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Preface

This document describes how to install Oracle Payment Interface (OPI) Release 6.1 with the Oracle Hospitality RES 3700 MICROS Gateway Device Handler (MGDH) and it explains how to configure RES 3700 for OPI with MGDH.

Audience

This document is intended for installers and system administrators of OPI and MGDH.

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
- 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/

Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Description of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2017</td>
<td>Initial publication</td>
</tr>
</tbody>
</table>
1 Pre-Installation

Before You Start the Installation

Verify that your environment meets the following requirements:

- The application requires .NET Framework version 4.0 or higher.
- Upgrading from OPI 6.1 and higher to OPI 6.1 MR1 is supported.
- Upgrading from MGDH 6.1 and higher to MGDH 6.1 MR1 is supported.
- Upgrading from previous versions of MPG to OPI is not supported.
- If an MGDH installation prior to 6.1 exists, go to Programs and Features and uninstall the previous MGDH installation. Then install the new MGDH.
- Verify with the merchant whether they use TSR (table service) or QSR (quick service), or both. (No tips allowed in QSR.)
- Verify with the merchant whether they would like “Refund” functionality activated or not. The merchant needs to control the privilege for this function.
- Verify with the merchant whether they would like “Sale&Cash” functionality activated. This allows a guest to get cash back with their purchase. This is only available for QSR.
- Make sure Microsoft Visual C++ 2010 is installed on the PC where MGDH and OPI will be installed.
- At least 6 GB of free disk space is required for OPI installation.
- You must install both MGDH and OPI as an Administrator.
- You will need to enter the user name and password of a Windows local admin during the installs.
- You will need to know a Micros database user name and password to install both MGDH and the Pay@Table portion of OPI.
- If upgrading OPI you will need to know the MySQL root user account password.

Obtain the following information before installing the software:

- Confirm Merchant ID’s
- Confirm receipt header details
- Tender Media numbers for each card type
- IP of OPI Server
- IP of POS Server
- Workstation ID’s and IP’s that will integrate to a PINPAD
**Note:** If the MGDH setup software is run on a 3700 server with legacy MGDH files present in the CAL Files folders, manually remove these files before installation. Otherwise, the files deployed via the new CAL Packages will be constantly overwritten by the legacy files in the CAL Files folders and unexpected results will occur.

For example, check Micros\Res\CAL\WS5A\Files\CF\Micros\Etc for any legacy MGDH files. If found, delete all legacy MGDH files. In addition, check in the similar location for other workstation types. Lastly, if there is a Bin folder in Files, then check that folder as well.
## 2 MGDH OPI Solution

### Installing MGDH

To install MGDH:

1. In Microsoft Windows, log in as an administrator, and then run the `MGDH_OPI_6.1.1.9.exe` file.
2. Click **Next**.
3. Select the install location, and then click **Next**.
4. Enter a database user name and password, and then click **Next**. It may take 10–20 seconds to connect to the database.
5. Select the currency, and then select the RVC Mode. QSR revenue centers do not allow tips.
6. To use one merchant ID, select **Single MerchantID**, enter the merchant ID, and then click **Next**.
7. To use multiple merchant IDs, select **Multiple Merchant ID**, and then click **Next**.
8. Enable all revenue centers that use MGDH.
9. If you selected **Multiple Merchant ID**, enter the merchant ID for each revenue center.
10. For **Mode**, select **TSR** or **QSR** for each revenue center. Tips are not allowed in QSR.
11. For each revenue center, click **Edit**, and then enter the revenue center headers and footers.

12. Select the tender from the drop-down for each card type. If you do not have a specific tender listed, leave that entry blank. Gift Cards are not supported in OPI 6.1, so leave that blank.
13. Select **VoidMode**, change the default selections if necessary, and then click **Next**.

14. Edit print options if necessary, and then click **Next**.

   **Note:** The “EnableSigVerify” option is enabled by default. This will cause the POS operator to be prompted to verify whether the signature matches on every CC auth and Sale. If this is not desired, disable this option.

15. Enter the IP address of the computer that hosts OPI, and then click **Next**.
16. On the POSEOD Options screen, enter the IP address of the computer that hosts, enter the merchant IDs, and then click Next.

17. Click OK, and then click Install on the Setup – MGDH OPI Solution package screen.

18. If necessary, edit configuration files, and then click Next.
19. Click Next.

20. Select No and Finish to continue with the OPI installation.

**POSCFG Configuration for MGDH**

**Employee Class / Refund**

The ability to perform a refund is controlled by the SIM privilege 4 option. To access, select Employee Classes > Privileges > Privilege Options.

Only enable this option with the merchant’s permission and only for the employee class they specify.
Interfaces

To access interfaces, select Poscfg > Devices > Interfaces.

Use the following parameters:
• Number: 7
• System Name: Chip&PIN Interface
• Outgoing Message Name: Chip&PIN
• Timeout: 120
• Network Node: RES Server
• Number ID Digits: 9
• SIM Interface: enable
• Type: TCP
**Touch Screens**

To access touch screens, select POSCFG > Devices > Touchscreen Designer.

![Touchscreen Designer](image)

Link every Void key to SIM inquire number 17.

Link credit card tender keys to the correct SIM inquire # using the values below.

The buttons for **TSR** are listed as the following:

- **[Sale + Tip]**: SIM INQ #2  
  (Supports tipping from the PED. Configure INQ #2 instead of INQ #1. For TSR only.)
- **[Tip Adjust]**: SIM INQ #3
- **[CC Refund]**: SIM INQ #4 (Recommended refund method.)
- **[Refund(m)]**: SIM INQ #11
- [CC Auth]: SIM INQ #8
- [CC Final]: SIM INQ #9
- [Tab Auth]: SIM INQ #13
- [Balance Inq]: SIM INQ #16
- [Reprint]: SIM INQ #7
- [Repost]: SIM INQ #19
- [Void(e)]: SIM INQ #17
- [Manual Auth] or [TSR CC Voice]: SIM INQ #18
- [Auth + CNP]: SIM INQ #14

Auth + CNP is a way for the TSR operator to trigger at the POS side through MGDH to allow the user to manually enter credit card info on payment terminal (PinPad), for card not present transactions.

