IBM Maximo Enterprise Adapter for Oracle Applications Configuration Guide

Version 7.6

Note

Before using this information and the product it supports, read the information in “Notices” on page 113

This edition applies to version 7, release 6, modification 0 of IBM Maximo Enterprise Adapter for Oracle Applications and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Contents

Configuring the adapter in Maximo Asset Management

1

You must configure the adapter in Maximo Asset Management to send transactional data between Maximo Asset Management and Oracle E-Business Suite. After you complete the adapter configuration, Maximo Asset Management can transform data from its format to a format that is compatible with Oracle E-Business Suite and vice versa.

Adding support for flat structures

If you use the object structure in interface tables or flat files, you must enable the support for flat structure in Maximo Asset Management. After you do so, the objects are checked for duplicate column names in the object structure. Duplicate column names produce errors.

Procedure

1. In Maximo Asset Management, select **Integration** > **Object Structures**.
2. Select the Support Flat Structure check box for the following object structures:
   - MXCOA
   - MXCRAFT
   - MXGLCOMP
   - MXGLTXN
   - MXINVBAL
   - MXINVENTORY
   - MXINVISSUE
   - MXINVOICE
   - MXINVRES
   - MXITEM
   - MXLABOR
   - MXPC
   - MXPO
   - MXPR
   - MXPROJ
   - MXRCVROTITM
   - MXRECEIPT
   - MXVENDOR
3. Click **Save.**
4. If duplicate column names exist, change the alias name by choosing **Add/ Modify Alias** from the **Select Action** menu.

Specifying and enabling the endpoint for the adapter

In Maximo Asset Management, the endpoint defines where and how you send outbound transactions to the Oracle E-Business Suite external system. You must specify an endpoint for Maximo Enterprise Adapter for Oracle Applications.

About this task

The handler describes how the adapter sends transactions to the external system, such as an interface table, HTTP post, or XML file.

Note: For Maximo Asset Management Multitenancy Users

For each tenant, you must specify the URL of the database that is used to communicate with the Oracle Adapter endpoint. For information about specifying tenant database URLs, see the Managing Tenants section in the Maximo Asset Management Multitenancy System Providers Guide.

Procedure

1. In Maximo Asset Management, go to **Integration** > **End Points** and select a new endpoint.
2. Populate the new endpoint with the following data:

Table 1: Endpoint and handler parameters

Name	OAIFACETABLE
Description	Oracle adapter 12 Endpoint
Handler	IFACETABLE
ISREMOTE	1
URL	*jdbc:oracle:thin:[server-name]:[port-number]:[database-instance]* • *[server-name]* is where Oracle E-Business Suite is hosted • *[port-number]* is the database port number • *[database-instance]* is the Oracle database instance
User name	maxora
Password	maxora
Driver	oracle.jdbc.driver.OracleDriver

3. Save the endpoint.

Enabling publish channels and enterprise services

The integration framework uses publish channels to transform data from the asset management software to a format that is compatible with Oracle E-Business Suite. Similarly, the integration framework uses enterprise services to transform data from Oracle E-Business Suite to a format that is compatible with Maximo Asset Management.

Procedure

1. Go to **Integration** > **External Systems** and display a list of external systems by pressing **Enter**.
2. To display information about the Oracle E-Business Suite external system in the **System** tab, click **OA12**.
3. To display all the publish channels for Maximo Enterprise Adapter for Oracle Applications, select the **Publish Channels** tab.

   By default, the publish channels are enabled.
4. Clear the **Enabled** check box for any publish channels that you do not use for your integration.
5. Click **Save External System**.
6. Enable the integration events for publish channels that you choose to use:
   a. Select **Integration** > **Publish Channels**.
   b. In the **adapter** field, filter the records by **OA12**.
   c. Select the **Select Records** check box and mark the publish channels that you choose to use.
   d. From the **Select Action** menu, choose **Enable Listener**.
7. Click **OK**.
8. To display all the enabled enterprise services for the adapter, select the **Enterprise Services** tab.
9. Clear the **Enabled** check box for any enterprise services that you do not use for your integration, or click **New Row** to add a new outbound or enterprise service.
10. Click **Save External System**.

For a list of publish channels and enterprise services that Maximo Enterprise Adapter for Oracle Applications provides, see Publish channels and enterprise services.

Publish channels and enterprise services

Maximo Enterprise Adapter for Oracle Applications has a specific set of enterprise services and publish channels. They are used to transform outbound and inbound data into formats that are compatible with Maximo Asset Management and Oracle E-Business Suite.

The following table lists the publish channels that the adapter provides.

Table 2: Publish channels for integrating with Oracle Applications

Publish channels	Oracle description
MXGLTXN_TOOA12	OA GL Journals
MXINVENTORY_TOOA12	OA Inventory
MXINVOICE_TOOA12	OA Invoices
MXINVRES_TOOA12	OA Inventory Reservations
MXITEM_TOOA12	OA Items
MXPC_TOOA12	OA Purchase Contracts
MXPO_TOOA12	OA Purchase Orders
MXPROJTXN_TOOA12	OA Project Actuals
MXPR_TOOA12	OA Purchase Requisitions
MXRECEIPT_TOOA12	OA Receipts

The following table lists the enterprise services that the adapter provides.

Table 3: Enterprise services for integrating with Oracle Applications

Enterprise services	Oracle description
MXCOA_FROA12	OA Chart of Accounts
MXCRAFT_FROA12	OA Employee Jobs
MXGLCOMP_FROA12	OA GL Components
MXINVBAL_FROA12	OA Inventory Balances
MXINVENTORY_FROA12	OA Inventory
MXINVISSUE_FROA12	OA Inventory Issue
MXINVOICE_FROA12	OA Invoices
MXITEM_FROA12	OA Items
MXLABOR_FROA12	OA Employees
MXPC_FROA12	OA Purchase Contracts
MXPO_FROA12	OA Purchase Orders
MXPROJ_FROA12	OA Projects
MXPR_FROA12	OA Purchase Requisitions
MXRCVROTITM_FROA12	OA Receive Rotating Items
MXRECEIPT_FROA12	OA Receipts
MXVENDOR_FROA12	OA Vendors

Setting up integration controls

You use integration controls to change the processing of data within a publish channel or enterprise service. You also use integration controls to configure them according to the requirements of your organization and sites. You can create integration controls to meet your business needs.

Procedure

1. Go to **Integration** > **External Systems** and select **OA12** external system record.
2. From the **Select Action** menu, select **Setup Integration Controls**.
3. Click **Save External System**.
4. Optional: If you want to add a new integration control, or a new organization or site value for an existing integration control:
   a. In the **Integration Control** subtab, click **New Row**.
   b. Specify the required information and repeat steps 2 and 3.

For a list of integration controls that Maximo Enterprise Adapter for Oracle Applications provides, see Integration controls.

Integration controls

The adapter has a set of controls that are associated with its publish channels and enterprise service.

The following table lists the integration controls that the adapter provides for the Oracle E-Business Suite external system.

Table 4: Integration controls for integration with Oracle Applications

Integration control	Description
APLINETYPE	Default invoice line type in the Oracle E-Business Suite
APSEND	Statuses at which invoices are sent from Maximo Asset Management to Oracle E-Business Suite. The domain is INVSTATUS
CATEGORYXREF	Cross-reference Maximo Asset Management item category and Oracle stock enabled flag
CHARGEORG	Default charge (project expenditure) organization
COAXREF	Cross-reference Maximo Asset Management organization ID and Oracle chart of accounts ID
CONVHRS	Hours to convert annual salary to hourly rate
CRAFTXREF	Multiply Oracle craft code to Maximo Asset Management organizations

Table 4: Integration controls for integration with Oracle Applications (Continued)

Integration control	Description
EXPENDITEM	Oracle Project Accounting item expenditure type
EXPENDLABOR	Oracle Project Accounting labor expenditure type
EXPENDTOOL	Oracle Project Accounting tool expenditure type
FCSTATUSXREF	Cross-reference Oracle project status and Maximo Asset Management financial control status
GENITEM	Dummy identifier for masking item number
GENSTORE	Dummy identifier for masking storeroom on outbound transactions
GENUSR	Dummy identifier for masking user ID on outbound transactions
GLCURNCY	Default currency code in the Oracle Applications E-Business Suite
GLCURNCYTYPE	Type of currency exchange rates
GLSOURCE	Source business object of Maximio Asset Management general ledger journal. The domain is GLSOURCE.
INVCSTATUSXREF	Translate Maximo Asset Management internal and external invoice status, if using synonyms
INVCTYPEXREF	Cross-reference Maximo Asset Management and Oracle invoice document types
ITMSUBXREF	Cross-reference storeroom and subinventory
JECATXREF	Cross-reference Maximo Asset Management transaction type and the Oracle E-Business Suite journal category
JEPROJSEND	List of Maximo Asset Management project transactions to forward to Oracle general ledger. The domain is GLSOURCE.
LABXREF	Multiply Oracle labor code to Maximo Asset Management organizations
LANGXREF	Cross-reference Maximo Asset Management language code and Oracle SET_PROCESS_ID
LINETYPEXREF	Cross-reference Maximo Asset Management line type (synonyms) and the Oracle E-Business Suite line type
LOTTYPEXREF	Cross-reference Maximo Asset Management and Oracle lot control indicators
NLRORG	Default Oracle Project Accounting non-labor resource organization
OACATXREF	Cross-reference Maximo Asset Management line type and Oracle item or service category identifier

Table 4: Integration controls for integration with Oracle Applications (Continued)

Integration control	Description
OAGLDELIMITER	Delimits GL components from GL account numbers. The default value is a hyphen. The OAGLDELIMITER integration control should have the same value as the MAXORACTLS GLDELIMITER Integration control. If GL Components contain a hyphen, do not use a hyphen for OAGLDELIMITER.
OAITMLOTPREF	Default starting lot prefix
OAITMLOTSTART	Default starting lot Number
OAPCDEFORDERUNIT	Default order unit for purchase contracts
ORGXREF	Cross-reference Maximo Asset Management organization and Oracle ledger ID
PCSEND	Statuses at which purchase requisitions are sent from Maximo Asset Management to Oracle E-Business Suite. The domain is CONTRACTSTATUS.
PCSTATUSXREF	Cross-reference Maximo Asset Management internal and external contract status, if using synonyms
PCTYPEXREF	Cross-reference Maximo Asset Management and Oracle contract types
POSTATUSXREF	Cross-reference Maximo Asset Management internal and external PO status, if using synonyms
POSEND	Statuses at which purchase orders are sent from from Maximo Asset Management to Oracle E-Business Suite. The domain is POSTATUS.
POTYPEXREF	Cross-reference Maximo Asset Management and Oracle E-Business Suite purchase order types
PROJAP	Include project accounting data on outbound invoice lines
PROJPO	Include project accounting data on outbound purchase order lines
PROJPR	Include project accounting data on outbound purchase requisition lines
PROJSEND	Transaction types for which actuals transactions are sent to Oracle Project Accounting. The domain is GLSOURCE.
PRSEND	Statuses at which purchase requisitions are sent from Maximo Asset Management to Oracle E-Business Suite. The domain is PRSTATUS.
PRSTATUSXREF	Cross-reference Maximo Asset Management internal and external PR status, if using synonyms
RESLEVELITEM	Resource level for items

Table 4: Integration controls for integration with Oracle Applications (Continued)

Integration control	Description
RESLEVELLABOR	Resource level for labor
RESLEVELTOOL	Resource level for tools
SENDPOCOST	Sends POCOST GL transactions upon receipt of purchase orders if the GL Journal Publish channel is enabled in Maximo Asset Management. The default value is false, which means that POCOST transactions are skipped. SENDPOCOST should be enabled when PO integration is turned off.
SITEXREF	Cross-reference Maximo Asset Management site ID and Oracle operating unit
SKIPINVOICECOST	Skips invoice cost distributions when invoices are sent from Maximo Asset Management to the Oracle E-Business Suite. The default value is false. SKIPINVOICECOST should be enabled when PO integration is turned off.
SKIPLOTSERIAL	Skips rotating and lot transactions when receipts are sent from Maximo Asset Management to the Oracle E-Business Suite. The default value is false. SKIPLOTSERIAL is used when items are masked in Maximo Asset Management.
SRCTIM	Transaction source for labor actuals
SRCUSE	Transaction source for non-labor actuals
SUBLOCDEL	Delimiter between subinventory code and locator ID in the Maximo Asset Management bin number
USEPRNUM	Specifies whether integration uses the Maximo Asset Management PR number as the Oracle E-Business Suite PR number (value 1) or uses the autogenerated number used by the Oracle import routine (0)

Configuring cron tasks

Cron tasks are behind-the-scene jobs that run automatically and on a fixed schedule in Maximo Asset Management. Configure cron tasks to monitor interface tables and JMS queues for messages that are waiting to be processed. Use the Cron Task Setup application to configure cron tasks.

For information about configuring cron tasks, see Managing cron tasks in the *Maximo Asset Management information center* (http://www-01.ibm.com/support/knowledgecenter/SSLKT6_7.6.0/com.ibm.mbs.doc/crontask/t_work_crontasks.html).

Configuring the cron task for interface table polling

Configure a cron task to prepare the Oracle interface table for polling. Do not activate this cron task until you are ready to send transactions between Maximo Asset Management and Oracle E-Business Suite. You must first install Oracle objects.

