Oracle Endeca Platform Services

Installation Guide

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Contents

Copyright and disclaimer

Preface

The Oracle Endeca Commerce solution enables your company to deliver a personalized, consistent customer buying experience across all channels — online, in-store, mobile, or social. Whenever and wherever customers engage with your business, the Oracle Endeca Commerce solution delivers, analyzes, and targets just the right content to just the right customer to encourage clicks and drive business results.

Oracle Endeca Commerce is the most effective way for your customers to dynamically explore your storefront and find relevant and desired items quickly. An industry-leading faceted search and Guided Navigation solution, Oracle Endeca Commerce enables businesses to help guide and influence customers in each step of their search experience. At the core of Oracle Endeca Commerce is the MDEX Engine™, a hybrid search-analytical database specifically designed for high-performance exploration and discovery. The Endeca Content Acquisition System provides a set of extensible mechanisms to bring both structured data and unstructured content into the MDEX Engine from a variety of source systems. Endeca Assembler dynamically assembles content from any resource and seamlessly combines it with results from the MDEX Engine.

Oracle Endeca Experience Manager is a single, flexible solution that enables you to create, deliver, and manage content-rich, cross-channel customer experiences. It also enables non-technical business users to deliver targeted, user-centric online experiences in a scalable way — creating always-relevant customer interactions that increase conversion rates and accelerate cross-channel sales. Non-technical users can control how, where, when, and what type of content is presented in response to any search, category selection, or facet refinement.

These components — along with additional modules for SEO, Social, and Mobile channel support — make up the core of Oracle Endeca Experience Manager, a customer experience management platform focused on delivering the most relevant, targeted, and optimized experience for every customer, at every step, across all customer touch points.

About this guide

This guide contains installation instructions for setting up Endeca Platform Services on Windows, Linux, and Solaris.

Who should use this guide

This guide is intended for developers who are building applications using Oracle Endeca Commerce, as well as for system administrators managing Oracle Endeca Commerce on Windows, Solaris, or Linux.

Note: Unless otherwise indicated, whenever this document specifies UNIX, it applies to Linux and Solaris.

Conventions used in this guide

This guide uses the following typographical conventions:

Code examples, inline references to code elements, file names, and user input are set in `monospace` font. In the case of long lines of code, or when inline monospace text occurs at the end of a line, the following symbol is used to show that the content continues on to the next line: ¬

When copying and pasting such examples, ensure that any occurrences of the symbol and the corresponding line break are deleted and any remaining space is closed up.

Contacting Oracle Support

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

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

Chapter 1

Installation for the Endeca Platform Services

This section contains instructions for installing the Endeca Platform Services.

Before you install

This section provides an overview of Endeca Platform Services, system requirements, and other information you need to know before installing.

Platform Services overview

The Endeca Platform Services package consists of a number of components that are used to build Endeca applications in support of the Endeca MDEX Engine.

Two of the major components of the Endeca Platform Services package are the Endeca Information Transformation Layer (which includes Forge and other Data Foundry components) and the Endeca Application Controller (EAC). The following table lists the components that are available in the Platform Services installation package.

Platform Services Component	Description
Endeca Application Controller (EAC)	The EAC components consist of the EAC Central Server (which coordinates the command, control, and monitoring of all Agents in an Endeca implementation), the EAC Agent (which controls the work of an Endeca implementation on a single host machine) and the EAC command-line utility, `eaccmd`.
Data Foundry	Consists of the Forge program and its related components, such as record adapters, record manipulators, dimension servers, property mappers, and so on. The Content Adapter Development Kit (CADK) is also installed. Note that the Dgidx program is not part of this package, but is available in the MDEX Engine installation package.
Presentation and Logging APIs	APIs to the Endeca MDEX Engine and Log Server. The Endeca Presentation API must be installed on the machine that hosts the Web application server.

Platform Services Component	Description
Logging and Reporting System	The Log Server and Report Generator, which (together with the Logging API) make up the Endeca Logging and Reporting System.
Reference Implementations	Sample Endeca applications that include a sample Developer Studio project (including source data and instance configuration files), as well as JSP and .NET user interface (front-end) applications.
emgr_update	A utility that lets you upload the instance configuration to Endeca Workbench and download it from Endeca Workbench.
Endeca Control System	The Endeca Job Control Daemon (JCD) and the Control Interpreter. These components control and administer the Endeca Information Access Platform running on one or multiple host machines. The Endeca Control System should be installed on the machine that hosts the Endeca Platform Services. Note that the Control System is deprecated, and is not installed by default.

