Oracle® iSetup

Developer's Guide

Release 12.2

Part No. E22957-06

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Oracle iSetup Developer's Guide, Release 12.2

Part No. E22957-06

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- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
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Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

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Preface

Intended Audience

Welcome to Release 12.2 of the *Oracle iSetup Developer's Guide.*

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area.
- Computer desktop application usage and terminology.

If you have never used Oracle E-Business Suite, we suggest you attend one or more of the Oracle E-Business Suite training classes available through Oracle University.

This manual describes how to set up your development environment, build, test, and deploy Oracle iSetup Framework Interfaces. For more information on coding standards followed by the Oracle E-Business Suite development staff and information on extending the products shipped by Oracle E-Business Suite development, see the *Oracle Application Framework Developer's Guide*, available from My Oracle Support Knowledge Document 1315485.1.

This documentation is written for the application developer and assumes familiarity with Java and SQL.

See Related Information Sources on page viii for more Oracle E-Business Suite product information.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Structure

1 Oracle iSetup Framework Interface Registration
2 Oracle iSetup Reportable API
A Oracle Application Object Library Messages for Oracle iSetup

Related Information Sources

This book is included in the Oracle E-Business Suite Documentation Library. If this guide refers you to other Oracle E-Business Suite documentation, use only the latest Release 12.2 versions of those guides.

Online Documentation

All Oracle E-Business Suite documentation is available online (HTML or PDF).

- **Online Help** - Online help patches (HTML) are available on My Oracle Support.
- **Oracle E-Business Suite Documentation Library** - This library, which is included in the Oracle E-Business Suite software distribution, provides PDF documentation as of the time of each release.
- **Oracle E-Business Suite Documentation Web Library** - This library, available on the Oracle Technology Network (http://docs.oracle.com/cd/E26401_01/index.htm), provides the latest updates to Oracle E-Business Suite Release 12.2 documentation. Most documents are available in PDF and HTML formats.
- **Release Notes** - For information about changes in this release, including new features, known issues, and other details, see the release notes for the relevant product, available on My Oracle Support.
- **Oracle Electronic Technical Reference Manual -** The Oracle Electronic Technical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for each Oracle E-Business Suite product. This information helps you convert data from your existing applications and integrate Oracle E-Business Suite data with non-Oracle applications, and write custom reports for Oracle E-Business Suite products. The Oracle eTRM is available on My Oracle Support.

Related Guides

You should have the following related books on hand. Depending on the requirements of your particular installation, you may also need additional manuals or guides.

Oracle iSetup User's Guide

This guide describes how to use Oracle iSetup to migrate data between different instances of the Oracle E-Business Suite and generate reports. It also includes information on configuration, instance mapping, and seeded templates used for data migration.

Oracle E-Business Suite Security Guide

This guide contains information on a comprehensive range of security-related topics, including access control, user management, function security, data security, and auditing. It also describes how Oracle E-Business Suite can be integrated into a single sign-on environment.

Oracle Application Framework Developer's Guide

This guide contains the coding standards followed by the Oracle E-Business Suite development staff to produce applications built with Oracle Application Framework. This guide is available in PDF format on My Oracle Support and as online documentation in JDeveloper 10*g* with Oracle Application Extension.

Additional Oracle JDeveloper 10*g* helpsets that apply to Oracle Application Framework application development include:

- Oracle Application Framework ToolBox Tutorial
- Oracle Application Component Reference
- Getting Started with the Oracle Application Extension
- Getting Started with JDeveloper
- Developing Business Components

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the Oracle E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

1

Oracle iSetup Framework Interface Registration

Oracle iSetup Framework Interface Registration

This chapter explains how to register an Oracle iSetup Framework (BC4J) API through iSetup Interface Repository and create an Extract for the registered API. The API registration process is explained with an example using SYSADMIN as the user and the API "Currency". Please note that Currency is an Oracle iSetup framework (BC4J) API which is available as a part of Oracle E-Business Suite. You can find the class files for the Currency API under

```
$JAVA_TOP/oracle/apps/gl/ispeed/currency/server
```

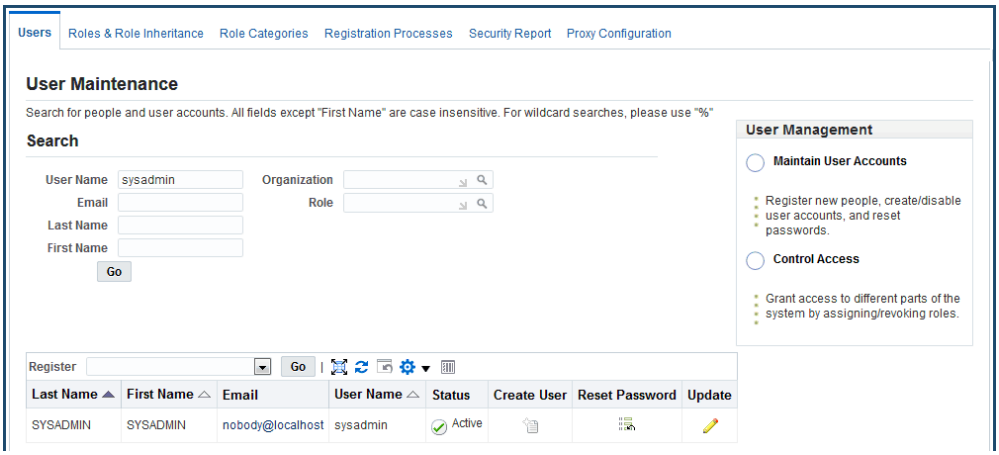
Security Setup for Registering the Oracle iSetup Framework (BC4J) API

Follow these instructions for the security setup of the API.

For more information on managing security, see:Oracle User Management, *Oracle E-Business Suite Security Guide*.

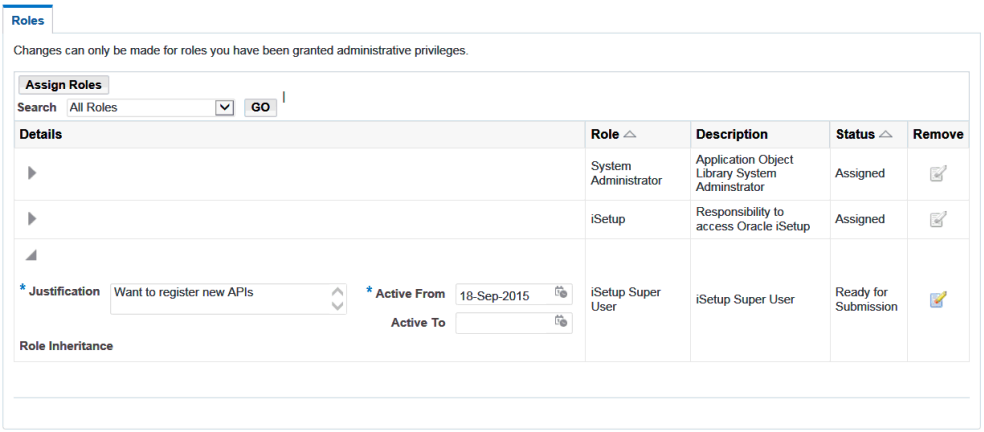
To assign the iSetup Super User Role to a User:

1. Log in to Oracle E-Business Suite as a system administrator with the User Management responsibility and the Functional Administrator responsibility.
2. Go to the User Management responsibility > Users.
3. Search for the desired username and click **Update**.



4. Assign the role to the user. Click on **Assign Roles**. In the LOV search window, search for iSetup Super User and select it.

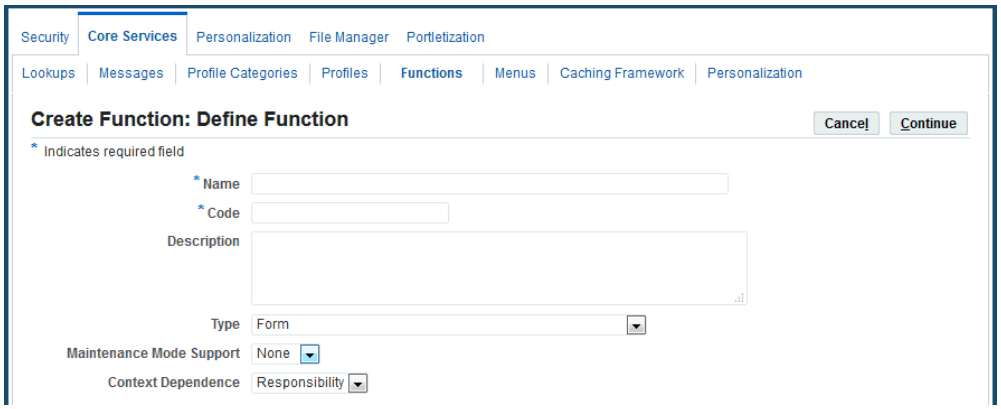
5. Provide a justification to add the role and click **Apply**. Return to the main menu.



To Create a Function:

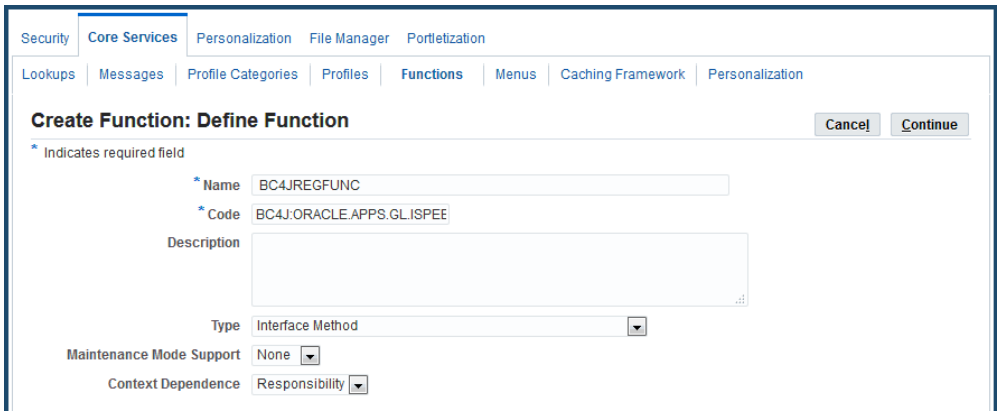
1. Navigate to Functional Administrator.

2. Navigate to Home > Core Services > Functions > Create Function.



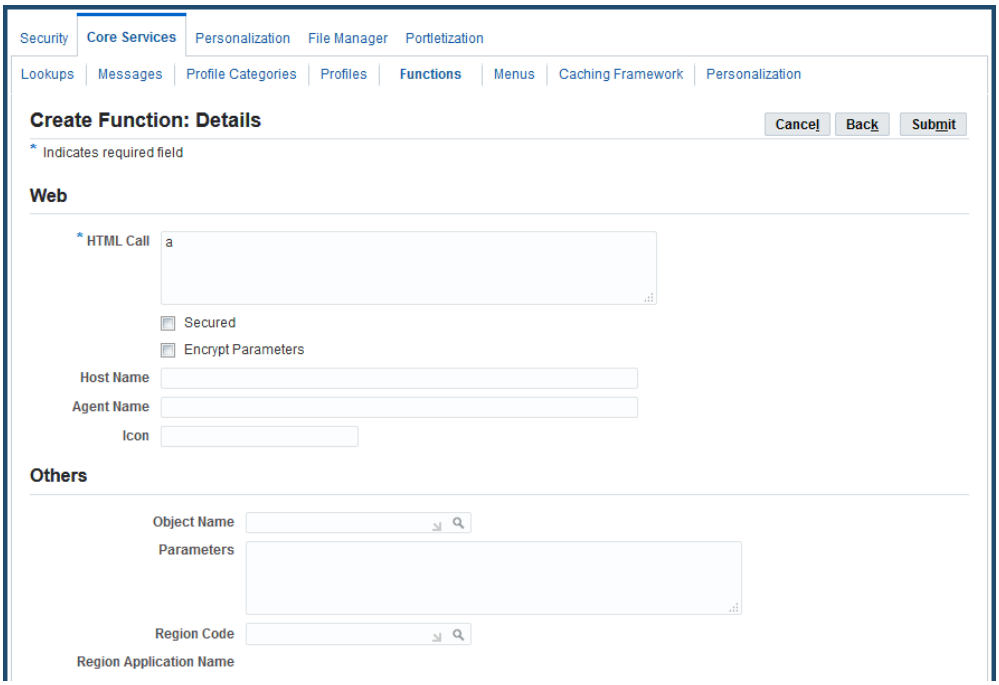
3. Enter the following details:

   - Name: BC4JREGFUNC (Name of your choice)
   - Code: **BC4J:oracle.apps.gl.ispeed.currency.server.currsetupam**. Prefix **BC4J:** with the Java class path to the Application Module that you have created. The code is not case sensitive; ultimately, it will be converted to uppercase by the application.
   - Type: Interface Method



4. Click **Continue**.

5. Add a dummy character in the HTML Call field.

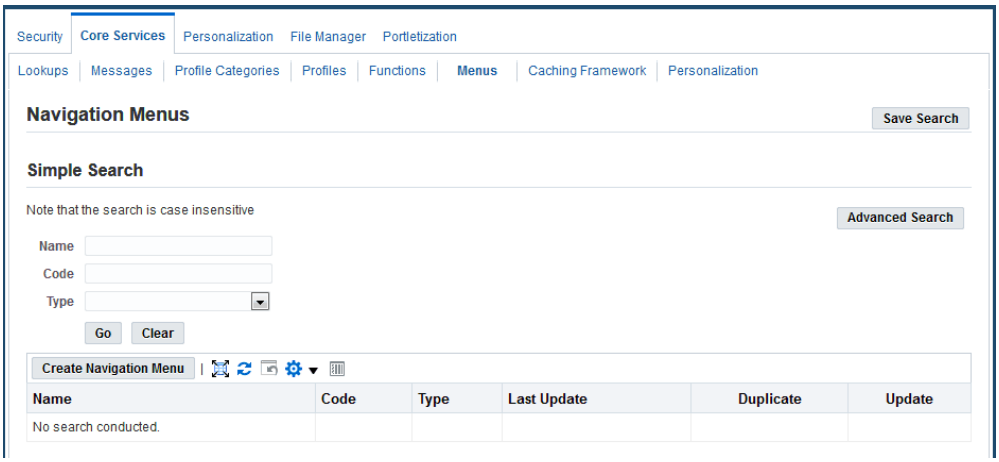


6. Click **Submit**.

   After creating the function, you can add it to a menu. You can directly proceed to that task by clicking on **Menu** in the subtab.

