Oracle® Payment Interface
Oracle Hospitality RES 3700 Native Driver
Installation Guide Release 6.2 E92122-02

March 2019



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Preface

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@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

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

Revision History

Date	Description of Change
December 2017	 Initial publication
March 2019	 Documentation updates

Preface vii

1 Pre-Installation

Important Information

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

- Only RES 5.5 MR1 or later support 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 6.2.
- You cannot upgrade to OPI 6.2 from any previous MICROS Payment Gateway (MPG) version.
- You cannot upgrade from MGDH 6.1.1.X to Native Driver 6.2 (must upgrade then switch to Native configuration).
- You cannot run upgrade from 6.1.1.X to 6.2 as unattended/silent (due to 6.1.1.X installation program differences between 6.2).
- You must uninstall previous versions of MPG before installing OPI 6.2.
- Batch and settle all credit transactions prior to installing or upgrading OPI.
 Transactions from previous OPI versions will not settle, once system is upgraded to OPI 6.2.
- OPI 6.2 does not install a database. If doing a clean install of OPI, a database must be installed first.
- If upgrading from OPI 6.1 or higher, the existing MySQL database will be migrated to 6.2.

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.

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

6. Restart the server.

Pre-Installation 1-1

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 6.2.

Pre-Installation 1-2

2 OPI Native Driver

Installation Prerequisites

OPI requires:

- Microsoft .NET Framework version 4.0 or later.
- Microsoft Visual C++ 2010.
- At least 6 GB of free disk space.

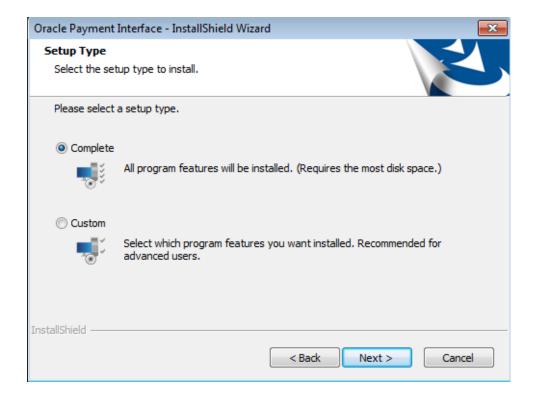
CaOPI requires Microsoft .NET Framework version 4.6.1 or later.

Before you start, make sure to know:

- Verify whether the merchant is a table service restaurant (TSR), quick service restaurant (QSR), or both. You cannot use tips in a QSR.
- Verify with the merchant whether they would like Refund functionality activated. 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 6.2 install.

Installing the OPI

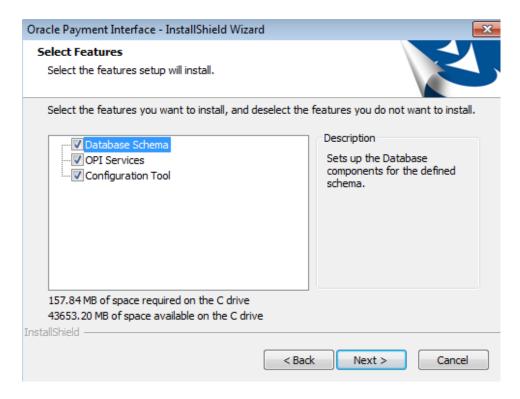
- 1. Take Micros Control Panel to off.
- 2. Copy OraclePaymentInterfaceInstaller-6.2.0.0.exe to the RES Server and double-click it to launch the install.
- 3. Select your language, and then click **OK**.
- 4. Click **Next** on the *Welcome to the InstallShield Wizard for Oracle Payment Interface* screen.
- 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 selected the Custom install option, the *Select Features* screen appears with the following options:

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

All three of these features must be installed. It is just a matter of whether they are all installed on the same computer or on separate computers.

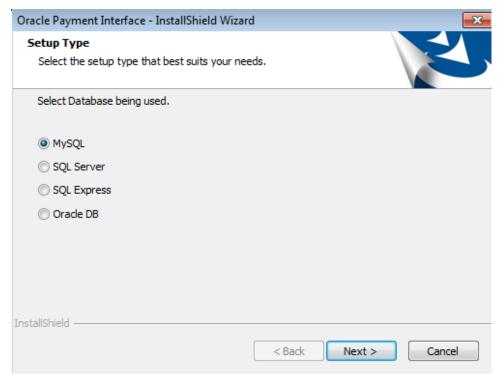
7. Select the features to install on this computer, and then click **Next**.

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.

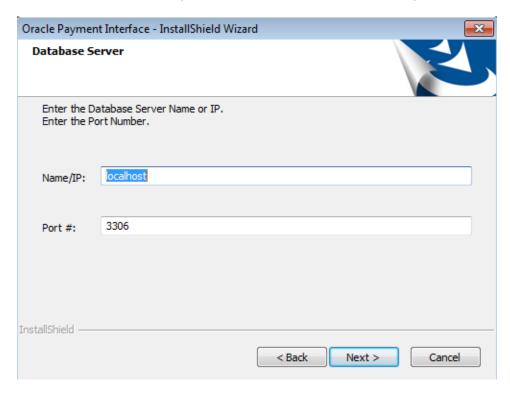
The Setup Status screen displays for a few minutes.