Procedure

1. Go to **System Configuration** > **Platform Configuration** > **Cron Task Setup**.
2. Display a list of cron tasks by pressing **Enter**.
3. Open the Interface Table Polling Task page by clicking **IFACETABLECONSUMER**..
4. Click **New Row** and specify a cron task instance name, for example, **OAPolling**.
5. Specify a schedule for the interface table polling:
   a. Display the Select Schedule or Time Interval window by clicking the **Schedule** icon.
   b. Specify an OAPolling task schedule that reflects how frequently you want to poll the interface table.
6. To display a Select Value list where you can choose a user ID to associate with the cron task, click the **Run as User** icon . The default value is **MAXADMIN**, which provides the highest level of user authorization.
7. Do not activate the polling cron task (by selecting the **Active** check box) until Maximo Asset Management is ready to receive transactions from Oracle Applications E-Business Suite.
8. In the **Parameters** tab for OAPolling, select **ENDPOINT Cron Task Parameter** and specify the name that you assigned to the endpoint for the adapter, for example, **OAIFACETABLE**.
9. Select the **EXTSYSNAME** cron task parameter, type **OA12**, and save the cron task.
10. From the **Select Action** menu, choose **Reload Request**.
11. Select all activated items and click **OK**.

Configuring cron tasks for JMS queues

You must activate the JMS sequential queues in Maximo Asset Management to process inbound and outbound transactions. The transactions are processed one at a time, in the order that they are received and sent.

Procedure

1. Go to **System Configuration** > **Platform Configuration** > **Cron Task Setup**.
2. Display a list of cron tasks by pressing **Enter**.
3. Display the cron task details by selecting **JMSQSEQCONSUMER**.
4. Select the **Active** check box for the sequential outbound queue (SEQQOUT).

   Select the **Active** check box for SEQQIN only when you have enabled the sequential inbound queue for any enterprise service (by clearing the **Use Continuous Queue** check box in the Enterprise Services tab for the OA12 external system).
5. Click **Save Cron Task**.
6. Select **Action** > **Reload Request**.
7. Select all activated items and click **OK**.

Configuring a cron task for message reprocessing

If you intend to use concurrent jobs on the Oracle Applications server to process inbound transactions, set up a cron task in Maximo Asset Management to automate the reprocessing of messages that are in error.

About this task

When you use concurrent jobs to send messages from Oracle Applications to Maximo Asset Management, errors can occur if associated transactions are sent in the wrong order. For example, if a receipt is sent from Oracle Applications before the associated purchase order is sent, the transaction containing the receipt cannot be processed. These messages are moved from the JMS queue into a reprocessing queue. You can manually fix messages that are in error in the Message Reprocessing application or you can configure the OAREPROCESSMSG cron task to retry messages in the error queue at predefined intervals.

Procedure

1. In the **Cron Task Setup** application, filter for the **OAREPROCESSMSG** cron task, and then select it.
2. In the OA12 cron task instance, set the shedule for running the cron task.
3. Select the **Active** check box to activate the cron task instance.
4. Optional: Select the IFACENAME cron task parameter and specify the names of interfaces if you want the cron task to filter for error messages from specific interfaces. You can specify the names of multiple interfaces, separated by commas, such as MXCOA_FROA12,MXCRAFT_FROA12,MXVENDOR_FROA12.
   If you do not specify a value, the cron task will return error messages for all interfaces.
5. Click **Save Cron Task**.

6. Select **Action** > **Reload Request**.
7. Select all activated items and click **OK**.

Adjusting databases to be compatible

You must adjust certain Maximo Asset Management database attributes to make them compatible with the corresponding attributes in the Oracle database.

1. To match the format of general ledger accounts:
   a. Review the GL account format in Oracle E-Business Suite.
   b. Reconfigure the GL account format in Maximo Asset Management to match the Oracle format.
2. Change the size and type attributes of tables and columns in Maximo Asset Management to match the corresponding attributes in the Oracle database.
3. Adjust the size of the COMPTYPE domain.
4. Update the Maximo Asset Management database to apply the changes you made.

Matching GL account formats and column lengths

Configure the general ledger accounts of Maximo Asset Management to have the same length and account delimiters as those defined in the Oracle database.

Viewing the GL account format of Oracle E-Business Suite

To view the structure of the chart of accounts in the Oracle Applications E-Business Suite, complete the following steps:

1. In Oracle, select **Responsibility** > **General Ledger, Vision Operations (USA)**.
2. Select **Setup** > **Financials** > **Flexfields** > **Key** > **Segments**.
3. Select **View** > **Query by Example** > **Enter**.
4. Enter **General Ledger** for Application and **Accounting Flexfield** for Flexfield Title.
5. Select **View** > **Query by Example** > **Run**.

   The Structures section displays all of the system chart of accounts.
6. To view the Segments Summary window, select a chart of accounts and click **Segments**.

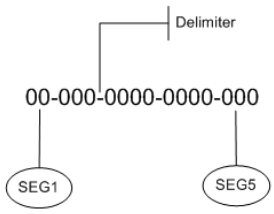
Reconfiguring the GL account format in Maximo Asset Management

Complete the following steps to reconfigure the Maximo Asset Management GL account format so that it matches the Oracle GL account format.

1 Navigate to the Database Configuration page by selecting **Go To** > **Configuration** > **Database Configuration**.

2 Choose **Select Action** > **GL Account Configuration** to open the GL Account Configuration dialog box.

3 Define each GL component to have the same length as in the Oracle Applications E-Business Suite. For example, if the Oracle Applications E-Business Suite has a GL account format where SEG 1 (out of 5) is 2 alphanumeric characters and the account delimiter is a dash as shown below:



Use the following table as a guide to reconfigure the Maximo Asset Management GL account format using the GL Account Configuration dialog box:

Table 5: GL account formats

Component	Length	Type	Required
SEG1	2	ALN	Y
SEG2	3	ALN	Y
SEG3	4	ALN	Y
SEG4	4	ALN	Y
SEG5	3	ALN	Y

4 Before you reconfigure the GL account format, you must delete each of the existing the GL components by clicking the appropriate Trash icons.

5 To add the Oracle GL account format, click **New Row** for each component, and enter the information in the previous table for SEG1 through SEG5 in the following fields:

- Component
- Length
- Type
- Required
- Screen Delimiter

You can enter any acceptable alphanumeric or special character as the delimiter between GL account components.

The Oracle adapter uses the delimiter to parse the GL account before sending component information to Oracle Applications E-Business Suite.

6 Click **OK** after you add each new row for an Oracle GL account component.

Adjusting the size and type of tables and columns

The data type and size in Maximo Asset Management table columns must be compatible with those in Oracle E-Business Suite table columns. If the columns are not compatible, Maximo Asset Management cannot store the data that it receives from Oracle E-Business Suite.

Shared table columns must have the following properties in common:

- Data type
- Maximum column length (a length sufficient to contain the data)

To ensure that all tables and columns are compatible, you can automatically update all tables and columns using a script. Alternatively, you can manually update individual tables or columns in the Database Configuration application.

Automatically updating the size and type of tables and columns

The **OAMaximoConfig.dbc** script will automatically update all tables and columns to the correct type and size for integration between Maximo Asset Management and Oracle E-Business Suite.

The **OAMaximoConfig.dbc** script is located in the following directory: **<MAXIMO_HOME>\tools\maximo\en\oa12**. Before running the script, you can edit it to update only the tables and columns that are relevant for your system.

The following table lists the type and size of the tables and columns that are updated by the OAMaximoConfig.dbc script:

Table 6: Table column properties

Type	Table	Column	Size
ALN	ADDRESS	ADDRESSCODE	60
	ADDRESS	ADDRESS1	240
	CHARTOFACCOUNTS	ACCOUNTNAME	240
	COMPANIES	ADDRESS1	240
	COMPANIES	ADDRESS3	150
	COMPANIES	BANKACCOUNT	55
	COMPANIES	COMPANY	57
	COMPANIES	CONTACT	52
	COMPANIES	CUSTOMERNUM	25
	COMPANIES	FAX	26
	COMPANIES	FOB	25
	COMPANIES	NAME	240
	COMPANIES	PAYMENTTERMS	50

Type	Table	Column	Size
	COMPANIES	PHONE	26
	COMPANIES	SHIPVIA	25
	COMPANIES	TYPE	30
	COMPCONTACT	POSITION	30
ALN	CONTRACT	CONTRACTNUM	20
	CRAFT	CRAFT	240
	CRAFT	DESCRIPTION	240
	CURRENCY	CURRENCYCODE	15
	GLCOMPONENTS	COMPTEXT	240
	GLCOMPONENTS	COMPVALUE	150
	GLCOMPONENTS	EXTERNALREFID	15
	INVENTORY	BINNUM	49
	INVENTORY	MODELNUM	25
	INVLOT	LOTNUM	30
	INVOICE	DESCRIPTION	240
	INVOICE	DOCUMENTTYPE	25
	INVOICE	INVOICENUM	50
	INVOICE	VENDORINVOICENUM	50
	ITEM	DESCRIPTION	240
ALN	ITEM	ITEMNUM	40
	ITEM	MSDSNUM	40
	MATRECTRANS	PACKINGSLIPNUM	25
	MATRECTRANS	REJECTCODE	30
ALN	MEASUREUNIT	MEASUREUNITID	25
ALN	PO	PONUM	20
	PO	POTYPE	25
	PRLINE	REMARK	240

Procedure

1. Stop the Maximo application server.
2. Open a command prompt and change the current directory to **\\<MAXIMO_HOME>\tools\maximo\internal**.
3. Run the following command: **>Runscriptfile -coa12 -fOAMaximoConfig** and wait for the script to finish.
4. Start the Maximo application server.

Manually updating the size and type of tables and columns

You can manually update individual tables and columns to the correct type and size for integration between Maximo Asset Management and Oracle E-Business Suite. Manually updating tables is useful if you have customized tables that are not updated by the **OAMaximoConfig.dbc** script.

Procedure

1. Open the Database Configuration application.
2. Select the object that you would like to update.
3. On the attributes tab, update the size and type of the tables and columns.
4. Save the object.

Note: Using PO inbound integration with a DB2 database

To use PO inbound integration with a DB2 database, you must change the data type of the POLINE.POLINENUM table column from INTEGER to BIGINT.

About this task

To update the data type of POLINE.POLINENUM to BIGINT, run the **polinenum13.dbc script**, which is located in the following directory: **<MAXIMO_HOME>\tools\maximo\en\oa12**.

Procedure

1. Stop the Maximo application server.
2. Open a command prompt and change the current directory to **\\<MAXIMO_HOME>\tools\maximo\internal**.
3. Run the following command: **>Runscriptfile -coa12 -fPOLineNum13** and wait for the script to finish.
4. Start the Maximo application server.

Adjusting the size of the COMPTYPE domain

The COMPTYPE domain contains values that Maximo Asset Management can use to validate company type data from Oracle applications. The size of the domain must match the size used in Oracle applications.

1. In the Domains application, specify COMPTYPE domain.
2. If necessary, change the value in the Length field to 30.

3 Click Save Domain.

For information about the Domains application, see *Managing Domains* in the Maximo Asset Management information center (http://www-01.ibm.com/support/knowledgecenter/SSLKT6_7.6.0/com.ibm.mbs.doc/domainadm/t_manage_domains.html).

Updating the database

Run the configdb.bat utility to update the database with the changes you made. When you run this tool, it applies all pending database configuration changes.

Procedure

1 Stop the Maximo Asset Management application server.

2 Navigate to the Maximo Asset Management directory that contains the configdb.bat file. The default path is:

`Maximo_root`\tools\maximo

3 Run the configdb.bat tool.

4 After the tool runs, open the log files in the following directory to review changes made to the database.

`Maximo_root`\tools\maximo\log

5 Restart the application server to continue with the installation tasks.

Adding Oracle Vendors to the Maximo Asset Management Companies Master Set

If you intend to synchronize Oracle vendors with the companies in Maximo Asset Management, you must select the **Automatically Add Companies to Company Master** check box for each company.

About this task

Enabling this flag ensures that all the Oracle vendors that you add are also included in the company master set in Maximo Asset Management. For the vendor and company integration to work, you must include Oracle vendors in the company set so that vendors are added at the organizational level in Maximo Asset Management.

Procedure

1 Navigate to the Sets application by selecting **Go To** > **Administration** > **Sets**.

2 Open the Details section for each Set record with a company type.

3 Select the **Automatically Add Companies to Company Master** check box.

4 Click **Save Set**.

Setting active default item status

When you are sending item transactions to Maximo Asset Management, you must set the default item status to active.

Procedure

1 Go to **Administration** > **Sets**.

2 For each Item Set row, change the default item status to **Active**.

3 Click **Save Set**.

4 Go to **Administration** > **Organizations**.

5 For each Organization row, change the default item status to **Active**.

6 Click **Save Organization**.

Configuring the adapter on Oracle E-Business Suite

2

To install and configure the Maximo Enterprise Adapter on Oracle, perform the following tasks:

1. Locate the PL/SQL files required for the installation
2. Create a schema in the Oracle E-Business Suite database.
3. Create Maximo interface tables in the Oracle E-Business Suite database.
4. Configure the installation environment parameters.
5. Run the installation script.
6. Verify and fix installation errors.

PL/SQL files for the Maximo Enterprise Adapter

The installation program for Maximo Enterprise Adapter for Oracle Applications creates the ORACLEAPIS directory. The directory holds user template files and scripts in the root directory of your Maximo Asset Management installation. The default path for the directory is `Maximo_root\`ORACLEAPIS.