To Create a Menu:

1. Click on **Create Navigation Menu**.



2. Enter the following details.

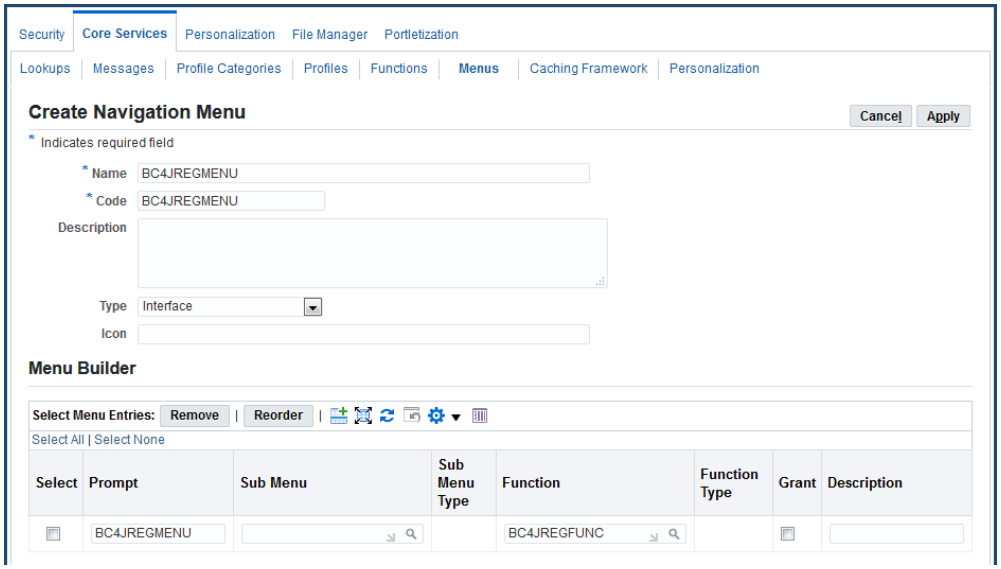
   - Name: BC4JREGMENU (Name of your choice)

- Code: BC4JREGMENU (Code of your choice)
- Type: Interface

Click **Add Another Row**. Add the following:

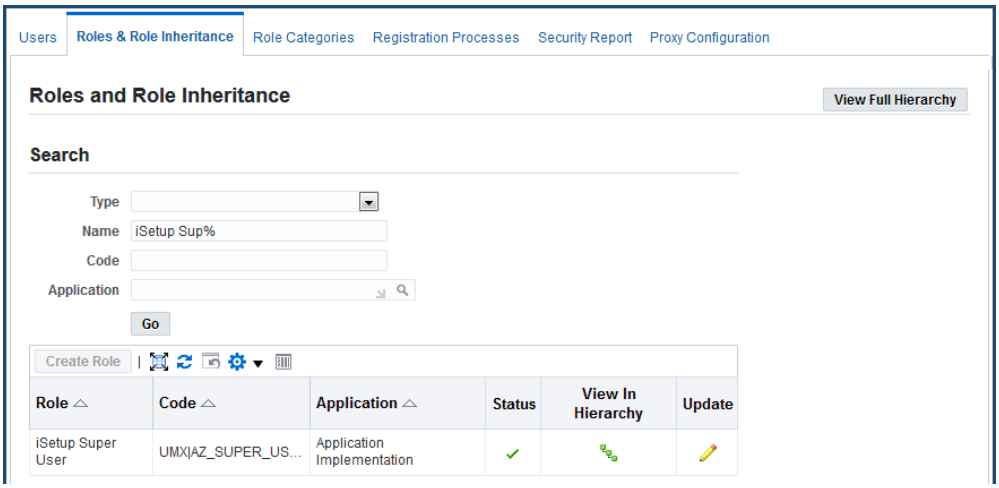
- Prompt: BC4JREGMENU
- Function: BC4JREGFUNC (Registered function)
- Grant: Deselect the box.

Click **Apply**.

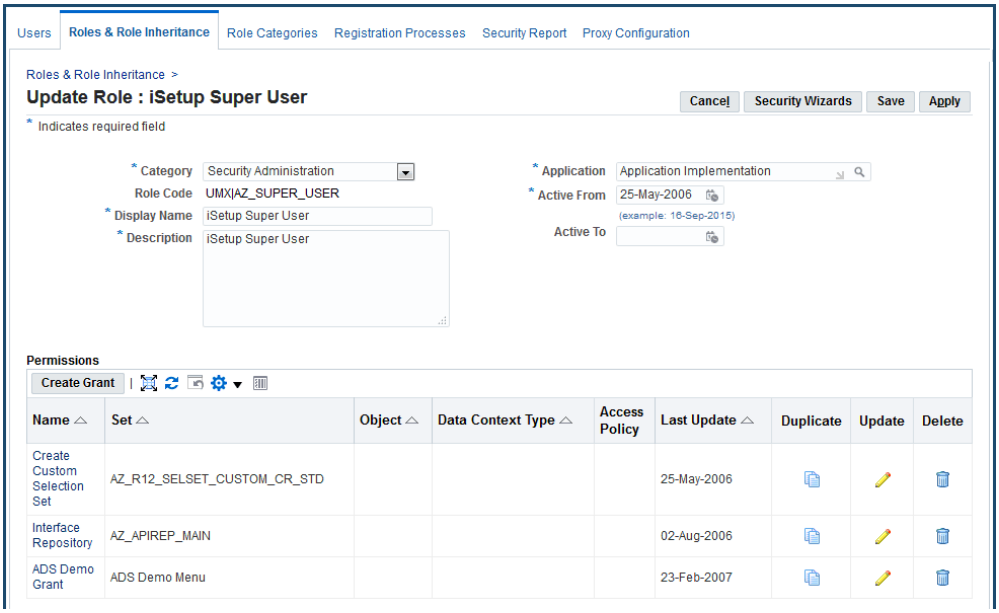


To Create a Grant:

1. Navigate to Home > User Management > Role & Role Inheritance.
2. Search for the iSetup Super User role.



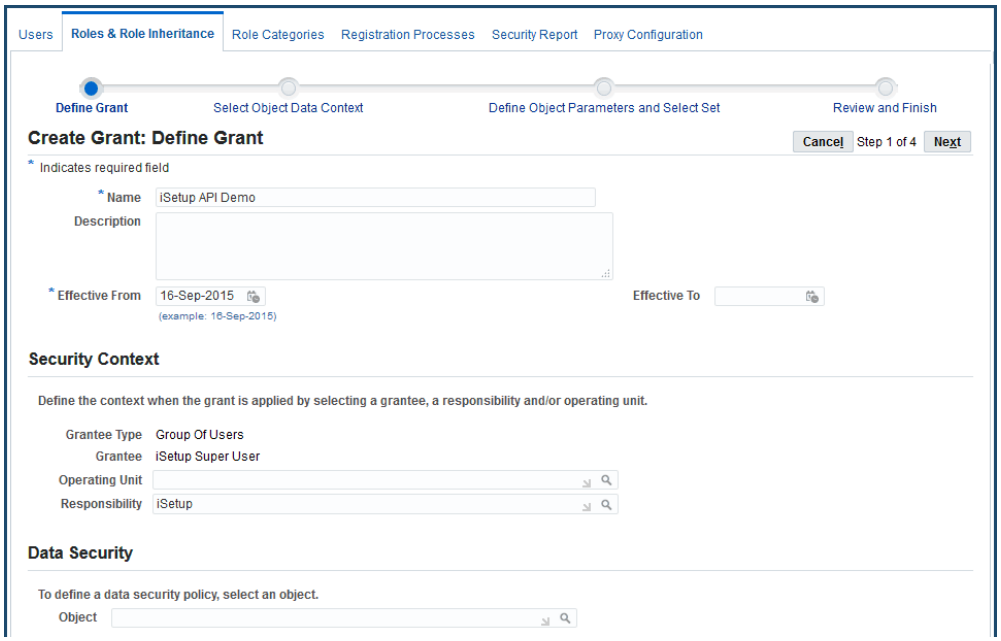
3. Click the **Update** icon.



4. Click **Create Grant**.

5. Enter the following:

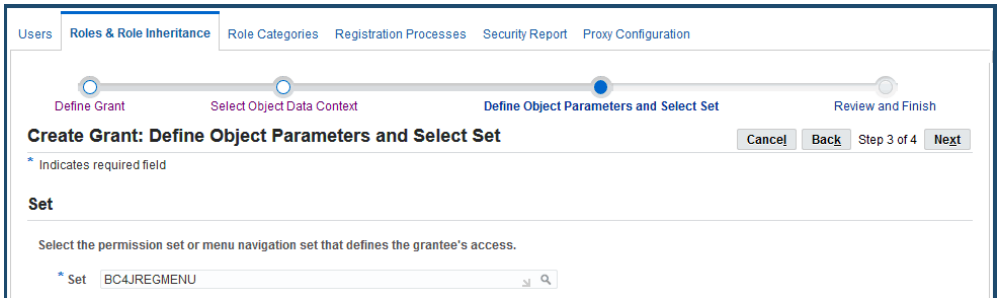
   - Name - iSetup API Demo
   - Responsibility - iSetup



6. Click **Next**.

7. Add the Menu name to the Set field.

   Set: BC4JREGMENU



8. Click **Next**.

9. Click **Finish**.

Registering the iSetup Framework (BC4J) API

To register the interface:

The following are descriptions of the fields used in registering an interface.

- Name - This field refers to the name of the Interface to be registered. This name has

to be unique to get registered.

- Description - The description refers to the description of the API to be created.
- Application - This field refers to the application which owns the interface being registered.
- Type - This field refers to the type of the interface to be created. This field would be read/display only in the Update flow. For example, the interface defined above has the type "iSetup Framework".
- Path - The path of the application module. For example, in the API defined above the path is:

  `oracle.apps.gl.ispeed.currency.server.CurrSetupAM`

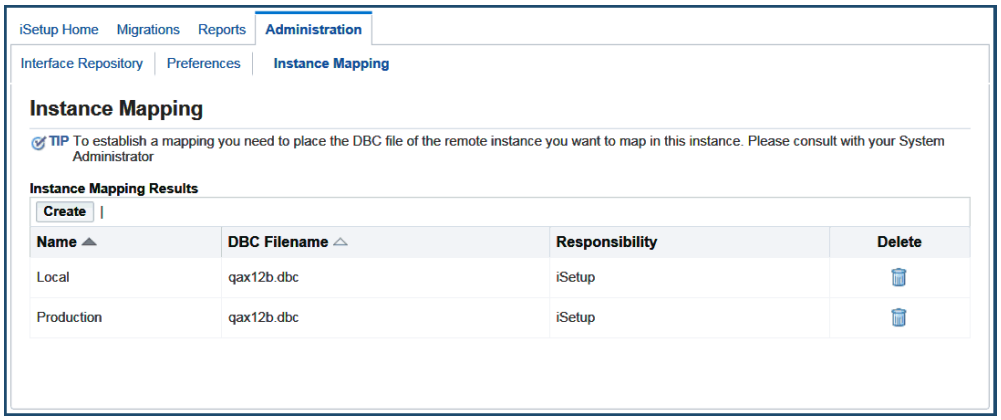
  'CurrSetupAM' should be physically present in the above-mentioned Java path.

