Oracle Payment Interface

Oracle Hospitality RES 3700 Native Driver Installation Guide

Release 19.1
F14990-03
October 2023

Oracle Payment Interface Oracle Hospitality RES 3700 Native Driver Installation Guide, Release 19.1

F14990-03

Contents

Preface

Purpose

This document will cover the steps to install Oracle Payment Interface (OPI) using the RES native credit card driver. It will also cover Middleware mode vs Terminal mode and Pay at Table.

Audience

This document is intended for installers of OPI using the RES native credit card driver in RES 5.5 MR1 and higher.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received and any associated log files
- Screenshots of each step you take

Documentation

Product documentation is available on the Oracle Help Center at http://docs.oracle.com/en/industries/hospitality/

Revision History

Date	Description of Change
February 2019	Initial publication.
March 2019	Updated formatting and cover page with new template.
July 2019	Updated security bugs in few chapters.
November 2020	Updated functionality for Debit and Cashback
October 2023	Removed the MySQL 5.6 version across the document as the OPI installer no longer supports

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Pre-Installation Steps

Important Information

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

IF UPGRADING OPI, YOU MUST READ THE UPGRADING THE OPI SECTION FIRST.

- Only RES 5.5 MR1 or later supports the native driver solution.
- You must install the CaOPI credit card driver.
- There is no Oracle Gateway Device Handler (OGDH) installation with the native driver solution.
- You can upgrade from OPI 6.1 (6.1.0.9) and higher to OPI 19.1.
- You cannot upgrade to OPI 19.1 from any previous MICROS Payment Gateway (MPG) version.
- You must uninstall previous versions of MPG before installing OPI 19.1.
- Batch and settle all credit transactions prior to installing or upgrading OPI.
- OPI 19.1 does not install a database. If a clean install, the database for OPI must be installed prior to installing OPI.
- If upgrading from OPI 6.1 or higher, the existing MySQL database will be migrated to 19.1.
- OPI supports JRE 8 and it is required to use JRE 8U152 or above JRE 8 build only to support all the currencies.
- Minimum CaOPI must be V5.2.3.
- If an MGDH installation exists, go to Programs and Features to uninstall the MGDH application.
- Ops.exe cannot be running during the MGDH uninstall.

Uninstalling Prior OPI/MPG Versions

1. Run POSEOD and verify all previous transactions have been batched and approved in transaction.log.
2. Uninstall MPG/OPI through the Microsoft Windows Control Panel.
3. If no other applications use the database, uninstall MySQL through the Microsoft Windows Control Panel.
4. Uninstall MySQL community through the Microsoft Windows Control Panel.
5. Rename the C:\ProgramData\MySQL folder to MySQL_Old.

6. If you cannot see the ProgramData folder, you may need to configure the Windows Explorer folder options to show the hidden folders.
7. Restart the server.

> **NOTE:**
>
> It is not recommended to leave a MySQL database from prior to OPI 6.1 in place. It should be un-installed and a newer MySQL database installed for OPI 19.1.

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OPI Native Driver

Installation Prerequisites

OPI requires:

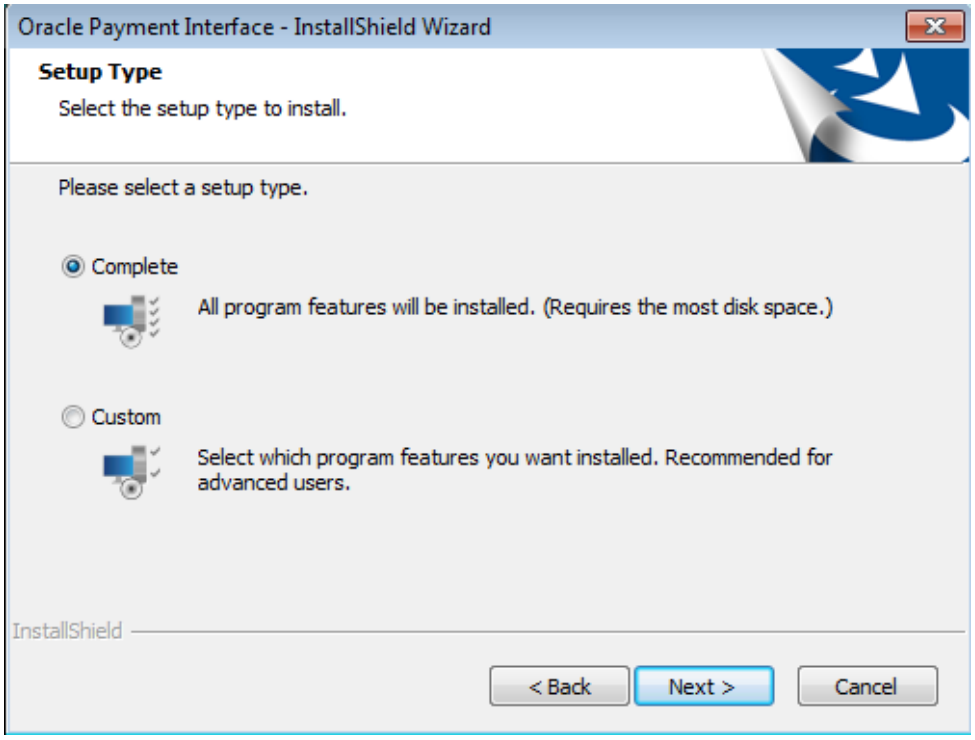
- At least 6 GB of free disk space.
- CaOPI requires Microsoft .NET Framework version 4.6.1 or later.

Before you start, make sure to know:

- Whether the merchant is a table service restaurant (TSR), quick service restaurant (QSR), or both. You cannot use tips in a QSR.
- Whether the merchant would like to activate Refund functionality or not. The merchant needs to control the privilege for this function.
- OPI must be installed while logged on as an administrator.
- Login credentials to the Micros database to enable Pay@Table.
- The Pay@Table certificate password when enabling Pay@Table. The certificate password comes from the OPI partner and should be part of the partner validation process.
- A passphrase to create during the OPI install. You will enter this passphrase in CreditCards.exe during configuration.
- If upgrading from OPI 6.1 or later you will need to know the MySQL root user account password.
- A MySQL, or other supported database type, must be installed for use with OPI, prior to the OPI 19.1 install.

Installing the OPI

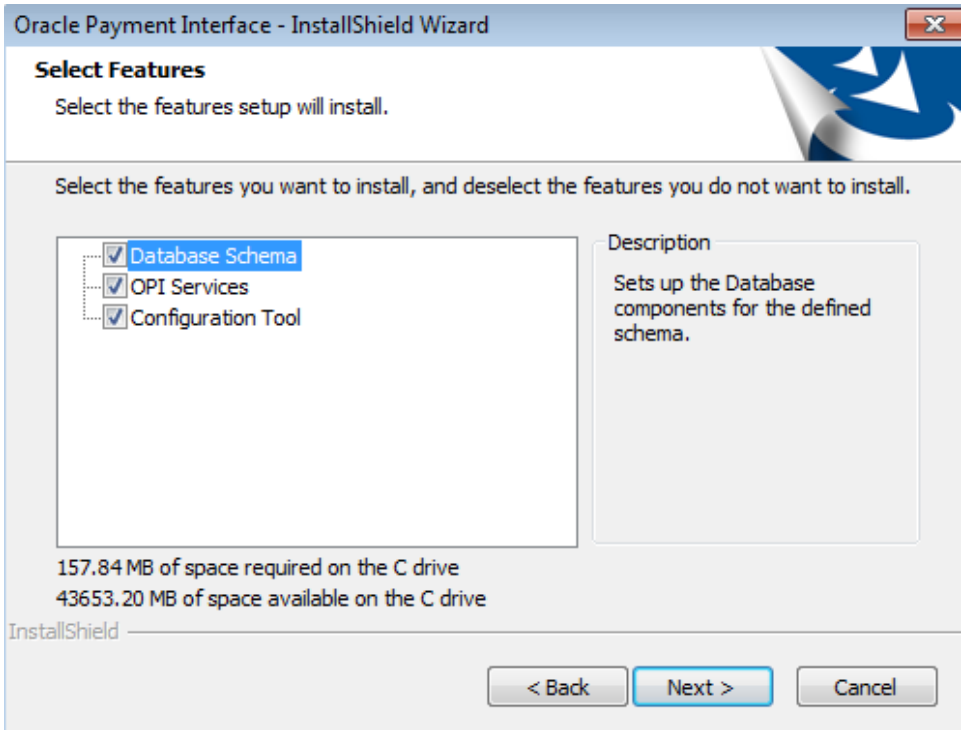
1. Take Micros Control Panel to **off**.
2. Copy `OraclePaymentInterfaceInstaller_19.1.0.0.exe` to the Server and double-click it to launch the install.
3. Select your language, and then click **OK**.
4. Click **Next** on the Welcome to the InstallShield Wizard for Oracle Payment Interface screen.
5. Click **Next** on the OPI Prerequisites screen.



The Setup Type screen appears.

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

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



If you select 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. It is just a matter of whether they are all installed on the same computer or on separate computers.

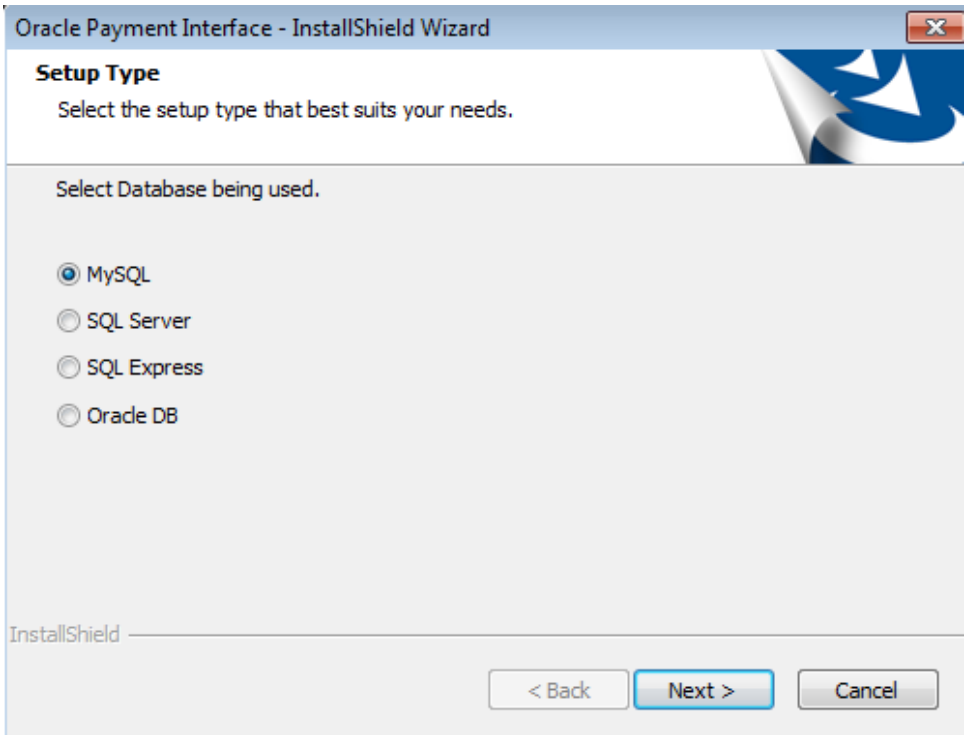
7. Select the features to install on this computer, and then click **Next**.

   The Choose Destination Location screen appears.