System requirements

The Endeca Platform Services package has the following requirements:

Supported operating systems

The Endeca Platform Services software supports the following 64-bit operating systems running on servers with x64 or SPARC processor capabilities:

Platform	Description
• Red Hat Enterprise Linux ES (version 4 for x64) • Red Hat Enterprise Linux AS (version 4 for x64)	For best performance on Red Hat Linux version 4 (ES and AS), Oracle recommends version 4.6.
• Red Hat Enterprise Linux Server (version 5 for x64) • Red Hat Enterprise Linux Advanced Platform (version 5 for x64)	For best performance on Red Hat Linux version 5 (ES and AS), Oracle recommends version 5.1.
Oracle Enterprise Linux 5	
Solaris 10 running on 64-bit SPARC processors.	For best performance on SPARC Solaris version 10, Oracle recommends Solaris 10 Update 5.
SUSE Enterprise Linux 11 SP1	
• Windows Server 2003 x64 • Windows Server 2008 R2 Enterprise	For best performance on Windows, Oracle recommends Windows Server 2003 Enterprise Edition Service Pack 2.

Platform	Description
VMware ESX 3.5	Platform Services 6.1 is supported on VMware ESX 3.5 for the following guest operating systems: • Red Hat Enterprise Linux Server (version 5 for x64) • Red Hat Enterprise Linux Advanced Platform (version 5 for x64) • Windows Server 2003
VMware vSphere 4 and 4.1	Platform Services 6.1 is supported in VMware vSphere 4 and 4.1 environments on the following guest operating systems: • Red Hat Enterprise Linux Server (version 5 for x64) • Red Hat Enterprise Linux Advanced Platform (version 5 for x64) • Windows Server 2008 R2 Enterprise

Note: 32-bit versions of any operating systems are not supported by the Platform Services component in any environment; only 64-bit based hardware and operating systems platforms are supported. Beyond upgrading to 64-bit platforms, no change to the deployment methodology or existing technical artifacts (ITL pipelines, application code, etc) is required related to this topic.

The Presentation API for Java and ASP.NET can be run on any of the supported platforms, using these versions of Java and .NET:

- Sun JDK 1.4.2, 5.0 (1.5), and 6.0 (1.6)
- IBM JDK 1.4.2, 5.0 (1.5.), and 6.0 (1.6)
- .NET 2.0 and 3.5

Hardware requirements

For all supported platforms, an 80 GB hard drive is the minimum recommended size.

HTTP Service memory requirements

Each instance of the HTTP Service has a memory footprint from 256 MB to 1 GB.

Required Oracle Endeca components

Endeca Platform Services does not require that any other Endeca components be previously installed.

You can install the Endeca MDEX Engine and Oracle Endeca Workbench packages either before or after you install the Platform Services package.

Note: The Endeca Document Conversion Module does require that Endeca Platform Services be installed.

You can install all the Endeca packages on a single server (which is typically a development server) or install them across multiple servers.

A *single development server* can have all the required Endeca packages installed on it:

- Core packages, which are the MDEX Engine, Platform Services and Oracle Endeca Workbench.

- Additional packages, such as Deployment Template, Developer Studio, and CAS.
- Separately licensed packages, such as Document Conversion Module, and other packages.

In a *multiple-server environment*, you can host:

- The MDEX Engine, the Platform Services package (which includes the EAC Central Server and Agent), the data for your application, and the Deployment Template on one server. This is the Data Processing (ITL) server.
- The MDEX Engine and the EAC Agent on one or more additional servers. These are the MDEX Engine servers.
- Endeca Workbench and the EAC Agent on a separate server. This is the Tools server.

For more information on these configurations, see the *Oracle Endeca Commerce Getting Started Guide*.

Compatibility with other Endeca components

To determine the compatibility of Platform Services with other Endeca installation packages, see the *Oracle Endeca Commerce Compatibility Matrix* available on the Oracle Technology Network.

Required reading

Before installing, Oracle recommends that you read the following documents for important information about the release.

Oracle Endeca Guided Search Getting Started Guide

The *Oracle Endeca Guided Commerce Started Guide* gives an overview of Endeca components and includes information about configuration scenarios. After installing all the components in your Endeca deployment, read this guide for information on verifying your installation. You can download the *Oracle Endeca Commerce Getting Started Guide* from the Oracle Technology Network.

Release Notes

Refer to the Endeca release notes (`README.txt`) for information about new features, changed features, and bug fixes for this release. After installation, release notes are also available in the following location:

- Windows: `%ENDECA_ROOT%\README.txt`
- UNIX: `$ENDECA_ROOT/README.txt`

Note that you can also download the release notes from the Oracle Technology Network.

Migration Guide

Refer to the *Oracle Endeca Platform Services Migration Guide* for information about migrating your implementation from a previous version of Endeca software. You can download the *Oracle Endeca Platform Services Migration Guide* from the Oracle Technology Network.

Installing the Endeca Platform Services

This section contains the Platform Services installation procedure and describes the contents of the installation directory.

Windows installation procedures

This section contains the Platform Services installation procedures for Windows.

Creating a user for the Endeca services on Windows

You must run the Endeca services as a specified user, for which you can control permissions.

You are asked to provide information about this Endeca services user during the installation process on Windows. Oracle recommends that you create a user account called `endeca` that has the proper file and directory permissions to access all necessary files for your application, and that you set up your Endeca HTTP Service to run under this account. However, you can use any user that you prefer, as long as it meets these requirements.