Details:

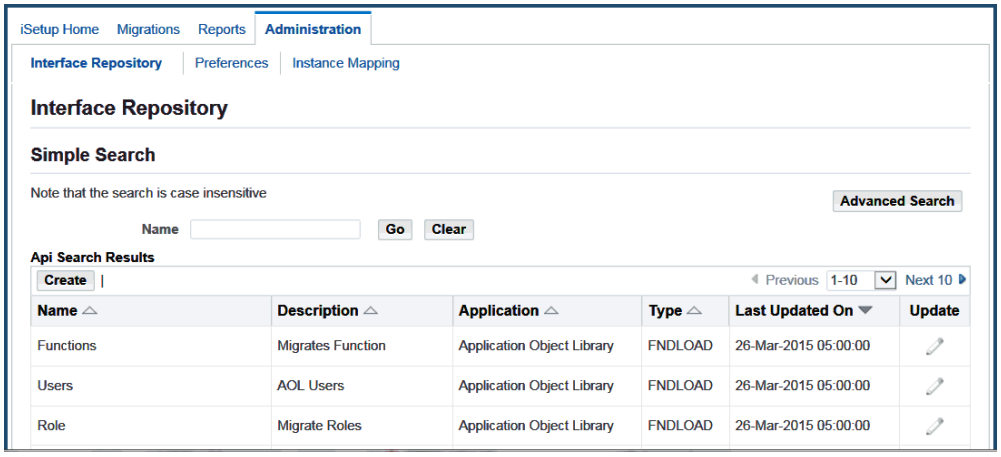
- Supports Filter - This flag indicates if iSetup could enable filtering support for the interface being registered. If this option is checked, then Oracle provides a filtering icon in front of this interface in the iSetup UI shipped with Oracle E-Business Suite.
- Supports Transform - This flag indicates whether the API supports transformation on any attributes. This flag does not need to be set for a Reportable API.
- Commit If Warning - This flag indicates whether the transaction could be committed in the case of a warning while validating the data at the time of loading using the interface. This flag does not need to be set for a Reportable API.
- Supports Update - This flag indicates whether the API supports updates to preexisting records. That is, at the time of loading the extracted data into the target instance, if the interface finds any record already existing in the instance, then based on the business logic it should be able to update the record. This flag does not need to be set for a Reportable API.
- Override Update - This flag would be functional only if the "Support Update" flag is checked. Support Update and Override Update flags go hand in hand. This flag indicates if user has a choice to make a call to override the existing record in the target instance. This flag does not need to be set for a Reportable API.

The steps to register an interface are:

1. Navigate to Home > iSetup > Administration.
2. Click **Administration**.



3. Navigate to Interface Repository.



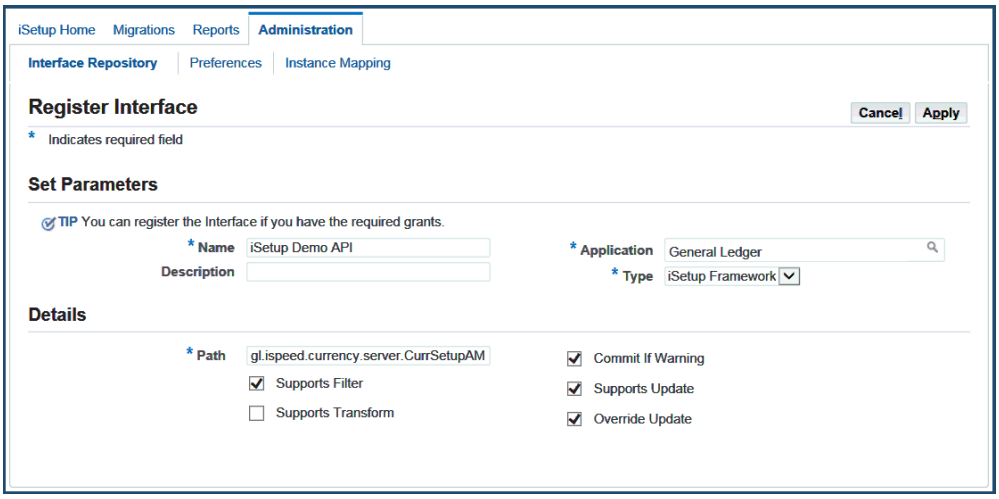
4. Click on **Create** and fill in the following details:

   - Name: iSetup Demo API
   - Application: General Ledger
   - Type: iSetup Framework
   - Path: oracle.apps.gl.ispeed.currency.server.CurrSetupAM

   Click Supports Filter, Commit If Warning, Supports Update, Override Update (Depending on what the API can do).

   > **Note:** The actual file 'CurrSetupAM' should be physically present under $JAVA_TOP in path the oracle.apps.gl.ispeed.currency.server in the instance where the API is registered. The reason for this requirement is that when the API

is registered, the system does not validate that the given file physically exists in the path; however, during extraction the system will try to instantiate the file ('CurrSetupAM' in this case) and if the file is not found, the system will return an error.



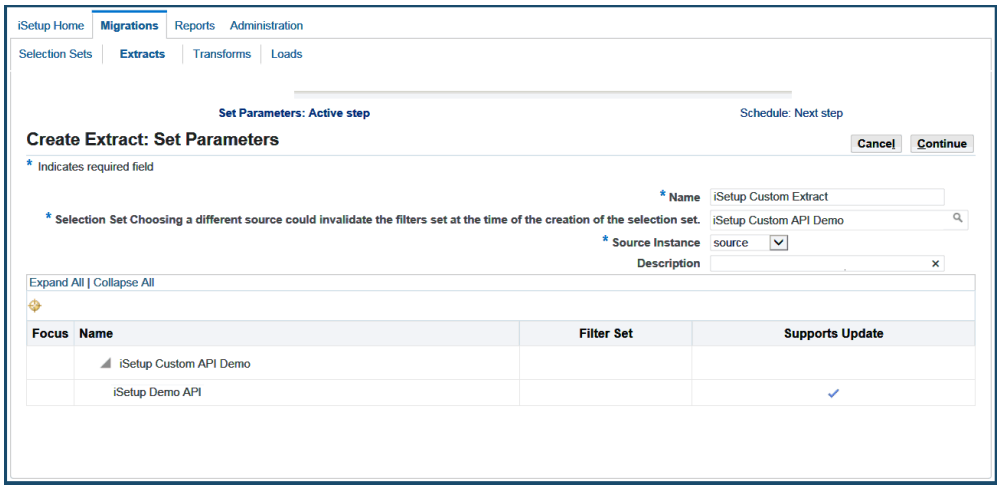
5. Click **Apply**.

To Create a Custom Selection Set:

1. Navigate to Migrations > Selection Set.
2. Click on **Create Custom** and enter the following details:
   - Name - iSetup Custom API Demo.
   - Source Instance - Choose 'source'.
   - LOV Field Name - iSetup Demo API.
3. Click on **Apply**.

To Create an Extract:

1. Navigate to iSetup > Migrations > Selection Set. Search for iSetup Custom API Demo, select it, and click on **Extract**.

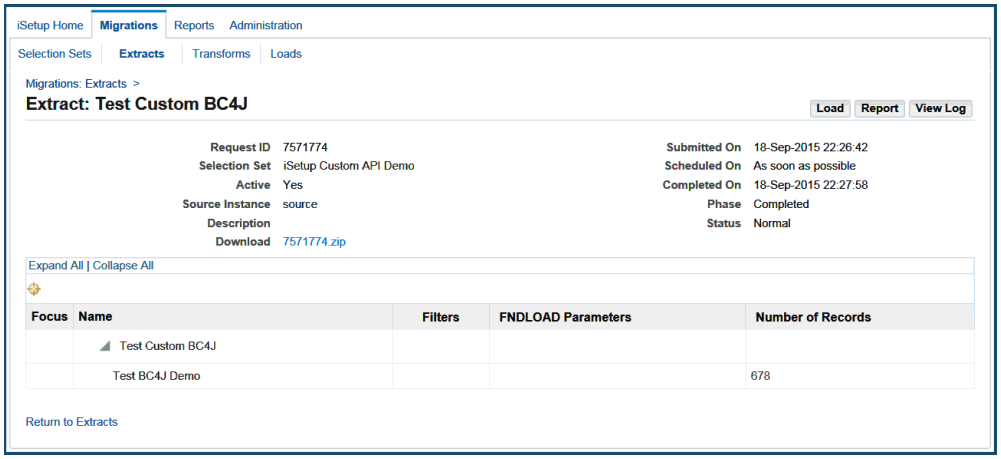


2. Click on **Continue** and **Finish**.

3. Search for iSetup Custom Extract and click on the **iSetup Custom Extract** link.

4. Wait for the Phase to be marked as Completed. Click on the **Refresh** button to confirm that it is Completed.

> **Note:** You need to follow the same steps and register the API on the Central Instance and the Target Instance.



2

Oracle iSetup Reportable API

Oracle iSetup Reportable API

This chapter explains how to write a iSetup Reportable API for Oracle E-Business Suite.

Typographical Conventions

This chapter uses the following typographic conventions to distinguish important elements from the body of the chapter.

Command and Example Syntax

Syntax:

OAPageContext.getParameter("<parameterName>");

Example:

```
/*
** Creates a SupplierEOImpl entity object and a corresponding row in the

SuppliersVO.
*/
public void createSupplier()
{
OAViewObject vo = getSuppliersVO();
vo.insertRow(vo.createRow());
}
```

Command and example syntax adhere to the conventions in the following table:

Convention	Explanation
plain monotype	Used for code fragments and examples.

Convention	Explanation
< Italic monotype in angle brackets >	Indicates developer-supplied values.
...	An ellipsis indicates that the actual code extends beyond the example shown.
/* */	A C-style comment.
/** */	A Javadoc comment.
//	A Java comment.
Indentation	The Oracle standard indentation helps to show code structure.

Setting Up JDeveloper

Refer to My Oracle Support Knowledge Document 416708.1 to find out the patch number for the patch with the appropriate version of JDeveloper for the Oracle E-Business Suite that you need. Download this patch for JDeveloper.

> **Note:** You can build, test, and deploy Oracle iSetup Framework interfaces on Oracle E-Business Suite Release 12.0.6 and later. These instructions use Release 12.0.6 as an example.

Download the Tutorial attachment to My Oracle Support Knowledge Document 843397.1 to get the Oracle iSetup Framework Library and sample code used in this document.

To Set Up JDeveloper:

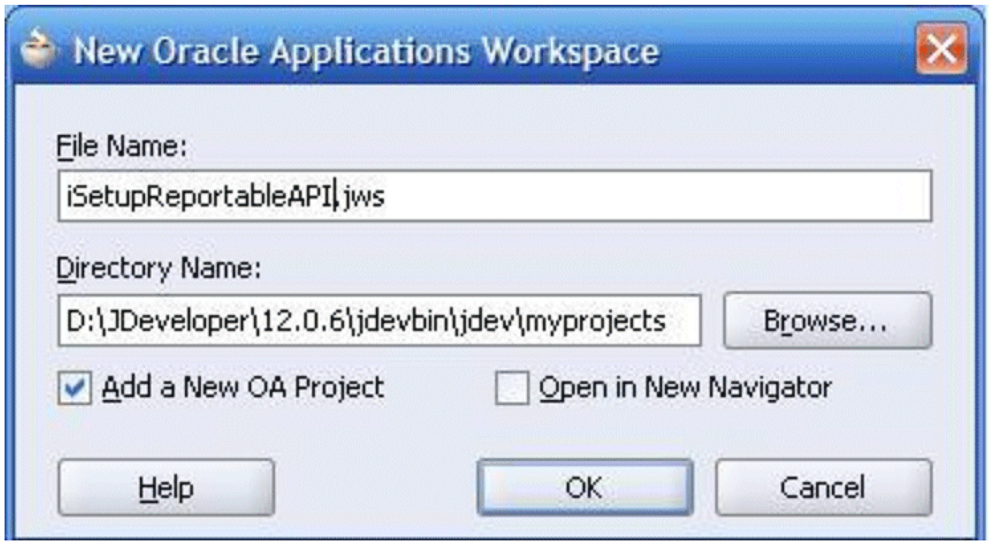
1. Unzip the JDeveloper patch to the folder JDeveloper_12.0.6.
2. You can add iSetup framework tutorial shipped with patch to your developer. Alternatively, you can go through this chapter to create BC4J objects on your own.
3. Unzip the Tutorial.zip. You should have the following contents:
   - iSetupFwk.jar - Oracle iSetup Framework Library.

- TutorialCode - Sample code used in this document.

4. Navigate through the folder JDeveloper_12.0.6/jdevbin/ and click on jdeveloper.exe

5. To open the example code, select File > Open in JDeveloper and navigate to the location where TutorialCode is present. Select **iSetupReportableAPI.jws** in the TutorialCode folder and click **Open**. To compile the above code, add the iSetup Framework Library as described in Steps 10 and 11, below. To create your own BC4J Objects, please follow the process described below.

6. Click on Applications Navigator tab > Right-click on Applications > New OA Workspace > Enter the workspace file name and directory name. Ensure that the "Add a new OA Project" box is checked.

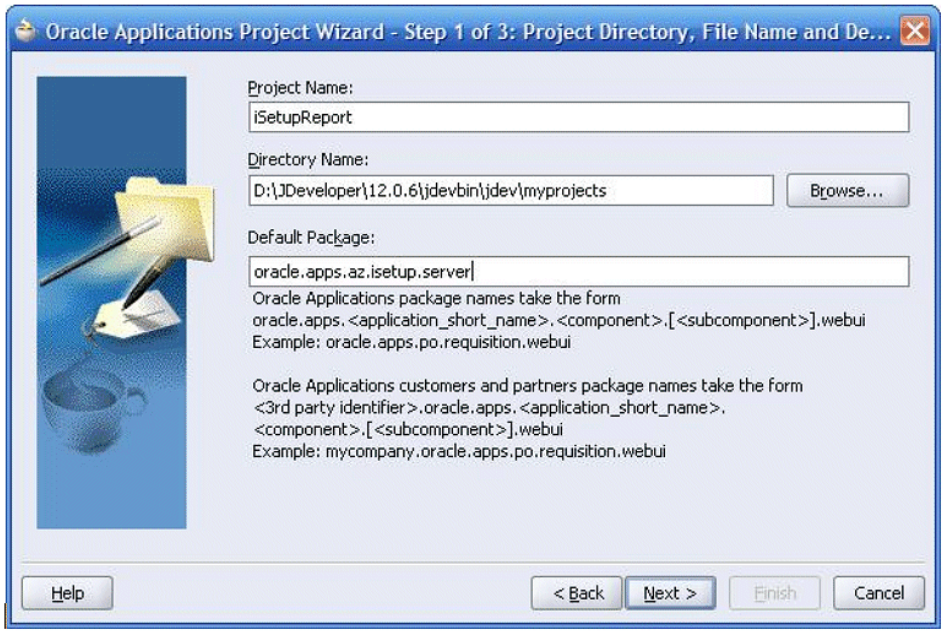


Click **OK**.