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

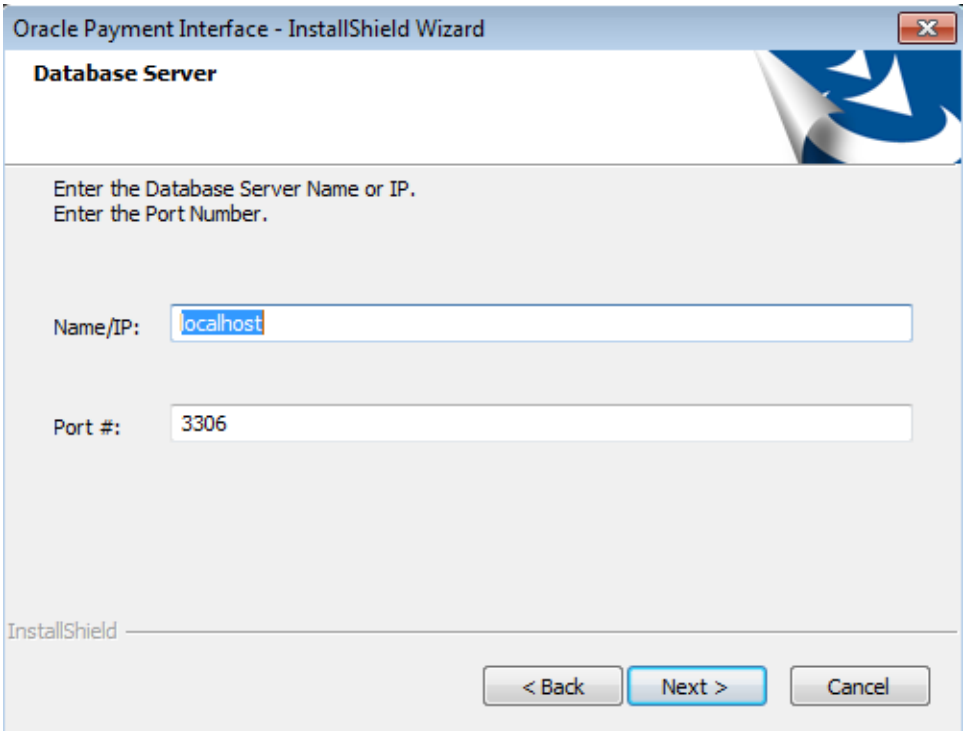
9. Click **Install** on the Ready to Install the Program screen. The Setup Status screen displays for a few minutes.

   The Setup Type screen appears.



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

> **NOTE:**
>
> OPI does not install any database, so the database must already be installed.



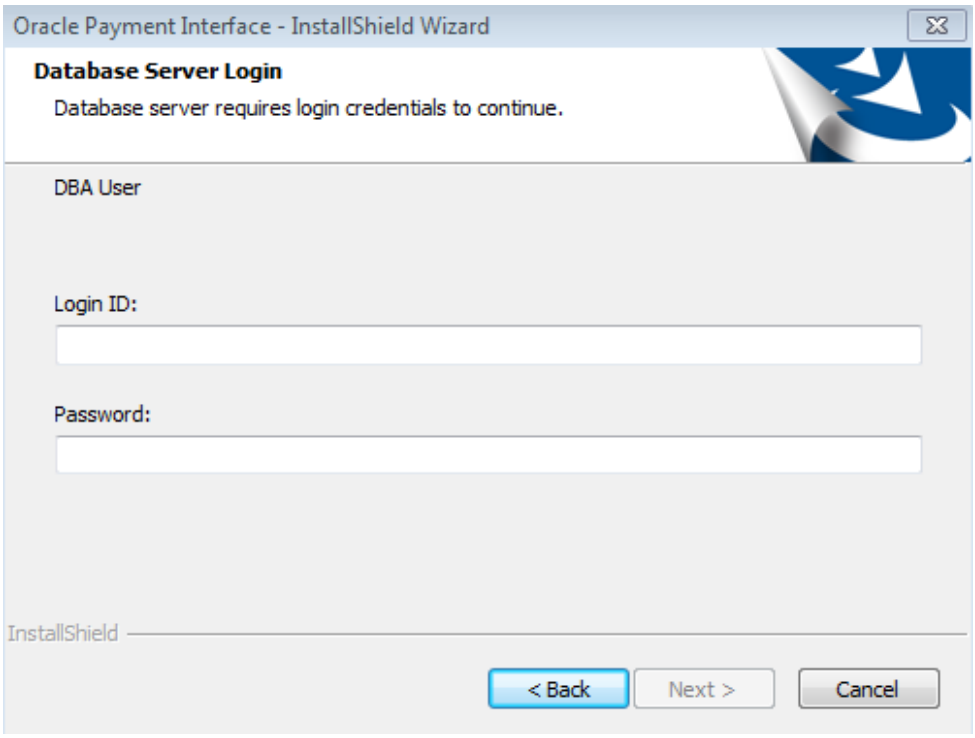
The Database Server screen appears.

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

> **NOTE:**
>
> If the database type is MySQL, and you cannot use localhost for the Name/IP field, then some commands must be run manually on that MySQL database before proceeding. See the **Granting Permission in MYSQL** section in the *Oracle Payment Interface Installation and Reference Guide* for instructions. Setup will not complete if this is not done.

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

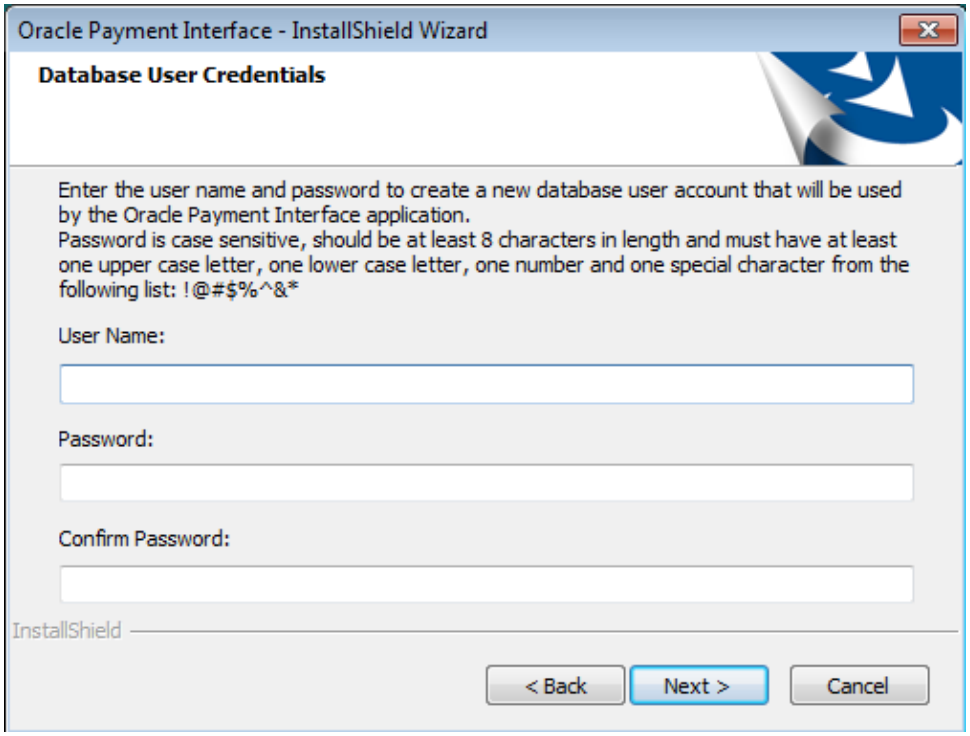
    The Database Server Login screen appears.



13. Enter the server login credentials of DBA user for the database type selected, and then click **Next**.

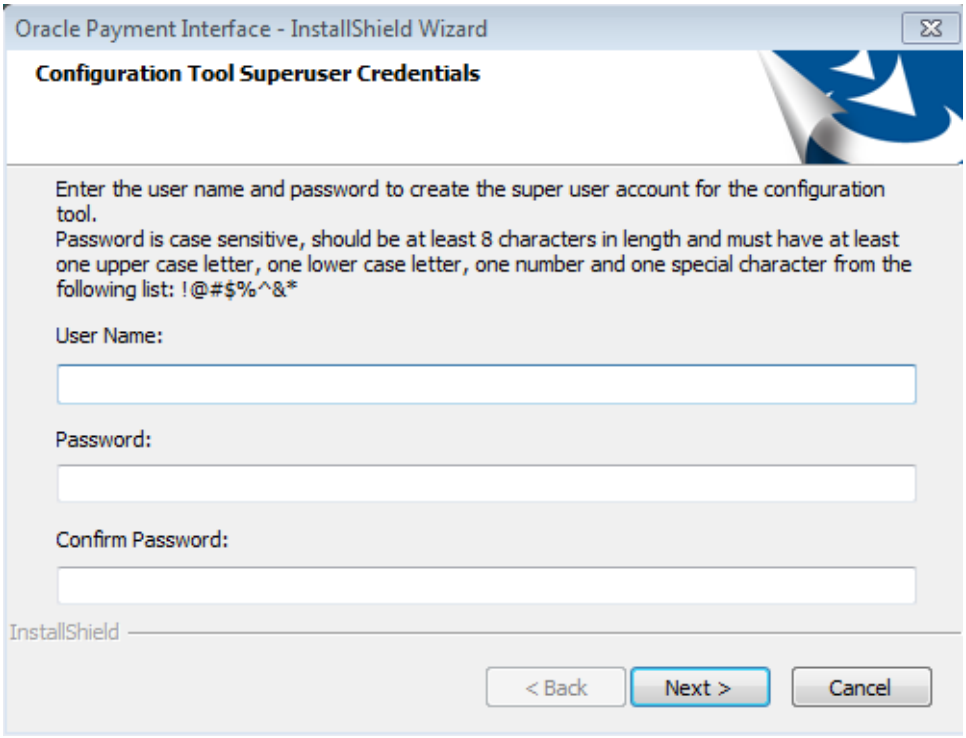
- For MySQL the Login ID: = root
- For other database types the DBA user name/Login ID may be different.
- Enter the correct password for the DBA user.

  The Database User Credentials screen appears.



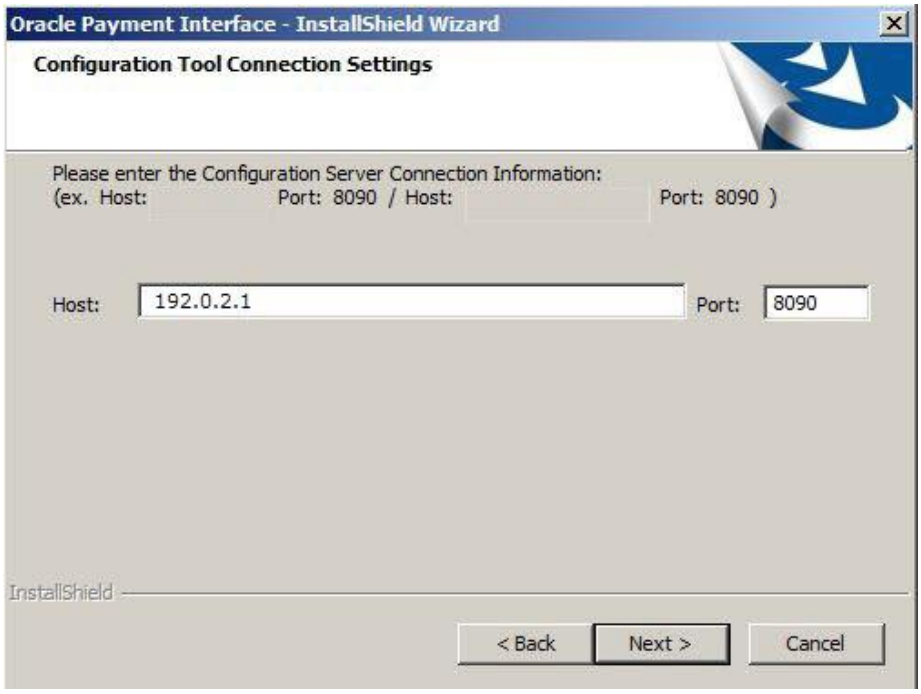
14. **User Name**: Enter the user name to create a new database user account.
15. **Password**: Create a password. Password is case sensitive, should be at least 8 characters in length and must have at least one upper case letter, one lower case letter, one number and one special character from the following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

    The Configuration Tool Superuser Credentials screen appears.