To create the user endeca:

1. Ensure that you have administrator privileges on the local machine.
2. From the Windows Control Panel, select **Administrative Tools** and then select **Computer Management**.
3. In the tree pane of the Computer Management window, expand **Local Users and Groups**.
4. Right-click **Users** and select **New User**.
5. In the New User dialog box, do the following:
   a) Enter `endeca` for both the User name and the Full name.
   b) Optionally, enter a description.
   c) Set a password for user `endeca`.

   

   Note: The user must have a non-blank password, because the installer will not accept a blank password for the services user.

   d) Uncheck **User must change password at next logon**.
   e) Select **Password never expires**.
6. Click **Create** to create the new user, and then **Close** to exit the dialog box.
7. Close the Computer Management window, but do not exit Administrative Tools.
8. From Administrative Tools, do the following:
   a) Open **Local Security Policy**.
   b) Go to **Local Policies > User Rights Assignments > Log on as a Service**.
   c) Add user `endeca` to the list of users that can register a process as a service.
   d) Close the dialog box and exit Administrative Tools.
9. Restart your computer to ensure that the changes take effect.

Installing Platform Services on Windows

You install the Platform Services on Windows by using the installation wizard.

Use the following prerequisites before installing:

- Ensure that you have administrator privileges on the local machine.
- The user name that is used to start the Endeca services must exist and have a non-blank password.
- Close all running programs.

To install the Endeca Platform Services on Windows:

1. In your local environment, locate the Endeca Platform Services installation package that you downloaded from the Oracle Software Delivery Cloud.

   The name of the installation file will be: `platformservices_<version>_x86_64pc-win32.exe`
2. Double-click the installer file to start the wizard.
3. When the **Endeca Platform Services Setup Wizard** screen appears, click **Next** to begin the installation process.
4. Read the copyright information and click **Next**.
5. In the **Destination folder** screen, select an installation location or accept the default `C:\Endeca\PlatformServices` installation directory and then click **Next**.

   Keep in mind that you cannot install the Endeca software in a directory with spaces in its name.

   

   Note: If you do not use the default location, and you are installing more than one Endeca product on the same machine, ensure that you install each product to a separate location.

6. In the **Custom Setup** screen, select the program features you want to install and then click **Next**. Note that some items have sub-items. By default, all of the items (except for the Endeca Control System) are selected for installation.

Feature	Contents
Endeca Platform Services	Data Foundry components, such as Forge and the CADK
Endeca Application Controller Server and Agent	EAC Central Server and Agent
Endeca Application Controller Agent	EAC Agent only
Endeca Application Controller Utility	EAC command-line utility (eaccmd)
Endeca Presentation and Logging APIs	Java and .NET APIs for Endeca MDEX Engine and Log Server
Endeca logging and reporting components	Endeca Log Server and Report Generator
Endeca Reference Implementation	Sample source data project and JSP/.NET UI references
Documentation	The *Licensing Guide* and Release Notes.
Endeca Control System	Endeca Control Interpreter (not installed by default)

   The wizard displays the required disk space for the selected features. The entire Platform Services installation requires approximately 470 MB of disk space for a default install.
7. In the **Endeca Services Information** screen, enter the user name, domain name, and password to use when launching the Endeca HTTP Service and then click **Next**.

   This user must already exist. For details on creating the user account, see the previous topic, "Creating a user for the Endeca services on Windows".
8. In the **Endeca Application Controller Service Information** screen, enter the following information and then click **Next**.
   - The port on which the Endeca HTTP Service will listen (default is **8888**).
   - The shutdown port of the Endeca HTTP Service (default is **8090**).
   - The location (an absolute path) of the MDEX Engine root directory (for example, `C:\Endeca\MDEX\6.2.2`). Note that the installer does not verify the existence of the directory; this allows you to install the Platform Services package before the MDEX Engine package.

9. In the **Ready to install the program** screen, confirm the settings you selected in previous screens and then click **Install**.
10. When the installation is complete, click **Finish** to exit the wizard.
11. When you exit the wizard, you are prompted to restart your computer. You may do so now, or wait until later.

Note: You must restart your computer to set the Endeca environment variables correctly and to start the Endeca HTTP Service.

After the computer restarts, the Endeca environment variables (such as `ENDECA_ROOT`) are available for use and the Endeca HTTP Service starts up.

Depending on your application needs, you may have to perform two post-installation tasks:

- If you did not specify the MDEX Engine root directory (at Step 9), the `com.endeca.mdexRoot` setting (in the EAC `eac.properties` configuration file) will have a blank value. The file is located in the `%ENDECA_CONF%\conf` directory. If you later install the MDEX Engine on your system, you must edit the file and add the absolute path of the MDEX Engine root directory in the setting, and then restart the Endeca HTTP Service for the change to take effect. For more information on this file, see the *Oracle Endeca Application Controller Guide*.

Configuring silent installation on Windows

The silent installer for Windows reads the necessary input from command-line properties.

Silent installations are installations that use the `/s` switch to run without a user interface. The responses to the Windows installer prompts are supplied with command-line properties and provide the same answers that an interactive user would provide.