**Note:** [Void(e)] INQ #17 is a special button. It exists on POS 3700 only. For other POS platforms, it is not needed. All void buttons need to be replaced with it.

The buttons for QSR are listed as the following:

- [CC Sale]: SIM INQ #1
- [SALE&CASH]: SIM INQ #5
- [CC Refund]: SIM INQ #4 (Recommended refund method.)
- [Refund(m)]: SIM INQ #11
- [Balance Inq]: SIM INQ #16
- [Reprint]: SIM INQ #7
- [Repost]: SIM INQ #19
- [Void(e)]: SIM INQ #17
- [Sale + CNP]: SIM INQ #6

Sale + CNP is a way for the QSR operator to trigger at the POS side through MGDH to allow the user to manually enter credit card info on payment terminal (PinPad), for card not present transactions.

**Note:** [Void(e)] is a special button. It exists on POS 3700 only. For other POS platforms, it is not needed. All void buttons need to be replaced with it.
Note: No Voice/Offline entry for QSR.
Tender Media

Setup the following for credit cards.

Notes:

- Assume paid in full.
- Reference required.
- Charged Tip: Set to 0 None if all RVCs are QSR mode.
- Charged Tip: Set to Link a Tip service charge if some RVCs are TSR mode.

The following Tender / Media Tabs should be left blank (no options enabled):

- Presets
- CC Tender
- Credit Auth | Authorization
- Credit Auth | Preambles
On the PMS tab, enable **Allow 19 reference characters**.
Cash Back Tender

Verify the merchant wants cash back functionality before configuring this.

Cash back is supported for QSR revenue centers only.

Sales | Tender / Media | Tender:

- Assume paid in full.
- Reference required.
- Service Charge - 0 None.
- Debit Card
- Prompt for Cashback Amount
- Allow 19 reference characters.
- MPG.inc must have this value:
  Promptcashback = True
Cash Back Service Charge

The cash back tender also requires a cash back service charge, though it is not directly linked to the cash back tender.

Setup the following service charge.

- Name = “CashBack SVC”
- General Tab:
  Menu Level Class = all levels
  Print Class = Guest check
- Options Tab:
  - Amount
  - Reset Itemizers
• Service Charge
  Non-Revenue Cash Back

POSEOD

To verify POSEOD files are properly configured, go to Micros\Res\Pos\Scripts\poseod\ and verify the contents of the following files:

• MGDH.inc
  Verify the server IP address and port are correct for the computer that hosts OPI.

• POSEOD.inc
  Verify 0R is the code for RES 3700. Other POS types use a different code. Verify the Merchant ID is correct. The following example shows a merchant ID and code. Separate multiple merchant IDs with the pipe symbol and no spaces (for example, |0R|3700000001|370000002|).
To run POSEOD manually, double-click the Micros\Res\Pos\Scripts\poseod\poseod.exe file. A DOS CMD window flashes briefly. To verify POSEOD ran successfully, open the OraclePaymentInterface\log\transaction.log file and confirm BATCH and APPROVAL appear with the correct time stamp at the bottom of the file.

<table>
<thead>
<tr>
<th>BATCH</th>
<th>00 APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGM RSA</td>
<td>00 APPROVED</td>
</tr>
<tr>
<td>MGM RSA</td>
<td>00 APPROVED</td>
</tr>
<tr>
<td>MGM RSA</td>
<td>00 APPROVED</td>
</tr>
</tbody>
</table>

Configuring POSEOD to run as part of a scheduled RES autosequence:

**Autosequences**

1. Poscfg | System | External Programs
• New record named: POSEOD
• User Interface: Console
• Run Style: Normal
• Working directory: $(MICROS_DIR_POS)\Scripts\Poseod
• Command line: $(MICROS_DIR_POS)\Scripts\Poseod\Poseod.exe

2. Call the above external program during the End of Night autosequence, but before printing occurs. (So that if printing fails, it will not prevent POSEOD from running.)

Note: You can schedule POSEOD using Windows Task Scheduler.

Tax Type Settings in MGDH

Verify your RES database tax types match what MGDH is set to. Percent and Breakpoint taxes are sent as part of the <TaxAmount> to OPI. Inclusive and Full inclusive tax amounts are not sent to OPI and this is by design. But if a percent or breakpoint tax is assumed by MGDH to be inclusive, that tax amount will not be included in the <TaxAmount> sent to OPI. There is no visible “TaxType” entry in OPI.inc, but the default taxtype setting is as follows.

TaxType = "PIPIIPPPP"
The above default setting assumes in Poscfg | Sales | Tax Rates | General that:
Tax 1 = P = Type (percent or breakpoint)
Tax 2 = I = Type (inclusive or Full inclusive)
Tax 3 = P = Type (percent or breakpoint)
Tax 4 = I = Type (inclusive or Full inclusive)
Tax 5 = I = Type (inclusive or Full inclusive)
Tax 6 = P = Type (percent or breakpoint)
Tax 7 = P = Type (percent or breakpoint)
Tax 8 = P = Type (percent or breakpoint)

If the tax rates being used by the RES database do not match the types listed above, you can correct that by either:
1) Moving tax rates in RES to match the MGDH defaults.
Or
2) Add a line to OPI.inc that tells MGDH your actual tax types.
Ex: If your tax types are:
Tax 1 = percent
Tax 2 = breakpoint
Tax 3 = inclusive
Tax 4 = full inclusive
Tax 5 thru 8 unused

Add this line to OPI.inc:

```
TaxType = "PPIIPPPP"
```

The "quotes" shown above are necessary.

## Uninstalling the Old Version of OPI and MPG

Upgrading from OPI version 6.1 and later to OPI 6.1 MR1 is supported. Upgrading anything earlier than OPI 6.1 is Not supported. Remove earlier versions of the software before installing OPI 6.1 MR1. The MySQL part of the installation fails if a ProgramData\MySQL folder from an older release is on the computer when you install OPI 6.1 MR1.