19. **User Name**: Enter the user name to create the Super user account. This can be any user name and does not have to be a Windows account user.
20. **Password:** Create a password. Password is case sensitive, should be at least 8 characters in length and must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#$%^&*.
21. **Confirm Password**: Confirm the new password, and then click Next.
22. Click **OK** on the Create SuperUser operation successful dialog.

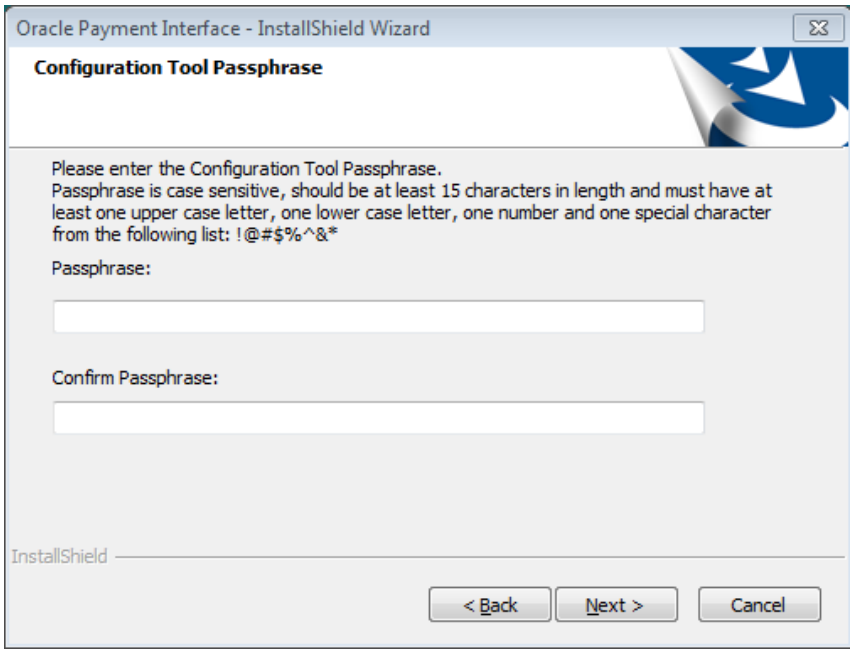
    The Configuration Tool Connection Settings screen appears.



- **Host**: Enter the IP address or server name of the PC where the OPI Config Service is installed. This will be the PC where you selected “OPI Services” to be installed.
- Leave the default Port of 8090.

23. Click **Next**.

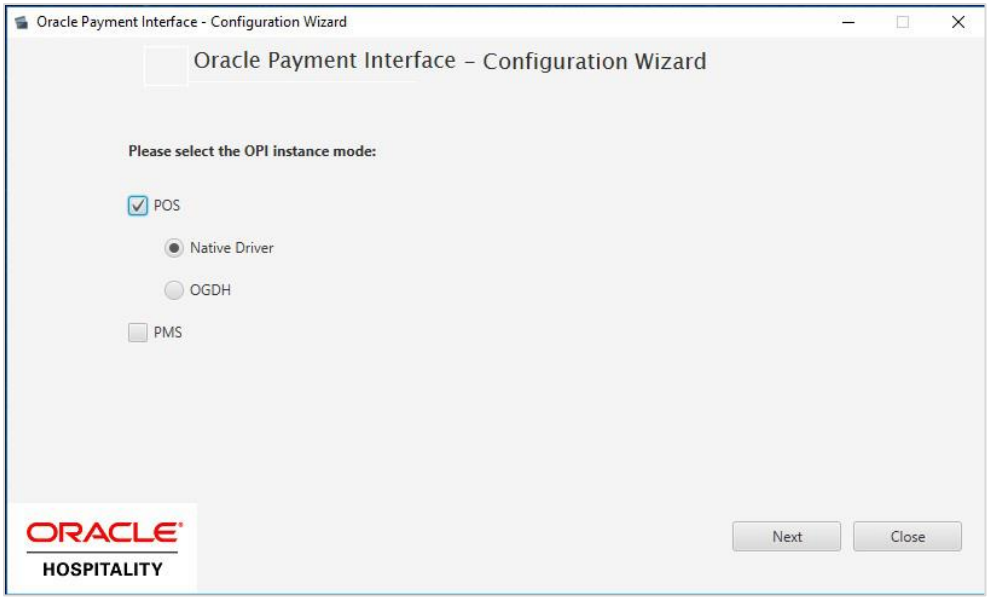
    The Configuration Tool Passphrase screen appears.



24. **Passphrase**: The passphrase is case sensitive, should be at least 15 characters in length and must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#$%^&*.

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

    After a brief pause, the Configuration Wizard launches.

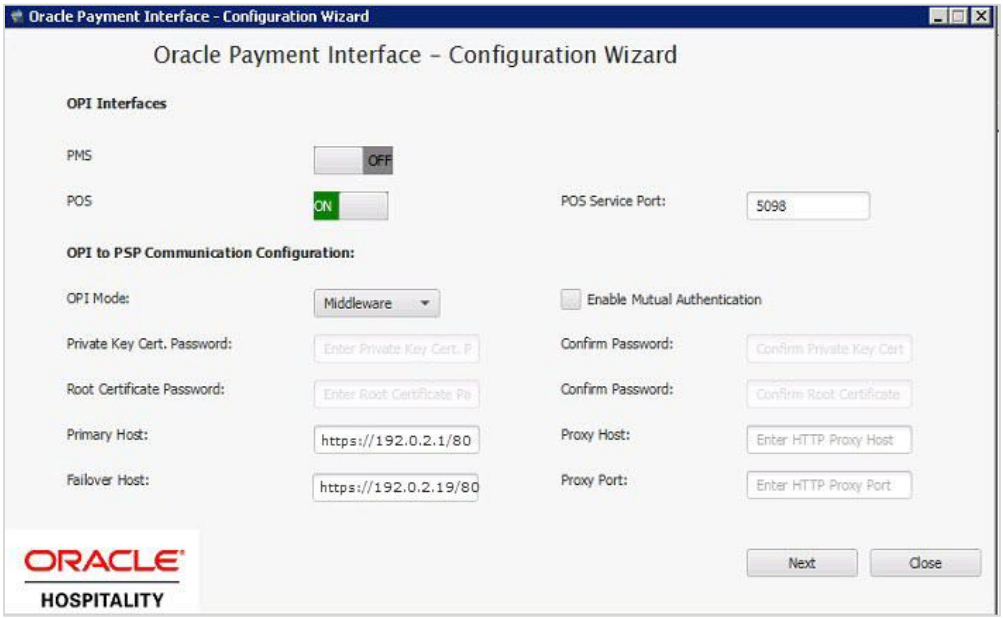


26. Select **POS and Native Driver**, and then click **Next**.

    The POS Native Driver Configuration screen appears.

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

    The **OPI Interface** screen appears.



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

29. **Private Key Cert. Password**: Enter the password and confirm it.
30. **Root Certificate Password**: Enter the password and confirm it.
31. Select the **OPI Mode** either as Middleware or Terminal.

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

32. Click **Next**.
33. Click the blue + icon in top right corner to create new merchant record.
34. Select the **POS Type** as RES.
35. Select the **Merchant Type as** Restaurant or Retail.
36. Enter the **Merchant ID**.
37. Enter the **Merchant Name**, **Merchant City**, **Merchant State** or **Province**.
38. Select the **Merchant Country/Region** from the drop-down list.
39. Select the **Enable Pay at Table** check box if the merchant will use Pay at Table.
40. Click **Next**.

Pay at Table Install

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

41. Complete or accept the following default values for Pay at Table fields:

- **DB Host**: Can remain 192.0.2.1 if OPI is installed on the RES server. Otherwise, enter the IP address of the RES server.
- **DB Port**: Leave at 2638.
- **DB Name**: Leave at Micros.
- **DB User**: Enter a user name that can access the RES database, and confirm it.
- **DB Password**: Enter the password for the DB user entered in the above step while installing OPI and confirm it.
- **Tenders**: If the Pay at Table tenders are not already configured in POSCFG, go to the **Pay at Table Tender Config** section and do that now.
- Enter the correct Tender number for each card type used with Pay At Table.
- **Print Check**: Enter the number of the Print check tender.
- **Service Charge**: Enter the number of the Service Charge that is used for tips.

42. Click **Next**.

The **Pay at Table Devices** screen appears.

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

    The **Pay at Table Configuration** screen appears.
45. Complete or accept the following default values for Pay at Table Configuration fields:

- **Service Port**: Enter the correct port for use with Pay at Table terminals.
- **Certificate Password:** If this is an OPI upgrade, leave the passwords unchanged as they will match the certificates already in use.
- If a new install, use the certificate password and port provided by the PSP.

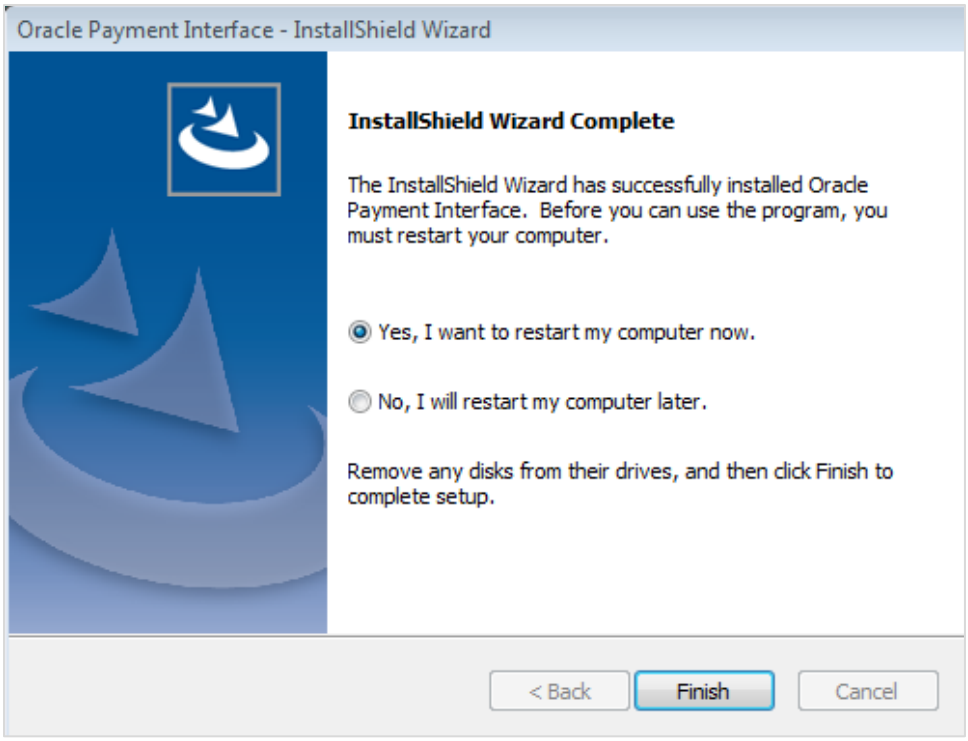
46. Click **Next**. This will end the Pay at Table Install section here.

    If using Terminal mode, the **Merchant Terminal Configuration** screen appears. If using Middleware mode, this screen will not appear.
47. Complete the following Merchant Terminal Configuration fields:

- **Workstation ID**: Enter the workstation number from the POS system.
- **Terminal IP**: Enter the IP address of the pinpad device.

48. Click **Next**.

    The **POS Merchants** screen appears.
49. Click the wrench icon to edit an existing merchant record.
50. Click **Main** to go back and review settings.
51. Click **Close** to advance to final screen.



52. Click **Finish** to reboot.

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

Upgrading the OPI and OGDH

VERY IMPORTANT: Read and follow the upgrade directions.

