbox"/>	AX	American Express
<input type="checkbox"/>	MC	Master
<input type="checkbox"/>	MOOLA	Test
<input checked="" type="checkbox"/>	PAYONLY	PAY ONLY
<input type="checkbox"/>	VA	Visa

13. Click **Save** to confirm selection.

Configure Setting ✕

Chip and Pin Payment Method
Credit Card types that should exhibit Chip and Pin functionality when using a Chip and Pin enabled terminal.

14. Pay only is now added.

OPERA Cloud Administration Enterprise ▾ Inventory ▾ Financial ▾ Booking ▾ Client Relations ▾ Interfaces ▾

Groups

- Accounts Receivables
- Blocks
- Cashiering
- Channel Management
- Commissions
- Country Specific
- Credit Card
- End Of Day
- Events

Parameters

Automatic Authorization
Indicates if the Automatic Credit Card Authorization Scheduling functionality is active.

Batch Settlement
Activates Batch Settlements functionality for supported systems. This parameter and Online Settlement parameter are mutually exclusive.

Chip and Pin
Activate Chip and Pin Functionality

Chip and Pin Payment Method
Credit Card types that should exhibit Chip and Pin functionality when using a Chip and Pin enabled terminal.

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 **Save**:
 - a. **Machine**: Enter the machine name where the OPERA IFC Controller Service is running.
 - b. **Controller Port**: Define the controller port.

- c. **Program:** Select the program from the list.
- d. **VNC Port:** Define the VNC port.

Home / Interfaces / Machines / Manage Machine

Manage Machine

Required Field

Machine: BCABALLO-US

Program: c:\Vidello\lfc8\lfc8.exe

Controller Port: 5001

VNC Port: 5555

Cancel Save

Creating an EFT Interface

1. Log in to OPERA.
2. 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.
3. Enter the following options:
 - **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

Machine: 142

Timeout: 240

Cashier ID: 8

Path ID: 1

Version:

Inactive

Cancel Save

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

Home / Interfaces / Property Interfaces / Property Interface Back to Property Interfaces Help

Property Interface

- Overview
- Primary Information
- General Information
- Custom Data
- Class of Service
- Translation

EFT - Test EFT DO NOT CHANGE

Property ROSIE	Interface Type EFT	Product Code CC9	IPC number 341
--------------------------	------------------------------	----------------------------	--------------------------

View **Style 1** Customize View

Primary Information

☐ Inactive Edit

IPC9 Product Code CC9	Path ID 1	Timeout 60	Menu Type ---
Name ---	Machine 621 NPLWIN10	Message Expires After (minutes) ---	Menu Name ---
Cashier ID 8	Version 12.1.0		

General Information

Edit

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

Custom Data

Edit

Details

View Options

User Defined Field	Value
HTTP_USERNAME	---
HTTP_PASSWORD	---
VAULT_CERT_CHAIN_CODE	CHA
VAULT_ID	341
WALLET_PASSWORD	---
VAULT_MAX_CC_PROCESSED	---

Class of Service

Edit

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

Translation

New

Select Transaction

☒ Merchant Id ☐ Article Number ☐ Language Code ☐ Key Options

View Options

Origin Code	Merchant Id
DEFAULT	---

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.

The screenshot displays the OPERA Cloud Configuration interface with four main panels:

- General Information:** Contains checkboxes for 'Handle Night Audit / End of Day Commands', 'CC Vault Function', 'Regular Transaction', and 'Courtesy Card Handling'. It also includes input fields for 'IP Address', 'Token Provider URL', 'Token Provider Protocol', 'Port', 'Device', 'Prepaid Tnx' (with a search icon), and 'Redeem Tnx' (with a search icon). There are checkboxes for 'Create Prepaid during Checkin', 'Prepaid System', and 'Show Prepaid Pin'. 'Cancel' and 'Save' buttons are at the bottom right.
- Custom Data:** Features an 'Edit' button and a 'Details' section with a 'View Options' gear icon. Below is a table with two columns: 'User Defined Field' and 'Value'.

User Defined Field	Value
HTTP_USERNAME	
HTTP_PASSWORD	
VAULT_CERT_CHAIN_CODE	CHA
VAULT_ID	341
WALLET_PASSWORD	
VAULT_MAX_CC_PROCESSED	
- Class of Service:** Includes a '+' button.
- Translation:** Features a 'Select Transaction' section with radio buttons for 'Merchant Id', 'Article Number', 'Language Code', and 'Key Options'. Below is a 'View Options' gear icon and a table with two columns: 'Origin Code' and 'Merchant Id'.

Origin Code	Merchant Id
DEFAULT	

 A 'New' button is located at the bottom right.

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 and 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 deselect 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 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.

The screenshot shows the OPERA Controls Settings panel for Credit Card configuration. The left sidebar contains a search bar and a list of groups including Accounts Receivables, Blocks, Cashing, Channel Management, Commissions, Country Specific, Credit Card, End Of Day, Events, Exports, Front Desk, General, IFC, Inventory Management, Look To Book Sales Screen, Membership, Profile, Rate Management, Reservations, and Room Management. The main panel is titled 'Credit Card' and contains several sections with toggle switches and input fields.

Parameters

- Automatic Authorization** (On): Indicates if the Automatic Credit Card Authorization Scheduling functionality is active.
 - Automatic Authorization Interval Time** (7,200): Specifies the interval in minutes after completion of an automatic credit card authorization and the start of the next instance. Minimum of 30 minutes.
 - Include Payments for Automatic Credit Card Authorizations** (Off): Automatic Credit Card Authorization will process authorizations based on the authorization rule and the balance of the Bills.
 - Automatic Authorization Failure No Post Flag** (Off): When this parameter is active, the "No Post" checkbox of a reservation is automatically flagged when the Credit Card Authorization fails during any automatic processes for Credit Card Authorizations.
 - Exclude No Post Reservations From Automatic Authorization** (Off): When this parameter is active, reservations flagged as "No Post" are not included in any automatic processes for Credit Card Authorizations.
- Batch Settlement** (Off): Activates Batch Settlements functionality for supported systems. This parameter and Online Settlement parameter are mutually exclusive.
- Chip and Pin** (On): Activate Chip and Pin Functionality.
 - Chip and Pin Payment Method** (MC,PO,AX,VA): Credit Card types that should exhibit Chip and Pin functionality when using a Chip and Pin enabled terminal.
- Credit Card Type Check/Usages** (Off): Enable a cross check between the credit card type and usages for that card type. This feature is used for any credit card types where a separate transaction code is applied to each specific usage of the card.
- Credit Limit Overage Payments** (On): Enables the processing of automatic payments for the total balance of a bill when the balance is equal or higher than the credit limit set for credit card payment method. Automatic Credit Limit Overage payments are processed based on the Credit Limit Overage Interval Time setting.
 - Default Credit Limit Overage Payments Auto Pay** (On): When this parameter is active, the Credit Limit Auto Pay checkbox on new reservations is selected by default.
 - Credit Limit Overage Payment Failure No Post Flag** (Off): When this parameter is active, the "No Post" checkbox is automatically flagged when a Credit Limit Overage payment fails in a reservation.
 - Exclude No Post Reservations For Credit Limit Overage Payments** (Off): When this parameter is active, reservations flagged as "No Post" are not processed in Credit Limit Overages.
 - Credit Limit Overage Payments Interval Time** (0): Specifies the interval in minutes after completion of an automatic Credit Limit Overage processing of Payments and the start of the next instance. Minimum value of 30 minutes. When set to 0 minutes, the automatic Credit Limit Overage processing of payments will not be executed.
 - Credit Limit Overage Payment Methods** (VA,AX,MC): Select the Credit Card Payment Methods which qualify for automatic Credit Limit Overage processing of payments.
- Manual Authorization Notification** (Off): Enables an authorization message delivery to the credit card processing vendor, when a manual credit card authorization code is obtained and entered in the reservation. Available if the credit card interface uses web-enabled transaction processing via VPN or secure HTTP.
- Online Settlement** (On): Activates Online Settlements functionality for supported systems. This parameter and Batch Settlement parameter are mutually exclusive.
 - Temporarily Store Offline Settlements** (Off): Indicates if the property wants to store failed Online Settlements (due to the credit card interface not running) and process them offline at the end of the day.
- Send Total Tax in Settlements** (Off): Specifies if the system is required to send Total Tax amounts in settlement requests to the interface.

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

Settings

Authorization Reversal Allowed

Credit Card types which authorization reversal is allowed by the credit card vendor. Existing authorizations for selected credit card types will be reversed if a different credit card or method of payment is used at Check Out.

VA

Authorization at Check In

Credit Card types that require an automatic authorization at Check In.

MC,VA,AX

Off

Force Auth. During Check In/Interactive Auth. Window

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.