### To Uninstall

1. Run POSEOD with the old version to verify all previous transactions have been batched. Verify the batch was approved in the transaction.log.
2. Save a backup of the current OPI and MPG folder structure.
3. Open the %OPI_HOME%/bin/MicrosGatewayConfig.exe file and save a screen capture of the ServerXX values.
4. Save a screen shot of the POS record you are using and its values (for example, posRes1).
5. Uninstall these components through Microsoft Programs and Features:
   - MPG
   - MySQL if no other products are using it
   - MySQL community
6. Rename the C:\ProgramData\MySQL folder to MySQL_Old.
   If you do not see the C:\ProgramData folder, enable Windows Explorer > Tools > Folder Options > View > Show hidden files, folders, and drives, and then close and re-open Windows Explorer.
7. Restart the computer.
8. Install OPI.

## Terminal Mode OPI Install

1. Take Micros Control Panel to off.
2. Double-click Oracle Payment Interface-6.1.1.9.exe to launch the install.

3. On the Choose your MySQL Root Password page, create a password, confirm the password, and then click Next. This password will be needed for future upgrades.

4. On the Create DB user for OPI page, create an OPI database user name and password, confirm the password, and then click Next.

5. On the Choose communication channel screen, select POS and MGDH.

6. Enter a certificate password.

7. Enter a date and time for the OPI service to restart on a weekly basis.

8. Select the install location.

9. Select the location for the source code files and license, and then click Next.

10. Click Install.

11. Follow the instructions and use the wizard to complete installation.

1. The installation wizard launches the Oracle Payment Interface Configuration Tool. If it does not automatically start, double-click INSTALLATION_DIR\OraclePaymentInterface\bin\OPIconfigurationWizard.exe.
2. Enter a Microsoft Windows administrator user name and password, and then click Login.

3. Specify interface and mode settings:
   - Select **Enable** from the **POS Interface** drop-down.
   - Select the **OPI Mode**:
     - To communicate directly to the pinpads, select **Terminal**.
     - Enter the **Port** value.
     - Or to communicate to the pinpads through a third party, select **Middleware**, and then go to the **Middleware**.

4. Select **POS Configuration**.

5. Click **Add New Property** to create a Merchant ID.

6. Specify merchant settings as follows:
   - Select **POSRES** from the **POS Type** drop-down.
   - Type the **Merchant ID** value. The value must match the Merchant ID value used for the MGDH installation.
   - **PosCrossMerchant** = Disable
   - **PosCrossCheck** = Disable
   - **Pay@Table** = Disable
     - If you want to enable Pay@Table, see the **Pay@Table** section.
   - Enter merchant information, and then click **Next**.
7. Click **Add Terminal**.

8. Enter terminal information:
   - **Workstation ID**: Workstation obj_num in POS Configurator.
   - **IP**: Pinpad IP address. If using a simulator instead of a PED, enter the IP address of the computer where the simulator is running.

9. Repeat above to add more terminals, and then click **Next**.

10. To add another Merchant ID or Property, click **Continue**.

11. To finish configuration, click **Exit**, save the changes, and then restart the computer.

---

**Running the OPI Config.exe File for Terminal Mode and Pay@Counter**

1. Go to `<drive>:\OraclePaymentInterface\bin\config.exe`, and then log in as a local administrator.

2. In the **About** pane, expand **Oracle Payment Interface**.

3. The **dll** entry shows the MGDH installation as mode 3 and the OPI listening port as 5098.

   The **pinpadAddress2** value is formatted as follows:
   - MerchantID_WSID | Pinpad IP

   Ex: 3700000001_99 | 10.39.176.89
4. Select **server0Q** and verify the **Port** value for communication to the pinpad.

5. For **vx6702**, the MICROS KDSController service uses port 5023. Change this port value to an unused port value even if not using Pay@Table (for example 8992.)

6. Exit config.exe, and then save your changes.

7. Restart the OPI service.

   If changes are made in Config.exe, the “OPI Service” needs to be restarted. But the “OPI Service Utility” service does not need to be restarted. The system is now ready for a test transaction.

**Middleware**

During the OPI installation, there is a step to select the **OPI Mode**:

- **Terminal**: OPI communicates directly to the pinpads.
- **Middleware**: OPI controls the pinpads by communicating through a third party.

Access the screens shown in the following steps by launching
**OraclePaymentInterface\bin\OPIconfigurationWizard.exe**.

If using Middleware, follow these directions to finish the OPI installation.
1. Select POS Configuration, and then click Show Summary.

2. Double-click the existing property, or if none yet click Add New Property and then configure the form as shown in the following image. Specify property settings as follows:
   - POS Interface = Enable
   - OPI Mode = Middleware
   - Primary Host = URL of 3rd party that will control the pinpads, including port.
   - Backup Host = Backup URL of 3rd party
   - Proxy Address = Blank unless you must go through a proxy server.
   - Proxy Port = Blank unless you must go through a proxy server.

3. Click Exit.

4. On the MICROS Gateway Service Configuration dialog box, click Yes.
5. Click **Yes** to restart the computer.

**Middleware Config.exe**

No additional changes to Poscfg are needed, as they were completed in **Configuration for MGDH**.

1. Double-click `OraclePaymentInterface\bin\config.exe`, and then log in with the administrator credentials used during setup.

2. Select **server0Q**.

![Middleware Config.exe](image)

- **HostMode** = true.
- **Host** = The URL of PrimaryHost set using the wizard. Including the port.
- **Port** = Not used in Middleware mode since the port is included in URL.

3. For **vx6702**, the MICROS KDSController service uses port 5023. Change this port value even if not using Pay@Table to an unused port value (for example, 8992.)

4. Exit config.exe, and then save your changes.

5. Restart the OPI Service.

    If you made changes in Config.exe, restart the OPI Service. The OPI Service Utility service does not need to be restarted. The system is ready to use.
Pay@Table

This section discusses enabling and configuring Pay@Table for the MGDH and OPI solution.

A normal workstation that most merchants have is referred to in the OPI configuration as Pay@Counter.

Pay@Table terminals use Transaction Services. You can have Pay@Counter or Pay@Table terminals or both.

Access the screens in this procedure by opening OraclePaymentInterface\bin\OPIconfigurationWizard.exe. The screens can be seen and used both during the middle of the OPI installation and after the OPI installation.

If you are enabling Pay@Table, follow these directions to complete the installation steps that were begun in the previous OPI Installation section.