The basic syntax for a silent installation on Windows is:

```
platformservices_613_x86_64pc-win32.exe /s /v" /qn endeca_properties"
```

The Endeca properties are described below. Note that this is the asynchronous version. To run the command synchronously, preface the installer executable with the `start /wait` command (especially useful in automated scripts).

If you want the installer to create a log, use the `/l` switch as part of the `/v` arguments; for example:

```
/s /v"/l* install.log /qn endeca_properties"
```

Note that the Endeca HTTP Service, when installed, does not start automatically, though it is set to automatically start on system startup (it will be started upon the next reboot).

Endeca Properties

The following properties, when passed to the silent installer, provide configuration information for the installation.

Endeca Property Name	Meaning
`INSTALLDIR`	Required. Specifies the absolute path to the directory to install Platform Services (e.g., C:\Endeca\PlatformServices). The path should be in escaped quotes. Keep in mind that you cannot install the Endeca software in a directory with spaces in its name.

Endeca Property Name	Meaning
	 **Note:** If you do not use the default location, and you are installing more than one Endeca product on the same machine, ensure that you install each product to a separate location.
ENDECA_USER_NAME	Required for features that install the HTTP Service. The user name to use when launching the Endeca HTTP Service. Note that the user must already exist and the name should be specified in escaped quotes.
ENDECA_USER_PASSWORD	Required if the user name is specified. The password for the Endeca HTTP Service user. Note that the password should be in escaped quotes.
ENDECA_PASSWORD_CONFIRM	Required if the user name is specified. Confirms the password for the Endeca HTTP Service user. Note that the password should be in escaped quotes.
USERDOMAIN	Optional. The Windows domain for the Endeca HTTP Service user. Note that the domain name should be in escaped quotes. The default is the domain the current user is logged in to.
ETOOLS_HTTP_PORT	Optional. The port on which the Endeca HTTP Service listens. The default is 8888.
ETOOLS_SERVER_PORT	Optional. The shutdown port for the Endeca HTTP Service. The default is 8090.
JCD_PORT	Optional. The port on which the Endeca JCD Service listens. This service is not installed by default. The default is 8088.
ADDLOCAL	Optional. Specifies which features to install (see the next section for the feature names). If omitted, all features (except the Endeca Control System) are installed.

Endeca Installable Features

The ADDLOCAL property specifies which Endeca features to install. The features correspond to the list on the Custom Setup screen in the interactive installer. If the ADDLOCAL property is omitted, all features are installed, except for the Endeca Control System. You can specify multiple features by using a comma-delimited list.

Property Value	Meaning
Endeca_Platform_Services • IAP_X64_Bin • IAP_X86_Bin	Data Foundry directories and components, including Forge and the CADK. Use IAP_X64_Bin for the 64-bit version of the binaries and IAP_X86_Bin for the 32-bit version. Note that Forge is a 32-bit program regardless of the specified feature.
Endeca_Application_Controller_Server	EAC Central Server and Agent

Property Value	Meaning
Endeca_Application_Con¬troller_Agent	EAC Agent only
Endeca_Application_Controller_Util¬ity	EAC command-line utility (eaccmd)
Endeca_Logging_and_Report	Endeca Log Server and Report Generator
Endeca_Presentation_and_Log¬ging_APIs • Java_APIs • NET_APIs	APIs for Endeca MDEX Engine and Log Server. Use Java_APIs for the Java version of the APIs and/or NET_APIs for the .NET version.
Endeca_Reference_Implementation • Sample_data • JAVA_jsp_Implementation • ASP.NET_Implementation	Sample references, consisting of the sample wine project with source data and JSP and .NET UI front-end references.
Endeca_Control_System • JCD_X64_Bin • JCD_X86_Bin	Endeca Control Interpreter. Use JCD_X64_Bin for the 64-bit version of the binaries and JCD_X86_Bin for the 32-bit versions.
Endeca_Documentation	The *Licensing Guide* and Release Notes.

Common Configurations

The following are some configurations for building specific types of servers. Note that the command examples are wrapped for ease of reading.

Development Server:

- Installs the entire Platform Services package (except for the Endeca Control System)

The command line would be similar to this example, which omits the ADDLOCAL property:

```
platformservices_613_x86_64pc-win32.exe /s /v"
  /qn INSTALLDIR=\"C:\Endeca\PlatformServices\"
  ENDECA_USER_NAME=\"endeca\" ENDECA_USER_PASSWORD=\"endeca\"
  ENDECA_PASSWORD_CONFIRM=\"endeca\"
  ETOOLS_HTTP_PORT=8888 ETOOLS_SERVER_PORT=8090"
```

MDEX Engine Server:

- EAC Agent
- EAC Utility
- Presentation and Logging APIs

The command line is identical as the Development Server, with the addition of this ADDLOCAL property:

```
ADDLOCAL=Endeca_Application_Controller_Agent,
Endeca_Application_Controller_Utility,
Endeca_Presentation_and_Logging_APIs,Java_APIs,NET_APIs
```

ITL Server:

- EAC Server
- EAC Utility

- Forge (including the CADK)
- Reference implementations
- Log Server and Report Generator

The command line is identical as the Development Server, with the addition of this ADDLOCAL property:

```
ADDLOCAL=Endeca_Application_Controller_Server,
Endeca_Application_Controller_Utility,
Endeca_Platform_Services,IAP_X64_Bin,
Endeca_Reference_Implementation,Sample_data,
JAVA_jsp_Implementation,ASP.NET_Implementation,
Endeca_Presentation_and_Logging_APIs,
Java_APIs,NET_APIs
```

This example is for a 64-bit Windows server. Replace `IAP_X64_Bin` with `IAP_X86_Bin` for a 32-bit Windows server.

