Oracle® Payment Interface

Oracle Hospitality 9700 POS MGDH
Installation Guide
Release 6.1
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February 2017

ORACLE

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Preface

This document describes the following steps to install the MICROS Gateway Device Handler (MGDH) and the Oracle Payment Interface (OPI).

- Installing the MGDH
- Installing the Oracle Payment Interface
- Configuring the POS for the OPI using the MGDH
- Using the Middleware mode or the Terminal mode with Pay@Table

Connecting the Oracle Payment Interface with the Oracle Hospitality RES POS native driver is described in another document. The *Oracle Payment Interface Oracle Hospitality RES POS Installation Guide* contains more information.

Audience

This document is intended for installers of the 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

Date	Description of Change
September 2016	• Initial publication
February 2017	• Revised formatting and made edits

1 Pre-Installation Steps

Before Installing the OPI

Complete the following tasks before installing:

- The application requires Microsoft .NET Framework version 4.0 or higher.
- You cannot upgrade from previous versions of MGDH to version 6.1.0.9.
- You cannot upgrade from previous versions of MPG and OPI to OPI version 6.1.0.9.
- If a previous MGDH installation exists, go to Programs and Features to uninstall the previous MGDH installation, then you can install the latest MGDH release.
- Verify with the merchant to setup table service (TSR) or quick service (QSR), or both. QSR does not support tips.
- Verify with the merchant if activating the Refund functionality, the merchant must control the privilege for this function.
- Verify with the merchant if they offer a guest the option to get cash back with their purchase, then activate the **Sale & Cash** option. This is only available for QSR.
- Confirm Microsoft Visual C++ 2010 is installed on the computer where MGDH and OPI are installed.
- Oracle Payment Interface requires at least 6 GB of free disk space.
- You must install both MGDH and OPI as a System Administrator.
- You must enter the user name and password of a Microsoft Windows local administrator during the installation.
- You must enter the MICROS database user name and password to install MGDH.

During the installation you must confirm the following:

- Merchant ID's
- Receipt header details
- Tender Media numbers for each card type
- IP address of the OPI Server
- IP address of the POS Server
- If there is an existing MySQL database installed, then the SQL root password is required.
- Workstation IDs and IPs that integrate with the PIN pad.

2 Network Considerations

You must consider the following points for the network:

- OPI listens on the TCP port 5098 for incoming messages from MGDH, this port must be open internally on the merchant's network.
- The port for the PIN pad depends the partner, confirm with the partner and confirm the corresponding port is open.

3 9700 Server Configuration

Adding an Interface

To configure the 9700 Server you must add a new interface.

1. In the Enterprise Management Console, go to the Interface tab.
2. Define the following Interface values.

Table 3-1 Insert Interfaces

Interface	Value
System Name	MGDH
Service Type	PMS /SIM
Communication Type	TCP/IP
Timeout	210
ISL Script Name	pms7

3. Select the check box to enable the option to **Use 19 Digit Reference Entry for PMS Inquiries**.

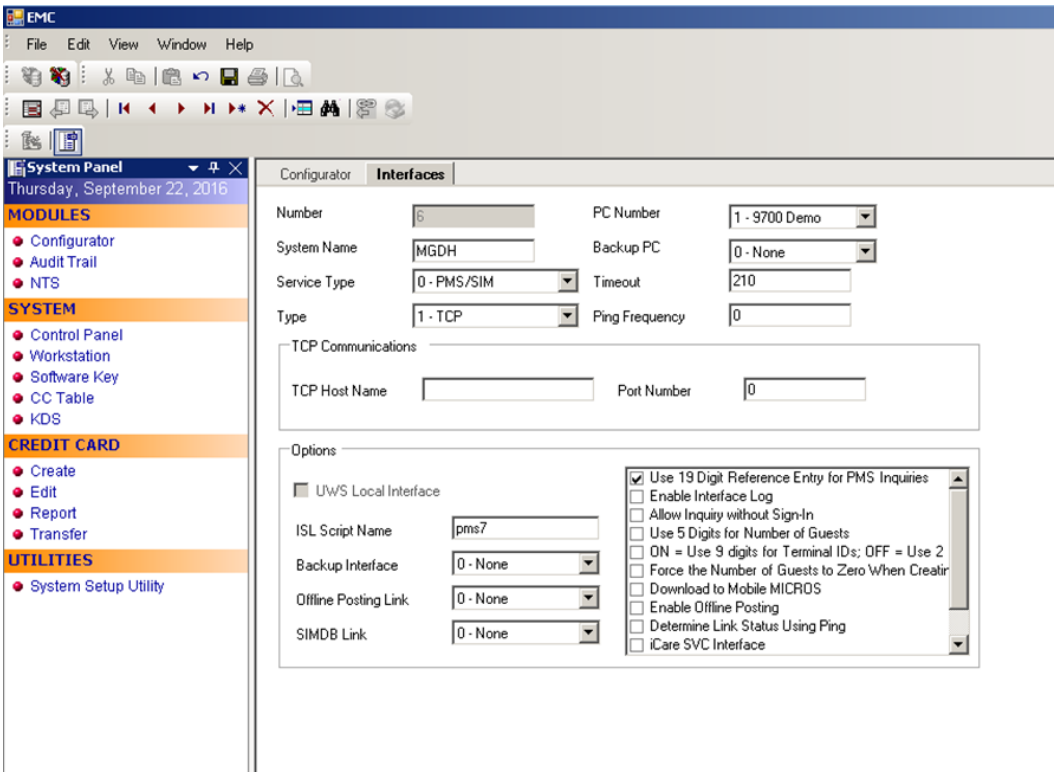

Figure 3-1 EMC Interfaces tab

Configuring RVC

To configure the RVC, link the interface MGDH to each RVC.

1. Go to the Enterprise Management Console.
2. Go to the RVC Parameters tab and link the MGDH interface to each RVC.

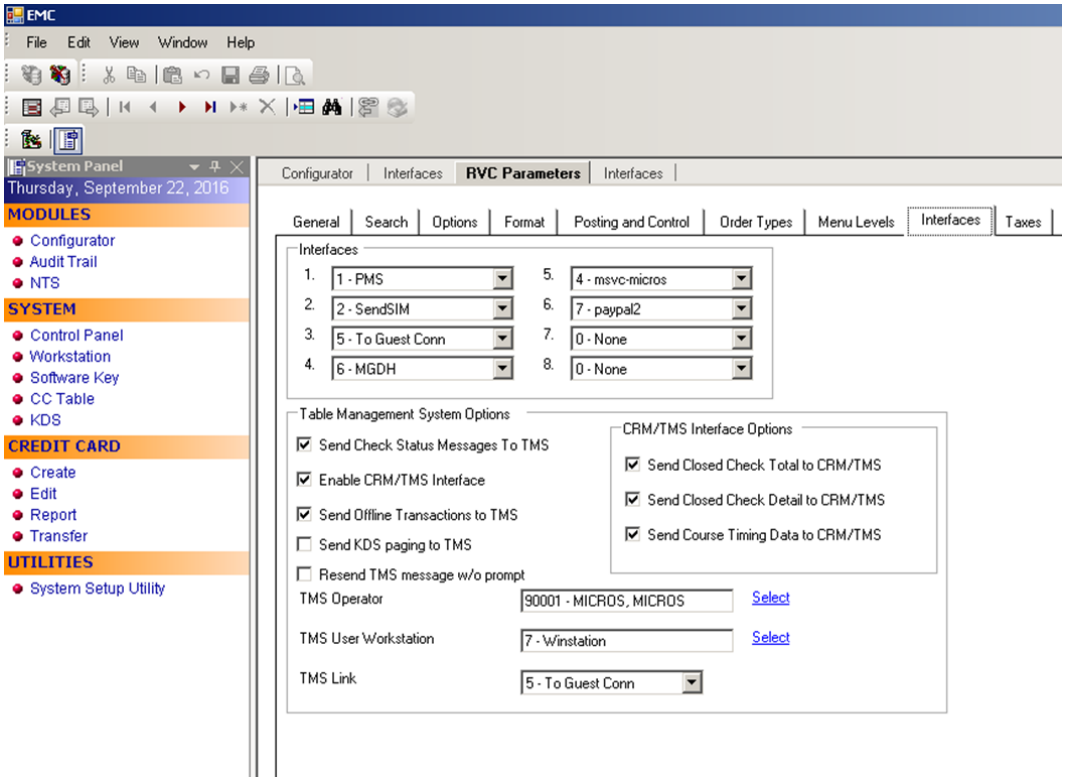

Table 3-2 EMC RVC Parameters

If the RVC is configured in QSR mode, then activate the options below:

- Select the check box **Do Not Prompt for Tips (No Overtendering if Charge Tip is Required)**.
- Select **Allow Fast Transactions**.

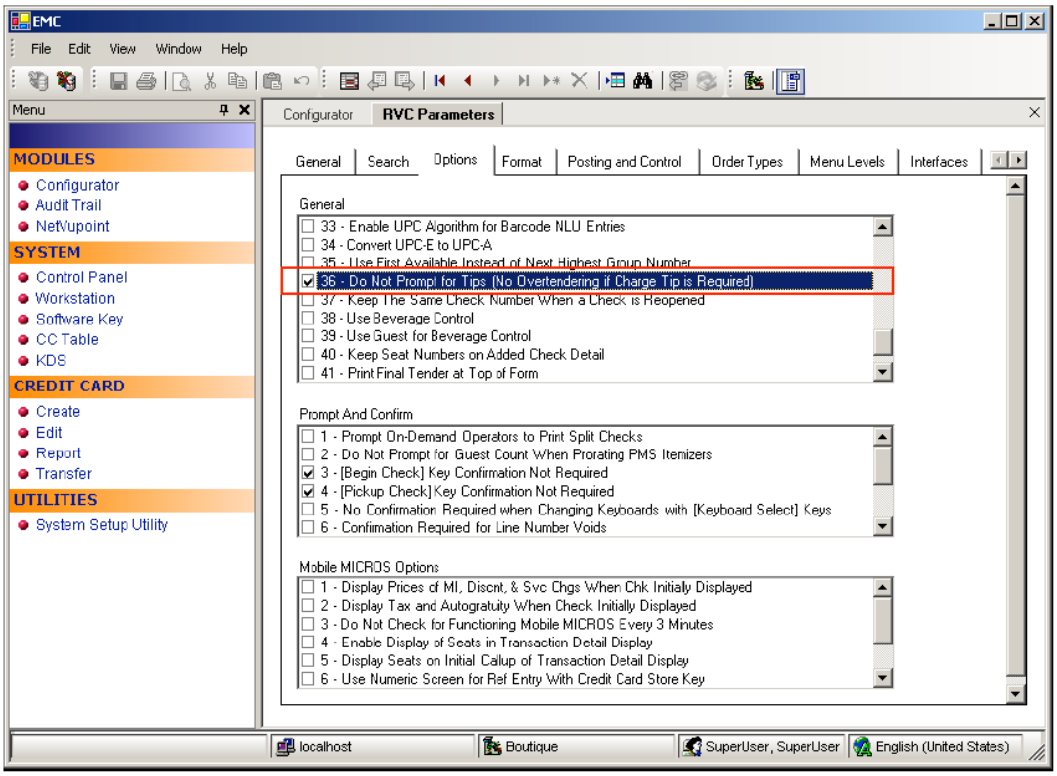

Figure 3-2 EMC RVC Parameters General Options

If using the TSR mode, do not activate this option. On the Format tab, configure and enable the following options for the TSR RVC's:

1. Define the **Number of Guest Check Information Lines** as **30**.
2. Select the check box **Skip Blank Lines When Print or Display Guest Check Info Lines**.

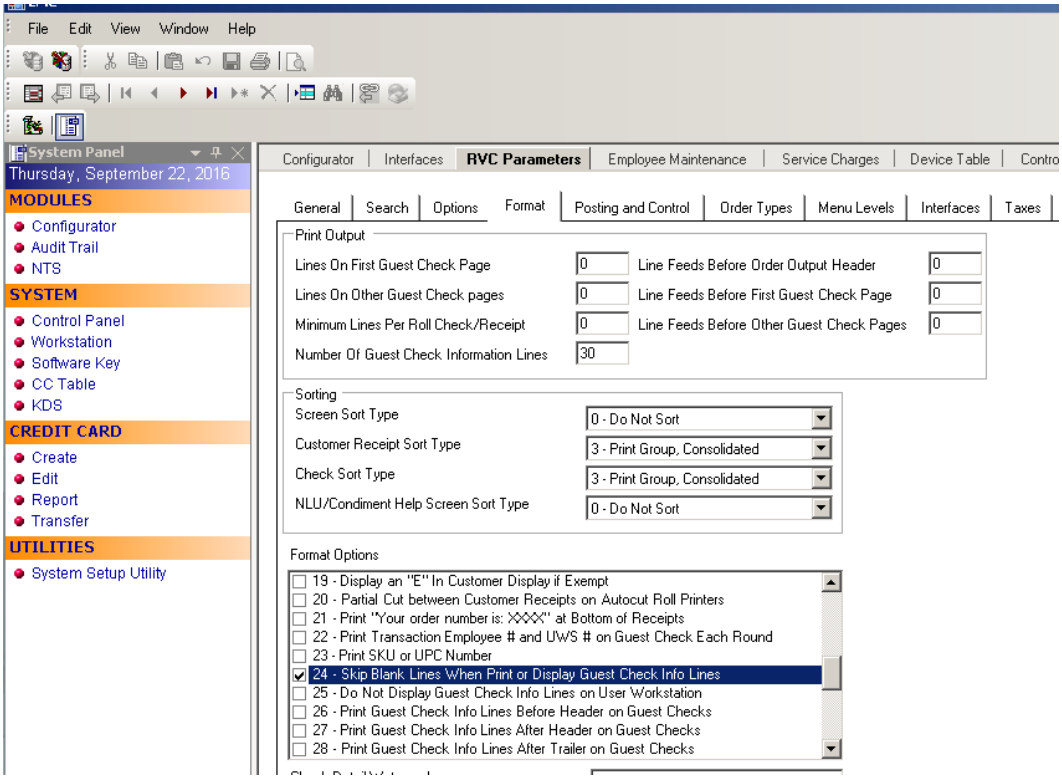

Figure 3-3 EMC RVC Parameters Format Options

Employee Configuration

1. Go to the Employee Maintenance tab, select the **Cashier** employee class.
2. Select the check box to activate the **ISL Employee Option #4** option to define the employee class that can process a refund.

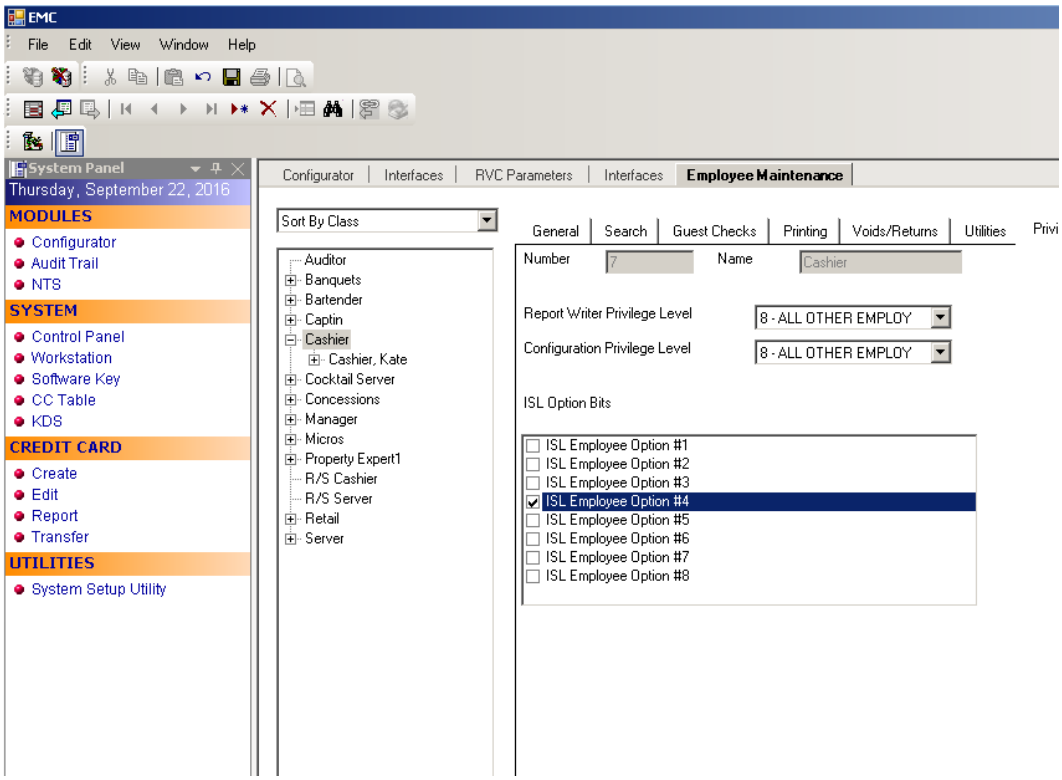

Figure 3-4 EMC Employee Maintenance - Employee Classes

3. Enable the **Authorize/Perform Closing of Checks with a Negative Balance** Tenders option.

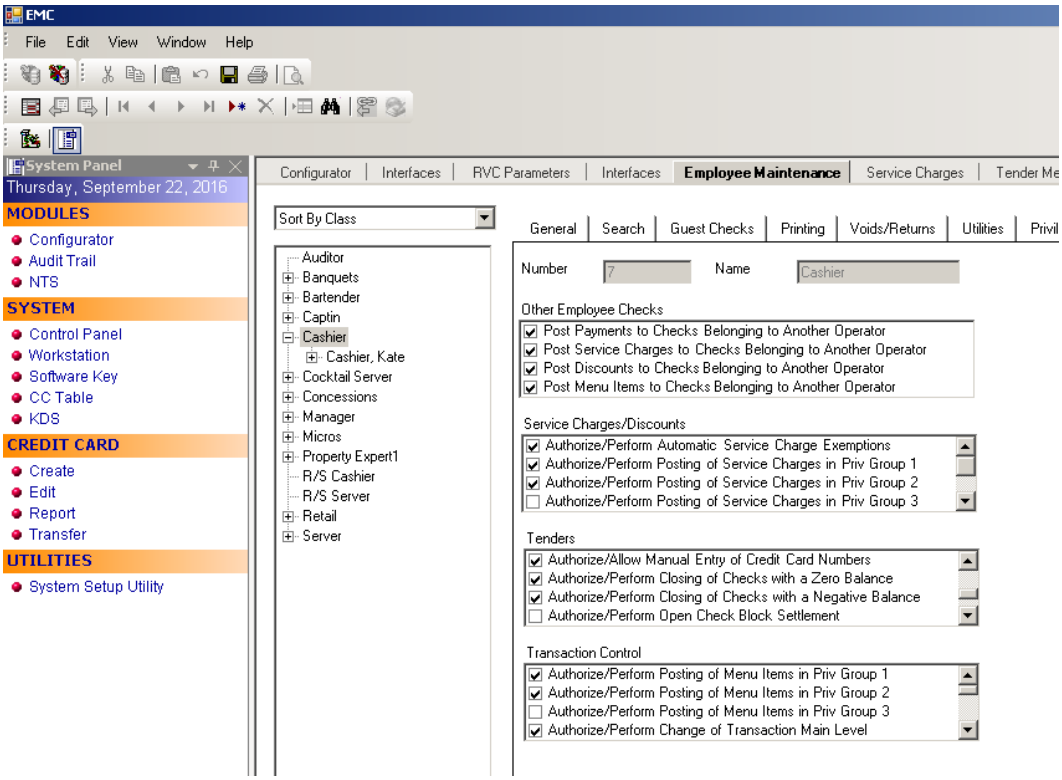

Figure 3-5 EMC Employee Maintenance Tenders Options

Service Charges

If the merchant provides a Cash Back option, then add a new Service Charge for the CashBack option. This is the same as the Open Amount Service Charge. You can skip this step if the merchant does not activate the SalesCash function.