1. Enable Pay@Table. The Pay@Table certificate is provided by the partner and is part of the partner validation process.

2. Enter and confirm a Pay@Table Cert Password.

3. Configure the following settings:
   - **Name**: Name of the DB, micros.
   - **Host**: IP address of the RES server. If OPI is installed on the RES server, then 127.0.0.1 is OK. If OPI is installed on another computer, enter the actual IP address of the RES server.
   - **Port**: 2638.
   - **Max pool**: 40
   - **User**: Micros DB user account
   - **Password**: Password for the DB user account.
4. Configure Tender Configuration settings as follows:
   - Use the object numbers of the Credit card tenders you configured for OPI in Pocfg | Sales | Tender Media. These values can also be referenced in Micros\RES\POS\Etc\MPG.inc.
   - For tender types you do not have, leave them blank.
   - Gift cards are not supported in OPI 6.1.1.9, so leave GiftCard blank.
   - ServiceNum is the object number of the Print Check tender having Type = Service total.

5. Click Next.

6. Select Pay@Table Device from the Device Type drop-down, and then click Add Pay@tableTerminal.

7. Enter a Mobile Device ID. The mobile device ID is an arbitrary ID assigned to a P@T terminal.

8. Select Query by Check or Table. Query by Table brings up all checks open at the table.

9. Click OK.

10. Repeat steps 6 through 9 to add more terminals.

11. Click Next.

12. Click Exit.
13. On the **MICROS Gateway Service Configuration** dialog box, click **Yes** to save your changes.

14. Open the **OraclePaymentInterface\bin\Config.exe** file.

### Pay@Table Config.exe

No additional changes to Poscfg are needed because you completed them in **Configuration for MGDH**.

### Config.exe

1. Double-click the **OraclePaymentInterface\bin\config.exe** file, and then log in with the administrator credentials used during the installation.

2. In the **About** pane, expand **Oracle Payment Interface**.

3. For **terminal47**, note the following:
   - Key = Mobile Device ID
   - OR = 3700
   - 3700000001 = Merchant ID
   - _1_C = The _1 is a Revenue Center value and is unused in RES, but defaults to 1.
     
     The _C means this is a Query by Check terminal. The Query by Table Terminals do not show the “_1_C”.

4. Select **vx6702**, and then change the port value to the port that connects to the pinpad for Terminal Mode or the port that connects through the third party in Middleware Mode.
The MICROS KDSController service uses port 5023. Change this port the port used for Pay@Table. Even if not using Pay@Table, change the port from 5023 as that port is already used by the KDScontroller service.

5. Exit Config.exe, and then save your changes.
6. Restart the OPI Service.
7. Restart the MICROS KDS Controller Service.
   The system is ready for a test transaction.

Upgrade Installation

Before upgrading
1. Run Poseod.exe to settle all credit transactions.
2. Know the MySQL root user account password.

Steps to upgrade from MGDH 6.1 or higher to 6.1 MR1
1. Take Micros Control Panel to off.
2. Double-click MGDH_OPI_6.1.1.9.exe to launch the install.
3. It will say some configuration files will not be updated.
   This is by design as those files contain the site specific settings.
   The MGDH upgrade is very quick and no configuration screens appear.
   If you want to see the configuration screens to make changes, then uninstall MGDH first and then install the new version.

Steps to upgrade from OPI 6.1 or higher to 6.1 MR1

4. Take Micros Control Panel to off.
5. Double-click Oracle Payment Interface-6.1.1.9.exe to launch the install.
6. On the Missing dependency screen read the message and follow the instructions to copy a backup of the MySQL Server 5.6.35 installation files.
7. Exit the OPI installer.
8. Double click mysql-installer-community-5.6.35.0.msi and follow prompts to upgrade the MySQL version.
9. When the MySQL upgrade is complete, double-click Oracle Payment Interface-6.1.1.9.exe to launch the installer again.
10. Follow the on screen instructions.
11. The installation wizard launches the Oracle Payment Interface Configuration Tool.

   If it does not automatically start, (don’t see the screen above), double-click INSTALLATION_DIR\OraclePaymentInterface\bin\OPIconfigurationWizard.exe.

12. Verify all settings are correct or update them if needed.

13. On Configuration Summary screen, to add another Merchant ID or Property, click **Continue**.

14. To finish configuration, click **Exit**, save the changes, and then restart the computer.
3 POS Workstation Procedures

TSR Transactions

CC Sale
Ring food, and then select CC sale.

Tip Adjust
1. Verify Micros\Res\Pos\Etc\OPI.inc has this line:
   TipAdjust = TRUE
2. Re-open a closed check that was paid using credit auth and credit final.
3. Type a new tip amount (for example, 5.00), select the tender payment in Ops detail, and then select Tip Adjust.
   The tender amount must be selected when Tip Adjust is selected. Tip Adjust does not work if Signature verify is enabled.

CC Refund
Begin the check, select Void, ring a menu item, select a reason code (if prompted), and then select CC Refund.

Refund (m)
1. Begin a check, add food, CC auth and CC final.
   You need the RRN number from this CC voucher in step 3.
2. Begin check, select Void, ring a menu item, select a reason code (if prompted), and then select Refund (m).
3. Enter the RRN number (when prompted) from the original Credit Card voucher from step 1.

CC Auth
1. Ring food and the service total.
2. Pick up that check and select CC auth. Service total.

CC Final
Pick up the CC Auth check from above and select CC final, and then answer the tip prompt.

CC Voice
1. Begin check, ring food, and then select CC voice.
2. Enter then approval code.
Tab Auth

1. Begin check, select **Tab Auth**, Service total.
2. Pick up that check, ring $10.00 of food. Enter 13.00, and then select **CC final**.
3. Ops prompts **Tip Amount is USD 3.00?** Press the Enter key.

Balance Inquire

Begin the check, select **Bal Inq**, and swipe the card when prompted.

Reprint

Pick up an open check that already has a CC auth and select **Reprint**. Hit enter to accept the “RePrint Auth Receipt?” prompt.

Repost

Use Repost if the final tender is interrupted. The following is an example of when to use it:

(Employee Class = Server table view)

1. Employee Classes | Guest checks | Other employee’s checks, Enable "Pick up others chk"
2. Employee Classes | Guest checks | Other employee’s checks, Disable "Tender Media to others chk"
3. 1, sign in, ring $10.00 food, Auth CC, service total.
4. Sign in as a DIFFERENT employee of same Emp class (Svr table view) 104 = John
5. John picks up Sally’s check, select **CC Final**.
6. OK Error mssg that kept paid check from closing.
7. Select **CC repost**. OK prompts.

