

Oracle Hospitality Payment Interface OPERA Reservation System (ORS) OPI Installation Guide



Release 20.4
F95684-01
June 2024

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

Oracle Hospitality Payment Interface OPERA Reservation System (ORS) OPI Installation Guide Release 20.4

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Contents

Contents	3
<hr/>	
Preface	4
<hr/>	
1 Pre-Installation Steps	1-1
<hr/>	
2 ORS-OPI Considerations	2-1
<hr/>	
3 ORS-OPI Communication Flow Diagrams	3-1
<hr/>	
4 Installing the OPI	4-1
<hr/>	
5 OPERA (ORS) Configuration	5-1
<hr/>	
Creating an EFT Interface	5-2
Configuring the OPI for ORS	5-6
Credit Card Type Payment Setup Information	5-7
Certificate Import using Microsoft Management Console	5-12
Perform Bulk Tokenization	5-15

Preface

Purpose

This document describes how to organize environments for an installation of the Oracle Payment Interface (OPI) for OPERA Reservation System (ORS) On Premise Token Exchange Service.

Audience

This document is intended to cover the additional steps required to setup OPI-ORS to handle the On Premise Token Exchange functionality.

This document covers only the configuration of the additional On Premise Token Exchange functionality, it does not cover in detail, installation of the OPI software and IFC8 merchant configuration, separate documentation already exists to cover this.

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

1

Pre-Installation Steps

The Oracle Token Proxy Service is required to tokenize card data manually entered into ORS. ORS can be deployed with or without the ORS Database Integrated to OPERA PMS. The following explains the components required depending on the ORS Set Up.

Follow this link for Minimum Software and Hardware requirements for the Token Proxy Service. https://docs.oracle.com/en/industries/hospitality/integration_platforms.html

1. ORS Database integrated with OPERA PMS.
 - For an OPERA On Premise solution, the Token Proxy Service is installed on-premise
 - For an OPERA 5 Hosted solution, or OPERA Cloud, the Token Proxy Service is hosted by Oracle.
2. ORS Database NOT integrated with OPERA PMS
 - The Token Proxy Service is installed in the same environment where ORS is hosted

2

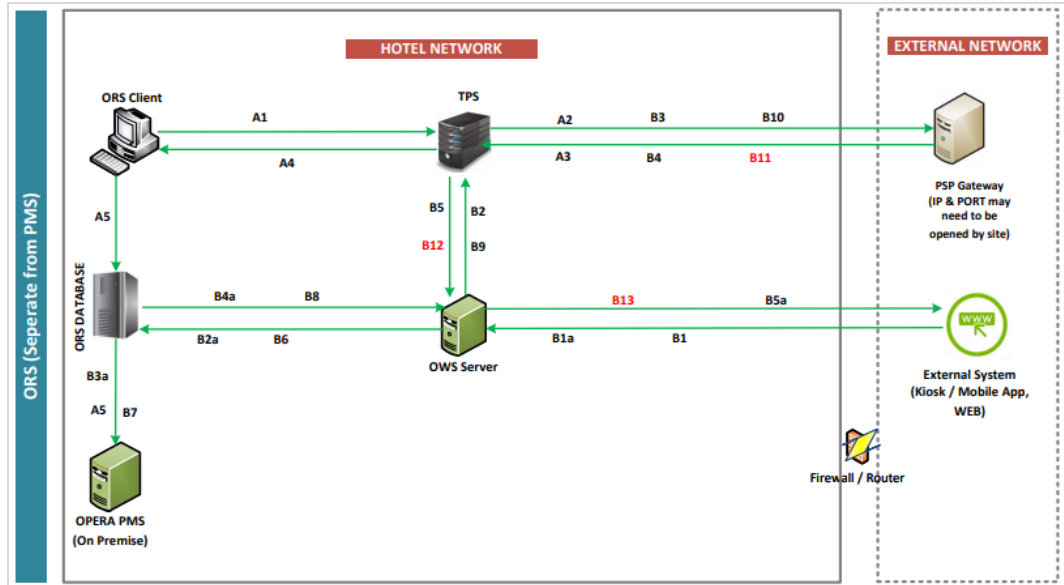
ORS-OPI Considerations

- **Tokenization:** Tokenization of the card data would run one resort at a time. Multiple resorts can also be selected if tokenized at the same time.
- **Bulk tokenization:** Since there are no financial transactions processed in ORS, there is nothing to settle at the ORS level. All the financial transactions for a reservation are processed at the PMS level.

3

ORS-OPI Communication Flow Diagrams

The below diagram depicts the ORS (Separated from PMS).



Use Case

A. ORS - Making Reservation: Multi-Property

1. ORS Client Sends Token request to TPS
2. TPS sends Token request to PSP External Server
3. PSP returns the confirmation + Token to TPS
4. TPS Sends Token to ORS Client → ORS DB
5. ORS DB Sends Reservation including the Token to OPERA PMS

B. OWS Multi-Property:

When Raw CC sent:

OWS REQUEST

1. Card Data sent from Ext System to OWS
2. OWS sends Card Data to TPS
3. TPS forwards Card Data to PSP External Server
4. PSP External Server returns the Token to TPS
5. TPS returns token to OWS
6. OWS inserts Token and Reservation Data to ORS Database
7. ORS sends Token and Reservation Data to PMS

OWS RESPONSE

8. OWS retrieves Token from ORS Database
9. OWS sends Token to TPS.
10. TPS sends Token to PSP.
11. PSP returns PAN (Raw CC) to TPS.
12. TPS return PAN to OWS.
13. OWS sends PAN back in the response to the External System

When a Token is Sent

- 1a. Token sent from Ext System to OWS
- 2a. OWS inserts Token and Reservation Data to ORS Database
- 3a. ORS sends Token and Reservation Data to PMS
- 4a. OWS retrieves Token from ORS Database
- 5a. OWS sends Token back in the response to the External System

4

Installing the OPI

 **NOTE:**

OPI deployment for ORS, requires the Token Proxy Service to be installed as ONLY GetToken transactions will be performed. CHIP&PIN setup is NOT required.

