

Endeca® Platform Services

Migration Guide

Version 6.0.3 • June 2012

ORACLE®

ENDECA

Contents

Copyright and disclaimer.....	v
Preface.....	7
About this guide.....	7
Who should use this guide.....	7
Conventions used in this guide.....	8
Contacting Oracle Support.....	8
Chapter 1: Upgrading Endeca Platform Services.....	9
About the restructuring of the IAP.....	9
Changes to documentation packaging.....	9
Recommended reading.....	10
Identifying your upgrade scenario.....	10
Avoiding problems during an upgrade.....	11
Package compatibilities.....	11
Upgrading an Endeca 5.1.x platform.....	12
Backing up your existing configurations.....	12
Uninstalling the earlier version.....	14
Installing IAP 6 with Endeca Platform Services 6.0.3.....	14
Restoring your configurations.....	14
Starting the processes.....	16
Upgrading an Endeca 5.1 project.....	16
Provisioning your system.....	16
Converting your Developer Studio project.....	16
Running a baseline update.....	17
Updating the APIs on the application server.....	17
After you upgrade.....	17
Chapter 2: Required Changes.....	19
General changes.....	19
The VOID ID_LANGUAGE expression is no longer supported.....	19
Removal of deprecated platform support.....	19
Removal of virtual machine support.....	19
Removal of the COM API.....	20
Removal of support for Microsoft .NET Framework 1.1 for the .NET API.....	20
Removal of the Standard Application.....	20
Removal of default SSL certificates.....	20
Removal of the sample baseline update script.....	20
Changes to environment variables.....	20
Changes to the Platform Services installation package.....	21
Term Extractor changes.....	21
New JKS conversion utility.....	21
Control System Changes.....	21
Removal of Forge hierarchical logging system.....	22
Changes to the Endeca Application Controller.....	22
Changes to the Presentation API URL query syntax.....	22
Chapter 3: Recommended Changes.....	23
Deprecation of the Endeca Crawler.....	23
Chapter 4: Behavioral Changes.....	25
General changes.....	25
Changes to the XML configuration files.....	25
Changes to the Platform Services installation package.....	25
CADK installed with Platform Services.....	26

Control System not installed by default on Windows.....	26
Installation Requirement Changes to the Presentation API for .NET	26
Eaccmd behavior changes.....	26
Changes to Endeca Developer Studio.....	26
Removal of support for non-positional indexing.....	27
Chapter 5: Previously Deprecated Features.....	29
JCD and Control Interpreter status.....	29
Deprecated method and constants in relevance ranking module.....	29



Copyright and disclaimer

Copyright © 2003, 2012, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Rosette® Linguistics Platform Copyright © 2000-2011 Basis Technology Corp. All rights reserved.

Preface

Oracle Endeca's Web 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 Web 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 helps you upgrade your Endeca Information Access Platform implementation by describing the major changes between versions IAP 5.1.x and IAP 6 with Endeca Platform Services 6.0.3 software.

Who should use this guide

This guide is intended for developers who are upgrading the Endeca Information Access Platform, as well as for system administrators managing the Endeca Information Access Platform on Windows, UNIX, or Linux.



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

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

Upgrading Endeca Platform Services

This section describes the steps you need to take to upgrade the Endeca software to IAP 6 with Endeca Platform Services version 6.0.3. It is critical that, after you follow the upgrade procedures in this section, you also review this guide for additional changes required to upgrade your specific Endeca implementation.

About the restructuring of the IAP

As of version 6.0.1, the Endeca Information Access Platform is now available in three separately installed components.

These components are as follows:

- Endeca MDEX Engine
- Endeca Platform Services
- Endeca Workbench

Each package can be installed on a separate machine or server as necessary, and each component can be upgraded individually. For more information on each package, see the *Endeca Getting Started Guide* available on the Endeca Developer Network (EDeN).

About Endeca Workbench editions

As of Endeca IAP version 6.0.1, IAP Workbench replaces Web Studio as the base version of the Endeca Web-based tools suite, included in the core IAP license.