Void (e)

1. Begin check, ring $10.00 food, and select **CC Sale**.
2. Re-open that closed check, select the CC tender in Ops detail window and select Void (Inq #17).

Manual Auth

Begin check, ring $10.00 food, select **Manual auth**, Enter approval code when prompted.
Auth + CNP
1. Begin check, ring $10.00 food, service total.
2. Pickup check, hit Auth + CNP.
3. This is a way for the operator to trigger at POS side, through MGDH to allow the user to manually enter credit card info on payment terminal (PinPad) for card not present transactions.

Partial Auth
4. Begin check, ring $10.00 food, enter 5.00 and select CC auth.
5. Enter 5.00 and select **CC Final**.
   Selecting **CC final** pays the entire amount due even if only part of the check amount has been authorized. So an amount must be entered prior to selecting **CC final** if only a partial payment is desired.

POSEOD
1. Verify Res\pos\scripts\poseod\MGDH.inc is pointing to OPI server IP address and correct port.
2. Verify Res\pos\scripts\poseod\POSEOD.inc has the correct POS type (RES = “0R” zero R) and Merchant ID value.
3. Double-click **poseod.exe**.
4. Check the Transaction.log file for "Batch" "Approval".
   For more complete information on POSEOD configuration, scheduling and verification click [here](#).

QSR Transactions

**CC Sale**
Ring food, and then select **CC sale**.

**SALE&CASH**
1. Ring food, and then select **Sale&Cash**.
2. Answer prompt for how much cash back.

**CC Refund**
Begin check, select **Void**, ring a menu item, select a reason code (if prompted), and then select **CC Refund**.

**Refund (m)**
1. Begin a check, add food, CC auth and CC final.
You need the RRN number from this CC voucher in step 3.

2. Begin check, select **Void**, ring a menu item, select a reason code (if prompted), select **Refund (m)**.

3. Enter the RRN number (when prompted) from the original Credit Card voucher (step 1).

**Balance Inquire**

Begin check, select **Bal Inq**, and then swipe the card when prompted.

**Reprint**

Pick up an open check that already has a CC auth and select **Reprint**.

**Repost**

Repost is meant to be used if the final tender gets interrupted. The following is an example of when it might be used.

(Employee Class = Server table view)

1. Employee Classes | Guest checks | Other employee’s checks, Enable "Pick up others chk"
2. Employee Classes | Guest checks | Other employee’s checks, Disable "Tender Media to others chk"
3. 1, sign in, ring $10.00 food, Auth CC, service total.
4. Sign in as a DIFFERENT employee of same Emp class (Svr table view)
   104 = John
5. John picks up Sally’s check, select **CC Final**.
6. OK Error mssg that kept paid check from closing.
7. Select **CC repost**. OK prompts.

**Void (e)**

1. Begin check, ring $10.00 food, and then select **CC Sale**.
2. Re-open the closed check, select the CC tender in Ops detail window and select Void (Inq #17).

**Sale + CNP**

1. Begin check, ring $10.00 food, Sale + CNP.
2. This is a way for the operator to trigger at POS side, through MGDH to allow the user to manually enter credit card info on payment terminal (PinPad) for card not present transactions.
4 Utilities

OPI Configuration Wizard

Use the OPI wizard can be to:

- Enable or Disable PMS or POS interfaces.
- Change from Terminal mode to Middleware mode and vice versa.
- Enable Pay@Table
- Add Pay@Table terminals
- Add Pay@Counter terminals
- Add a new Merchant ID
- Edit an existing Merchant ID

1. Open

   OraclePaymentInterface\bin\OPIconfigurationWizard.exe.

2. Log in as an administrator.

3. If necessary, update interface and mode settings.

4. Restart the OPI service.

RWregistry.exe

There are two options in rwregistry. The first is Update POS Passphrase and it is only used with Native solutions, not with MGDH. The second is Update OPI Database User Creds, which can be used with both RES Native and MGDH solutions.

Q: How do I update the OPI DB user password?
A: First change the pw in 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.

Then change it to match on the OPI side in rwregistry.

1) Go to OraclePaymentInterface\Bin\ and right click rwregistry.exe and "Run as Administrator".
2) Login using the administrative user credentials given during install.
3) From the drop box select "Update Database Creds".
   User: Enter the OPIDBuser name given during install (and changed in MySQL).
   Password: Enter new PW. Same as used in MySQL.
    Click "Commit".
   Result = "Committed update successfully"

4) Close rwregistry.
5) Restart MySQL svc
6) Restart OPI svc
7) If using an OPI simulator, restart the simulator.

Config.exe

Open OraclePaymentInterface\bin\config.exe, and then log in as a local administrator.

The following tables describe the settings accessible from config.exe:

card

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amex</td>
<td>23 00000000 3499999999 13 0 0</td>
<td>AMEX card schema.</td>
</tr>
<tr>
<td>JCB</td>
<td>43 528000000 3589999999 16 0 0</td>
<td>JCB card schema.</td>
</tr>
<tr>
<td>Mastercard</td>
<td>15 10000000 5599999999 16 1 0</td>
<td>MasterCard card schema.</td>
</tr>
<tr>
<td>Visa</td>
<td>04 000000000 4999999999 16 1 0</td>
<td>Visa card schema.</td>
</tr>
</tbody>
</table>

currency

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>036</td>
<td>036</td>
<td>AUD</td>
</tr>
</tbody>
</table>
### dll

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
<td>3</td>
<td>Default value, OPI use HTTPS for POS request.</td>
</tr>
<tr>
<td>Port</td>
<td>5098</td>
<td>Default port for POS request.</td>
</tr>
</tbody>
</table>

### ifc8

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CpPolicy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Dp_pms_connection_check</td>
<td>true</td>
<td></td>
</tr>
<tr>
<td>Pms_check_inactive_interval</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Pms_inactive_gate</td>
<td>313</td>
<td></td>
</tr>
<tr>
<td>TotalMerchantNumber</td>
<td>0-n</td>
<td>Total merchant number for OPERA, depends on merchant configuration.</td>
</tr>
</tbody>
</table>