The following table lists the files in the ORACLEAPIS subdirectories.

Table 1: Files installed in the ORACLEAPIS directory

Subdirectory	Description
apiuser	Contains standard template files for the user exit procedures
concurrent	Contains the PL/SQL procedures that the concurrent jobs run
install	Contains installation scripts
interfac	Contains the script that creates triggers, procedures, and packages
log	The log subdirectory

The template .usp files that are in the apiuser subdirectory contain sample code for the user exit procedures. If you have written custom user exit procedures, you must integrate your changes within these template files.

Creating the integration schema

You must create a schema for managing the integration framework in the Oracle E-Business Suite database. You can create multiple integration schemas on the same database instance to support multiple Maximo Asset Management application servers.

About this task

The procedure uses **MAXORA** as the schema user name for the Oracle E-Business Suite integration. You can specify any user name for the schema, but the name must be the same as the user name configured for the endpoint in System tab of the External Systems application.

Procedure

1. In the `Maximo_root`\ORACLEAPIS\install directory, open the cremxora.sql file.
2. Replace all instances of MAXORA with your integration schema name.
3. Replace all instances of USER_DATA with your table space name.
4. Save the cremxora.sql file.
5. Start SQL* Plus and connect to the Oracle E-Business Suite database as a database administration user.
6. Create and grant privileges to the integration schema by entering the following command:

   SQL > start `Maximo_root`\ORACLEAPIS\install\cremxora <Enter>
7. Review and correct any errors that you see on the screen.

Creating the Maximo interface tables in the Oracle E-Business Suite database

You must run the create procedure in Maximo Asset Management. The procedure creates the interface tables in the Oracle E-Business Suite database. Anticipate that it might take several minutes to build the interface tables.

Procedure

1. In the External Systems application, click the **System** tab.
2. In the System field, press Enter and then select **OA12 External System**.
3. From the Select Action menu**,** choose **Create Interface Tables**.
4. Click the **End Point Select** icon and then select **OAIFACETABLE**.
5. Select the interface tables that you want to create or recreate.

Table 2: Maximo interface tables

• MXCOA_IFACE	• MXITEM_IFACE
• MXCRAFT_IFACE	• MXLABOR_IFACE
• MXGLCOMP_IFACE	• MXPC_IFACE
• MXGLTXN_IFACE	• MXPO_IFACE
• MXINVBAL_IFACE	• MXPR_IFACE
• MXINVENTORY_IFACE	• MXPROJ_IFACE
• MXINVISSUE_IFACE	• MXPROJTXN_IFACE
• MXINVOICE_IFACE	• MXRCVROTITM_IFACE
• MXINVRES_IFACE	• MXRECEIPT_IFACE
• MXINVVENDOR_IFACE	• MXVENDOR_IFACE

6. Click **Create**.

Configuring installation environment variables

The setofvar.sql script contains installation environment parameters that the install script uses when you run it to install PL/SQL objects and synchronize databases.

Procedure

1. In the `Maximo_root`\ORACLEAPIS\install directory, open the setofvar.sql script.
2. Configure only the variables specified in the following parameters:

Table 3: Installation environment variables to configure

Parameter	Description
hostStrOF = 'service name for Oracle database'	Specify the Oracle database service name that is configured in tnsnames.ora.
RootApis = ′`Maximo_root`\ORACLEAPIS′	Specify the install directory for the Oracle E-Business Suite adapter, that contains the following subdirectories: • apiuser • concurrent • install • interfac • log
LogDir = '`Maximo_root`\ORACLEAPIS\log'	The location of output log files.
UserDir = '`Maximo_root`\ORACLEAPIS\apiuser'	The location of user exit templates. If you have customized versions of the user exits, be sure to add them to the templates.
ConcVer = 'n'	Specify the type of architecture to use for processing messages from Oracle Applications. The options are: • To use concurrent jobs for batch-mode inbound processing, set ConcVer = 'y'. • To use triggers for real-time inbound processing, set ConcVer = 'n'. The default value for this parameter is 'n'.

Running the installation script on Oracle

After configuring the installation environment variables, run the install script to install the packages, procedures, triggers, concurrent jobs, and objects in the Oracle E-Business Suite database.

Before you begin

Make a note of the following usernames and passwords that you are prompted to provide during the installation:

- Maxmo Asset Management username, which must be all uppercase, and password
- Oracle Applications username and password

Procedure

1. In SQL * Plus, connect as the MAXORA user to the Oracle E-Business Suite database.
2. Specify the following command to list the parameters that are defined in the setofvar.sql script:

   SQL> start `Maximo_root`\ORACLEAPIS\install\setofvar

   This command lists the install parameters that are defined in the setofvar.sql script**.**
3. Specify the following command to run the install.sql script:

   SQL> start &InstallDir.install
4. In the `Maximo_root`\ORACLEAPIS\log\install.out directory, open the install.out file and check the file for any errors.

Verifying and fixing installation errors

After you install the packages, procedures, triggers, and concurrent jobs to the Oracle E-Business Suite database, you must check for installation errors and fix them.

To verify and fix installation errors:

1. Open the install.out file in the log directory and check for errors. The following table describes the types of errors that you can find:

Table 4: Typical installation errors

Error type	Description
File not found	Search for text similar to "unable to open file `\Maximo_root`\ORACLEAPIS\...". Errors of this type indicate that the setofvar.sql file might not have correct directory settings. For example, the user directory `Maximo_root`\ORACLEAPIS\apiuser might be missing a \ after "apiuser."
Statements not accepted by the system	Search for "unknown command" text. If you find this error, check that your version of SQL * Plus for Windows is equal to or higher than 3.1.3.5.4.
Oracle	Search for "ORA –" text. If you find any ORA-type errors, contact your Oracle Database Administrator.
Compile	Search for "PLS –" text. If you find any lines that start with "PLS-", then also search for "with compilation error" text. If you find any compile errors, contact IBM Support.

2. Fix any problems that you find and rerun install.sql without errors.

MAXORACTLS integration control and the Oracle E-Business Suite database

The installation process of Maximo Enterprise Adapter for Oracle Applications creates the MAXORACTRLS integration control table in the Oracle E-Business Suite database. This table contains additional controls that the adapter uses on the Oracle E-Business Suite side of the integration. You set the values of Oracle integration controls by using an SQL statement.

The following tables display the structure and contents of the MAXORACTLS table.

Any changes you make to the MAXORACTLS controls table take effect within one minute.

Table 5: MAXORACTLS inbound controls for concurrent jobs

Field	Description	Length	Null	Data type
CTLNAME	Control name	25	Not null	Varchar2
CTLVALUE	Control value	50	Null	Varchar2
CTLDESC	Control description	200	Null	Varchar2

Table 6: MAXORACTLS general controls

Control name	Default value	Description
AP_USE_ACTUALDATE	0	When sending INVOICETRANS GL transactions from Maximo Asset Management to the Oracle E-Business Suite, ACTUALDATE is used instead of ENTERDATE when AP_USE_ACTUALDATE is enabled.
APITRANS	1	If value is 1, allows the transfer of data from Oracle E-Business Suite to the Maximo Asset Management interface tables. If value is 0, does not allow the transfer of data from Oracle E-Business Suite to the Maximo Asset Management interface tables.
EXCEPTIONTOEXT	0	Exception to Oracle E-Business Suite If value is 1, sends errors to Oracle E-Business Suite. If value is 0, no errors are sent to Oracle E-Business Suite.

Table 6: MAXORACTLS general controls (Continued)

Control name	Default value	Description
EXCEPTIONTOMAX	0	Exception to Maximo Asset Management If value is 1, sends errors back to the Maximo Asset Management server. If value is 0, inserts the records in the Maximo Asset Management interface tables and logs the errors in the interface table message and status columns.
EXTSYS	OA12	External system name.
FCEXTRACTDATE	Null	Last FC Extract Date (fmDD-MON-RRRR HH24:MI:SS)
GLDELIMITER	-	Delimits GL components from GL account numbers. The default value is a hyphen. The GLDELIMITER integration control should have the same value as the OAGLDELIMITER external system integration control.
GLSOBID2	0	Reporting ledger ID used to retrieve EXCHANGERATE2 in Oracle E-Business Suite.
MEAORAVER	7.6.0.0 Build	The installed version of the Maximo Enterprise Adapter for Oracle Applications.

Table 7: MAXORACTLS inbound controls

Control name	Default value	Description
APIN	1	Controls transfer of inbound invoices.
COAIN	1	Controls transfer of inbound charts of accounts.
COMIN	1	Controls transfer of inbound companies.
INVBALIN	1	Controls transfer of inbound inventory balances.
ISUIN	1	Controls transfer of inbound material issues.
ITEMIN	1	Controls transfer of inbound items.
ITMBALXFRIN	1	Controls transfer of inbound item balances.
LCIN	1	Controls transfer of inbound labor codes.
LOGLEVEL	Error, Warning, Info, Debug	Controls the amount and type of information written to the log file.

Table 7: MAXORACTLS inbound controls (Continued)

Control name	Default value	Description
PCIN	1	Controls transfer of inbound purchase contracts
POIN	1	Controls transfer of inbound purchase orders.
PROJPAY	1	Controls transfer of inbound Oracle Projects pay rates. Default value is 1 when integration with Oracle Project Accounting is installed.
RCVIN	1	Controls transfer of inbound receipts.

Table 8: MAXORACTLS inbound controls for concurrent jobs

Control name	Control value format	Description
CR_POAPPR_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for PO approvals.
CR_POLINE_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last dateconcurrent requests ran for PO lines.
CR_PRIMP_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for PO requisitions.
CR_RECEIPT_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for receipts.
CR_RCVSERIAL_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for receiving rotating items.
CR_INVC_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for invoices.
CR_INVCAPPR_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for invoice approvals.
CR_POREL_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for PO releases.
CR_POIMP_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date rejected concurrent requests ran for PO interfaces.
CR_POACTION_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for PO action histories.

Table 8: MAXORACTLS inbound controls for concurrent jobs (Continued)

Control name	Control value format	Description
CR_GLCC_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for GL code combinations.
CR_GLCOMP_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for GL components.
CR_GLCOMPDESC_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for GL component descriptions.
CR_MTLBAL_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date for concurrent requests ran for inventory balances.
CR_MTLITM_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for inventory items.
CR_MTLITMTL_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for inventory item descriptions.
CR_VNDHDR_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for suppliers.
CR_VNDSITE_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for supplier sites.
CR_VNDCONT_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for supplier contacts.
CR_VNDCONTUPD_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for supplier contact processes.
CR_PAEMP_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for PA employees master data.
CR_PACOMP_DATE	fmDD-MON-RRRR HH24:MI:SS	Records the last date concurrent requests ran for master data related to PA employees compensate rates.

Configuring integration controls and synchronizing data

3

Certain data that is shared by Maximo Asset Management and the Oracle Applications E-Business Suite must be consistent at the Maximo Asset Management organization-level and Oracle Applications E-Business Suite ledger-level. To ensure consistency, you must configure and synchronize a number of Maximo Asset Management and Oracle fields by using the integration controls.

You must accurately synchronize information like Oracle employees and Maximo Asset Management labor codes and Oracle vendors and Maximo Asset Management companies before you can successfully exchange data between Maximo Asset Management and Oracle.

For example, if the Oracle Applications E-Business Suite uses the British pound as the base currency in a ledger, the asset management system must use the British pound as the base currency for the corresponding organization.

The following data must be consistent between the asset management system and the Oracle Applications E-Business Suite:

- Currencies
- Financial calendars
- Tax rates
- Units of measure and conversion factors
- User names (if you do not use the GENUSR integration control)

To maintain this data, update it manually in the applications.

Activating the cron task for interface table polling

Now that you have completed installing and configuring the Oracle Adapter on the Oracle side of the integration, you are ready to send transactions between the asset management system and the Oracle Applications E-Business Suite. You must first enable the OAPolling cron task.

Procedure

1. Navigate to the Cron Task Setup application by selecting **Go To** > **System Configuration** > **Platform Configuration**>**Cron Task Setup**.
2. Press **Enter** to display a list of cron task instances.
3. Click **IFACETABLECONSUMER**.
4. Click **OAPolling** (or some other Cron task name) to display record information.
5. Select the **Active** check box to enable the cron task.
6. Click **Save Cron Task**.
7. Click **Select Action** > **Reload Request**.

Enabling the external system

In addition to enabling the cron task for interface table polling, you also must enable the Oracle Applications E-Business Suite external system (OA12).

Procedure

1. Navigate to the External Systems application by selecting **Go To** > **Integration** > **External Systems**.
2. Type **OA12** in the **System** field, and press Enter.
3. Click **OA12** to open the OA12 external systems window.
4. Select the **Enabled** check box.
5. Click **Save External System**.

Setting up Oracle-specific integration control values in Maximo Asset Management

There are several Oracle-specific integration control values you must configure in the asset management system.

Generating the showcats.out output file

Generate the showcats.out output file to determine the values you must specify for the Oracle-specific integration controls for Services, Special Orders, and Materials.

Procedure

1. Login to SQL* Plus, and enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar

   SQL> start &InstallDir.showcats

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\showcats.out

   The showcats.out file displays the values of category IDs to use for Services, Special Orders, and Materials.

2. Select a category ID to transfer, then rerun the showcats script.

3. Use the information from showcats.out shown in the following table to set the integration control values in the asset management system:

Table 1: showcats.out output file

Control	Value
OACATXREF	Used to convert the asset management system line types into Oracle categories.