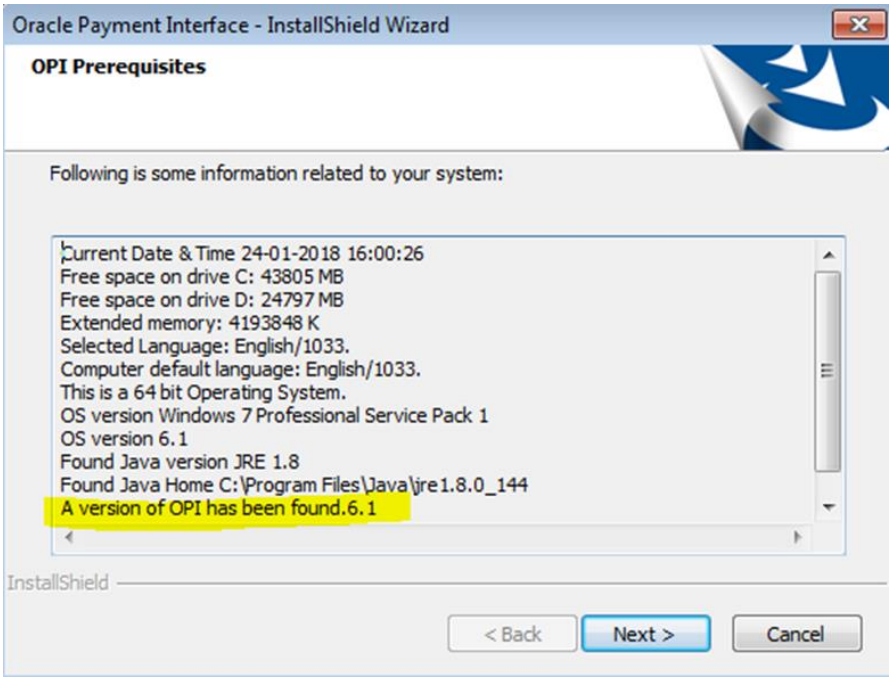
> **NOTE:**
>
> OPI 6.1 and higher can be upgraded to OPI 19.1

OPI 6.1/6.2 to 19.1.0.0 Upgrade Steps

1. Right-click and Run as Administrator the `OraclePaymentInterfaceInstaller_19.1.0.0.exe` file to perform an upgrade.
2. Select a language from the drop-down list, and then click **OK**.
3. Click **Next** on the Welcome screen to proceed with the installation.

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

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



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

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

   IF YOU CLICK NO, YOU WILL HAVE BOTH OPI 6.1 AND OPI 19.1 INSTALLED AND NEITHER WILL WORK.

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

> **NOTE:**
>
> The above warning is ONLY for **OPI 6.1 to 19.1** upgrades.
>
> A Canceled or failed **OPI 6.2 to 19.1** upgrade will not leave both versions installed – 6.2 will remain intact.

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

8. Click **Next**.

   The Ready to Install the Program screen displays.

9. Click **Install**.

   The Setup Status screen displays for a few minutes.

Setup Type

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

Database Server

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

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

Database Server Login

DBA user

Login ID: root

Password: root user password for MySQL database.

Database User Credentials

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

Password: Password for the new database user.

Configuration Tool Superuser Credentials

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

Password: Create a password, and then confirm it.

Configuration Tool Connection Settings

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

Port: Leave at 8090.

Configuration Tool Passphrase

Enter and confirm a passphrase.

Click **Next**.

The Configuration Wizard launches.

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

POS Merchants

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

Verify the merchant settings are correct.

Merchant Pay At Table Configuration

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

Continue to follow the on-screen directions.

InstallShield Wizard Complete

Click **Finish** to allow a reboot.

Pay at Table Tender Config

POSCFG Create Pay at Table Tender

With the RES Native driver solution, there must be separate tenders for Pay@Counter transactions and Pay at Table (P@T) transactions.

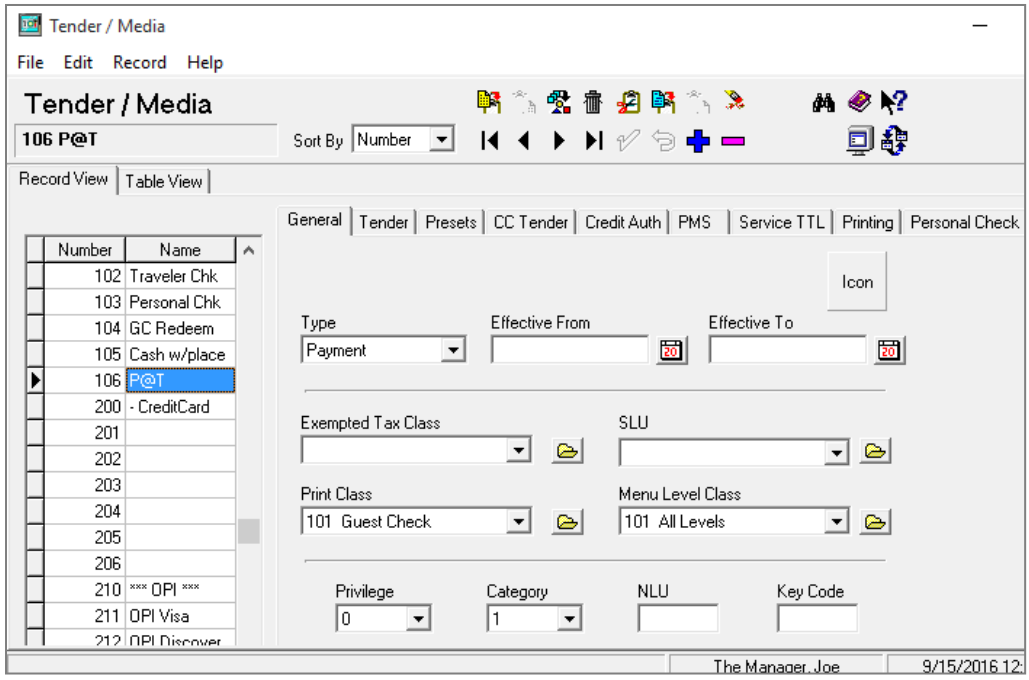
If you create a separate P@T tender for each card type, make sure to use easily-identifiable names such as **P@T Visa** and **P@T M.C**.

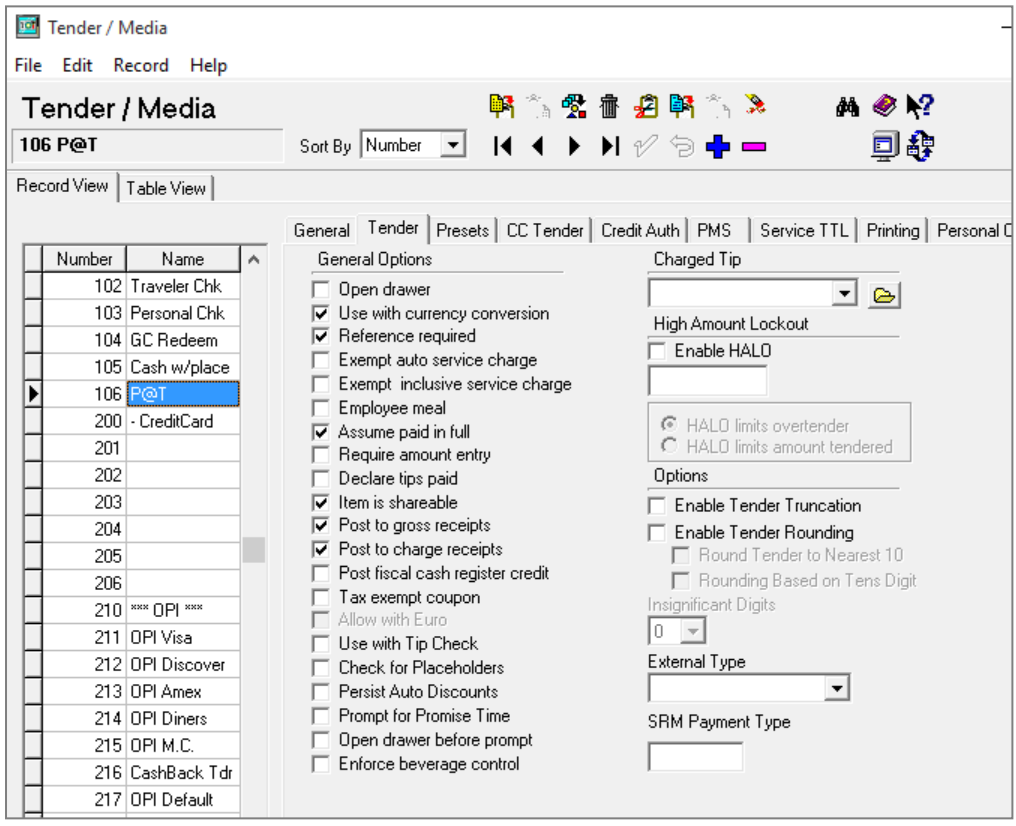
If the merchant wants to use the 3rd party processor's reports, all transactions will be reported by card type and will not be separated into P@T vs P@C.

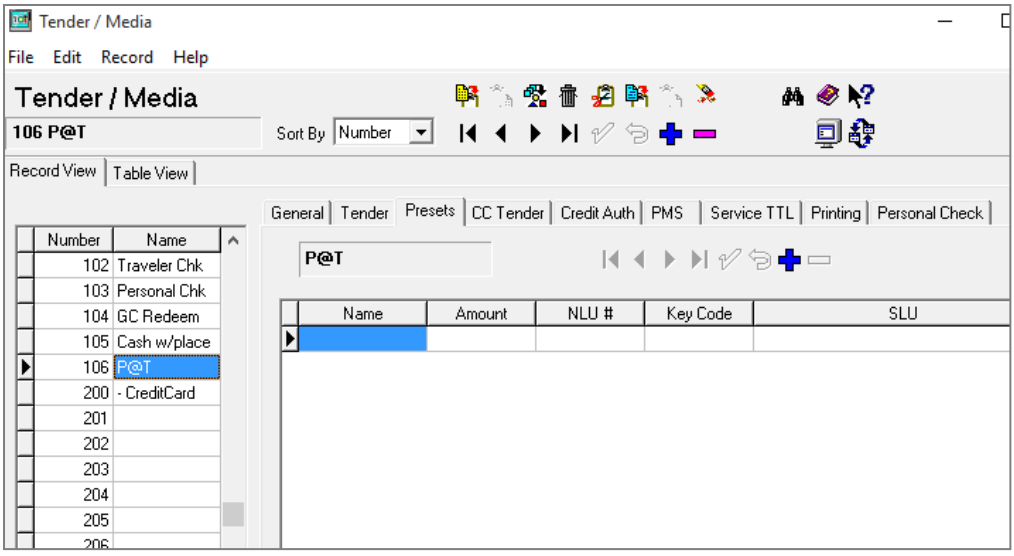
If the merchant wants to use local RES reports to show just 1 total for each card type, they can have a custom report that combines the Pay@Counter and Pay at Table tenders for each card type.