In addition, the following editions are available as a separate license: Endeca Merchandising Workbench (designed for eCommerce applications) and Endeca Publishing Workbench (designed for Media and Publishing sites). These editions include the Endeca Page Builder for managing dynamic landing pages.

Changes to documentation packaging

As of 6.0.1, the documentation installed with each Endeca IAP component has been changed.

The documents shipped with the Endeca Platform Services component are:

- *Migration Guide*
- *Platform Services Installation Guide*

- *Endeca Licensing Guide*
- *Platform Services Release Notes*

For the complete documentation associated with each Endeca product, refer to the Oracle Technology Network.

Recommended reading

In addition to reading this document, Oracle recommends that you read the following documents for important information about the release.

Release Announcement for IAP 6

The *Release Announcement* provides a brief explanation of the new features that were added in Version 6. The *Release Announcement* is available for download from the Endeca Developer Network (EDeN).

Release Notes

The release notes for each package provide information about new features, changed features, and bug fixes for this release. You can download the release notes (`README.txt`) from the Knowledge Base section of the Endeca Developer Network (EDeN) at <http://eden.endeca.com>. After installation, release notes are also available in the following location:

- Windows: `C:\Endeca\PlatformServices\\README.txt`
- UNIX: `user/local/endeca/PlatformServices//README.txt`

Or from **Start > Programs > Endeca > Platform Services > Release Notes**.

You can find the Release Notes for core installation packages in:

- The `MDEX/version` directory of your MDEX Engine installation.
- The `PlatformServices/` of your Endeca Platform Services installation.
- The `Workbench/` directory of your Endeca Workbench installation.

Getting Started Guide

The *Endeca Getting 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.

Identifying your upgrade scenario

This guide assumes that your upgrade scenario is one in which you were using the Endeca IAP version 5.1.x on a 64-bit machine and that you were also using the Endeca Application Controller environment.

There are, however, other upgrade scenarios. The following table lists versions and environments you may have, and provides information about upgrading from your current version to Platform Services 6.0.3.

Your current version and environment	To upgrade to Platform Services 6.0.3
Endeca IAP 5.1.x with EAC on a 64-bit machine	See Upgrading an Endeca 5.1.x platform on page 12
Endeca IAP 5.1.x on a platform NOT supported by IAP 6	Install the Endeca IAP components—Platform Services, MDEX Engine, and Endeca Workbench—on a supported platform. For a complete list of supported platforms, see the <i>Platform Services Installation Guide</i> , and the Installation Guides for the MDEX Engine and Endeca Workbench versions that you are installing.
Endeca IAP 5.1.x with control scripts	Upgrade to an EAC environment. Control scripts were deprecated in Endeca IAP version 5.0. For information, consult with Endeca Support.
Endeca IAP prior to 5.1	Upgrade incrementally, one version at a time. For upgrade instructions, see the corresponding version of the <i>Endeca Installation Guide</i> . For example, if you are upgrading from version 4.8, see the <i>Endeca Installation Guide</i> for version 5.0; if you are upgrading from version 5.0, see the <i>Endeca Installation Guide</i> for version 5.1. In addition, you must read the <i>Endeca Migration Guide</i> for each corresponding software version to which you are upgrading, and make the required changes for each version.

Avoiding problems during an upgrade

To help you avoid problems when you upgrade from a previous version, it is important that you follow the recommendations below. This way, you can isolate problems during an upgrade.

- Before installing the software, read this entire guide and make sure you know which migration changes you need to make after you upgrade to the new software.
- After you upgrade your software based on the instructions in this chapter, make the migration changes in your Endeca implementation.
- Before you add any new version 6.0 features, test your Endeca implementation with the version 6.0 software to make sure that it runs properly with the migration changes you have made.
- When you are satisfied that your implementation is running as expected, you can start adding the new version 6.0 features that you require.

Package compatibilities

To determine the compatibility of components in Oracle Endeca Commerce, see the *Oracle Endeca Commerce Compatibility Matrix* available on the Oracle Technology Network.

