

# **Oracle® Endeca Information Discovery**

Getting Started Guide

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## Preface

Endeca Information Discovery Studio is an industry-leading application composition environment and discovery experience that allows business users to easily upload and mash up multiple diverse data sources, and then quickly configure discovery applications - all within the context of an enterprise framework that maintains existing governance and enterprise definitions.

Studio includes world-class search, guided navigation, and filtering, as well as offering an array of powerful interactive visualizations, for rapid intuitive analysis that requires zero training.

## About this guide

This guide provides instructions for installing Oracle Endeca Information Discovery on a single instance of WebLogic Server. After you complete the installation, you can create a Studio application using sample data from an Excel spreadsheet.

This guide also provides instructions for installing Integrator ETL and using it to process sample data. You can then create a Studio application using that data.

## Conventions used in this document

The following conventions are used in this document.

### Typographic conventions

The following table describes the typographic conventions used in this document.

Typeface	Meaning
<b>User Interface Elements</b>	This formatting is used for graphical user interface elements such as pages, dialog boxes, buttons, and fields.
Code Sample	This formatting is used for sample code phrases within a paragraph.
<i>Variable</i>	This formatting is used for variable values. For variables within a code sample, the formatting is <i>Variable</i> .
File Path	This formatting is used for file names and paths.

### Symbol conventions

The following table describes symbol conventions used in this document.

Symbol	Description	Example	Meaning
>	The right angle bracket, or greater-than sign, indicates menu item selections in a graphic user interface.	File > New > Project	From the File menu, choose New, then from the New submenu, choose Project.

## Contacting Oracle Customer Support

Oracle Customer Support provides registered users with important information regarding Oracle software, implementation questions, product and solution help, as well as overall news and updates from Oracle.

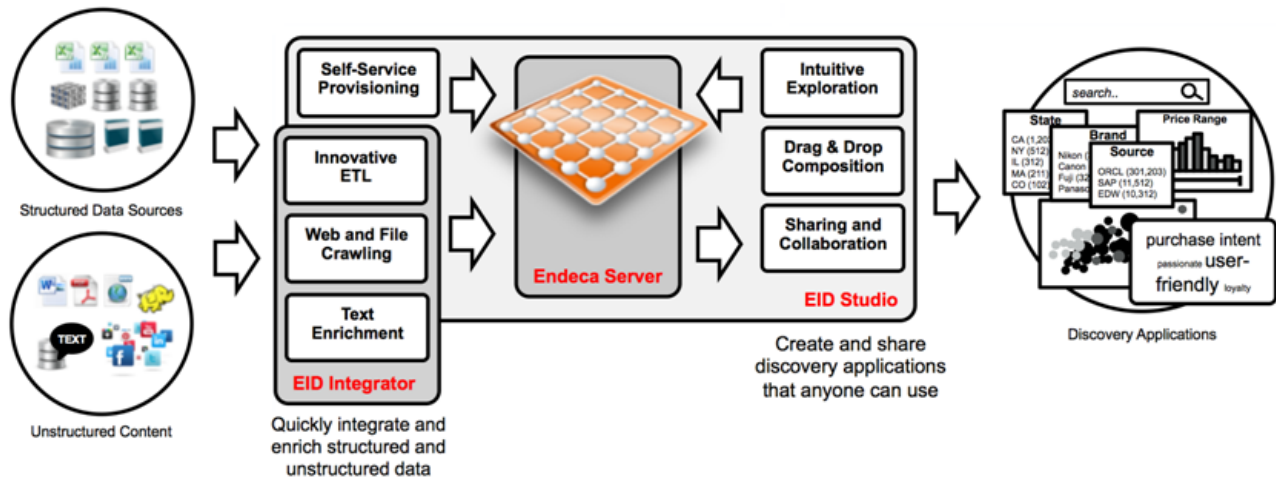
You can contact Oracle Customer Support through Oracle's Support portal, My Oracle Support at <https://support.oracle.com>.



## Chapter 1

# Overview of Oracle Endeca Information Discovery

Oracle Endeca Information Discovery is a data discovery platform that guides people to better decisions based on diverse and changing data. It leverages the Endeca Server, a hybrid search-analytical database that provides a centralized platform to rapidly deploy interactive analytic applications and keep pace with changing business requirements while maintaining information governance.



Oracle Endeca Information Discovery consists of the following modules:

- Rapid composition and configuration of applications, views, and dashboards through **Studio**.  
Studio includes the Provisioning Service, which allows you to upload data directly from spreadsheets or JSON files, or import data from configured Oracle BI Server or JDBC connections.
- Search, Guided Navigation™, and analytics capabilities powered by **Oracle Endeca Server**.
- Comprehensive data integration options, featuring the **Integrator ETL** enterprise ETL solution and the **Integrator Acquisition System**.

Integrator ETL provides connectors for standard structured and unstructured data sources, a comprehensive data enrichment library, and direct connectors to the Oracle Endeca Server.



## Chapter 2

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# Installing Oracle Endeca Information Discovery

These installation instructions create a development instance of Oracle Endeca Information Discovery (Endeca Server, Studio, and the Provisioning Service) on one machine. In this instance, Endeca Server, Studio, and the Provisioning Service are installed into a single WebLogic Server.

[About these installation instructions](#)

[System requirements](#)

[Downloading the required installation packages](#)

[Installing the Sun Java JDK](#)

[Setting up the orchestration script directories](#)

[Configuring and running the orchestration script](#)

[Orchestration script configuration properties](#)

[Configuring the Studio connection to the Provisioning Service](#)

## About these installation instructions

These instructions take you through a complete process of installing Oracle Endeca Information Discovery into separate domains on a single WebLogic Server.

This all-in-one installation process:

- Assumes a Windows environment
- Is for a development environment only, designed to be used for development, testing, or training
- Does not use SSL
- Uses default configurations for paths and directories

The process includes:

1. Downloading the Sun Java 6 JDK.
2. Downloading the Oracle Endeca Information Discovery installation packages, including WebLogic Server 10.3.6 and Oracle ADF Runtime.
3. Installing the JDK.
4. Installing Oracle Endeca Information Discovery.

This process installs:


- WebLogic Server 10.3.6



- ADF (Application Development Framework) Runtime
- Endeca Server 7.6.0
- Studio 3.1.0
- Provisioning Service 3.1.0

## System requirements

Here are the system requirements for installing Oracle Endeca Information Discovery, including WebLogic Server, on a single Windows machine.

Requirement	Details
Hardware	<p>Minimum hardware requirements:</p> <ul style="list-style-type: none"> <li>• x64 processor, minimum 1.8 GHz</li> <li>• At least 2 GB of RAM, depending on the size of the application data set</li> <li>• 80 GB hard drive, depending on the size of the application data set</li> </ul> <p>Recommended hardware requirements:</p> <ul style="list-style-type: none"> <li>• x64 3.0+ GHz processors; we recommend Intel Xeon (including Nehalem) or AMD Opteron processors</li> <li>• 8 GB of RAM or more, depending on the size of the application data set</li> <li>• High performance network-attached storage (for example, attached via a dedicated iSCSI or fibre channel network) or high performance locally-attached RAID storage (for example, a RAID 6 or RAID 0+1 array with battery-backed write caching, operating on 72GB or 146 GB spindles at 10k or 15k RPM spindle speed)</li> <li>• Gigabit Ethernet</li> </ul> <p> <b>Note:</b> In this guide, the term "x64" refers to any processor compatible with the AMD64/EM64T architecture. You might need to upgrade your hardware, depending on the data you are processing.</p> <p>All run-time code must fit entirely in RAM. Likewise, hard disk capacity must be sufficient based on the size of your data set.</p>
Operating system	<p>Windows Server 2008 R2 Enterprise running on x64 processors.</p> <p>Because this is a development environment, you can also install on Windows 7. For a production environment, Windows 7 would not be supported.</p> <p>For improved performance, we recommend turning off hyper-threading.</p>

Requirement	Details
Disk space	<p>WebLogic and Oracle Endeca Server have the following disk sizes after installation:</p> <ul style="list-style-type: none"> <li>• Oracle WebLogic Server: 425 MB</li> <li>• Oracle Application Development Runtime: 1024 MB</li> <li>• Oracle Endeca Server: 475 MB</li> </ul> <p>The total disk size of the entire installation is approximately 1.9 GB.</p> <p>Each installation program uses a temporary directory into which they extract the files necessary to install the software on the target system. During the installation process, your temporary directory must contain sufficient space to accommodate these files.</p> <p>As a general guideline, the files in the temporary directory require approximately 2.5 times the space that is ultimately required for each installation.</p> <p>By default, the installation programs use the directory referenced by the TMP system variable.</p>
Browser (for Studio)	<ul style="list-style-type: none"> <li>• Firefox ESR on Windows. Firefox is the recommended browser for Studio.</li> <li>• Internet Explorer 8 (with compatibility mode disabled) on Windows. Running Internet Explorer 8 in compatibility mode is not supported.</li> <li>• Internet Explorer 9 on Windows</li> <li>• Safari on the iPad. iPad can only be used to log in to Studio and view applications. Users cannot create or configure Studio applications from an iPad.</li> </ul>
Browser plugin (for Studio)	<p>For users on Internet Explorer 8, Adobe Flash 10.0 or greater, for displaying charts. For other browsers, charts are displayed using HTML5.</p> <p>We recommend using the most recent version of Flash supported by the browser.</p>

## Downloading the required installation packages

Before you can start the installation, you need to download the required installation packages.