Off

Night Audit Remote Authorization

This option enables End of Day remote authorization, where available.

Authorization during Stay/Deposit

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.

MC,VA,AX

Authorization settlement at Check-Out

Credit Card types for which an authorization and settlement will take place during Check Out.

PO

Days to Purge Credit Card Authorization Log

Enter the number of days in which the credit card authorization log should be removed.

Days to Purge Credit Cards

Enter the number of days in which the credit card information will be removed in the case where no transactions or reservations are active.

9

Deposit Address Verification

Credit Card types that will require to provide the credit card billing address information during payment.

Deposit CVV2 Check

Credit Card types for which the Credit Card Security Code (CVV2) will be required when making a payment.

Hotel ID

Hotel ID

VAB181SMOKE

Settlement Authorization Code

Authorization Code to be used at Settlement, if multiple authorization codes exist

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 During Stay/Deposit.

- **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.

IFC

Functions

Active

Video Check Out

Activate Video Check Out Functionality.

Video Check Out Start Time

Time of Day the Video Check Out is to start.

Video Check Out Stop Time

Time of Day the Video Check Out is to stop.

Video Check Out Email

Address used to receive Video Check Out folios.

Parameters

On

Advanced Authorization Rules

The ability to define authorization rules based on Room Type, Room Class, Rate Code, Rate Category, Reservation Type and Source Code or a combination of the same.

Off

Exclusive Taxes will be Posted as Itemizers by the POS Interface.

Exclusive Taxes will be Posted as Itemizers by the POS Interface.

On

Prompt For Terminal

Allows a terminal to be selected for credit card transactions

Activating and Using the Payment Service Directive (PSD2) Control

A Payment Service Directive OPERA Control is added for properties with payment integration to meet the requirements of the PSD2 European directive for card not present transactions.

The Payment Service Directive Control parameter in OPERA CLOUD need to be activated. Currently, the supported functions for OPERA CLOUD are MOTO (Mail Order/Telephone Order), and MIT (Merchant Initiated Transaction).

****CIT (Merchant Initiated Transaction is not yet supported in OPERA Cloud but will be in the future).**

Activating the Payment Service Directive is available only once the credit card interface has been installed in OPERA Cloud and the Credit Card Vault function and the Chip and Pin is turned on. If this is completed follow the below sections to know the functions of MOTO and MIT:

- From the **Administration** menu, go to **Enterprise | OPERA Controls | Groups | IFC | Parameters**.
- Turn On **Payment Service Directive** option: Selecting this check box enables the Payment Services Directive (PSD2) specifications for processing of credit card payments and settlements when an EFT interface is configured at the property.

The screenshot shows the OPERA Cloud Administration interface. The left sidebar lists various modules including Accounts Receivables, Blocks, Cashiering, Channel Management, Commissions, Comp Accounting, Country Specific, Credit Card, End Of Day, Events, Exports, Front Desk, General, IFC, Inventory Management, Look To Book Sales Screen, Membership, Profile, and Rate Management. The main content area is titled 'Parameters' and contains several toggle switches and settings:

- Video Check Out:** Inactive (Red circle). Description: Activate Video Check Out Functionality.
- Advanced Authorization Rules:** Off (Red circle). Description: The ability to define authorization rules based on Room Type, Room Class, Rate Code, Rate Category, Reservation Type and Source Code or a combination of the same.
- Exclusive Taxes will be Posted as Itemizers by the POS Interface:** Off (Red circle). Description: Exclusive Taxes will be Posted as Itemizers by the POS Interface.
- Payment Services Directive:** On (Green circle). Description: Enables Payment Services Directive (PSD2) specifications for processing of credit card payments and settlements when an EFT interface is configured at the property.
- Prompt For Terminal:** Off (Red circle). Description: Allows a terminal to be selected for credit card transactions.
- Settings:**
 - Default Keys Expiry Time:** Choice of using reservation Expected Time of Departure or OPERA Controls setting Key Expiry Time as default on the Valid Until Time field in Create Key screen.
 - IFC Cloud Log Level:** SEVERE. Description: Overrides the log level of the requests received by OPERA CLOUD from IFC interface.
 - Key Expiry Days:** The number of days after the check out date for key card to expire.

- OPERA Cloud includes the following flags when sending payments to the payment service provider for approval:
 - PSD2-PRE-PAYMENT when processing credit card payments for deposits.
 - PSD2-NOSHOW when processing credit card payment for no show fees.
 - PSD2-DELAYED_CHARGE when processing credit card payments for post-stay charges.

Mail Order / Telephone Order (MOTO) Flag

When **Payment Service Directive** is Active, the information sent from OPERA Cloud to the interface will:

- Include a MOTO flag in the “PaymentMethod” tag indicating:
 - MOTO=0 indicates the Credit Card was NOT entered manually
 - MOTO=1 indicates that the Credit Card was entered manually

Sample:

`PaymentMethod="InitTrx:MIT2[Cc:|Moto:0|'cc:0'/'>|]`

- Display a new ‘Card Present’ checkbox.
 - **Card Present** checkbox selected indicates the Credit Card was not entered manually.
 - **Card Present** checkbox not selected indicates that the Credit Card was entered manually (Entering Credit card manually will also prompt a message saying “**Credit card was entered manually**”).

Look To Book Sales Screen

Stay Information Property: PROPO Arrival: 12-07-2019 Fri Nights: 1 Departure: 13-07-2019 Sat Guests: 3 + 0 Room: DLX Rate Code: BEPEXCL Rate: ¥90,000 Packages: • Osaka Excl Additional Packages	Guest Information * Required Field * Name: Ramneek Raaman More info... Booking Details * Reservation Type: 4PM * Market: IND * Source: DRK * Arrival Time: 12:00pm * Room Type to Charge: DLX * Rate: 90,000 JPY <input type="checkbox"/> Fixed Rate Show More
Payment Information Window 1 Window 2 Window 3 Window 4 Window 5 Window 6 Window 7 Window 8 * Method: MC - Master Card Clear Card Number: XXXXXXXXXXXXX5100 Get Token * Expiration: XX/XX <input checked="" type="checkbox"/> Card Present Card Holder: Rule: Amount / Percent:	

Merchant Initiated Transaction (MIT) Flag

When **Payment Service Directive** is Active, the information sent from OPERA Cloud to the interface which will include the MIT flag in the 'PaymentsMethod' tag when sending payments to the Payment Service Provider for approval.

MIT Flag options include an MIT flag in the "PaymentMethod" tag indicating:

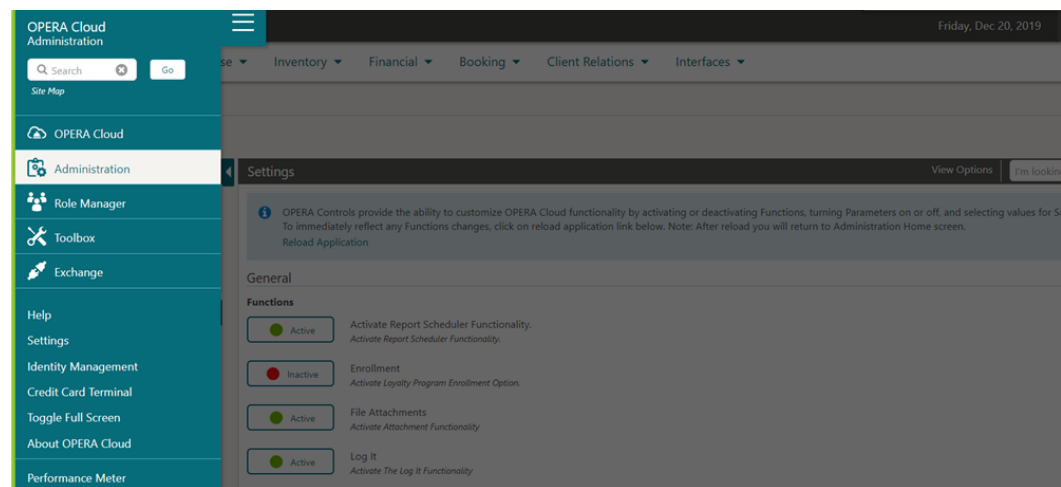
- **MIT1: NO SHOW** - used when processing credit card payment for **NO SHOW** fees.
- **MIT2: PRE-PAYMENT** - used when processing credit card **PRE-PAYMENT** for deposits.
- **MIT4: DELAYED CHARGE** - used when processing credit card payments for **POST-STAY CHARGES**.