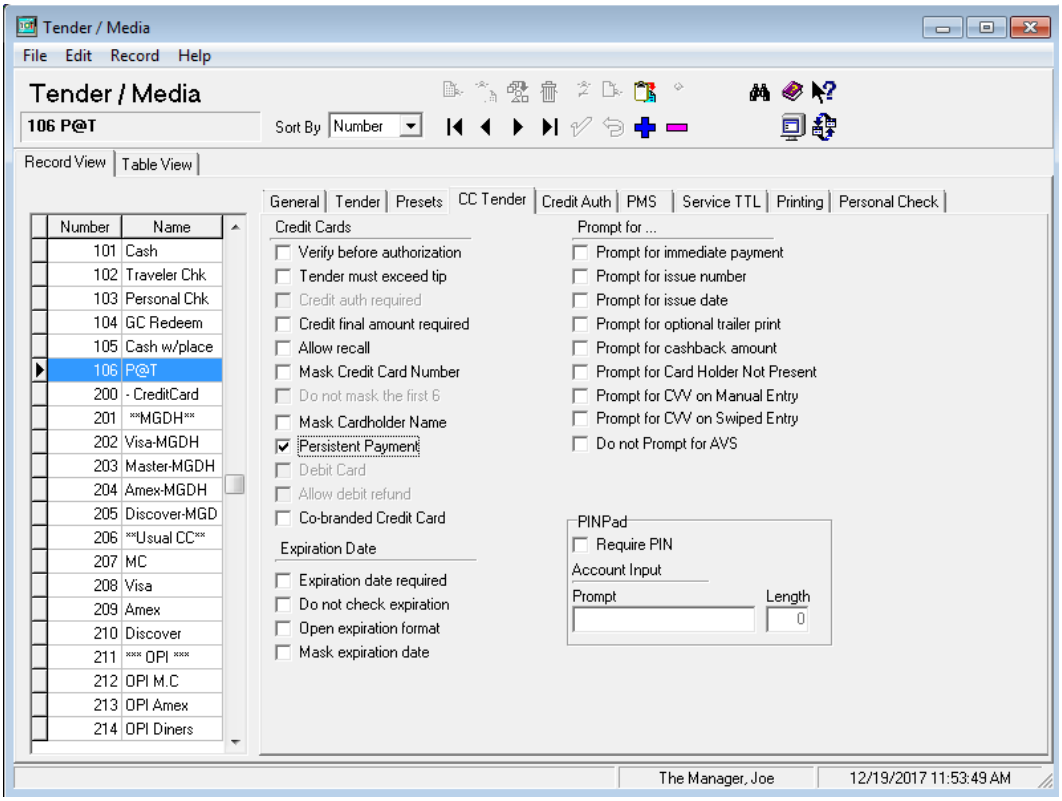
The following example provides instructions for creating one P@T tender for all P@T transactions.

1. **Poscfg | Sales | Tender Media**, copy **Cash Tender** and paste it.
2. Rename it to P@T.
3. Configure P@T tender according to the following screenshots.


Tender / Media
File Edit Record Help
Tender / Media
106 P@T
Sort By Number
Record View Table View
General Tender Presets CC Tender Credit Auth PMS Service TTL Printing Personal Check
Number Name
102 Traveler Chk
103 Personal Chk
104 GC Redeem
105 Cash w/place
106 P@T
200 - CreditCard
201
202
203
204
205
206
210 *** OPI ***
211 OPI Visa
212 OPI Discover
Icon
Type
Payment
Effective From
Effective To
Exempted Tax Class
SLU
Print Class
101 Guest Check
Menu Level Class
101 All Levels
Privilege
0
Category
1
NLU
Key Code
The Manager Joe
9/15/2016 12:

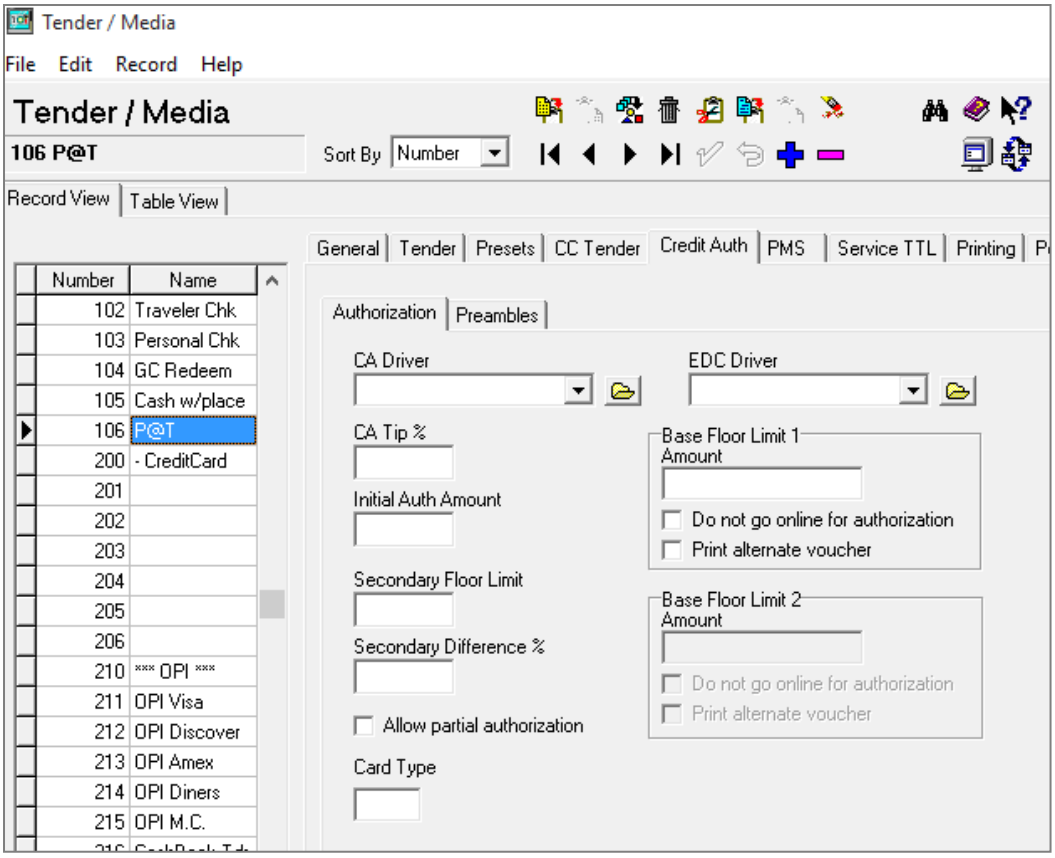

Tender / Media
File Edit Record Help
Tender / Media
106 P@T
Sort By Number
Record View Table View
General Tender Presets CC Tender Credit Auth PMS Service TTL Printing Personal C
Number Name
102 Traveler Chk
103 Personal Chk
104 GC Redeem
105 Cash w/place
106 P@T
200 - CreditCard
201
202
203
204
205
206
210 *** OPI ***
211 OPI Visa
212 OPI Discover
213 OPI Amex
214 OPI Diners
215 OPI M.C.
216 CashBack Tdr
217 OPI Default
General Options
Open drawer
Use with currency conversion
Reference required
Exempt auto service charge
Exempt inclusive service charge
Employee meal
Assume paid in full
Require amount entry
Declare tips paid
Item is shareable
Post to gross receipts
Post to charge receipts
Post fiscal cash register credit
Tax exempt coupon
Allow with Euro
Use with Tip Check
Check for Placeholders
Persist Auto Discounts
Prompt for Promise Time
Open drawer before prompt
Enforce beverage control
Charged Tip
High Amount Lockout
Enable HALO
HALO limits overtender
HALO limits amount tendered
Options
Enable Tender Truncation
Enable Tender Rounding
Round Tender to Nearest 10
Rounding Based on Tens Digit
Insignificant Digits
0
External Type
SRM Payment Type





Since RES native P@T CC payment is done between the P@T device and the PSP and RES only posts the payment to a copy of the cash key named "P@T", voiding that tender will not refund any money to the customer's card.

Solution: Poscfg | Sales | Tender / Media | CC Tender, enable **Persistent Payment** for the P@T tender. This will prevent P@T tenders from being voided. If value needs to be returned to the card, a refund should be performed.



Preambles tab = No Preambles.

PMS tab = Allow 19 reference characters.

POS Configuration for Native Driver

Credit card drivers, including CaOPI, require complex security. Ops.exe does not start if complex security is not enabled. The troubleshooting section contains instructions for enabling complex security.

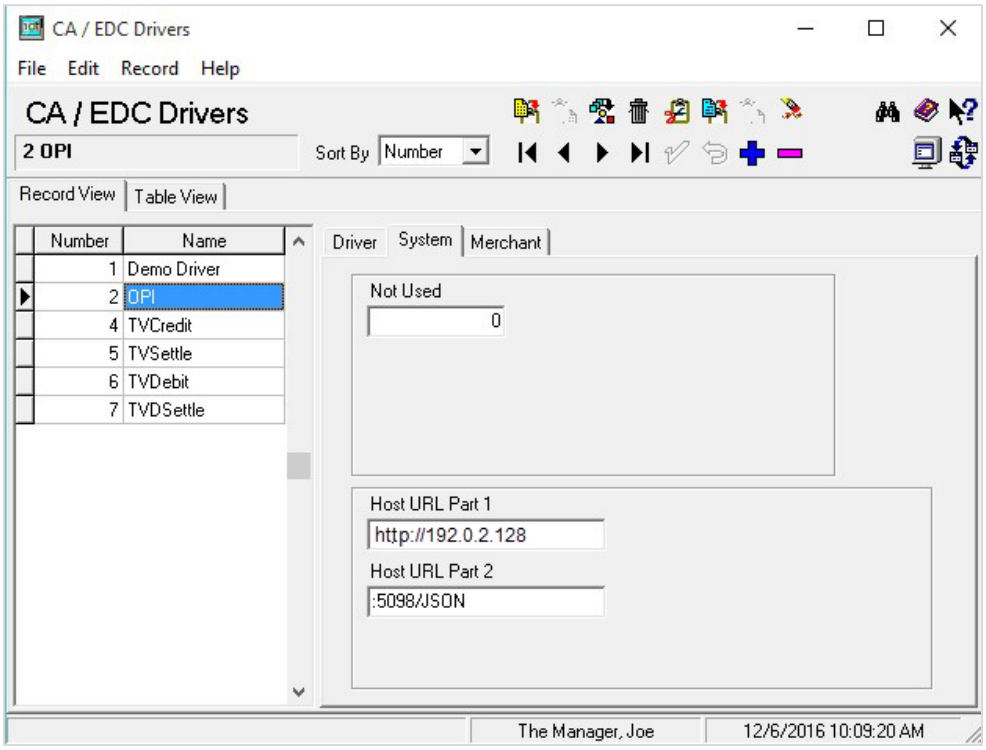
Install and Configure CaOPI driver

1. Batch and Settle all current transactions.
2. Take Micros Control panel to off.
3. Verify Microsoft .NET Framework 4.6.1 is installed.
4. On the RES Server, double-click CaOPI.exe and follow the installation instructions.
5. You must run the CaOPI.exe installation again, on RES backup servers because it must register OpiProxy.dll. You cannot only copy the file to the backup servers. Make sure Microsoft .NET Framework 4.6.1 is installed on the backup server.

Configure CaOPI Driver

1. Take Micros Control Panel to **Back of house**.
2. Open **Poscfg | Devices | CA/EDC Drivers**.

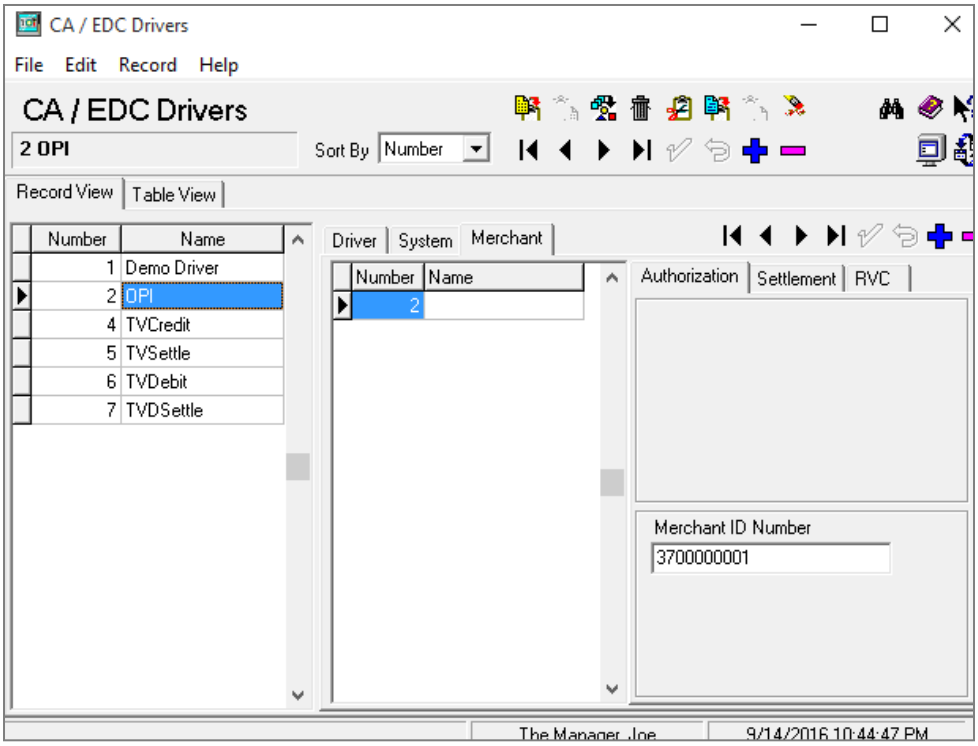
3. Create a new record named **OPI**.
4. On the **Driver** tab, enter OPI as the **Driver Code**.
5. On the **System** tab, enter the **Host URL Part 1** and **Host URL Part 2**.