Please refer the [Oracle Documentation Website](#) locations for the latest Oracle payment Interface and Self Hosted Token Proxy installation document:

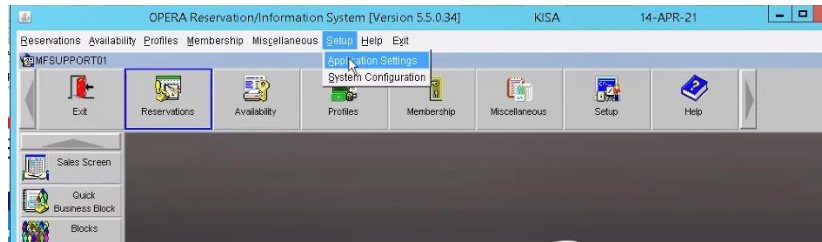
5

OPERA (ORS) Configuration

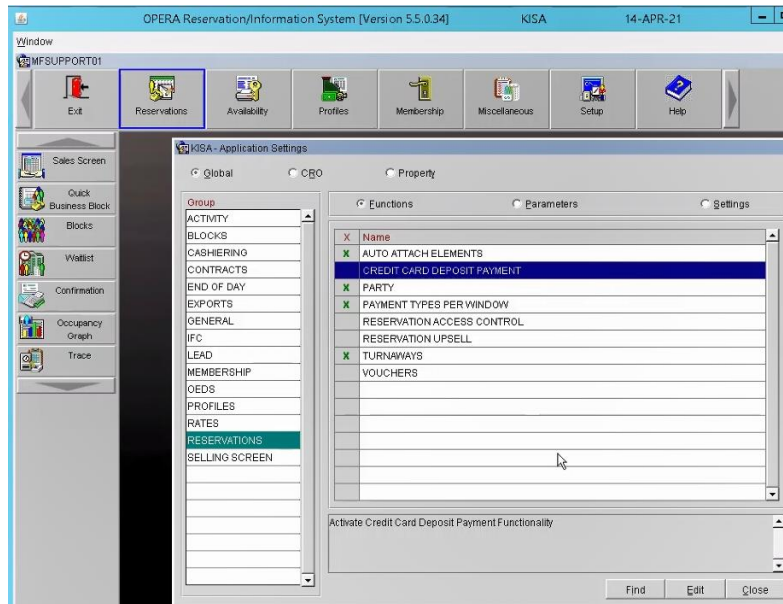
NOTE:

The OPI Interface Configuration for ORS needs to be installed and activated. This Configuration option is available only when the **Credit Card Deposit Payment** function in Application Settings is turned on. Follow the below instructions to verify this is turned on.