Tools Server:

- EAC Agent
- EAC Utility
- Presentation and Logging APIs
- Reference implementations
- Log Server and Report Generator

The command line is identical as the Development Server, with the addition of this ADDLOCAL property:

```
ADDLOCAL=Endeca_Application_Controller_Agent,
Endeca_Application_Controller_Utility,
Endeca_Presentation_and_Logging_APIs,Java_APIs,NET_APIs,
Endeca_Reference_Implementation,Sample_data,JAVA_jsp_Implementation,
ASP.NET_Implementation,Endeca_Logging_and_Report
```

Running a silent installation on Windows

You run a silent installation for Windows using the appropriate command-line properties.

To launch the silent installer on Windows:

1. Open a command prompt and navigate to the directory where you downloaded the installer.
2. Determine which Endeca features you want to install and issue a command with the appropriate Endeca properties. The following example installs the complete package (except for the Endeca Control Interpreter) on a 64-bit Windows machine:
   ```
   platformservices_613_x86_64pc-win32.exe /s /v" /qn
   ENDECA_USER_NAME=\"endeca\" ENDECA_USER_PASSWORD=\"endeca\"
   ENDECA_PASSWORD_CONFIRM=\"endeca\"
   INSTALLDIR=\"C:\Endeca\PlatformServices\" ETOOLS_HTTP_PORT=8888
   ETOOLS_SERVER_PORT=8090"
   ```
   The command line call returns immediately, but the installer continues to run for a few minutes in the background as it installs the Platform Services package and sets the Platform Services environment variables (such as ENDECA_ROOT).
3. After the installation is finished, reboot the machine to ensure that the Endeca environment variables are set correctly and to start the Endeca HTTP Service.

Keep in mind that you can run the command with a batch script. Note that the above command is the asynchronous version. To run the command synchronously, preface the installer executable with the `start /wait` command.

Depending on your application needs, you may have to perform two post-installation tasks:

- If you did not specify the MDEX Engine root directory (at Step 9), the `com.endeca.mdexRoot` setting (in the EAC `eac.properties` configuration file) will have a blank value. The file is located in the `%ENDECA_CONF%\conf` directory. If you later install the MDEX Engine on your system, you must edit the file and add the absolute path of the MDEX Engine root directory in the setting, and then restart the Endeca HTTP Service for the change to take effect. For more information on this file, see the *Oracle Endeca Application Controller Guide*.

UNIX installation procedures

This section contains the Platform Services installation procedures for UNIX.

Installing Platform Services on UNIX

The UNIX version of the Endeca Platform Services software is distributed as a self-extracting tar file and install script.

The Endeca Platform Services package can be installed at any location. In these instructions, we assume `/usr/local` as the installation target directory.

To install the Endeca Platform Services on UNIX:

1. In your local environment, locate the Endeca Platform Services installation package that you downloaded from the Oracle Software Delivery Cloud. The name of the installation file is as follows:
   - For Intel Linux 64-bit: `platformservices_<version>_x86_64pc-linux.sh`
   - For SPARC Solaris: `platformservices_<version>_sparc_64-solaris.sh`
2. Run the Endeca install script with the `--target` flag, which specifies the absolute path of the target installation directory, as in this example:
   ```
   ./platformservices_613_x86_64pc-linux.sh --target /usr/local
   ```
3. The copyright and legal information displays. Scroll to the end.

   As the installation is being unpacked, a series of dots serves as a progress monitor. The unpacking may take several minutes. After the unpacking, you are asked a series of configuration questions.
4. Enter the port on which the EAC service will listen. The default is **8888**, but you must specifically enter that number in the prompt.
5. Enter the shutdown port of the EAC service. The default is **8090**, but you must specifically enter that number in the prompt.
6. Enter the Endeca Control System JCD port, or nothing if you do not intend to use the Endeca Control System. The default is 8088.
7. You are asked if you want this installation to be configured to run the Application Controller, including the Application Controller Agent. Enter **Y** or **N**.
8. If you entered N in the previous step, you will be asked if you want the installation configured to run only the Application Controller Agent. Enter **Y** or **N**.
9. Enter the location (an absolute path) of the MDEX Engine root directory (for example, `/usr/local/endeca/MDEX/6.2.2`).

   Note that the installer does not verify the existence of the directory; this allows you to install the Platform Services package before the MDEX Engine package.
10. You are asked if you want the reference implementations to be installed. Enter **Y** or **N**.
11. The installation is complete when the screen displays a reminder message about setting the environment variables.