10. The Setup Type screen appears.



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

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



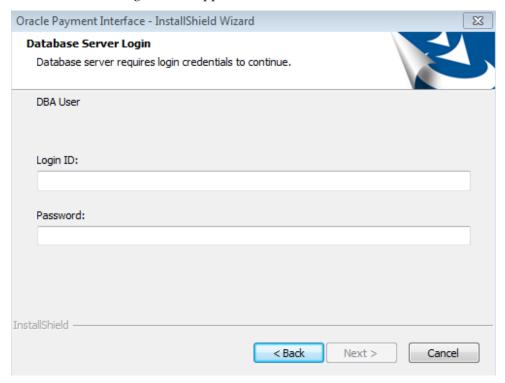
The Database Server screen appears.

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

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

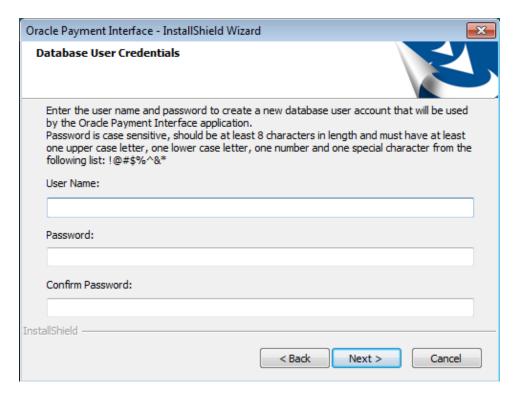
12. Accept the default **Port** # of 3306 (for MySQL), and then click **Next**.

The Database Server Login screen appears.



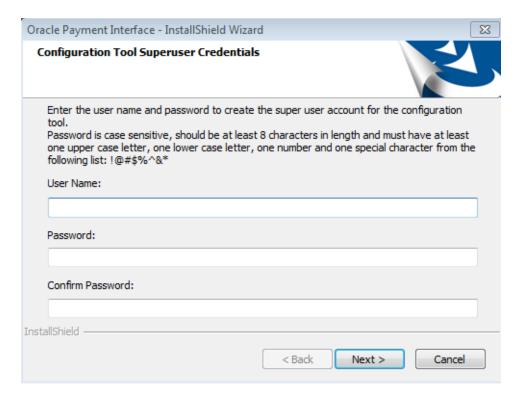
- 13. Enter the credentials for the DBA user of the database type selected, and then click **Next**.
 - For MySQL the Login ID: = root
 - For other database types the DBA user name/Login ID may be different.
 - Enter the correct password for the DBA user.

The Database User Credentials screen appears.



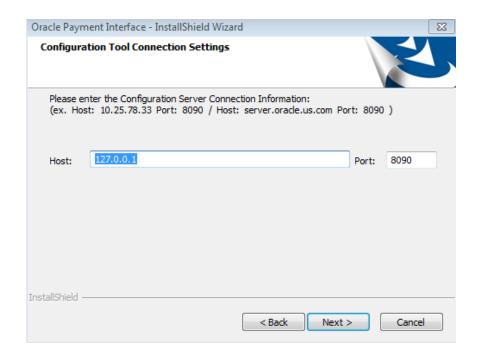
- User Name: Create a new user.
- **Password**: Create a password.
 - Password is case sensitive
 - Should be at least 8 characters in length
 - Must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#\$%^&*
- 14. Confirm the password,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

The Configuration Tool Superuser Credentials screen appears.



- **User Name**: This can be any user name. It does not have to be a Windows account user.
- Password: Create a password.
 - Password is case sensitive
 - Should be at least 8 characters in length
 - Must have at least one upper case letter, one lower case letter, one number and one special character from the following list: !@#\$%^&*
- 17. Confirm the password, and then click Next.
- 18. Click **OK** on the Create SuperUser operation successful dialog.

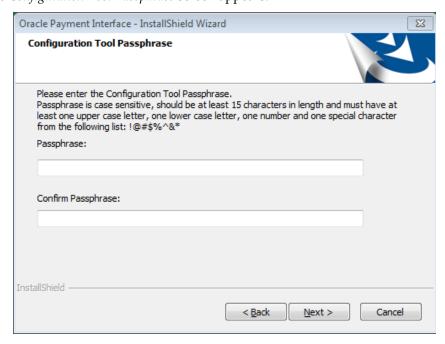
The Configuration Tool Connection Settings screen appears.



- **Host**: May be left at 127.0.0.1 if the OPI configuration server is installed on this PC. Otherwise, specify the name or IP address of the PC where the OPI configuration server will be installed.
- Leave the default **Port** of 8090.

19. Click Next.

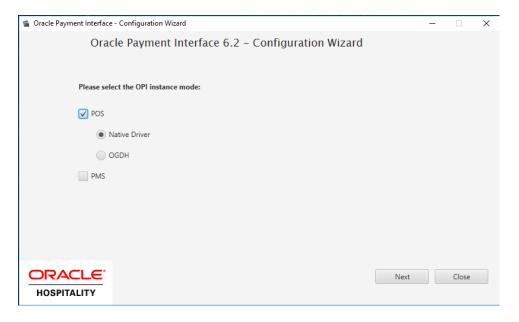
The Configuration Tool Passphrase screen appears.