[Downloading the Sun JDK](#)

[Downloading the installation packages for Oracle Endeca Information Discovery, WebLogic Server, and Oracle ADF Runtime](#)

## Downloading the Sun JDK

Before you can begin the installation process, you must download the installation package for Sun Java 6.

To download Sun Java 6:

1. Go to <http://www.oracle.com/technetwork/java/javase/downloads/index.html>.
2. On the **Downloads** tab, click **Previous Releases**.
3. On the **Oracle Java Archive** page, click **Java SE 6**.
4. On the **Java SE 6 Downloads** page, click the link for the most recent version of the Java SE Development Kit.  
The page scrolls to the list of downloads for that version of the JDK.
5. At the top of the list, click the **Accept License Agreement** radio button.
6. In the list, click the **Download** link for Windows x64.
7. Save the file (`jdk-6u43-windows-x64.exe`) to your machine.

## Downloading the installation packages for Oracle Endeca Information Discovery, WebLogic Server, and Oracle ADF Runtime

Before you can install Oracle Endeca Information Discovery, you must download the installation packages for each of the modules from the Oracle Software Delivery Cloud. The Endeca Server download page includes links to the required WebLogic Server and Oracle ADF Runtime installation packages.

To download the installation packages for Oracle Endeca Information Discovery, WebLogic Server, and Oracle ADF Runtime:

1. Log in to <https://edelivery.oracle.com>.
2. On the **Terms and Restrictions** page, check the checkboxes to accept the terms and restrictions, then click **Continue**.
3. On the **Media Pack Search** page:
  - (a) From the **Select a Product Pack** drop-down list, select **Oracle Endeca**.
  - (b) From the **Platform** drop-down list, select **Windows**.
  - (c) Click **Go**.  
The list of available packages is displayed.
4. In the list, click **Oracle Endeca Server (7.6.0) Media Pack for Microsoft Windows x64 (64-bit)**.  
The list of downloads for the Endeca Server media pack for Windows is displayed.
5. From the list, download the following packages:
  - **Oracle Endeca Server (7.6.0) for Microsoft Windows x64 (64-bit)**
  - **Oracle WebLogic Server 11gR1 (10.3.6) Generic and Coherence** (downloads the generic installer for WebLogic Server version 10.3.6)
  - **Oracle Application Development Runtime 11g Patch Set 5 (11.1.1.6.0)** (downloads Oracle ADF Runtime version 11.1.1.6)
6. Return to the **Media Pack Search** page.

7. In the list for Oracle Endeca and Windows, click **Oracle Endeca Information Discovery Studio (3.1.0) Media Pack for Microsoft Windows x64 (64-bit)**.

The list of downloads for the Studio media pack for Windows is displayed.

8. From the list, download **Oracle Endeca Information Discovery Studio (3.1) Install Scripts for Microsoft Windows x64 (64-bit)**.

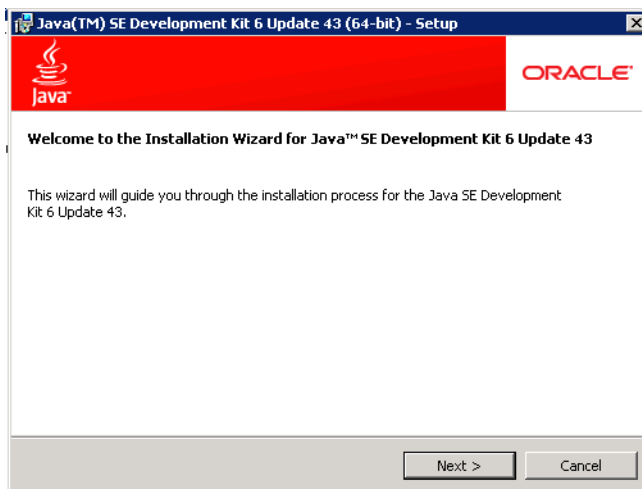
## Installing the Sun Java JDK

When you install the Sun Java SDK, you must install it to a path that does not have any spaces.

To install the Sun Java SDK:

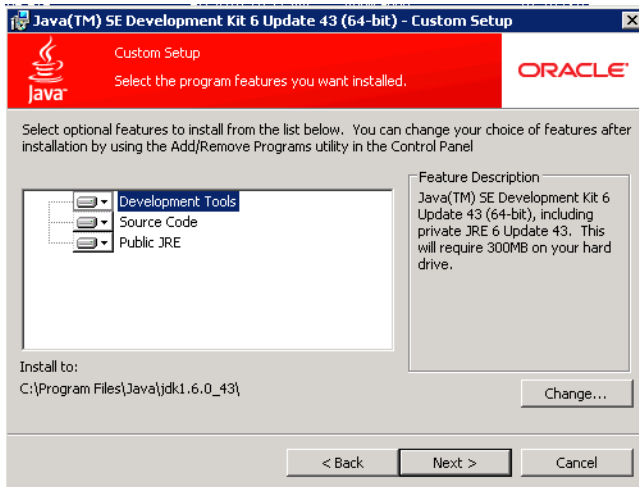
1. Double-click the JDK installer file that you downloaded (`jdk-6u43-windows-x64.exe`).

The welcome page of the JDK installation wizard is displayed.

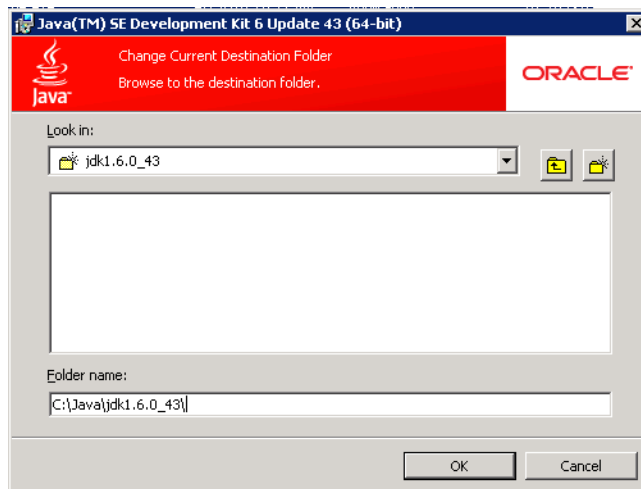


2. On the welcome page, click **Next**.

3. On the **Custom Setup** page, because the default installation location (under Program Files) has a space, you must change it here. To change the JDK installation location:

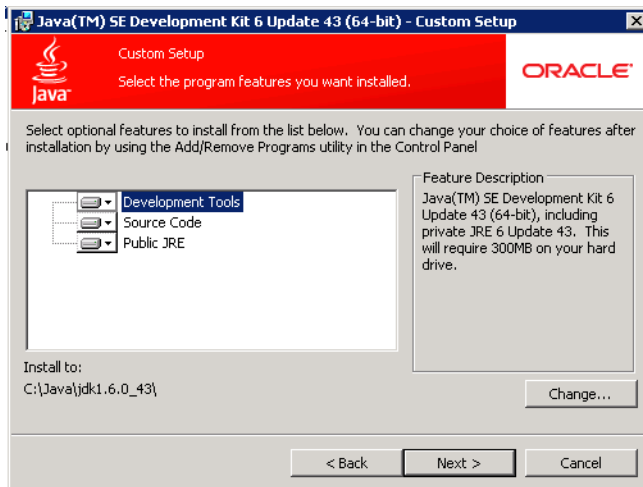


- (a) Click the **Change** button.
- (b) In the **Folder name** field, remove the Program Files directory. This changes the location to:  
C:\Java\jdk1.6.0\_43\

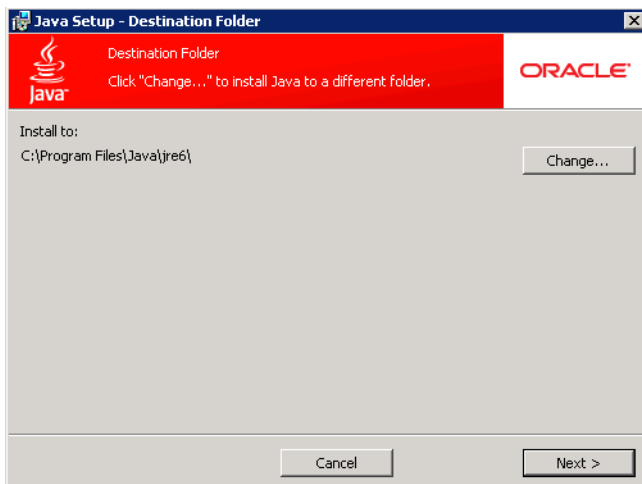


- (c) Click **OK**.

- (d) On the **Custom Setup** page, verify that the installation location has been updated, then click **Next**.

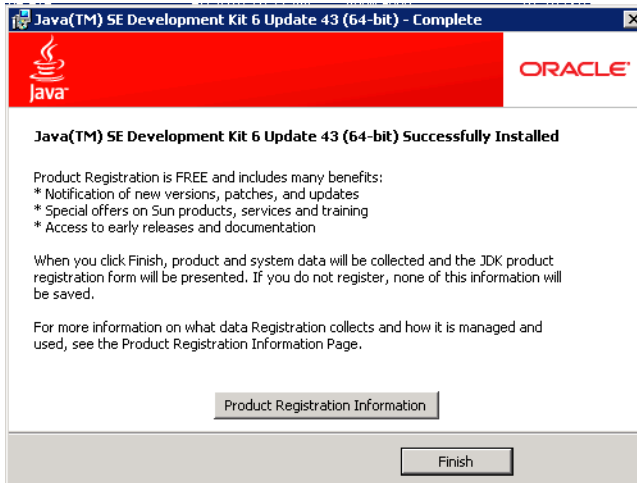


4. The **Destination Folder** page sets the location of the public JRE. Because this JRE is not used by Endeca Information Discovery, you can leave the default directory. Click **Next**.