Generating the showmult.out output file

Generate the showmult.out output file to determine the values you must specify for the Oracle-specific integration controls fthat display the relationship between inventory organizations and operating units.

Procedure

1. Login to SQL* Plus and enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar

   SQL> start &InstallDir.showmult

The generated file is in the following location:

c:\MAXIMO\ORACLEAPIS\log\showmult.out

The showmult.out file displays the relationship between inventory organizations and operating units.

2 Use the information from showmult.out shown in the following table to set the ORGXREF and SITEXREF integration control values in the asset management system.

If the multi_org_flag at the top of the file is Y, your application is running multiple operating units (organizations). If you are not running multiple organizations, you can bypass setting up values for the ORGXREF and SITEXREF controls.

Table 2: showmult.out output file

Control	Value
ORGXREF	Maps the asset management system organizations to the Oracle Applications E-Business Suite ledger.
SITEXREF	Maps the asset management system sites to the Oracle Applications E-Business Suite operating units.

Synchronizing Oracle and Maximo Asset Management GL components

The Oracle Applications E-Business Suite and the asset management system must use the same chart of accounts structure before you can begin transferring GL data from Oracle to the asset management system. Oracle and asset management system chart of accounts must share the same number of segments.

You can reconfigure the asset management system so that its account segments have the same structure as those in the Oracle Applications E-Business Suite.

Additionally, you can modify the Oracle and asset management system GL structures with user exit procedures that transform accounts from one structure to the other. For example, Oracle allows null segments in any part of the account structure, while the asset management system does not allow a null segment to precede a populated segment. To reconcile these differences, you may need to create a user exit procedure that alters the number and position of the GL segments.

To transfer GL components from Oracle to the asset management system, complete the following steps:

1. Navigate to the Install directory from `Maximo_root`. Locate and open the syncglcomp.sql file. You can edit this file by using a WHERE clause to accomplish the following:
   - To transfer all accounts to the asset management system
   - Transfer selected accounts to the asset management system
2. Login to SQL* Plus and connect to the Oracle Applications E-Business Suite database.
3. Enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.syncglcomp.sql <Enter>

   The above commands set the Oracle Adapter environment and start the transfer of Oracle GL component data to Asset Management System.
4. When prompted, press **Enter.**
5. Enter a chart of accounts ID (COA_ID) from the list of IDs displayed on your screen, then press **Enter**.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\syncglcomp.out

6 Review the syncglcomp.out file for errors.

The spool file might direct you to select from the MAXORALOG table to review error conditions. You can view this log in SQL* Plus after logging in as user MAXORA.

For example, you might see errors similar to the following:

```
column application = 'API_GLCC_SP'
ORA-06502: PL/SQL: numeric or value error
```

If you get the above error message, check the mapping for the MX_GLCOMP_IFACE table. This error indicates that the COMPTEXT field is not large enough to hold the GL component description from the Oracle Applications E-Business Suite. To resolve this type of error, reconfigure the asset management system GLCOMPONENTS table and increase the length of the COMPTEXT field.

Synchronizing Oracle and Maximo Asset Management Chart of Accounts

To transfer the chart of accounts from Oracle to the asset management system, complete the following steps:

1. Navigate to the ORAAPIS directory from `Maximo_root`. Locate and open the synccoa.sql file. You can edit this file by using a WHERE clause to accomplish the following:

   - To transfer all accounts to the asset management system
   - Transfer selected accounts to the asset management system

2. Login to SQL* Plus and connect to the Oracle Applications E-Business Suite database.

3. Enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.synccoa.sql <Enter>

   The above commands set the Oracle Adapter environment and start the transfer of Oracle chart of accounts data to the asset management system.

4. When prompted, press **Enter.**

5. Enter a chart of accounts ID (COA_ID) from the list of IDs displayed on your screen, then press **Enter**.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\synccoa.out

6. Review the synccoa.out file for errors.

7 To transfer additional chart of accounts IDs:

- Select a different COA_ID from the list
- Rerun the script
- Review the output file for errors

Synchronizing Oracle Employees and Maximo Asset Management Labor Codes

To transfer the Oracle employees to the asset management system labor codes, complete the following steps:

1. Login to SQL* Plus, then enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.synclabor <Enter>

2. When prompted, press **Enter.**

3. Enter an Oracle business group ID from the list of IDs displayed on your screen, then press **Enter**.

   Each time you want to transfer a different business group ID, select it from the screen and rerun the synclabor script.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\synclabor.out

4. Review the synclabor.out file for errors.

Synchronizing Oracle Organizations and Locations and Maximo Asset Management Address Codes

You must map the Oracle Applications E-Business Suite organizations and locations to the asset management system address codes. To synchronize the two systems, you must first obtain a listing of the organizations and locations in the Oracle Applications E-Business Suite and then define those codes in the asset management system.

Listing Oracle Applications E-Business Suite Organizations and Location Codes

To generate a list of Oracle organizations and locations, complete the following steps:

1. Login to SQL* Plus, then enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.showaddr <Enter>

2. When prompted, press **Enter.**

   You will see a list of Oracle organizations and locations that you must manually map to the asset management system address codes as described in the procedure that follows.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\showaddr.out

Mapping Oracle Organizations and Locations to Maximo Asset Management System Address Codes

The following procedure describes how to map the asset management system address codes to the Oracle organizations and locations. Additionally, the following table shows how to map the asset management system Bill To Companies, Ship To Companies, and Bill To and Ship To contacts to the Oracle Applications E-Business Suite.

Table 3: Mapping address codes to organizations and locations

Asset Management System	Oracle Applications E-Business Suite	Asset Management System definition
Bill to company	Organization	Address code
Ship to company	Location	Address code
Bill to contact	Employee	Labor code
Ship to contact	Employee	Labor code

To define an address code in the asset management system for an Oracle organization or location, complete the following steps:

1. In the asset management system, select **Go To** > **Administration** > **Organizations**.
2. Press **Enter** to display a list of organizations.
3. Click the name of the organization that you want to update.
4. Click the Address tab.
5. Click **New Row**.
6. Enter the Oracle location or organization in the **Address Code** field.
7. Enter the following address information:
   - Long description
   - Address
   - City
   - State/Province
   - Zip/Postal Code
   - Country
8. Click **Save Organization**.

Synchronizing Oracle and Maximo Asset Management Currencies

The asset management system and the Oracle Applications E-Business Suite must use the same currency. To synchronize the two systems, you must first obtain a listing of the currency codes in the Oracle Applications E-Business Suite and then define those codes in the asset management system.

Listing Oracle Applications E-Business Suite Currency Codes

To obtain a listing of the currency codes in the Oracle Applications E-Business Suite, complete the following steps:

1. Login to SQL* Plus and connect to the Oracle Applications E-Business Suite database.
2. Enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.showcurr <Enter>

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\showcurr.out

   The showcurr.out file lists the currency codes defined in the Oracle Applications E-Business Suite.

Defining Oracle Currency Codes in Maximo Asset Management

To define the Oracle currency codes in the asset management system, complete the following steps:

1. In the asset management system, select **Go To** > **Financial** > **Currency Codes**.
2. Click **New Row**.
3. Enter a currency code in the **Currency** field and a description in the adjacent text box.
4. Click **Save Currency Code**.

Synchronizing Oracle Vendors and Maximo Asset Management Companies

To synchronize the Oracle vendors and the asset management system companies, you must run a script that defines the Oracle Applications E-Business Suite vendors as companies in the asset management system.

Before you run the synchronization script, you must set up the Oracle vendor type defaults in the asset management system as follows:

1. In the asset management system, select **Go To** > **Financial** > **Chart of Accounts**.

2. Choose **Select Action** > **Company-Related Accounts** to open the Company-Related Accounts screen.

3. Click **New Row**, then add the following information:

   - Company Type (Courier, Manufacturer, or Vendor)
   - RBNI Account
   - AP Suspense Account
   - AP Control Account

4. Repeat Steps 1 – 3 for each Oracle vendor type you expect to transfer to the asset management system.

The newly defined asset management system company ID is a concatenation of the Oracle operating unit ID, vendor ID, and vendor site code. Hyphens separate the three segments.

The script adds the AP control account to each asset management system company ID. If you plan on using invoicing, you must update each company ID with an RBNI (received but not invoiced) and suspense account.

To synchronize the Oracle vendors and the asset management system companies, complete the following steps:

1. Navigate to the Install directory from `Maximo_root`. Locate and open the syncvnd.sql file. You can edit this file by using a WHERE clause to accomplish the following:
   - To transfer all vendors to the asset management system
   - Transfer selected vendors to the asset management system
2. Login to SQL*Plus and connect to the Oracle Applications E-Business Suite database.
3. Enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.syncvnd <Enter>
4. When prompted, press Enter**.**
5. Enter an Oracle operating unit ID from the list of IDs displayed on your screen, then press Enter.

   Each time you want to transfer a different operating unit ID, select it from the screen and rerun the syncvnd script.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\syncvnd.out
6. Review the syncvnd.out file for errors.

Updating the Maximo Asset Management Company ID with an RBNI and Suspense Account

To update the company ID with an RBNI and suspense account, complete the following steps:

1. In the asset management system, select **Go To** > **Purchasing** > **Companies**.
2. Press Enter to display a list of company IDs.
3. Click the company you want to update to display the record in the Company tab.
4. Click the Select Icon for the RBNI Account to open the Select GL Account dialog box where you can build the RBNI account.
5. Repeat Step 4 for the Suspense Account.
6. Click **Save Company**.

Synchronizing Oracle Inventory Organizations and Maximo Asset Management Storeroom Locations

To synchronize the Oracle inventory organizations and the asset management system storeroom locations, you must first obtain a listing of the organizations in the Oracle Applications E-Business Suite, then define them as storerooms in the asset management system.

Listing Oracle Applications E-Business Suite Organizations

To obtain a listing of the organizations and other control values from the Oracle Applications E-Business Suite, complete the following steps:

1 Login to SQL* Plus, then enter the following commands:

```
SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>
SQL> start &InstallDir.showids <Enter>
```

2 When prompted, press **Enter** to display a list of the Oracle Applications E-Business Suite showids.out control values as shown in the following table.

Table 4: showids.out output file

Control	Default value
APLINETYPE	ITEM
GENSTORE	Null or ORG_CODE
COAXREF	Chart_of_accounts_ID
ORGXREF	Ledger_ID

The generated file is in the following location:

c:\MAXIMO\ORACLEAPIS\log\showids.out

3 Review the showids.out file for any errors.

Defining Storerooms in Maximo Asset Management

To create a storeroom in the asset management system, complete the following steps:

1 In the asset management system, select **Go To** > **Inventory** > **Storerooms**.

2 Click **New Storeroom**.

3 Enter data about the storeroom, including:

- Storeroom and site location
- GL account information
- Ship to and Bill to information

4 Click **Save Storeroom**.

Synchronizing Oracle Order Units and Maximo Asset Management Units of Measure

To synchronize the Oracle and the asset management system order units, you must first obtain a listing of the order units in the Oracle Applications E-Business Suite, then define them in the asset management system.

Listing Oracle Applications E-Business Suite Order Units

To obtain a listing of the order units in the Oracle Applications E-Business Suite, complete the following steps:

1. Login to SQL* Plus, then enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.showuom <Enter>

2. When prompted, press **Enter**.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\showuom.out

   The showuom.out output file lists the units of measure defined in the Oracle Applications E-Business Suite.

3. Review the showuom.out file for any errors.

Defining Units of Measure and Conversion Factors in Maximo Asset Management

To define a unit of measure and a conversion factor in Asset Management System, complete the following steps:

1. In asset management system, select **Go To** > **Inventory** > **Item Master**.

2. Choose **Select Action** > **Unit of Measure and Conversion** > **Add/Modify Units of Measure**.

3. Click **New Row**.

4. Enter the unit of measure, a long description, and an abbreviation for the unit of measure. For example, you might enter **GBYTE**, **GIGABYTE**, and **GB**.

5. Click **OK**.

6. Additionally, if you wish to add a conversion factor for a unit of measure, choose **Select Action** > **Unit of Measure and Conversion** > **Add/Modify Conversions**.

For example, you might enter a conversion factor of **250** when converting a unit of measure value of BOX to a unit measure value of **FEET**.

7 Click **OK**.

8 Click **Save Item**.

Adding Tax Codes to Maximo Asset Management

Before you can synchronize the Oracle and the asset management system items, you must define the Oracle tax codes that you use in asset management system.

Listing Oracle Applications E-Business Suite Tax Codes

To obtain a listing of the tax codes in the Oracle Applications E-Business Suite, complete the following steps:

1. Login to SQL* Plus, then enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.showtax <Enter>

2. When prompted if OK to continue, press **Enter**.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\showtax.out

   The showtax.out file lists the tax codes defined in the Oracle Applications E-Business Suite.

3. Review the showtax.out file for any errors.

Defining Oracle Tax Codes in Maximo Asset Management

To define tax codes, complete the following steps:

1. In the asset management system, select **Go To** > **Administration** > **Organizations**.
2. Press **Enter** to display a list of organizations.
3. Click an organization to open the record.
4. Click **Select Action** > **Purchasing Options** > **Tax Options**.
5. Click **New Row**.
6. Enter values for the following fields:
   - Tax Code
   - Tax Code Description
   - Tax Rate
   - Effective Date
   - Paid Tax GL Account
   - Unpaid Tax GL Account
7. Click **OK**.