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: !@#\$%^&*

20. Enter a passphrase, confirm it, and then click Next.

After a brief pause, the *Configuration Wizard* launches.



21. Select POS, Select Native Driver, and then click Next.

The POS Native Driver Configuration screen appears.

22. 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 Interfaces screen appears.

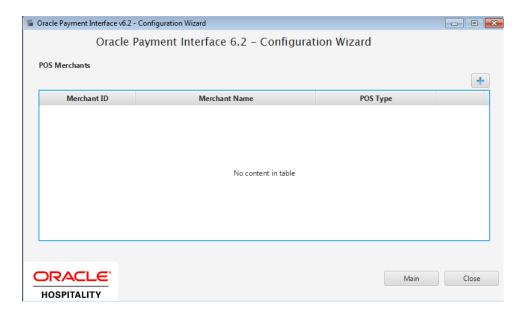
Enable Mutual Authentication: Enable this option only if the PSP has provided the certificates and passwords for it.

Private Key Cert. Password: Enter the password and confirm it.

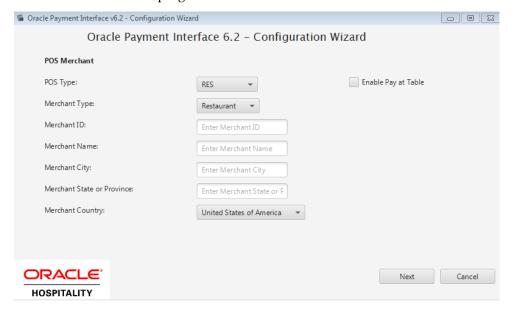
Root Certificate Password: Enter the password and confirm it.

- **OPI Mode**: Select either Middleware or Terminal.
- Middleware: Fill in 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*.

23. Click Next.



24. Click the blue + icon in top right corner to create new merchant record.

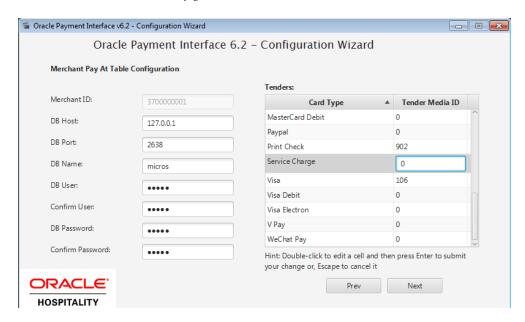


- 25. Select RES for POS Type.
- 26. Select Restaurant or Retail for Merchant Type.
- 27. Enter the Merchant ID.
- 28. Enter Merchant name, city, state and country.
- 29. Check the "Enable Pay at Table" box if the merchant will use Pay at Table.

30. 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.



31. Complete or accept the defaults for the following Pay at Table fields:

DB Host: Can remain 127.0.0.1 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 step above and confirm it.

Tenders: If the Pay at Table tenders are not already configured in POSCFG, go the the **Pay@Table Tender Config** section and do that now.

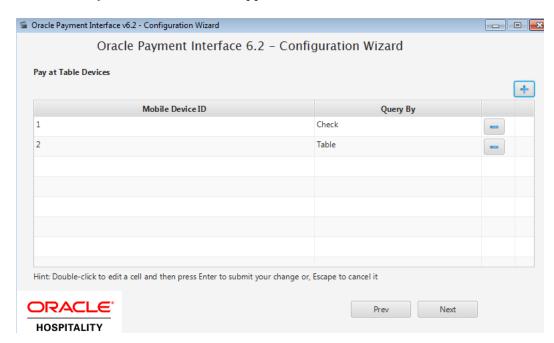
Enter the correct Tender number for each card type used with Pay At Table.

Print Check: Enter the number of the Print check tender.

Service Charge: Enter the number of the Service Charge that is used for tips.

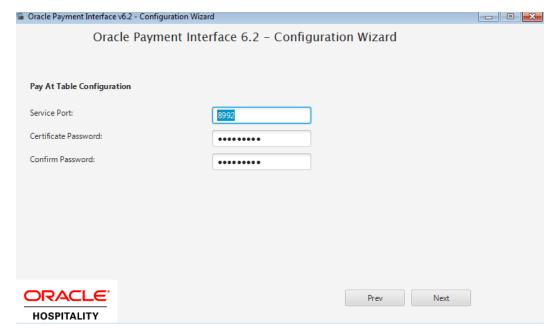
32. Click Next.

The Pay at Table Devices screen appears.



- 33. 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.
- 34. Click Next.

The Pay at Table Configuration screen appears.



35. Complete or accept the defaults for the following Pay at Table Configuration fields:

Service Port: Enter the correct port for use with Pay at Table terminals.