The installation process begins.

- When the installation is completed, click **Finish**.



## Setting up the orchestration script directories

Before you can run the orchestration script, you must set up the orchestration script directories.

This procedure assumes you have:

- Installed the Sun JDK.

For details, see [Downloading the Sun JDK on page 11](#) and [Installing the Sun JDK on page 12](#).

- Downloaded the following packages:

- Oracle WebLogic Server 10.3.6 Generic installer
- Oracle ADF Runtime



**Note:** Installation of ADF requires at least 150 MB of temp space and 512 MB of swap space. Ensure that adequate space is available for the ADF installation.

- Oracle Endeca Information Discovery Studio (3.1) Install Script for Microsoft Windows x64 (64-bit)
- Oracle Endeca Server (7.6.0) for Microsoft Windows x64 (64-bit)

For details, see [Downloading the Oracle Endeca Information Discovery installation packages on page 11](#).

To set up the orchestration script directories:

- Unzip the orchestration script package, `EIDStudio31_InstallWin.zip`, to a convenient location.

Unzipping this file creates the `eidOrch` directory, which contains the following subdirectories:

Directory	Description
<code>installers</code>	Contains the installers for Studio and the Provisioning Service.
<code>orchScripts</code>	Contains all of the orchestration scripts and related files for Studio and the Provisioning Service.

2. Unzip the Endeca Server package to a convenient location.
3. Copy the file `endecaserver.zip` from the location where you unzipped the Endeca Server package to the directory `eidOrch\installers`.
4. Copy the directory `windows` from the location where you unzipped the Endeca Server package to the directory `eidOrch\orchScripts`.
5. Rename the directory `eidOrch\orchScripts\windows` to `ES_windows_OC`.
6. Copy the following installer files to the directory `eidOrch\installers`:
  - `wls1036_generic.jar` (WebLogic 10.3.6 Generic installer)
  - The ADF Runtime .zip file (ADF Runtime installer)
7. The ADF Runtime .zip file initially uses the ADF part number as the file name. Before you can run the orchestration script, you must rename the file to `ofm_appdev_generic_11.1.1.6.0_disk1_1of1.zip`.

## Configuring and running the orchestration script

Once you have set up the orchestration script directories, you are ready to configure and run the orchestration script.

Before configuring and running the orchestration script, be sure you have downloaded all required packages and have set up the orchestration script directories. For details, see [Setting up the orchestration script directories on page 15](#).

To run the orchestration script, you must have administrator privileges on the machine.



**Note:** Installation of ADF requires at least 150 MB of temp space and 512 MB of swap space. Ensure that adequate space is available for the ADF installation.

To configure and run the orchestration script:

1. Using a simple text editor, such as Notepad, edit the configuration file, `eidOrch\orchScripts\config_EID_win.prop` to specify the settings for your installation.

For details about the configuration settings, see [Orchestration script configuration properties on page 18](#).

You should at least change the value of `USE_SSL` to `FALSE`, so that you are not using SSL for this basic getting started implementation.

Note that for a full production environment, you would want to use SSL.

2. Open a command prompt in administrator mode, then change to the directory `eidOrch\orchScripts`.
3. Run the following command:

```
run_EID_install.bat config_EID_windows.prop [ --temp-directory <tempFolderName> ]
```

The `temp-directory` parameter is optional. If specified, the directory must exist.



## 4. When prompted, enter the following data:

Module	Data to Enter
Endeca Server	<ul style="list-style-type: none"> <li>• WebLogic Server Admin Username</li> <li>• WebLogic Server Admin Password (and confirmation)</li> <li>• Endeca Server Admin Username</li> <li>• Endeca Server Admin Password (and confirmation)</li> </ul>
Endeca Information Discovery Studio	<ul style="list-style-type: none"> <li>• WebLogic Server Admin Username</li> <li>• WebLogic Server Admin Password (and confirmation)</li> </ul>
Provisioning Service	<ul style="list-style-type: none"> <li>• WebLogic Server Admin Username</li> <li>• WebLogic Server Admin Password (and confirmation)</li> <li>• Endeca Server hostname</li> </ul>

WebLogic Server is installed to the location you specified in your configuration. WebLogic domains are created for Endeca Server, Studio, and the Provisioning Service. All domains are started and Studio is deployed to its domain.

To verify that Endeca Server and the Provisioning Service have been installed successfully, start a browser, then in the address bar, enter `http://<hostname>:<port>/eid-ps/status`, where:

- `<hostname>` is the name or IP address of the machine where you installed Oracle Endeca Information Discovery.
- `<port>` is the port of the Provisioning Service.

If the Provisioning Service and Endeca Server are functioning correctly, a page similar to the following is returned:

### **Oracle Endeca Information Discovery Provisioning Service 3.1.0.0 Revision 2426**

**Endeca Server Communication**      SUCCESS

**Backend Database Access**      SUCCESS

If either check fails, the message returned is Error: check logs.

To verify that Studio has deployed successfully, start a browser, then in the address bar enter `http://<hostname>:<port>/eid`, where:


- `<hostname>` is the name or IP address of the machine where you installed Oracle Endeca Information Discovery.
- `<port>` is the port of Studio.

You should see the Studio login page.

Before you can create the sample application, you must connect Studio to the Provisioning Service. See [Configuring the Studio connection to the Provisioning Service on page 20](#).

## Orchestration script configuration properties

The Oracle Endeca Information Discovery orchestration script includes the following configuration parameters.

Configuration property	Description	Default value
START_MODE	Configures the start mode (DEV or PROD) of the WebLogic Server.	DEV
USE_SSL	Specifies whether the components of the Oracle Endeca Information Discovery installation will use SSL for secure communication.  All components use the same SSL configuration: either all components use SSL or none of them use SSL.	TRUE  For this basic Getting Started implementation, change this setting to FALSE.
JAVA_HOME	The absolute path to the installed JDK.  Default locations are specified, but you should configure this property to specify the location of your JDK installation.   <b>Note:</b> The path to the JDK should not include space characters. If this path includes space characters, installation of ADF fails.	Windows: C:\jdk1.6.0_45  Linux: /etc/jdk1.6.0_45

Configuration property	Description	Default value
ORACLE_HOME	<p>The absolute path to the Oracle Middleware directory in which to install WebLogic Server and Oracle Endeca Information Discovery.</p> <p>The specified directory must not exist. It is created during the installation processing. If the specified directory exists, the installation will fail.</p>	<p>Windows: C:\Oracle\Middleware_Orch</p> <p>Linux: /home/&lt;username&gt;Oracle/Middle ware_orch</p>
ORACLE_INV_PTR	<p>Linux only.</p> <p>The location of the Oracle Installer Pointer file.</p>	/etc/oraInst.loc
INSTALLER_LOCATION	<p>Absolute path to the directory that contains the installation files.</p> <p>Default locations are specified, but you should configure this property to specify the location where you extracted the installer files.</p>	<p>Windows: C:\Oracle\eidOrch\Installers</p> <p>Linux: /home/&lt;username&gt;/eidOrch/ins taller</p>
STOP_EID_PROCESSES	<p>Linux only.</p> <p>Whether all Oracle Endeca Information Discovery processes started from the location specified in the ORACLE_HOME directory should be stopped if:</p> <ul style="list-style-type: none"> <li>• The installation fails</li> <li>• The orchestration script is run again after a successful installation.</li> </ul>	TRUE
ENDECA_SERVER_DOMAIN_NAME	The name of the WebLogic Server domain for Endeca Server.	endeca_server

Configuration property	Description	Default value
ENDECA_SERVER_PORT	The HTTP port on which Endeca Server listens for requests when using non-secure communication (not using SSL).	7001
ENDECA_SERVER_SECURE_PORT	The HTTP port on which Endeca Server listens for requests when using secure communication (using SSL).	7002
ENDECA_STUDIO_DOMAIN_NAME	The name of the WebLogic Server domain for Studio.	endeca_studio
ENDECA_STUDIO_PORT	The HTTP port on which Endeca Studio listens for requests when using non-secure communication (not using SSL).	8101
ENDECA_STUDIO_SECURE_PORT	The HTTP port on which Endeca Studio listens for requests when using secure communication (using SSL).	8102
ENDECA_PS_DOMAIN_NAME	The name of the WebLogic Server domain for the Provisioning Service.	endeca_provisioning
ENDECA_PS_PORT	The HTTP port on which the Provisioning Service listens for requests when using non-secure communication (not using SSL).	8201
ENDECA_PS_SECURE_PORT	The HTTP port on which the Provisioning Service listens for requests when using secure communication (using SSL).	8202

## Configuring the Studio connection to the Provisioning Service

In order to be able to create Studio applications via file upload, you must configure the connection from Studio to the Provisioning Service.

Before you configure the Provisioning Service connection, make sure that Endeca Server is running.

These instructions also assume you are not using SSL.