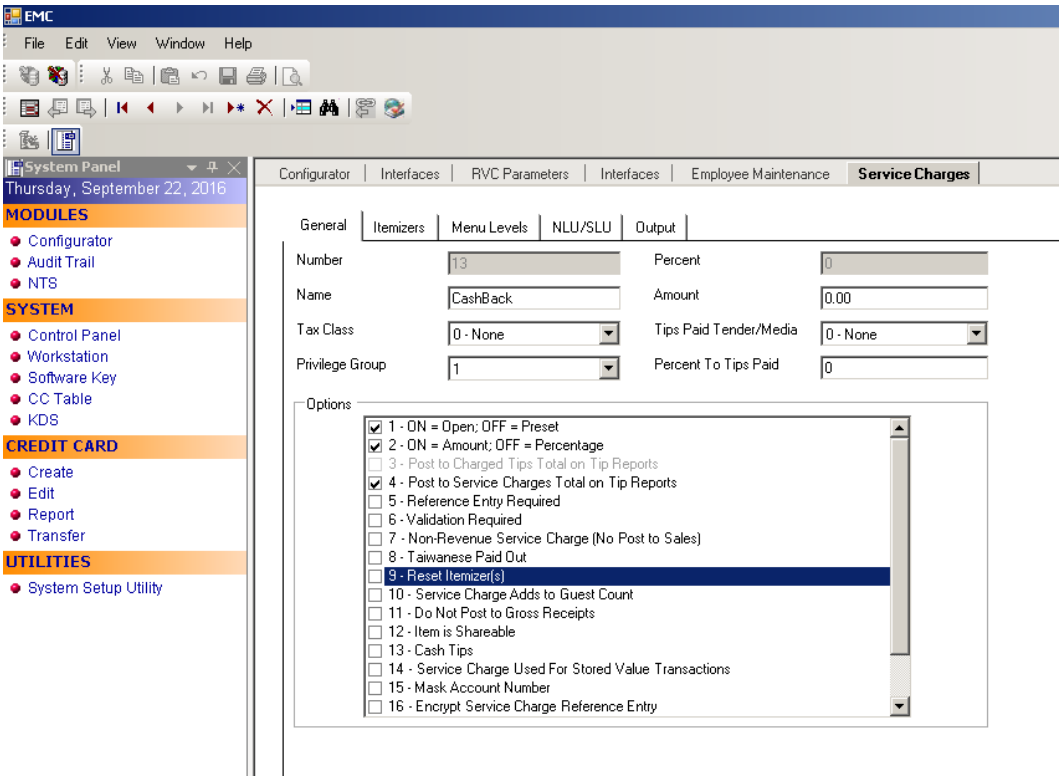

Figure 3-6 EMC Service Charges Options

Configuring Tender Media Records

Configure the following options for the credit/debit card tenders.

1. In the Enterprise Management Console, go to the **Tender Media** tab.
2. Select the **Options** tab and select the category **Interface Options**.
3. Activate the **PMS and Credit Card use 19 Digit Acct Number** option.

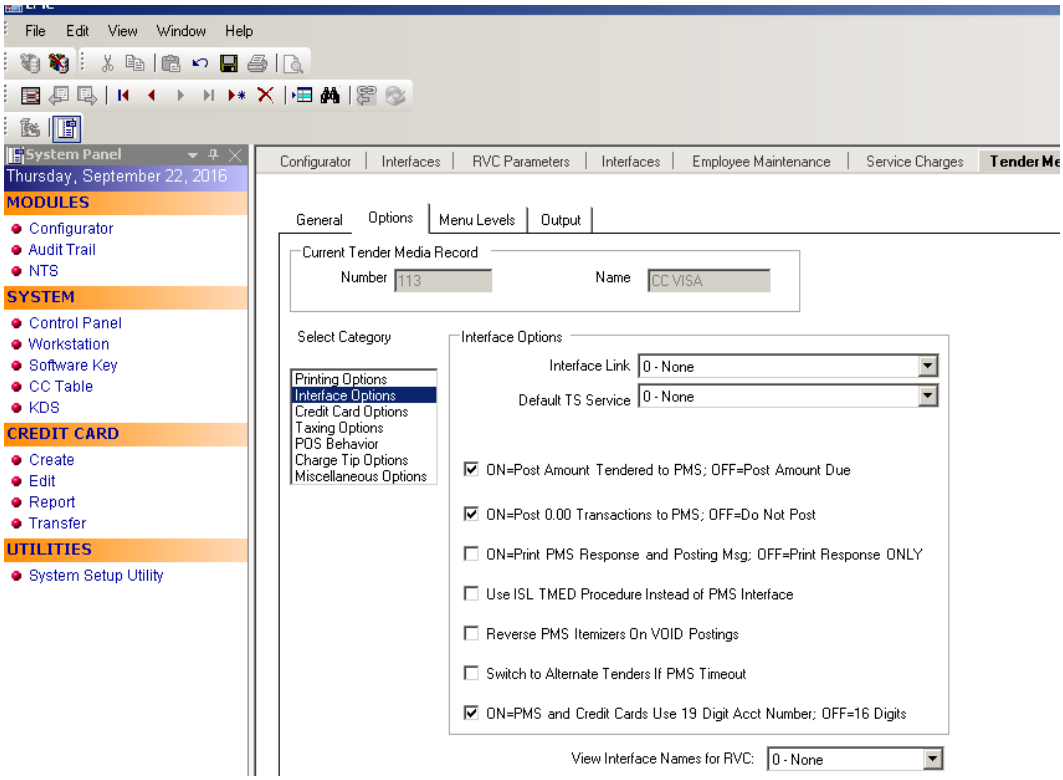

Figure 3-7 EMC Tender Media Options

To configure the credit card options:

1. Go to **Options** tab select **Credit Card Options**.
2. Deactivate all options and remove the floor limit/preambles list.
3. Enable the **No Credit Card Length Check** option.

To configure the POS options:

1. Go to the **Options** tab and select **POS Behavior**, to active the following options:
   - Assume Paid in Full
   - Reference Entry Required
2. Deactivate the following options:
   - Mask Account Number
   - Encrypt Tender/Media Reference Entry
3. Link the tender to **Open amount Service Charge** for TSR environments.
4. Add the debit tender option the same way you would for normal credit card tenders.
5. Add the new tender **SaleCash** option the same way as a normal credit card tender. You can skip this step if the merchant does not activate the **SaleCash** function.

Note: The **SaleCash** tender is only supported when utilized in a Quick Service Restaurant (QSR) environment.

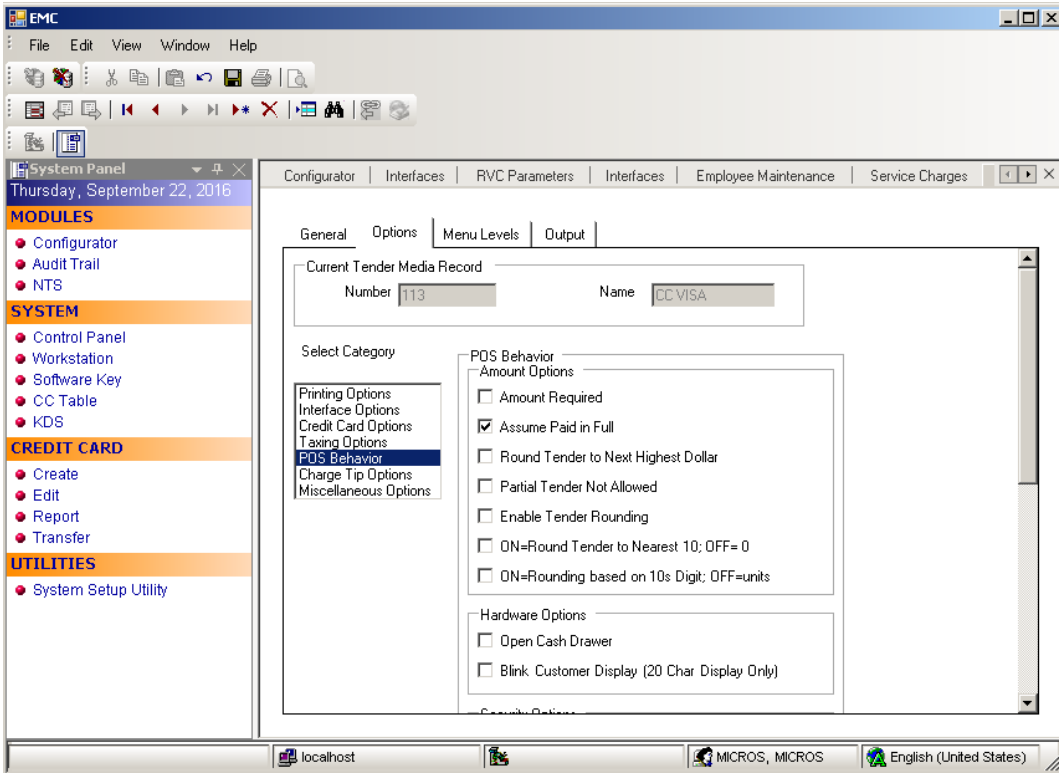

Figure 3-8 EMC Tender Media POS Behavior Options

Touch Screen Design

First, contact the Oracle Hospitality Consulting Team for confirmation, and then if required, add the following buttons to the payment screen. The key types are Functions and you can link them to the MGDH interface.

Table 3-3 Table Service Restaurant (TSR) Payment Screen

Field	Value
CC PAY	SIM INQ #2
CC REFUND	SIM INQ #4
CC AUTH	SIM INQ #8
CC FINAL	SIM INQ #9
TAB AUTH	SIM INQ #12
BALANCE INQUIRY	SIM INQ #14
CC REPRINT	SIM INQ #7
CC REPOST	SIM INQ #16
MANUAL AUTH	SIM INQ #15
REFUND MANUAL	SIM INQ #11

Table 3-4 Quick Service Restaurant (QSR) Payment Screen

Field	Value
QSR SALE	SIM INQ #1
SALE CASH	SIM INQ #5
CC REFUND	SIM INQ #4
BALANCE INQUIRY	SIM INQ #14
CC REPRINT	SIM INQ #7
CC REPOST	SIM INQ #16
REFUND MANUAL	SIM INQ #11

The OPI shares the VOID touchscreen key with the 9700 POS. Using the VOID key you can:

- Void the transaction
- Add Tips (for TSR only)

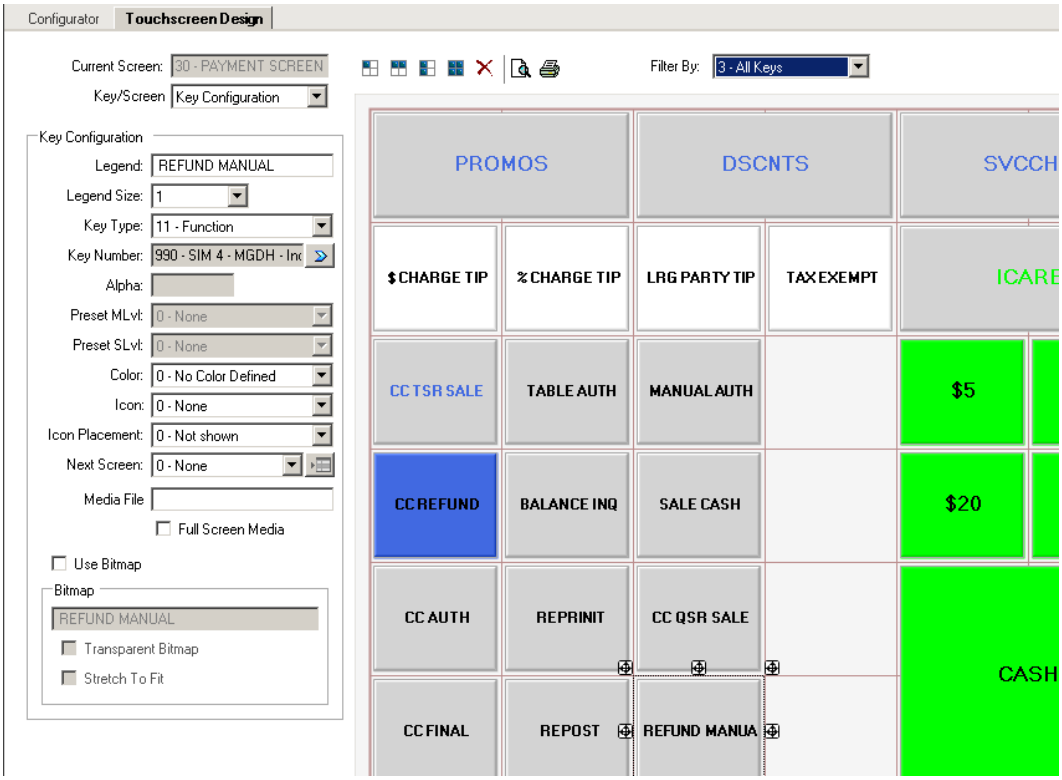

Figure 3-9 EMC Touchscreen Design Module

4 Installing the MGDH Driver

Installing MGDH on the Simphony Server

1. Double-click the MGDH installer to start the installation.
2. Click **Next**.
3. Browse to select the location to install MGDH.

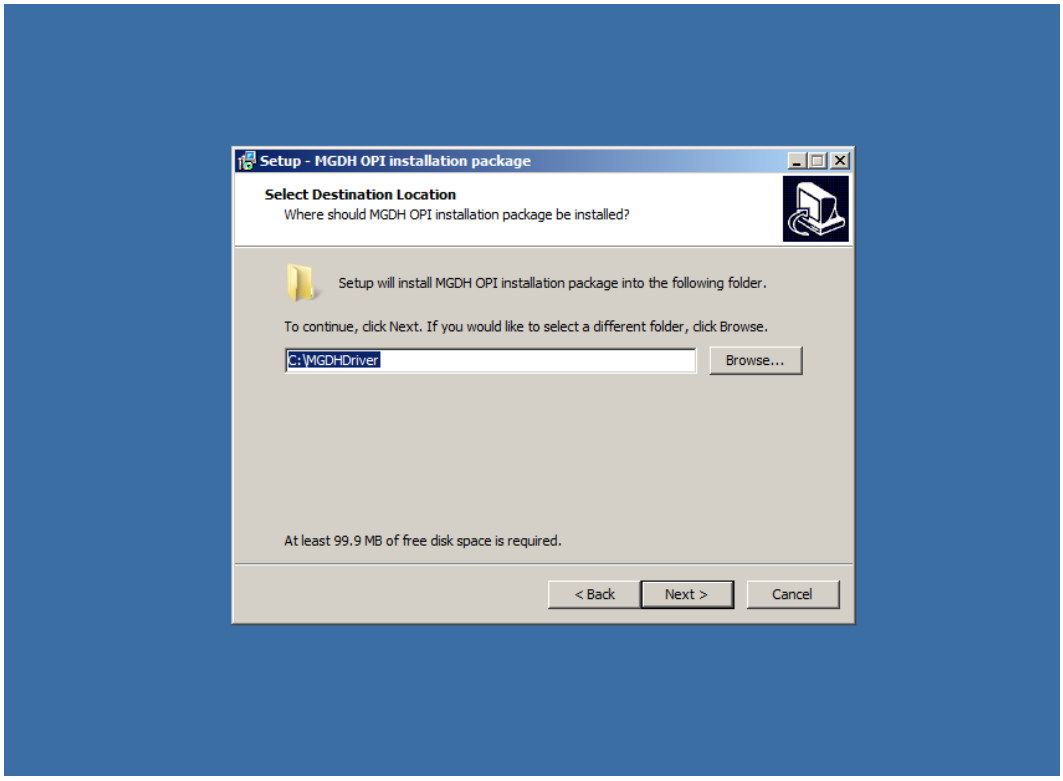

Figure 4-1 MGDH OPI Installation Package

4. Click **Next**.
5. Enter your database information.

Table 4-1 MGDH Database Information Settings

Field	Value
Database Type	MSSQL
DB Server	localhost
Database Name	mcrspos

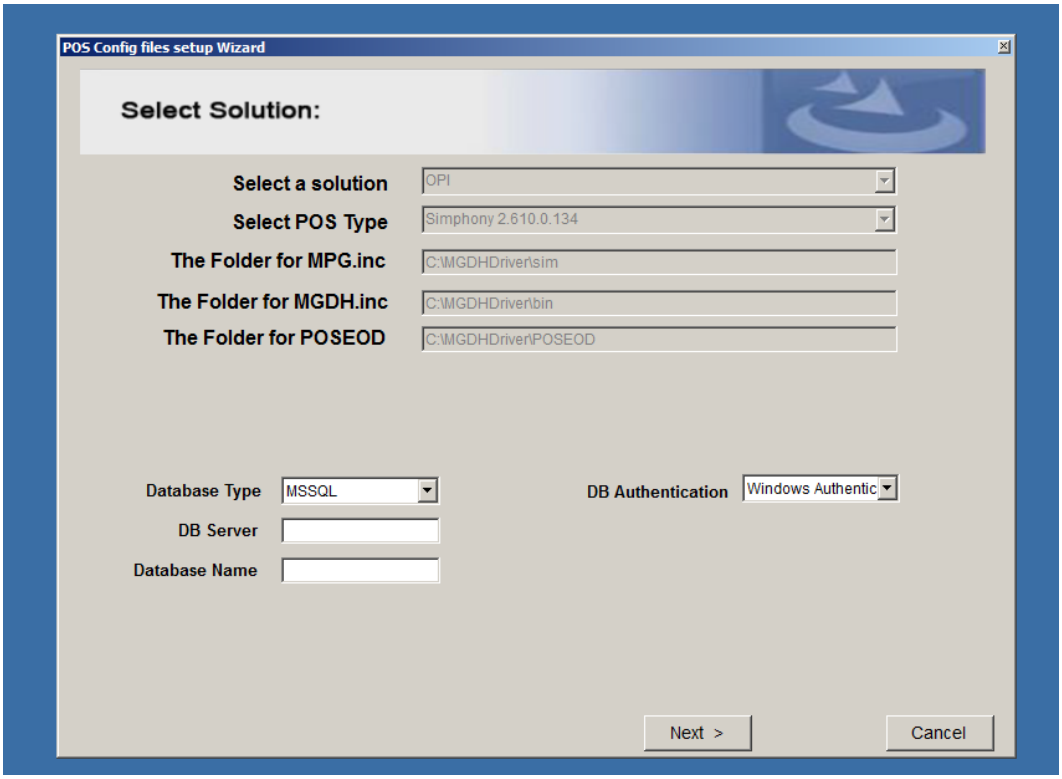

Figure 4-2 MGDH POS Config Files Setup

6. Click **Next**.

7. Select the property.

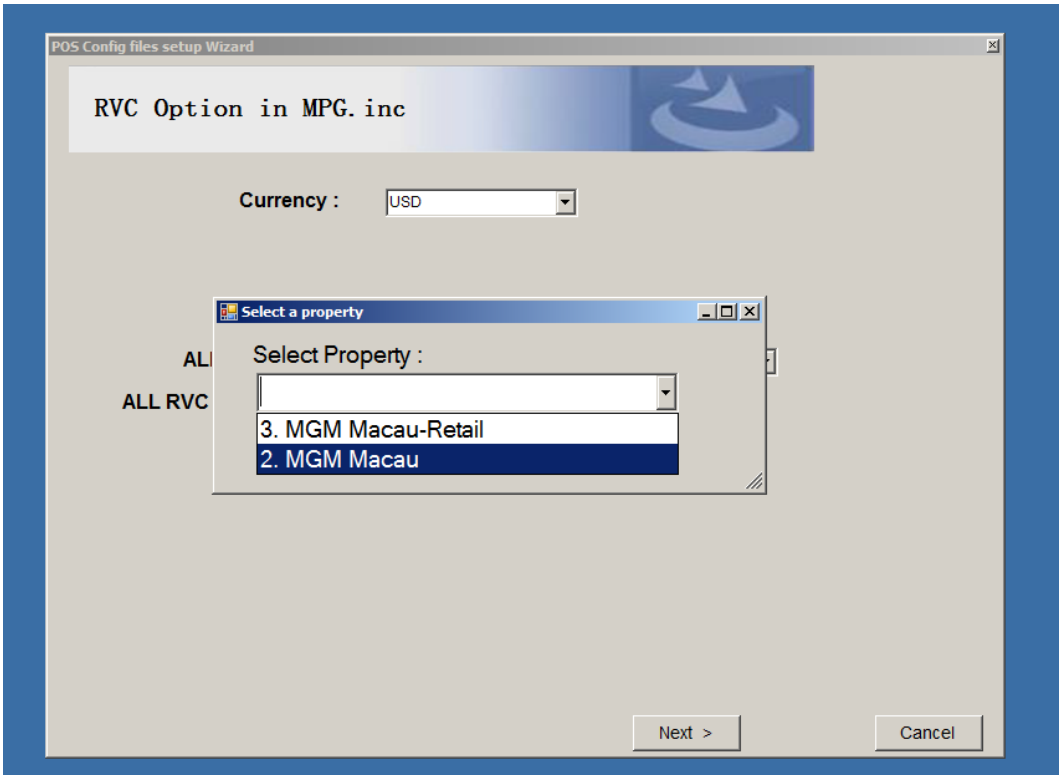

Figure 4-3 MGDH POS Config Property Setup

8. Select **Next**.

9. Select the **Currency** and **Single MerchantID** or **Multiple MerchantID**.
10. Enter the **MID number,** in this case enter the Single MerchantID and click **Next**. If needed, you can confirm the MerchantID setup configuration with the Oracle Hospitality Consulting Team.