PaymentMethod="InitTx:MIT2[Cit:]Moto:0[Vcc:0"/>]

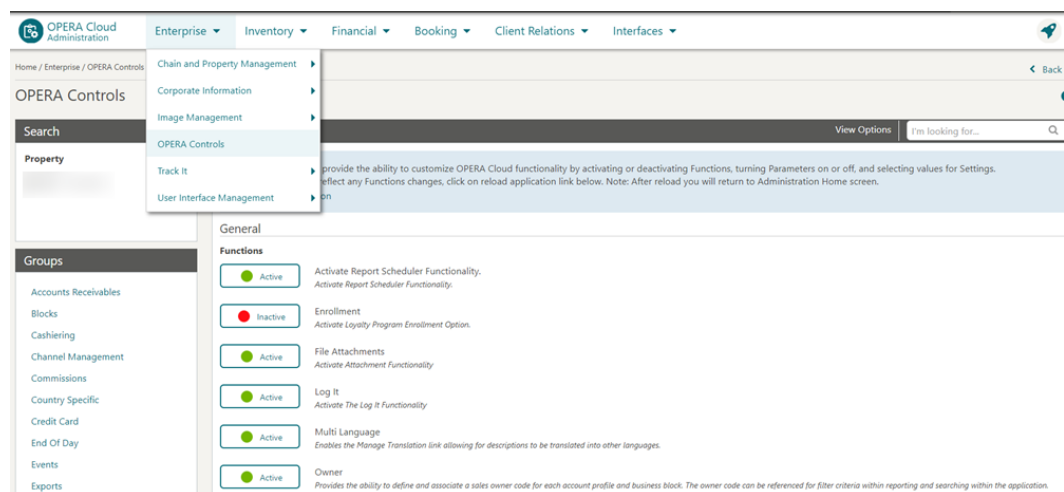
Credit Card Manual Entry into OPERA

- **Credit Card Vault** function and the **Chip and Pin** Parameter must be set active.
- OPERA Cloud uses web services rather than OPERA forms for activation. Therefore, there is no Payment Widget. Instead, credit card information is manually entered into the browser. The steps for activation/deactivation of manual entry by accessing the OPERA control setting are mentioned below.

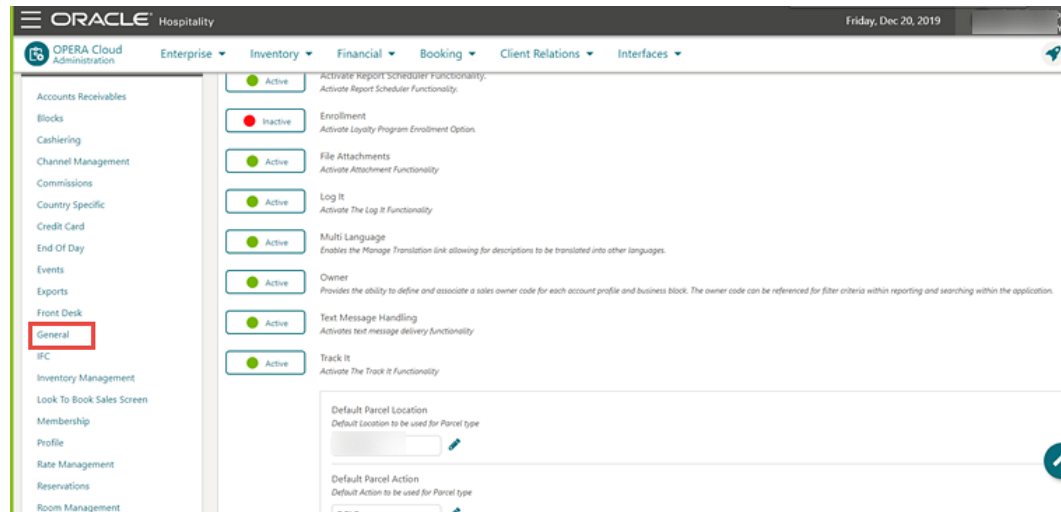
1. Go to **OPERA Cloud Administration**.



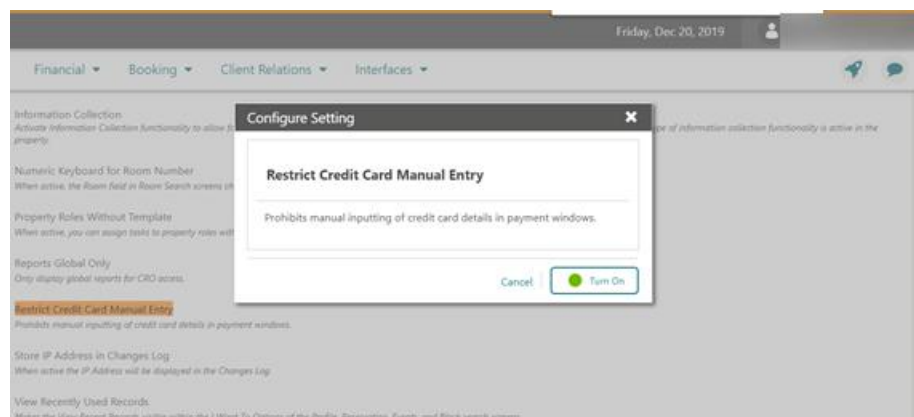
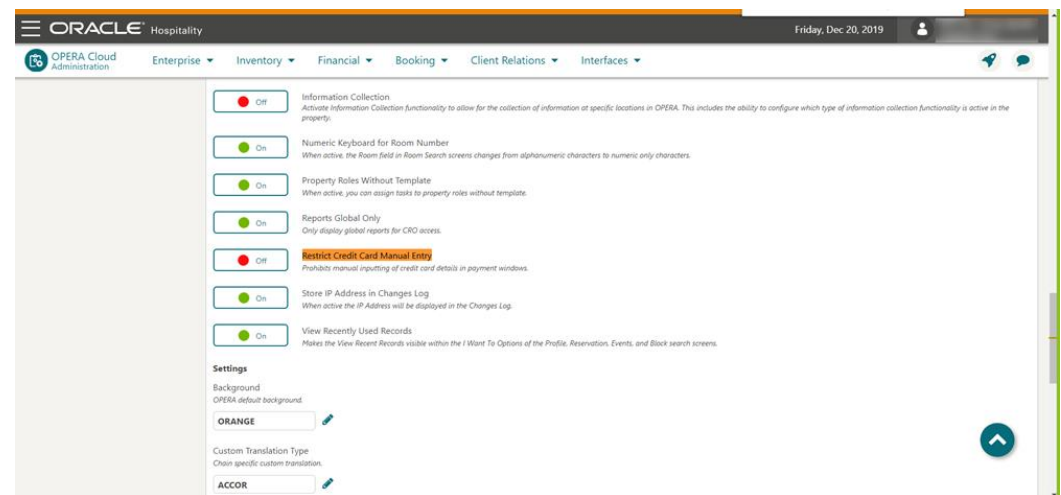
2. Go to **Enterprise** and then select **OPERA Controls**.



3. From the Groups select **General**.



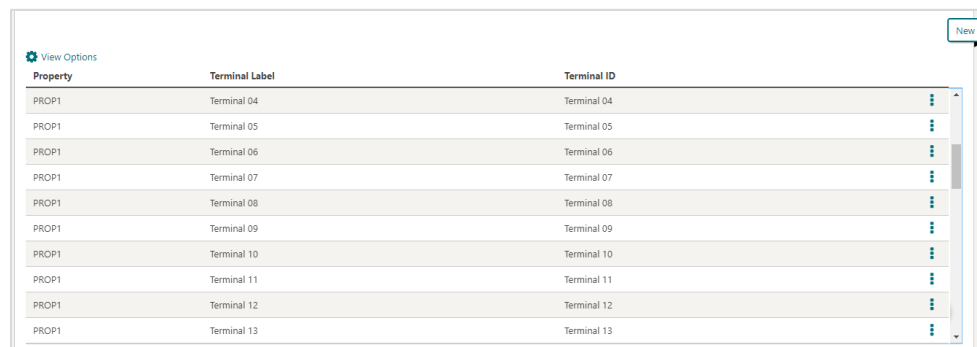
4. Activate or Deactivate the **Restrict Card Manual entry**.