1. Log in to **ORS/CRO** and go to **Configuration**.
2. Go to **Setup | Application Settings**.



3. Select the **Global | Reservation | Functions | Credit Card Deposit Payment** option.

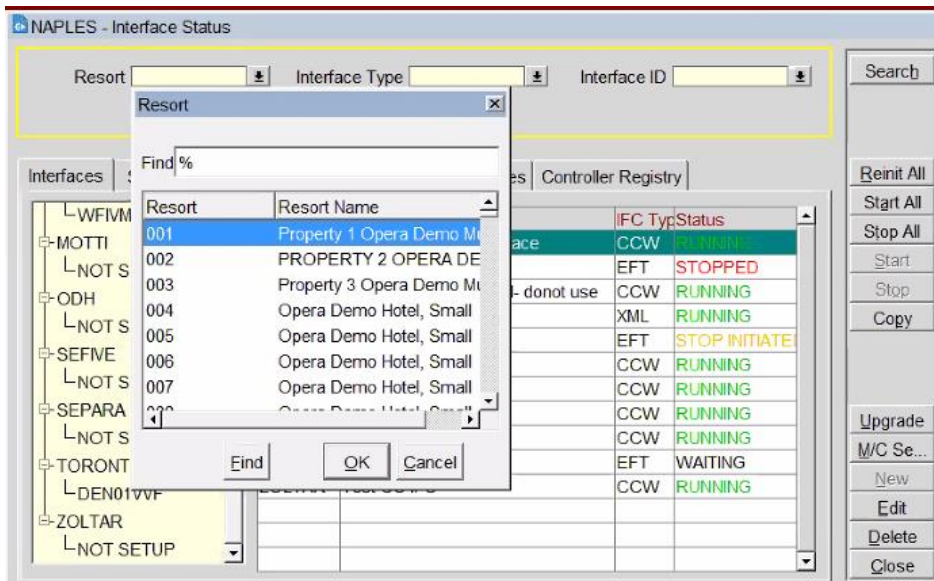


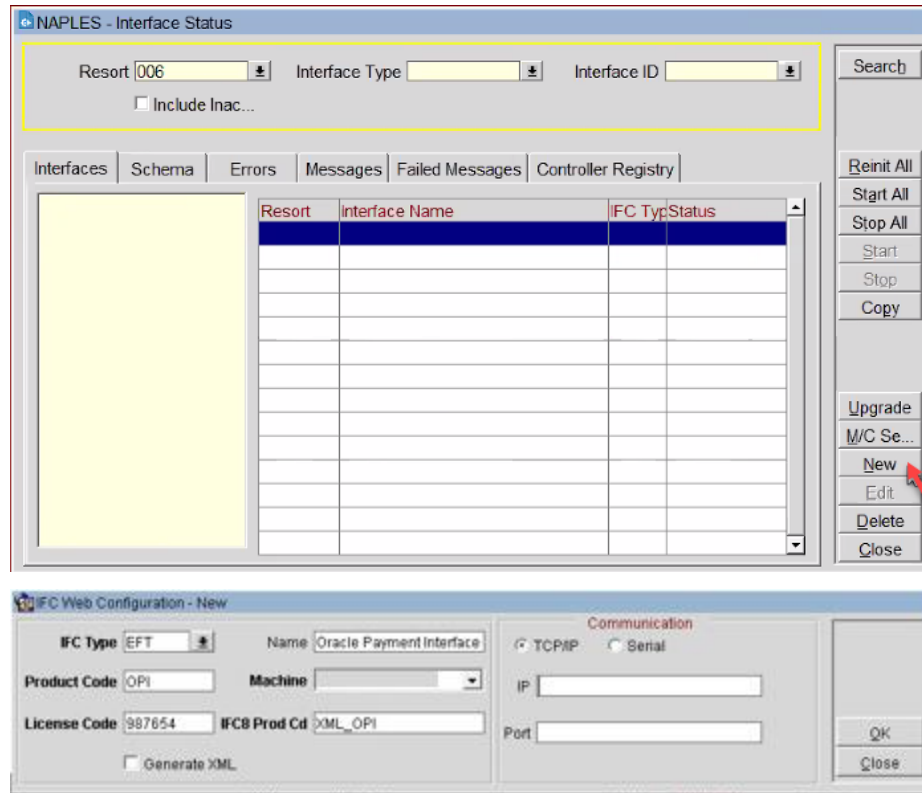
4. Click **Edit** and change the value to "Y".

Creating an EFT Interface

1. Log in to **ORS/CRO** and go to **Configuration**.
2. Select the menu option **Setup | Property Interfaces | Interface Configuration**. If there is no active EFT or CCW IFC Type, select **New** to add the configuration for a new EFT interface.

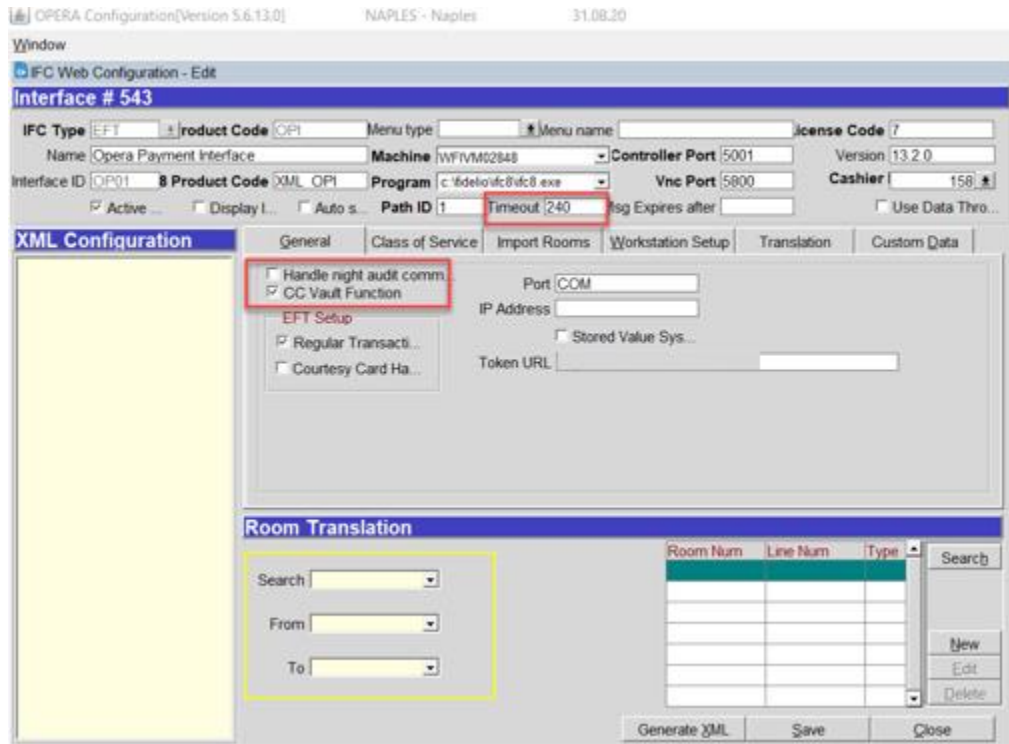
Each time you need to configure a property specific setting needs to be configured (transaction code, payment methods and so on) they must be set up at the property level and the specific property needs to be selected.