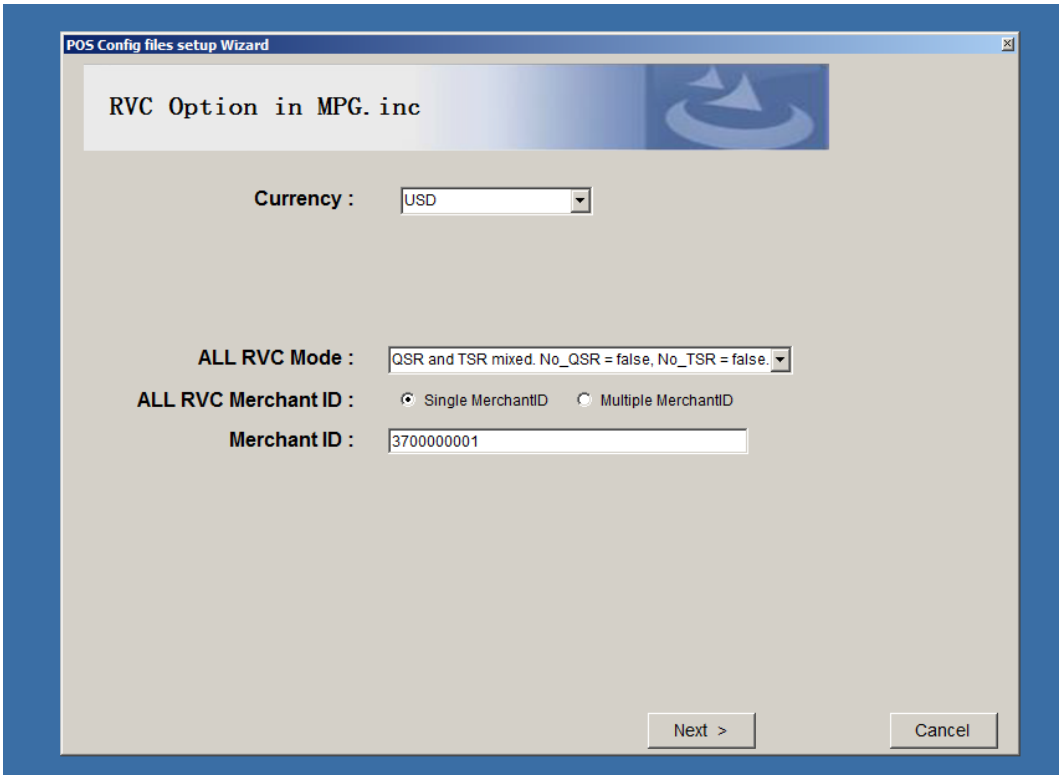

Figure 4-4 MGDH POS Config RVC Currency Setup

11. Select the RVC mode for the RVCs under the property. TSR is for Table Service and QSR is for Quick Service, which enables the No Tip option and click **Next**.

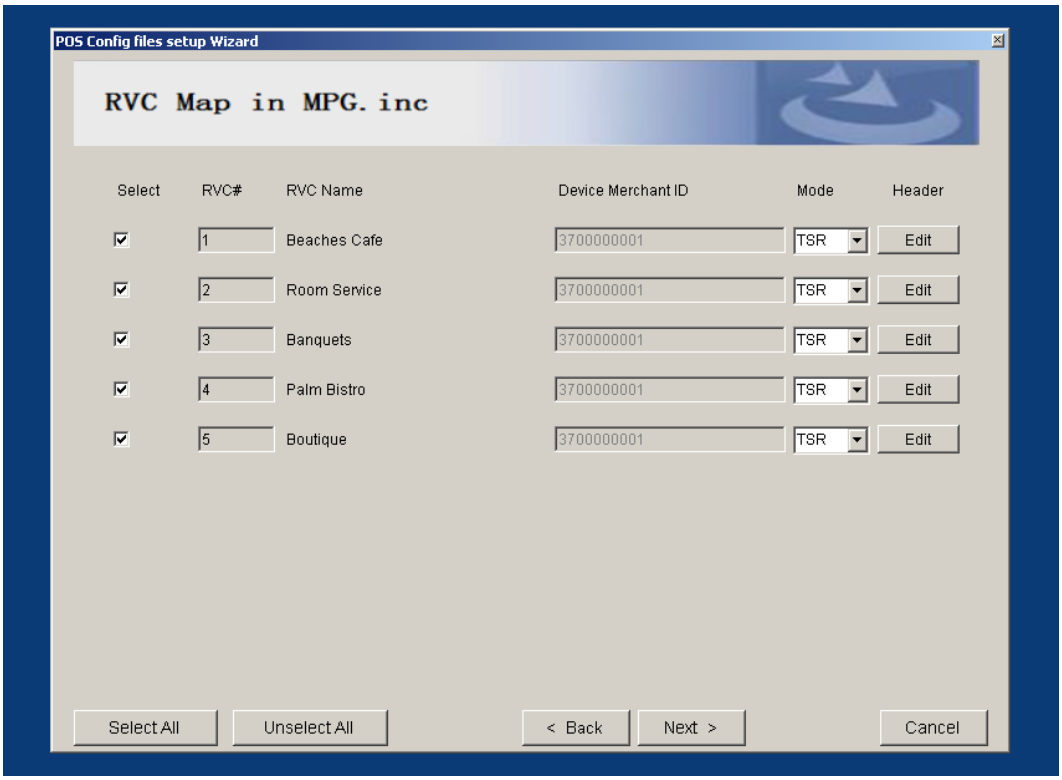

Figure 4-5 MGDH POS Config setup - RVC Map

12. **Header** and **Trailer** information is configured by the partner and the partner who responds with all of the print data, therefore, you do not need to configure the following information.
13. Click **OK**.

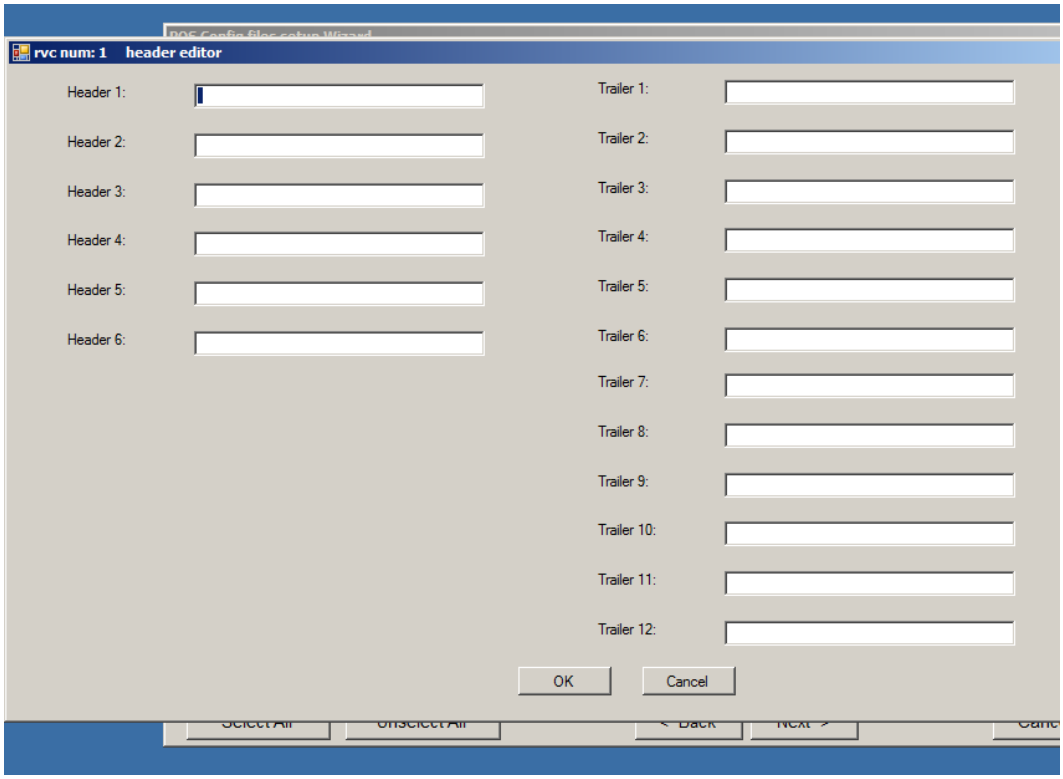

Figure 4-6 MGDH RVC Header Editor

14. You can match the tender from the drop-down list for the card types and enter the CashBack service charge number for **Cashback_svc**. If the tender is not used, skip this step.
15. Click **Next**.

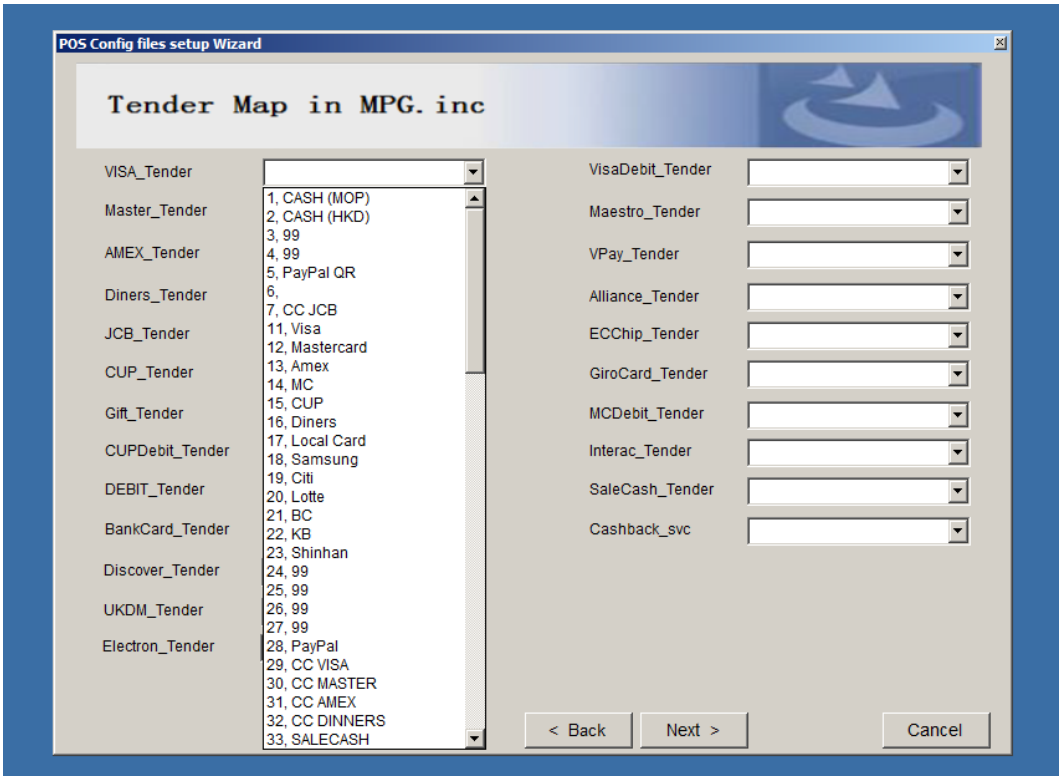

Figure 4-7 MGDH Tender Map

16. Select the check box to enable the required options. You can double-click the **Trans Option Description** to access detailed descriptions for the transaction options.
17. Click **Next.**

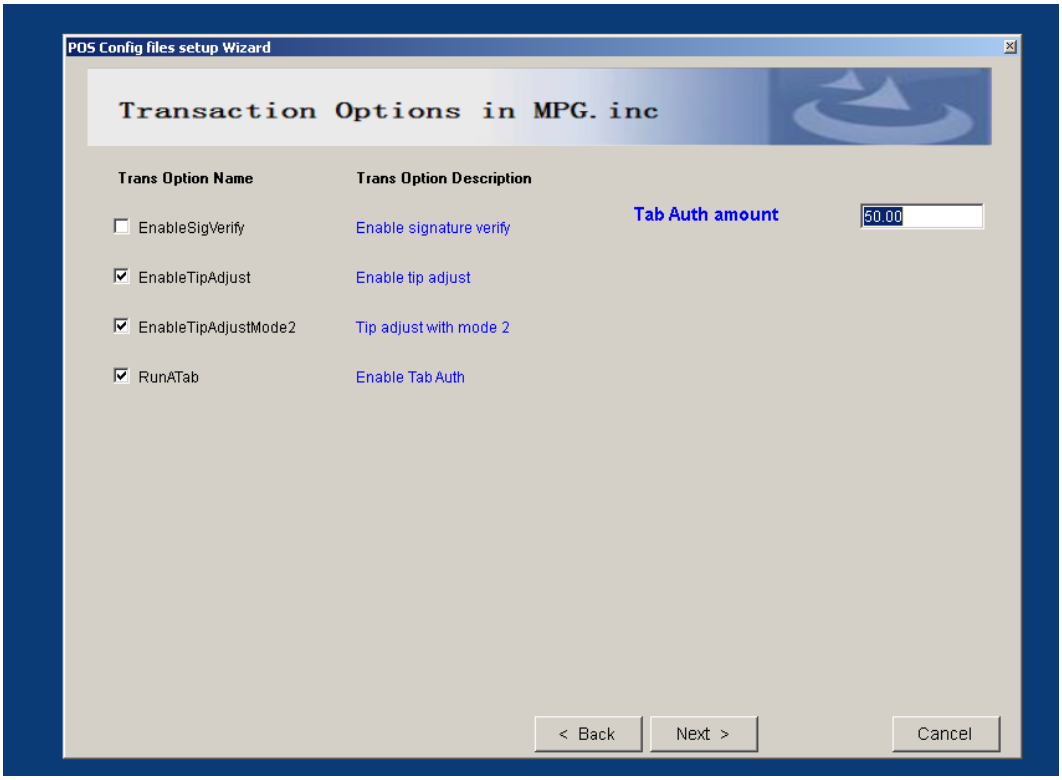

Figure 4-8 MGDH Transaction Options

18. Select the options required for the merchant.
19. Click **Next.**

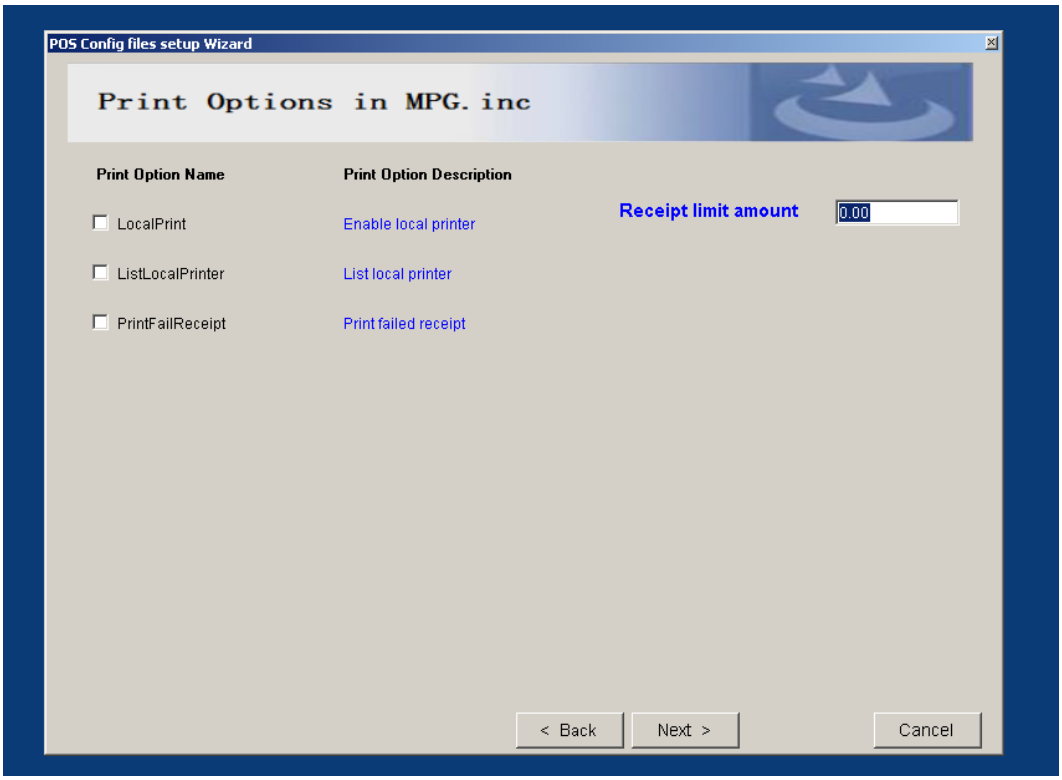

Figure 4-9 MGDH Print Options

20. Enter the following information:

Table 4-2 MGDH Server Setup Options

Option	Value
Host1 HTTP	OPI Server IP address, for example: https://127.0.0.1
Host1 Port	OPI port, you can use the default 5098
TIMEOUT	MGDH timeout, you can use the default 60 seconds