The window "Oracle Applications Project Wizard" opens.

7. Complete the following steps in the Oracle Applications Project Wizard window.

- Step 1 of 3: Click on Next. Enter Project Name, Directory Name, and Default Package Name (for example, 'oracle.apps.az.isetup.server').

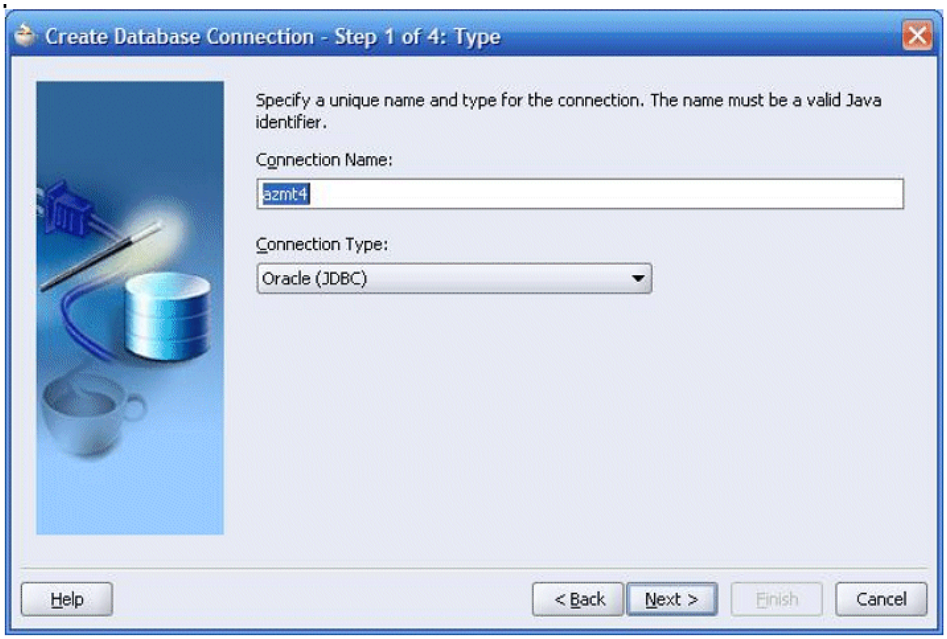


- Click **Next**.

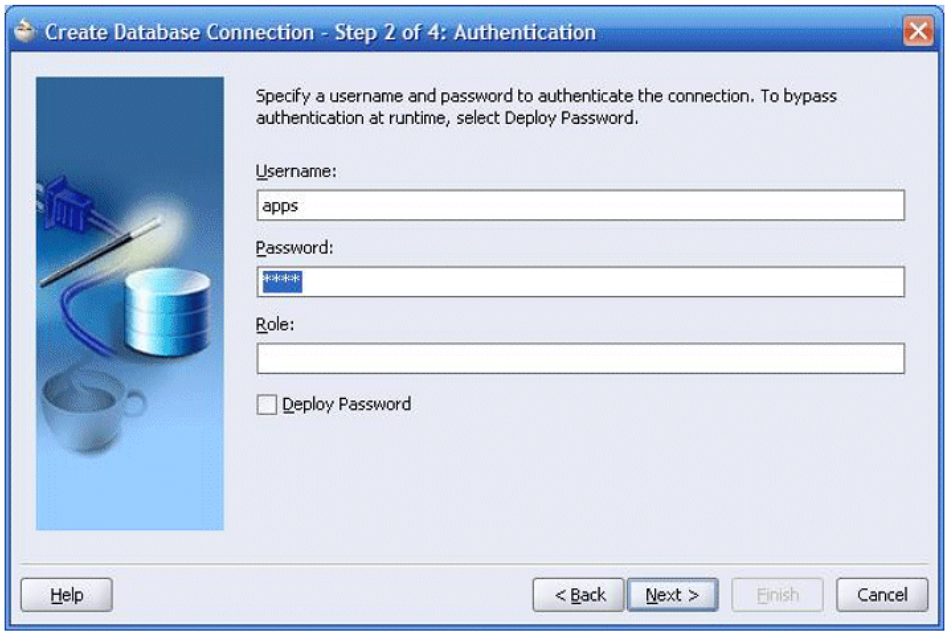
- Step 2 of 3: Check the box "Use Repository for Design Time". If you have already defined the database connection select it from the list or else click on **New**. The window "Create Database Connection Wizard" opens.

8. Click **Next**. Perform the steps required to create a database connection.

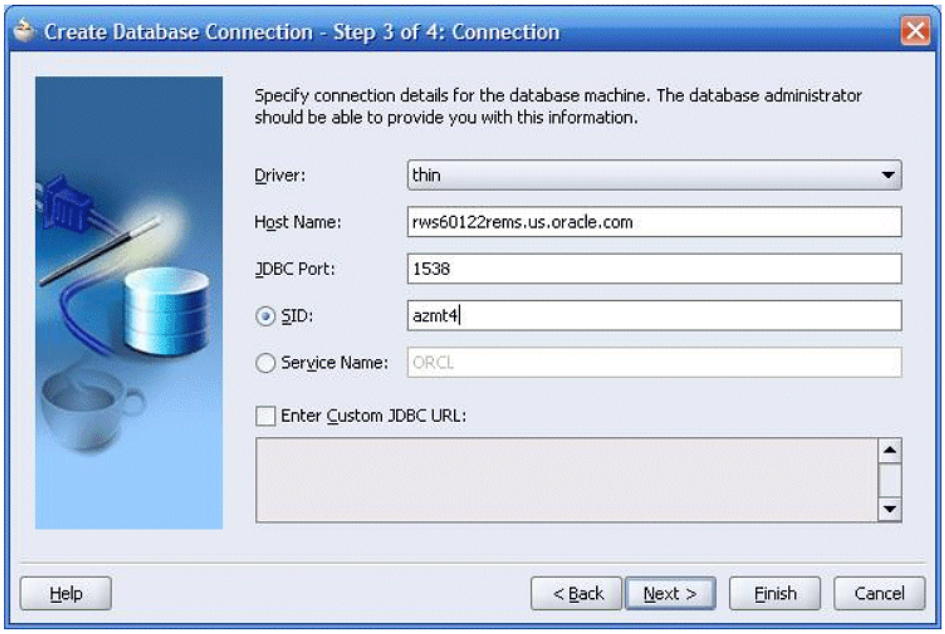
   - Step 1 of 4: Enter Connection Name and Select Connection type as Oracle (JDBC). Click **Next**.



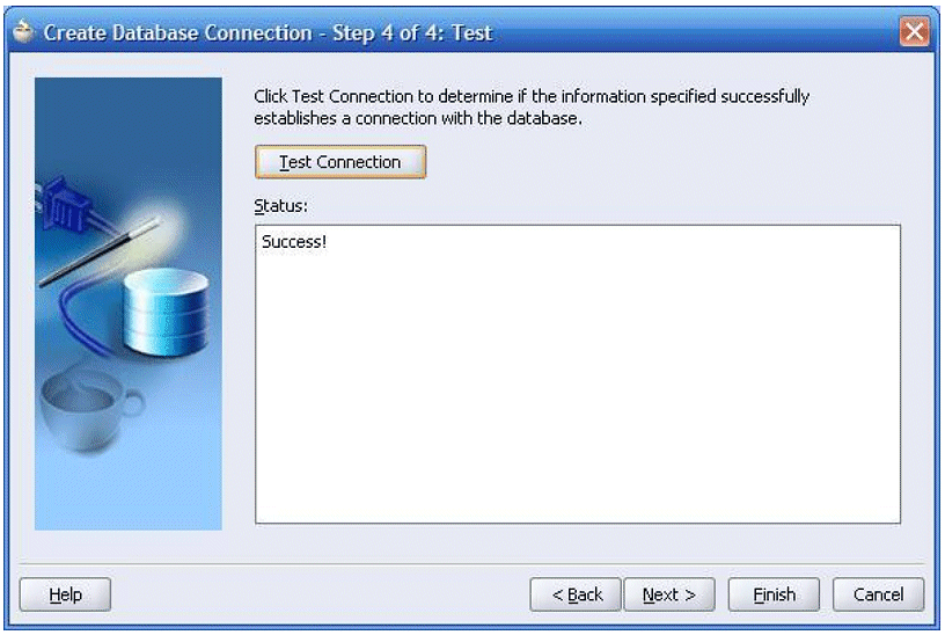
- Step 2 of 4: Enter Username and Password to authenticate the connection. Click **Next**.



- Step 3 of 4: Specify connection details of the database machine. Click **Next**.



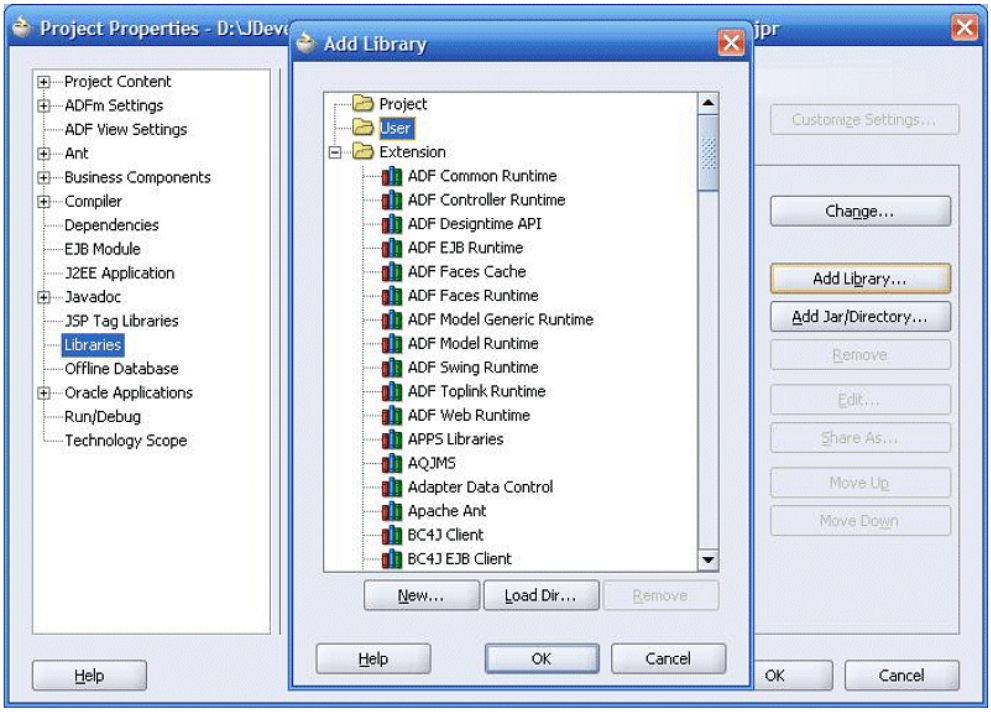
- Step 4 of 4: Click on **Test Connection** to ensure that all the details you supplied above are correct.



Click **Finish** to return to the Oracle Applications Project Wizard.

9. Now you are done creating the new OA Project. Click **Finish**.

10. In the Applications Navigator right-click on the project and navigate to Project Properties > Libraries > Add Library.

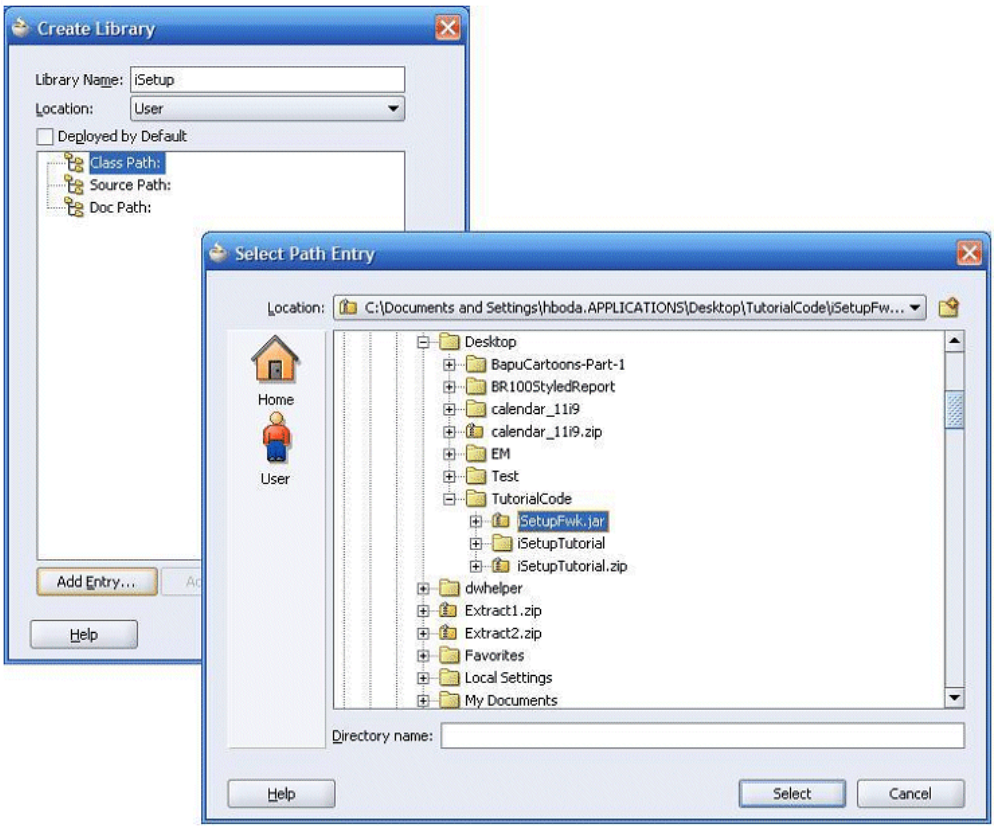


11. Add a new library:

    - Click on **New**.