After the installation is finished, you should run a script that sets the Platform Services environment variables (such as ENDECA_ROOT), as well as some additional ones that are used internally. The two environment variable scripts are located in the endeca/PlatformServices/workspace/setup directory and are named as follows:

- installer_csh.ini (for csh and tcsh shells)
- installer_sh.ini (for Bourne, Bash, and Korn shells)

The following example shows how to run the sh version:

```
source /usr/local/endeca/workspace/setup/installer_sh.ini
```

Generally this command should be placed in a script run at the startup of the shell so the variables are set for future use.

To start the Endeca HTTP Service, change to the endeca/PlatformServices/6.1.2/tools/server/bin directory and run the startup.sh script. (You can also run the script from another directory by using the absolute path to the script). For information on controlling this service, see the *Oracle Endeca Application Controller Guide*.

If you did not specify the MDEX Engine root directory (at Step 9), the com.endeca.mdexRoot setting (in the EAC eac.properties configuration file) will have a blank value. The file is located in the $ENDECA_CONF/conf directory. If you later install the MDEX Engine on your system, you must edit the file and add the absolute path of the MDEX Engine root directory in the setting, and then restart the EAC srevice. For more information on this file, see the *Oracle Endeca Application Controller Guide*.

Running a silent installation on UNIX

The silent installer for UNIX reads the necessary input from a response file.

Silent installations are installations that use the --silent flag to run without a user interface. The responses to the UNIX installer prompts are supplied in a response file and provide the same answers that an interactive user would provide. The silent installer is useful if you want to add the installation of Platform Services to your own install script, or push out the installation on multiple machines.

To launch the silent installer on UNIX:

1. Create a new text file. In this procedure, the file is named silent.txt.
2. In the file, specify the response value for each prompt on its own line, in the order in which they appear in the interactive installer. For example:

   ```
   8888
   8090
   8088
   Y
   /usr/local/endeca/MDEX/6.2.2
   Y
   ```

   Each line answers a question that the installer asks:

Line number	Description
1	The port on which the Endeca HTTP Service listens. In the example, this is specified as 8888.
2	The shutdown port for the Endeca HTTP Service. In the example, this is specified as 8090.
3	The port number of the Endeca Control System JCD. In the example, this is specified as 8088.

Line number	Description
4	Indicates that you want to install EAC Central Server and Agent. In the example, this is specified as `Y`.
5	The absolute path to the MDEX Engine root directory. In the example, this is specified as `/usr/local/endeca/MDEX/6.2.2`. If the MDEX Engine is not installed, use a newline or carriage-return to indicate that there is no MDEX Engine installed.
6	Indicates that you want to install the reference implementations. In the example, this is specified as `Y`.

Note: You must specify a value for each prompt. Even if you want to use the default, you must specify that value to the installer.

3. From a command prompt, navigate to the directory where you downloaded the installer.
4. Run the install script with the `--silent` flag (which indicates silent mode), the `--target` flag (which specifies the absolute path of the target installation directory), and the response file as an input. For example:

```
./platformservices_613_x86_64pc-linux.sh --silent --target /usr/local <
 silent.txt
```

5. The installation is complete when the screen displays a reminder message about setting the environment variables.

After the installation is finished, you should run a script that sets the Platform Services environment variables (such as `ENDECA_ROOT`), as well as some additional ones that are used internally. The two environment variable scripts are located in the `endeca/PlatformServices/workspace/setup` directory and are named as follows:

- `installer_csh.ini` (for csh and tcsh shells)
- `installer_sh.ini` (for Bourne, Bash, and Korn shells)

The following example shows how to run the sh version:

```
source /usr/local/endeca/workspace/setup/installer_sh.ini
```

Generally this command should be placed in a script run at the startup of the shell so the variables are set for future use.

To start the Endeca HTTP Service, change to the `endeca/PlatformServices/6.1.3/tools/server/bin` directory and run the `startup.sh` script. (You can also run the script from another directory by using the absolute path to the script). For information on controlling this service, see the *Oracle Endeca Application Controller Guide*.

If you did not specify the MDEX Engine root directory in the response file, the `com.endeca.mdexRoot` setting (in the EAC `eac.properties` configuration file) will have a blank value. The file is located in the `$ENDECA_CONF/conf` directory. If you later install the MDEX Engine on your system, you must edit the file and add the absolute path of the MDEX Engine root directory in the setting and restart the EAC service. For more information on this file, see the *Oracle Endeca Application Controller Guide*.

Package contents and directory structure

This topic describes the directories that are created in the Endeca Platform Services installation.

The `PlatformServices` directory is the top-level directory for the Endeca Platform Services software. It has three sub-directories, which are described below.

Root directory

The `PlatformServices/<version>` directory is the root directory for the Endeca Platform Services software. This is the directory to which the `ENDECA_ROOT` variable is set.

The directory contains files and software modules for all the Platform Services components.