Configuring Credit Card Terminal

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

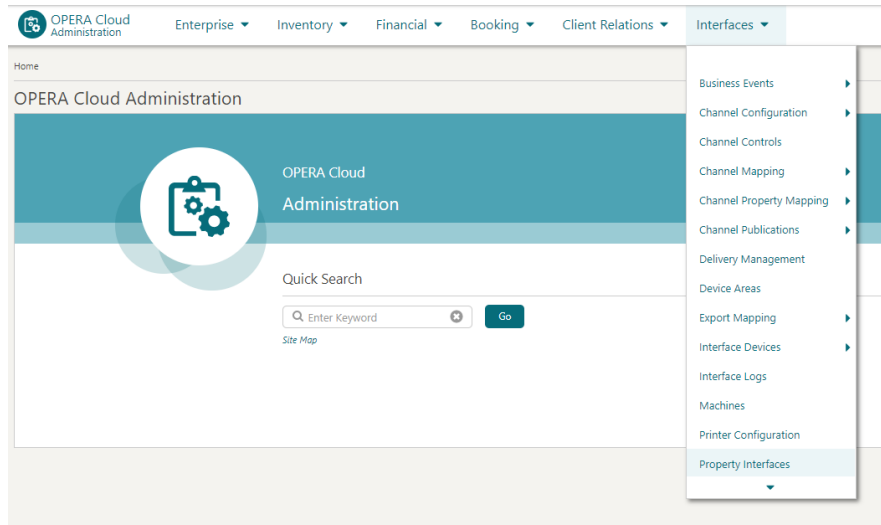
1. Log in to OPERA.
2. From the **Administration** menu, go to **Administration | Interfaces | Interface Devices | Credit Card Terminals**.
3. Click **New**.
4. Enter the following information for the reader:
5. **Terminal ID:** The terminal ID number provided by the vendor. You can also locate this number on the actual card reader device. This data is what will populate the WSN_{um} 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 OPI for Hotel Mobile or OWS/Kiosk Setup in OPERA

1. Navigate to **Administration > Interfaces > Property Interfaces.**



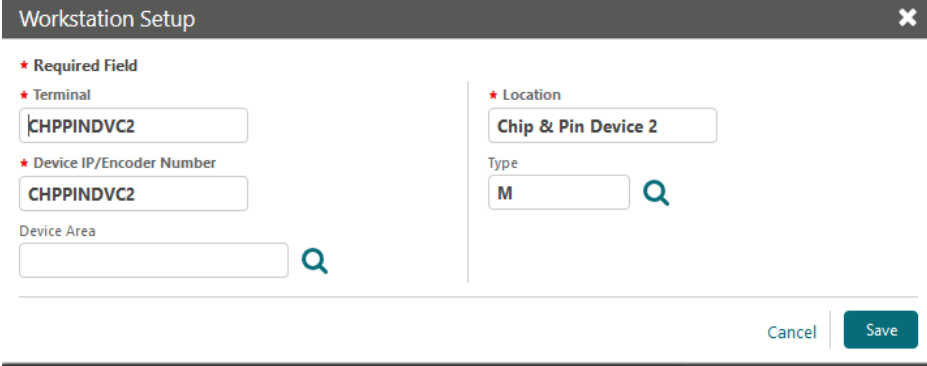
2. Edit the **OPI Interface > Workstations.**

Status	Interface Type	Name	
On	EFT	Oracle Payment Interface for Savon	
Off	BMS	Topher - BMS	
Off	BMS	sandy test updated	
Off	BMS	bms show and tell	
Off	DLS	Saflok System	

3. Select **Workstation Setup.**

Terminal	Device IP/Encoder Number	Location	Type	Device Area
CHPPNDVC2	CHPPNDVC2	Chip & Pin Device 2	M	
CHPPNDVC1	CHPPNDVC1	Chip & Pin Device 1	M	

4. Complete the fields



Workstation Setup

★ Required Field

★ Terminal
CHPPINDVC2

★ Device IP/Encoder Number
CHPPINDVC2

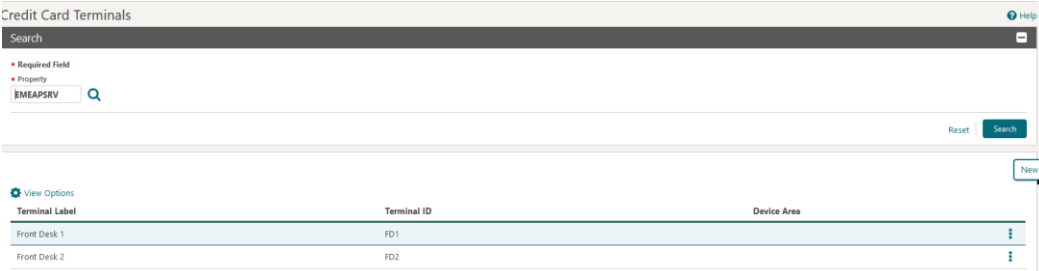
Device Area

★ Location
Chip & Pin Device 2

Type
M

Cancel Save

- **Terminal:** Must match the name assigned to the EMV device by the PSP.
 - **Device IP/Encoder Number:** Must match the name assigned to the EMV device by the PSP.
 - **Location:** Free format description.
 - **Type:** M.
5. Go to **Administration > Interfaces > Property Interfaces > Interface Devices > Credit Card Terminals**.



Credit Card Terminals

Search

★ Required Field
★ Property
EMEAPSRV

Reset Search

New

Terminal Label	Terminal ID	Device Area
Front Desk 1	FD1	
Front Desk 2	FD2	

6. Edit as needed.
- **Terminal ID:** Must match the name assigned to the EMV device by the PSP.
 - **Terminal Label:** Free format description.

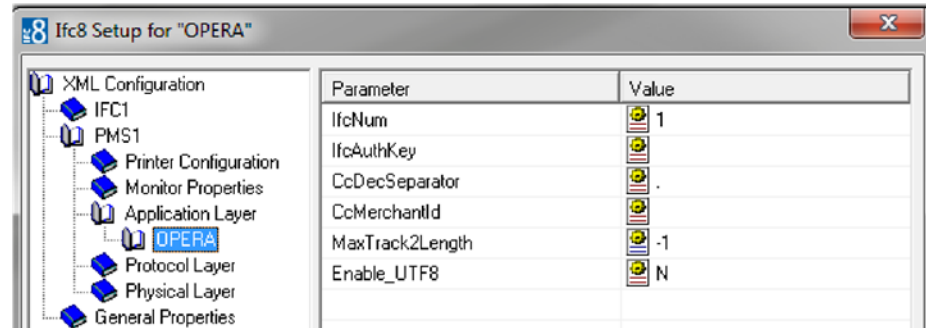
Configuring the Hotel Property Interface (IFC8) Instance to the OPERA Hotel Property Interface (IFC)

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:

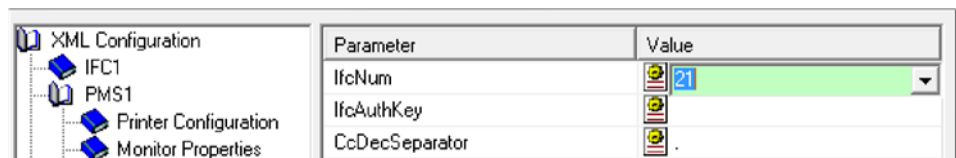
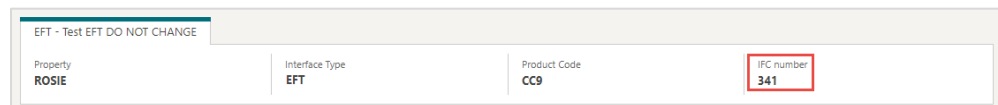
https://docs.oracle.com/cd/E94145_01/docs/Oracle%20Hospitality%20OPERA%20IFC8.pdf

To configure the link between the interfaces:

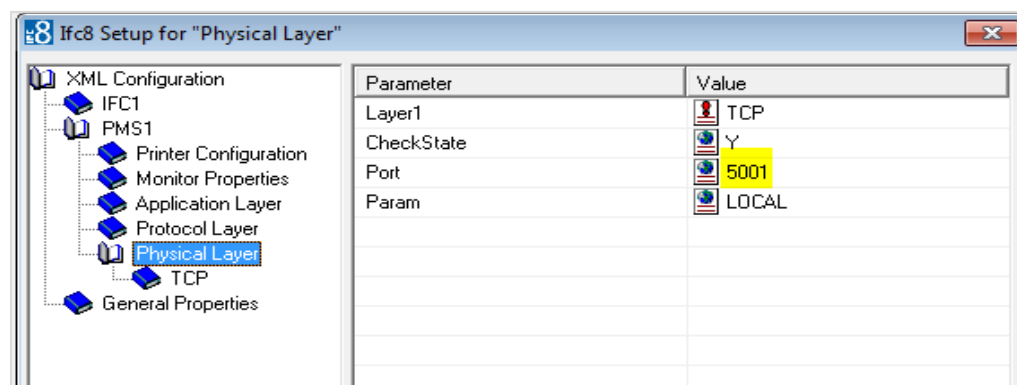
1. In the **Hotel Property Interface**, go to the **PMS1** tree and select **OPERA** in the application layer.
2. Enter the **OPERA IFC** number in the parameter IfcNum value.