### ifc8X

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition_code</td>
<td>42</td>
<td>Default value.</td>
</tr>
<tr>
<td>Currency_code</td>
<td>840</td>
<td>Merchant currency code, please refer to chapter 4.</td>
</tr>
<tr>
<td>Currency_code_decimal</td>
<td>2</td>
<td>Currency decimal.</td>
</tr>
<tr>
<td>Device_merchant_id</td>
<td>xxxxxxxxx</td>
<td>OPERA Chain and Property ID.</td>
</tr>
<tr>
<td>ExternalMode</td>
<td>true</td>
<td>Default value.</td>
</tr>
<tr>
<td>Merchant_city</td>
<td>xxxxxx</td>
<td>Merchant city, maximum is 13 characters.</td>
</tr>
<tr>
<td>Merchant_country</td>
<td>xx</td>
<td>Merchant country, please refer chapter 4.</td>
</tr>
<tr>
<td>Merchant_id</td>
<td>MGS-OPERA</td>
<td>Default value.</td>
</tr>
<tr>
<td>Merchant_name</td>
<td>xxxxxxxx</td>
<td>Merchant name, maximum is 25 characters.</td>
</tr>
<tr>
<td>Merchant_type</td>
<td>7011</td>
<td>Merchant MCC code.</td>
</tr>
<tr>
<td>PaymentCode_0</td>
<td>VA</td>
<td>Visa transaction code in OPERA.</td>
</tr>
</tbody>
</table>
**PaymentCode_1**  |  MC  | MasterCard transaction code in OPERA.
---|---|---
**PaymentCode_10**  |  CU  |
**PaymentCode_11**  |  DD  |
**PaymentCode_12**  |  DL  |
**PaymentCode_15**  |  GC  |
**PaymentCode_17**  |  MD  |
**PaymentCode_18**  |  ME  |
**PaymentCode_19**  |  VE  |
**PaymentCode_2**  |  AX  | AMEX transaction code in OPERA.
---|---|---
**PaymentCode_21**  |  SD  |
**PaymentCode_24**  |  VP  |
**PaymentCode_25**  |  AL  |
**PaymentCode_26**  |  EC  |
**PaymentCode_29**  |  MX  |
**PaymentCode_3**  |  DC  | Diners transaction code in OPERA.
---|---|---
**PaymentCode_32**  |  PC  |
**PaymentCode_4**  |  JC  | JCB transaction code in OPERA.
**PaymentCode_40**  |  BC  |
**PaymentCode_9**  |  CC  |
**Pms_server_ip**  |  xx.xx.xx.xx  | OPERA IFC8 server IP.
**Pms_server_port**  |  xxxx  | OPERA IFC8 server port.
**SwitchID**  |  0Q  | Default value.
**Terminal_id**  |  OPERA1  | Default value.
**User3**  |  ********  | OPERA IFC8 encryption key.

**master**

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>systemType</td>
<td>1</td>
<td>Default value.</td>
</tr>
</tbody>
</table>
### parameter_level

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>US</td>
<td></td>
</tr>
<tr>
<td>Instance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Solution</td>
<td>OPI</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>OnSite</td>
<td></td>
</tr>
</tbody>
</table>

### payment

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>US</td>
<td></td>
</tr>
<tr>
<td>Dll</td>
<td>0/1</td>
<td>Enable or disable port for POS. 0 is disable port, 1 is enable port.</td>
</tr>
<tr>
<td>Opera</td>
<td>0</td>
<td>Default value.</td>
</tr>
<tr>
<td>Opera2</td>
<td>0</td>
<td>Default value.</td>
</tr>
<tr>
<td>OptionByte2</td>
<td>true</td>
<td>Default value.</td>
</tr>
<tr>
<td>OptionByte4</td>
<td>true</td>
<td>Default value.</td>
</tr>
<tr>
<td>Pos</td>
<td>0</td>
<td>Default value.</td>
</tr>
<tr>
<td>Pos9700</td>
<td>0</td>
<td>Default value.</td>
</tr>
<tr>
<td>RefreshTime</td>
<td>0 29 0 ** ?</td>
<td>OPI refresh time to reload merchant configuration and purge history transaction data.</td>
</tr>
<tr>
<td>RemoveDevice4</td>
<td>0/1</td>
<td>Enable or disable port for Pay@Table device. 0 is disable port, 1 is enable port.</td>
</tr>
<tr>
<td>Running_mode</td>
<td>0</td>
<td>Default value.</td>
</tr>
<tr>
<td>Server</td>
<td>0Q</td>
<td>Default value.</td>
</tr>
<tr>
<td>TimeZone</td>
<td>America/New_York</td>
<td>Merchant time zone, follow Java time zone format.</td>
</tr>
<tr>
<td>Ifc8</td>
<td>0/1</td>
<td>Enable or disable function for OPERA IFC8 interface. 0 is disable function, 1 is enable function.</td>
</tr>
</tbody>
</table>
### pinpadAddress2

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xxxxxxxx_xx</td>
<td>TID IP</td>
<td>PED mapping list, please refer to chapter 4.</td>
</tr>
</tbody>
</table>