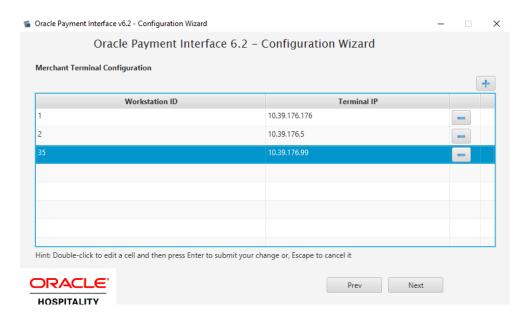
Certificate Password: If this is an OPI upgrade, leave the passwords unchanged as they will match the certificates already in use.

• If a new install, use the certificate password and port provided by the PSP.

36. Click Next.

Pay at Table Install section ends here.

If using Terminal mode, the *Merchant Terminal Configuration* screen appears. If using Middleware mode, this screen does not appear.



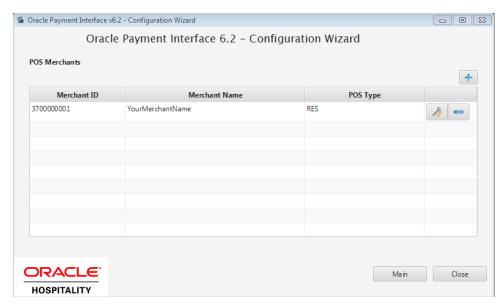
37. Complete the following Merchant Terminal Configuration fields:

Workstation ID: Enter the workstation number from the POS system.

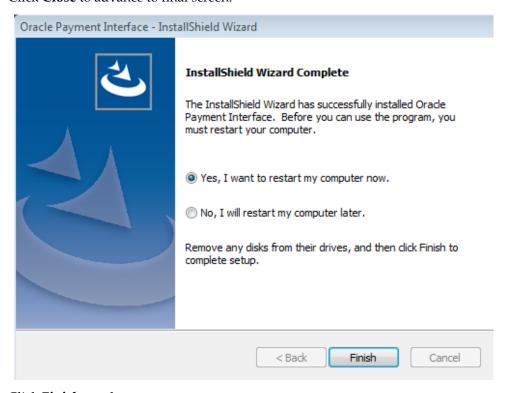
Terminal IP: Enter the IP address of the pinpad device.

38. Click Next.

The POS Merchants screen appears.



- 39. Click the wrench icon to edit an existing merchant record.
- 40. Click **Main** to go back and review settings.
- 41. Click **Close** to advance to final screen.



42. 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

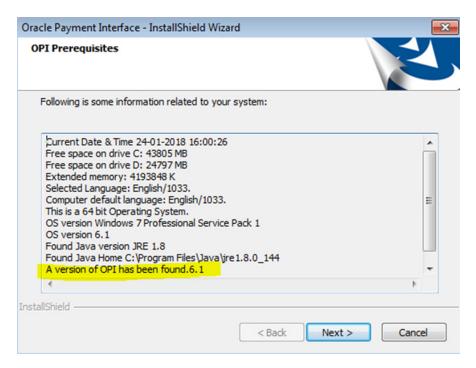
VERY IMPORTANT: Read and follow the upgrade directions.

Note: OPI 6.1 and higher can be upgraded to OPI 6.2.

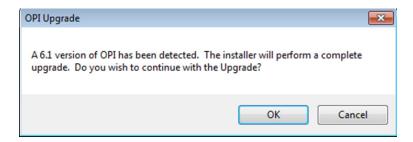
OPI Upgrade Steps

- 1. Right-click and Run as Administrator the OraclePaymentInterfaceInstaller_6.2.0.0.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.

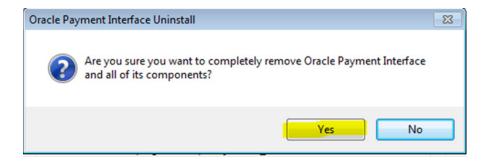
Prerequisites for the installation will be checked, including the required free drive space, details of the host environment, and the Java version that is present.



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 6.2 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.

- 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: May be left at 127.0.0.1 if the OPI configuration server is installed on this PC. Otherwise, specify the name or IP address of the PC where the OPI configuration server will 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@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.

If you cannot immediately reboot, you must stop and then start the OPI Service for the current settings to take effect.

Pay@Table Tender Config

POSCFG Create Pay@Table Tender

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

- Create one P@T tender for all P@T transactions.
- Create a P@T tender for each card type.

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**.

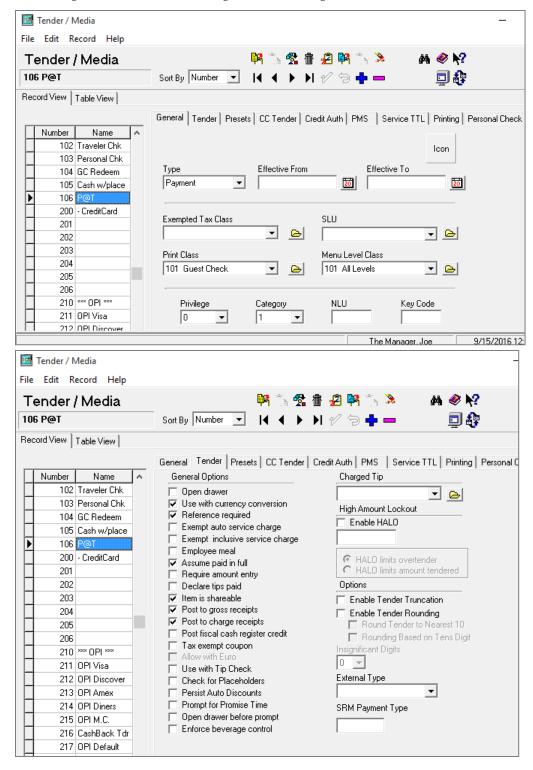
If the merchant wants to use the 3rd party processor's reports, all transactions will be reported by card type and will not be separated into P@T vs P@C.