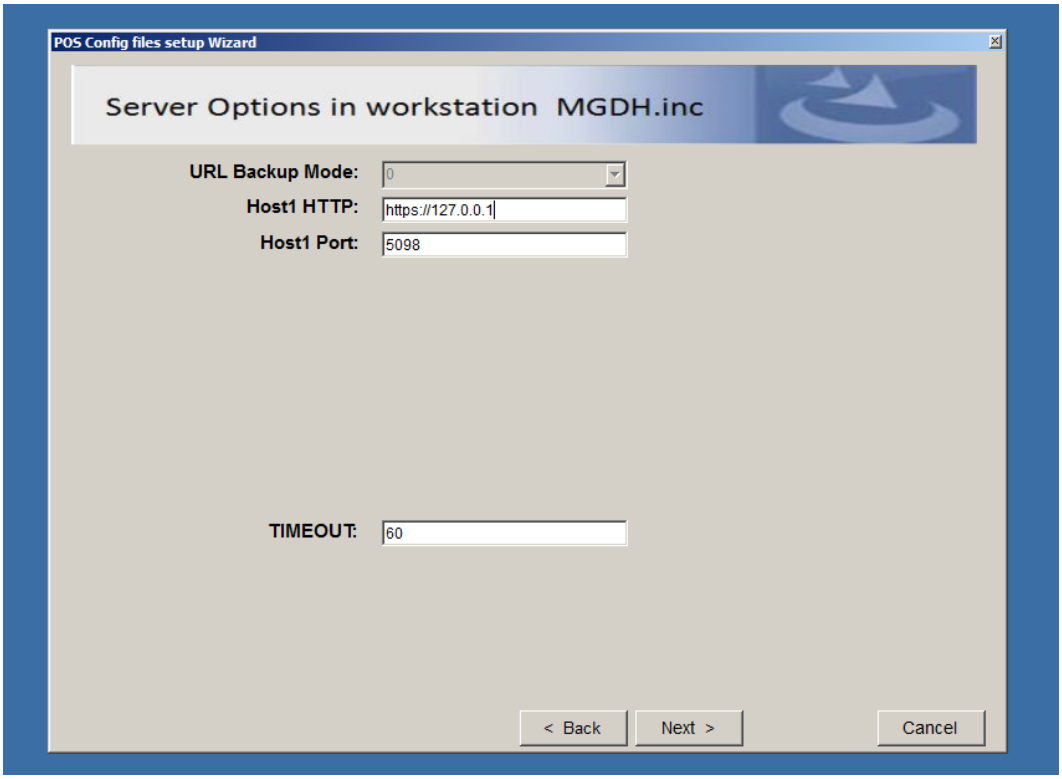

Figure 4-10 MGDH Server Options

21. Click **Next** and enter the following information for the POSEOD:

Table 4-3 MGDH POSEOD Setup Options

Option	Value
Server	OPI Server, same with last step
Server port	OPI port, same with last step
TIMEOUT(POSEOD)	EOD TIMEOUT, you can use the default value 80
Device Merchant ID	The MID or MID's required for the RVCs
Multiple MID	There must be a "|" between the MIDs

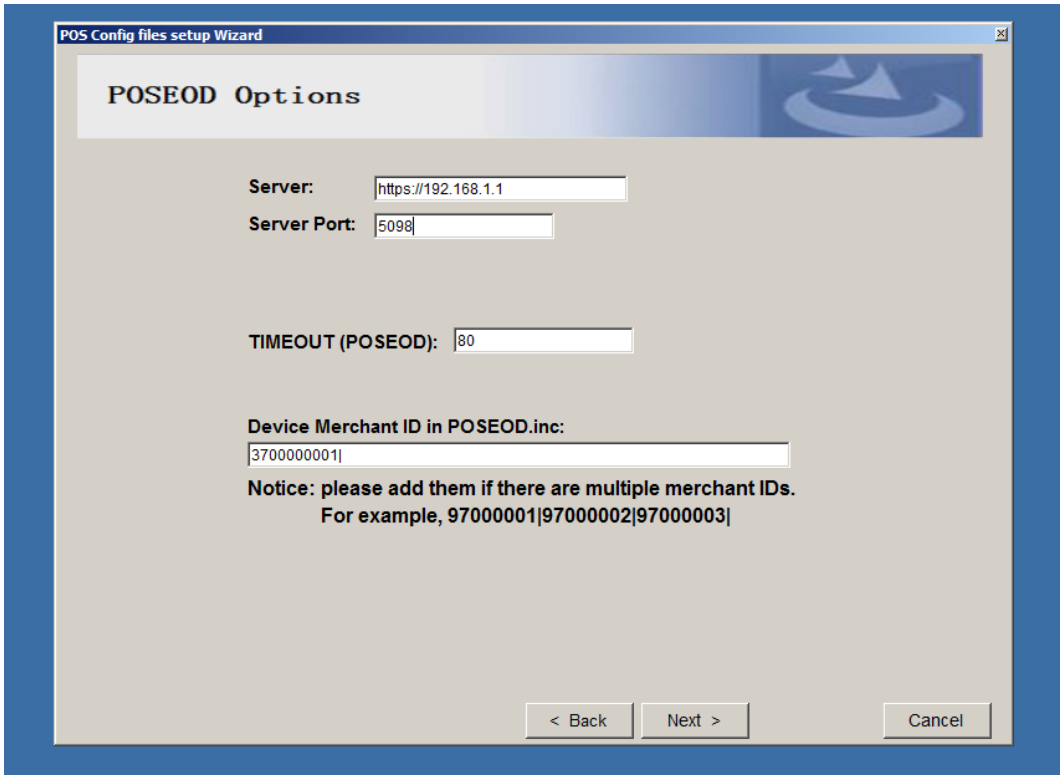

Figure 4-11 MGDH POSEOD Setup Options

22. Click **Next**.

23. Click **OK**.

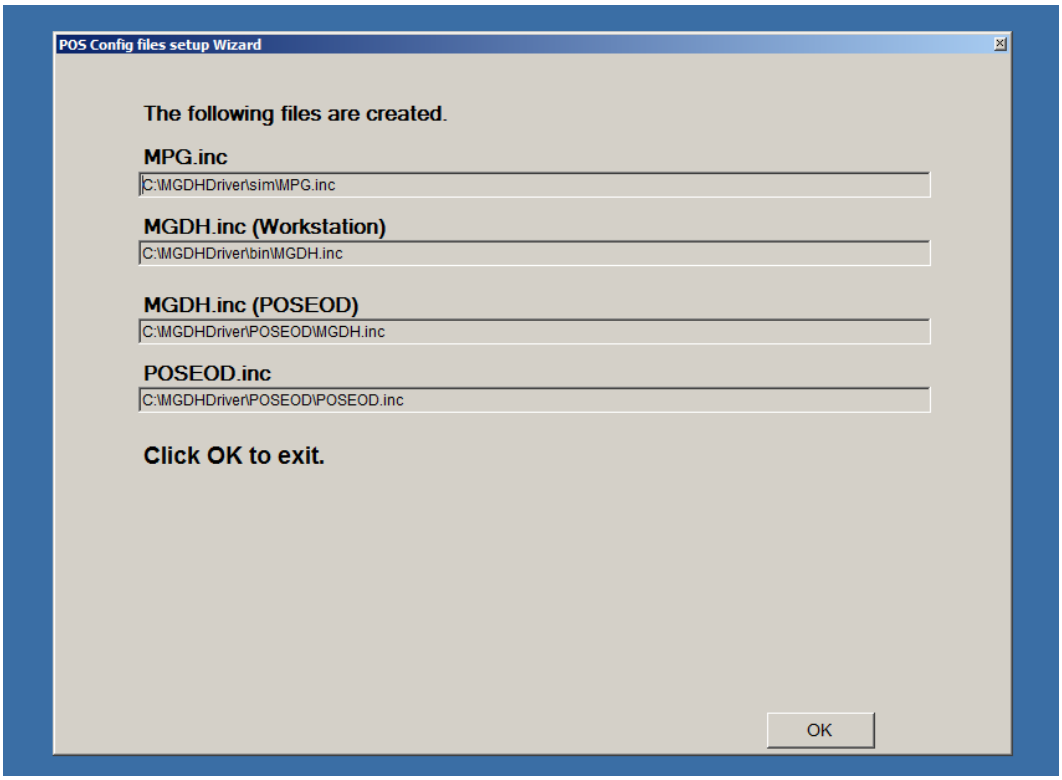

Figure 4-12 MGDH File Creation Confirmation Screen

24. Click **Install**.

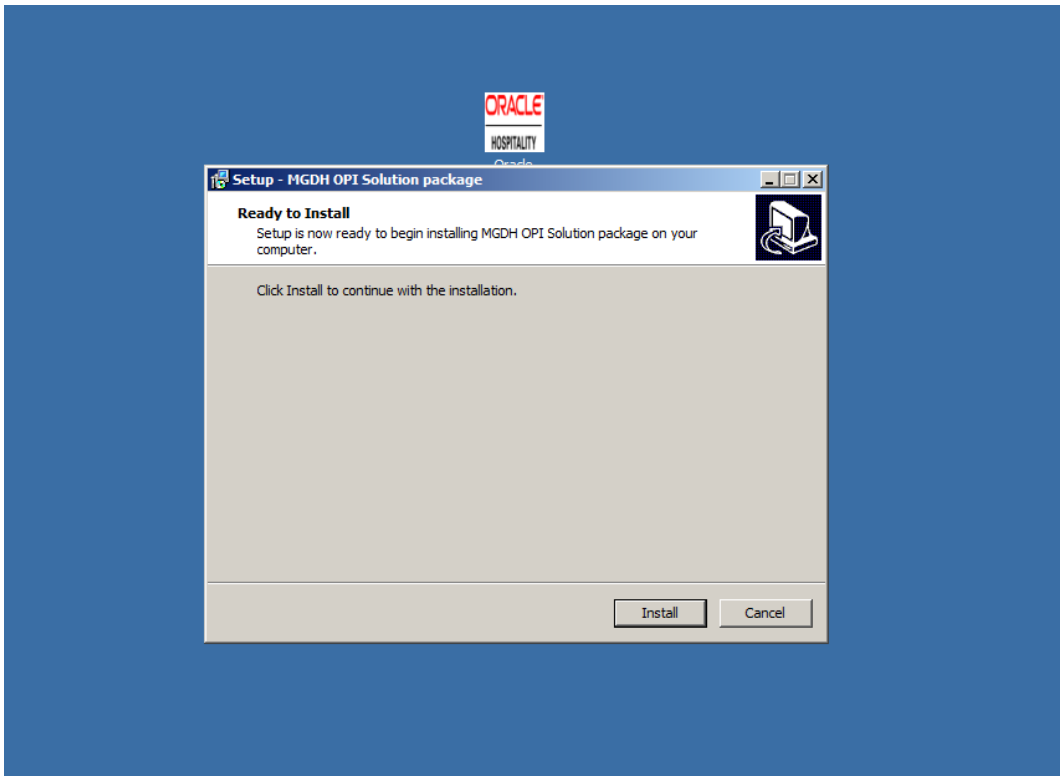

Figure 4-13 MGDH OPI Installation Screen

25. If you need to edit the files configured during a previous installation, then you can select the available **Edit** options to edit the files and click **Next**.

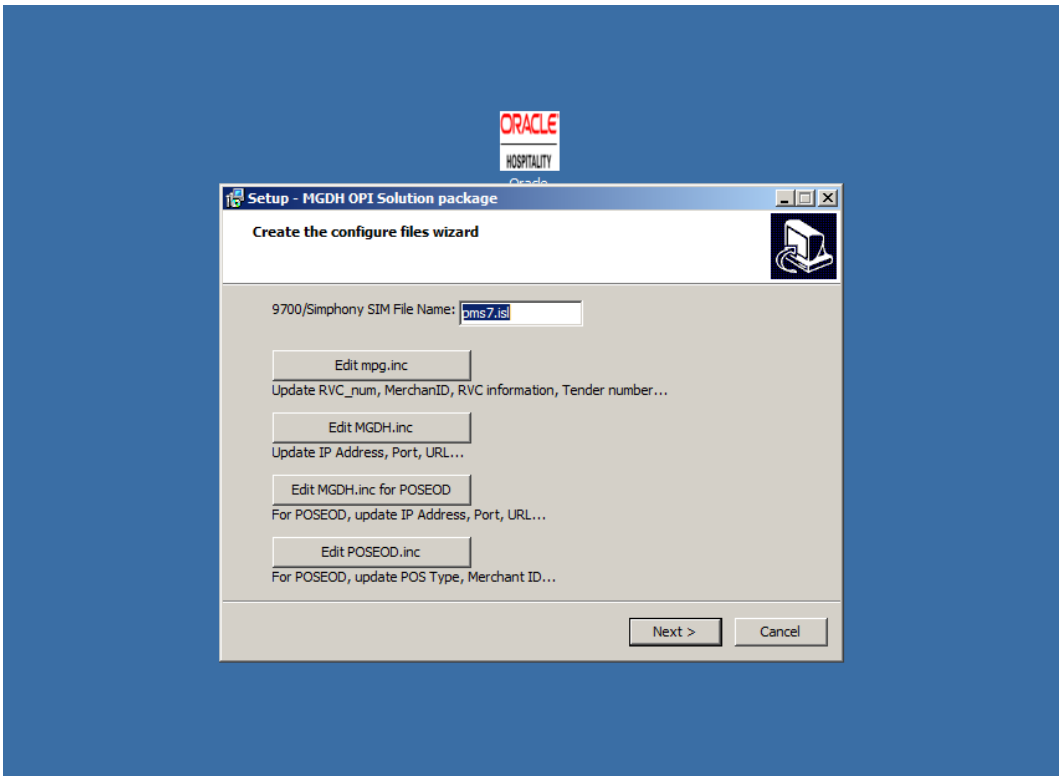

Figure 4-14 MGDH OPI Edit Files Screen

26. Click **Next**.

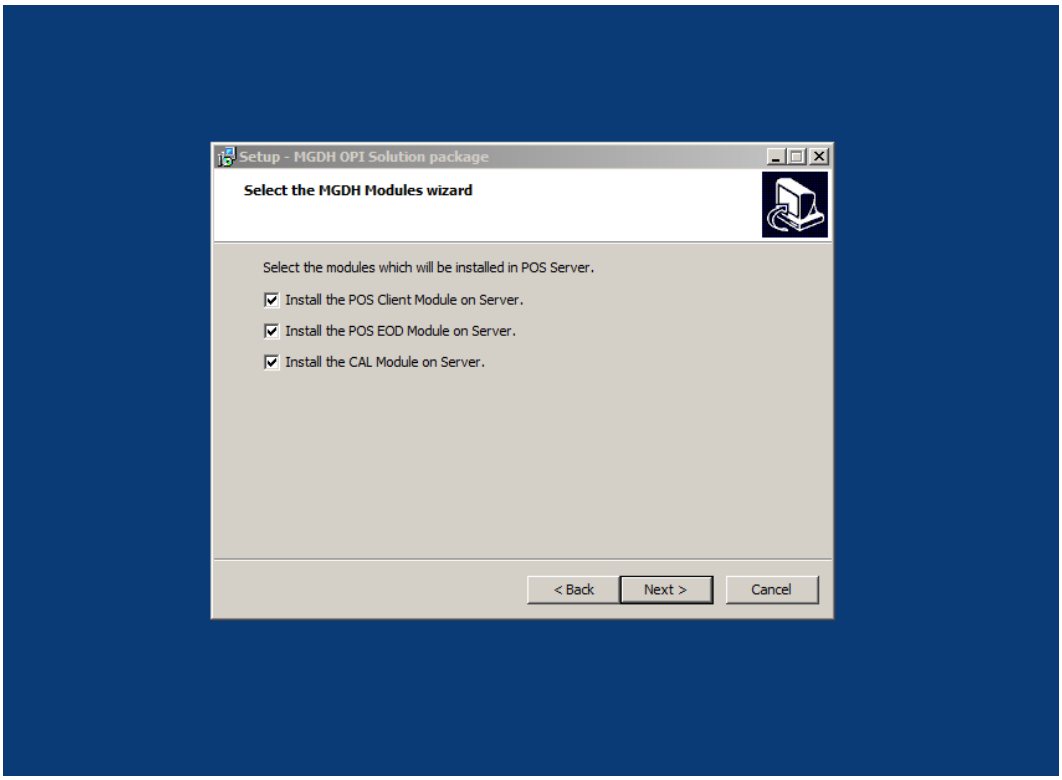

Figure 4-15 MGDH Modules Installation Screen

27. A restart of the computer is not required.
28. Click **Finish**.

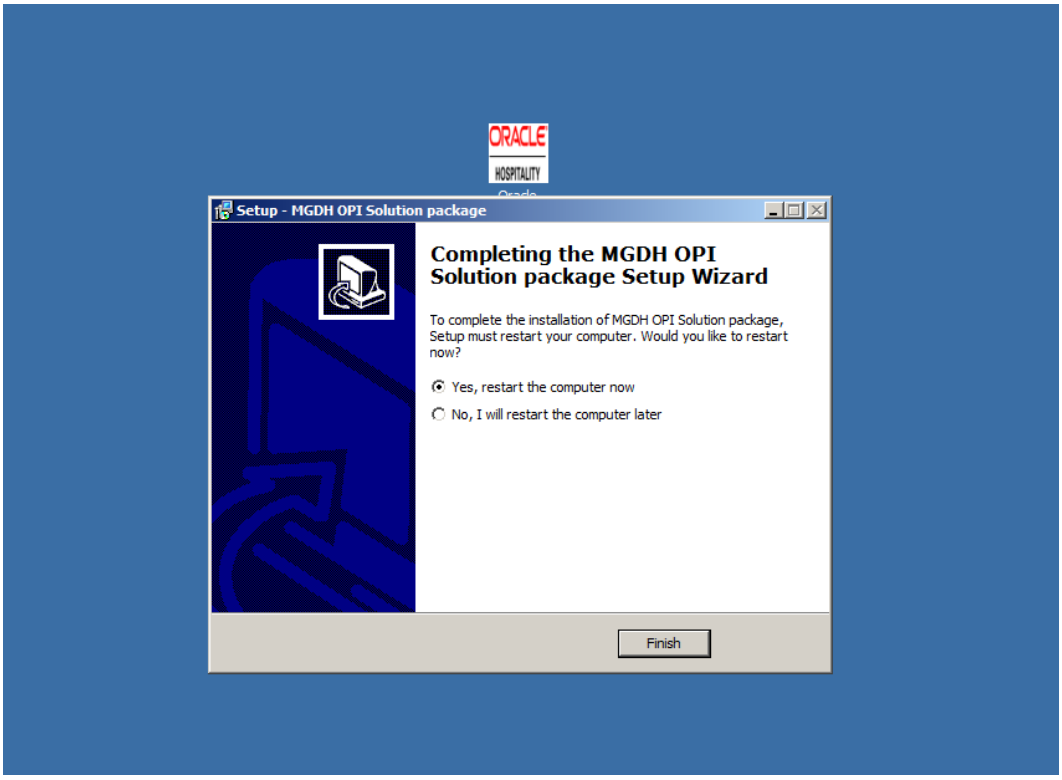

Figure 4-16 MGDH OPI Installation Completion Prompt

Point-of-Sale (POS) End-of-Day (EOD)

You can use the Microsoft Windows Task Scheduler to run the OPI POSEOD using the following configuration details.

Table 4-4 Microsoft Windows Task Scheduler Settings

Temporary	Table
Name	OPI POSEOD
Description	Generates the OPI transaction report
Trigger	Daily
Action	Start a program
Program/script	Browse to find the `POSEOD.exe` in MGDHDriver directory
Add arguments (optional)	The upper level of the POSEOD.exe path
Start in (optional)	The upper level of the `POSEOD.exe` path

For more information on how to setup the Microsoft Windows Task scheduler visit the Microsoft website at: `http://www.microsoft.com`

5 Installing the OPI

OPI Installation Steps

Complete the following steps to install OPI.