8 Click **Save Organization**.

Synchronizing Oracle and Maximo Asset Management Items

To synchronize items between the two systems, you must complete the following tasks:

- Verify integration control settings and financial periods
- Run a SQL script that transfers the Oracle items to the asset management system
- Verify that the Oracle items were added to the Item Master in the asset management system
- Define the item as a direct delivery item in Oracle (optional)

You must define individual or all items in an Oracle organization as direct delivery so that you can receive an item in Oracle and then send the receipt to the asset management system.

Items that belonged to an organization in the Oracle Applications E-Business Suite belong to a storeroom in the asset management system after you run the syncitm.sql script.

To synchronize items across the two systems, complete the following steps:

1 Verify that the item-related asset management system integration controls for the Oracle Adapter have the following default value setting:

Integration control	Default value
ITEMIN	1

2 Ensure that the financial periods during which you synchronize items are open in the asset management system.

For information on displaying the financial periods in Asset Management System, see the *IBM Maximo Asset Management Integration Guide*.

3 Navigate to the Install directory from `Maximo_root`. Locate and open the syncitm.sql file. You can edit this file by using a WHERE clause to accomplish the following:

- To transfer all items to the asset management system
- Transfer selected items to the asset management system

4 Login to SQL* Plus and connect to the Oracle Applications E-Business Suite database.

5 Enter the following commands:

SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

SQL> start &InstallDir.syncitm <Enter>

The generated file is in the following location:

c:\MAXIMO\ORACLEAPIS\log\syncitm.out

The syncitm.out file contains a list of all the inventory items that you can transfer to the asset management system.

6 Review the syncitm.out file for any errors.

7 Enter an Oracle item ID from the list of IDs displayed on your screen, then press Enter.

Each time you want to transfer a different item ID, select it from the screen and rerun the syncitm script.

8 To verify that you successfully transferred an Oracle item to the asset management system, select **Go To** > **Inventory** > **Item Master**.

9 Enter the item number in the Item field, and press **Enter**.

10 If successfully transferred, the item search action displays a line item for the record.

11 Click the Item number to open the detail record.

Synchronizing Oracle and Maximo Asset Management Item Balances

If you want to transfer item balances from Oracle to the asset management system, complete the following procedures. This synchronization transfers the current balance and the bin number where the balance is located. Transferring item balances is optional.

When testing reservations, receipts, and issues, you need a default bin. The script in the following procedure defines the default bin.

Transferring Oracle Item Balances to Maximo Asset Management

To transfer item balances from Oracle to the asset management system, complete the following steps:

1. Navigate to the Install directory from `Maximo_root`. Locate and open the syncbal.sql file.
2. Edit this file by entering an organization ID in a WHERE clause that represents the organization item balances that you wish to transfer.
3. Login to SQL* Plus, then enter the following commands:

   SQL> start c:\MAXIMO\ORACLEAPIS\install\setofvar <Enter>

   SQL> start &InstallDir.syncbal <Enter>
4. When prompted, press Enter.

   The generated file is in the following location:

   c:\MAXIMO\ORACLEAPIS\log\syncbal.out

   The syncbal.out file lists the Oracle inventory organization IDs that can be transferred to the asset management system.
5. Review the syncbal.out file for any errors.

   Each time you want to transfer a different inventory balance, select the inventory organization ID from the screen and rerun the syncbal script.

Verifying Item Balances in Maximo Asset Management

To verify that transferred items were updated with the correct balance and bin number in the asset management system, complete the following steps:

1. In the asset management system, select **Go To** > **Inventory** > **Inventory**.
2. Type an item number in the Item field, and press Enter. Also, you can click the **Select Icon** > **Select Value**, and click an item number from the displayed list of items.

The summary line displays the current balance for the selected item.

3 Click the Inventory tab to view the item detail record, including bin and lot numbers.

MAXORA Schema Table 4

When you install the adapter on the Oracle Applications server, asset management objects are created in the MAXORA schema. Do not drop, modify, move, or grant additional access to any of these objects.

These objects are listed as a reference for the Oracle database administrator. There are three groups of schema objects:

- Schema objects for concurrent jobs architecture
- Schema objects for database trigger architecture
- Schema objects common to both architectures

If you want to change from one architecture to another, you must reconfigure the environment variables and rerun the installation script on the Oracle Applications server. The reinstallation process performs the following changes to the schema objects:

- Removes the objects that were specific to the old architecture
- Installs the objects that are specific to the new architecture

The objects that are common to both architectures are not affected.

Schema objects for concurrent jobs architecture

The schema objects listed in the following table are installed in the MAXORA schema only if the concurrent jobs architecture is selected

Table 1: Schema objects for a concurrent jobs architecture

Object name	Object type
API_GLCC_CR_SP	PROCEDURE
API_GLCOMP_CR_SP	PROCEDURE
API_INVCAPPR_CR_SP	PROCEDURE
API_INVC_CR_SP	PROCEDURE
API_MTLBAL_CR_SP	PROCEDURE
API_MTLITMTL_CR_SP	PROCEDURE
API_MTLITM_CR_SP	PROCEDURE
API_PACOMP_CR_SP	PROCEDURE
API_PAEMP_CR_SP	PROCEDURE

Table 1: Schema objects for a concurrent jobs architecture (Continued)

Object name	Object type
API_POACTION_CR_SP	PROCEDURE
API_POAPPR_CR_SP	PROCEDURE
API_POIMP_CR_SP	PROCEDURE
API_POLINE_CR_SP	PROCEDURE
API_POREL_CR_SP	PROCEDURE
API_PRIMP_CR_SP	PROCEDURE
API_RCVLOT_CR_SP	PROCEDURE
API_RCVSERIAL_CR_SP	PROCEDURE
API_RECEIPT_CR_SP	PROCEDURE
API_VNDCONTUPD_CR_SP	PROCEDURE
API_VNDCONT_CR_SP	PROCEDURE
API_VNDHDR_CR_SP	PROCEDURE
GL_SETS_OF_BOOKS	SYNONYM
MX_HZ_PARTIES_CR	TABLE
MX_HZ_PARTIES_CR_IDX1	INDEX
MX_INVCAPPR_CR	TABLE
MX_INVCAPPR_CR_IDX1	INDEX
MX_INVCPAY_CR	TABLE
MX_INVCPAY_CR_IDX1	INDEX
MX_MTL_MATTRANS_CR_IDX1	INDEX
MX_MTL_MAT_TRANS_CR	TABLE
MX_POREL_CR	TABLE
MX_POREL_CR_IDX1	INDEX
MX_PO_HEADERS_CR	TABLE
MX_PO_HEADERS_CR_IDX1	INDEX
MX_REQ_INTERFACE_CR	TABLE
MX_REQ_INTERFACE_CR_IDX1	INDEX
MX_SUP_SITES_ALL_CR	TABLE
MX_SUP_SITES_ALL_CR_IDX1	INDEX

Schema objects for database trigger architecture

The schema objects listed in the following table are installed in the MAXORA schema only if the database trigger architecture is selected

Table 2: Schema objects for a database trigger architecture

Object name	Object type
API_GLCC_TRG	TRIGGER
API_GLCOMP_DESC_TRG	TRIGGER
API_GLCOMP_TRG	TRIGGER
API_INVCAPPR_TRG	TRIGGER
API_INVC_TRG	TRIGGER
API_MTLBAL_TRG	TRIGGER
API_MTLITMTL_TRG	TRIGGER
API_MTLITM_TRG	TRIGGER
API_PA_COMPENSATION_TRG	TRIGGER
API_PA_EMPLOYEE_TRG	TRIGGER
API_POACTION_TRG	TRIGGER
API_POAPPR_TRG	TRIGGER
API_POIMP_TRG	TRIGGER
API_POLINE_TRG	TRIGGER
API_POREL_TRG	TRIGGER
API_PRIMP_TRG	TRIGGER
API_RCV_LOT_TRG	TRIGGER
API_RCV_SERIAL_TRG	TRIGGER
API_RECEIPT_TRG	TRIGGER
API_VNDCONTUPD_TRG	TRIGGER
API_VNDCONT_TRG	TRIGGER
API_VNDHDR_TRG	TRIGGER
API_VNDSITE_TRG	TRIGGER

Schema objects common to both architectures

The following table lists the asset management objects in the MAXORA schema that are common to both architectures:

Table 3: Schema objects common to both architectures

Object name	Object type
APILOG	SEQUENCE
API_APX_SP	PROCEDURE
API_BAL_SP	PROCEDURE
API_GLCC_PKG	PACKAGE
API_GLCC_PKG	PACKAGE BODY
API_GLCC_SP	PROCEDURE
API_GLCOMP_SP	PROCEDURE
API_INVCAPPR_SP	PROCEDURE
API_INV_SP	PROCEDURE
API_ITEM_PKG	PACKAGE
API_ITEM_PKG	PACKAGE BODY
API_ITEM_SP	PROCEDURE
API_LC_PA_SP	PROCEDURE
API_LC_SP	PROCEDURE
API_LOC_PKG	PACKAGE
API_LOC_PKG	PACKAGE BODY
API_MTLISU_SP	PROCEDURE
API_PCX_SP	PROCEDURE
API_PC_SP	PROCEDURE
API_POACT_PKG	PACKAGE
API_POACT_PKG	PACKAGE BODY
API_POAPPR_SP	PROCEDURE
API_POLINE_SP	PROCEDURE
API_POLX_SP	PROCEDURE
API_POX_SP	PROCEDURE
API_PR_SP	PROCEDURE
API_PUT_ERROR_SP	PROCEDURE
API_RCVROT_SP	PROCEDURE
API_RCV_SP	PROCEDURE

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
API_VNDCONTUPD_SP	PROCEDURE
API_VNDCONT_SP	PROCEDURE
API_VND_SP	PROCEDURE
AP_INVOICES_ALL	SYNONYM
AP_INVOICES_INTERFACE	SYNONYM
AP_INVOICES_INTERFACE_S	SYNONYM
AP_INVOICE_DISTRIBUTIONS_ALL	SYNONYM
AP_INVOICE_LINES_INTERFACE	SYNONYM
AP_INVOICE_LINES_INTERFACE_S	SYNONYM
AP_SUPPLIERS	SYNONYM
AP_SUPPLIER_CONTACTS	SYNONYM
AP_SUPPLIER_SITES_ALL	SYNONYM
AP_TAX_CODES	SYNONYM
AP_TERMS	SYNONYM
CHK_OPERID_SP	PROCEDURE
CREATE_DEBUG_SP	PROCEDURE
CREATE_INSERT_SP	PROCEDURE
CREATE_TRIGGER_SP	PROCEDURE
CST_INV_LAYERS	SYNONYM
CST_ITEM_COSTS	SYNONYM
CST_QUANTITY_LAYERS	SYNONYM
CVROTITM_IFACE_NDX	INDEX
ENTERPROC	PROCEDURE
EXTRACT_FC_DATA	PROCEDURE
FA_CATEGORIES	SYNONYM
FINANCIALS_SYSTEM_PARAMETERS	SYNONYM
FND_API	SYNONYM
FND_APPLICATION_VL	SYNONYM
FND_FILE	SYNONYM
FND_FLEX_VALUES	SYNONYM
FND_FLEX_VALUES_TL	SYNONYM
FND_ID_FLEX_SEGMENTS	SYNONYM
FND_ID_FLEX_STRUCTURES	SYNONYM

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
FND_LANGUAGES	SYNONYM
FND_MSG_PUB	SYNONYM
FND_PRODUCT_GROUPS	SYNONYM
FND_PROFILE_OPTIONS	SYNONYM
FND_PROFILE_OPTION_VALUES	SYNONYM
FND_USER	SYNONYM
GET_OPERID_SP	PROCEDURE
GET_PA_ORGID_SP	FUNCTION
GL_CODE_COMBINATIONS	SYNONYM
GL_INTERFACE	SYNONYM
GL_LEDGERS	SYNONYM
HR_ALL_ORGANIZATION_UNITS	SYNONYM
HR_EMPLOYEES	SYNONYM
HR_LOCATIONS	SYNONYM
HR_LOCATIONS_ALL	SYNONYM
HR_OPERATING_UNITS	SYNONYM
HZ_CONTACT_POINTS	SYNONYM
HZ_LOCATIONS	SYNONYM
HZ_ORG_CONTACTS	SYNONYM
HZ_PARTIES	SYNONYM
HZ_PARTY_SITES	SYNONYM
HZ_RELATIONSHIPS	SYNONYM
INVISSUE_IFACE_NDX	INDEX
IN_INTER_TRANS_NDX	INDEX
IS_PARENT_REJECTED	FUNCTION
MAXAPIDEBUG	PACKAGE
MAXAPIDEBUG	PACKAGE BODY
MAXAPIERRORS	PACKAGE
MAXAPIERRORS	PACKAGE BODY
MAXAPIINSERT	PACKAGE
MAXAPIINSERT	PACKAGE BODY
MAXAPISET	PACKAGE
MAXAPISET	PACKAGE BODY