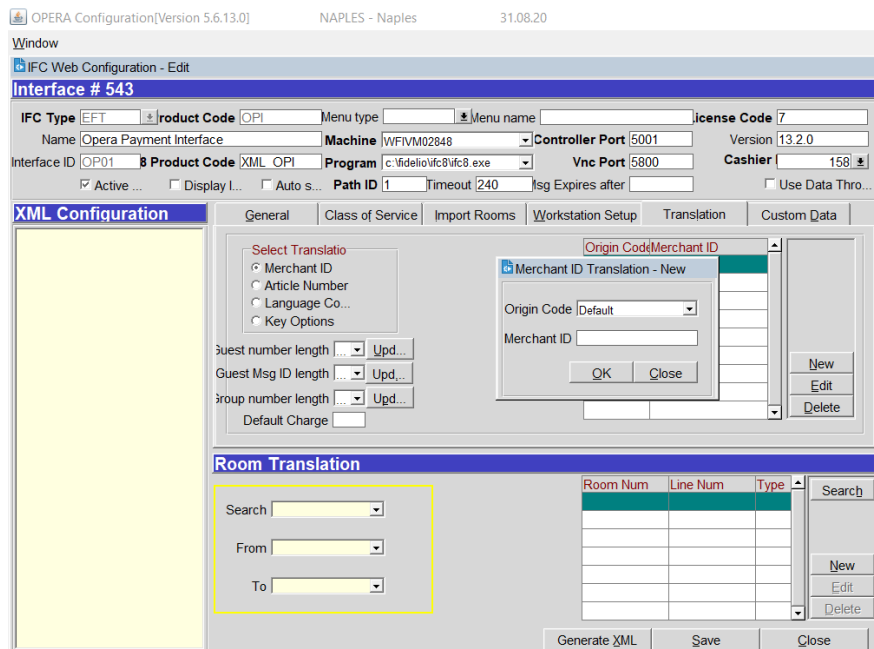
3. Enter the following options, and then click **OK**:
 - a. **IFC Type**: EFT
 - b. **Name**: Oracle Payment Interface for ORS
 - c. **Product Code**: OPI
 - d. **Machine**: Select the machine
 - e. **License Code**: License code for interface
 - f. **IFC8 Prod Cd**: XML_OPI

4. On the configuration screen below, select the following:



- a. Select the check box to enable the **CC Vault Function**.
- b. Define the **Timeout** value as 210.

5. Select the **Translation** tab, and then click **Merchant ID**.



6. Select **New** to add the Merchant ID. This must be the same as previously configured in OPI (MPG) Configuration.

OPERA Configuration[Version 5.6.13.0] NAPLES - Naples 31.08.20

Window

IFC Web Configuration - Edit

Interface # 543

IFC Type: EFT Product Code: OPI Menu type: Menu name: License Code: 7
 Name: Opera Payment Interface Machine: Controller Port: 5001 Version: 13.2.0
 Interface ID: OP01 Product Code: XML OPI Program: Vnc Port: 5800 Cashier: 158
 Active Display L... Auto s... Path ID: 1 Timeout: 240 Msg Expires after: Use Data Thro...

XML Configuration | General | Class of Service | Import Rooms | Workstation Setup | Translation | Custom Data

Select Translatio
 Merchant ID
 Article Number
 Language Co...
 Key Options

Guest number length: Upd...
 Guest Msg ID length: Upd...
 Group number length: Upd...
 Default Charge:

Origin Code	Merchant ID
DEFAULT	GEN/MEAD

New Edit Delete

Room Translation

Search:
 From:
 To:

Room Num	Line Num	Type

Search New Edit Delete

Generate XML Save Close

Configuring the OPI for ORS

1. Log into **ORS**.
2. Go to **Configuration | Setup | Property Interfaces | Interface Configuration | edit EFT IFC OPI | Custom Data tab**.
3. The Token URL is accessible from **Configuration | Setup | Property Interfaces | Interface Configuration | edit EFT IFC OPI | General**.

The screenshot shows the 'Interface # 12845' configuration window. The 'XML Configuration' tab is selected, showing a table with the following data:

User Defined	Value
HTTP_PASSWORD	
HTTP_USERNAME	
VAULT_CERT_CHAIN_CODE	CHA
VAULT_ID	12845
VAULT_MAX_CC_PROCESSED	50
WALLET_PASSWORD	

The 'Room Translation' section below the table includes search and filter options (Search, From, To) and a table with columns 'Room Num', 'Line Num', and 'Type'. Buttons for 'Generate XML', 'Save', and 'Close' are at the bottom right.

- OPERA uses the CREDIT CARD VAULT CHAIN CODE for the certificate lookup and should be populated with what was entered during the OPI configuration for PMS.
- The CREDIT CARD VAULT WEB SERVICE URL should be in the following format:
Example: `https://OPIHost or address :OPITokenPortNumber/TokenOPERA`

The screenshot shows the 'Interface # 12845' configuration window. The top section contains fields for IFC Type (EFT), Product Code (FID), Name (OPI_EFT), Machine (DEN00QDA), Program (c:\fdel\ofc8\ifc8.exe), and various ports (5001, 5800). Below this is the 'XML Configuration' section with tabs for General, Class of Service, Import Rooms, Workstation Setup, Translation, and Custom Data. The 'General' tab is active, showing options like 'Handle night audit commands', 'CC Vault Function', and 'EFT Setup' with sub-options for 'Regular Transaction' and 'Courtesy Card Handling'. At the bottom is the 'Room Translation' section, which includes search and range selection fields and a table with columns for Room Num, Line Num, and Type.

- The CREDIT CARD VAULT ID can be set to the Interface # displayed above in the IFC title bar.
- The CREDIT CARD 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 (This is determined by the Payment Partner/Vendor; verify with the Partner/Vendor, the number of credit cards that can be processed per batch).

Credit Card Type Payment Setup Information

The OPERA Card Types are linked to the OPI Merchant Tenders. The common Credit Card types are automatically included in the OPERA Configuration (AB, AM, AX, CB, CU, DC, DS, DT, EC, ER, JC, JL, LP, MC, NB, SO, SV, SW, VA, XY, ZZ) and others can be created as needed. Each OPERA PMS Credit Card Payment Method will have its own Credit Card Type and transaction code.

Sample List of Card Types

Payment Types - Customer Present (Chip & PIN)	Description	Capture Method
VA	Visa	CP can be used. Transaction will go to the EMV (Chip & PIN) device.
MC	MasterCard	CP can be used. Transaction will go to the EMV (Chip & PIN) device.
AX	American Express	CP can be used. Transaction will go to the EMV (Chip & PIN) device.
DC	Diners Club	CP can be used. Transaction will go to the EMV (Chip & PIN) device.
JC	JCB	CP can be used. Transaction will go to the EMV (Chip & PIN) device.
CU	China Union Pay	CP can be used. Transaction will go to the EMV (Chip & 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 & 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 & 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 & PIN) device.
MS	Maestro	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip & PIN) device. Customer present ONLY!
VP	V-Pay	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip & PIN) device. Customer present ONLY!
BC	GiroCard	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip & PIN) device. Customer present ONLY!