    - Enter Library Name using the navigation path iSetup > Select Class Path and click on **Add Entry**.

    - Browse to the directory where the iSetup Tutorial files have been unzipped (Refer to Step 3). Select **iSetFwk.jar**. Click **OK** in Create Library Dialog Pane.

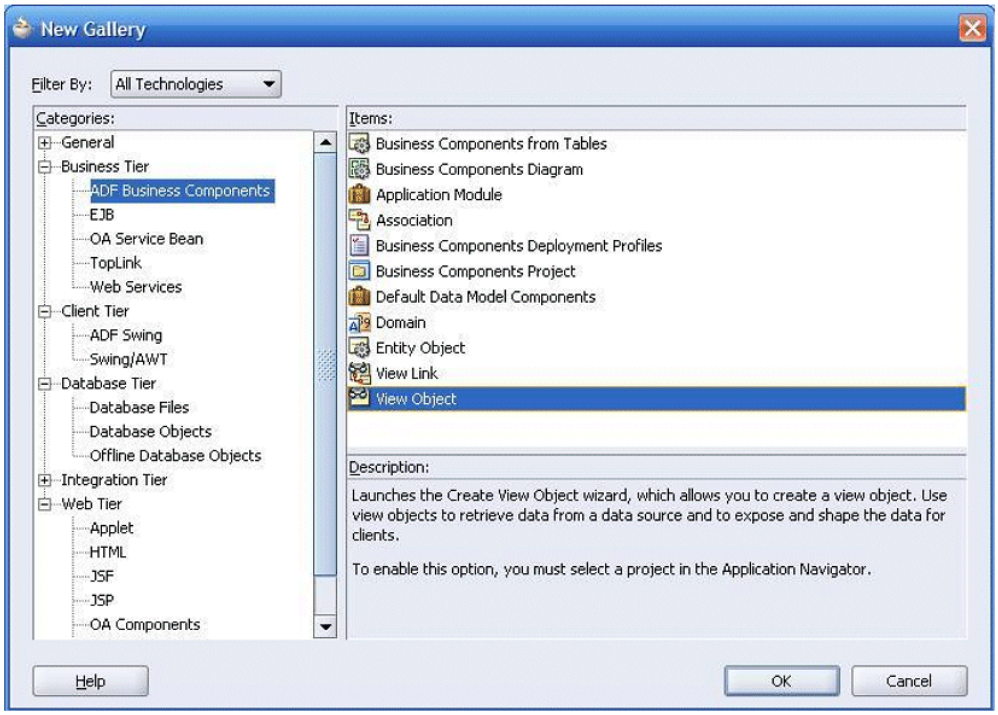


12. Click **OK** in Add Library Dialog Pane.

13. Click **OK** in Project Properties Dialog Pane.

To Create the iSetup Framework Reportable Interface:

1. Create View Object: Right-click on the Project and click on New > Select ADF Business Components: View Object.



2. Click on **OK**. The "Create View Object Wizard" window opens.

3. Click **Next**.

4. Perform the following in the Create View Object screens:

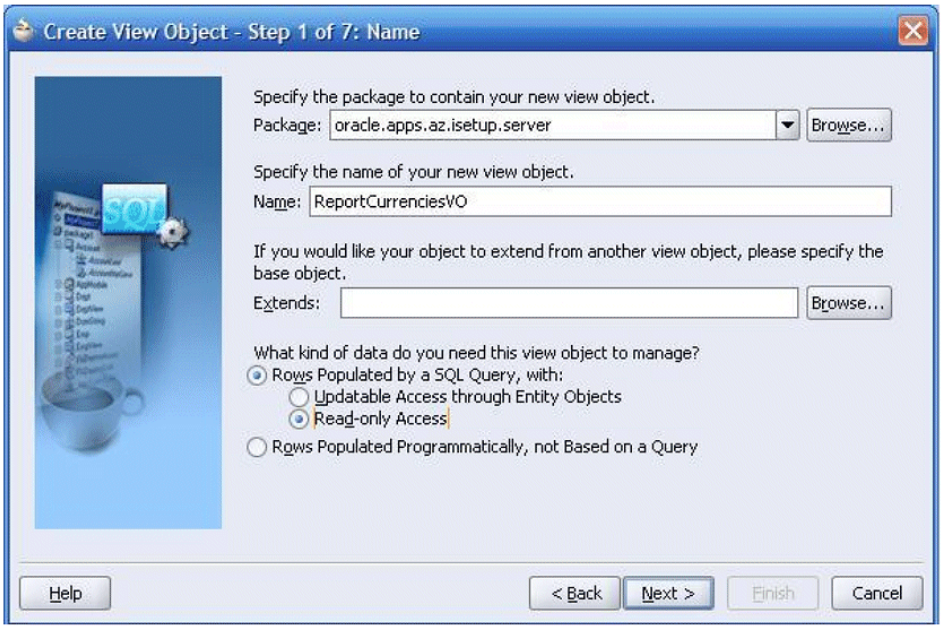
   - Step 1 of 7: Specify the package and name of the View Object.

     Select rows populated with SQL Query: with Read-only access radio button.

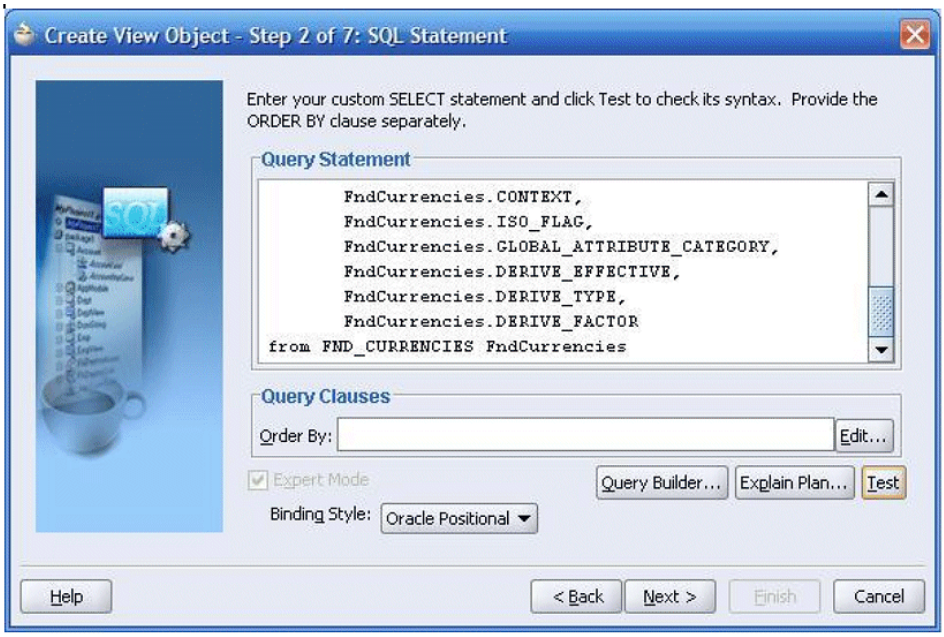
     Click **Next**.

     This tutorial is explained using Oracle iSetup, with the application short name 'az' ('AZ'). You can create under your custom PRODUCT_TOP. You can replace 'az' with your own product short code (application short name).

     For example, the Package Name can be given as oracle.apps.az.isetup.server and the View Object name as ReportCurrenciesVO.



- Step 2 of 7: Enter the SQL query (The query for the desired records that needs to come in the report. In this example, we used the FND_CURRENCIES table) in the Query Statement text box and select the binding style as Oracle Positional. Click **Next**.

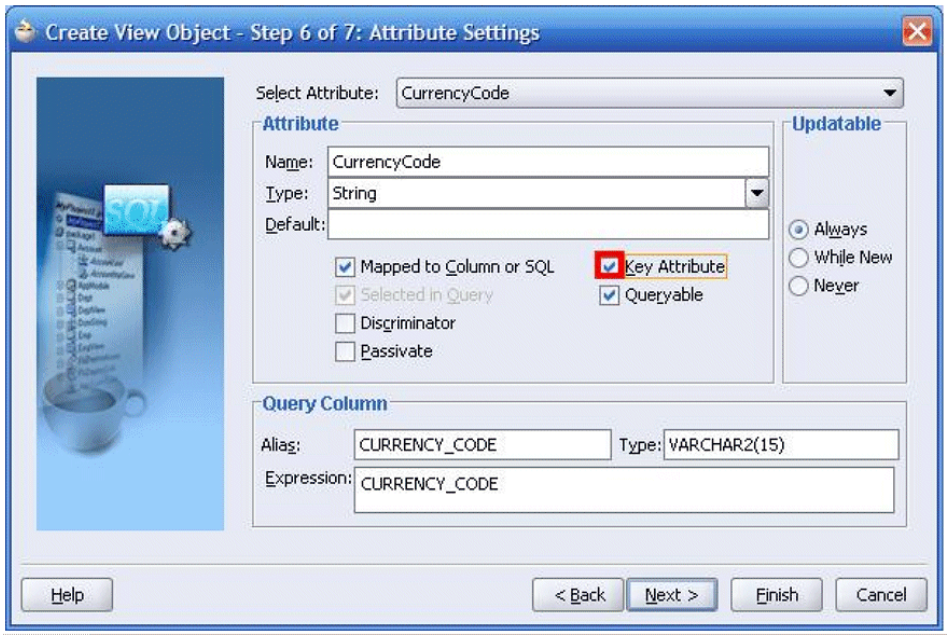


Note: An example query is

```
SELECT
 FndCurrencies.CURRENCY_CODE,
 FndCurrencies.ENABLED_FLAG,
 FndCurrencies.CURRENCY_FLAG,
 FndCurrencies.DESCRIPTION,
 FndCurrencies.ISSUING_TERRITORY_CODE,
 FndCurrencies.PRECISION,
 FndCurrencies.EXTENDED_PRECISION,
 FndCurrencies.SYMBOL,
 FndCurrencies.START_DATE_ACTIVE,
 FndCurrencies.END_DATE_ACTIVE,
 FndCurrencies.MINIMUM_ACCOUNTABLE_UNIT,
 FndCurrencies.CONTEXT,
 FndCurrencies.ISO_FLAG,
 FndCurrencies.GLOBAL_ATTRIBUTE_CATEGORY,
 FndCurrencies.DERIVE_EFFECTIVE,
 FndCurrencies.DERIVE_TYPE,
 FndCurrencies.DERIVE_FACTOR
FROM FND_CURRENCIES FndCurrencies
```

- Click on **Next**, accepting the defaults, until you reach step 6 of 7: Attribute Settings.

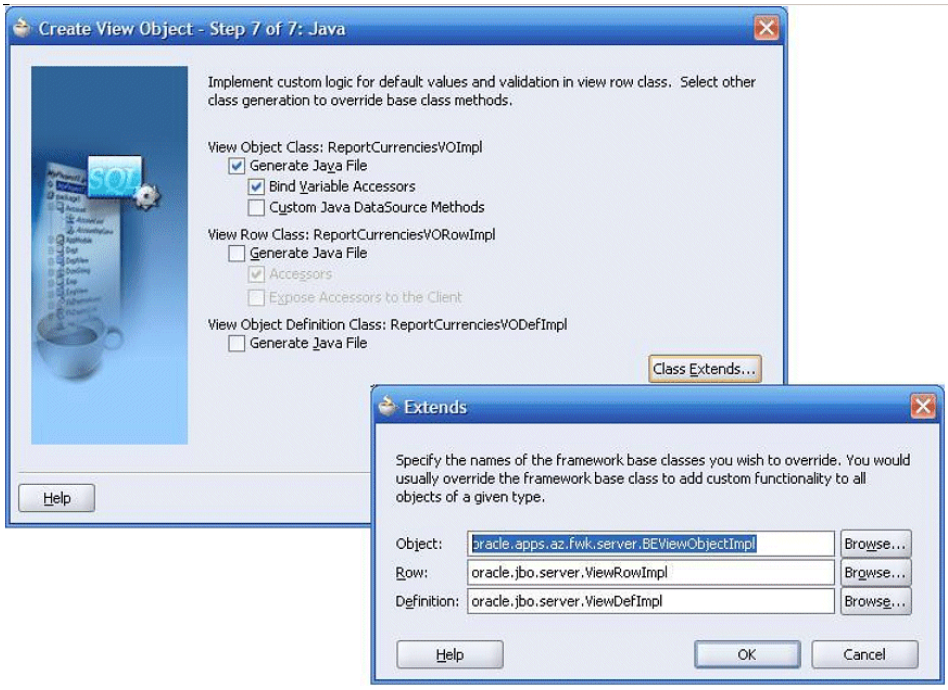
- Step 6 of 7: Now mark the unique key attributes (Unique keys are the developer keys of your API. Unique Keys should not contain any sequence IDs. Based on unique key columns, you can uniquely identify a record. In this example, the CurrencyCode view object attribute uniquely identifies a record.