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
MAXAPITRIGGER	PACKAGE
MAXAPITRIGGER	PACKAGE BODY
MAXCONCUTLPACK	PACKAGE
MAXCONCUTLPACK	PACKAGE BODY
MAXDEBUGAPI	PACKAGE
MAXDEBUGAPI	PACKAGE BODY
MAXIFACETRANSSEQ	SEQUENCE
MAXORACTLS	TABLE
MAXORACTLS_TRG	TRIGGER
MAXORALOG	TABLE
MAXPCPACK	PACKAGE
MAXPCPACK	PACKAGE BODY
MAXPOPACK	PACKAGE
MAXPOPACK	PACKAGE BODY
MAXSEQ	SEQUENCE
MAXUTLPACK	PACKAGE
MAXUTLPACK	PACKAGE BODY
MOF_USR_APX_SP	PROCEDURE
MOF_USR_AP_SP	PROCEDURE
MOF_USR_BAL_SP	PROCEDURE
MOF_USR_COA_SP	PROCEDURE
MOF_USR_FC_SP	PROCEDURE
MOF_USR_GLCOMP_SP	PROCEDURE
MOF_USR_INV_SP	PROCEDURE
MOF_USR_ISU_SP	PROCEDURE
MOF_USR_ITM_SP	PROCEDURE
MOF_USR_LC_PA_SP	PROCEDURE
MOF_USR_LC_SP	PROCEDURE
MOF_USR_PCX_SP	PROCEDURE
MOF_USR_PC_SP	PROCEDURE
MOF_USR_POLX_SP	PROCEDURE
MOF_USR_POX_SP	PROCEDURE
MOF_USR_PO_SP	PROCEDURE

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
MOF_USR_PR_SP	PROCEDURE
MOF_USR_RCVROT_SP	PROCEDURE
MOF_USR_RCV_SP	PROCEDURE
MOF_USR_VNDCONT_SP	PROCEDURE
MOF_USR_VND_SP	PROCEDURE
MO_GLOBAL	SYNONYM
MTL_CATEGORY_SET_VALID_CATS	SYNONYM
MTL_DEFAULT_CATEGORY_SETS	SYNONYM
MTL_DEFAULT_SETS_VIEW	SYNONYM
MTL_DEMAND	SYNONYM
MTL_ITEM_CATEGORIES	SYNONYM
MTL_ITEM_LOCATIONS	SYNONYM
MTL_MATERIAL_TRANSACTIONS	SYNONYM
MTL_MATERIAL_TRANSACTIONS_S	SYNONYM
MTL_ONHAND_QUANTITIES	SYNONYM
MTL_PARAMETERS	SYNONYM
MTL_PHYSICAL_ADJUSTMENTS	SYNONYM
MTL_RESERVATIONS	SYNONYM
MTL_RESERVATIONS_INTERFACE	SYNONYM
MTL_RESERVATIONS_INTERFACE_S	SYNONYM
MTL_SECONDARY_INVENTORIES	SYNONYM
MTL_SERIAL_NUMBERS_INTERFACE	SYNONYM
MTL_SYSTEM_ITEMS	SYNONYM
MTL_SYSTEM_ITEMS_INTERFACE	SYNONYM
MTL_SYSTEM_ITEMS_TL	SYNONYM
MTL_TRANSACTION_ACCOUNTS	SYNONYM
MTL_TRANSACTION_LOTS_INTERFACE	SYNONYM
MTL_TRANSACTION_LOT_NUMBERS	SYNONYM
MTL_TXN_SOURCE_TYPES	SYNONYM
MTL_UNITS_OF_MEASURE	SYNONYM
MTL_UNIT_TRANSACTIONS	SYNONYM
MTL_UOM_CLASSES	SYNONYM
MTL_UOM_CONVERSIONS	SYNONYM

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
MXCOA_IFACE	TABLE
MXCOA_IFACE_NDX	INDEX
MXCRAFT_IFACE	TABLE
MXCRAFT_IFACE_NDX	INDEX
MXE_AP_SP	PROCEDURE
MXE_GL_SP	PROCEDURE
MXE_INVRESERVE_SP	PROCEDURE
MXE_INV_SP	PROCEDURE
MXE_ITM_SP	PROCEDURE
MXE_PA_ACT_SP	PROCEDURE
MXE_PROCESS_LOT_SP	PROCEDURE
MXE_PR_SP	PROCEDURE
MXE_RCV_LOT_SP	PROCEDURE
MXE_RCV_SER_SP	PROCEDURE
MXE_RCV_SP	PROCEDURE
MXE_USR_AP_SP	PROCEDURE
MXE_USR_GLOUTX_SP	PROCEDURE
MXE_USR_GL_SP	PROCEDURE
MXE_USR_INVRESERVE_SP	PROCEDURE
MXE_USR_INV_SP	PROCEDURE
MXE_USR_ITM_SP	PROCEDURE
MXE_USR_PA_ACT_SP	PROCEDURE
MXE_USR_PC_SP	PROCEDURE
MXE_USR_PO_SP	PROCEDURE
MXE_USR_PRT_SP	PROCEDURE
MXE_USR_PR_SP	PROCEDURE
MXE_USR_RCV_LOT_SP	PROCEDURE
MXE_USR_RCV_SER_SP	PROCEDURE
MXE_USR_RCV_SP	PROCEDURE
MXGLCOMP_IFACE	TABLE
MXGLCOMP_IFACE_NDX	INDEX
MXGLTXN_IFACE	TABLE
MXGLTXN_IFACE_NDX	INDEX

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
MXGLTXN_IFACE_TRG	TRIGGER
MXINVBAL_IFACE	TABLE
MXINVBAL_IFACE_NDX	INDEX
MXINVENTORY_IFACE	TABLE
MXINVENTORY_IFACE_TRG	TRIGGER
MXINVISSUE_IFACE	TABLE
MXINVOICE_IFACE	TABLE
MXINVOICE_IFACE_TRG	TRIGGER
MXINVRES_IFACE	TABLE
MXINVRES_IFACE_NDX	INDEX
MXINVRES_IFACE_TRG	TRIGGER
MXIN_INTER_TRANS	TABLE
MXITEM_IFACE	TABLE
MXITEM_IFACE_NDX	INDEX
MXITEM_IFACE_TRG	TRIGGER
MXI_USR_GLINX_SP	PROCEDURE
MXLABOR_IFACE	TABLE
MXLABOR_IFACE_NDX	INDEX
MXOUT_INTER_NDX2	INDEX
MXOUT_INTER_TRANS	TABLE
MXPC_IFACE	TABLE
MXPC_IFACE_NDX	INDEX
MXPC_IFACE_TRG	TRIGGER
MXPO_IFACE	TABLE
MXPO_IFACE_NDX	INDEX
MXPO_IFACE_TRG	TRIGGER
MXPROJTXN_IFACE	TABLE
MXPROJTXN_IFACE_TRG	TRIGGER
MXPROJ_IFACE	TABLE
MXPROJ_IFACE_NDX	INDEX
MXPR_IFACE	TABLE
MXPR_IFACE_NDX	INDEX
MXPR_IFACE_TRG	TRIGGER

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
MXRCVROTITM_IFACE	TABLE
MXRECEIPT_IFACE	TABLE
MXRECEIPT_IFACE_TRG	TRIGGER
MXVENDOR_IFACE	TABLE
MXVENDOR_IFACE_NDX	INDEX
MX_SQL	PROCEDURE
NVENTORY_IFACE_NDX	INDEX
OF_ID_PKG	PACKAGE
OF_ID_PKG	PACKAGE BODY
ORG_ORGANIZATION_DEFINITIONS	SYNONYM
PA_ALL_ORGANIZATIONS	SYNONYM
PA_BILL_RATES_ALL	SYNONYM
PA_BUDGET_TYPES	SYNONYM
PA_BUDGET_VERSIONS	SYNONYM
PA_COMPENSATION_DETAILS_ALL	SYNONYM
PA_IMPLEMENTATIONS_ALL	SYNONYM
PA_NON_LABOR_RESOURCES	SYNONYM
PA_PROJECTS_ALL	SYNONYM
PA_PROJECT_ACCUM_ACTUALS	SYNONYM
PA_PROJECT_ACCUM_BUDGETS	SYNONYM
PA_PROJECT_ACCUM_COMMITMENTS	SYNONYM
PA_PROJECT_ACCUM_HEADERS	SYNONYM
PA_STD_BILL_RATE_SCHEDULES_ALL	SYNONYM
PA_TASKS	SYNONYM
PA_TRANSACTION_INTERFACE_ALL	SYNONYM
PA_TRANSACTION_SOURCES	SYNONYM
PER_ADDRESSES	SYNONYM
PER_ALL_ASSIGNMENTS_F	SYNONYM
PER_ALL_PEOPLE_F	SYNONYM
PER_ASSIGNMENT_STATUS_TYPES	SYNONYM
PER_BUSINESS_GROUPS	SYNONYM
PER_JOBS	SYNONYM
PER_PAY_BASES	SYNONYM

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
PER_PAY_PROPOSALS	SYNONYM
PO_ACTION_HISTORY	SYNONYM
PO_AGENTS	SYNONYM
PO_API_ERRORS_REC_TYPE	SYNONYM
PO_CANCEL_IFACE	TABLE
PO_CHANGE_API1_S	SYNONYM
PO_DISTRIBUTIONS_ALL	SYNONYM
PO_DISTRIBUTIONS_INTERFACE	SYNONYM
PO_DISTRIBUTIONS_INTERFACE_S	SYNONYM
PO_DISTRIBUTIONS_S	SYNONYM
PO_DOCUMENT_CONTROL_PUB	SYNONYM
PO_HAZARD_CLASSES	SYNONYM
PO_HEADERS_ALL	SYNONYM
PO_HEADERS_INTERFACE	SYNONYM
PO_HEADERS_INTERFACE_S	SYNONYM
PO_HEADERS_S	SYNONYM
PO_LINES_ALL	SYNONYM
PO_LINES_INTERFACE	SYNONYM
PO_LINES_INTERFACE_S	SYNONYM
PO_LINES_S	SYNONYM
PO_LINE_LOCATIONS	SYNONYM
PO_LINE_LOCATIONS_ALL	SYNONYM
PO_LINE_LOCATIONS_S	SYNONYM
PO_LINE_TYPES	SYNONYM
PO_LOOKUP_CODES	SYNONYM
PO_RELEASES_ALL	SYNONYM
PO_RELEASES_S	SYNONYM
PO_REQUISITIONS_INTERFACE_ALL	SYNONYM
PO_REQUISITION_HEADERS_ALL	SYNONYM
PO_REQUISITION_LINES_ALL	SYNONYM
PO_REQ_DISTRIBUTIONS_ALL	SYNONYM
PO_SYSTEM_PARAMETERS_ALL	SYNONYM
PO_UNIQUE_IDENTIFIER_CONTROL	SYNONYM

Table 3: Schema objects common to both architectures (Continued)

Object name	Object type
PO_UN_NUMBERS	SYNONYM
PO_UPDATE_IFACE	TABLE
PO_VENDOR_CONTACTS	SYNONYM
PUT_IN_LOG	PROCEDURE
RCV_HEADERS_INTERFACE	SYNONYM
RCV_HEADERS_INTERFACE_S	SYNONYM
RCV_INTERFACE_GROUPS_S	SYNONYM
RCV_LOT_TRANSACTIONS	SYNONYM
RCV_ROUTING_HEADERS	SYNONYM
RCV_SERIAL_TRANSACTIONS	SYNONYM
RCV_SHIPMENT_HEADERS	SYNONYM
RCV_SHIPMENT_LINES	SYNONYM
RCV_TRANSACTIONS	SYNONYM
RCV_TRANSACTIONS_INTERFACE	SYNONYM
RCV_TRANSACTIONS_INTERFACE_S	SYNONYM
RESP_ID_PKG	PACKAGE
RESP_ID_PKG	PACKAGE BODY
RETPROC	PROCEDURE
RETPROCERROR	FUNCTION
SET_OPERID_SP	PROCEDURE
UT_INTER_TRANS_NDX	INDEX
XINVOICE_IFACE_NDX	INDEX
XPROJTXN_IFACE_NDX	INDEX
XRECEIPT_IFACE_NDX	INDEX

Predefined components for the concurrent jobs architecture

5

The Maximo Enterprise Adapter for Oracle Applications includes predefined concurrent requests and request sets that are installed if you specify the concurrent jobs architecture during installation. For some interfaces, a single concurrent request is provided. Request sets are provided for interfaces that require more than one concurrent request. You can access concurrent requests and request sets in the System Administrator application.

The following concurrent requests are provided:

- <*MAXORA_schema_name*>: Maximo GL COA Master data
- <*MAXORA_schema_name*>: Maximo GL Component Master data
- <*MAXORA_schema_name*>: Maximo Inventory Balance Master data
- <*MAXORA_schema_name*>: Maximo Requisitions and Purchase documents
- <*MAXORA_schema_name*>: Maximo Requisitions rejected import
- <*MAXORA_schema_name*>: Maximo Purchase documents rejected import

The following table lists the predefined concurrent request sets and the individual requests that they contain.