Payment Types - Customer Present (Chip & PIN)	Description	Capture Method
AB	AliPay	CP can be used, but PayOnly recommended. Transaction will go to the EMV (Chip & PIN) device. Customer present ONLY!

Payment Types – Customer NOT Present (Keyed)	Description	Capture Method
KVA	Visa Credit Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KMC	MasterCard Credit 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 Keyed	Card not present transaction (CNP, MO/TO, Mail Order / Telephone Order, MOTOEC)
KCD	China Union Pay Debit keyed	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 & 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

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

Update OPI Configuration Merchant Tenders

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

Card Type	Payment Code
AliPay	AB
Alliance	AL
American Express	AX
China UnionPay	CU
China UnionPay Debit	CD
Debit	DD
Diners Club	DC
Discover	DS
EC Chip	EC

Certificate Import using Microsoft Management Console

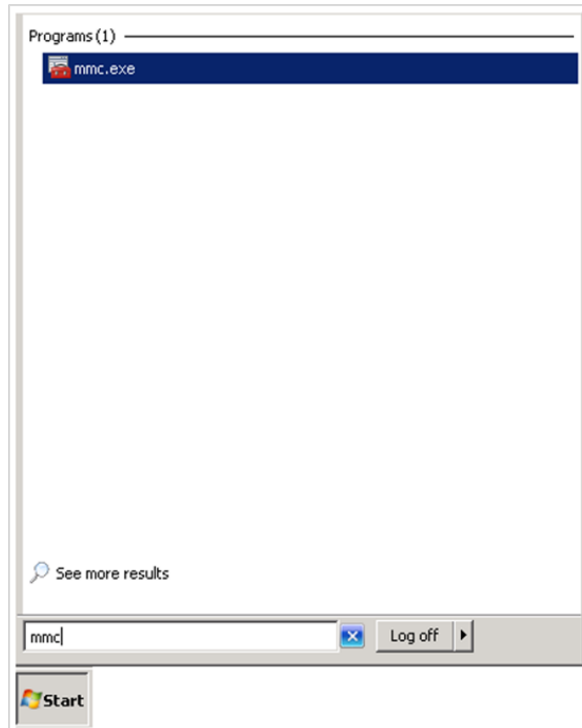
All the ORS Client terminals that need to perform Token Exchange requests need client certificates to be imported into Trusted Root Certification Authorities using mmc.exe. These certificates will be generated when OPI is installed. OPI Installer will provide copies of these certificates.

NOTE:

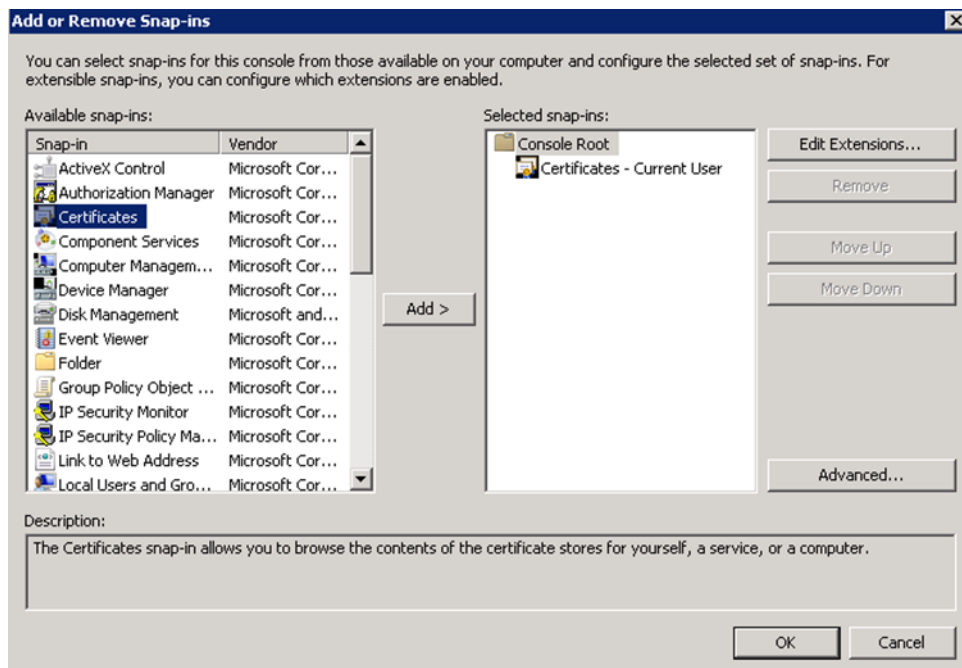
For the following OPERA versions, the Mutual Authentication requirement was removed for OPI TPS communication.

- OPERA V5.5.0.24.4 and V5.6.6.
- OPERA Cloud 19.4.0.0 and 1.20.16.0.