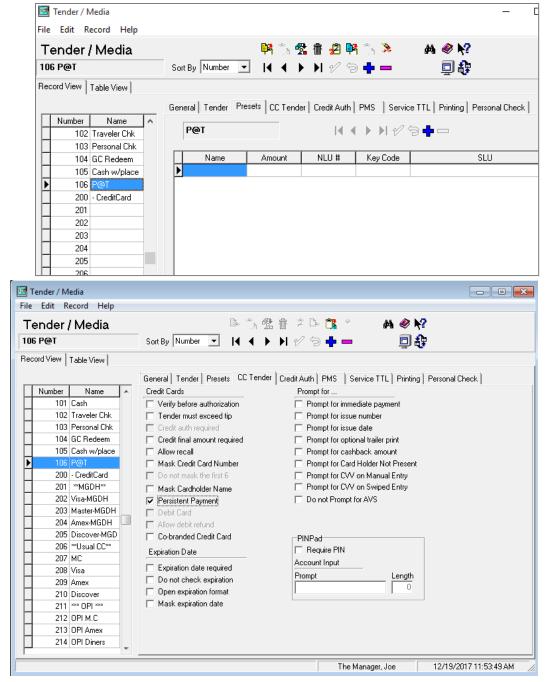
If the merchant wants to use local RES reports to show just 1 total for each card type, they can have a custom report made that combines the Pay@Counter and Pay@Table tenders for each card type.

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.

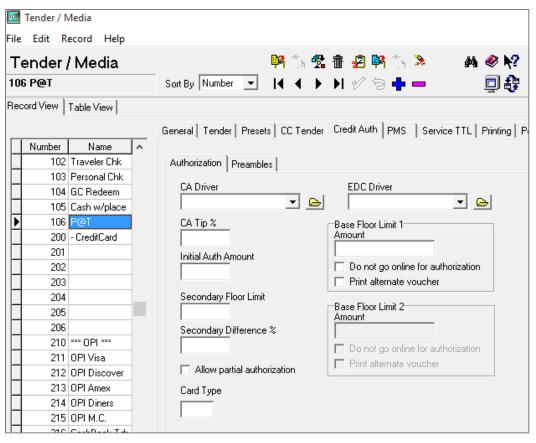
- 2. Rename it to P@T.
- 3. Configure P@T tender according to the following screenshots.





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.



- 4. **Preambles** tab = No Preambles.
- 5. **PMS** tab = Allow 19 reference characters.

POS Configuration for Native Driver

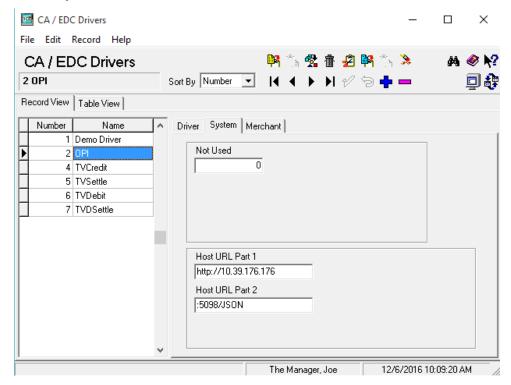
Credit card drivers, including CaOPI, require complex security. Ops.exe does not start if complex security is not enabled. The troubleshooting section contains instructions for enabling complex security.

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.

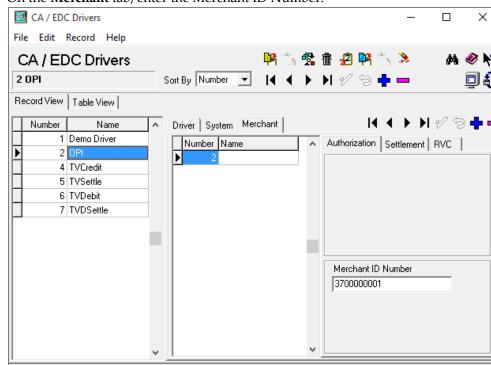
Configure CaOPI Driver

- 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.

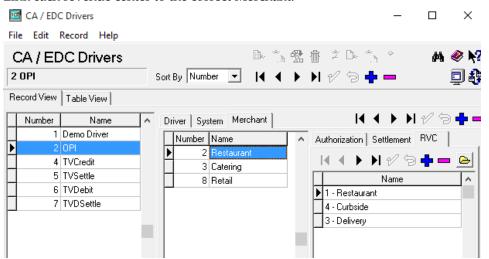
Do not use 127.0.0.1 even if OPI is installed on the RES server.



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

If you are using multiple merchant IDs, click the lower blue plus symbol to add another Merchant record. Use the record Number that Poscfg defaults to even if it is not in sequence. Add a Name for each Merchant record and the correct Merchant ID Number.