Predefined concurrent request sets

Request set	Contains these requests
<*MAXORA_schema_name*>: Maximo Item and Inventory Master data	• <*MAXORA_schema_name*>: Maximo inventory items • <*MAXORA_schema_name*>: Maximo inventory items description
<*MAXORA_schema_name*>: Maximo Labor and Craft Master data	• <*MAXORA_schema_name*>: Maximo labors • <*MAXORA_schema_name*>: Maximo labor rate
<*MAXORA_schema_name*>: Maximo Companies and Contract Master data	• <*MAXORA_schema_name*>: Maximo suppliers • <*MAXORA_schema_name*>: Maximo supplier sites • <*MAXORA_schema_name*>: Maximo supplier contacts • <*MAXORA_schema_name*>: Maximo supplier contact update

Predefined concurrent request sets (Continued)

<*MAXORA_schema_name*>: Maximo Requisitions and Purchase documents	• <*MAXORA_schema_name*>: Maximo purchase documents approvals and status changes • <*MAXORA_schema_name*>: Maximo purchase documents require reapproval • <*MAXORA_schema_name*>: Maximo release purchase orders require reapproval • <*MAXORA_schema_name*>: Maximo purchase lines cancellations and close
<*MAXORA_schema_name*>: Maximo Receipts, Returns and Corrections	• <*MAXORA_schema_name*>: Maximo receipt concurrent • <*MAXORA_schema_name*>: Maximo receiving lot concurrent • <*MAXORA_schema_name*>: Maximo purchase lines cancellations and close
<*MAXORA_schema_name*>: Maximo Invoices and Payments	• <*MAXORA_schema_name*>: Maximo Invoice approval concurrent • <*MAXORA_schema_name*>: Maximo Invoice payment concurrent

Oracle Applications E-Business Suite Configuration

6

When you setup and configure the Oracle Applications E-Business Suite for Maximo Asset Management integration, you must create and configure the ship to locations, general ledger accounts, and accounts payable capabilities. You can use general ledger accounts to import journals from Maximo Asset Management. You also can use the accounts payable capabilities to import invoices from Maximo Asset Management.

For procedures, you must enter the key value in both the general ledger accounts and accounts payable fields.

If you intend to run concurrent jobs to a predefined schedule, you must define these schedules. This task applies to the concurrent jobs that are used for processing transactions from Maximo Asset Management to Oracle Applications as well as the concurrent jobs used for sending transactions to Maximo Asset Management if you are using the concurrent jobs architecture.

Creating a ship to location

The ship to locations in Maximo Asset Management must be defined as ship to locations in the Oracle Applications E-Business Suite. Purchase requisitions and purchase orders use this information.

To define a ship to location, complete the following steps:

1. Sign on to the Oracle Applications E-Business Suite as a user with purchasing responsibility.
2. In the Navigator window, double-click **Setup**.
3. Double-click **Organizations**.
4. Double-click **Locations**. The Location window opens.
5. In the Location window, enter a ship to location in the **Name** field and a description in the **Description** field.
6. On the Address Details tab, tab to the Address Style field and click the value list button [...]. The Address Styles dialog box opens.
7. Select **United States** and click **OK**. The Location Address window opens.
8. Enter values in the **Address Line 1**, **City**, **State**, **Zip Code** and **County** fields.
9. Click **OK**.
10. On the Shipping Details tab, enter values in the **Contact** and **Ship-To Location** fields, and select the **Ship-To Site** check box**.** Select or clear other check boxes as needed.
11. On the Other Details tab, tab to the Inventory Organization field, and click the value list button [...]. The Inventory Organizations dialog box opens.
12. Select the applicable inventory organization, and click **OK**.
13. Click the **Save** icon.

Setting up a general ledger to import journals from Maximo Asset Management

When you set up a general ledger, you must ensure that the financial periods are open for the test journal import. You also must ensure that you only import a transaction in Maximo Asset Management that falls within any open periods in the Oracle Applications E-Business Suite general ledger.

To set up general ledger to import journal entries from Maximo Asset Management, complete the following steps.

An asterisk (*) next to a field name means you must enter or select the value shown.

1 Sign on to the Oracle Applications E-Business Suite as a user with general ledger responsibility.

2 Double-click **Setup**.

3 Double-click **Journal**.

4 Double-click **Sources**. The Journal Sources window opens.

5 In the Journal Sources window, enter the following values:

Field	Value
Source*	MAXIMO
Description	Maximo Asset Management Journal Import
Import Journal References	Yes [selected]

6 Click the **Save** icon.

7 Close the Journal Sources window.

8 In the Navigator window, double-click **Categories**. The Journal Categories window opens.

9 Enter the following values:

Field	Value
Category	Use Maximo Asset Management Cross Reference Controls (JECATXREF) to configure journal categories (Go To > Integration > External Systems > Integration Controls).
Description	Maximo Asset Management Journal Entry

10 Click the **Save** icon.

Setting up accounts payable to import invoices from Maximo Asset Management

To set up the accounts payable to import invoices from Maximo Asset Management, complete the following steps.

An asterisk (*) next to a field name means you must enter or select the value shown.

1. Sign on to the Oracle Applications E-Business Suite as a user with Payables responsibility.
2. In the Navigator window, double-click **Setup**.
3. Double-click **Lookups**.
4. Double-click Payables. The Oracle Public Sector Payables Lookups window opens.
5. On the menu bar, click **View > Query by Example > Enter**.
6. Enter Source in the Type field.
7. On the menu bar, click **View > Query by Example > Run**.
8. Click the **New** icon.
9. In the new row, enter the following values:

Field	Value
Code*	MAXIMO
Enabled	Yes [Selected]

10. Click the **Save** icon.

Sending purchase order updates from Maximo Asset Management to Oracle Applications

During the installation, a POIMPORT concurrent request, <*MAXORA_schema_name*>: Import Asset Management System PO Updates and Cancellations, is created that you can use to receive PO updates and cancellations from Maximo Asset Management in Oracle applications. This program can be scheduled to run or can be run manually.

Users can access the <*MAXORA_schema_name*>: Import Asset Management System PO Updates and Cancellations program in the Purchasing application. You can associate the program with a different request group if you want to provide access to the program from within a different application.

Concurrent Jobs Installed for Concurrent Architecture

Customers who are opting for Concurrent Architecture may schedule jobs to be executed based on a frequency and/or run manually. Refer to Schedule Concrrent Jobs Section below

Scheduling concurrent jobs to run

Oracle E-Business Suite uses concurrent jobs to process all transactions that are outbound from Maximo Asset Management into Oracle Applications. During installation, users choose if they want to use the concurrent jobs architecture to process transactions that are inbound to Maximo Asset Management from Oracle Applications.

For all concurrent jobs (inbound and outbound), you can define a schedule for these processes to execute, or the user can execute them manually, depending on your business requirements.

The following procedure schedules the import process to run for the <*MAXORA_schema_name*>: Import Asset Management System PO Updates and Cancellations concurrent job. To schedule other concurrent jobs, specify the appropriate responsibility in step 1 and change the name of the concurrent program that is specified in step 5.

Procedure

1. Select **Responsibility** > **Purchasing**.
2. Click **OK**.
3. Select **Reports** > **Run**.
4. Select the **Single Request** option and click **OK**.
5. Enter the name <*MAXORA_schema_name*>: Import Asset Management System PO Updates and Cancellations.
6. Optional: If you want to start importing the report for the current data, click **Submit**.
7. Optional: If you want the report to run on the background for a given time interval, for example, every 5 minutes:
   a. Click **Schedule**.
   b. Select **Periodically** and specify the start and end dates.
   c. Select **Run Every 5 Minute(s)** from the drop-down menu, or any other time interval appropriate to your implementation.
   d. Select the **Save this Schedule** check box.
   e. Click **OK**.

The request now runs every five minutes for the period established between the start and end dates. The request also imports all the purchase order updates from the interface tables.

For more information, see the *Oracle EBS System Administrator*.

Oracle Project Accounting Configurations

7

When you install and configure the integration between Maximo Asset Management and Oracle Project Accounting (the Projects integration), you must be familiar with the installation prerequisites and the configuration activities.

You must completely install and configure the Maximo Enterprise Adapter for Oracle Applications before you install the Projects integration.

To complete these procedures, you need the following documentation:

- *IBM Maximo Enterprise Adapter System Administrator Guide for Oracle Applications 12 Adapter*
- The most recent Maximo Enterprise Adapter for Oracle Applications 12 patch release notes

Configuration Prerequisites

Before you configure the Projects integration, you must define the following values. You might already have performed much of this configuration when you installed the Maximo Enterprise Adapter for Oracle Applications.

- Budget entry methods
- Budget types
- Expenditure categories
- Expenditure types
- Labor and craft (as Oracle employees)
- Non-labor resources
- Project templates
- Project types
- Resource lists
- Transaction sources

For information about these values, refer to your Oracle Applications E-Business Suite documentation.

Configuration Activities

Depending on the combination of processes that you perform (installing the Oracle Adapter, installing the Projects integration, installing patches, and applying manual updates), there may be some overlap in the required activities. If you encounter the same activity a second time, perform it a second time. Skipping a duplicate procedure might cause errors.

Configuring the Projects integration involves the activities shown in the following table. All the activities may not apply to you.

Table 1: Configuration tasks for integration with Oracle Projects

	Configuration activity
[ ]	Update database column lengths.
[ ]	Enable new publish channels, enterprise services and integration event listener.
[ ]	Configure the Projects-specific Maximo Asset Management integration controls.
[ ]	Add fields to user interfaces.
[ ]	Enable the financial control concurrent extract manager.
[ ]	Provide access to the financial control concurrent extract manager.
[ ]	Synchronize the Oracle employees and Maximo Asset Management labor codes.

Update Database Column Lengths

Use the Maximo Asset Management Database Configuration application to resize the following columns in the Maximo Asset Management database tables.

Table 2: Database tables to resize

Table	Column	Change type	Size
CRAFT	CRAFT	ALN	240
CRAFT	DESCRIPTION	ALN	240

Enable New Publish Channels, Enterprise Services, and the Integration Event Listener

The Projects integration adds the following enterprise service and publish channel:

- MXPROJ_FROA12
- MXPROJTXN_TOOA12

The Projects integration also uses the MXGLTXN_OA12 publish channel.

To enable the new publish channels and enterprise services see the enabling publish channels and enterprise services information.

Configure Projects-specific Maximo Asset Management Integration Controls

The Projects integration uses the following Projects-specific Maximo Asset Management integration controls:

- CHARGEORG
- EXPENDITEM
- EXPENDLABOR
- EXPENDTOOL
- FCSTATUSXREF
- NLRORG
- PROJAP
- PROJPO
- PROJPR
- PROJSEND
- RESLEVELITEM
- RESLEVELLABOR
- RESLEVELTOOL
- SRCTIM
- SRCUSE

The Projects integration also uses the PROJPAY Oracle processing control to determine whether to extract cost rates from Oracle Human Resources (value 0) or Oracle Project Accounting (value 1). The default value of the control is 1 when the Projects integration is installed.

For details about these controls, see the Projects Accounting information in the *IBM Maximo Enterprise Adapter for Oracle Applications System Administration Guide.*

For information on configuring the Maximo Asset Management integration controls, see the *IBM Maximo Asset Management Integration Guide* or the online help for the External Systems application.

Add Fields to User Interfaces

The following table lists hidden fields that you might need to add to the user interfaces in the Maximo Asset Management work order, purchasing, inventory, and cost management applications. In some cases adding the field is optional, depending on your business practices.

You add these fields through the Application Designer application in the Maximo Asset Management configuration module.

Table 3: Fields to add to windows in Maximo Asset Managemen t

Application	Page	Field	Required or optional
Work Order Tracking	Work Order tab	Project ID Task ID	Required
	Labor subtab of Actuals tab	Expenditure type	See text
	Materials subtab of Actuals tab	Expenditure type Charge organization Non-labor charge organization	See text
	Tools subtab of Actuals tab	Expenditure type Charge organization Non-labor charge organization	See text
	Services subtab of Actuals tab	Expenditure type Charge organization Non-labor charge organization Note: On the Services subtab, the fields are display only	See text
Purchase Requisitions	PR Lines tab	Expenditure type Charge organization	See text
Purchase Orders	PO Lines tab	Expenditure type Charge organization	See text
Receipts	Material receipts tab	Expenditure type Charge organization Non-labor charge organization	See text
	Service Receipts tab	Expenditure type Charge organization Non-labor charge organization	See text
Invoices	Invoice Lines tab	Expenditure type Charge organization	See text
Issues and Transfers	Issue	Expenditure type Charge organization Non-labor charge organization	See text
Cost Management	Project tab	Budget Cost Burdened Cost Committed Cost Remaining Cost	Optional

You do not have to add the expenditure type field if your business does one of the following:

- Uses a single expenditure type for items, a single expenditure type for labor, and a single expenditure type for tools
- Uses item number, labor code, and tool code as expenditure types

In these cases, transactions that require these values use the default values in the EXPENDITEM, EXPENDLABOR, and EXPENDTIOOL integration controls, respectively.

In all other cases, add the expenditure type field to the applicable user interfaces.

You do not need to add the charge organization and non-labor resource organization fields if your business uses a single charge organization and a single non-labor resource organization for all transactions. Transactions that require these values will use the default values in the CHARGEORG and NLRORG integration controls, respectively.

If your business uses multiple charge or non-labor resource organizations, add the two fields to the applicable user interfaces.

Adding Fields to the Work Order Tracking Application

The following procedures add the required and optional Work Order Tracking fields. If you do not want to add an optional field, skip the corresponding procedure. You must add the project ID and task ID fields to the Work Order tab.

Adding the project ID and task ID to the Work Order tab

To add the project ID and task ID fields to the Work Order tab, complete the following steps:

1. On the Applications tab in the Application Designer, select **WOTRACK**.
2. On the Workspace tab, click the Work Order subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box below the **Is Task** field.

   Do not close the Controls dialog box until you finish this procedure.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the Attribute field, enter **FCPROJECTID**.
7. In the Lookup field, enter **PARENTPROJECT**.
8. Move the cursor to the next field in the Textbox Properties dialog box. Do not close the Textbox Properties dialog box until you finish this procedure.