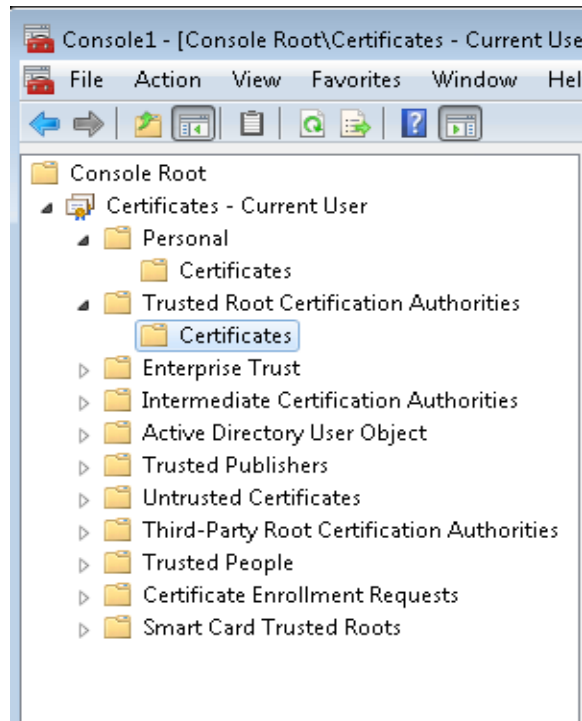
1. Find and open mmc.exe from Start menu.



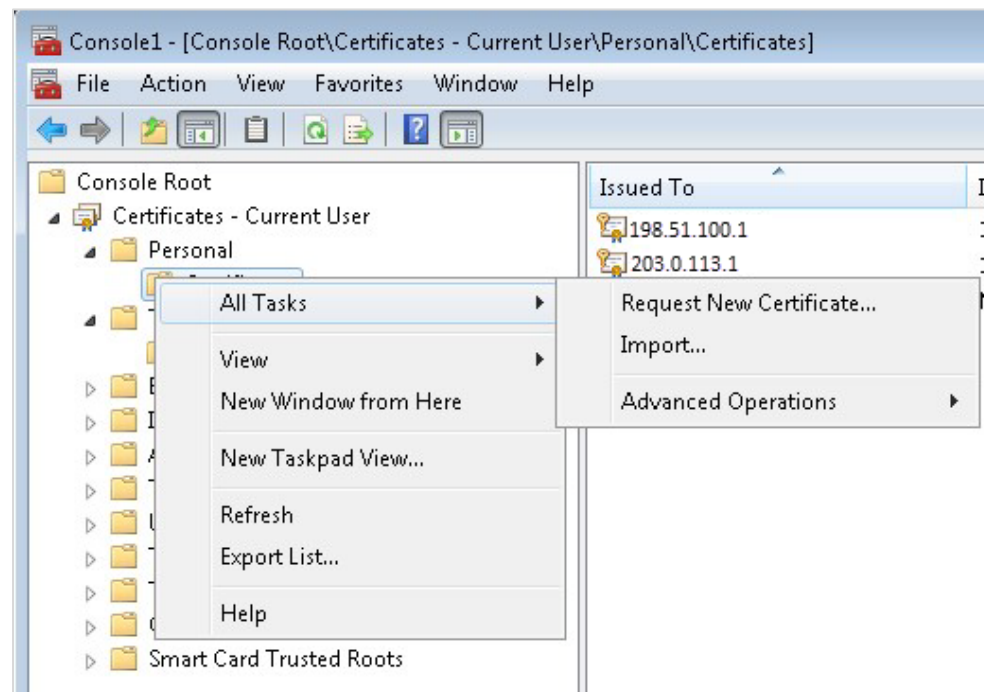
2. Go to **File | Add or Remove Snap-ins**, add certificates to Selected snap-ins, and then click **OK**.



3. Expand **Certificates**, expand **Personal** or **Trusted Root** as required, and then select **Certificates**.



4. Right-click **Certificates**, select **All Tasks**, and then select **Import**.



- a. On the **Certificate Import Wizard Welcome** page, click **Next**.
- b. Browse to the location of the certificate file, and then click **Next**.
- c. If required enter the password relevant to the certificate you are importing, and then click **Next**.

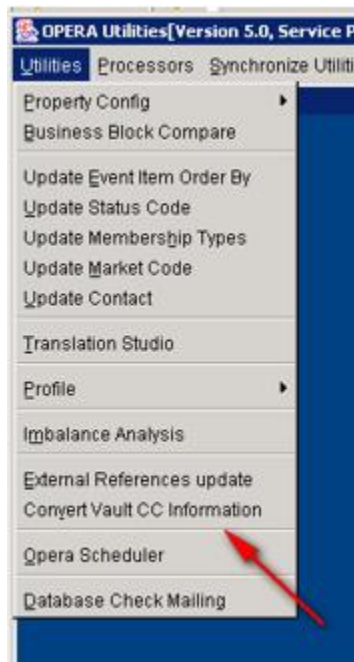
- d. If the import is successful, then the certificates, common Name will be listed under the folder that was selected during import.

Perform Bulk Tokenization

- 1. Test Connection. This is done from the **Utilities** Module.

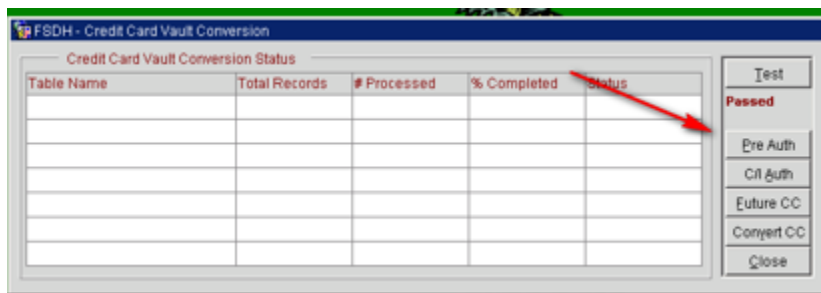


- 2. From the **Utilities** module, select the **Convert Vault CC Information** option.