7. Link each revenue center to the correct Merchant.

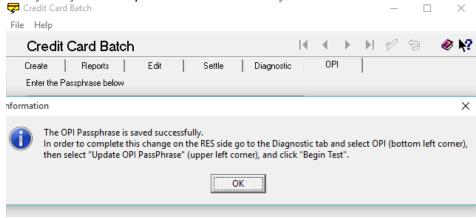


Every revenue center must be linked to a Merchant. Checks should not be transferred between revenue centers with different Merchant IDs.

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

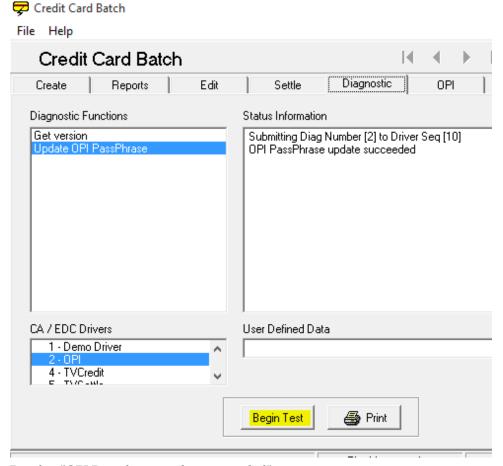
- 1. Start | Run | CreditCards.exe | OPI.
- 2. Enter the passphrase created during the OPI installation, and then click **Save**.
- 3. Verify it says the Passphrase saved successfully.



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.

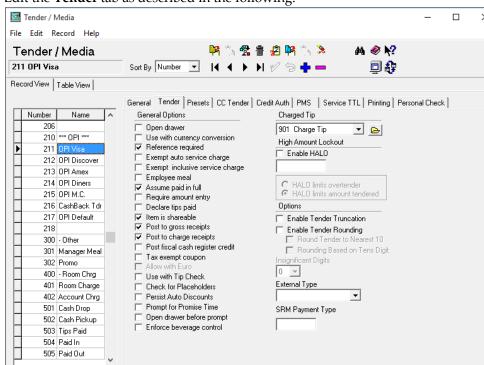
4. CreditCards.exe | diagnostics, select OPI from CA/EDC Drivers, select Update OPI PassPhrase, and then click Begin Test.



- 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.



9/14/2016 10:48:15 PM

The Manager, Joe

2. Edit the **Tender** tab as described in the following:

Reference required

Assume paid in full

Charged Tip linked if any TSR Revenue Centers.

Empty if only QSR Revenue Centers.

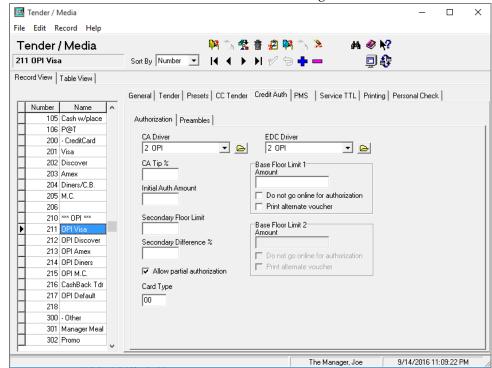
3. Make sure the **Presets** tab is empty.

4. Enable the following options on the **CC Tender** tab:

Credit Auth required.

Mask Credit Card Number.

Mask expiration date.



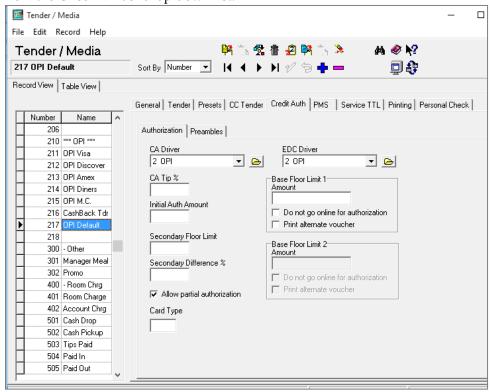
5. Edit the **Credit Auth** tab as described in the following:

- 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".

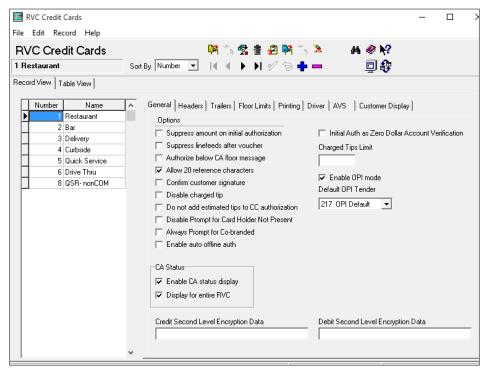
- 6. Make sure the **Preambles** tab is empty.
- 7. On the **PMS** tab, select **Allow 19 reference characters**.

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-6.2.exe to launch the install.
- 3. Follow the on screen instructions to compete the upgrade.