Upgrading an Endeca 5.1.x platform

This procedure provides high-level steps needed to upgrade your Endeca 5.1.x platform to IAP 6 with Endeca Platform Services 6.0.3.

After you back up your configuration and source data, uninstall the 5.1.x version of the Endeca IAP, then install the IAP 6 components.

When installing, ensure that you point Endeca Workbench to the machine on which you are installing the EAC Central Server. Also, you need to run your existing scripts (the provisioning script that you used for your application in version 5.1 and the baseline update script) in Endeca Workbench. Ensure that your baseline update script can communicate with the EAC Central Server in this version. Oracle recommends using the Deployment Template.



Note: If you were using the Endeca Application Controller environment in version 5.1, you can continue using your EAC scripts after you upgrade.

The high-level procedure of upgrading a 5.1 platform is:

1. Back up your existing configurations.
2. Uninstall IAP version 5.1.
3. Install and configure MDEX Engine, Platform Services, Endeca Workbench, Developer Studio, and the Deployment Template.
4. Restore your configurations.
5. Start the Endeca processes.

For detailed information on each of the steps, see the corresponding sections below.

Backing up your existing configurations

The backup process allows you to take a snapshot of your project including its users, rule groups, and permissions data.

To back up your Endeca IAP configuration, back up the following pieces:

- **Web Studio store** — a directory that contains a database of users, rule groups, and associated permission information.
- **Configuration files** — XML and properties files that customize the behavior of a Web Studio installation.
- **EAC store** — a directory that contains a database of your provisioning information.

Backing up the Web Studio store

The Web Studio store contains information such as users and permissions, as well as preview application settings used in Web Studio.

For implementations not using Web Studio in 5.1, this step is unnecessary.



Note: It is not possible to back up and restore the Web Studio store from a version before 5.1.2. If you are upgrading from an earlier version, make a manual record of your Web Studio user settings and re-create them in Endeca Workbench.

To back up the Web Studio store:

1. Stop the Endeca HTTP service.

2. Copy the `webstudiostore` directory, including all its subdirectories, from `%ENDECA_CONF%\state` (on Windows) or `$ENDECA_CONF/state` (on UNIX) to another location.

Recall that the default location of `ENDECA_CONF` in the Endeca IAP version 5.1.x is `C:\Endeca\MDEXEngine\workspace` (Windows) and `endeca/workspace` (UNIX).

Backing up the Web Studio configuration files

Web Studio uses several configuration files that customize the behavior of various aspects of Web Studio.

In general, you only need to back up these files if you have made customizations to your Web Studio instance.

To back up the Web Studio configuration files:

1. Navigate to the directory where the configuration files are located: `%ENDECA_CONF%\conf` (on Windows) or `$ENDECA_CONF/conf` (on UNIX).

Recall that the default location of `ENDECA_CONF` is `C:\Endeca\MDEXEngine\workspace` (Windows) and `endeca/workspace` (UNIX).

2. To preserve the settings controlled by each of the following files, copy them to another location.

File name	Description
Login.conf	Configuration for user authentication using LDAP.
ws-extensions.xml	Definitions of Web Studio extensions.
ws-mainMenu.xml	Definitions of the Web Studio navigation menu and launch page.
ws-roles.xml	Definitions of custom Web Studio user roles.

Note that there are some configurations that cannot be migrated. For example, if you have configured your Web Studio for SSL, hidden the application drop-down menu in the UI, or made the EAC Admin Console read-only, you must make these configuration changes in the new environment.

Backing up the EAC store

The EAC store contains application configuration.



Note: This step is only necessary if you are using EAC scripts to provision your application. Implementations relying on the Deployment Template in 5.1 do not need to back up the EAC store because the information is stored in the Deployment Template's `AppConfig.xml` file.

To back up the EAC store:

1. Stop the Endeca HTTP service if it is running.
2. Copy the `eacstore` directory from `%ENDECA_CONF%\state` (on Windows) or `$ENDECA_CONF/state/` (on UNIX) to another location.