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



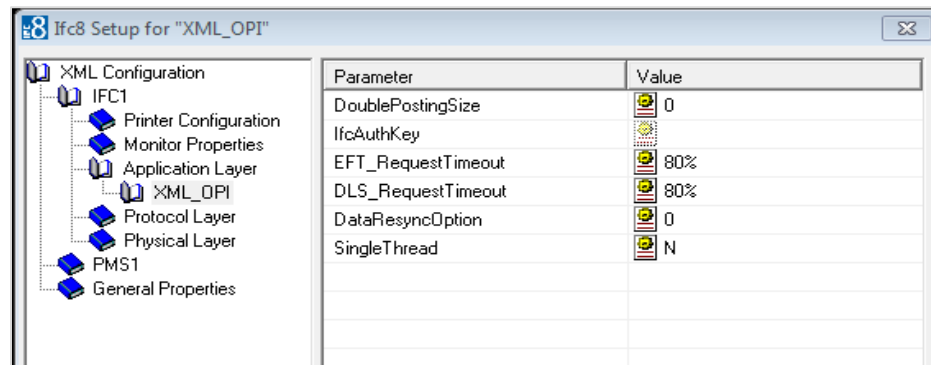
3. Go to the **PMS1** tree in the **Physical Layer**.
4. Enter the port number into Parameter value Port. This is the port IFC8 uses to communicate with the OPERA IFC controller.
5. Select **Enter** and **Apply** to re-initiate IFC8, and then click **Save**.



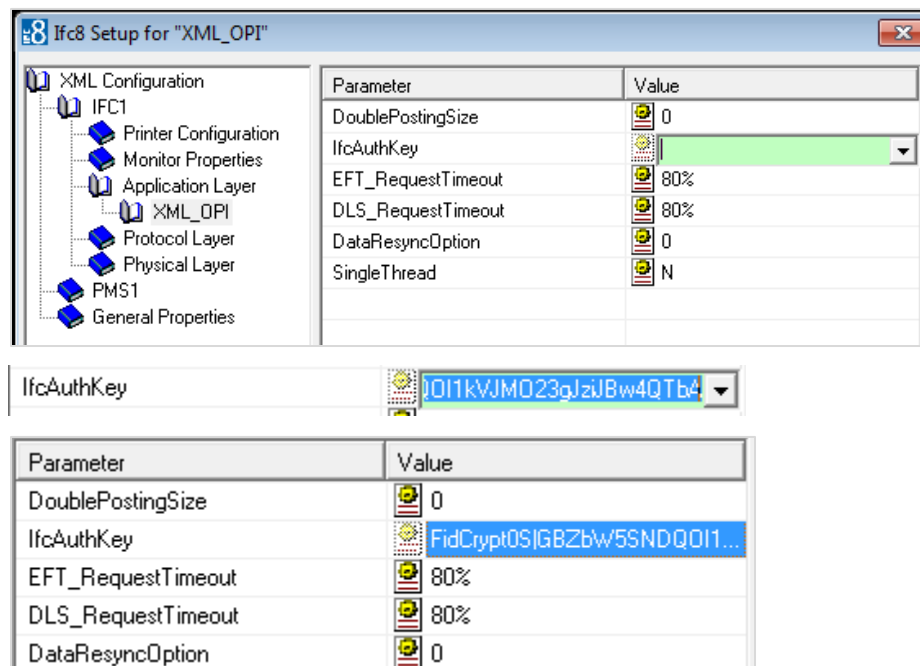
Configuring Authentication for the Hotel Property Interface (IFC8) with OPI

You must secure the connection between OPI and 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.

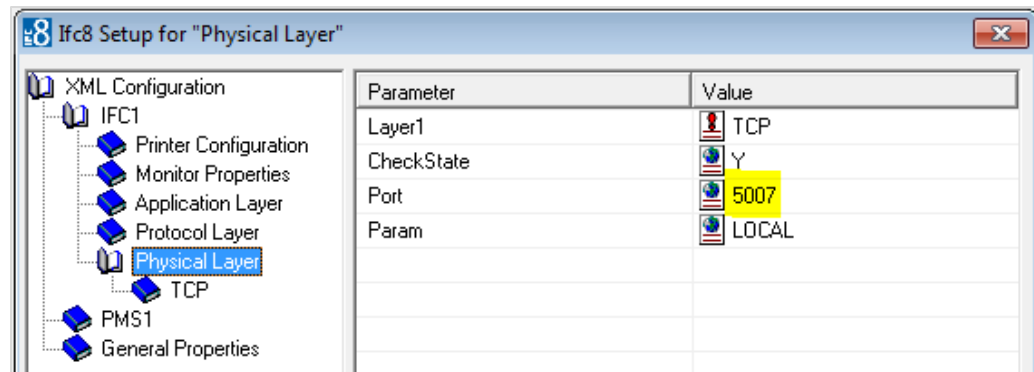


2. Copy the **generated key** from Configuring OPI - OPERA merchant step 3.
3. Copy this string into the IFC8 Parameter **IfcAuthKey** value field.



4. Go to the **IFC1** tree and select the **Physical Layer**.

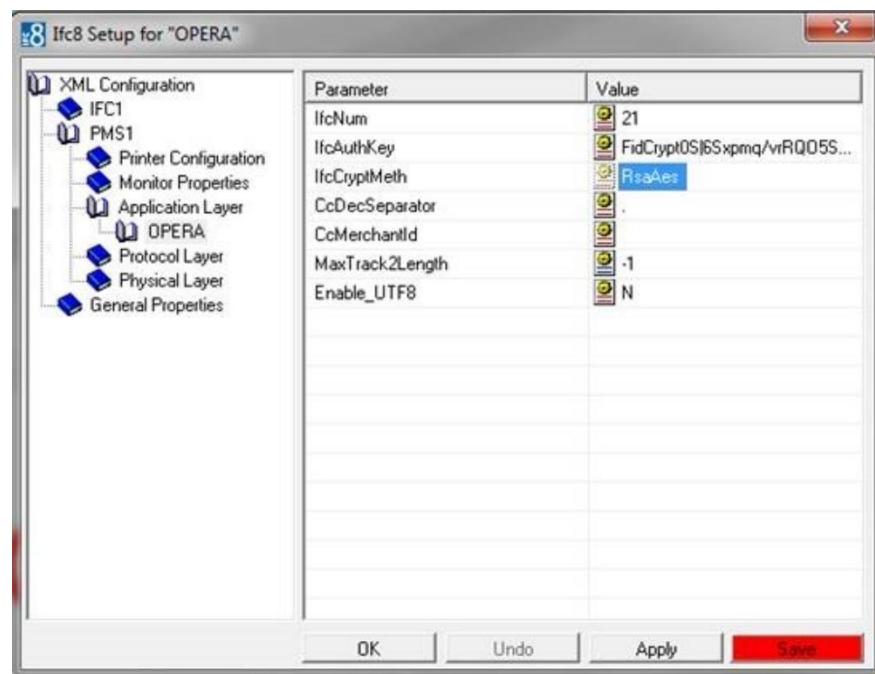
5. Enter the port number in the port value. This is the same port that was configured in OPI.



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.



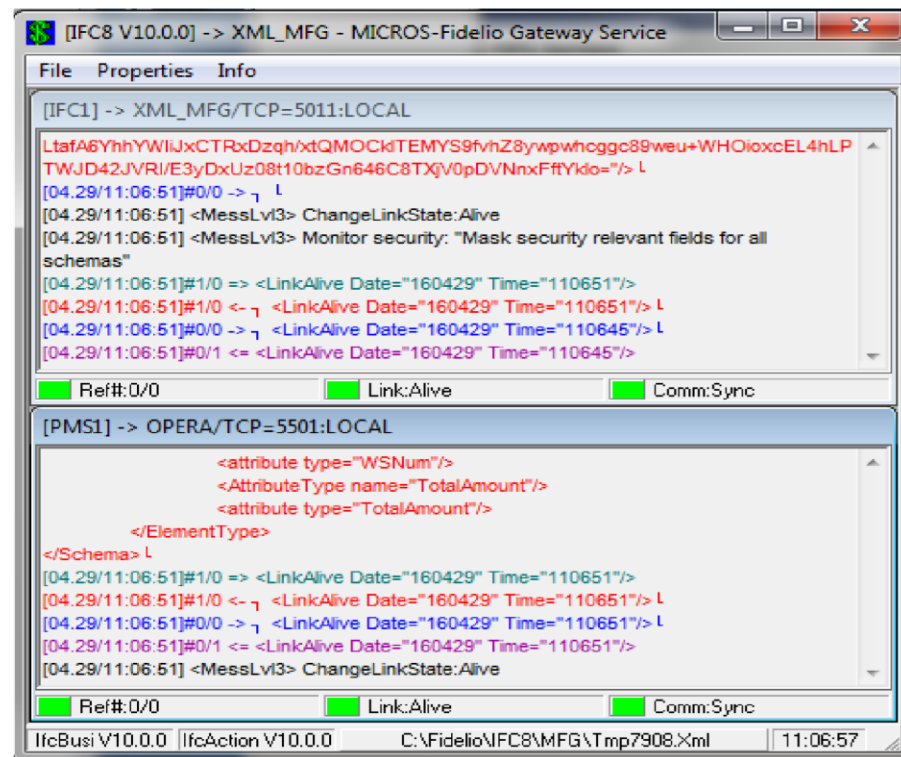
8. Change the Parameter value **IfcCryptMeth** (for IFC8 **PMS OBJECT**) from "**RsaAes**" to "**Des3Idx_Opera_1**".