3 POS Workstation Procedures

Credit card transactions with OPI and the RES native CaOPI driver function the same as existing native drivers. You can now use the following features that were not supported by MGDH/OGDH:

- Beverage control
- Place holders
- Splitting checks with auths.
- Adding checks with auths.
- Not limited to 5 auths per check.
- Auths can be associated with a specific seat.
- Can void a CC tender (before batch and settle).
- Credit auths print to the CA Voucher printer.

TSR

CC Auth

Button configuration = Function Transaction: Credit Authorize.

- 1. Begin check, ring food, and service total.
- 2. Pick up check, select **Auth CC**, and service total.

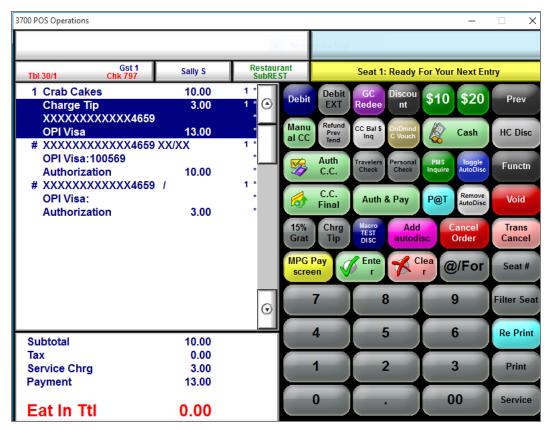
CC Final

Button configuration = Function Transaction: Credit Finalize.

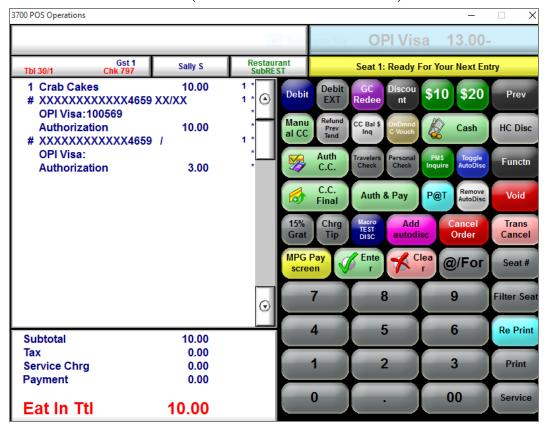
- 1. Pick up check with a CC auth and select **CC Final**.
- 2. Select **No** to "Chg tip amount is 0.00".
- 3. Enter total amount including tip and select **CC Final**.
- 4. Click **OK** at the tip amount prompt.

Void CC Tender

- 1. Re-open the closed check.
- 2. Select CC tender payment.

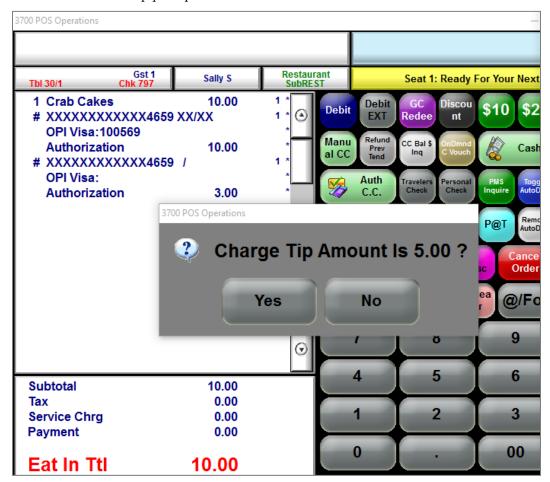


3. Click the **Void** button. (Normal RES void button. No SIM.)



Adjust tip

- 1. Starting from the steps above with the CC tender already voided, enter 15.00 and select **CC Final**. This applies 10.00 to the amount due and raises the tip from 3.00 to 5.00.
- 2. Click **Yes** to tip prompt.



Voice / Manual Auth

This is only supported in TSR.

Button configuration = Function Transaction: Manual Authorize.

- 1. Begin check, ring food, and service total.
- 2. Pick up check, and select Manual CC.
- 3. Enter the voice auth code when Ops prompts for it.

Refund

- 1. Begin check, and then select **Void**.
- 2. Ring up \$10.00 food, and then select **CC auth**.

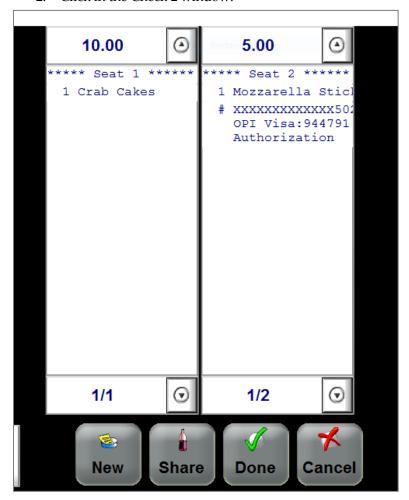
Result = A \$10.00 refund is applied to the card and the check closes without having to hitting CC final.

Customer and Merchant copies of Refund voucher print.

Move Auth

Pick up a check with food rung on seats 1 and 2 and a CC auth on seat 2.

- 1. Click **Split Check** and select the food and auth on Seat 2.
- 2. Click in the Check 2 window.



CC Reprint

CC Reprint cannot be used from within a check.

Button configuration = Function Transaction: On Demand CC Voucher.