Recall that the default location of `ENDECA_CONF` is `C:\Endeca\MDEXEngine\workspace` (Windows) or `endeca/workspace` (UNIX).

Uninstalling the earlier version

After backing up the required configuration files, you can uninstall version 5.1.x.

For information about uninstalling version 5.1.x, see the 5.1 version of the *Endeca Installation Guide*.

Installing IAP 6 with Endeca Platform Services 6.0.3

The next step is to install the new versions of the Endeca components.

Because the Endeca IAP is now installed as separate components, the directory structures and environment variables have changed from version 5.1. Please consult the *Endeca Getting Started Guide* for detailed information.

Before installing upgraded versions of Endeca components, check the appropriate *Installation Guide* for the version that you are uninstalling for a list of environment variables used by all Endeca components, and ensure that any environment variables from previous installations are removed from your servers. This is because, on UNIX, when you uninstall the previous versions, the environment variables from the previous installations are not removed automatically.

To install the upgrade components:

1. Install version 6.1.x of Endeca MDEX Engine.
For installation details, see the *Endeca MDEX Installation Guide*.
2. Install version 6.0.3 of Endeca Platform Services.
For installation details, see the *Endeca Platform Services Installation Guide*.
3. Install version 2.0 of Endeca Workbench, version 2.0 of Merchandising Workbench, or version 2.0 of Publishing Workbench.
For installation details, see the *Endeca Workbench Installation Guide*.
4. Install version 6.0 of Endeca Developer Studio on a Windows machine.
For installation details, see the *Endeca Developer Studio Installation Guide*.
5. Install version 3.1 of the Endeca Deployment Template.
For installation details, see the *Endeca Deployment Template Usage Guide*. Note that versions of the Deployment Template earlier than 3.0 are not compatible with Endeca IAP 6.

Restoring your configurations

To restore your project settings, copy the files that you backed up earlier into the appropriate locations in your upgraded implementation.

Restoring a backup of the Web Studio store

If you are upgrading from Endeca IAP version 5.1.2 or later, you can restore backups of the Web Studio store to an installation of Endeca Workbench.

To restore a backup of the Web Studio store into Endeca Workbench:

1. Stop the Endeca Tools Service if it is running.
2. If there is a `webstudiostore` directory in `%ENDECA_TOOLS_CONF%\state\` (on Windows) or `$ENDECA_TOOLS_CONF/state/` (on UNIX), delete the directory.

Recall that the default location of `ENDECA_TOOLS_CONF` in Endeca Workbench is `C:\Endeca\Workbench\workspace` (Windows) or `endeca/Workbench/workspace` (UNIX).

3. Copy the `webstudiostore` directory that you backed up earlier from `%ENDECA_CONF%\state\` (on Windows) or `$ENDECA_CONF/state/` (on UNIX).
4. Paste the `webstudiostore` directory into `%ENDECA_TOOLS_CONF%\state\` (on Windows) or `$ENDECA_TOOLS_CONF/state/` (on UNIX).
5. If you have no further customizations to restore to Endeca Workbench, start the Endeca Tools Service.

Restoring a backup of the Web Studio or Endeca Workbench configuration files

You can now restore the configuration files that you backed up earlier.



Note: If you have made customizations to `ws-mainMenu.xml` in Web Studio that you wish to preserve and you are upgrading to Merchandising Workbench or Publishing Workbench, you must manually merge the original file that you backed up with the default version in your new Workbench installation.

To restore a backup of the Endeca Workbench configuration files:

1. Stop the Endeca Tools Service if it is running.
2. Copy the files that you backed up earlier from `%ENDECA_CONF%\conf` (on Windows) or `$ENDECA_CONF/conf` (on UNIX).
3. Paste the backup versions into `%ENDECA_TOOLS_CONF%\conf` (on Windows) or `$ENDECA_TOOLS_CONF/conf` (on UNIX).
Recall that the default location of `ENDECA_TOOLS_CONF` is `C:\Endeca\Workbench\workspace` (Windows) or `endeca/Workbench/workspace` (UNIX).
4. Start the Endeca Tools Service.