To configure the Provisioning Service connection from Studio:

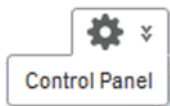
1. Log in to Studio.

To log in, use the default credentials:

Field	Value
<b>Login:</b>	admin@oracle.com
<b>Password:</b>	Welcome123

You are immediately prompted to change the password upon first use. The new password must contain:

- At least 6 characters
  - At least one non-alphabetic character
2. From the Studio menu, select **Control Panel**.



3. In the **Control Panel** menu, under **Information Discovery**, click **Provisioning Service**.
4. On the **Provisioning Service** page, edit the connection string to:
  - Change the value of `port` to the port used for installation. The default value for a non-SSL installation is 8201.
  - Change the value of `server` to be the name of the machine where you installed Oracle Endeca Information Discovery.
  - Remove the `sslConfig` section.

When you finish, the connection string should look something like:

```
{
  "port": "8201",
  "server": "myhostname"
}
```

5. Click **Save**.

Studio saves and validates the connection information.



## Chapter 3

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# Creating a Sample Application from Uploaded Data

To get a feel for Studio applications, you can quickly create an application by uploading sample data from a spreadsheet.

*About the file upload sample application*

*Downloading the file upload sample application materials*

*Creating the sample application from the spreadsheet*

*Importing the sample application pages*

## About the file upload sample application

The file upload sample application uses data related to warranty claims. You can use this data to analyze trends and patterns in the reported issues and completed repairs.

To create this application, you upload a spreadsheet containing the warranty data. After creating the application, you import the sample application pages.

This sample application reflects the self-service type of Studio implementation, where individual users can create applications using their own data in spreadsheets or JSON files.

Administrators can also provide available data from Oracle BI Server or JDBC connections.

## Downloading the file upload sample application materials

The materials for the file upload sample application are available from the Oracle Technology Network (OTN).

The sample application .zip file contains:

- The PDF version of this guide
- An `EID3.1_Sample` directory containing:
  - `SampleData.xls`, the sample application spreadsheet containing the application data
  - `EID_31SampleApp.lar`, containing the application pages and components to import into Studio

To download the sample application materials:

1. Go to the **Downloads** tab for Oracle Endeca Information Discovery:  
<http://www.oracle.com/technetwork/middleware/endeca/downloads/index.html> .
2. At the bottom of the tab, under **Related Products**, click **Endeca Information Discovery Studio Sample Application**.

3. On the download page, click the **Accept License Agreement** radio button.
4. Click the link to download `EID31_SampleApp.zip`.
5. After downloading the .zip file, extract the files to a temporary directory.

## Creating the sample application from the spreadsheet

After downloading and extracting the sample application files, you can use the spreadsheet to create a new application.

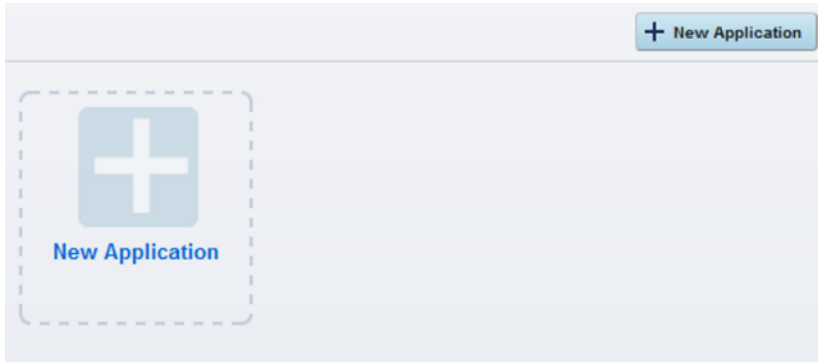
When you create the application from the spreadsheet, Studio:

- Creates a new Endeca Server data domain
- Uses the spreadsheet data to create a new data set within the domain

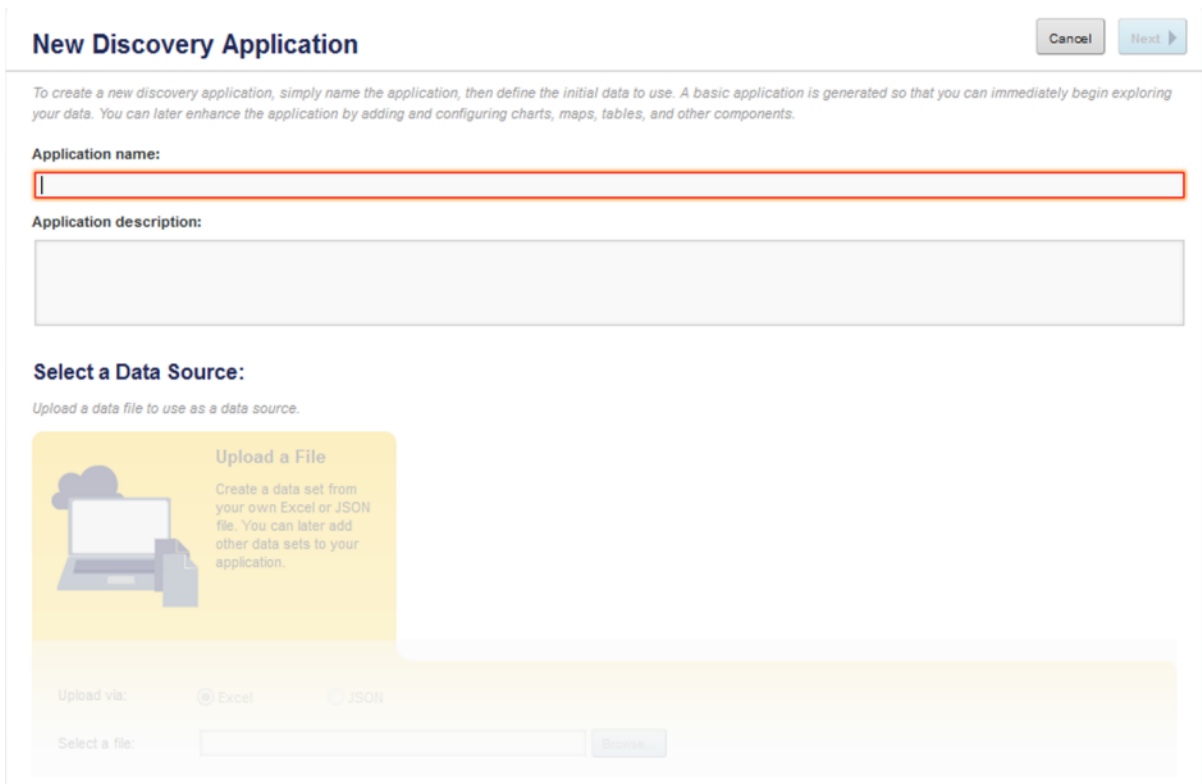
To create a new application from the sample application spreadsheet:

1. Start and log in to Studio.

2. On the **Discovery Applications** page, click **+ New Application**.



The **New Discovery Application** page is displayed.



3. In the **Application name** field, type a name for the application.
4. You can leave the application description blank.



- Under **Select a Data Source**, click **Upload a file**.

**Select a Data Source:**

Upload a data file to use as a data source.

- To search for and select `SampleData.xls`, click **Browse**.  
Studio processes the file and displays a sample of the data.
- Click **Next**.  
Studio displays a list of attributes from the spreadsheet data.
- Keep the default value of **Data set name**, so that the data set name matches the component configuration you will be importing from the `.lar` file.
- To complete the application creation, click **Done**.  
Studio creates and displays the application.

The application initially contains a single page with the following components:

- **Search Box**
- **Available Refinements**
- **Selected Refinements**
- **Chart**
- **Results Table**

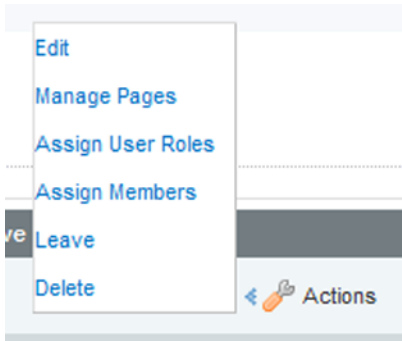
## Importing the sample application pages

After you create the initial application from the uploaded spreadsheet, you import the sample application pages from `EID31_SampleApp.lar`.

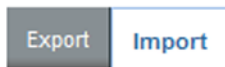
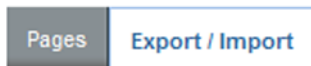
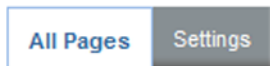
To import the pages from `EID31_SampleApp.lar`:

- From the administrator menu, select **Control Panel**.
- In the **Control Panel** menu, in the **Portal** section, click **Applications**.

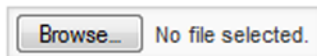
3. On the **Applications** page, click the **Actions** link for the sample application, then click **Manage Pages**.



4. Click **Export/Import**.
5. Click **Import**.



Import a LAR file to overwrite the selected data.



6. To complete the import:
  - (a) Browse to `EID31_SampleApp.lar`.
  - (b) Under **What would you like to import?**, accept the default settings, and then click **Import**.

When the import is completed, you will see a success message.

7. Click **Back to *applicationName***.  
The new pages are added to the application.



## Chapter 4

---

# Navigating to Applications in Studio

Once you have created an application, you can always navigate to it from the **Discovery Applications** page.