Vouchers can be reprinted for open or closed checks.

- 1. Sign into Ops, but do not begin a check.
- 2. Enter a check # and select **CC Reprint**.
- 3. The vouchers will reprint showing ***Reprint*** at the top.
- 4. If just **CC Reprint** is hit, the auth from the last check that was open on that specific workstation will be reprinted. If it has multiple auths on it, a list of those auths will be shown so the user can select one. If there were no CC auths on the last check then it will show: "No CC Voucher Found to Print".

Initial Auth

Button configuration = Function Transaction: Initial Authorize

- 1. Sign into Ops, begin check, enter an amount and select **Initial Auth**.
- 2. That amount will be authorized, but no vouchers will print.
- 3. To close the check later, do a **CC auth** and **CC final** with the card.

QSR

CC Sale

Button configuration = Function Transaction: Credit Card Lookup.

- 1. Sign into QSR revenue center and ring in order.
- 2. Select CC Sale.

Void CC Tender

- 1. Re-open the closed check and select **CC tender payment**.
- 2. Click the **Void** button. This is a normal RES void button and not SIM.

CC Reprint

Button configuration = Function Transaction: On Demand CC Voucher.

CC Reprint cannot be used from within a check.

Vouchers can be reprinted for open or closed checks.

- 1. Sign into Ops, but do not begin a check.
- 2. Enter a check # and select **CC Reprint**.
- 3. The vouchers will reprint showing ***Reprint*** at the top.
- 4. If just CC Reprint is hit, the auth from the last check that was open on that specific workstation will be reprinted. If it has multiple auths on it, a list of those auths will be shown so the user can select one. If there were no CC auths on the last check then it will show: "No CC Voucher Found to Print".

Refund

- 1. Select **Void**, and then ring \$10.00 food.
- 2. Select CC sale.

Result = A \$10.00 refund is applied to the card and the check closes.

Customer and Merchant copies of Refund voucher print.

4 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 5.6 | MySQL 5.6 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.

The following commands use a DB user name of 'OPIDBuser' as an example.

5. Update mysql.user set password=PASSWORD('YourNewPWgoesHere') where user='OPIDBuser';

Result = When successful it shows: 'Query OK, 2 rows affected"

6. Select user, password, host from mysql.user;

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

7. Exit MySQL.

Utilities 4-1

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

See the OPI Installation and Reference Guide for directions.

Utilities 4-2

5 Troubleshooting and FAQs

Troubleshooting

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

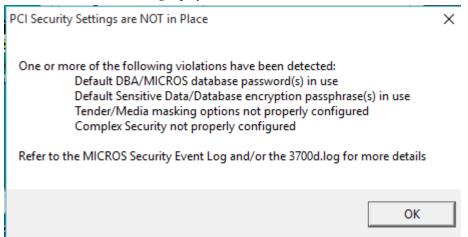
Solution: Right-click and config.exe and select "Run as Administrator".

Situation 2: Cannot communicate to OPI after installation.

Test:

- Verify you can telnet to the OPI PC on port 5098 from another PC.
 Ex: From CMD prompt: telnet 172.23.25.16 5098
 (Where 172.23.25.16 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:

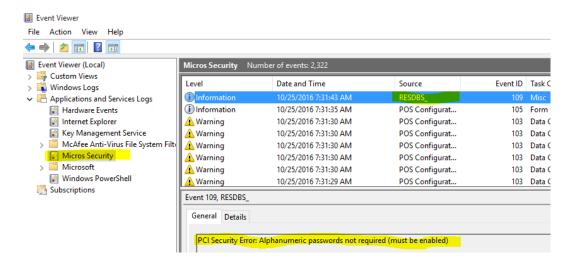


Solution:

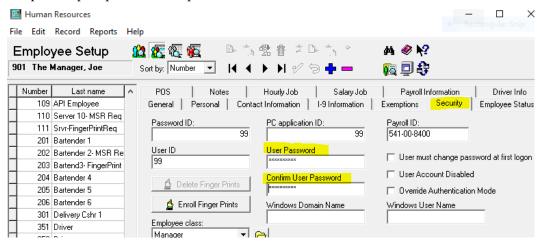
- Enable Complex security.
- Look in event viewer to see what the specific issue or issues are.
- Correct the issues listed.

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

Example below.

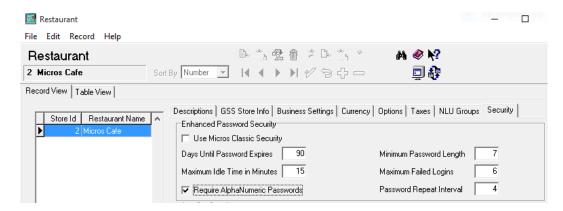


Setup a complex password for power user.



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 : Can not 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://10.39.176.175:8991

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 thru workstation. Not thru OPI or PED.)
- Balance Inquiry
- Void a refund (RES limitation)
- Debit (RES Native OPI)
- SaleCashBack (RES Native OPI)
- 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
CUP	10
Discover	26
PayPal	27
Visa Electron	17
Maestro	19
VPAY	20
Alliance	21
EC Chip	22
Bancomat Card	23