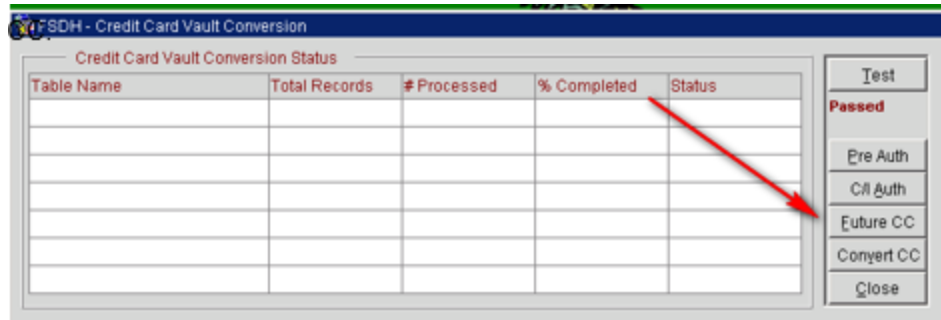


- 3. Click **Test Client** (this will verify that the certificate is loaded on this machine where OPERA is accessed). A credit card number is needed to verify that the token can be retrieved successfully. Once successful, the Vault Conversion process can be run.

“Passed” test will activate the **Pre auth**, **C/I auth**, **Future CC** and **Convert CC** options. If the test fails, refer to HTTP_TRANSACTIONS_LOG to check the reason for the failure.

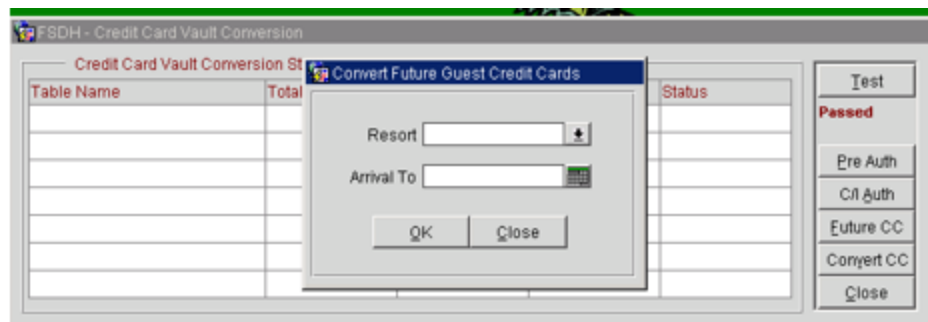


4. Convert Future Guest Credit Cards. Click **Future CC**, if needed or the **Convert CC** action will convert all the existing data.

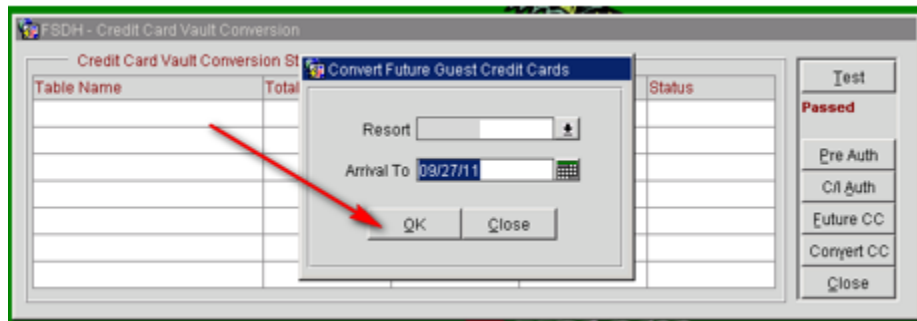


Populate the parameters as needed.

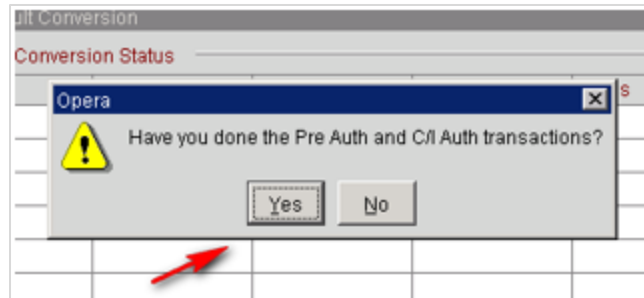
- **Resort:** This allows you to choose a specific resort to convert in a multi property environment. Leave blank if you are working on a single property or want to convert all resorts in the schema.
- **Arrive To:** This is the arrival date you want the system to convert out to. The next business date should suffice unless you are working in a multi property environment where the conversion might take several days.



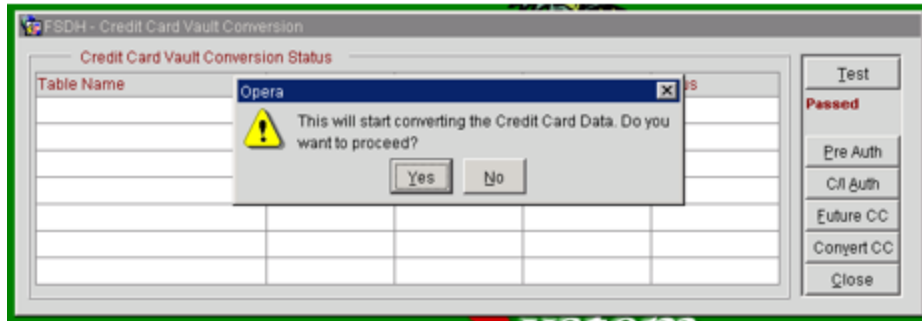
- Once the parameters are populated, click **OK**.