- Step 7 of 7: Select Generate Java File for View Object Class: ReportCurrenciesVOImpl.

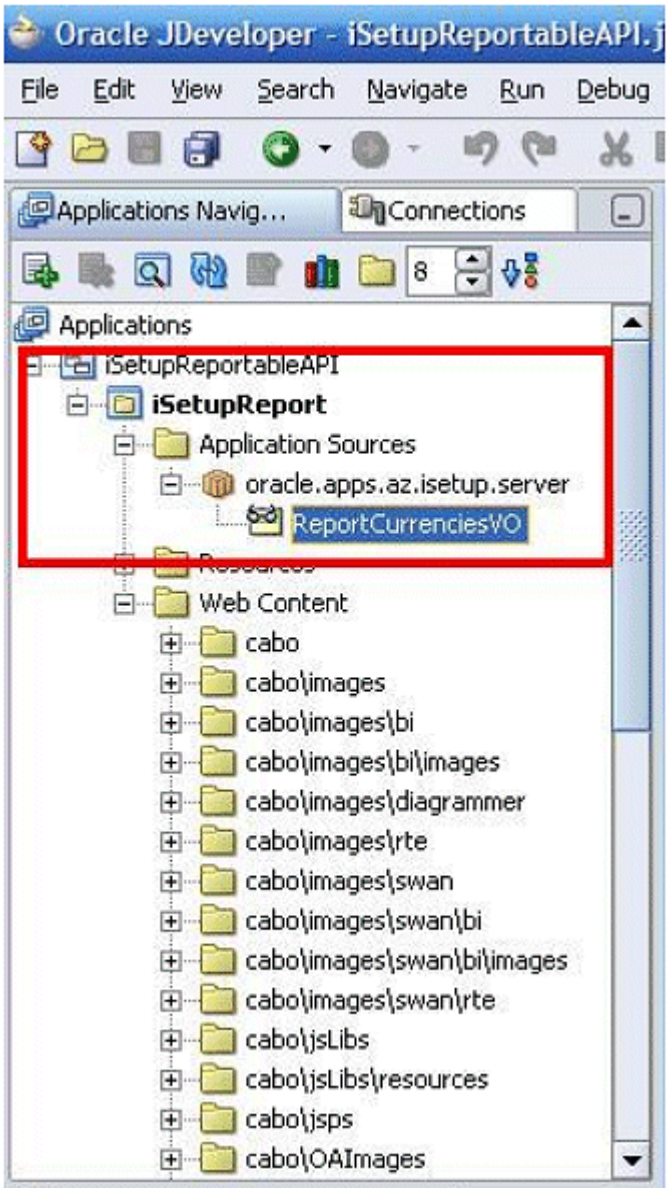
  Click on the **Class Extends** button. In the Against Object box, you need to override the base class as 'oracle.apps.az.fwk.server.BEViewObjectImpl'.

  Click **OK** on the Extends dialog pane and click **Finish** in Create View Object wizard.

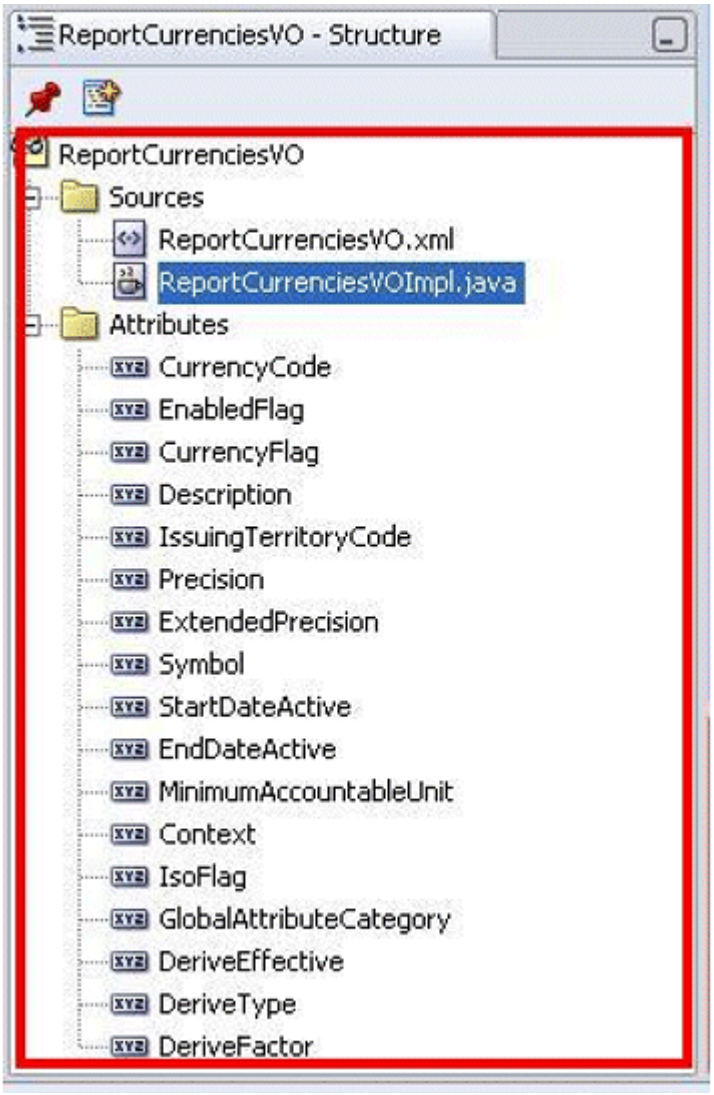


Note that the View Object is created with following two files:

- ReportCurrenciesVO.xml



- ReportCurrenciesVOImpl.java



5. Filtering attributes need to be marked if the iSetup Reportable API has to support filtering records. APIs are responsible for determining which filtering parameters are allowed and to which view object attributes that these filtering parameters map. In order to achieve these goals, the APIs need to register the filtering parameters by marking view object attributes as filtering parameters as shown below:

   For the attributes that need to be filtered on, the APIs need to add the following three properties

   - AZ_FILTER_NAME: a unique value within the view object. Make sure it's all-uppercase and has no spaces. This is a mandatory parameter if you wish to set filter on an attribute.

   - AZ_ATT_DISPLAY_MSG: The Oracle Application Object Library (FND)

message name.

- AZ_ATT_DISPLAY_APP: The application short name that corresponds to the FND message name.

Optional properties are as follows:

Properties AZ_ATT_DISPLAY_MSG and AZ_ATT_DISPLAY_APP are used to show the label of the filtering parameter in the iSetup Migration UI pages. These properties are optional. If you do not set the values for these properties, then the VO attribute name would be used as the display name.

To set the above properties you need to follow following steps.

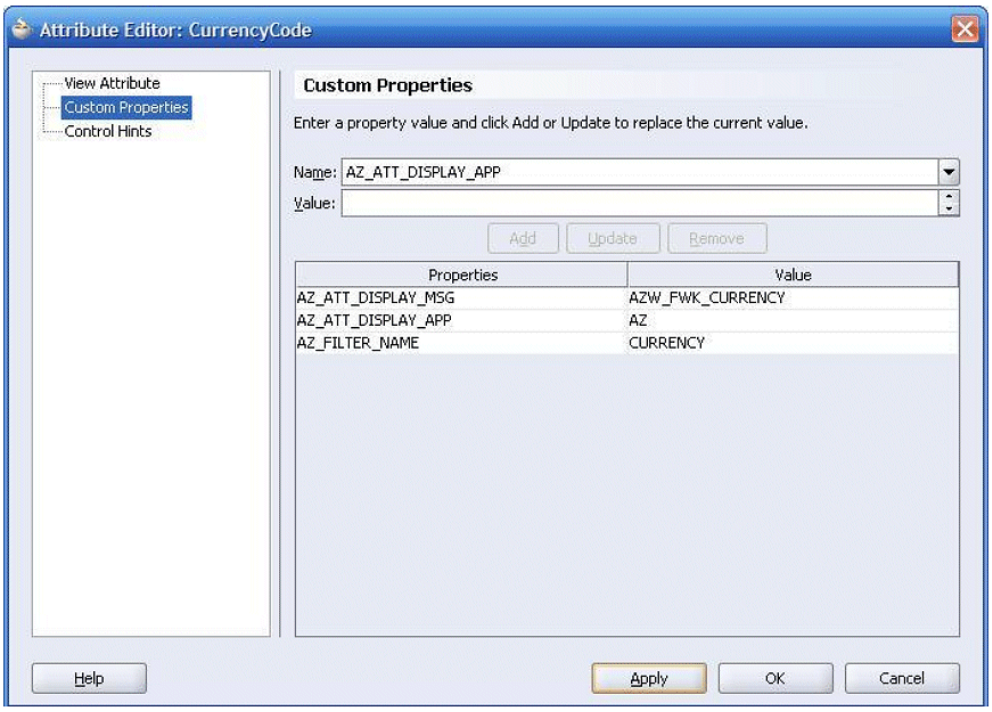
In this example, attribute CurrencyCode of ReportCurrenciesVO is the filtering parameter.

1. Select ReportCurrenciesVO in Applications Navigator of JDeveloper. In the Structure Pane, select and right-click on the CurrencyCode view object attribute and select 'Edit CurrencyCode'. Then select 'Custom Properties' in Attribute Editor wizard. For Name enter: AZ_FILTER_NAME and for Value enter: CURRENCY. Click on **Add** and **Apply**.

2. Repeat the above procedure for the properties (Optional): AZ_ATT_DISPLAY_MSG and AZ_ATT_DISPLAY_APP. In this example the values are given as follows:

   - AZ_FILTER_NAME: CURRENCY
   - AZ_ATT_DISPLAY_MSG: AZW_FWK_CURRENCY
   - AZ_ATT_DISPLAY_APP: AZ

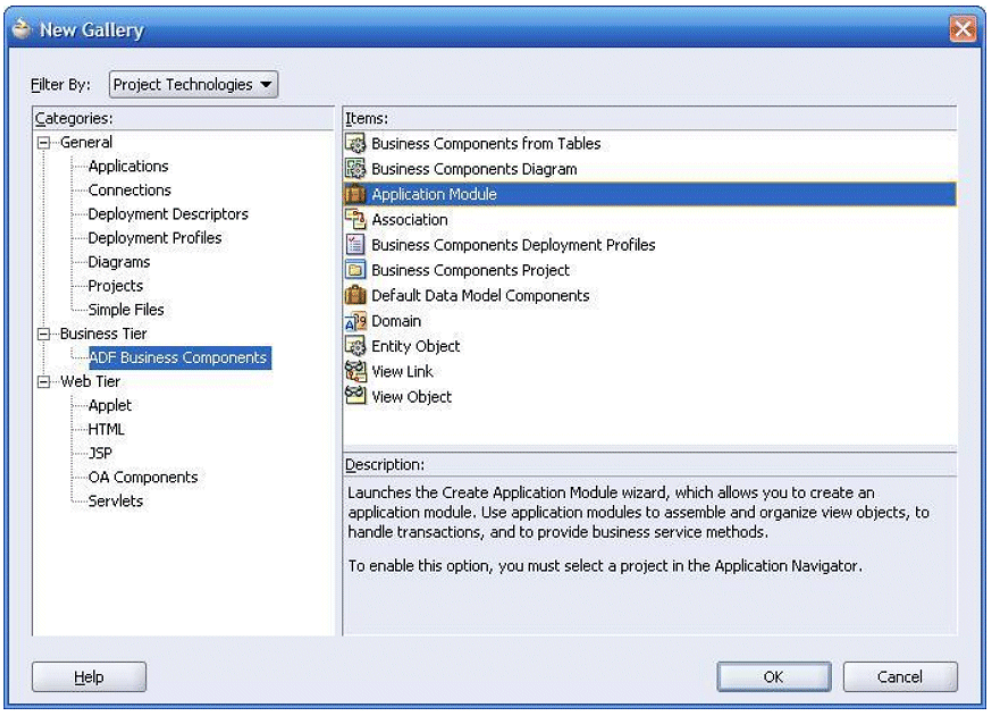
3. After entering all the properties for filtering parameters, click **OK**.



To Create an Application Module:

Perform the following steps to create an application module.