1. Double-click the OPI installer desktop icon.

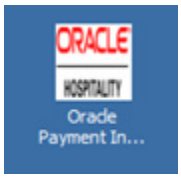

Table 5-1 OPI Installer Desktop Icon

2. Click **Next**.

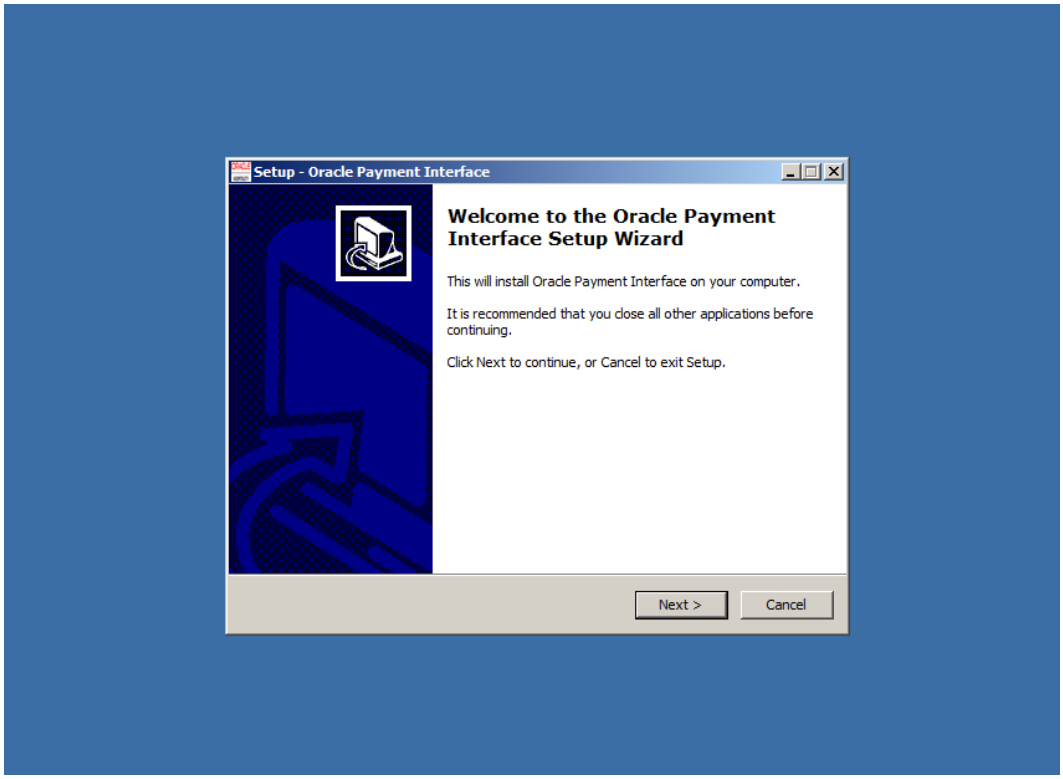

Figure 5-1 OPI Installation Wizard

3. Verifying your computer and validating the required software takes around 10 seconds.

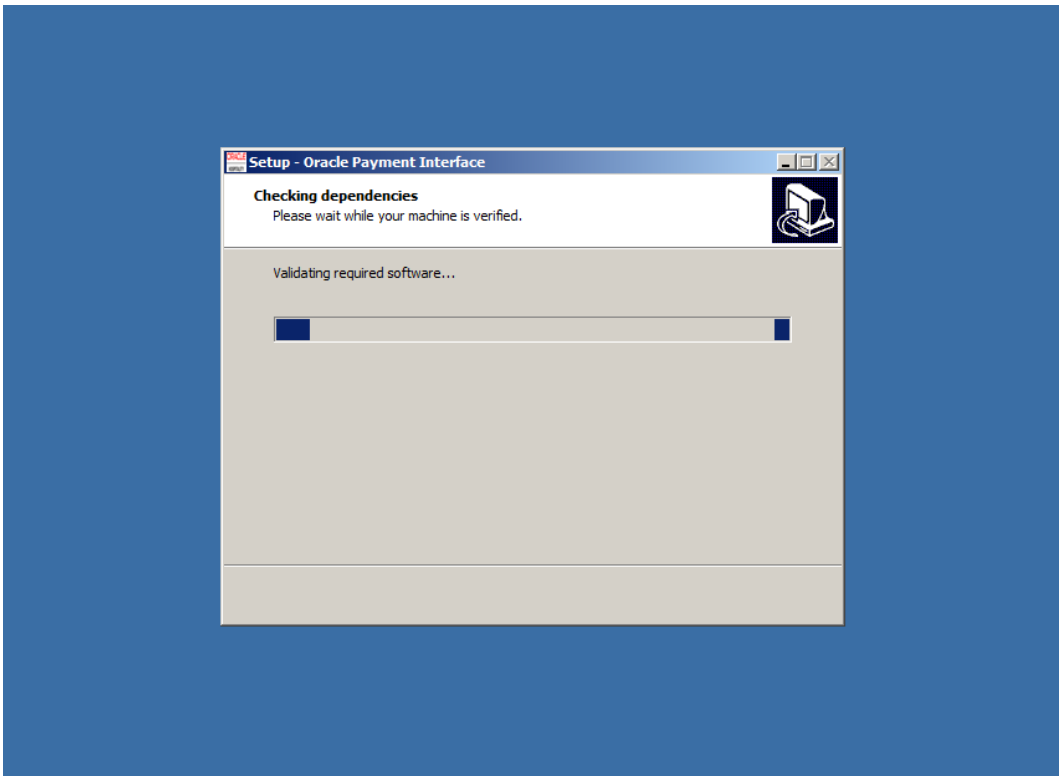

Figure 5-2 OPI Setup Validation Screen

4. If the target computer doesn't have MySQL installed, then the OPI installs the MySQL database. If MySQL is already installed, then the OPI uses the existing MySQL database and you must enter your MySQL logon credentials.
5. Click **Next**.

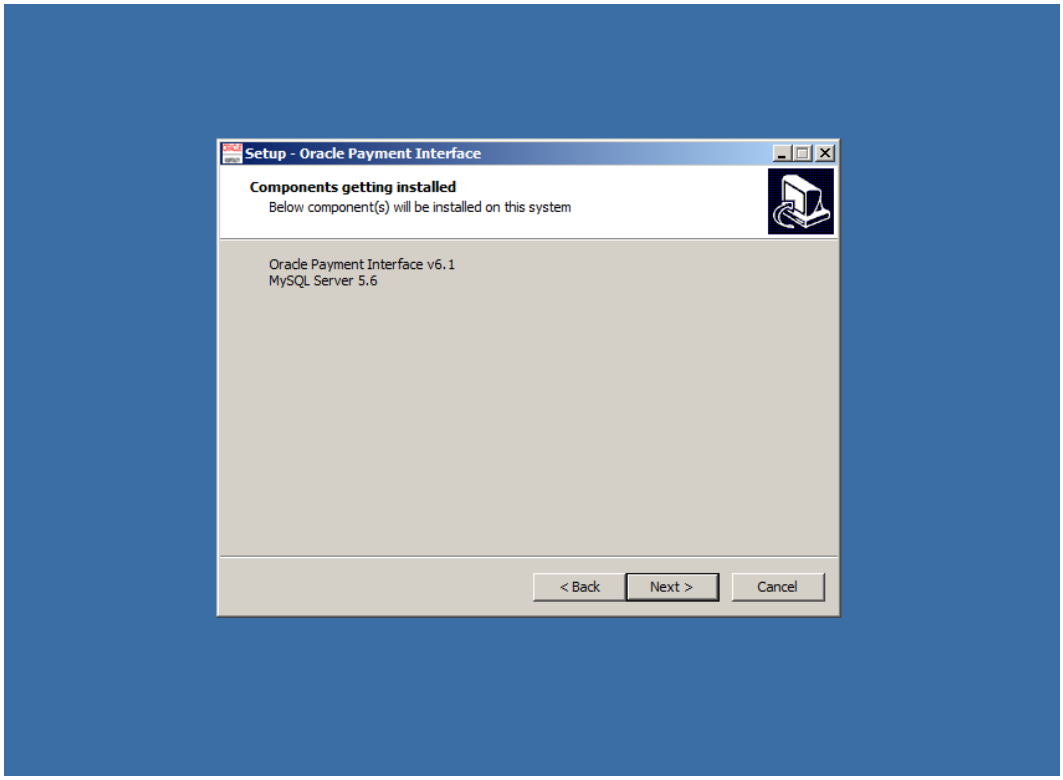

Figure 5-3 OPI Components Installation Screen

6. Setup a MySQL password to use for creating the Database Schema.

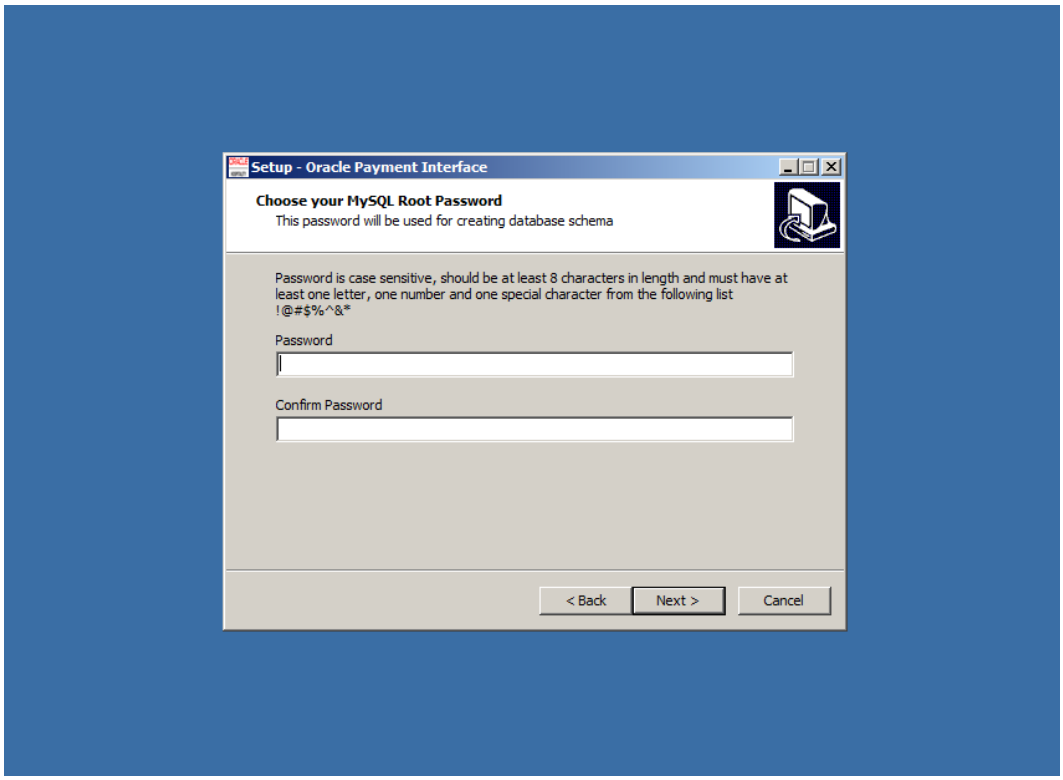

Figure 5-4 OPI MySQL Root Password Setup

7. Click **Next** to continue and enter a **Username** and **Password** to create a database user for the OPI and click **Next**.

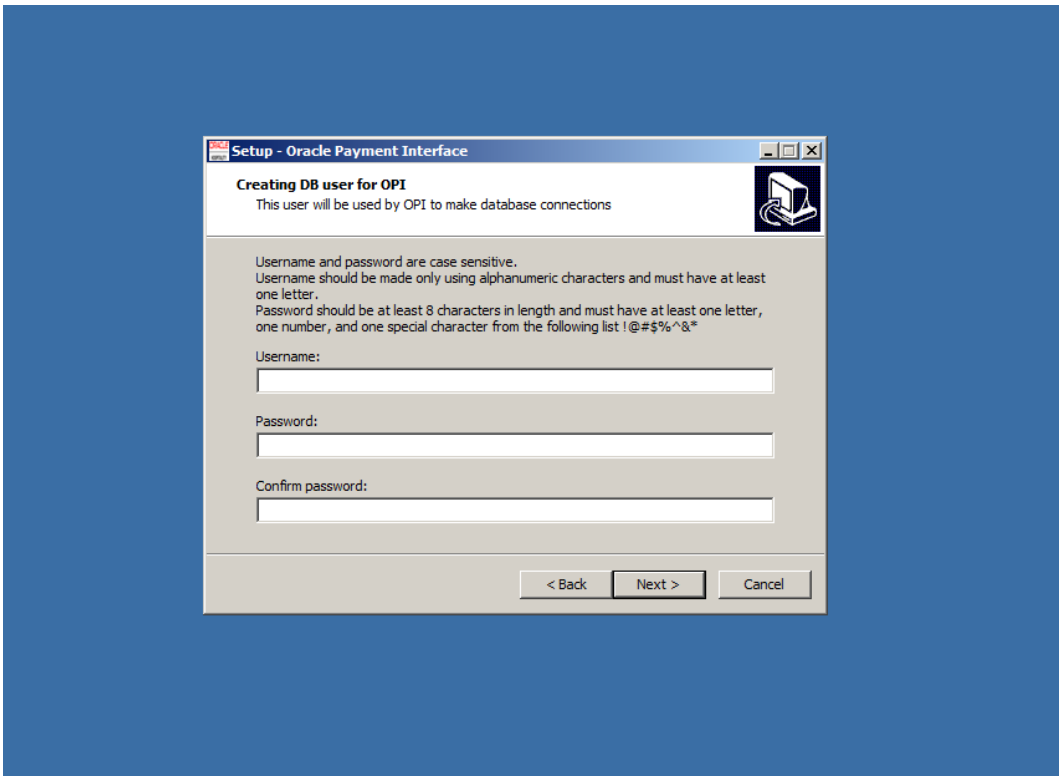

Figure 5-5 OPI Creating a DB User

8. Select **POS**, **MGDH,** and then click **Next**.

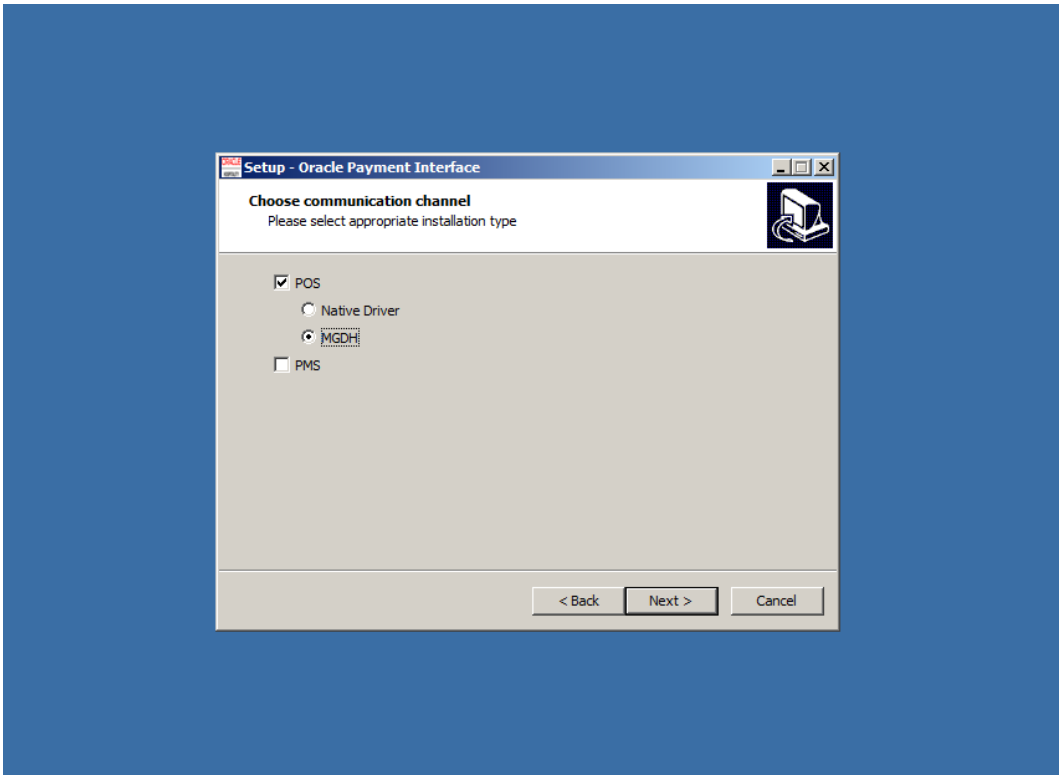

Figure 5-6 OPI Communication Channel Selection Screen

9. Enter and confirm your password to secure a certificate for the OPI to use during MGDH communication, and click **Next**.