Restoring a backup of the EAC store

You can now restore the EAC store that you backed up earlier.

This step is only necessary if you used EAC scripts to provision your application in 5.1. Implementations relying on the Deployment Template do not need to back up or restore the EAC store.

To restore a backup of the EAC store:

1. Stop the Endeca HTTP service if it is running.
2. If there is an `eacstore` directory in `%ENDECA_CONF%\state` (on Windows) or `$ENDECA_CONF/state/` (on UNIX), delete the directory.
Recall that the default location of `ENDECA_CONF` in Platform Services 6.0 is `C:\Endeca\PlatformServices\workspace` (Windows) or `endeca/PlatformServices/workspace` (UNIX).
3. Copy the backup `eacstore` directory into `%ENDECA_CONF%\state` (on Windows) or `$ENDECA_CONF/state/` (on UNIX).
4. Start the Endeca HTTP service.

Starting the processes

For UNIX, you need to start the Endeca HTTP service that was installed as part of the Platform Services setup, and the Endeca Tools Service that was installed as part of the Endeca Workbench setup.

To start the processes on UNIX:

1. Before starting the processes, follow the installation steps in each installation guide and set the appropriate environment variables.
2. Start the Endeca HTTP service at the command line with:

```
$ENDECA_ROOT/tools/server/bin/startup.sh
```

3. Start the Endeca Tools Service at the command line with:

```
$ENDECA_TOOLS_ROOT/server/bin/startup.sh
```

On Windows, the services are started automatically after you complete the installation procedures (including restarting the system after the Platform Services installation).

Upgrading an Endeca 5.1 project

This section provides instructions for the basic tasks involved in upgrading an Endeca project.

However, because Endeca projects are highly configurable, some implementations may require further migration changes. Please review this guide for additional changes required to upgrade your specific Endeca implementation.

Provisioning your system

To provision your application, Endeca recommends using the Deployment Template. However, you can also provision your system using EAC scripts.

To provision your system:

1. Before provisioning your system, remove all Advanced Crawler components.
2. Run the provisioning script from your existing application. (This step assumes that you already have an EAC script that you used in version 5.1 for your application's provisioning).

For Deployment Template information, see the *Deployment Template Usage Guide*. For information about the Endeca Application Controller, see the *Endeca Application Controller Guide*. For detailed information about provisioning hosts, components, and scripts in Endeca Workbench, see the *Endeca Workbench Help*.



Note: For implementations upgrading from an earlier version of the Deployment Template, customizations to scripts and components must be migrated to the new version and tested with IAP 6.

Converting your Developer Studio project

If you have installed version 6.0 of Developer Studio, you can upgrade your 5.1 project.

Before converting your project to Developer Studio version 6.0, ensure that you have already provisioned your application. Developer Studio 6.0 is compatible with MDEX Engine 6.1 and Endeca Workbench 2.0.

To convert your Developer Studio project to version 6.0:

1. Start Developer Studio version 6.0.
2. Open the project you want to convert. Developer Studio issues a message stating that the project will be converted to the new format. Click **OK**, and specify the location to which you want to save your updated project.
3. There may be further migration necessary before you can process your data in version 6.0. For more information, consult the *MDEX Engine Migration Guide* for version 6.1. Do not proceed until you have completed all necessary migration steps.
4. Select **Tools > IAP Workbench Settings**. In the IAP Workbench Settings dialog box, make sure that the machine name and port information for your Workbench host and port are correct. (The default port number is 8006.) Also make sure you select the appropriate application to associate with this project, because Endeca Workbench can support multiple applications.



Note: Although the Developer Studio UI reads "IAP Workbench," the settings apply to all Endeca Workbench editions.

5. Save your changes.
6. From the **Tools > IAP Workbench** menu, select **Set Instance Configuration**. This uploads the instance configuration from Developer Studio to Endeca Workbench.

Running a baseline update

Run a baseline update to start the Dgraphs.