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.



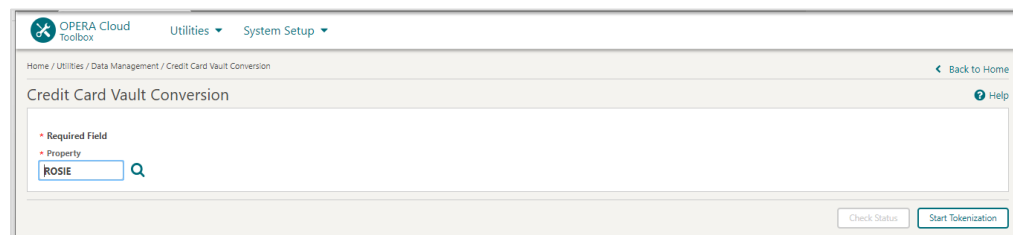
Perform the Bulk Tokenization

Bulk Tokenization is used to convert all historical credit card data in the OPERA database to tokens. With Vault activated for the OPI EFT Property Interface in OPERA Administration.

Go to **Toolbox>Utilities>Data Management>Credit Card Vault Conversion**.

NOTE:

You must be a **Support Organization** user to access **Credit Card Vault Conversion** option. Log in at the resort level where **Vault** is active.



- Select the **Start Tokenization** to exchange the existing credit card numbers in the database to tokens (uses the TPS certificate found on the WS servers).
- A successful message appears once all cards are tokenized.

NOTE:

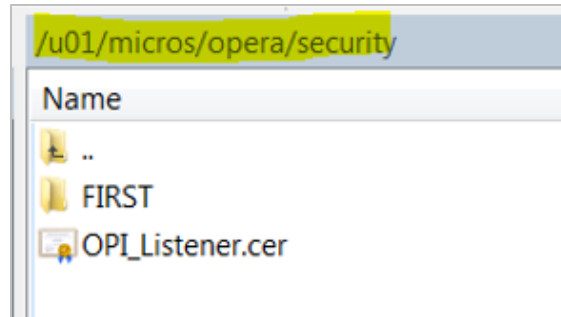
De-tokenization is not allowed in OPERA Cloud.

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

4

Upgrading the OPI

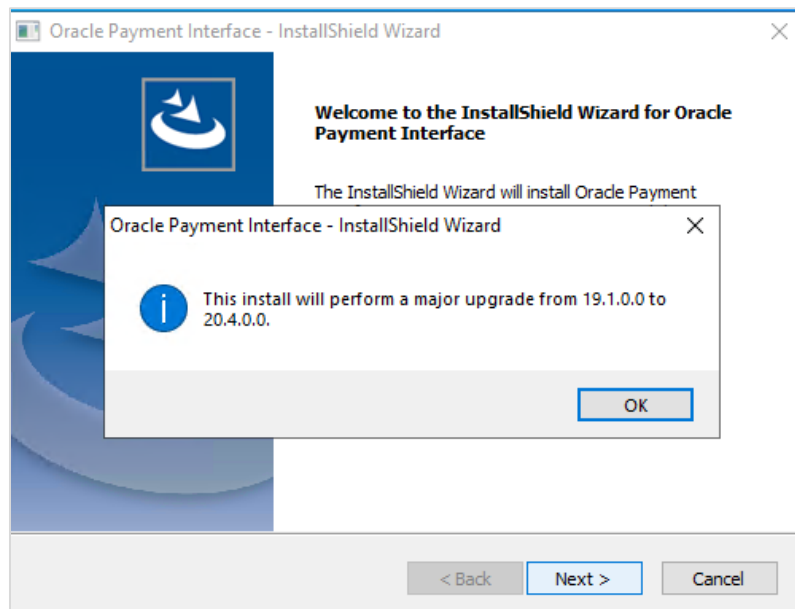
VERY IMPORTANT: Read and follow the upgrade directions.

NOTE:

- OPI upgrade functionality supports:
 - Upgrading OPI 19.1 (include patch releases) to OPI 20.4
 - Upgrading OPI 20.1 (include patch releases) to OPI 20.4
 - Upgrading OPI 20.2 (include patch releases) to OPI 20.4
 - Upgrading OPI 20.3 (include patch releases) to OPI 20.4

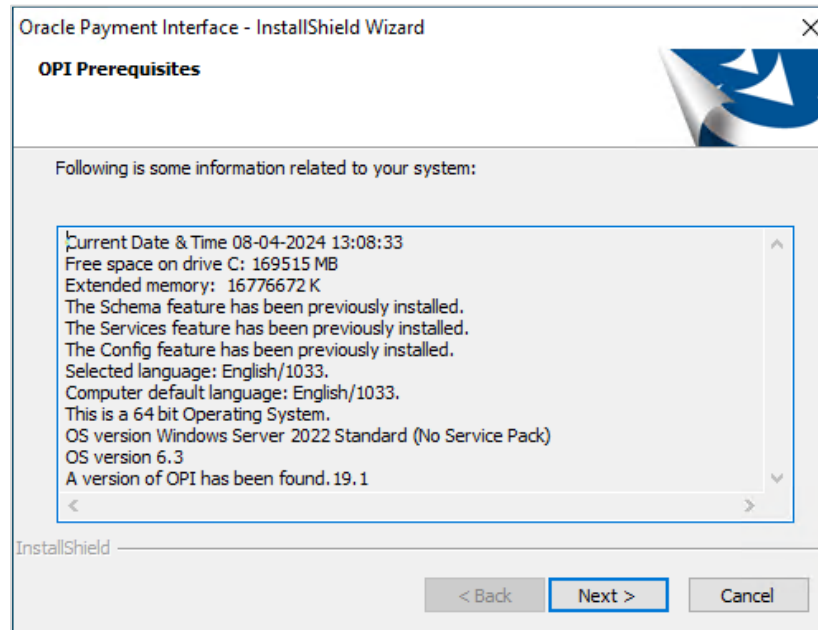
Upgrading OPI 19.1.0.0 to 20.4.0.0

1. Right-click **OraclePaymentInterfaceInstaller_20.4.0.0.exe** file and select **Run as Administrator** to perform an upgrade.
2. Select your language from the drop-down list, and click **OK**.
3. Click **Next**.
4. Click **OK**.



5. Click **Next**.

Ensure all the prerequisites for the OPI installation are met.

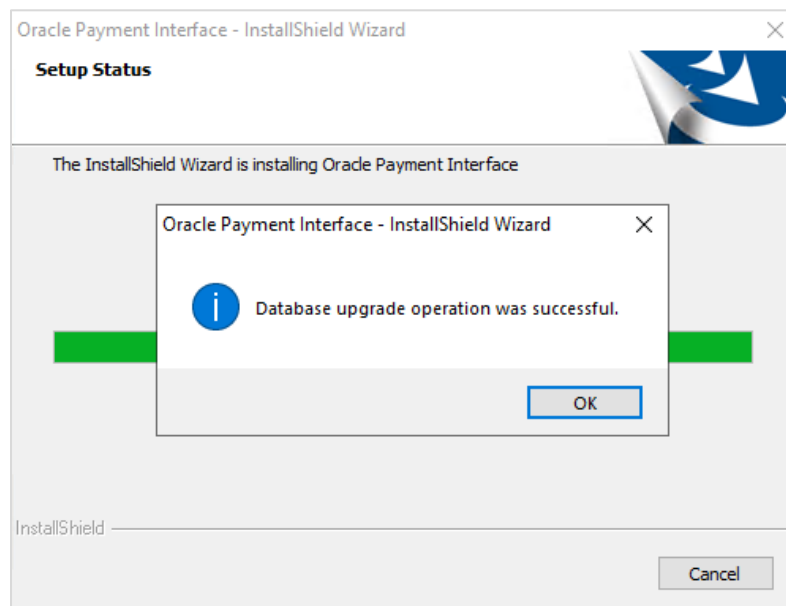


6. Choose a Destination Location. Accept the default installation location or click **Change...** to choose a different location.