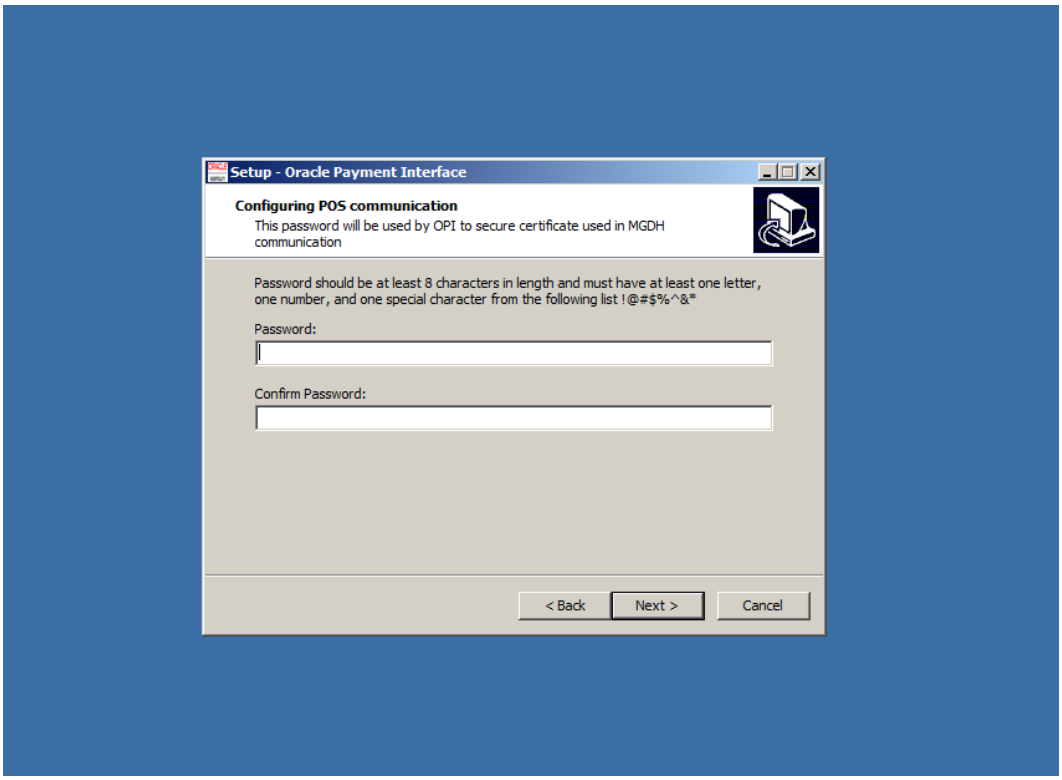

Figure 5-7 OPI Configuring POS Communication Screen

10. Enter the date and time you want to schedule a weekly restart of the OPI Service.

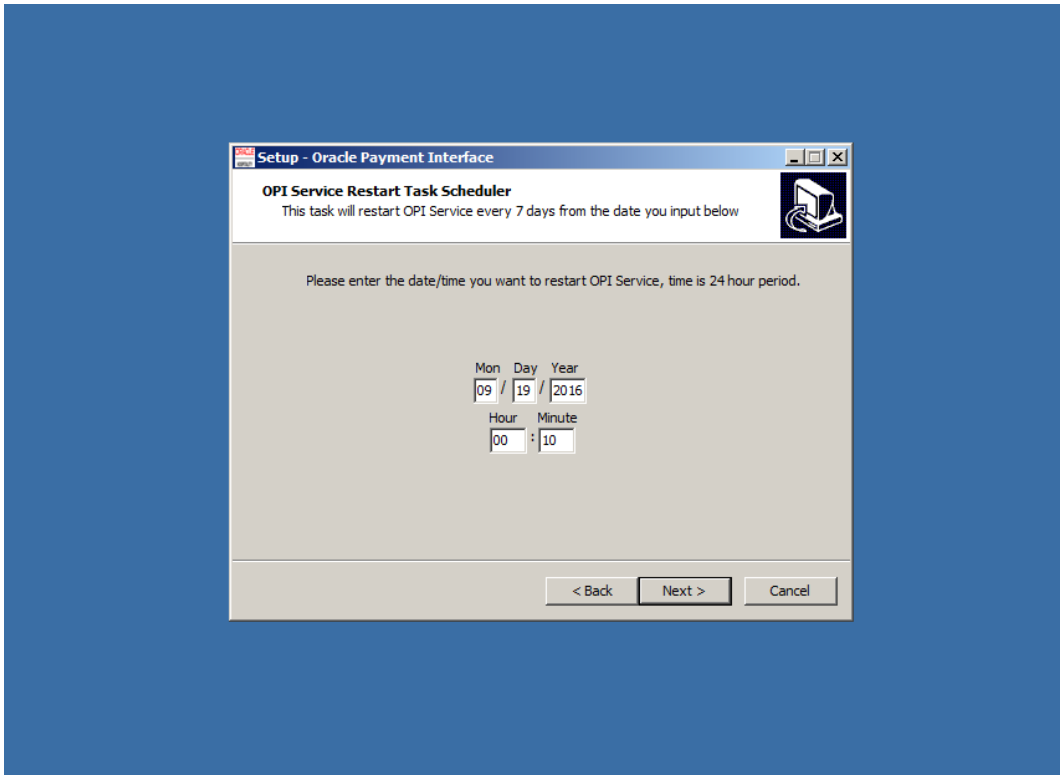

Figure 5-8 OPI Service Restart Task Scheduler

11. Select the destination drive location where to install the OPI and click **Next**.

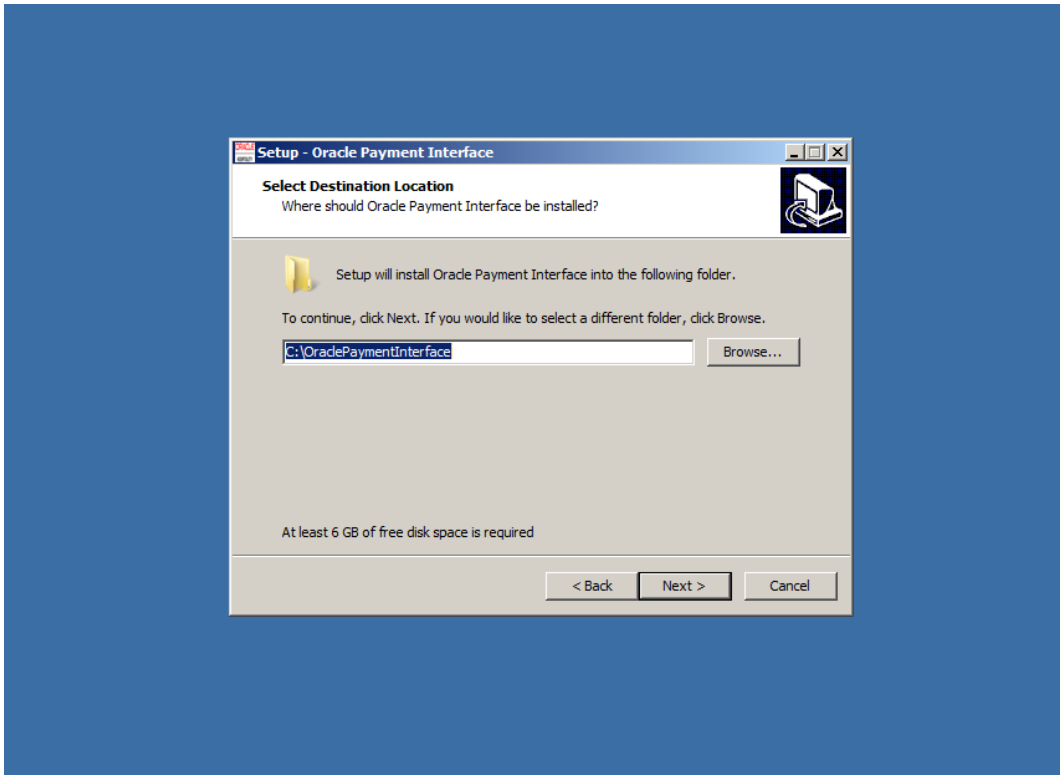

Figure 5-9 OPI Select Destination Location Screen

12. Click **Next**.

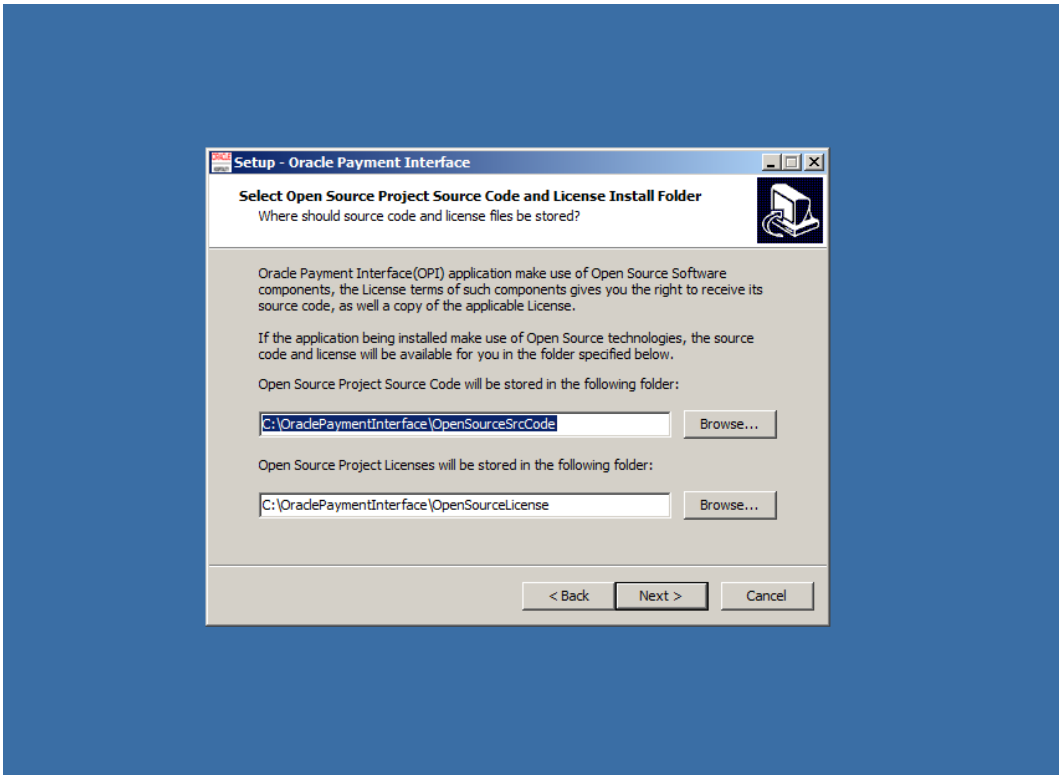

Figure 5-10 OPI Open Source Project Code and License Storage Locations

13. Click **Next**.

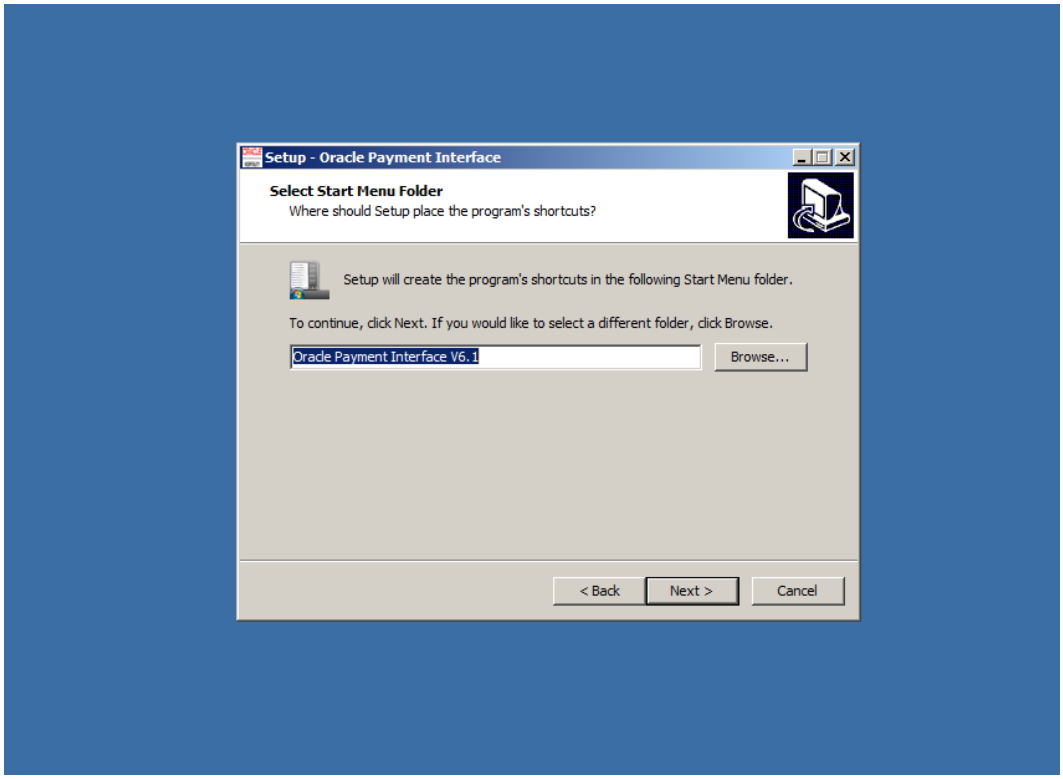

Figure 5-11 OPI Select Start Menu Folder

14. Verify your previous installation settings, and if correct, click **Install**.

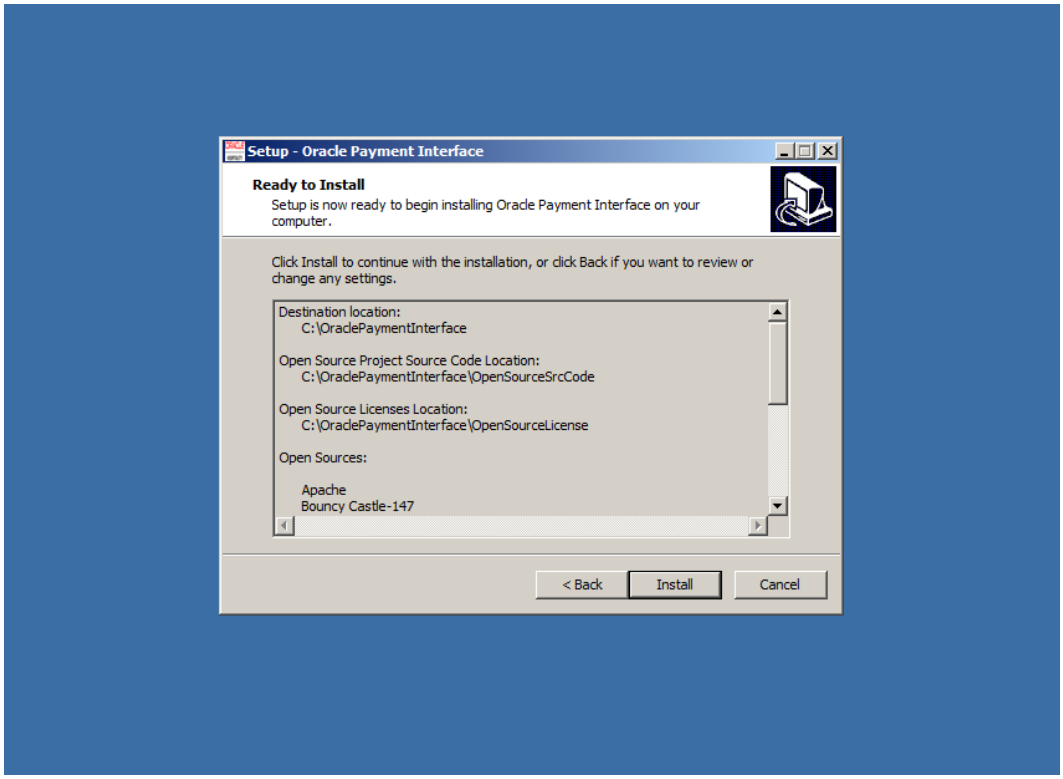

Figure 5-12 OPI Installation Screen

15. The installation of the OPI and MySQL starts and may take several minutes. Upon completion, you can now configure the OPI.

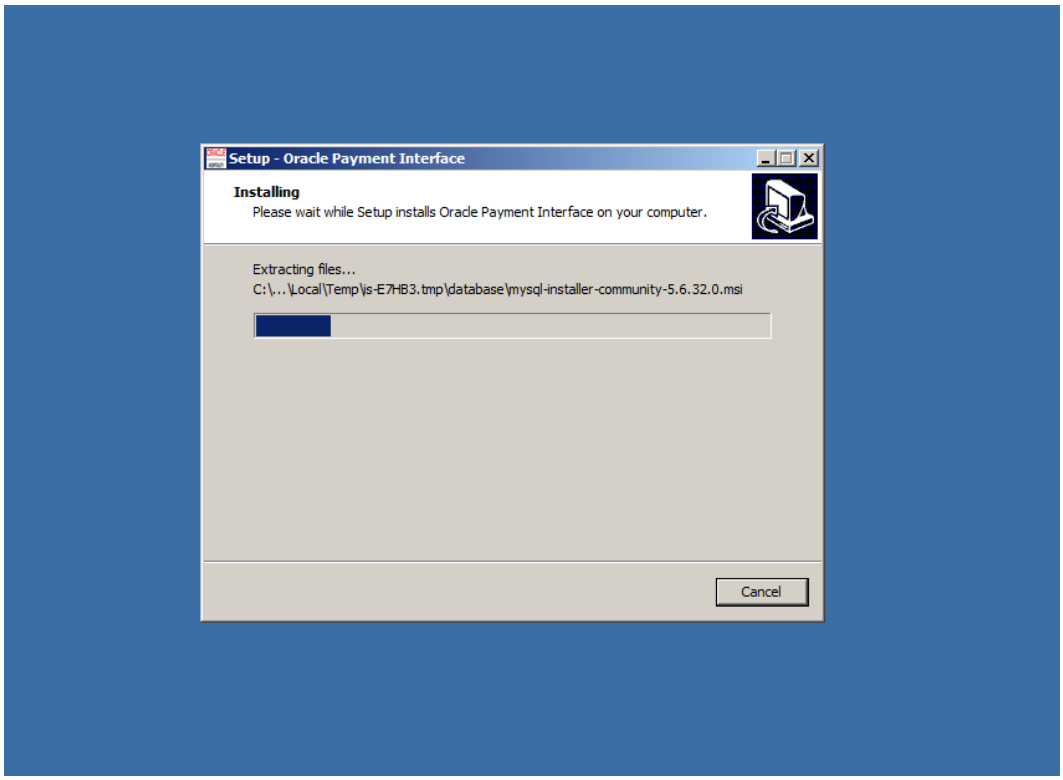

Figure 5-13 OPI Installation Progress Screen

Configuring the OPI

Complete the following steps to configure the OPI:

1. Log in using your Microsoft Windows System Administrator credentials.

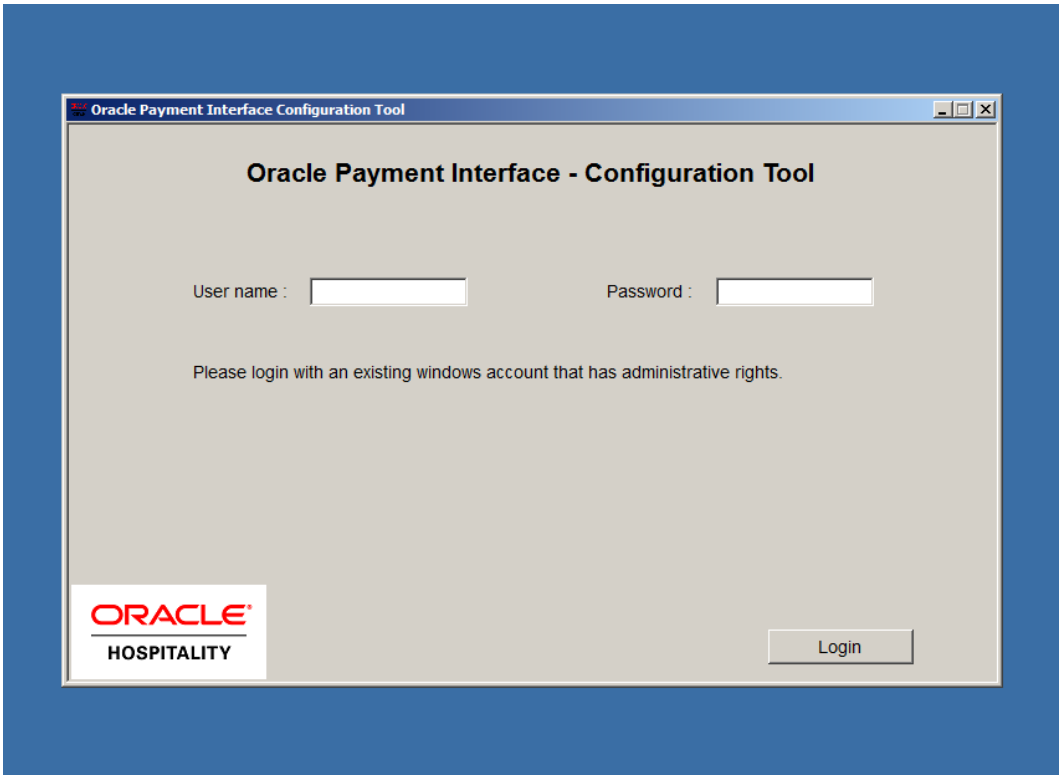

Figure 5-14 OPI Configuration Tool - Terminal Mode

2. Click **Next**.

3. Enter the following information to configure the OPI Terminal mode:

Table 5-2 OPI Terminal Mode Configuration Settings

Field	Value
POS Interface	Enable
OPI Mode	Terminal

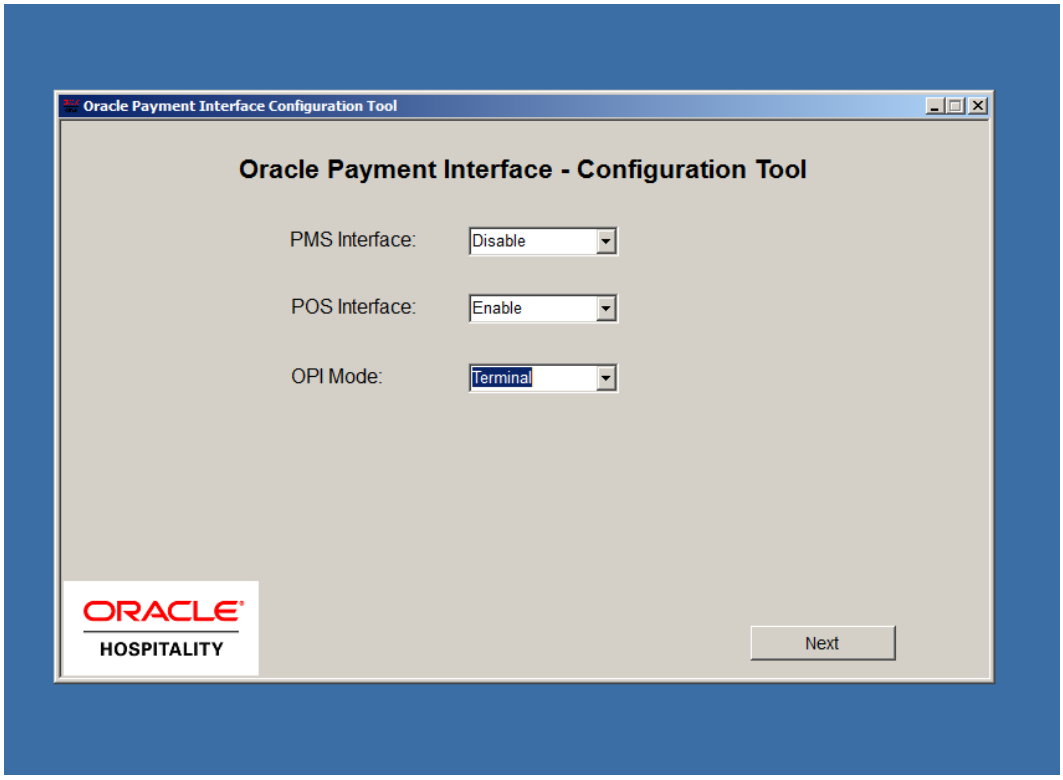

Table 5-3 OPI Terminal Mode Settings

4. Click **Next,** and configure the OPI Middleware mode by entering the following information:

Table 5-4 OPI Middleware Mode Configuration Settings

Field	Value
POS Interface	Enable
OPI Mode	Middleware
PrimaryHost	Confirm with Oracle Consulting Team
BackupHost	Confirm with Oracle Consulting Team