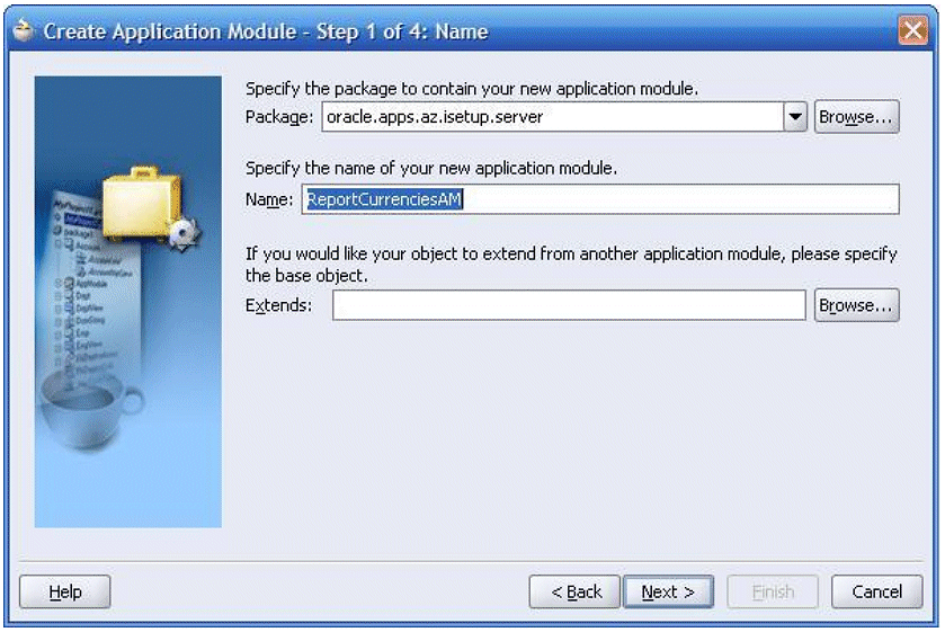
1. Right-click on the project and click on **New**. Select ADF Business Components: Application Module.



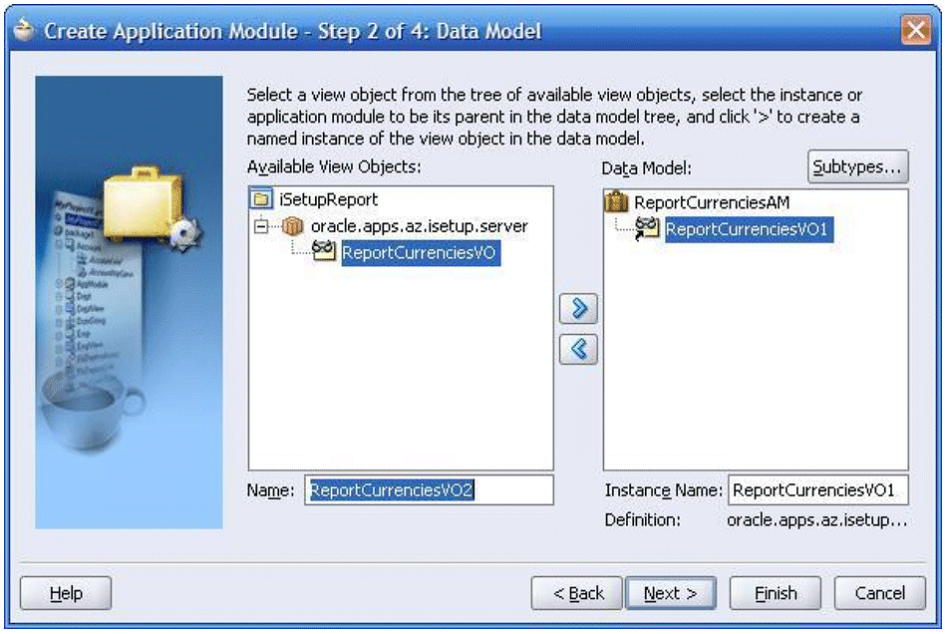
2. Click **OK**. The "Create Application Module" wizard opens. Click **Next**.

3. Perform the steps in the Create Application Module window.

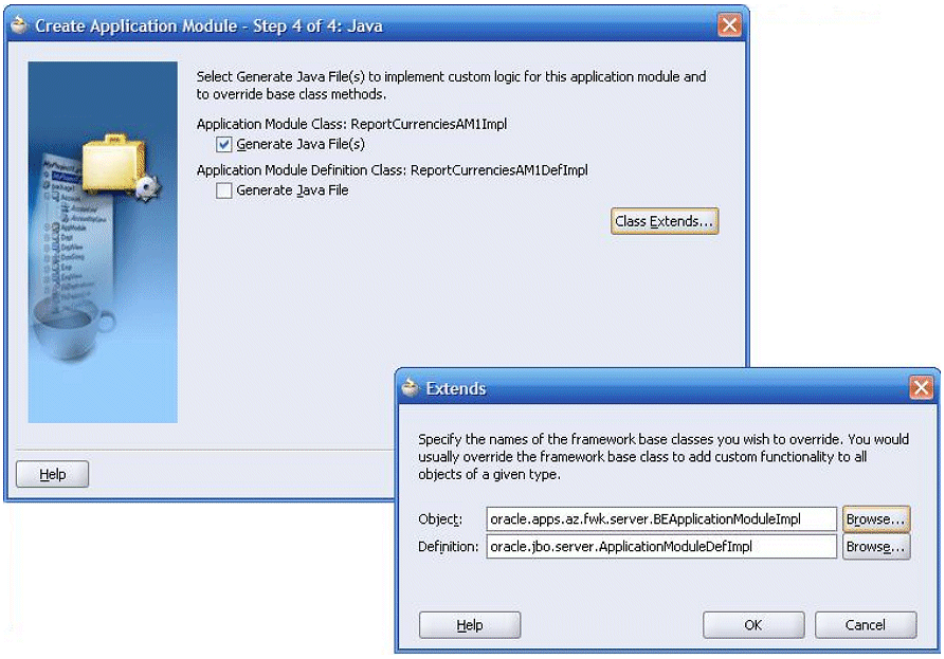
   - Step 1 of 4: Specify the package and name of the Application Module. Here the package name is given as 'oracle.apps.az.isetup.server' and the View Object name is given as 'ReportCurrenciesAM'.



- Step 2 of 4: Select ReportCurrenciesVO in the Available View Objects and add it to the data model. Click on **Next**.



- Click on **Next** until you reach step 4 of 4: Java.

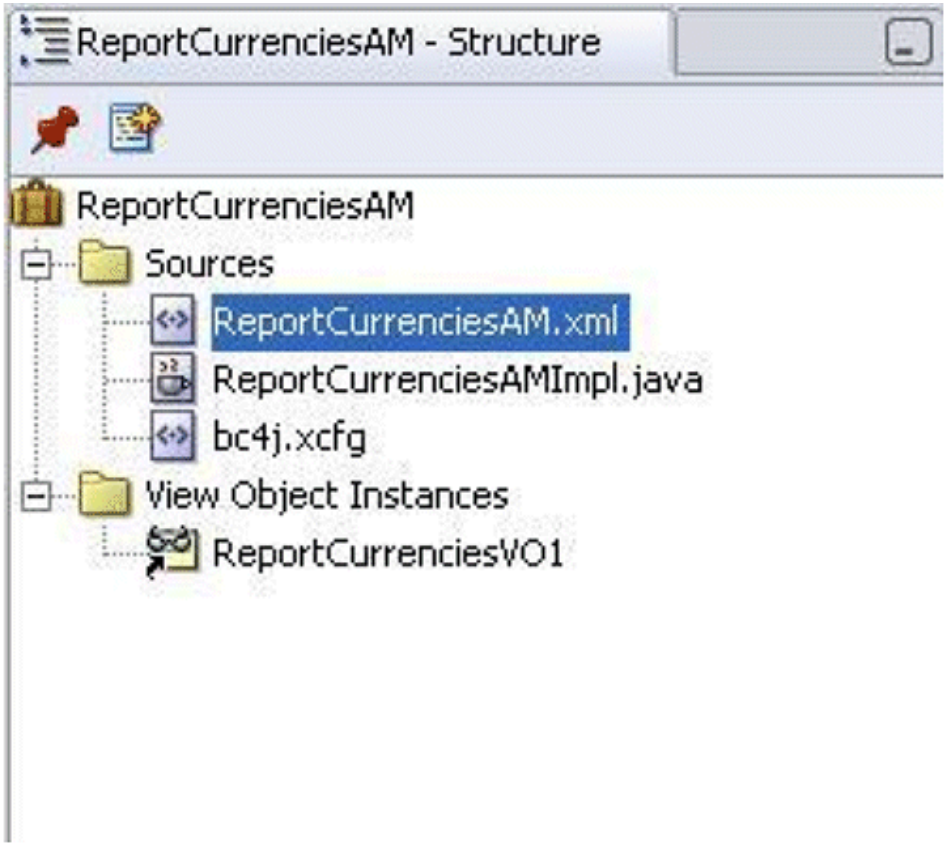


- Select Application Module Class: ReportCurrenciesAMImpl > Generate Java File(s). Click on the **Class Extends** button. In the Against Object box you need to override the base class as 'oracle.apps.az.fwk.server.BEApplicationModuleImpl'. Click **OK** on the Extends dialog pane and click **Finish** in the Create Application Module wizard.

- Note that the Application Module is created with following two files:

  - ReportCurrenciesAM.xml

  - ReportCurrenciesAMImpl.java



- Now you need to add exportable view object to the application module. Open ReportCurrenciesAMImpl.java and add the following piece of code to the application module's default constructor:

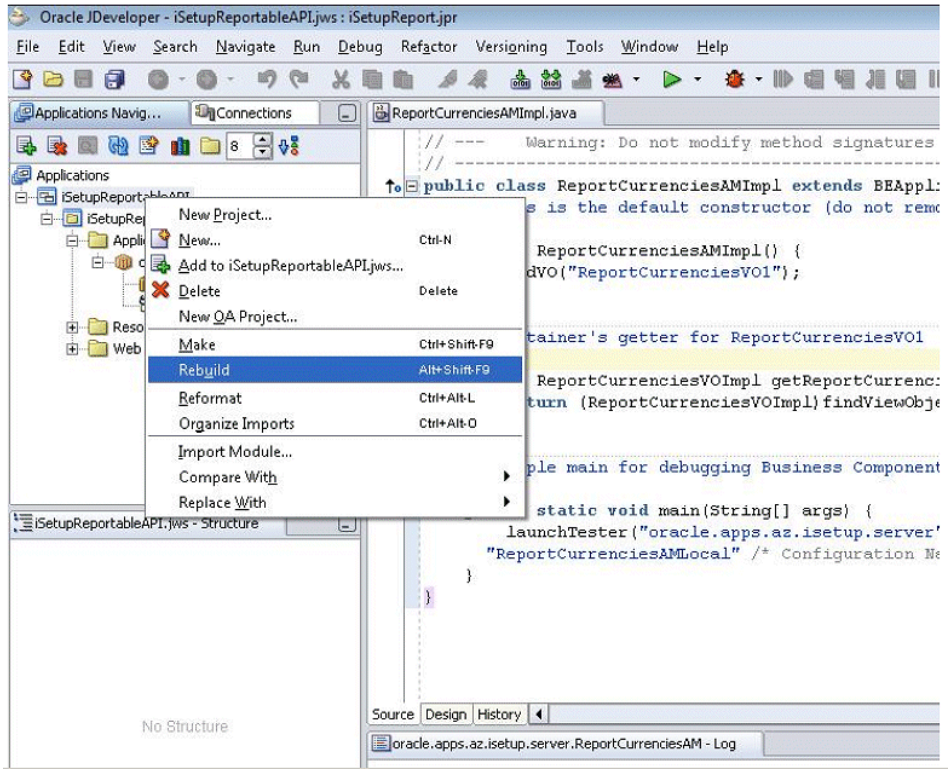
```
public class ReportCurrenciesAMImpl extends
BEApplicationModuleImpl {
  /**This is the default constructor (do not remove)
  */
  public ReportCurrenciesAMImpl() {
     addVO("ReportCurrenciesVO1");     }

  ..........
```

- In the iSetup Migrator UI, a LOV can be linked to each filtering parameter. This feature is optional. You may skip this if you do not want the LOV. To enable this feature, the API needs to override BEViewObjectImpl.getSqlForLov method to return the LOV SQL, which should select the distinct values of the filtered column. Add the following piece of code to the ReportCurrenciesVOImpl.java file.

```
public class ReportCurrenciesVOImpl extends
BEViewObjectImpl {
  /**This is the default constructor (do not remove)
   */
  public ReportCurrenciesVOImpl() {
  }
  public String getSqlForLov(String attrName) {
     if (attrName.equalsIgnoreCase("CurrencyCode")) //if this
attribute is not defined on a database column
          {
            StringBuffer sql = new StringBuffer();
            sql.append("select distinct currency_code ");
            sql.append("from ");
            sql.append("fnd_currencies ");
            return sql.toString();
          } else {
             return super.getSqlForLov(attrName);
          }
    }
  }
```

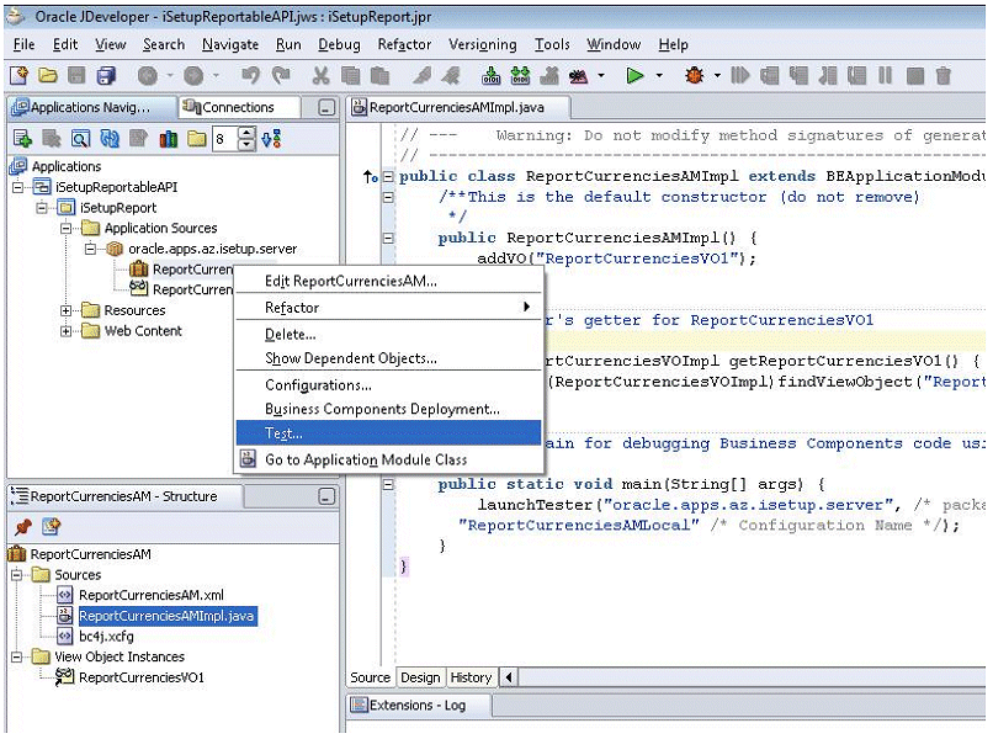
- Now right-click on the workspace and select **Rebuild**. Ensure that there are no compilation errors.