To run a baseline update:

1. You can run a baseline update in the same manner as in your 5.1 implementation. Oracle recommends using the Deployment Template to perform updates.
2. Optionally, start any other Endeca components required by your application, such as the Log Server component (if your baseline update script does not start it for you).

Updating the APIs on the application server

After upgrading, ensure that the server or servers running your front-end application are using the latest versions of the Presentation API and Logging API.

The Presentation and Logging APIs are shipped as part of the Endeca Platform Services package.

After you upgrade

It is recommended that you test the upgrade before adding new features.

After you have provisioned your system and converted your 5.1 Developer Studio project to a version 6.0 Developer Studio project, it is critical that you read the appropriate *Migration Guides* and complete all required migration changes that may affect your implementation. Before you add any new features,

test your Endeca implementation with the IAP version 6 software to make sure that it runs properly with the migration changes you have made.

When you are satisfied that your implementation is running as expected, you can start adding any new features that you require.



Chapter 2

Required Changes

You must make the changes specified in this section, if they apply to your application.

General changes

This section describes general changes to the Endeca software.

The `VOID ID_LANGUAGE` expression is no longer supported

In Platform Services 6.0.3, the `VOID ID_LANGUAGE` expression is no longer supported. The `VOID ID_LANGUAGE` expression was typically used in a Record Manipulator to identify the language of a specified property and then add a language identifier property to a record.

The expression has been removed *Endeca Data Foundry Expression Reference* and from examples in the Platform Services documentation.

Removal of deprecated platform support

Starting in version 5.1.0, support for installation of the Endeca IAP on the following platforms was deprecated:

- Red Hat Enterprise Linux AS version 3
- Red Hat Enterprise Linux ES version 3
- Windows 2000 Server
- Windows 2000 Advanced Server

Support for installation of the Endeca IAP on these platforms has been removed in version 6.0.1.

Removal of virtual machine support

Starting with version 6.0, Endeca no longer supports running the Information Access Platform on any virtualized operating system.

Removal of the COM API

The COM API, which was deprecated in version 5.1.0 of the Endeca IAP, has been removed from version 6.0.

Removal of support for Microsoft .NET Framework 1.1 for the .NET API

Starting in version 5.1.0, the Microsoft .NET Framework version 1.1 was deprecated for the Endeca Presentation API and the Logging and Reporting API for .NET. Support for version 1.1 of the Microsoft .NET Framework has been removed from version 6.0.

Removal of the Standard Application

The Standard Application has been removed from version 6.0.

Removal of default SSL certificates

In previous versions, the Endeca IAP shipped with a pre-generated set of SSL certificates that you could use to enable basic security. Starting in 6.0, no default certificates are provided.

In order to use certificates, you must either generate them yourself with the `enecerts` utility that Endeca provides for this purpose, or obtain them elsewhere, for example, from a certificate authority. You may continue to use default certificates obtained from previous versions of the Endeca IAP until they expire.

For details about enabling SSL or using Endeca's certificate utility, see the *Endeca Security Guide*.

Removal of the sample baseline update script

The sample baseline update script is no longer part of the Endeca installation.

In previous versions, the `baseline-update.bat` and `baseline-update.sh` scripts were stored in:

- `%ENDECA_ROOT%\bin\baseline-update.bat` (Windows)
- `$ENDECA_ROOT/bin/baseline-update.sh` (UNIX)

The sample baseline update script has also been removed from the `sample_wine_data` project installed in `ENDECA_REFERENCE_DIR`. Instead, Endeca recommends that you download and install the Endeca Deployment Template (available as a free download from the Endeca Developer Network at <http://eden.endeca.com>), and use the baseline update script provided and configured by the Deployment Template.

Changes to environment variables

The installation restructuring required changes and additions to the environment variables.

For a complete list of Endeca environment variables please see the section "Endeca environment variables" in the *Endeca Getting Started Guide*.

Changes to the Platform Services installation package

The following required changes pertain to components installed as part of the Platform Services package.

Term Extractor changes

If you are using the Relationship Discovery feature, you should be aware of the following two changes.

About enabling relationship discovery

Relationship Discovery must be enabled in the Platform Services package, not the MDEX Engine package.