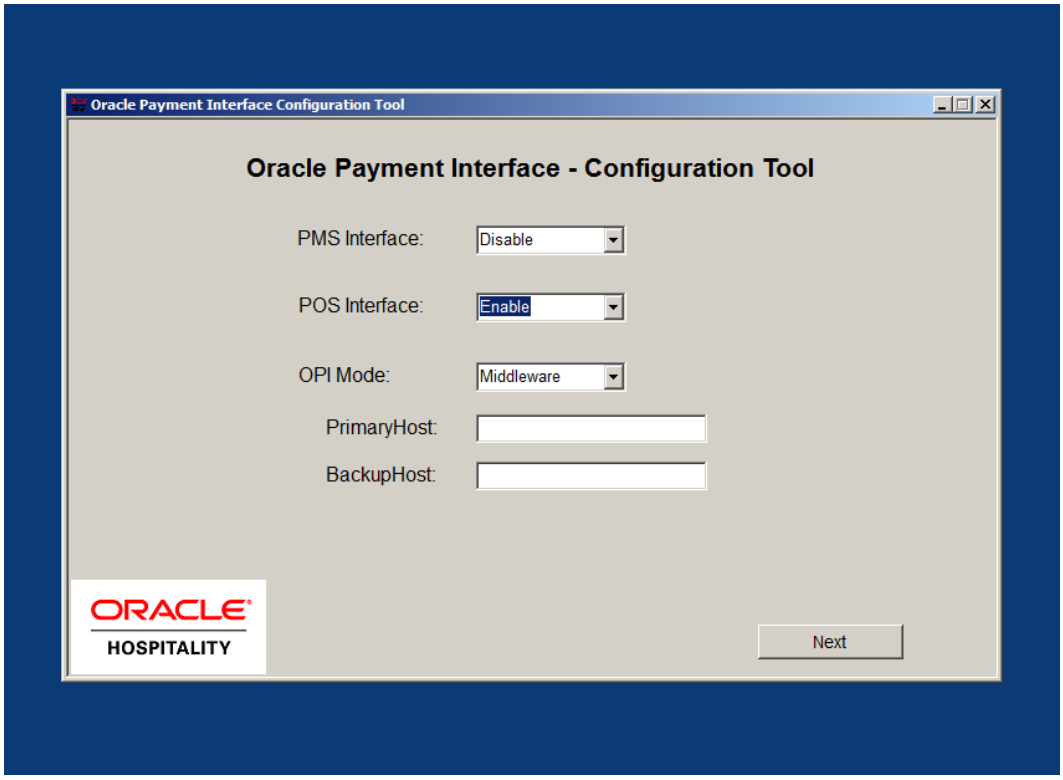

Table 5-5 OPI Middleware Mode Settings

5. Select **POS Configuration**.

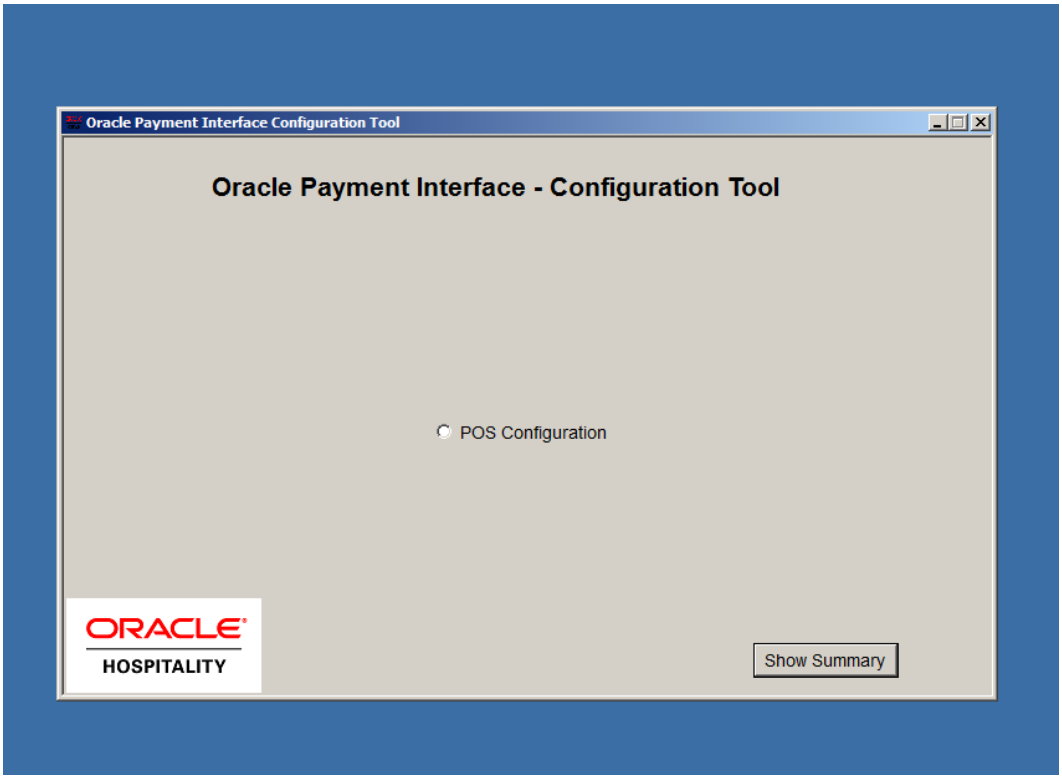

Figure 5-15 OPI POS Configuration

6. Select the **Add New Property** button.

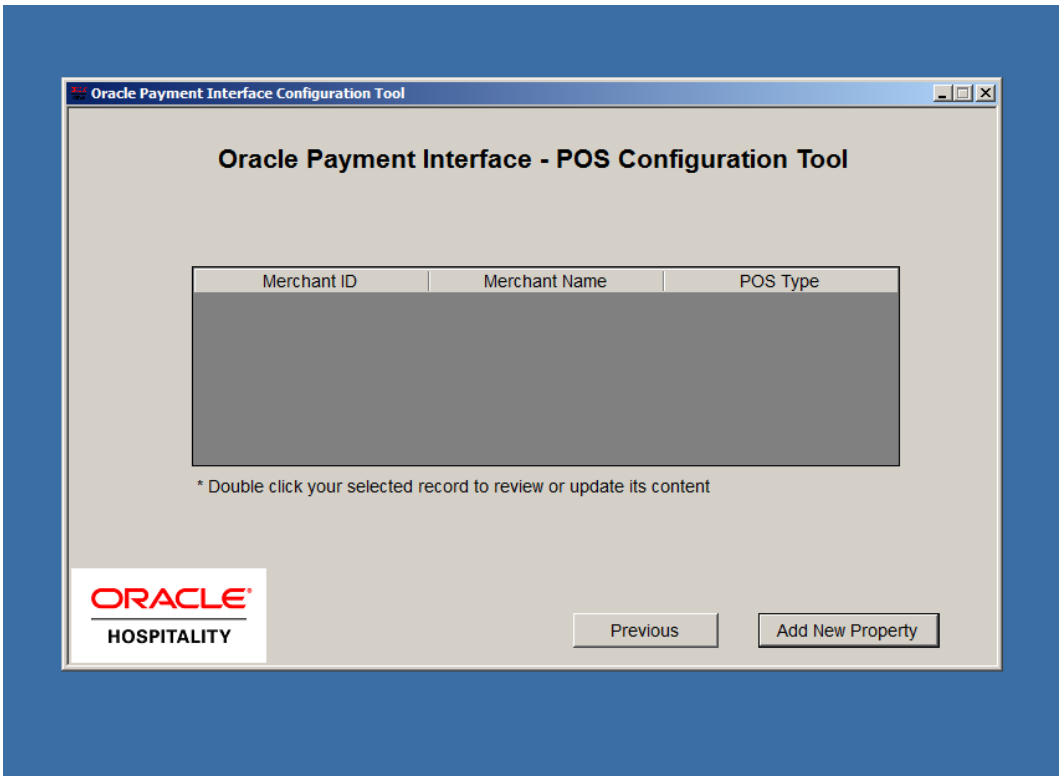

Figure 5-16 OPI Add New Property Screen

7. Configure the merchant details using the following information:

Table 5-6 OPI Merchant Details Configuration

Temporary	Table
POS Type	9700
Merchant ID	MID, same with the MGDH Merchant ID
Pay@Table	Disable
Merchant Name	Merchant Name
Merchant City	City where the merchant is located
Merchant Country	Merchant's Country

- If multiple merchants have multiple MID's, refer to the steps listed above to **Add New Property** again or contact the Oracle Hospitality Consulting Team for assistance.
- The Merchant Name does not support special characters including the **&** character or the **@** character and must contain from 5 to 25 characters.