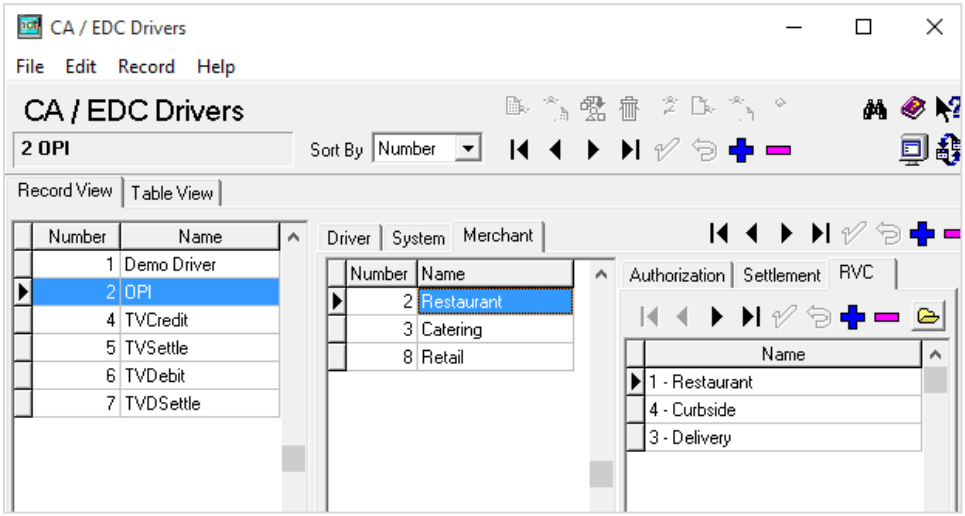
Use the IP of the PC where OPI is installed.

Do not use 192.0.2.1 even if OPI is installed on the RES server.

6. On the **Merchant** tab, enter the Merchant ID Number.



7. Link each revenue center to the correct Merchant.

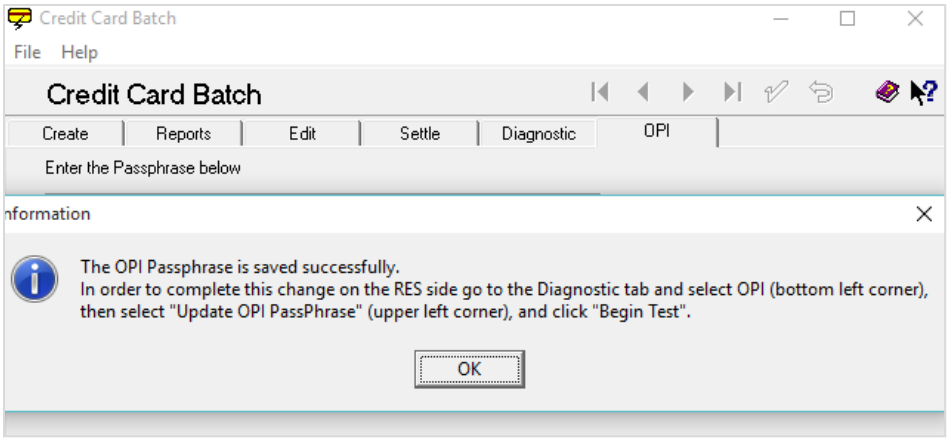


Every revenue center must be linked to a Merchant. Checks should not be transferred between revenue centers with different Merchant IDs.

8. In Micros Control Panel, highlight **Restaurant**, and then click **Reload DB**. No driver configuration changes are complete until the DB has been reloaded.

Credit Card Batch Configuration

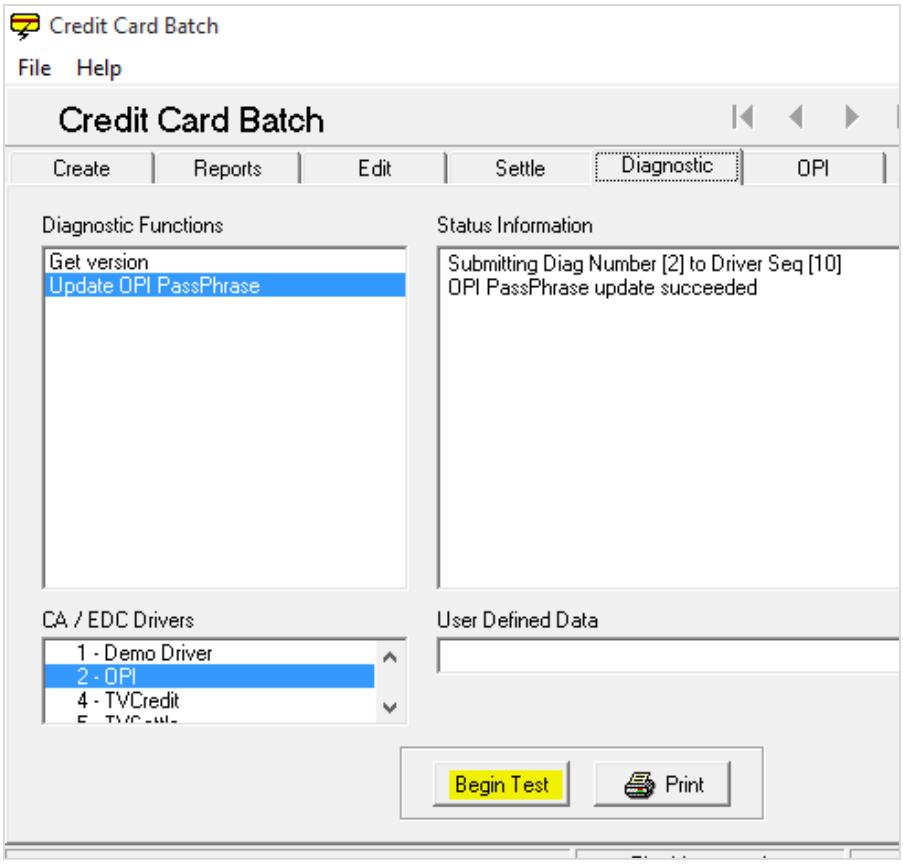
1. **Start | Run | CreditCards.exe | OPI**.
2. Enter the passphrase created during the OPI installation, and then click Save.
3. Verify it says the Passphrase saved successfully.



If you have a backup server configured and the Passphrase cannot be written to that PC, the passphrase will not save. The Backup Server Network Node is configured in **Poscfg | System | Restaurant | Descriptions**.

> **NOTE:**
>
> If a new backup server workstation is added after the OPI passphrase is entered in CreditCards.exe, you must re-enter the passphrase in CreditCards.exe again, so that the passphrase can be saved to the backup server.

4. **CreditCards.exe | diagnostics**, select OPI from **CA/EDC Drivers**, select **Update OPI PassPhrase**, and then click **Begin Test**.



5. Result = "OPI Passphrase update succeeded"

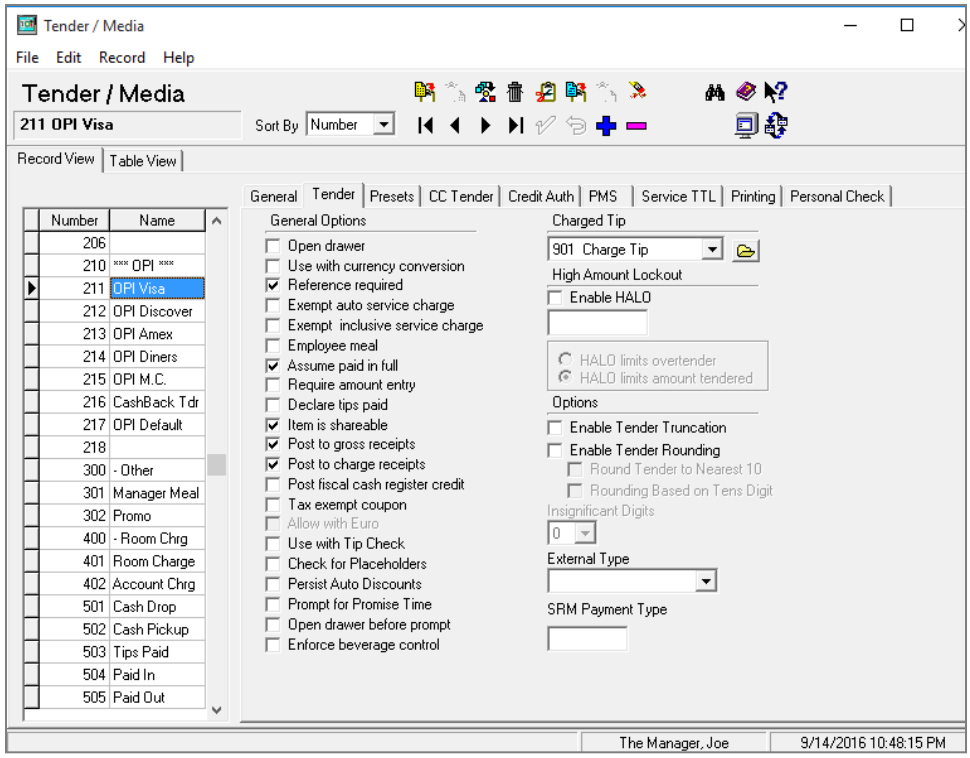
   If the OPI Passphrase is changed to something other than what was used during the OPI installation, you must also change the value on the OPI side. See the **Utilities | RWregistry** section for more information.

6. To change the POS passphrase in OPI, run **LaunchConfiguration.bat** and go to the POS Service tab.

Tender Configuration

1. Navigate to **Sales | Tender/Media | Tender**, and then create a tender for a card using OPI. The following example uses an OPI tender for Visa. To create a default tender, follow the same instructions or make a copy of an existing tender, clear the card type ID field, and then name the tender accordingly.

2. Edit the **Tender** tab fields as shown in the below screen:

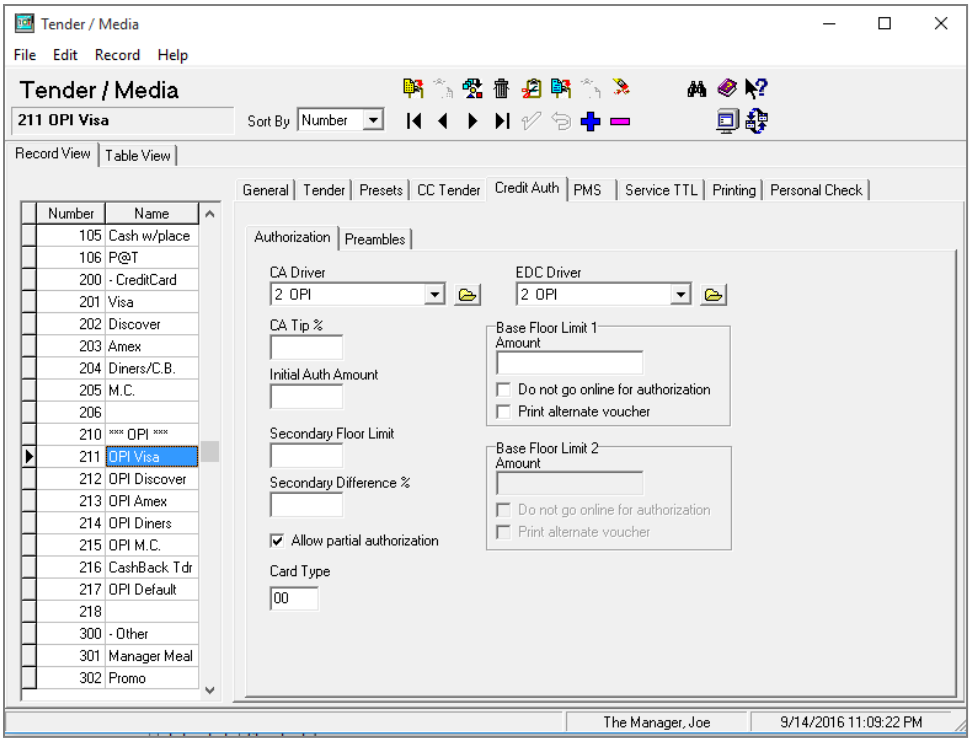


- **Reference required**
- **Assume paid in full**
- **Charged Tip** linked if any TSR Revenue Centers.
- Empty if only **QSR Revenue Centers**.