7. Click **Next**.

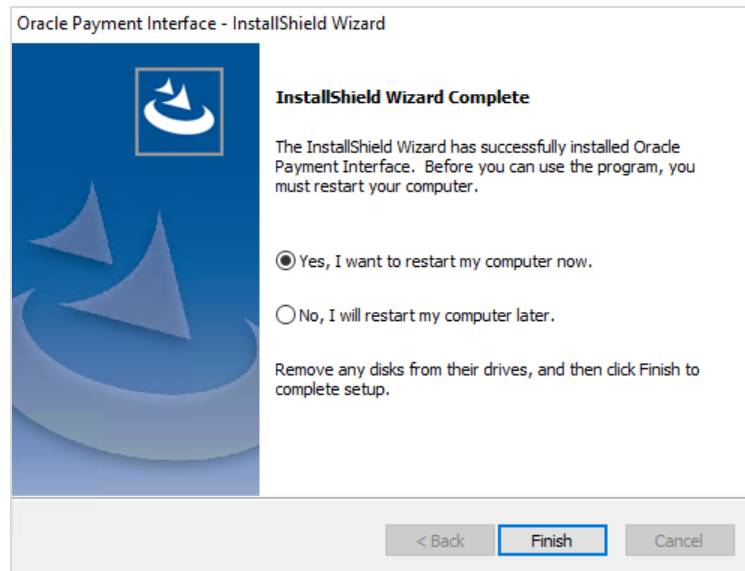
The **Ready to Install the Program** screen appears.

8. Click **Install** to begin the installation.
9. Click **OK**.



10. Enter the **Host** and **Port** that should be used to connect to the OPI Config Service for the Merchant Configuration.

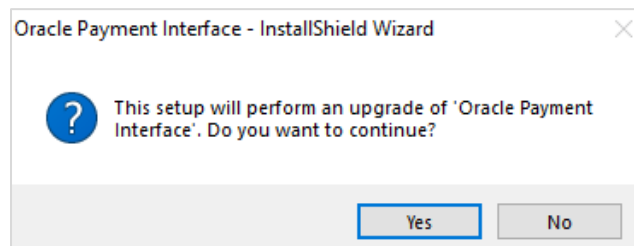
11. Once the installation is complete, the installer will prompt for a reboot of the host machine.



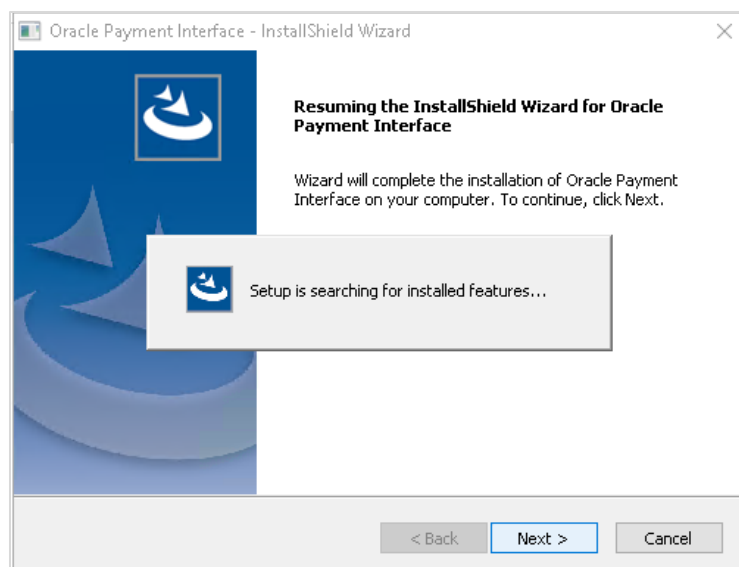
12. Click **Finish**.

Upgrading OPI 20.1.0.0 to 20.4.0.0

1. Right-click **OraclePaymentInterfaceInstaller_20.4.0.0.exe** file and select **Run as Administrator** to perform an upgrade.

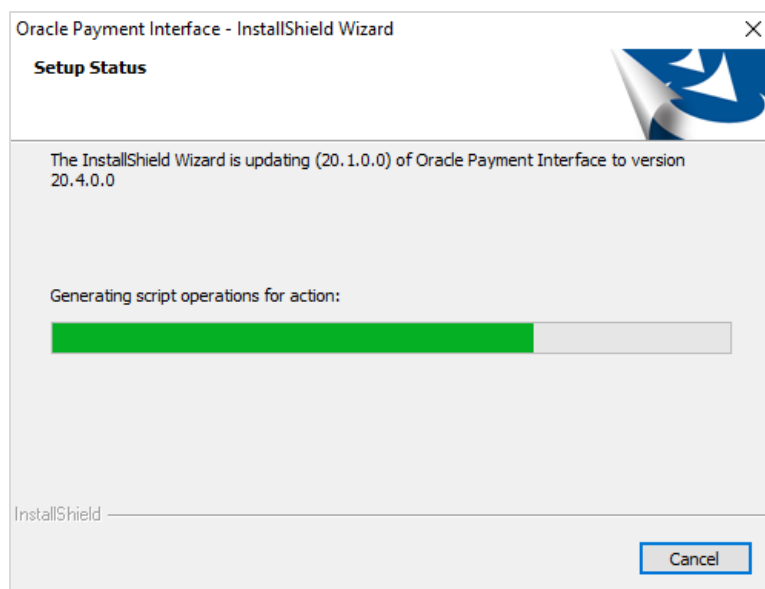


2. Click **Yes**.



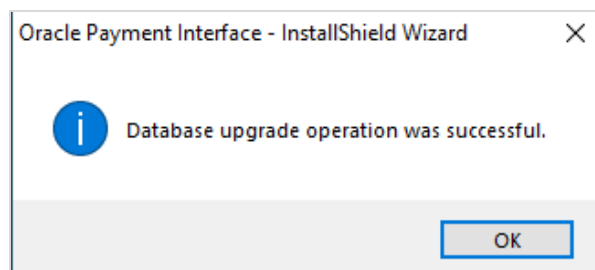
3. Click **Next**.

Setup is searching for installed features.

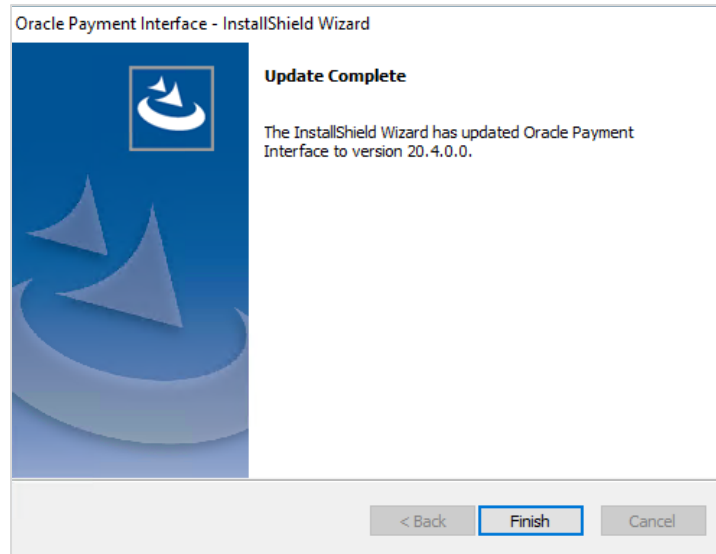


4. Click **Next**.

The Install wizard is updating from **OPI 20.1** to version **20.4**.



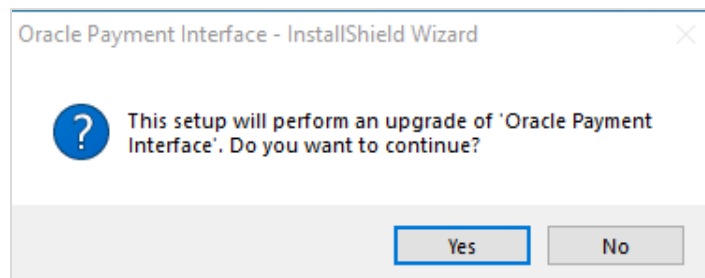
5. Click **OK**.



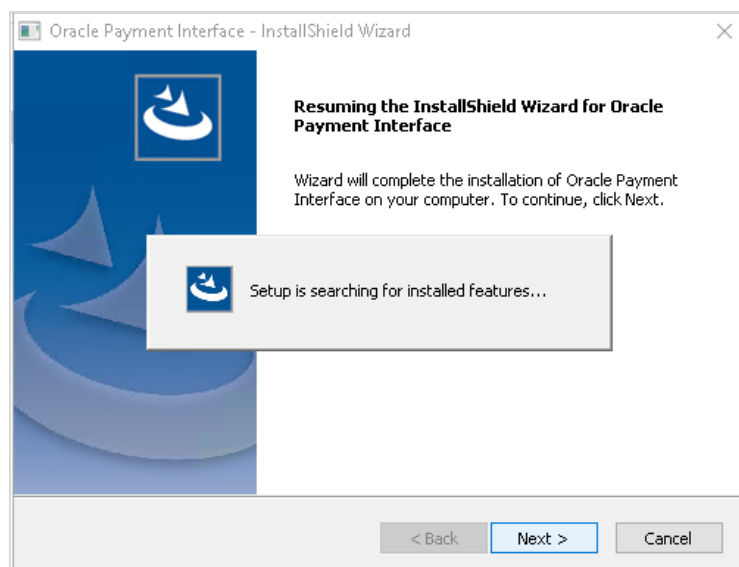
6. Click **Finish**.