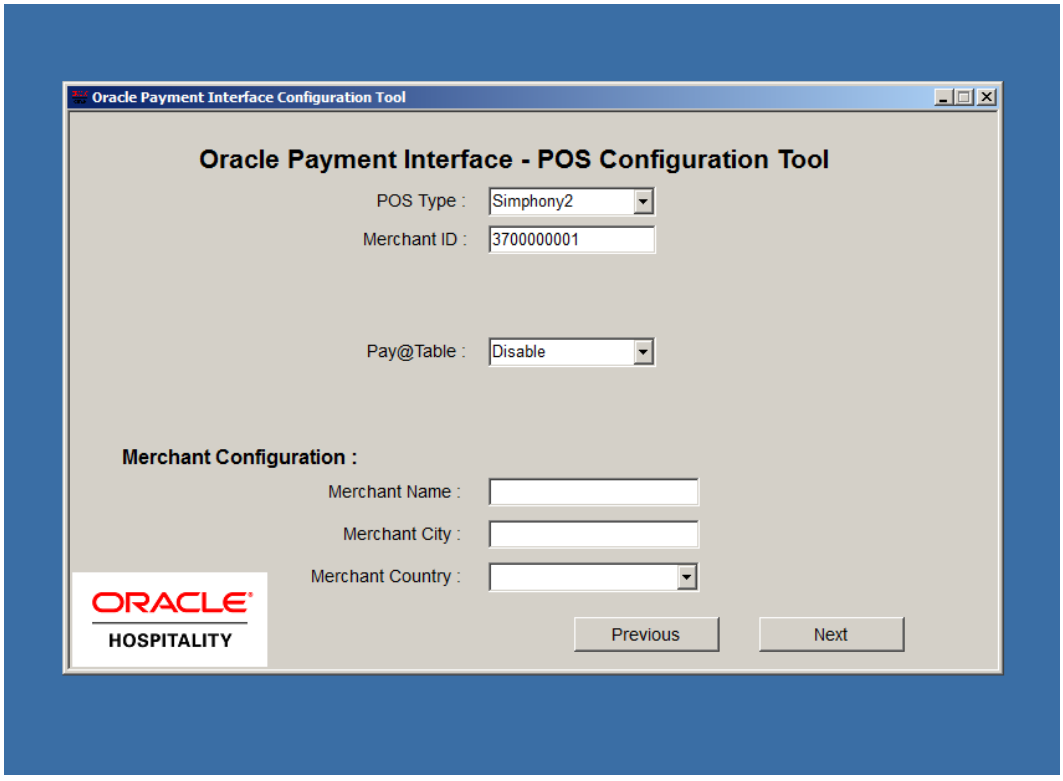

Figure 5-17 OPI Merchant Details Entry Screen

8. Click **Add Terminal**.

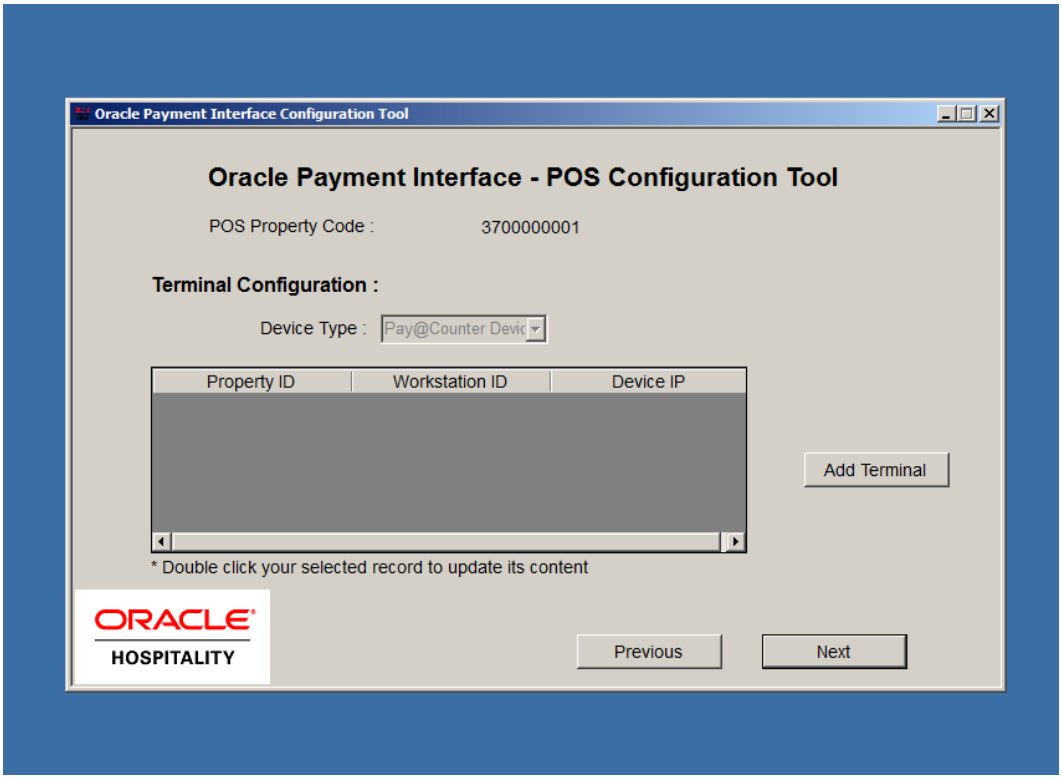

Figure 5-18 OPI Add Terminal Screen

9. Enter the POS Terminal information using the following settings:

Table 5-7 OPI POS Terminal Configuration

Field	Value
Workstation ID	Workstation ID in the EMC
IP	PINPad IP Address

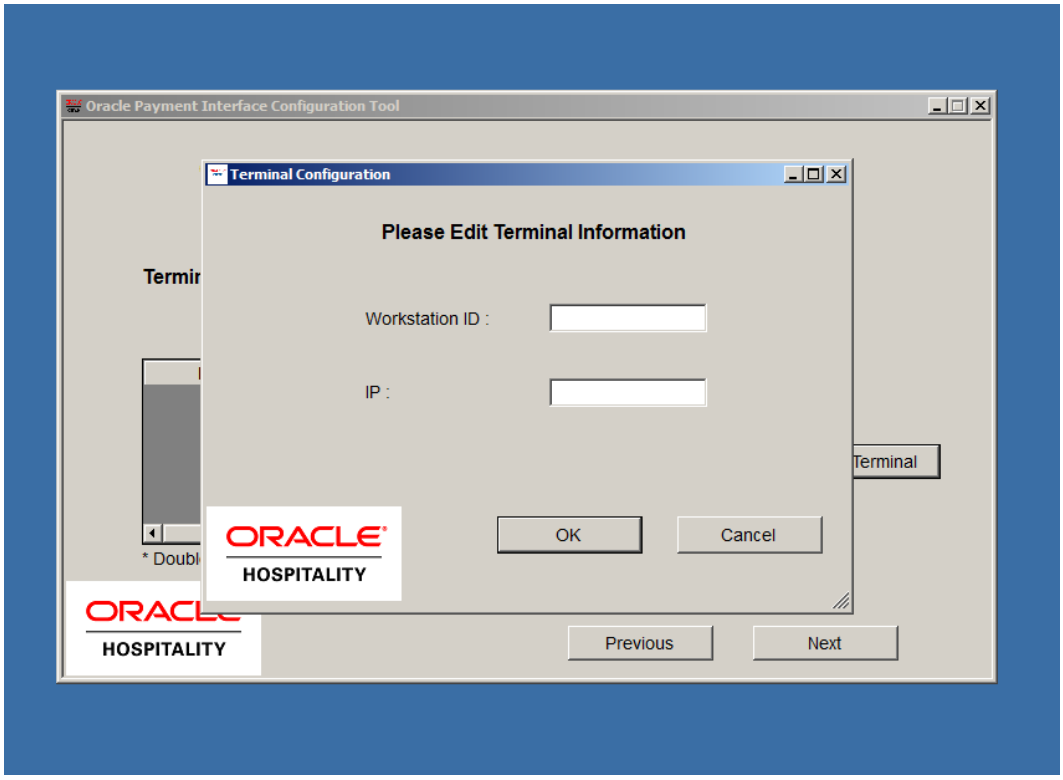

Figure 5-19 OPI Terminal Information Entry Screen

10. Click **Next** and then click **Exit**.

11. Review the OPI Configuration Summary page and click **Continue**.

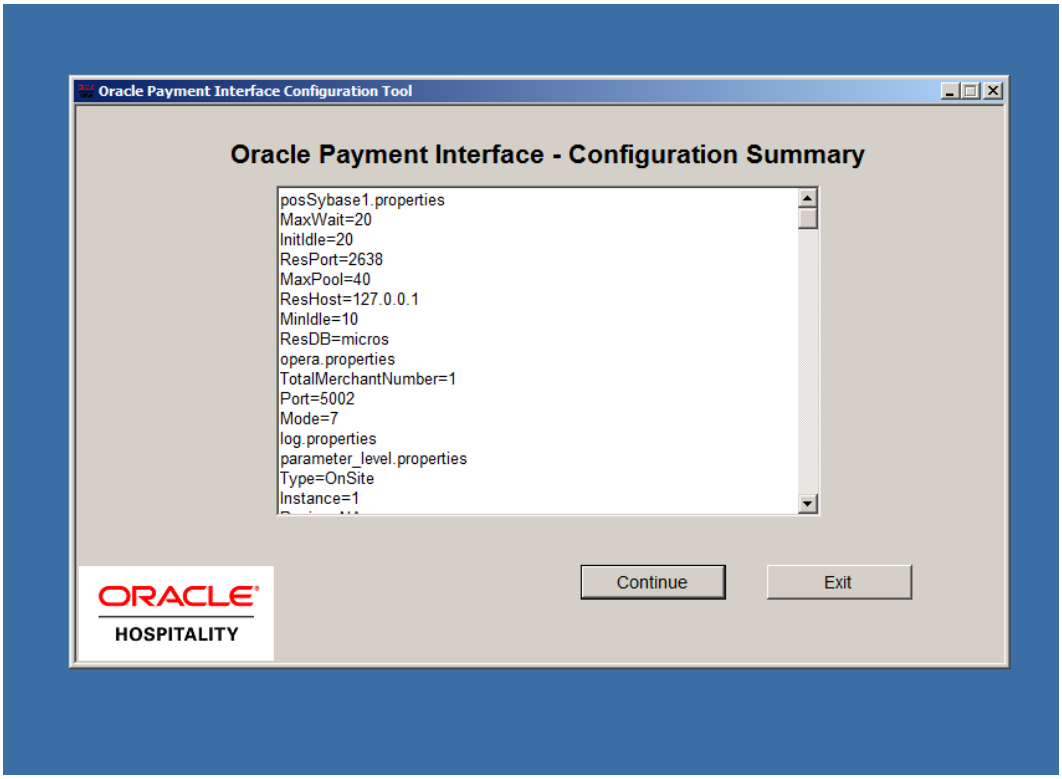

Figure 5-20 OPI Configuration Summary Screen

12. Click **Yes** to save the configuration settings.

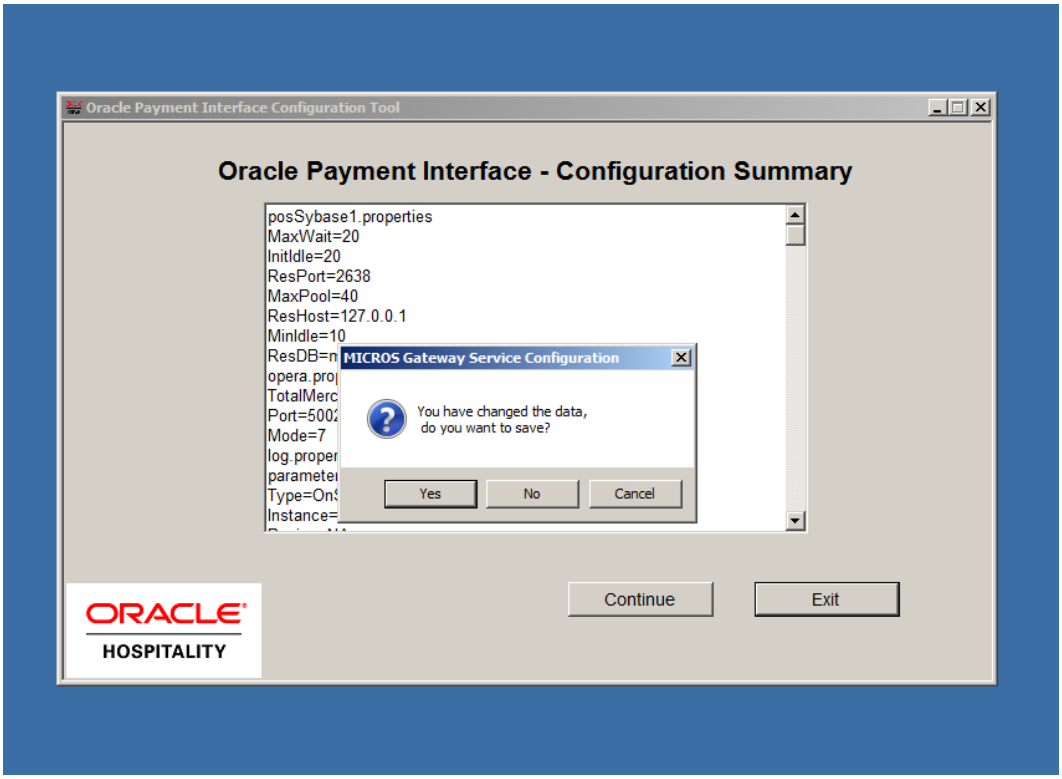

Figure 5-21 Save OPI Configuration Settings

13. Select **Yes** to restart the computer now or select **No** to restart the computer at a later time to complete installing and configuring the OPI.

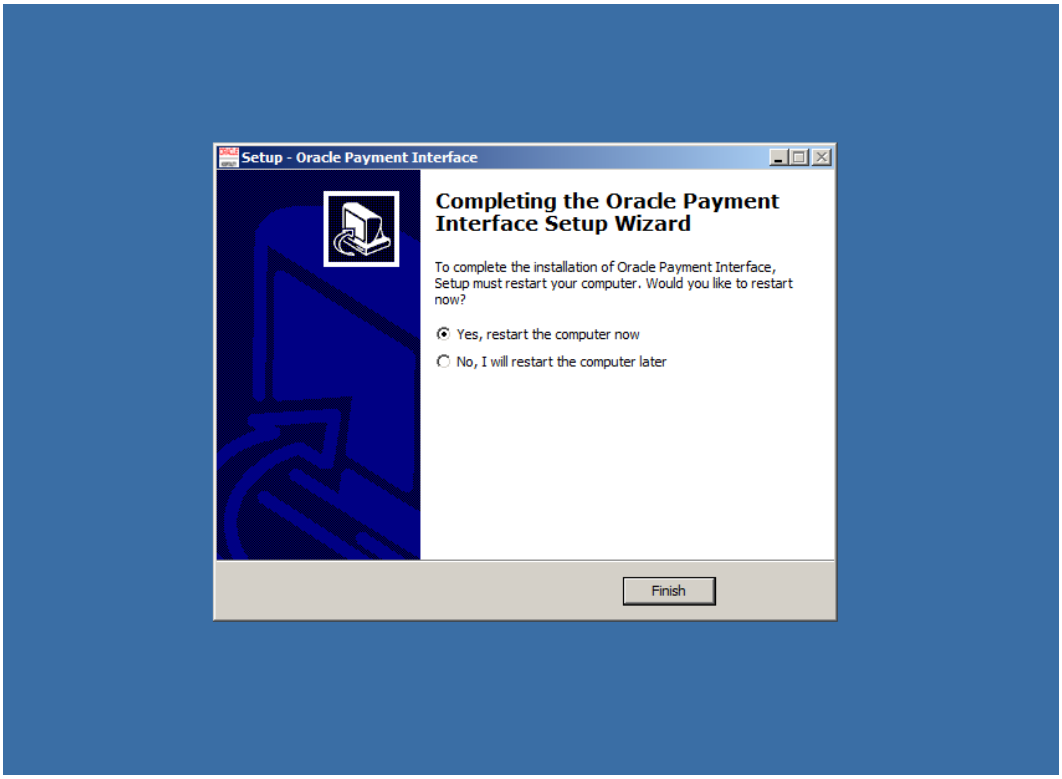

Figure 5-22 OPI Installation Completion

Configuring the Port for the PIN Pad Terminal Mode

1. Go to the `OraclePaymentInterface` folder and go to the **`bin`** folder, then double-click the **`config.exe`** file.

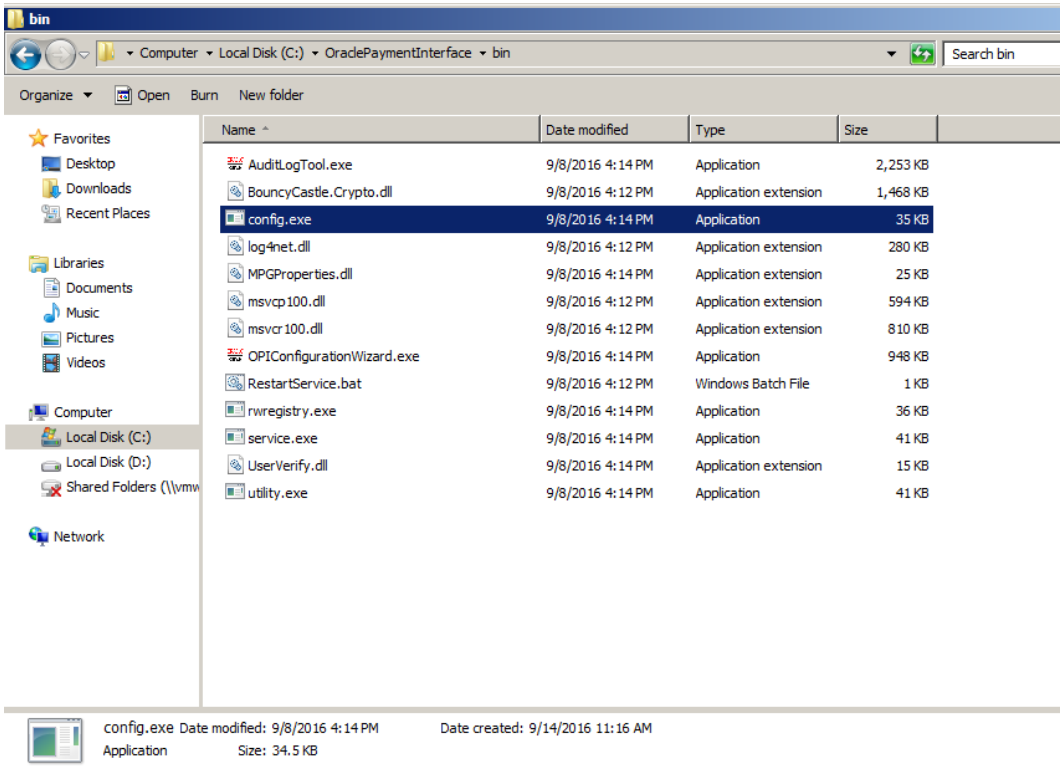

Figure 5-23 Port Configuration for PIN Pad Terminal Mode

2. Enter your Microsoft Windows System Administrator credentials and click **Login**.

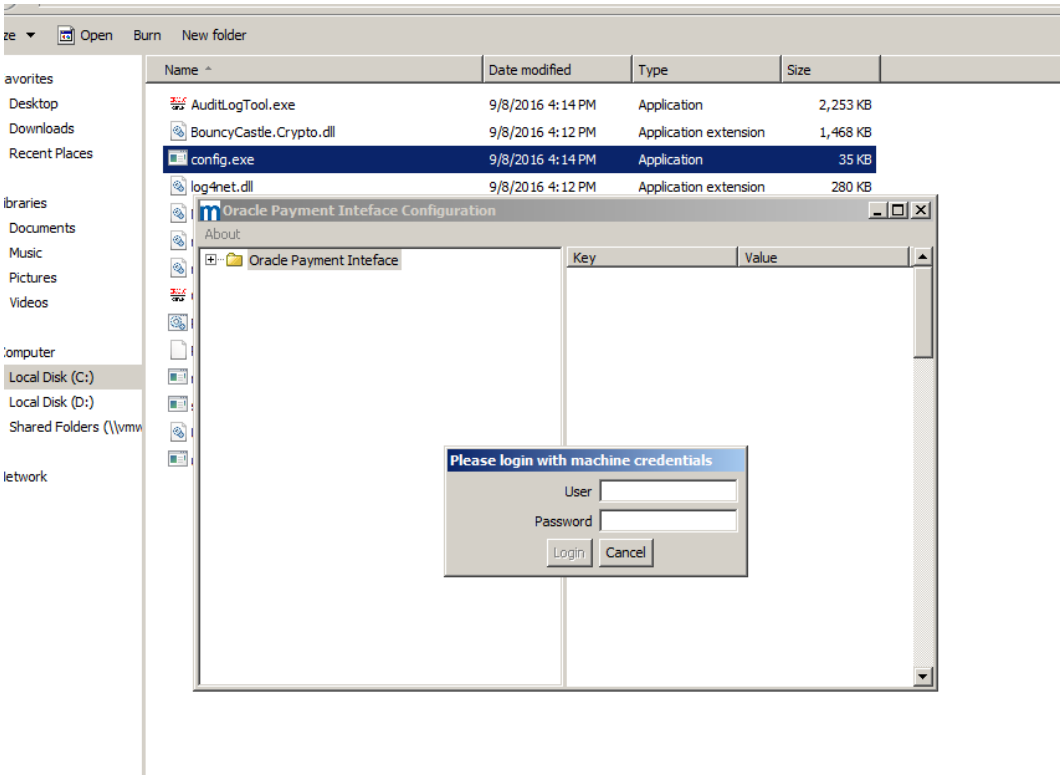

Figure 5-24 OPI Port Configuration – Step 1

3. Double-click the **Oracle Payment Interface** to expand the folder.

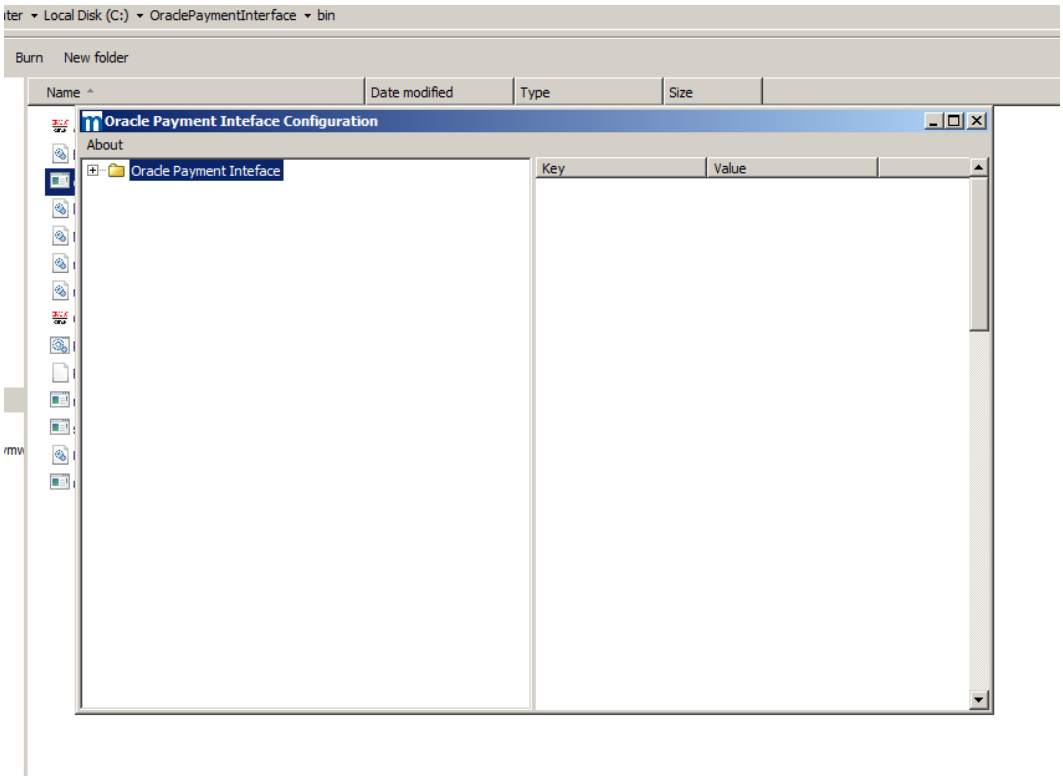

Figure 5-25 OPI Port Configuration - Step 2

4. Click **server0Q** and then double-click the **Port** setting and enter the correct port number for the PIN pad. You must confirm the PIN pad port number with the partner.

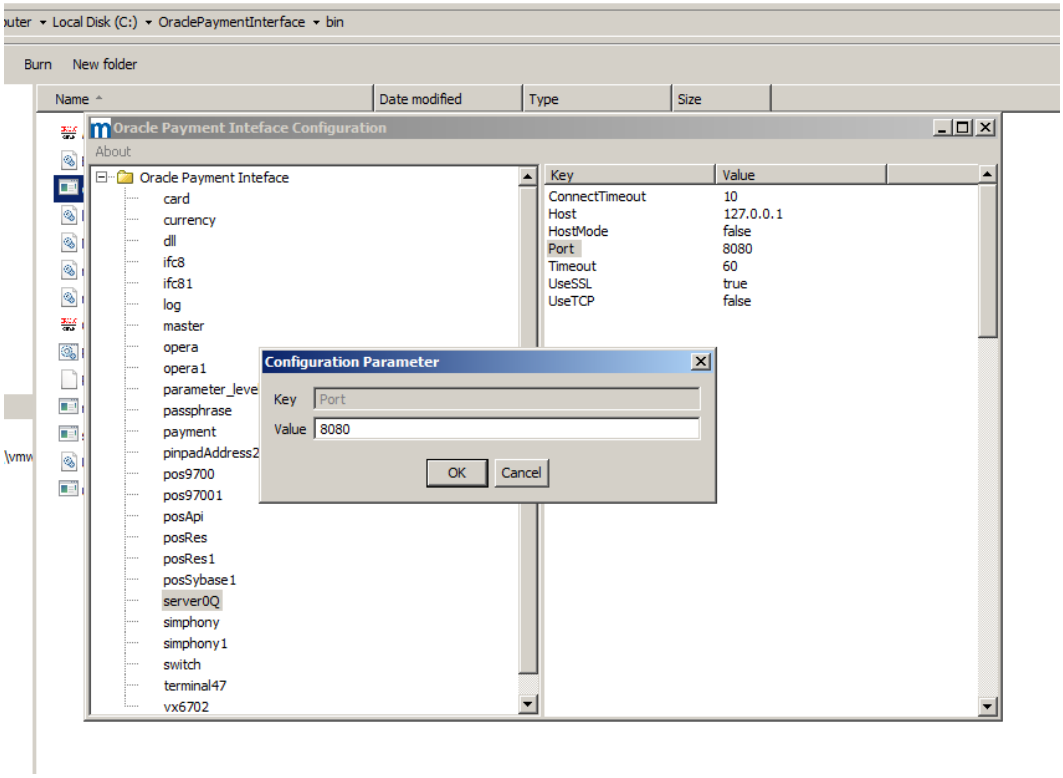

Figure 5-26 OPI Port Configuration - Step 3

5. Restart the **OPI Service**.

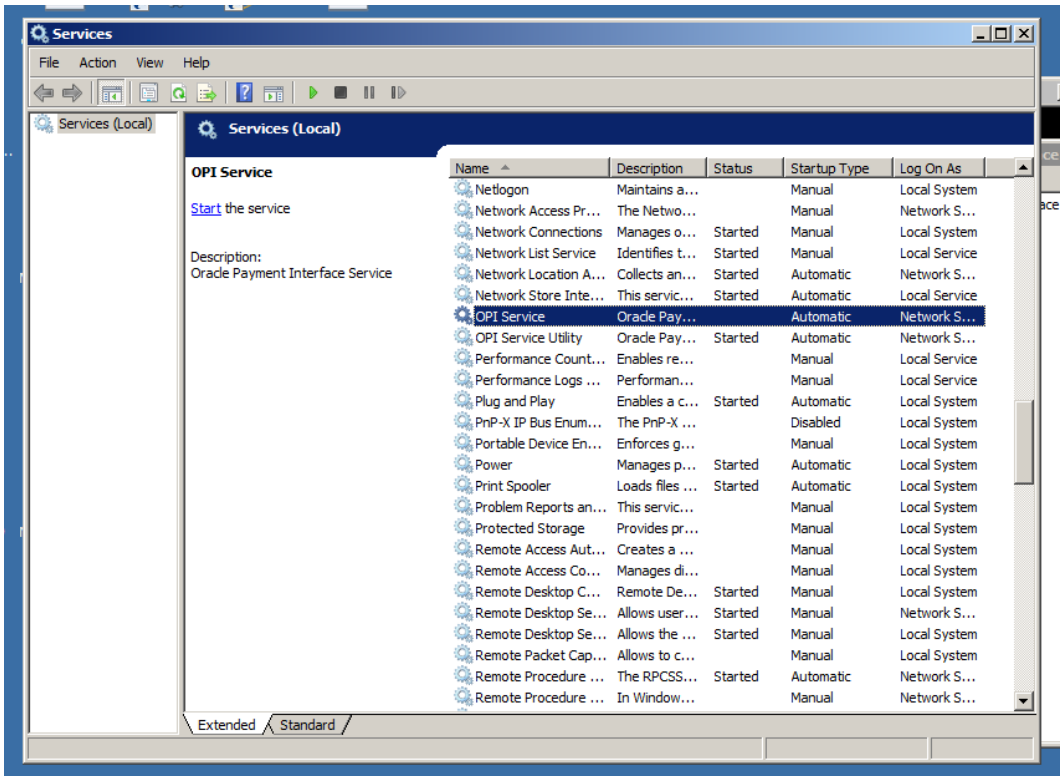

Figure 5-27 Microsoft Windows Services Screen