The Relationship Discovery feature is enabled via the `ProductConfig.xml` file in the `ENDECA_ROOT/conf` directory (in the Platform Services package), not the `ProductConfig.xml` that is in the `ENDECA_MDEX_ROOT/conf` directory (which is part of the MDEX Engine package). For details on enabling the feature, refer to the enablement guide for that feature.

Java classpath required for Term Extractor

In version 5.1, the `Class path` setting in the Java manipulator for the Term Extractor class was optional. In version 6.0 of the IAP, the setting is no longer optional.

If you did not specify the setting in previous versions, it used a default classpath of `ENDECA_ROOT/lib/java`. In version 6.0, you must enter the absolute path to the Jar file that contains the class. Because the Term Extractor Jar files are now in the `ENDECA_ROOT/lib/java/te` directory, you just specify the `Class path` setting, as in this UNIX example:

```
/usr/local/endecca/PlatformServices/6.0.1/lib/java/te/termextractor.jar
```

New JKS conversion utility

The Endeca Key Importer is a certificate conversion utility that allows you to convert PEM-format certificates to the standard Java KeyStore (JKS) format.

The utility is provided as a Jar file named `endecca-key-importer.jar` and is located in the `ENDECA_ROOT/lib/java` directory. This converter replaces the PKCS12 key converter that was provided in the JAR file named `endecca_PKCS12ToJKS.jar`.

For details on the new converter, refer to the *Endeca Security Guide*.

Control System Changes

The Endeca Control System, version 6.0, has changed as follows:

By default, the version 6.0 Endeca Control System starts up the JCD service in non-SSL mode, unlike in version 5.1.

In addition, you must ensure that the `ENDECA_MDEX_ROOT` environment variable is set in the JCD environment. On Windows, you should manually add `ENDECA_MDEX_ROOT` as a system environment variable so that the JCD Service starts with this variable in its environment. For detailed information about setting this environment variable for the JCD, refer to the *Endeca Control System Guide*.

Removal of Forge hierarchical logging system

The Forge hierarchical logging system, which was deprecated in version 5.1, has been removed from this release.

Changes to the Endeca Application Controller

The Advanced Crawler is no longer supported by the Endeca Application Controller, and cannot be provisioned or run via the EAC.

It is recommended that you use the Endeca Web Crawler for Web crawls. The Endeca Web Crawler is available in the Endeca CAS package.

Changes to the Presentation API URL query syntax

The `N1` Analytics parameter has been removed in this release. The parameter was previously used to obtain summary information about sets of records.

Queries containing arguments related to this parameter return a 410 HTTP error code.

The equivalent capabilities exist in the Endeca Analytics module. For more information on this module, please contact your Endeca sales representative.



Chapter 3

Recommended Changes

This section describes changes that are not required for your implementation but that are recommended by Endeca. Endeca strongly recommends that you make the changes specified in this section. Your application will continue to perform correctly if you don't make these changes.

Deprecation of the Endeca Crawler

The Endeca Crawler, which uses the Forge spider component, has been deprecated in version 6.0 of the Endeca IAP. The Endeca Crawler will be removed in a future version of the Endeca Information Access Platform.

The Endeca Advanced Crawler is now obsolete and has been replaced by the Endeca Web Crawler.

If you are beginning a new project, it is recommended that you use the Endeca Web Crawler for Web crawls and the Endeca CAS Server for file system crawls. Both crawlers are available in the Endeca CAS package.



Chapter 4

Behavioral Changes

This section describes changes that do not require action on the developer's part, but will have an effect on how your Endeca application behaves after you upgrade.

General changes

This section describes general changes to the Endeca software.

Changes to the XML configuration files

The default values for the `MAX_NGRAM_LENGTH` and `DICTIONARY_MAX_NGRAM_LENGTH` attributes in the `RECSEARCH_INDEXES` and `DIMSEARCH_INDEX` elements in the XML configuration files have changed. These attributes control the size of substrings that are indexed for wildcard search.