9 Drag the Textbox in the Controls dialog box to the space below the new Project ID field.

10 Ensure that the new textbox field is highlighted, then enter **FCTASKID** in the Attribute field of the Textbox Properties dialog box.

11 In the Lookup field, enter **PARENTTASK**.

12 Move the cursor to the next field in the Textbox Properties dialog box.

13 Close the Controls dialog box and the Textbox Properties dialog box.

14 Click the **Save Application Definition**.

Adding the expenditure type field to the Labor [Actuals] subtab

To add the expenditure type field to the Labor [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Labor subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Labor subtab where you want the expenditure type field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_EXPENDTYPE** (object LABTRANS).

8 Move the cursor to the next field in the Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the expenditure type field to the Materials [Actuals] subtab

To add the expenditure type field to the Materials [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Materials subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Materials subtab where you want the expenditure type field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_EXPENDTYPE** (object MATUSETRANS).

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the charge organization field to the Materials [Actuals] subtab

To add the charge organization field to the Materials [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Materials subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Materials subtab where you want the charge organization field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_CHARGE_ORG** (object MATUSETRANS).

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the non-labor resource organization field to the Materials [Actuals] subtab

To add the non-labor resource organization field to the Materials [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Materials subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Materials subtab where you want the non-labor resource organization field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_NLR_ORG** (object MATUSETRANS).

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the expenditure type field to the Services [Actuals] subtab

To add the expenditure type field to the Services [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Services subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Services subtab where you want the expenditure type field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_EXPENDTYPE** (object SERVRECTRANS).

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the charge organization field to the Services [Actuals] subtab

To add the charge organization field to the Services [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Services subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Services subtab where you want the charge organization field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_CHARGE_ORG** (object SERVRECTRANS**)**.

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the non-labor resource organization field to the Services [Actuals] subtab

To add the non-labor resource organization field to the Services [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Services subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Services subtab where you want the non-labor resource organization field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_NLR_ORG** (object SERVRECTRANS).

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the expenditure type field to the Tools [Actuals] subtab

To add the expenditure type field to the Tools [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Tools subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Tools subtab where you want the expenditure type field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_EXPENDTYPE** (object TOOLTRANS).

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the charge organization field to the Tools [Actuals] subtab

To add the charge organization field to the Tools [Actuals] subtab, complete the following steps:

1 On the Applications tab in the Application Designer, select **WOTRACK**.

2 On the Workspace tab, click the Actuals subtab.

3 On the Actuals subtab, click the Tools subtab.

4 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

5 Drag the Textbox in the Controls dialog box to the location on the Tools subtab where you want the charge organization field to appear.

6 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

7 In the **Attribute** field, select **OA_CHARGE_ORG** (object TOOLTRANS).

8 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

9 Click the **Save Application Definition**.

Adding the non-labor resource organization field to the Tools [Actuals] subtab

To add the non-labor resource organization field to the Tools [Actuals] subtab, complete the following steps:

1. On the Applications tab in the Application Designer, select **WOTRACK**.
2. On the Workspace tab, click the Actuals subtab.
3. On the Actuals subtab, click the Tools subtab.
4. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
5. Drag the Textbox in the Controls dialog box to the location on the Tools subtab where you want the non-labor resource organization field to appear.
6. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
7. In the **Attribute** field, select **OA_NLR_ORG** (object TOOLTRANS).
8. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
9. Click the **Save Application Definition**.

Adding Fields to Purchase Requisition Application

The following procedures add the optional purchase requisition fields. If you do not want to add a field, skip the corresponding procedure.

Adding the expenditure type field to the purchase requisition (PR) application

To add the expenditure type field to the purchase requisition (PR) application, complete the following steps:

1. On the Applications tab in the Application Designer, select **PR**.
2. On the Workspace tab, click the PR Lines subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location where you want the expenditure type field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **OA_EXPENDTYPE** (object PRLINE)
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
8. Click the **Save Application Definition**.

Adding the charge organization field to the purchase requisition (PR) application

To add the charge organization field to the purchase requisition (PR) application, complete the following steps:

1. On the Applications tab in the Application Designer, select **PR**.
2. On the Workspace tab, click the PR Lines subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location where you want the charge organization field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **OA_CHARGE_ORG** (object PRLINE).
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
8. Click the **Save Application Definition**.

Adding Fields to the Purchase Order Application

The following procedures add the optional purchase order fields. If you do not want to add a field, skip the corresponding procedure.

Adding the expenditure type field to the purchase order (PO) application

To add the expenditure type field to the purchase order (PO) application, complete the following steps:

1. On the Applications tab in the Application Designer, select **PO**.
2. On the Workspace tab, click the PO Lines subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location where you want the expenditure type field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **OA_EXPENDTYPE** (object POLINE).
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the charge organization field to the purchase order (PO) application

To add the charge organization field to the purchase order (PO) application, complete the following steps:

1 On the Applications tab in the Application Designer, select **PO**.

2 On the Workspace tab, click the PO Lines subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the charge organization field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_CHARGE_ORG** (object POLINE).

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding Fields to the Invoice Application

The following procedures add the optional invoice fields. If you do not want to add a field, skip the corresponding procedure.

Adding the expenditure type field to the Invoice application

To add the expenditure type field to the Invoice application, complete the following steps:

1 On the Applications tab in the Application Designer, select **INVOICE**.

2 On the Workspace tab, click the Invoice Lines subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the expenditure type field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_EXPENDTYPE** (object INVOICELINE)

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the charge organization field to the Invoice application

To add the charge organization field to the Invoice application, complete the following steps:

1 On the Applications tab in the Application Designer, select **INVOICE**.

2 On the Workspace tab, click the Invoice Lines subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the charge organization field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_CHARGE_ORG** (object INVOICELINE).

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding Fields to the Receipts Application

The following procedures add the optional receipts fields. If you do not want to add a field, skip the corresponding procedure.

Adding the expenditure type field to the Material Receipts tab

To add the expenditure type field to the Material Receipts tab, complete the following steps:

1 On the Applications tab in the Application Designer, select **RECEIPTS**.

2 On the Workspace tab, click the Material Receipts subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the expenditure type field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_EXPENDTYPE** (object MATRECTRANS).

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the charge organization field to the Material Receipts tab

To add the charge organization field to the Material Receipts tab, complete the following steps:

1 On the Applications tab in the Application Designer, select **RECEIPTS**.

2 On the Workspace tab, click the Material Receipts subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the charge organization field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_CHARGE_ORG** (object MATRECTRANS).

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the non-labor resource organization field to the Material Receipts tab

To add the non-labor resource organization field to the Material Receipts tab, complete the following steps:

1 On the Applications tab in the Application Designer, select **RECEIPTS**.

2 On the Workspace tab, click the Material Receipts subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the non-labor resource organization field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_NLR_ORG** (object MATRECTRANS).

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the expenditure type field to the Service receipts tab

To add the expenditure type field to the Service receipts tab, complete the following steps:

1 On the Applications tab in the Application Designer, select **RECEIPTS**.

2 On the Workspace tab, click the Service receipts subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location on where you want the expenditure type field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_EXPENDTYPE** (object SERVRECTRANS).

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the charge organization field to the Service Receipts tab

To add the charge organization field to the Service Receipts tab, complete the following steps:

1 On the Applications tab in the Application Designer, select **RECEIPTS**.

2 On the Workspace tab, click the Service Receipts subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the charge organization field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **OA_CHARGE_ORG** (object SERVRECTRANS).

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the non-labor resource organization field to the Service Receipts tab

To add the non-labor resource organization field to the Service Receipts tab, complete the following steps:

1. On the Applications tab in the Application Designer, select **RECEIPTS**.
2. On the Workspace tab, click the Service Receipts subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location where you want the non-labor resource organization field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **OA_NLR_ORG** (object SERVRECTRANS).
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
8. Click the **Save Application Definition**.

Adding Fields to the Issues and Transfers Application

The following procedures add the optional issue fields. If you do not want to add a field, skip the corresponding procedure.

Adding the expenditure type field to the Issue subtab

To add the expenditure type field to the Issue subtab, complete the following steps:

1. On the Applications tab in the Application Designer, select **INVISSUE**.
2. On the Workspace tab, click the Issue subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location on the Issue subtab where you want the expenditure type field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **OA_EXPENDTYPE** (object MATUSETRANS).
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
8. Click the **Save Application Definition**.

Adding the charge organization field to the Issue subtab

To add the charge organization field to the Issue subtab, complete the following steps:

1. On the Applications tab in the Application Designer, select **INVISSUE**.
2. On the Workspace tab, click the Issue subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location on the Issue subtab where you want the charge organization field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **OA_CHARGE_ORG** (object MATUSETRANS).
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
8. Click the **Save Application Definition**.

Adding the non-labor resource organization field to the Issue subtab

To add the non-labor resource organization field to the Issue subtab, complete the following steps:

1. On the Applications tab in the Application Designer, select **INVISSUE**.
2. On the Workspace tab, click the Issue subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location on the Issue subtab where you want the non-labor resource organization field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **OA_NLR_ORG** (object MATUSETRANS).
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
8. Click the **Save Application Definition**.

Adding Fields to the Cost Management Application

You can add budget, burdened, committed, and remaining cost fields to the Cost Management application. These optional fields display the rolled-up project costs transferred from Oracle PA to Maximo Asset Management.

Adding the budget cost field to the Cost Management (FINCNTRL) application

To add the budget cost field to the Cost Management (FINCNTRL) application, complete the following steps:

1. On the Applications tab in the Application Designer, select **FINCNTRL**.
2. On the Workspace tab, click the Project subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location where you want the budget cost field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **BUDGETCOST** (object FINCNTRL).
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.
8. Click the **Save Application Definition**.

Adding the burdened cost field to the Cost Management application

To add the burdened cost field to the Cost Management application, complete the following steps:

1. On the Applications tab in the Application Designer, select **FINCNTRL**.
2. On the Workspace tab, click the Project subtab.
3. Click the **Control Palette** icon on the task bar. The Controls dialog box appears.
4. Drag the Textbox in the Controls dialog box to the location where you want the burdened cost field to appear.
5. Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.
6. In the **Attribute** field, select **BURDENEDCOST** (object FINCNTRL)
7. Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the committed cost field to the Cost Management application

To add the committed cost field to the Cost Management application, complete the following steps:

1 On the Applications tab in the Application Designer, select **FINCNTRL**.

2 On the Workspace tab, click the Project subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the committed cost field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **COMMITTEDCOST** (object FINCNTRL)

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

Adding the remaining cost field to the Cost Management application

To add the remaining cost field to the Cost Management application, complete the following steps:

1 On the Applications tab in the Application Designer, select **FINCNTRL**.

2 On the Workspace tab, click the Project subtab.

3 Click the **Control Palette** icon on the task bar. The Controls dialog box appears.

4 Drag the Textbox in the Controls dialog box to the location where you want the remaining cost field to appear.

5 Ensure that the new textbox field is highlighted, then click the **Control Properties** icon on the task bar. The Textbox Properties dialog box appears.

6 In the **Attribute** field, select **REMAININGCOST** (object FINCNTRL)

7 Move the cursor to the next field in Textbox Properties dialog box, then close the dialog box.

8 Click the **Save Application Definition**.

For more information about all listed fields, see the Projects Accounting information in the *IBM Maximo Enterprise Adapter for Oracle Applications System Administration Guide.*

Predefined content for Oracle Project Accounting

During the installation, the <*MAXORA_schema_name*> PRC: Asset Management System Financial Control Update from Oracle concurrent extract manager is created that can initiate the transfer of project and task summary information from Oracle Project Accounting to the Cost Management application in Maximo Asset Management.

Users can access the <*MAXORA_schema_name*> PRC: Asset Management System Financial Control Update from Oracle program in the Projects application. You can associate the program with a different request group if you want to provide access to the program from within a different application.

Synchronize Oracle Employees and Maximo Asset Management Labor Codes

To synchronize the labor and craft to update Maximo Asset Management with cost rates from Oracle Project Accounting, see the synchronizing Oracle employees and Maximo Asset Management labor codes information.

Index

L

M

N

O

P

R

S

T

U

W

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

19-21, Nihonbashi-Hakozakicho, Chuo-ku

Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new

editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation

2Z4A/101

11400 Burnet Road

Austin, TX 78758

U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

Trademarks

IBM®, the IBM logo, and ibm.com® are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at www.ibm.com/legal/copytrade.shtml.

Terms and conditions for product documentation

Permissions for the use of these publications are granted subject to the following terms and conditions.

Applicability

These terms and conditions are in addition to any terms of use for the IBM website.

Personal use

You may reproduce these publications for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative work of these publications, or any portion thereof, without the express consent of IBM.

Commercial use

You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications or any portion thereof outside your enterprise, without the express consent of IBM.

Rights

Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the publications or any information, data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

Privacy Policy Considerations

IBM Software products, including software as service solutions, (“Software Offerings”) may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering’s use of cookies is set forth in the following section.

Depending on the configuration that is deployed in the application server, this Software Offering may use session cookies for session management. These cookies can optionally be enabled or disabled, but disabling the cookies will also

disable the functionality that they enable. See the application server documentation for additional information.

Optionally, you can also use functionality, such as typeahead, to store data locally on the browser. The data that is stored locally could contain personally identifiable information.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at http://www.ibm.com/privacy and IBM's Online Privacy Statement at http://www.ibm.com/privacy/details in the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at http://www.ibm.com/software/info/product-privacy.