### posApi

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Century</td>
<td>20</td>
<td>Res IIS mode, default value.</td>
</tr>
<tr>
<td>CommandSleep</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>CommandSleep2</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Currency</td>
<td>840</td>
<td>Merchant currency code, please refer to chapter 4.</td>
</tr>
<tr>
<td>Mode</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>NeedAdjustReceipt</td>
<td>false</td>
<td>Default value, doesn’t allow Pay@Table modify exist check.</td>
</tr>
<tr>
<td>PCommand</td>
<td>CREDIT_AUTHORIZE_AND_PAY</td>
<td>Needed for MGDH.</td>
</tr>
<tr>
<td>PaymentCode_0</td>
<td>xxx</td>
<td>Visa tender number in POS configuration.</td>
</tr>
<tr>
<td>PaymentCode_1</td>
<td>xxx</td>
<td>MasterCard tender number in POS configuration.</td>
</tr>
<tr>
<td>PaymentCode_10</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_11</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_12</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_15</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_18</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_19</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_2</td>
<td>xxx</td>
<td>AMEX tender number in POS configuration.</td>
</tr>
<tr>
<td>PaymentCode_21</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_24</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_25</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_26</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>Key</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PaymentCode_29</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_3</td>
<td>xxx</td>
<td>Diners tender number in POS configuration.</td>
</tr>
<tr>
<td>PaymentCode_32</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_4</td>
<td>xxx</td>
<td>JCB tender number in POS configuration.</td>
</tr>
<tr>
<td>PaymentCode_40</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>PaymentCode_9</td>
<td>xxx</td>
<td></td>
</tr>
<tr>
<td>RoomPosting</td>
<td>xxx</td>
<td>Room posting tender number in POS configuration.</td>
</tr>
<tr>
<td>ServiceNum</td>
<td>xxx</td>
<td>“Save check” tender number in POS configuration.</td>
</tr>
<tr>
<td>SimphonyVersion</td>
<td>2.5</td>
<td>Simphony version definition.</td>
</tr>
<tr>
<td>Timeout</td>
<td>30</td>
<td>Timeout value for OPI connect to POS transaction service.</td>
</tr>
<tr>
<td>Url</td>
<td><a href="http://xxxx">http://xxxx</a></td>
<td>RES transaction service URL.</td>
</tr>
</tbody>
</table>

**posRes**

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TotalMerchantNumber</td>
<td>0-n</td>
<td>Total merchant number for RES, depend by merchant configuration.</td>
</tr>
</tbody>
</table>

**posResX**

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition_code</td>
<td>42</td>
<td>Default value.</td>
</tr>
<tr>
<td>Currency_code</td>
<td>840</td>
<td>Merchant currency code, please refer to chapter 4.</td>
</tr>
<tr>
<td>Currency_code_decimal</td>
<td>2</td>
<td>Currency decimal.</td>
</tr>
<tr>
<td>Device_merchant_id</td>
<td>xxxxxxxxx</td>
<td>CMID, assig by OPI installer.</td>
</tr>
<tr>
<td>Merchant_city</td>
<td>xxxxxxx</td>
<td>Merchant city, maximum is 13 characters.</td>
</tr>
<tr>
<td><strong>Merchant_country</strong></td>
<td><strong>xx</strong></td>
<td><strong>Merchant country, please refer to chapter 4.</strong></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>Merchant_id</strong></td>
<td><strong>MGS-POS 3700</strong></td>
<td><strong>Default value.</strong></td>
</tr>
<tr>
<td><strong>Merchant_type</strong></td>
<td><strong>5812</strong></td>
<td><strong>Merchant MCC code.</strong></td>
</tr>
<tr>
<td><strong>Pos_type</strong></td>
<td><strong>posRES</strong></td>
<td><strong>POS version definition.</strong></td>
</tr>
<tr>
<td><strong>SwitchID</strong></td>
<td><strong>0Q</strong></td>
<td><strong>Default value.</strong></td>
</tr>
<tr>
<td><strong>Terminal_id</strong></td>
<td><strong>POS3700</strong></td>
<td><strong>Default value.</strong></td>
</tr>
</tbody>
</table>

### posSybase1

<table>
<thead>
<tr>
<th><strong>Key</strong></th>
<th><strong>Value</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>InitIdle</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>MaxPool</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>MaxWait</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>MinIdle</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>ResDB</td>
<td>Micros</td>
<td>RES DB name, default value.</td>
</tr>
<tr>
<td>ResHost</td>
<td>xx.xx.xx.xx</td>
<td>RES Server IP.</td>
</tr>
<tr>
<td>ResPassword</td>
<td>**********</td>
<td>RES DB user password.</td>
</tr>
<tr>
<td>ResPort</td>
<td>2638</td>
<td>RES Server Sybase database port, default value.</td>
</tr>
<tr>
<td>ResUser</td>
<td>**********</td>
<td>RES DB user name.</td>
</tr>
</tbody>
</table>

### server0Q

<table>
<thead>
<tr>
<th><strong>Key</strong></th>
<th><strong>Value</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ConnectTimeout</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Host</td>
<td><a href="https://xx.xx.xx:port">https://xx.xx.xx:port</a></td>
<td>3rd PSP middleware URL.</td>
</tr>
<tr>
<td>HostMode</td>
<td>true/false</td>
<td>Terminal mode (PED direct connection) = false. Middleware mode set to “true”.</td>
</tr>
<tr>
<td>Port</td>
<td>8080</td>
<td>Port for 3rd PSP PED or middleware.</td>
</tr>
<tr>
<td>Timeout</td>
<td>60</td>
<td>Timeout value for OPI send request to 3rd PSP PED or middleware.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>UseSSL</td>
<td>true</td>
<td>Default value, OPI send request to 3rd PSP PED or middleware by HTTPS.</td>
</tr>
<tr>
<td>UseTCP</td>
<td>false</td>
<td>Default value.</td>
</tr>
<tr>
<td>UseInquiryMode</td>
<td>true</td>
<td>This parameter must be added manually and it only affects Middleware mode.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>true = do transaction Inquiry.     false = do reversal.</td>
</tr>
</tbody>
</table>

### switch

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0Q</td>
<td>-1</td>
</tr>
<tr>
<td>1</td>
<td>0Q</td>
<td>-1</td>
</tr>
<tr>
<td>11</td>
<td>0Q</td>
<td>-1</td>
</tr>
<tr>
<td>2</td>
<td>0Q</td>
<td>-1</td>
</tr>
<tr>
<td>3</td>
<td>0Q</td>
<td>-1</td>
</tr>
<tr>
<td>4</td>
<td>0Q</td>
<td>-1</td>
</tr>
<tr>
<td>8</td>
<td>0Q</td>
<td>-1</td>
</tr>
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### terminal47

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>xxxxxxxx</td>
<td>xx_xxxxxxxx_x</td>
<td>Please refer to chapter 4 for Pay@Table device mapping.</td>
</tr>
</tbody>
</table>

### vx6702

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CertPass</td>
<td>********</td>
<td>Pay@Table certificate password.</td>
</tr>
<tr>
<td>PayAtTableServer</td>
<td>0Q</td>
<td>Default value.</td>
</tr>
<tr>
<td>Port</td>
<td>5023</td>
<td>Default port for Pay@Table device request. The RES KDScontroller uses port 5023 so this value should always be changed.</td>
</tr>
<tr>
<td>Setting</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>UseDeviceRRN</td>
<td>true</td>
<td>Default value.</td>
</tr>
<tr>
<td>UseSSL</td>
<td>true/false</td>
<td>Pay@Table connection mode, default is “true” to use HTTPS for Pay@Table request.</td>
</tr>
</tbody>
</table>
5 Troubleshooting and FAQs

Troubleshooting Issues

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

**Solution:** Right-click on 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 computer.

Example: 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:

- Restart the OPI Service.
- Temporarily by pass the firewall.
- Verify OPI is listening on port 5098.
- Open CMD prompt: `C:\>netstat > c:\temp\ports.txt` and then search for 5098.