The default values are as follows:

- 3 is the default size for the `MAX_NGRAM_LENGTH`. It is the maximum length of substrings that are indexed if direct wildcard search is used for searching records and dimensions.
- 5 is the default size for the `DICTIONARY_MAX_NGRAM_LENGTH`. It is the maximum length of substrings that are indexed if dictionary-based wildcard search is used for searching records and dimensions.

Higher values for `MAX_NGRAM_LENGTH` and `DICTIONARY_MAX_NGRAM_LENGTH` improve runtime performance but cause super-linear growth in indexing time and disk space. Unless you have been specifically advised otherwise by Endeca, avoid values higher than the defaults. Lower values save memory and indexing time, but increase the time required to handle queries for long substrings.

Changes to the Platform Services installation package

The following required changes pertain to components installed as part of the Platform Services package.

CADK installed with Platform Services

In previous versions, the Content Adapter Development Kit (CADK) had its own separate installer. In the version 6.0 Platform Services package, the CADK is installed by default as part of the Endeca Platform Services feature. Uninstalling Endeca Platform Services also uninstalls the CADK.

Control System not installed by default on Windows

In version 5.1, the Endeca Control System was installed by default. In the version 6.0 Platform Services installation (Windows version), the Control System is not installed by default.

To install it, you must select the feature on the **Custom Setup** menu. Note that the Control System is still installed by default on the UNIX version of the Platform Services installer.

Installation Requirement Changes to the Presentation API for .NET

If you are using the bulk records feature and the Presentation API for .NET, you no longer need to install the Visual J# Redistributable Package.

In previous releases, J# was an installation requirement. In 6.0.1, the dependency on J# has been removed.

Eaccmd behavior changes

The following changes have been made to eaccmd.

Change in the way arguments are passed to eaccmd

Starting in version 5.1.1, the syntax of some eaccmd commands that can take passed-in arguments has become more explicit.

The `--cmd` flag on `add-script`, `update-script`, and `start-util` (shell) is followed by one or more arguments.

If `--cmd` is omitted, the first unrecognized argument is taken as the start of the command. This approximates the behavior in earlier releases.

Change in the order of flags

If the `add-script` and `update-script` commands include the `--wd` or `--log-file` flags, they must appear before the `--cmd` flag.

Changes to Endeca Developer Studio

The following behavioral changes pertain to Developer Studio.

Removal of support for non-positional indexing

In version 5.0.0 and later, positional indexing was enabled by default and non-positional indexing was deprecated. Beginning in version 6.0, it is no longer possible to disable positional indexing in Developer Studio.



Previously Deprecated Features

This section describes features that were deprecated in previous versions and are still deprecated in Endeca Platform Services 6.0.1.

JCD and Control Interpreter status

The Endeca JCD and the Control Interpreter, which were deprecated in version 5.0, are still deprecated.

Deprecated method and constants in relevance ranking module

The following method, property, and constants are deprecated:

Starting in version 5.1.2, in the Java version of the Presentation API, the `ENEQuery.setNavRelRankERecSearch()` method has been deprecated. Use the `ENEQuery.setNavRelRankERecRank()` method in its place.

In the .NET version, the `ENEQuery.NavRelRankERecSearch` property has been deprecated. In its place, you should use the `ENEQuery.NavRelRankERecRank` property.

As a result of this change, several constants have been deprecated and replaced, and one new constant has been added. The following table lists constants being deprecated, replaced, and added in the .NET and Java APIs.

Deprecated constant	New constant
NAV_RELRANK_EREC_SEARCH_KEY_PARAM	NAV_RELRANK_EREC_RANK_KEY_PARAM
NAV_RELRANK_EREC_SEARCH_TERMS_PARAM	NAV_RELRANK_EREC_RANK_TERMS_PARAM
NAV_RELRANK_EREC_SEARCH_STRATEGY_PARAM	NAV_RELRANK_EREC_RANK_STRATEGY_PARAM

Deprecated constant	New constant
N/A	NAV_RELRANK_EREC_RANK_MATCHMODE_PARAM