To display an application:

1. Start and log in to Studio.
2. On the **Discovery Applications** page, click the application tile.



## Chapter 5

# Next Steps

After you explore the sample application, here are the next steps you can take with Oracle Endeca Information Discovery.

[Obtaining more information](#)

[Uninstalling Oracle Endeca Information Discovery](#)

## Obtaining more information

Here are some additional resources that can help you be successful with Oracle Endeca Information Discovery.


### Documentation set

This guide walked you through a basic scenario and does not account for possible differences that you may have in your real staging environment, such as alternate platforms, additional system requirements, or specific use cases for loading data.

The full documentation set for Oracle Endeca Information Discovery is available from the **Documentation** tab of its [OTN \(Oracle Technology Network\) page](#).

Depending on your role in the deployment process, you should consult the following guides to find more specific in-depth information:

If you are...	See this guide...
Any user who needs to learn more about terminology related to Studio, Integrator, or Oracle Endeca Server	The <i>Oracle Endeca Information Discovery Glossary</i> contains definitions for related modules, concepts, and terms.
An administrator who needs to install Oracle Endeca Information Discovery, or learn about system requirements or platform support	The following installation guides contain platform support information and detailed installation instructions for all currently supported installation environments: <ul style="list-style-type: none"><li>• <i>Oracle Endeca Server Installation Guide</i></li><li>• <i>Integrator ETL Installation Guide</i></li><li>• <i>Studio Installation Guide</i></li><li>• <i>Integrator Acquisition System Installation Guide</i></li><li>• <i>IKM SQL to Endeca Server Installation and Usage Guide</i></li></ul>

If you are...	See this guide...
An administrator who needs to know how to administer and maintain Oracle Endeca Server and Oracle Endeca Information Discovery Studio	<p>The <i>Oracle Endeca Server Administrator's Guide</i> provides information about creating and managing data domains hosted by the Endeca Server. (In Studio, Endeca Server data domains are known as Endeca Server connections).</p> <p>The <i>Studio Administration and Customization Guide</i> provides information about administrative tasks associated with Studio.</p> <p>The <i>Provisioning Service Administration Guide</i> provides information about administrative tasks associated with the Provisioning Service.</p>
An administrator who needs to secure Oracle Endeca Information Discovery	<p>The following guides contain security information:</p> <ul style="list-style-type: none"> <li>• <i>Oracle Endeca Server Security Guide</i></li> <li>• <i>Security Guide for Integrator</i></li> <li>• <i>Studio Security Guide</i></li> </ul> <p> <b>Important:</b> While security is not required by this sample application, in real-world scenarios, Oracle recommends that you install and run Oracle Endeca Information Discovery securely.</p>
An ETL developer or data architect who needs to load data into Endeca Server	<p>The <i>Integrator ETL User's Guide</i> describes how to load data using Integrator ETL.</p> <p>In addition, the <i>Oracle Endeca Server Data Loading Guide</i> describes the Data Ingest Web Service API used by Integrator.</p>
A developer who needs to know about features of the Endeca Server such as search, refinements, search interfaces, or thesaurus	<p>The <i>Oracle Endeca Server Developer's Guide</i> describes the core features of the Oracle Endeca Server that you can access via applications built with Studio.</p> <p>It covers basic concepts, working with records and attributes, and search configuration.</p>
A data architect who needs to manage available sources of data for applications	<p>The <i>Studio Administration and Customization Guide</i> describes how to create Endeca Server connections and manage data sources from Oracle BI Server and JDBC connections.</p>
A user who needs to create and configure Studio applications	<p>The <i>Studio User's Guide</i> describes how to create Studio applications and manage the application data.</p>
A developer who needs to know about the APIs for the Oracle Endeca Server	<p>The <i>Oracle Endeca Server Developer's Guide</i> describes the Oracle Endeca Server Web Services used by Studio.</p> <p>In addition, see the <i>API Reference</i> for information about Web services and schemas, which are packaged with the Oracle Endeca Server. The <i>API Reference</i> is the documentation generated from the Endeca Server interfaces. It is located in the <code>EndecaServer&lt;version&gt;/apis/doc/endeca-server</code> directory of the Oracle Endeca Server installation.</p>

If you are...	See this guide...
A developer who needs to know how to extend Studio	<p>The <i>Studio Administration and Customization Guide</i> provides information on how to extend Studio.</p> <p>For additional information about extending Studio, see the Studio Javadoc, which is packaged with the rest of the Studio documentation.</p>

## OTN product page

In addition to the sample applications and the documentation set, the OTN page for Oracle Endeca Information Discovery (<http://www.oracle.com/technetwork/middleware/endeca/overview>) contains other useful content for someone getting up to speed, including videos and best practices.

## User forums

The Oracle forums include an [Information Discovery forum](#). You can use this forum to post questions and view information from other users and experts.

## Education and training

Oracle offers training courses on configuring and using Oracle Endeca Information Discovery.

For information on available courses, see the [Oracle University site](#).

# Uninstalling Oracle Endeca Information Discovery

After you have finished exploring the Oracle Endeca Information Discovery suite of modules, you may want to uninstall the product from your local machine.

For information about uninstalling Oracle Endeca components, see the corresponding installation guide:

- *Oracle Endeca Server Installation Guide*
- *Oracle Endeca Information Discovery Integrator ETL Installation Guide*
- *Oracle Endeca Information Discovery Studio Installation Guide*



## Appendix A

---

# Installing Integrator ETL and the Integrator ETL Sample Application

In enterprise environments, you may prefer to use Integrator ETL to extract, transform, and load data for Oracle Endeca Information Discovery.

[Downloading and installing Integrator ETL](#)

[Creating a Sample Application from Data Ingested Using Integrator ETL](#)

## Downloading and installing Integrator ETL

You download Integrator ETL from the Oracle Software Delivery Cloud, then install it into an Eclipse IDE.

[Downloading Integrator ETL](#)

[Installing Integrator ETL Designer](#)

## Downloading Integrator ETL

Integrator ETL is downloaded from the Oracle Software Delivery Cloud.

To download Integrator ETL:

1. Log in to <https://edelivery.oracle.com>.
2. Accept the terms and restrictions.
3. On the **Media Pack Search** page:
  - (a) From the **Select a Product Pack** drop-down list, select **Oracle Endeca**.
  - (b) From the **Platform** drop-down list, select **Windows**.
  - (c) Click **Go**.

The list of media packs for the selected product and platform is displayed.

4. In the media pack list, click **Oracle Endeca Information Discovery Integrator ETL (3.1) Media Pack v1 for Microsoft Windows x64 (64-bit)**.

The **Download** page displays, listing the downloads for the selected media pack.

5. Download **Oracle Endeca Information Discovery Integrator ETL (3.1) Media Pack v1 for Microsoft Windows x64 (64-bit)**.

Save the downloaded file, `EID_IETL31_Win.zip`, to your machine.

## Installing Integrator ETL Designer

Integrator ETL is installed into an Eclipse IDE.

Before installing Integrator ETL, download the Eclipse IDE for Java Developers Version Indigo (3.7) from <http://eclipse.org>. Store the downloaded Eclipse package in a convenient location. You do not need to extract or install the Eclipse package. The Integrator ETL installation script installs the Eclipse Workbench for you.

The installation process also installs the Eclipse RSE plugin. The plugin is downloaded during the installation process, the installation process needs an active connection to the Internet. If a connection to the Internet is not available, the installation hangs during this part of the process.

You also need the Integrator ETL package you downloaded from the Oracle Software Delivery Cloud.

To install Integrator ETL on a Windows client:

1. Extract the Integrator ETL Designer installation package for Windows (EID\_3.1\_IntegratorETL.zip) to a convenient location.
2. Change to the directory where you unzipped the Integrator ETL installation package, then run `install.bat`.

The installation script starts.

3. The default installation directory is `C:\Oracle\Endeca\Discovery\3.1.0\IntegratorETL`. At the `Do you want to use the default directory` prompt:
  - To install to the default directory, either press the return key, or enter `y` and then press the return key.
  - To install to a different directory, enter `n` and then press the return key.

At the `Specify IntegratorETL installation directory` prompt, enter the fully qualified path to the directory where you want to install Integrator ETL.



**Note:** Recommended practice is to specify a directory that does not exist. The directory is created during the installation. If you specify a directory that exists, you are asked to confirm the directory you specified. The existing directory is then overwritten during the installation. Alternatively, specify a different directory.

4. At the `Enter the full path of the Eclipse zip file` prompt, enter the fully-qualified path to the Eclipse .zip file you downloaded from <http://eclipse.org>.

The path must include the name of the .zip file itself.

For example, if you store the Eclipse ZIP file in the Oracle directory, you would enter `C:\Oracle\eclipse-java-indigo-SR2-win32-x86_64.zip`.

When you press the return key after entering the path to the Eclipse .zip file, the installation processing begins.

Integrator ETL is installed to the location you specified.



**Note:** The installation processing takes time. During this processing, the installer connects to the Internet to download the RSE plugin. Depending on a number of factors, the download and installation of this plugin may take some time.

If, however, the installation of the RSE plugin continues for an excessive time, your Internet connection may have been interrupted and the installation may be hung. If you think the installation is



hung for this reason, terminate the installation, restore your connection to the Internet, and then try the installation again.

You may want to create a desktop shortcut to the Integrator ETL executable.

## Creating a Sample Application from Data Ingested Using Integrator ETL

Studio provides a sample application based on data that you ingest using Integrator ETL.