**Situation 3:**

This generic error message can be caused by several things.

**Solution 1:**

Restart the OPI Service and try again.

**Cause 2:**

If the system.log shows the following message, the cause is likely a Java security update. (This should not be an issue in OPI 6.1 MR1, but leaving info, in case.)

```
[GATEWAY RESPONSE] GenericJSONProcessor : Can not decrypt
java.security.InvalidKeyException: Illegal key size
```
Not all Java updates cause this error, but security updates can cause it. For example, Java 8 update 111 causes this issue.

**Solution 2:**

- Stop the OPI service.
- Go to the link below and download jce_policy-8.zip.
  
- Unzip the file and copy the two files to your Java security folder.
  - Local_policy.jar
  - US_export_policy.jar
  
  **Example:** C:\Program files\Java\jre(your current version)\lib\security\n- Start the OPI service.

**Situation 4:**

If you have more than one card settlement driver, and you decide to clear sales totals, manually delete the batch history of those drivers to avoid future batch settlement issues. This is a very rare configuration and situation.

When sales totals are cleared, and a new batch is created it is batch 1. The existing batch 1 is found in batch history and all batches for that settlement driver are automatically deleted. This is by design, as it prevents duplicate batch numbers. But if a second settlement driver exists that does not have a batch 1, that driver’s batch history is not automatically cleared.

**Solution:**

After clearing sales totals open the registry to
HKLM\Software\Wow6432Node\MICROS\Common\ CCS\DrvrCfg\ and open each Drvr# record. Example: Drvr5.
If the Drvr# folder contains a History folder, delete the entire History folder. If there is no History folder, nothing needs to be done for that driver. Repeat this for every Drvr# record.

**Situation 5: “Issuer or switch inoperative”**

- **Cause 1:** Simulator is not running.
- **Cause 2:** OPI service not restarted after making config change.
- **Cause 3:** Java security update broke OPI by replacing files. This should not be an issue in OPI 6.1 MR1.
- **Cause 4:** Incorrect Proxy settings.
- **Cause 5:** Incorrect settings in Config | Server0Q, 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

Cause 7: Wrong IP address in Config | pinpadAddress2 for that terminal.

Situation 6: “Bad Terminal ID”

Cause 1: In Config | pinpadAddress2, wrong Merchant ID or wrong workstation number.

Cause 2: Config | posRes1 | Device_merchant_id is not set correctly.

Cause 3: In OPI.inc if "Multi Merchant = FALSE" then the "merchantID" value below it cannot be empty.

Cause 4: In OPI.inc no mid or wrong mid. rvc_mid[1] = ""

Cause 5: MGDH.inc has some wrong value. These below are correct.
HOST1 = https://10.30.23.34 (Wrong URL/IP)
PORT1 = 5098 (Wrong port)
URL1 = GDIPOS (Wrong solution)

Solution 5: Verify no old OPI.inc is left over in CAL\Files\Micros\Etc.
Verify the correct values are in OPI.inc in CAL package.
Install that MGDH CAL package on that workstation again.

Cause 6: Forgot to restart OPI service after making changes in config.exe or the wizard.

Situation 7: Cannot enable/disable the signature prompt.

Solution: To disable the signature verification prompt, open Etc\OPI.inc and set this value: EnableSigVerify = False

Frequently Asked Questions (FAQs)

Q1: If a transaction can’t finish for some reason. (for example, your network is shutdown), how does OPI handle it?

A: If HostMode is false, (Terminal mode) OPI automatically sends a reversal transaction to void the previous one.
If HostMode is true, (Middleware mode) OPI automatically sends an inquiry transaction every 3 minutes until bank give a response (decline or approve). This can be changed by adding the UseInquiryMode parameter:

1. Run config.exe.
2. Select server0Q from left list, right click, select add, add UseInquiryMode. UseInquiryMode = true, means do a transaction inquiry. UseInquiryMode = false, means do a reversal.
3. This parameter has no affect unless HostMode = true

**Not Supported**

- Gift cards
- Top Up Auth
- Void a Refund (RES limitation)
- CC voice / Manual entry in QSR revenue center
- Backup OPI Server
- Voiding the tender from a SaleCashBack transaction.
## Currency List

<table>
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<th>Value</th>
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</thead>
<tbody>
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## Country Code

<table>
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<td>MO</td>
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</tr>
<tr>
<td>United States</td>
<td>US</td>
</tr>
</tbody>
</table>

**PED Mapping Format**

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMID_WS</td>
<td>TID_IP</td>
</tr>
</tbody>
</table>

**POS Format**

- CMID: Need match `Device_merchant_id` in merchant configuration.
- WS: POS workstation number.
- TID: Terminal ID.
- IP: PED IP.
OPERA Format

- CMID: Need match `Device_merchant_id` in merchant configuration.
- WS: OPERA client name, cannot contain “_” and space.
- TID: Terminal ID.
- IP: PED IP.

Pay@Table Mapping Format

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTID</td>
<td>Product_CMID_RVC</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>Product_CMID_RVC_Option</td>
</tr>
</tbody>
</table>

Format

- PTID: Pay@Table device ID.
- Product: POS definition, 2 characters.
- 0R: RES; 0F: 9700; 1Z: Simphony 1 & 2; 1N: IFC8; 06: e7
- CMID: Need match `Device_merchant_id` in merchant configuration.
- RVC: RVC number in POS activates Pay@Table function.
- Option: By default, Pay@Table picks up check by table number. If option C is attached, allows check pickup by check number.