Upgrading OPI 20.2.0.0 to 20.4.0.0

1. Right-click **OraclePaymentInterfaceInstaller_20.4.0.0.exe** file and select **Run as Administrator** to perform an upgrade.

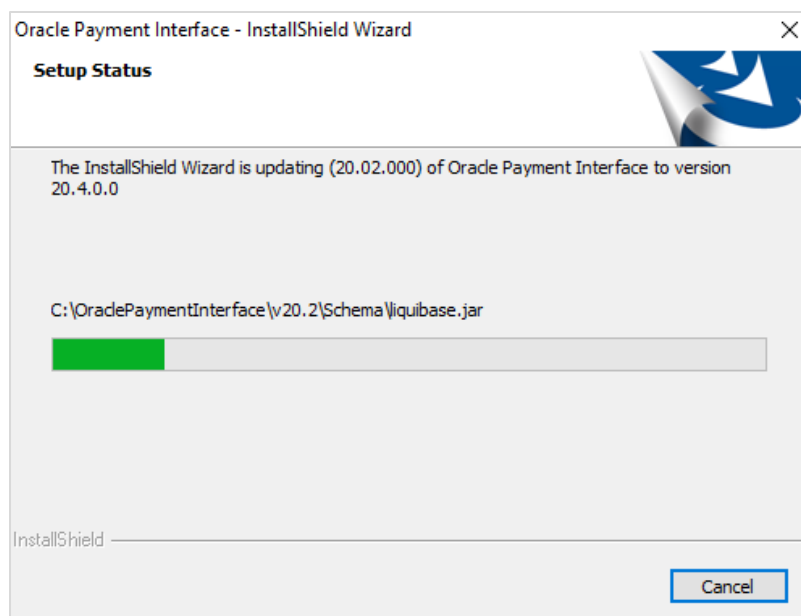


2. Click **Yes**.



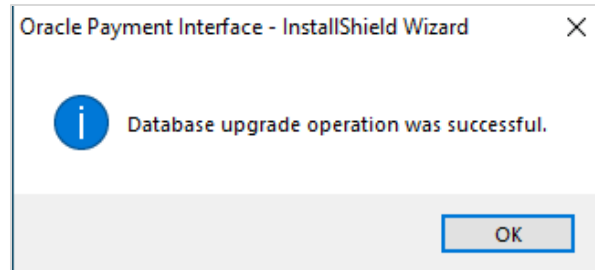
3. Click **Next**.

Setup is searching for installed features.

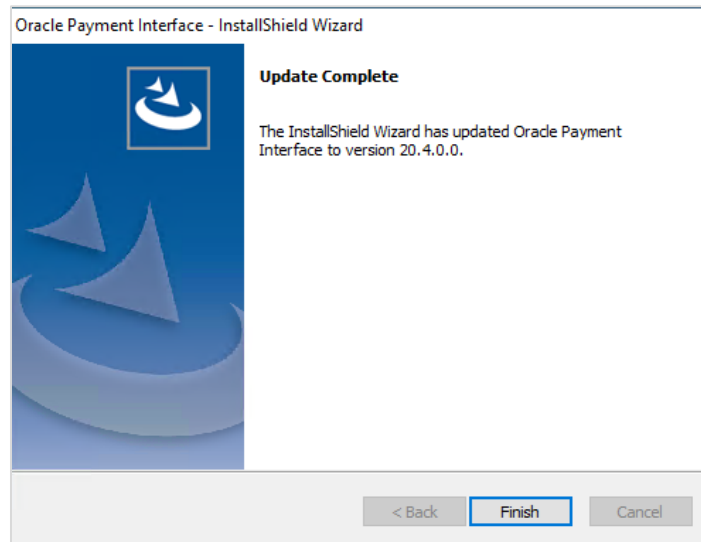


4. Click **Next**.

The Install wizard is updating from **OPI 20.2** to version **20.4**.



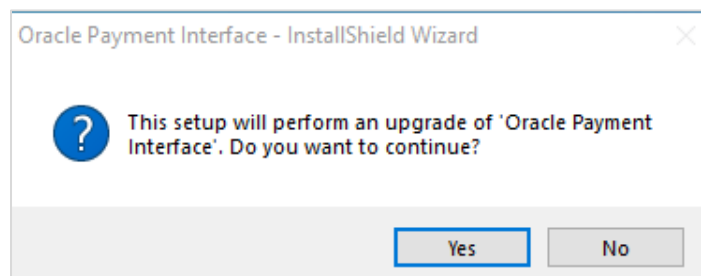
5. Click **OK**.



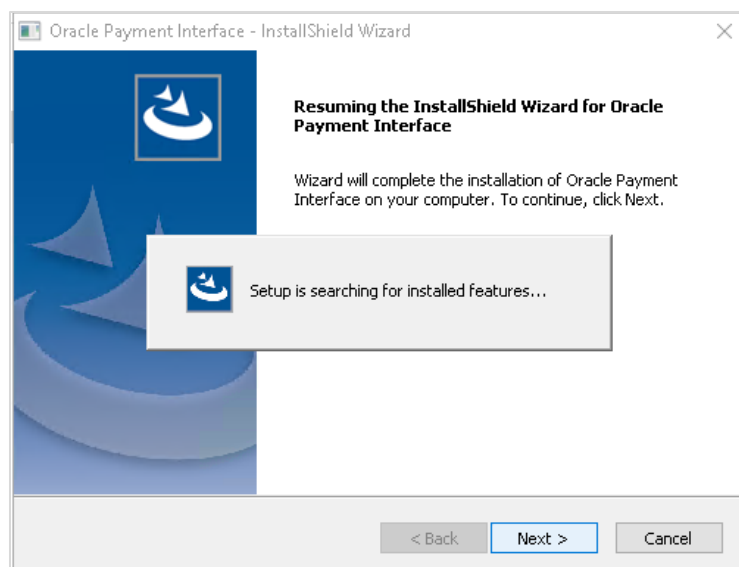
6. Click **Finish**.

Upgrading OPI 20.3.0.0 to 20.4.0.0

1. Right-click **OraclePaymentInterfaceInstaller_20.4.0.0.exe** file and select **Run as Administrator** to perform an upgrade.



2. Click **Yes**.

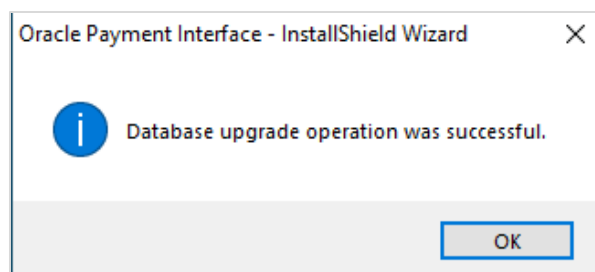


3. Click **Next**.

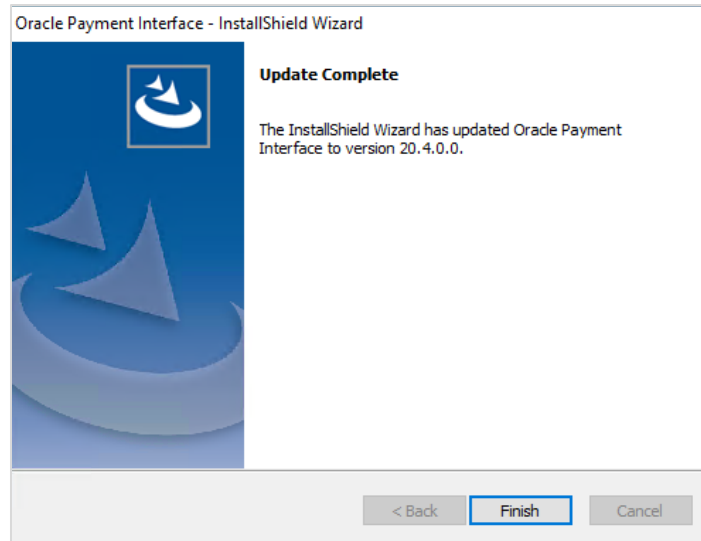
Setup is searching for installed features.

4. Click **Next**.

The Install wizard is updating from **OPI 20.3** to version **20.4**.



5. Click **OK**.



6. Click **Finish**.