*[About the Integrator ETL-based sample application](#)*

*[Downloading the Integrator ETL-based sample application materials](#)*

*[Loading the sample data](#)*

*[Loading the sample application](#)*

### About the Integrator ETL-based sample application

The Integrator ETL-based sample application uses sales and product data from a fictitious bicycle manufacturer. You use this sample application to analyze the performance of resellers and products across a wide variety of dimensions.

To create this sample application, you run the Integrator ETL sample project pipeline to create an Endeca Server data domain, then create an application connected to that data domain.

Integrator ETL is used with enterprise systems that need to ingest and combine data from a variety of sources.

For these types of deployments, the data is managed centrally by a data architect. The data architect creates the Endeca Server domains, then uses Studio to create available Endeca Server connections for users to create applications from.

### Downloading the Integrator ETL-based sample application materials

The materials for the Integrator ETL-based sample application are available from the Oracle Technology Network (OTN).

The sample application .zip file includes:

- The PDF version of this guide
- An `EID3.1_Sample_IntegratorETL` directory containing:
  - `EID31_SamplePipeline.zip`, the Integrator ETL pipeline, to ingest the sample data into Endeca Server
  - `EID31_SampleApp_IntegratorETL.lar`, the Studio .lar file, to import the application pages and components into Studio

To download the sample application materials:

1. Go to the **Downloads** tab for Oracle Endeca Information Discovery  
<http://www.oracle.com/technetwork/middleware/endeca/downloads/index.html>.

2. At the bottom of the tab, under **Related Products**, click **Endeca Information Discovery Studio Sample Application**.
3. On the download page, click the **Accept License Agreement** radio button.
4. Click the link to download `EID31_SampleApp.zip`
5. After downloading the .zip file, extract the files to a temporary directory.

## Loading the sample data

You import and load the sample application data using Integrator ETL.

## Starting Integrator

In order to run the sample project pipeline, you must launch Integrator ETL.

To start Integrator:

1. Go to the directory where you installed Integrator ETL and run the Integrator Designer application (Integrator ETL.exe in Windows or IntegratorETL.sh in Linux).

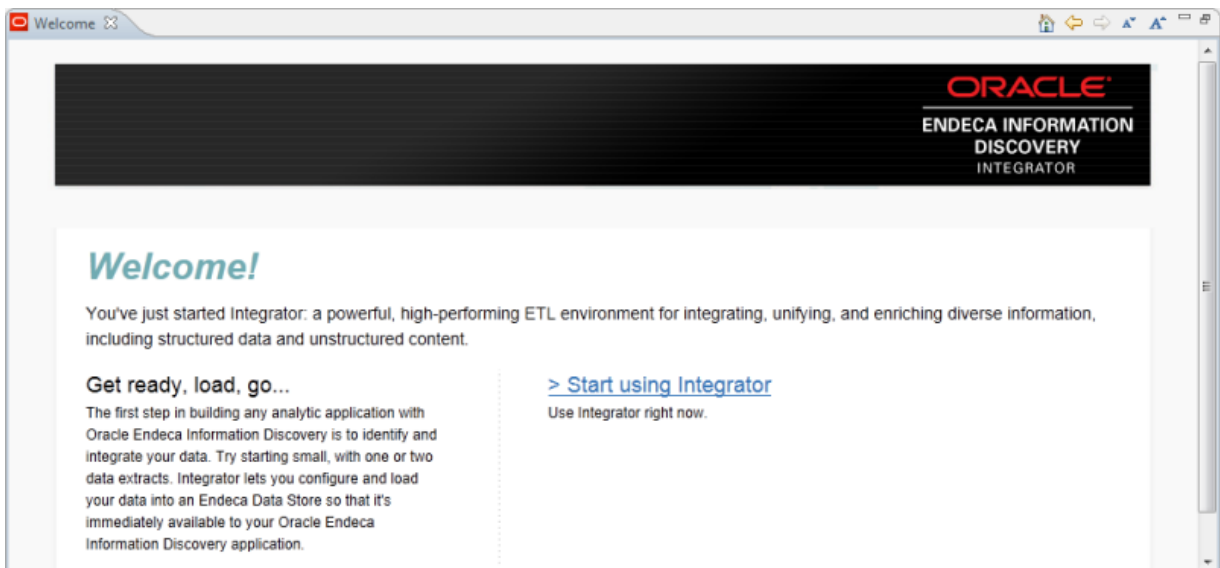
The Integrator ETL splash screen displays first, followed by the **Workspace Launcher** dialog box.

2. Click **OK** to accept the default workspace location, or click **Browse** to select another location.



**Note:** The workspace is the folder in which Integrator ETL stores all your project files. If you want to use the same folder each time you run Integrator ETL, check **Use this as the default and do not ask again** before clicking **OK**.

3. The first time you launch Integrator ETL, the Welcome screen displays, as pictured. Click **Start using Integrator ETL**.



**Note:** If you want to return to this Welcome screen at any point while you are in the Integrator ETL workspace, choose **Help>Welcome**.

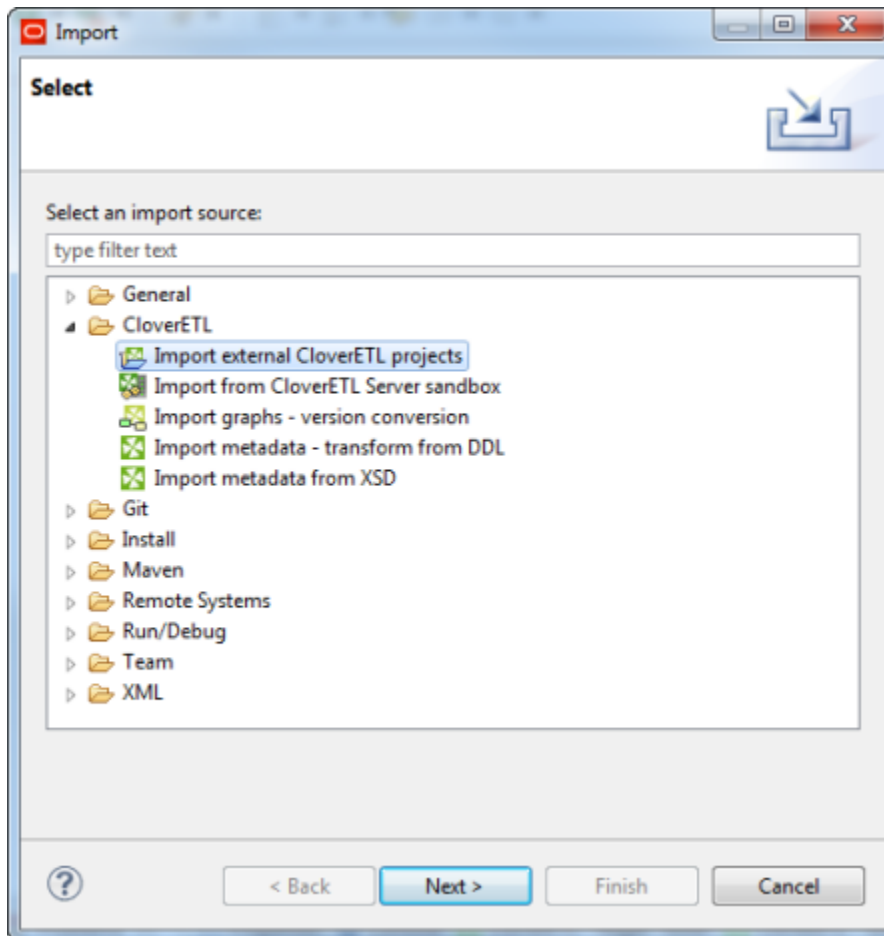
## Loading the sample data pipeline

Next, you import the sample data pipeline into Integrator ETL.

The sample data pipeline is contained in the file `EID31_SamplePipeline.zip`, which is part of the sample application .zip file that you downloaded.

To import the sample data pipeline:

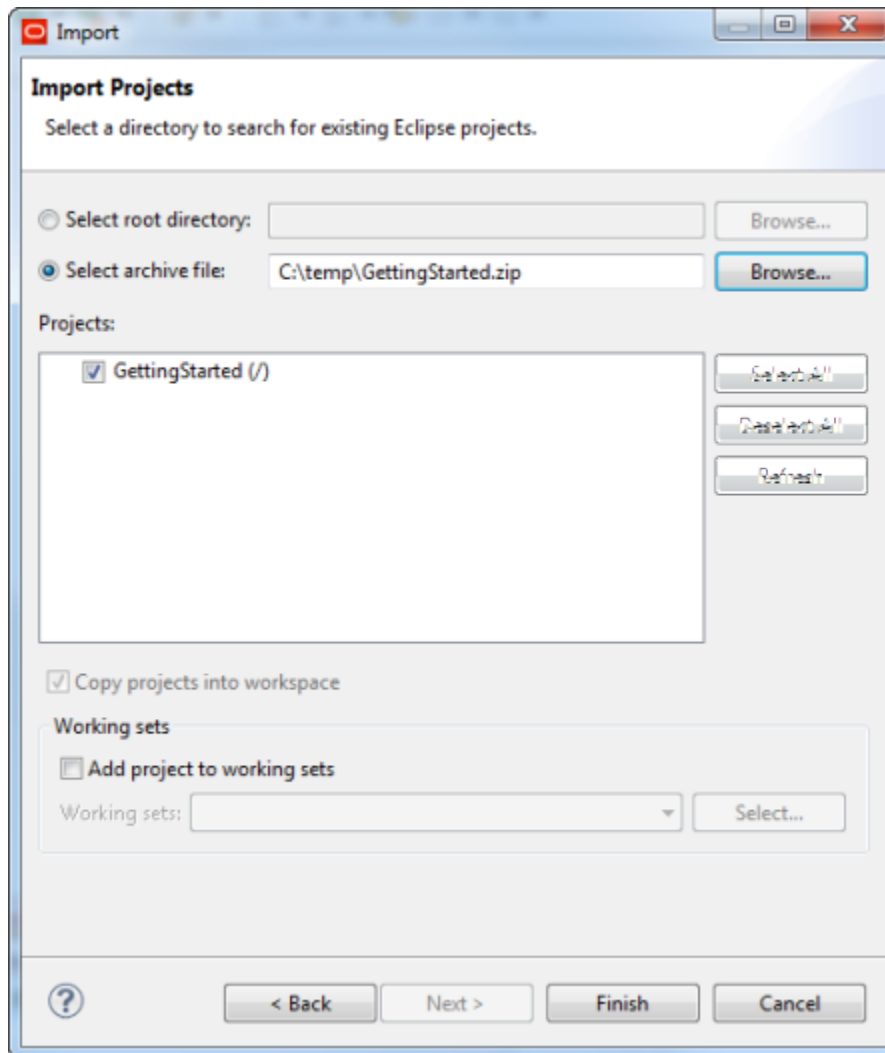
1. From the **File** menu, select **Import**.  
The **Import** wizard opens.
2. On the **Select** page:
  - (a) Open the **Clover ETL** folder.
  - (b) Select **Import external Clover ETL projects**.
  - (c) Click **Next**.



3. On the **Import Projects** page:
  - (a) Click the **Select archive file** radio button.

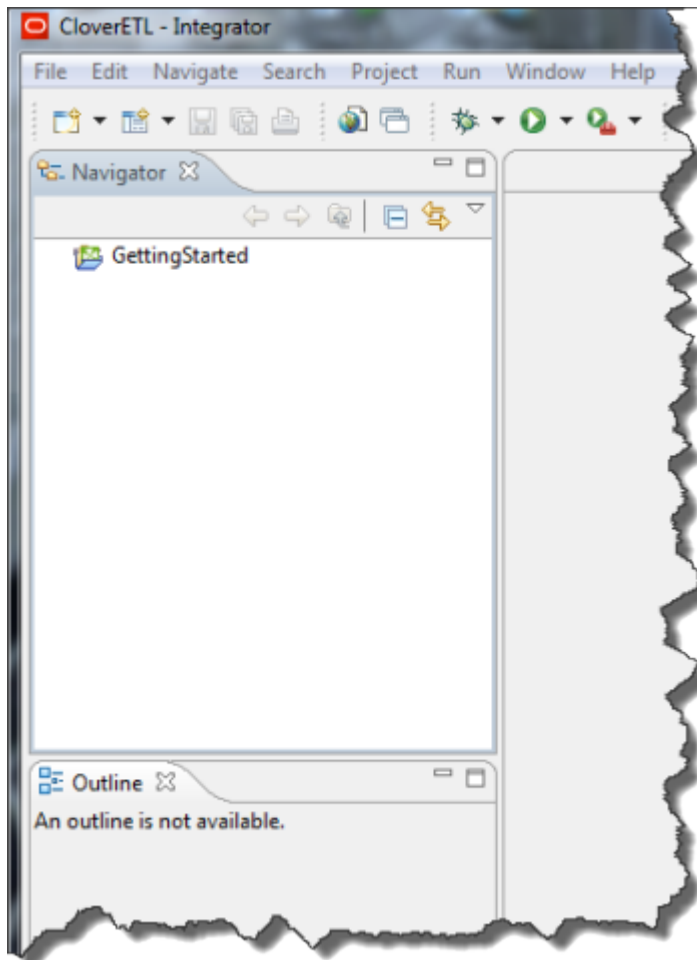
- (b) Use the **Browse** button to navigate to the location where you unzipped the sample application package and select `EID31_SamplePipeline.zip`.

The sample project appears in the **Projects** list.



4. Click **Finish**.

The sample project now appears in the Integrator ETL Navigator.



## Running the sample pipeline project

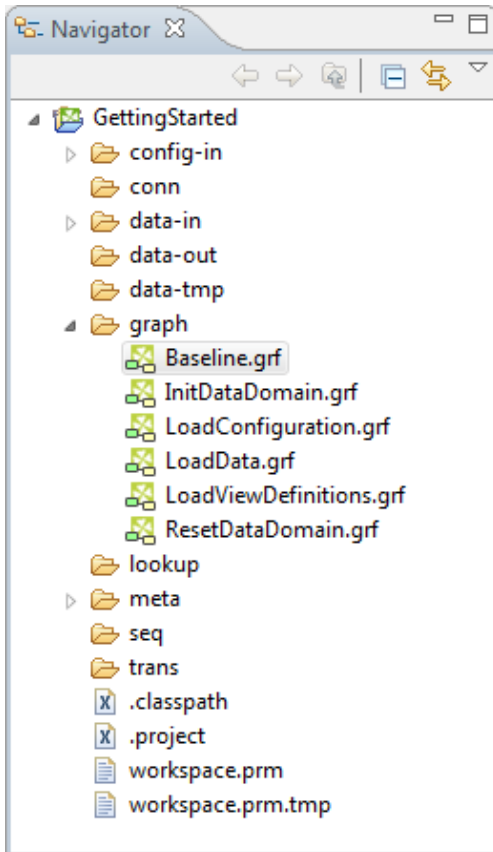
After you load the sample pipeline project, you then run the pipeline in order to load the data.



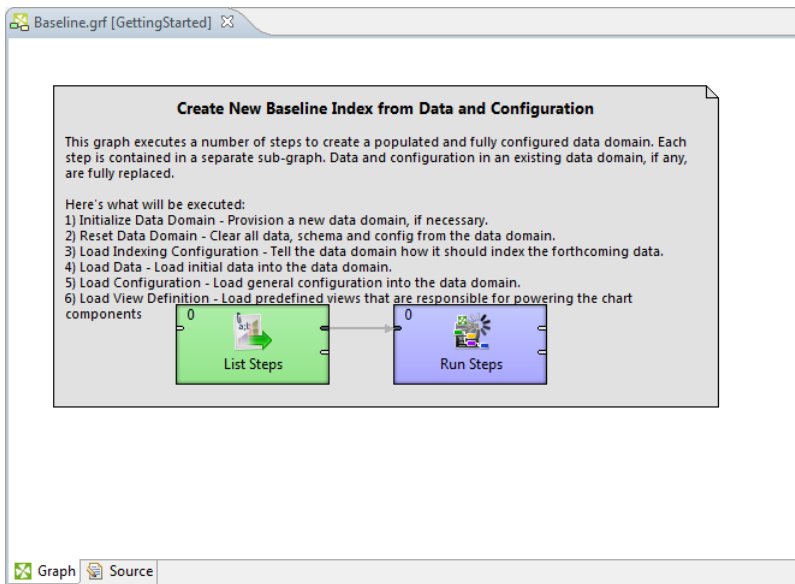
**Important:** To process the pipeline, Endeca Server must be running. For details, see the *Oracle Endeca Server Administrator's Guide*.

To run the pipeline project:

1. In the Navigator, in the sample project folder, navigate to the **graph** folder.



2. In the **graph** folder, double-click **Baseline.grf** to launch it.



Make sure `Baseline.grf` is open in Integrator ETL, as pictured, and that the `GettingStarted` project appears in the **Navigator** pane.

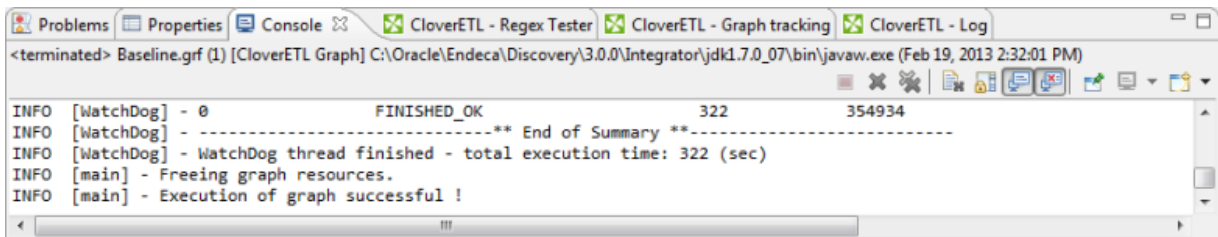
3. To start the graph process:
  - (a) Click anywhere in the Baseline graph's gray box.

The box is given focus (indicated by a black line around the box).

- (b) Click **Run**  .

Integrator ETL processes `Baseline.grf`, which initializes a new, empty Endeca data domain instance (named `GettingStarted`) and loads the data and configuration for the sample application. This step takes several minutes.

You can monitor the graph's progress in the **Console** (located at the bottom of the workspace). It issues an `Execution of graph successful` message when finished.



4. When the graph processing completes, exit Integrator ETL.

## Loading the sample application

Now that the data and configuration is loaded into a data domain, you can create the sample application.