Directory	Contents
`bin`	Executables for the Platform Services programs and utilities, such Forge, Endeca Log Server, Report Generator, and emgr_update.
`cadk`	Components of the Content Acquisition Development Kit.
`conf`	Configuration files, such as the DTDs used by Endeca components (such as Forge) and the product configuration file.
`doc`	The *Endeca Licensing Guide*.
`j2sdk`	Version 6 of the Java 2 Platform Standard Edition Development Kit (JDK).
`lib`	Java and .NET versions of the Presentation and Logging APIs, as well as libraries for various Platform Services components (such as the Endeca Application Controller).
`lib64`	Shared libraries used by various Endeca components. This directory is created only on UNIX platforms.
`perl`	Binaries for Perl utilities.
`setup`	Internal configuration file for the installer.
`tools`	Directories and files for the Endeca HTTP Service.
`utilities`	Utility programs used by Endeca programs.
`workspace_template`	Templates of the `workspace` directory, that can be used by users to build a customized version.

Workspace directory

The `workspace` directory is the directory to which the `ENDECA_CONF` variable is set.

Directory	Contents
`conf`	Configuration files for the Endeca Application Controller and the Endeca HTTP Service.
`etc`	Configuration files for the JCD and the Endeca Access Control System, as well as report generation style sheets.
`logs`	Log directory for the Endeca HTTP Service.
`reports`	Reports generated from Endeca Log Server files.
`state`	State information maintained by the Endeca Application Controller.
`temp`	Temporary files written out by the Endeca Application Controller.

Directory	Contents
`work`	Working directory of the Endeca HTTP Service.

Reference directory

The `reference` directory contains the sample wine data project (which can be used as a template for the back-end project you create with Endeca Developer Studio) and JSP/.NET versions of a front-end UI for the Endeca MDEX Engine . This is the directory to which the `ENDECA_REFERENCE_DIR` variable is set. Note that this directory is available only if you installed the Endeca Reference Implementation feature.

After you install

This section describes optional post-installation procedures.

Installing the Endeca Document Conversion Module

This section contains the Document Conversion Module installation procedure for Windows and UNIX.

The Endeca Document Conversion Module converts source documents from a variety of file formats to text. The resulting text can be manipulated as part of Data Foundry processing for use in your Endeca records. For information about the types of file formats that the module can convert as part of Data Foundry processing, see “Formats Supported by the Document Conversion Module” in the *Endeca Platform Services Forge Guide*.

Note that the installation of the module has these pre-requisites:

- You must have previously installed the Endeca Platform Services package.
- You must have purchased a license for the Document Conversion Module.
- The version of the Document Conversion Module must be the same as the Platform Services version.

Installing the Document Conversion Module on Windows

You install the Document Conversion Module on Windows by using the installation wizard.

To install the Endeca Document Conversion Module on Windows:

1. In your local environment, locate the Endeca Document Conversion Module installation package that you downloaded from the Oracle Software Delivery Cloud.

   The name of the installation file should be: `docconverter_613_x86_64pc-win32.exe`
2. Double-click the installer file to start the wizard.
3. When the **Endeca Document Conversion Module Setup Wizard** screen appears, click **Next** to begin the installation process.
4. Read the copyright information and click **Next**.
5. In the **License Agreement** screen, select **I accept the terms in the license agreement** and then click **Next**.
6. In the **Ready to Install the Program** screen, click **Install**.
7. When the installation is complete, click **Finish** to exit the wizard.

After the installation is finished, you should see a directory named `Stellent` in the `%ENDECA_ROOT%\lib` directory.

Installing the Document Conversion Module on UNIX

The UNIX version of the Endeca Document Conversion Module software is distributed as a self-extracting tar file and install script.

To install the Endeca Document Conversion Module on UNIX:

1. Determine the root directory of the Platform Services installation. The Document Conversion Module must also be installed there.
2. In your local environment, locate the Endeca Document Conversion Module installation package that you downloaded from the Oracle Software Delivery Cloud. The name of the installation file is as follows:
   - For Intel Linux 64-bit: `docconverter_613_x86_64pc-linux.sh`
   - For SPARC Solaris: `docconverter_613_sparc-solaris.sh`
3. Run the Endeca install script with the `--target` flag, which specifies the location of the target installation directory, as in this example:
   ```
   ./docconverter_613_x86_64pc-linux.sh --target /usr/local
   ```
4. The Endeca license agreement displays. Scroll to the end, then type Y to accept the agreement and finish the installation.

After the installation is finished, you should see a directory named `Stellent` in the `$ENDECA_ROOT/lib` directory.

Controlling the HTTP Service

After installing Platform Services, you may need to start the Endeca HTTP Service.

On Windows, the Endeca HTTP Service (if installed) is automatically started when the computer reboots after the installation is complete.

On UNIX, the service can be started either from the command line or `init` from `inittab`. See the next topic for details on starting the service from `inittab`.

Starting the HTTP Service from inittab

In a UNIX production environment, the Endeca HTTP Service can be started by `init` from `inittab`.

In a UNIX development environment, the Endeca HTTP Service can be started from the command line. In a UNIX production environment, however, Oracle recommends that it be started by `init` from `inittab`. If the service crashes or is terminated, `init` automatically restarts it.