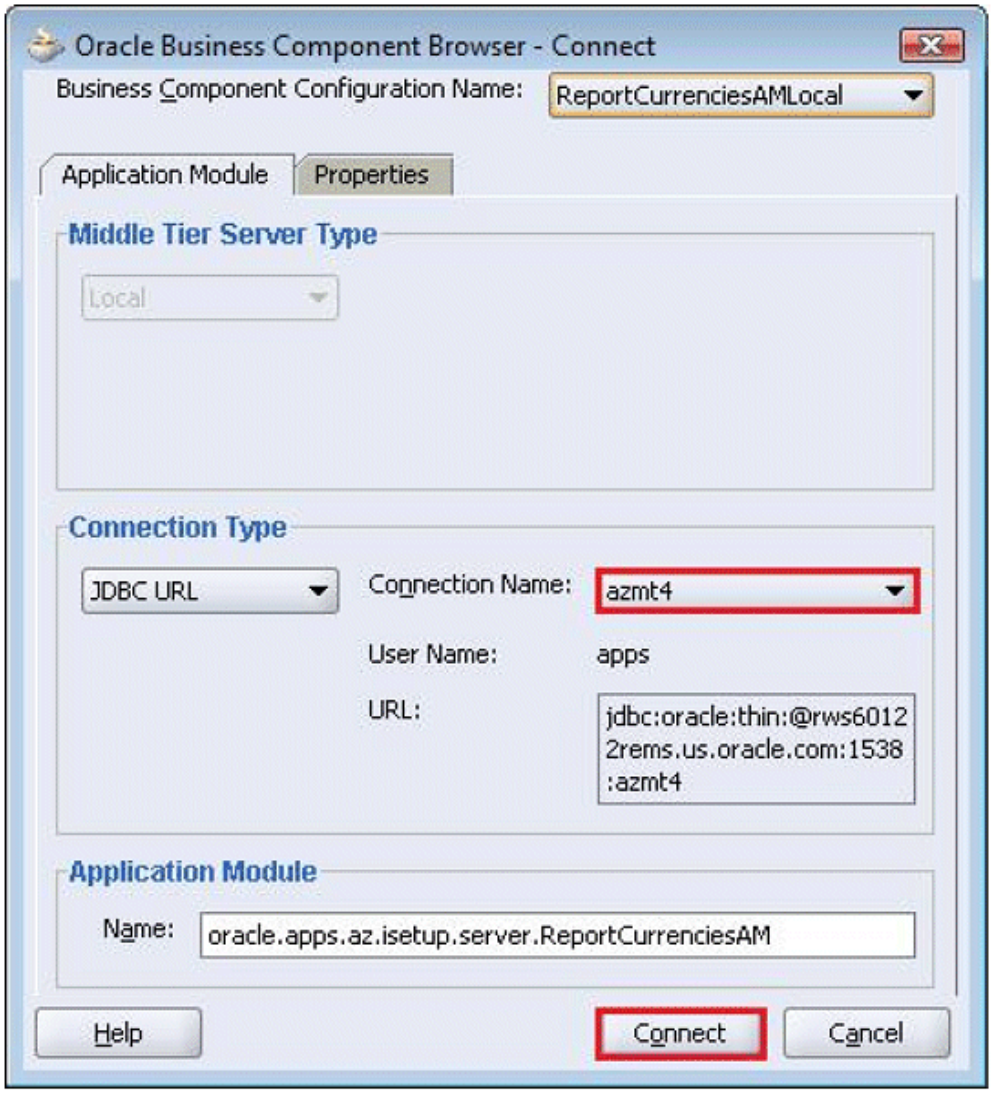
- Now your API supports the default export functionality, which is exporting all the records found for the defined view objects so that a report can be generated with the exported records.

To Test the Interface in JDeveloper:

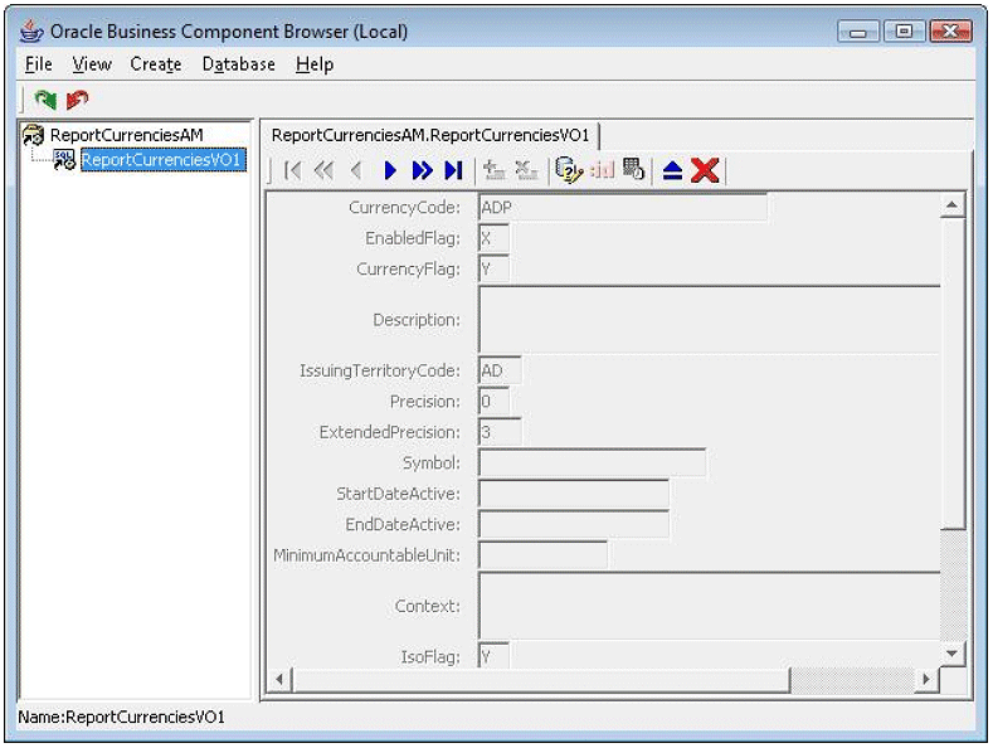
1. Right-click on ReportCurrenciesAM application module and select **Test**.



2. The Oracle Business Component Browser opens. Select **Connection Name** to the instance on to which you need to test and click on **Connect**.



3. A Java frame window 'Oracle Business Component Browser' opens up. Click on the View Object you need to test. In this example, we added ReportCurrenciesVO1 to the application module, so we would click on ReportCurrenciesVO1. All the records that need to be fetched with the SQL query will be returned.



4. Click on File > Exit to close the Testing mode.

To Test and Deploy Interface in an Oracle E-Business Suite Instance:

1. Navigate to the JDeveloper folder where your code resides. By default when you create workspace and project, this folder is usually created here:

   ```
   <JDeveloper12.0.6>\jdevbin\jdev\myclasses
   ```

   Copy the Application Module and View Object related files to the JAVA_TOP of the instance. During copy don't disturb the directory structure. Here you need to copy the folder

   ```
   <JDeveloper12.0.6>\jdevbin\jdev\myclasses\oracle\apps\az\isetup\server
   ```

   to

   ```
   <$JAVA_TOP>\oracle\apps\az\isetup\server
   ```

2. For testing purposes, execute the following query against the instance database.

   Note: This query is purely for testing purpose only. After testing and if your API is working as expected, remove the below inserted record from the database and register the API as described in the section Registering the iSetup Framework (BC4J) API, page 1-7.

```
Insert Record Query
INSERT
   INTO az_apis
  (
    API_NAME,
    APPLICATION_SHORT_NAME,
    SEQ ,
    DISPLAY_NAME,
    DESCRIPTION,
    COMMIT_IF_WARNING,
    TYPE_CODE,
    METHOD_NAME,
    PATH,
    CREATED_BY,
    CREATION_DATE,
    LAST_UPDATED_BY,
    LAST_UPDATE_DATE,
    LAST_UPDATE_LOGIN,
    API_CODE,
    SEQ_NUM,
    API_DESC,
    COMMIT_IF_WARNING_FLAG,
    API_TYPE,
    REPORT_LAYOUT,
    FILTERING_PARAMETERS,
    DATA_SOURCE_NAME,
    UPDATABLE_FLAG,
    CHANGE_UPDATABLE_FLAG,
    ALLOW_SET_TARGETVAL_FLAG,
    ALLOW_FILTER_FLAG,
    API_STANDALONE_FLAG,
    ACTIVE,
    DISABLE_REPORT_FLAG
  )
  VALUES
  (
    NULL  ,
    'AZ'  ,
    NULL  ,
    :1,
    NULL  ,
    NULL  ,
    NULL  ,
    'importFromXML',
    :2,
    1,
    to_timestamp('03-JAN-07','DD-MON-RR HH.MI.SSXFF AM'),
    1,
    to_timestamp('21-MAR-07','DD-MON-RR HH.MI.SSXFF AM'),
    0,
    :3,
    NULL,
    NULL,
    'N',
    'BC4J',
    'MULTIPLE',
    NULL,
    NULL,
    NULL,
    NULL,
    NULL,
```

```
'Y',
    'Y',
    'Y',
    NULL
  );

Where
    :1 => DISPLAY_NAME => Any user friendly name to identify the
API. In this case, please substitute Report Currencies for
DISPLAY_NAME

    :2 => PATH => Java path to refer AM. In this case, substitute
oracle.apps.az.isetup.server.ReportCurrenciesAM for PATH.

    :3 => API_CODE => A unique identifier to register the API.
Naming convention is prefix with Application Short Name + "_" + API
Name without any spaces. In this case, substitute AZ_Currencies for
API_CODE.

Delete Record Query
   DELETE
     FROM az_apis
     WHERE api_standalone_flag = 'Y'
       AND api_code= 'AZ_Currencies';
```

3. Reports can be generated as described in the *Oracle iSetup User's Guide*. You will need to create a Custom Selection Set by selecting the data object created above. In our example, the navigation path is Report Currencies > Create Extract > Create Report. The detailed process can be found in the *Oracle iSetup User's Guide*.

4. Once you are done with testing the interface, you can deploy it on to any Oracle E-Business Suite instance. Follow the steps described in the section Registering the iSetup Framework (BC4J) API, page 1-7 to register the iSetup reportable API to the iSetup Interface Repository.

A

Oracle Application Object Library Messages for Oracle iSetup

Oracle iSetup Messages in Oracle Application Object Library (FND)

The following table provides a list of the Oracle Application Object Library (FND) messages that are owned and managed by Oracle iSetup and can be shared among all APIs.

Message Name	Message
AZW_FWK_INV_ORG_NAME	"Inventory Organization Name"
AZW_FWK_SOB_NAME	"Set of Books Name"
AZW_FWK_ORG_NAME	"Organization Name"
AZW_FWK_USER_NAME	"User Name"
AZW_FWK_LANGUAGE	"Language"
AZW_FWK_CURRENCY	"Currency"
AZW_FWK_BG_NAME	"Business Group Name"
AZW_FWK_LE_NAME	"Legal Entity Name"
AZW_FWK_PARTY_NAME	"Party Name"
AZW_FWK_CUSTOMER_NAME	"Customer Name"

Message Name	Message
AZW_FWK_CUST_ACT_NUM	"Customer Account Number"
AZW_FWK_SUPPLIER_NAME	"Supplier Name"
AZW_FWK_SUPPLIER_NUM	"Supplier Number"
AZW_FWK_BANK_NAME	"Bank Name"
AZW_FWK_BANK_NUM	"Bank Number"
AZW_FWK_EMP_NAME	"Employee Name"
AZW_FWK_EMP_NUM	"Employee Number"