## Connecting to the sample data domain

Next, you update the default Studio Endeca Server connection to connect to the sample data domain that you created when you ran the baseline graph in Integrator ETL.

To connect the Studio default Endeca Server connection to the sample data domain:

1. Start and log in to Studio.
2. From the administrator menu, select **Control Panel**.



3. In the **Control Panel** menu, in the **Information Discovery** section, click **Endeca Servers**.
4. For the default Endeca Server connection, click **Edit**.
5. On the **Endeca Server Connection Definition** dialog, edit the JSON string as follows:
  - Set `dataDomainName` to `GettingStarted`
  - Set `name` to `GettingStarted`

- Set `port` to the port used for Endeca Server. If you used the default configuration, then the port is 7001.
- Set `server` to the name of the machine.

When you're finished, the string will look something like this:

```
{
  "dataDomainName": "GettingStarted",
  "name": "GettingStarted",
  "port": "7001",
  "server": "localhost"
}
```

6. Click **Save**.
7. To return to the **Discovery Applications** page, click **Back to Home**.

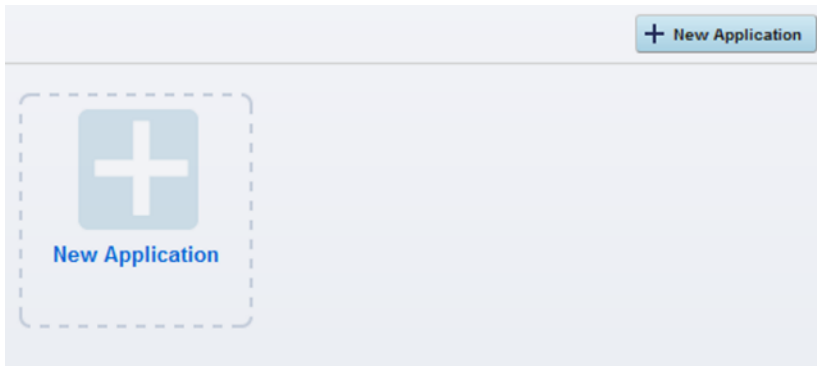


## Creating the application in Studio

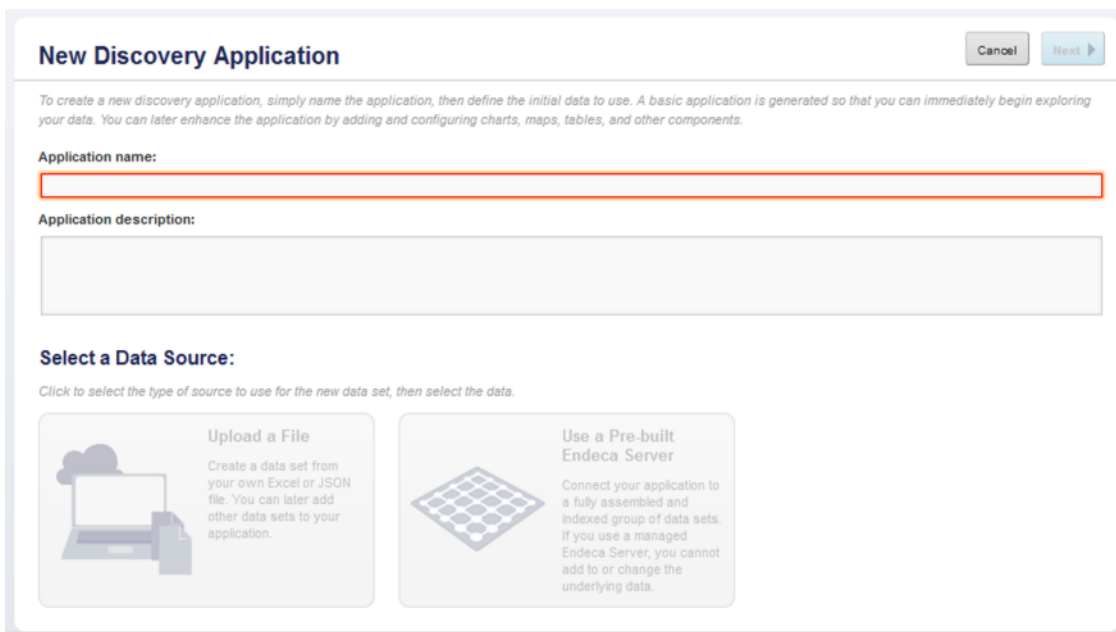
Next, you create a Studio application, into which you will import the sample application pages.

To create the application:

1. On the **Discovery Applications** page, click **+ New Application**.



The **New Discovery Application** page is displayed.

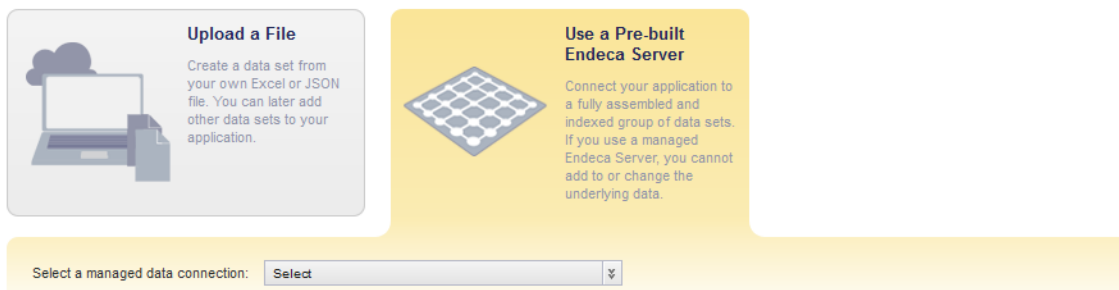
A screenshot of the 'New Discovery Application' page. The page has a title bar with 'New Discovery Application' and 'Cancel' and 'Next' buttons. Below the title bar, there is a paragraph of instructions: 'To create a new discovery application, simply name the application, then define the initial data to use. A basic application is generated so that you can immediately begin exploring your data. You can later enhance the application by adding and configuring charts, maps, tables, and other components.' There are three main sections: 1. 'Application name:' with a text input field. 2. 'Application description:' with a large text area. 3. 'Select a Data Source:' with two options: 'Upload a File' (with a laptop icon) and 'Use a Pre-built Endeca Server' (with a grid icon). Each option has a brief description of what it does.

2. In the **Application name** field, type a name for the application.
3. You can leave the application description blank.

- Under **Select a Data Source**, click **Use a Pre-built Endeca Server**.

#### Select a Data Source:

Click to select the type of source to use for the new data set, then select the data.



- From the **Select a managed data connection** drop-down list, select **SampleData**.
- Click **Done**.

The new application is displayed.

The application initially contains a single page with the following components:

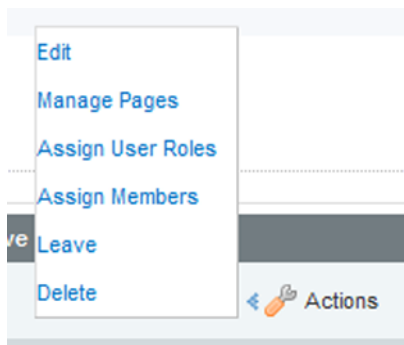
- **Search Box**
- **Available Refinements**
- **Selected Refinements**
- **Chart**
- **Results Table**

## Importing the sample application pages

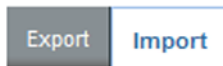
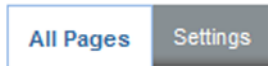
After you create the initial application using the Endeca Server connection, you import the sample application pages into it.

To import the sample application pages:

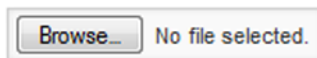
- From the administrator menu, select **Control Panel**.
- In the **Control Panel** menu, in the **Portal** section, click **Applications**.
- On the **Applications** page, click the **Actions** link for the sample application, then click **Manage Pages**.



4. Click **Export/Import**.
5. Click **Import**.



Import a LAR file to overwrite the selected data.



6. To complete the import:
  - (a) Browse to the `EID31_SampleApp_IntegratorETL.lar` sample application .lar file you downloaded.
  - (b) Under **What would you like to import?**, accept the default settings, and then click **Import**.  
When the import is completed, you will see a success message.

7. Click **Back to *applicationName***.

The following new pages are added to the application:

- **Sales Overview**
- **Resellers**
- **Products**
- **Map**



## Appendix B

---

# Installing Oracle Endeca Information Discovery on Linux

An orchestration script is provided to install Oracle Endeca Information Discovery on Linux operating systems. Installing Oracle Endeca Information Discovery on Linux differs in the following ways from the documented procedure:

- Use the appropriate procedures for your Linux operating system to install Oracle Sun Java JDK 1.6.
- Download the Linux versions of the Oracle Endeca Information Discovery Packages:
  - Oracle Endeca Information Discovery Studio (3.1) Media Pack v1 for Linux x86-64
  - Oracle Endeca Server (7.6) for Linux x86-64
  - Oracle Endeca Server (7.6) Installers for Linux



**Note:** The recommended installation packages for WebLogic Server and ADF are compatible with Linux operating systems as well as with Windows.

- The Endeca Server installation package includes a directory named `linux`. When setting up the orchestration script directories, rename this directory to `ES_linux_OC`.
- To run the orchestration script, use the command

```
sh run_EID_install.sh config_EID_windows.prop [ --temp-directory <tempFolderName> ]
```

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