3. Make sure the **Presets** tab is empty.
4. Enable the following options on the **CC Tender** tab:

- **Credit Auth required.**
- **Mask Credit Card Number.**
- **Mask expiration date.**

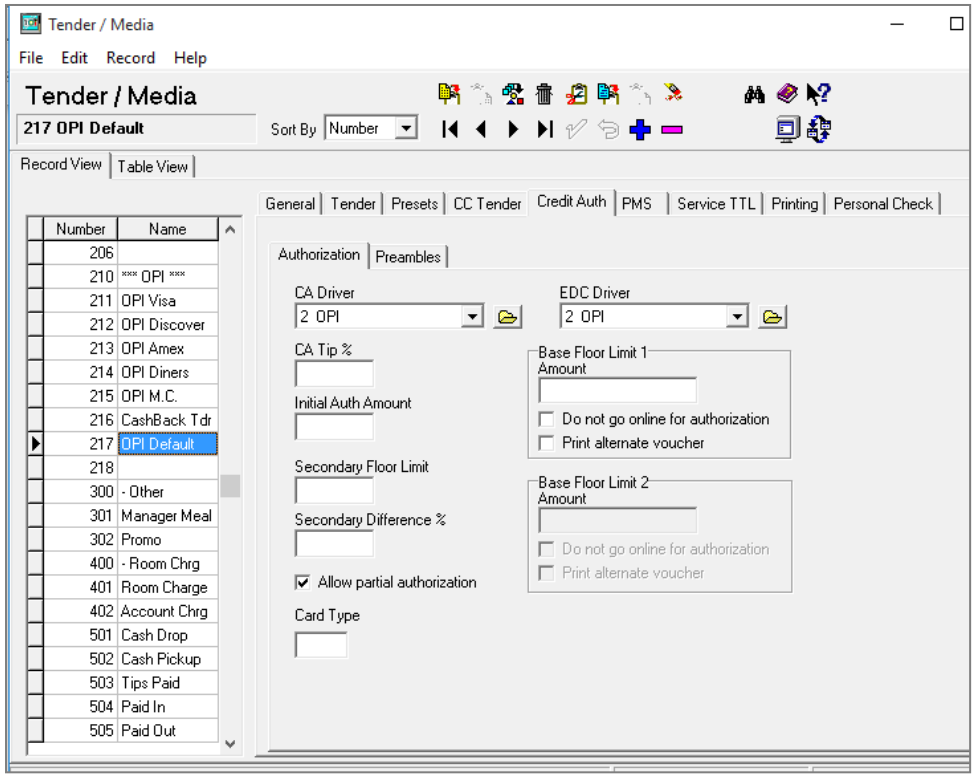
5. Edit the **Credit Auth** tab fields as shown in the below screen:



- **CA Driver** = OPI
- **EDC Driver** = OPI
- **Allow partial authorization** = Enable (unless 3rd party does not support it.)
- **Card Type** = Enter the card type ID, in this case 00 for Visa. Card Type ID Reference contains a reference of the ID for each card type.

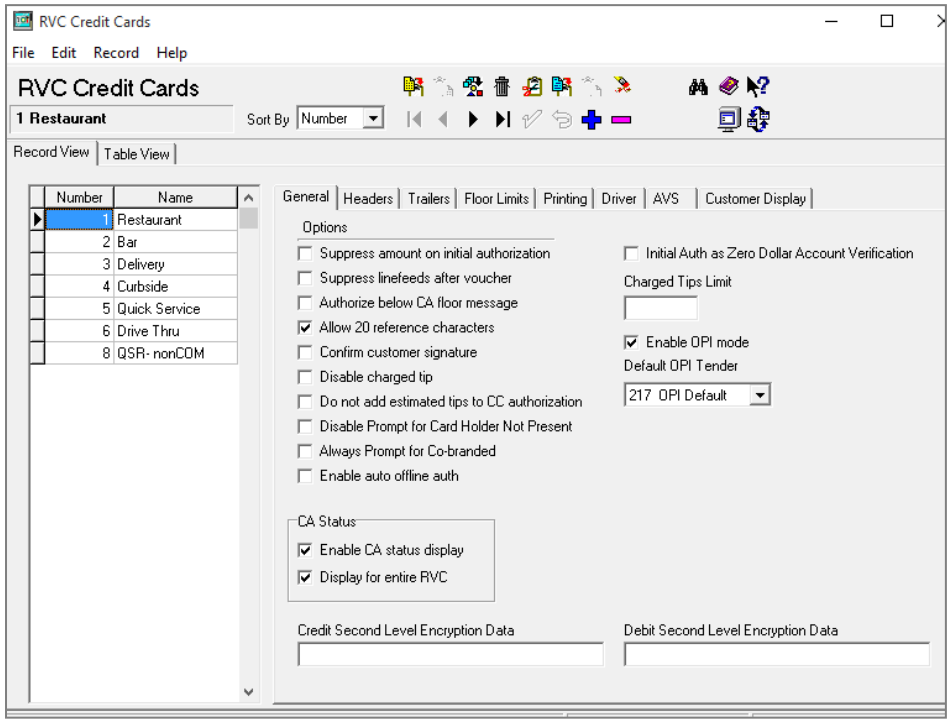
> **NOTE:**
>
> Some of the card type values have changed from OPI 6.1 to 6.1 MR1. The new values must be entered in **Tender/Media | Credit Auth | Authorization**, “Card Type”.

6. Make sure the **Preambles** tab is empty.
7. On the **PMS** tab, select Allow 19 reference characters.
8. On the **Personal Check** tab, select **Authorization required**, and then select **OPI** from the **Check Driver** drop-down list.



9. Save the tender.

Revenue Center Configuration



Navigate to **Revenue Center | RVC Credit Cards | General**. For each applicable revenue center, on the **General** tab:

- Select **Allow 20 reference characters**.
- Select **Enable OPI mode**.
- Set the **Default OPI Tender**.

If OPI is not enabled for all revenue centers, you cannot transfer checks with Credit auths between the differing revenue centers.

Upgrade Installation

Before upgrading

1. Batch and settle all credit transactions. Checks paid in earlier OPI versions will not settle after being upgraded to OPI 6.2.
2. Know the MySQL root user account password.

> **NOTE:**
>
> Some of the card type values changed from OPI 6.1 to 6.1 MR1. The new values must be entered in Tender/Media | Credit Auth | Authorization, “Card Type”.

The list of current Card Type IDs can be found in the last section of this document, **Card Type ID Reference**.

Steps to upgrade from OPI 6.1 and higher

1. Take Micros Control Panel to **off**.
2. Double-click `Oracle Payment Interface_19.1.exe` to launch the install.
3. Follow the on screen instructions to compete the upgrade.

Support for RES Debit Mode with OPI Native

Starting with version 5.7.3, RES 3700 with OPI now features the ability for customers to pay using Debit. To make Debit transactions, you must enable the OPI Debit Support Mode.

When OPI Debit Mode is enabled

The point of sale system (POS) initiates a Sale Request rather than an Authorization Request at the time of authorization. A sale request results in the POS applying a persistent tender/payment to the check. If paid in full, the check will be closed. A sale response posts, listing approval details, optional tip amount, and cashback amount. The POS posts the cashback, tip, and tender to the guest check.

The tender will always post as a persistent tender. This means absolutely no edits are allowed to the tender. To perform corrections, you must create a new guest check and take corrective action on that check. This may be difficult or impossible if the account

information or the card is not available. Merchants can work directly with their Payment Service Provider (PSP) to rectify any issues external to the POS system.

If posting the payment in the POS fails because of an error or network communication issue, then the payment will be voided with the Payment Processor.

When OPI is used, several credit card processing options are not necessary and should be disabled.

These options include:

- Auto Offline Authorization
- CA Status Display
- Print Voucher in Background

To disable Auto Offline Authorization and CA Status Display: Select Revenue Center > RVC Credit Cards > General > and then disable Auto Offline Auth and CA Status Display.

To disable Print Voucher in Background: Select Revenue Center > RVC Credit Cards > Printing > and then disable Print Voucher in Background.

Software Version Requirements:
Debit Mode without Cashback Support:
Credit card driver CaOPI - Version 5.2.3 and 5.2.2.2.
Oracle Payment Interface - Release 6.2.2 and above.

Debit Mode with Cashback Support:
Credit card driver CaOPI - Version 5.2.3.
Oracle Payment Interface - Release 19.1 and above.

3 Utilities

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

Q: Where do I change the POS Native passphrase on the RES side?

A: Use the CreditCards.exe tool:

1. Navigate to **CreditCards.exe** | OPI, change the password, and then click **Save**.
2. Navigate to CreditCards.exe | diagnostics, select OPI, select Update OPI PassPhrase, and click Begin Test.
3. Wait for the operation to complete and verify that you get the message: OPI Passphrase update succeeded.

Q: How can I edit the POS Native Passphrase in OPI to match RES?

A:

1. Run **LaunchConfiguration.bat**, select the **POS Service** tab, and then change the passphrase.
2. Save change(s).
3. Re-start the OPI service.

Q: How do I update the OPI DB user password?

A: First change the pw in OPI database.

Example for MySQL:

1. Stop OPI service.
2. Start | All programs | MySQL | MySQL Server 5.7 | MySQL 5.7 Command line Client.
3. Enter the MySQL root user account pw at the prompt.
4. Select user,password,host from mysql.user;

   Result = shows root user 3 times and OPIDBuser 2 times.
5. The following commands use a DB user name of 'OPIDBuser' as an example.
6. Update mysql.user set password=PASSWORD('YourNewPWgoesHere') where user='OPIDBuser';

   Result = When successful it shows: 'Query OK, 2 rows affected"
7. Select user,password,host from mysql.user;

   Result = the hashed PW for OPIDBuser should now be different than in step 3 above.
8. Exit MySQL.

Then, change it to match on the OPI side in LaunchSettingsAdminTool.bat.

See the **OPI Installation and Reference Guide** for directions.

4 Troubleshooting and FAQs

Troubleshooting

Situation 1: Unable to launch config.exe on Server 2008 R2.

Solution: Right-click and config.exe and select “Run as Administrator”.

Situation 2: Cannot communicate to OPI after installation.