The UNIX version of Platform Services contains a file named `endeca_run.sh` that is in the `$ENDECA_ROOT/tools/server/bin` directory. This is a version of `startup.sh` that calls run instead of start and redirects stdout and stderr to `$ENDECA_CONF/logs/catalina.out`.

You can write a script that is referenced in `inittab`. The script sets environment variables and then calls `endeca_run.sh`. When writing your script, it is recommended as a best practice that you run the Endeca HTTP Service as a user other than root. When running the service as a non-root user, you can set a USER environment variable that will be inherited by other scripts, such as EAC scripts.

This sample script (named `start_endeca_http_service.sh`) sets the ENDECA_USER variable to the "endeca" user, sets the INSTALLER_SH variable to the path of the environment variables script and sources it, and then does an su to change to the "endeca" user:

```
#!/bin/sh
ENDECA_USER=endeca
INSTALLER_SH=/usr/local/endeca/PlatformServices/workspace/setup/in¬
staller_sh.ini
# We want to use installer_sh.ini variables in this script,
# so we source it here.
source $INSTALLER_SH
# change to user endeca
su $ENDECA_USER -c "/bin/sh -c \"source $INSTALLER_SH; \
   cd $ENDECA_CONF/work; exec env USER=$ENDECA_USER \
   $ENDECA_ROOT/tools/server/bin/endeca_run.sh\""
```

On Solaris platforms, replace "source" with "." because source is not a command in the Bourne shell. The `start_endeca_http_service.sh` script is then referenced in inittab with an entry similar to this example.

```
ec:2345:respawn:/usr/local/endeca/PlatformServices/workspace/setup/start_en¬
deca_http_service.sh
```

When writing your startup script, keep in mind that it is server-specific, and therefore its details (such as paths and user names) depend on the configuration of your server.

Download the Endeca 6.1.x documentation set

Documentation for Platform Services 6.1.x and all other Endeca components is available on the Oracle Technology Network (OTN).

If you have not already done so, you should download the documentation set.

Note: If you are doing development work with the Presentation API, keep in mind that the *Endeca Presentation API for Java Reference (Javadoc)* and the *Endeca Presentation and Logging API for .NET Reference (HTML Help)* are part of the documentation set on the OTN.

Chapter 2

Uninstalling Platform Services and the Document Conversion Module

This section contains the procedures for uninstalling the packages.

Uninstalling Platform Services on Windows

Follow these steps to uninstall the Platform Services software from your Windows machine.

Before you begin the uninstall process, keep the following in mind:

- Only the `%ENDECA_ROOT%\PlatformServices\<version>` directory is removed. The `workspace` directory and the `reference` directory (if it has been installed) are left in place. However, it is a good practice to back up any files that you want to retain, regardless of where they reside.
- If you have the Document Conversion Module installed, you must uninstall it before removing Endeca Platform Services.

To uninstall Endeca Platform Services from your Windows machine:

1. Ensure that you have administrator privileges on the local machine.
2. If you running the .NET API version, remove the virtual directories in IIS (Internet Information Services). Refer to the IIS help for information.

   If you have trouble uninstalling the `Endeca.Navigation.dll`, even after removing the Web site, you may need to stop the IIS service altogether by using the Services control panel. Typical uninstallation problems include errors such as:

   ```
   -1905: fail to unregister dll
   ```

   In that case, IIS may still be using the DLL.
3. To uninstall the Endeca Platform Services, do one of the following:
   - From the Start menu, select **All Programs > Endeca > Platform Services > Uninstall Endeca Platform Services**, and follow the prompts.
   - From the Windows Control Panel, select **Add or Remove Programs**, select **Endeca Platform Services** from the list of installed software, click **Remove**, and follow the prompts.

Uninstalling Platform Services on UNIX

Follow these steps to uninstall the Platform Services from your UNIX machine.

Before you begin the uninstall process, back up files that you want to retain from the `$ENDECA_ROOT` directories.

To uninstall Platform Services from your UNIX machine:

1. Stop all Endeca processes (such as the Dgraph and the Endeca HTTP service).
2. Determine which Platform Service top-level directories you want to uninstall. For example, you can choose to uninstall only the `6.1.3` directory or all the Platform Service directories.
3. Issue an `rm` command, as in this example which removes all the Platform Services directories:
   ```
   rm -rf endeca/PlatformServices
   ```
4. Unset any environment variables that reference directories that no longer exist.

The command example above removes the Platform Services package, including Document Conversion Module if it is installed. However, it does not remove the `endeca/MDEX` directory if it is installed. To remove all Endeca software, use the only the `endeca` directory name with the `rm` command.

Uninstalling the Document Conversion Module on Windows

You use the Windows Control Panel to remove the module on Windows.

To uninstall the Document Conversion Module from your Windows machine:

1. From the Windows Control Panel, select **Add or Remove Programs**.
2. Select **Endeca Document Conversion Module** from the list of installed software.
3. Click **Remove**.
4. When prompted to confirm the removal of the module, click **Yes**.

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