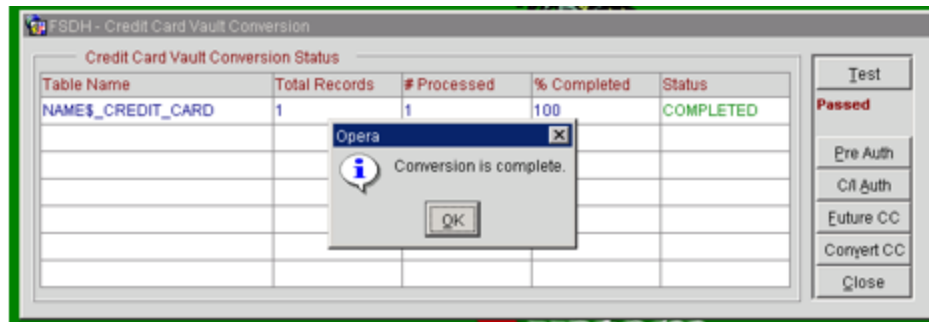
- You are prompted with a question concerning whether you have converted all pre auth and in house guest. If you have completed this step click **Yes**, if not click **No** and go to the previous step.



- You will receive one more prompt, if you are ready to continue click **Yes**.



- Once the conversion is complete, you will view the following message.



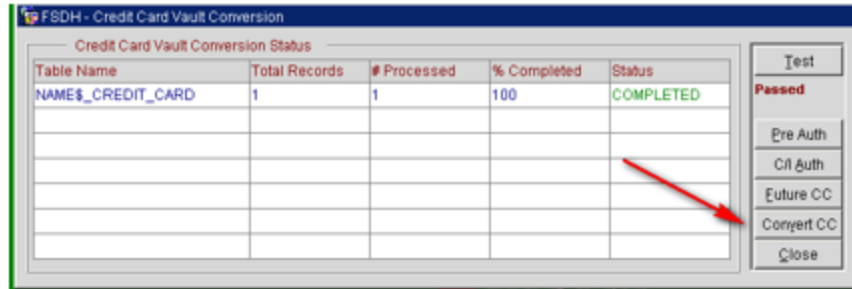
Credit Card Vault Conversion Status

- **Table Name:** Name of the table that is currently having the credit card information converted.
- **Total Records:** Total records to be converted in this table.
- **# Processed:** Number of records that have been processed for the table.
- **% Completed:** Displays the percentage complete for converting the credit card information in the listed table.
- **Status:** Displays the status of the conversion, Running, Complete, or Failed.
- Credit cards are converted to tokens at a rate of 50 cards per batch.
- Convert remaining CC #'s

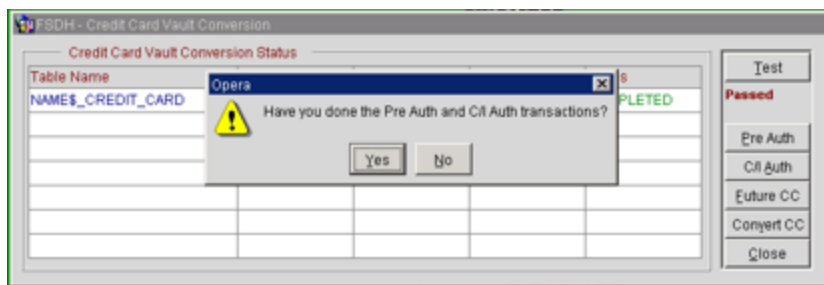
NOTE:

This will convert all the remaining Credit Cards which are stored in OPERA.

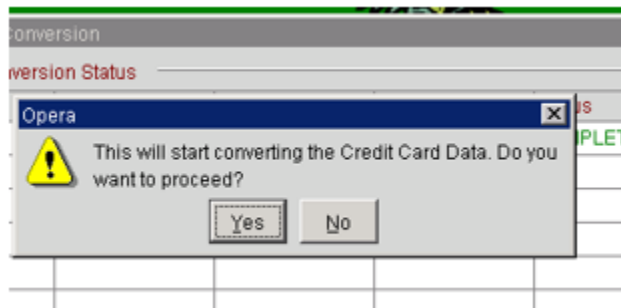
- Click **Convert CC**.



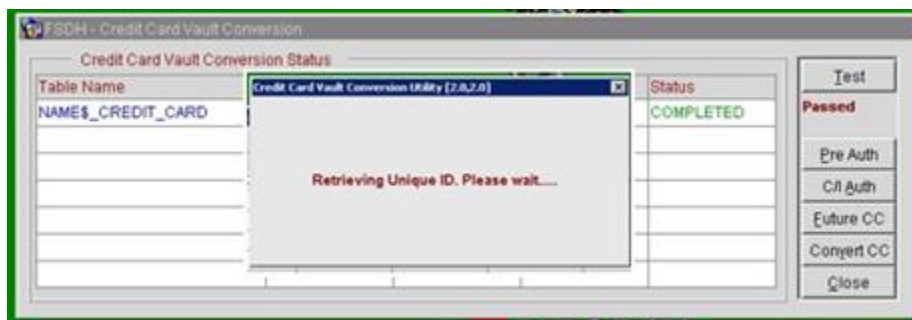
- You will receive a prompt requesting if you have completed the conversion of the pre auth and in house guest.
 - o Yes – Initiates the conversion for the rest of the database.
 - o No – Takes you back to the form to allow you to run the pre auth and C/I Auth process.



- You will receive another prompt requesting if you want to proceed. Click **Yes** if you want to proceed.



- The grid will start an update as the conversion proceeds. There will be a flashing "RUNNING" box as the process proceeds, and with each flash the grid will update the status.



Credit Card Vault Conversion Status

- **Table Name:** Name of the table that is currently having the credit card information converted.

- **Total Records:** Total records to be converted in this table.
- **# Processed:** Number of records that have been processed for the table.
- **% Completed:** Displays the percentage complete for converting the credit card information in the listed table.
- **Status:** Displays the status of the conversion, Running, Complete, or Failed.
- The conversion processes 50 cards per transaction. Click **OK**.