Test:

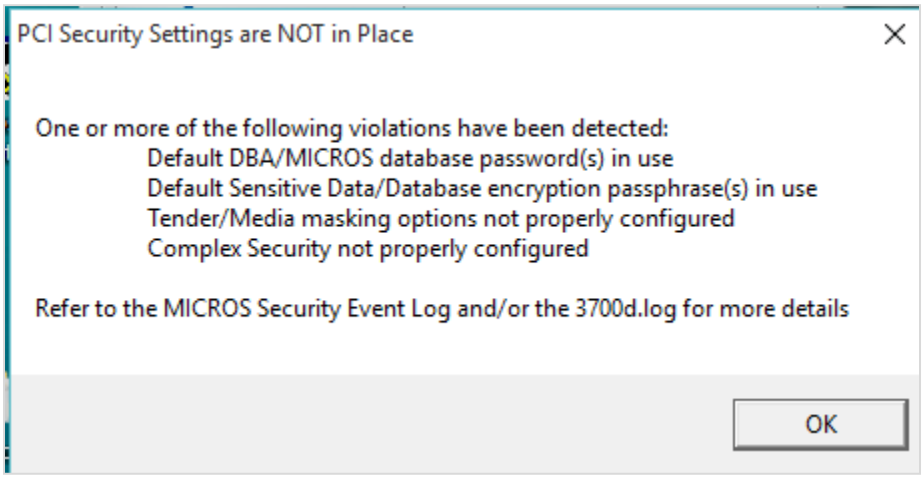
1. Verify you can telnet to the OPI PC on port 5098 from another PC.

   Ex: From CMD prompt: telnet 192.0.2.16 5098

   (Where 192.0.2.16 is the IP address of the OPI server.)

   If you cannot telnet to the OPI port, try the following:
2. Restart the OPI Service.
3. Temporarily bypass the firewall.
4. Verify OPI is listening on port 5098.
5. Open CMD prompt: C:\>netstat –anob > c:\temp\ports.txt
6. Search ports.txt for “5098”.

Situation 3: When starting Ops you see:

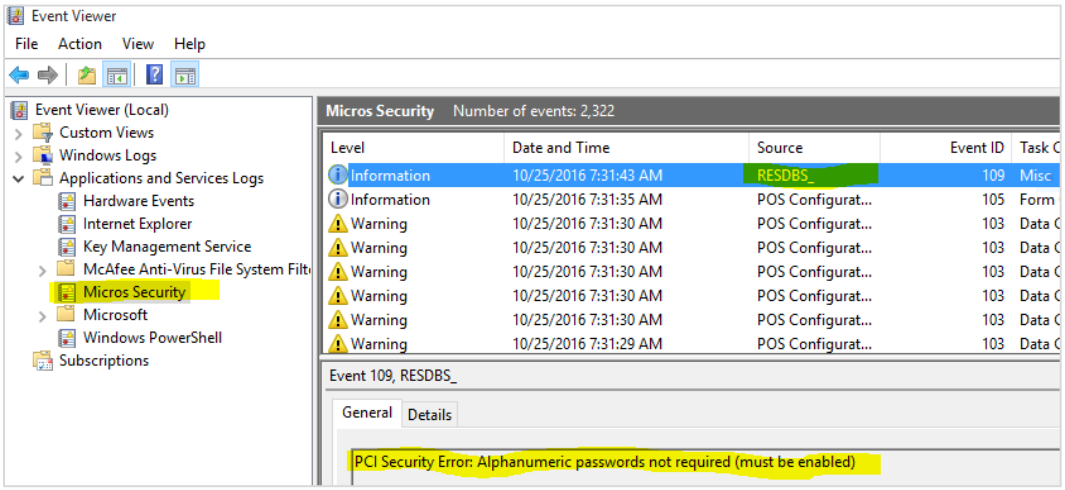


Solution:

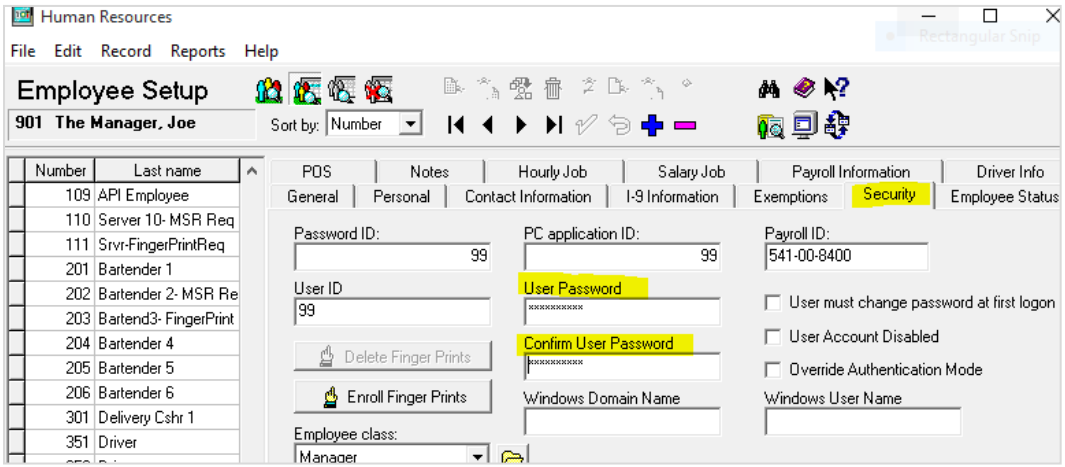
- Enable Complex security.
- Look in event viewer to see what the specific issue or issues are.
- Correct the issues listed.

If Ops does not start, go to **Event Viewer | Applications and Services Logs | Micros Security** and see what the issue is.

Example below.

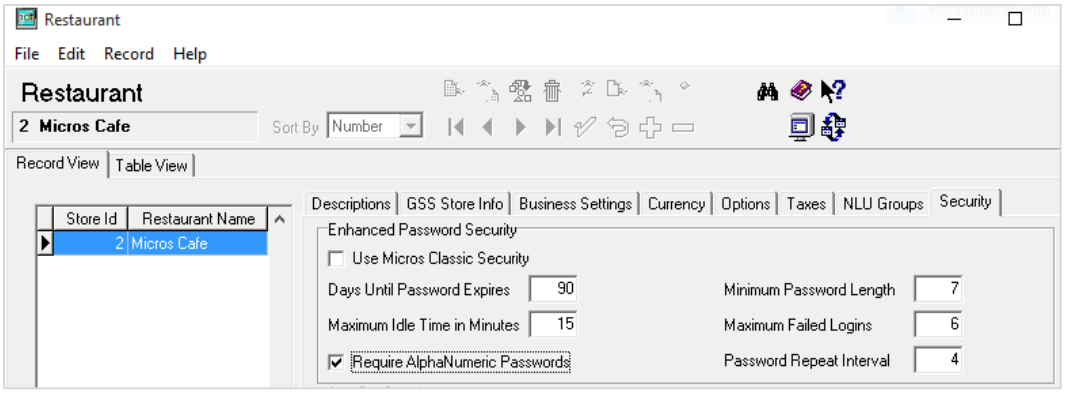


Setup a complex password for power user.



Poscfg | Employees | Employees | Security

- Give your manager or power user a User Password with both letters and numbers and at least 7 characters.
- You will not be able to open any back office application without this complex User Password.



Poscfg | System | Restaurant | Security:

- Disable Use Micros Classic Security.
- Days Until Password Expires = not greater than 90
- Maximum Idle Time in Minutes = 15 or less
- Require AlphaNumeric Passwords = On
- Minimum Password Length = at least 7
- Maximum Failed Logins = not greater than 6
- Password Repeat Interval = at least 4
- Before exiting Poscfg, test your new complex password by logging into another application like CreditCards.exe.

Poscfg | Sales | Tender / Media | CC Tender, and then enable:

- Verify before authorization
- Credit auth required
- Mask Credit Card Number
- Mask Expiration Date

The “Micros” and “DBA” user passwords must not be the defaults.

These passwords can be changed in **Database Manager | Users\Passwords**.

The “Database Key” and “Data Key” values must not be the defaults.

These values can be changed in **Database Manager | Encryption Keys**.

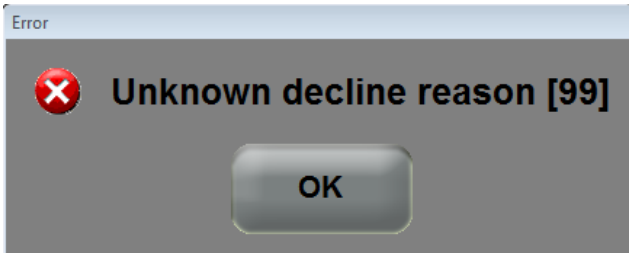
After making all of the above changes, Ops should start.

If not, go back to event viewer and see what it says.

Situation 4: Attempting to get an auth results in error “Failed to send OPI request [-214”.

Solution: Install Microsoft .NET Framework 4.6.1 on both server and backup server.

Situation 5:



This generic error message can be caused by several things.

Solution 1:

Restart the OPI Service and try again.

Solution 2:

If the system.log shows the message below then the cause is likely a Java security update.

(This should not be an issue in OPI 6.2, but leaving info, in case.)

[GATEWAY RESPONSE] GenericJSONProcessor: Cannot decrypt

java.security.InvalidKeyException: Illegal key size

Not all Java updates will cause this error, but security updates will. For example: Java 8 update 111 causes this issue.

1. Stop the OPI service.
2. Go to the link below and download jce_policy-8.zip.

   http://www.oracle.com/technetwork/java/javase/downloads/jce8-download-2133166.html
3. Unzip the file and copy the two files to your Java security folder.

- Local_policy.jar
- US_export_policy.jar

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

  Some systems may have Java installed in Program Files (x86). If so, update the files there also.

4. Start the OPI service.

Solution 3:

If the debug.log shows: "ht is null" and the problem was not caused by the Java security update mentioned in solution 2 above, then the cause may be that the wrong POS passphrase is in either OPI or RES.

The solution is to change the POS passphrase at both RES and OPI to be the same value. The steps to do this are in the **Utilities** section.

Solution 4:

If nothing is writing to the debug.log at all when you get the “Unknown decline reason [99]” error, then you may have the wrong POS Mode setting.

1. Open **OraclePaymentInterface\v6.2\Config\LaunchConfiguration.bat**.
2. On **POS Service** tab, verify Mode: = Native Driver.
3. Save changes, and then restart OPI service.

Situation 6: "Issuer or switch inoperative"

Cause 1: Simulator is not running.

Cause 2: OPI service not restarted after making config change.

Cause 3: Incorrect Proxy settings.

Cause 4: Incorrect settings in LaunchConfiguration.bat | PSP Configuration for Host and or Port.

Solution For Middleware mode:

1) Need to use https instead of http.

2) Need to append port to end of host value

Ex: Host = https://192.0.2.175:8991

Cause 5: Wrong IP address or port.

Solution for IP: LaunchConfiguration.bat | Merchants | Terminals. Verify IP is correct for terminals.

Solution for port: LaunchConfiguration.bat | PSP Configuration.

Correct Terminal port value.

Situation 8: *"Bad Terminal ID"*

Cause 1: Wrong workstation number.

Cause 2: Wrong merchant ID.

Solution: LaunchConfiguration.bat | Merchants, verify Merchant ID and WS numbers.

Cause 3: Forgot to restart OPI service after making changes in configurator or the wizard.

FAQs

Q1: Can OPI transactions be performed in SAR mode?

A1: No. The recommendation to the user will be that they need to have cash tender named properly, for example OPI OFFLINE.

It is up to OPI and the processor how electronic payments will be processed if OPI service is not available, because RES server is down or UWS is in SAR.

Not Supported

Not supported with RES Native OPI solution:

- Gift Cards (SVC works as usual through workstation. Not through OPI or PED.)
- Balance Inquiry
- Void a refund (RES limitation)
- Backup OPI Server

Card Type ID Reference

Card Type	ID for OPI 6.1.1 and later
Visa	00
Master Card	01
American Express	02
Diners	03
JCB	04
SVC/Gift Card	08
Reserved for future use	09
CUP	10
Debit Card	11
CUP Debit	14
Interac	15
UKDM/Switch	16
VISA Electron	17
VISA Debit	18
Maestro	19
VPAY	20
Alliance	21
EC Chip	22
GiroCard	23
MasterCard Debit	24
Bank Card	25
Discover	26
PayPal	27
RESERVE Tenders	28 to 42

Card Type	ID for OPI 6.1.1 and later
WeChat Pay	43
AliPay	44