

ORACLE | ENDECA

Relevance Ranking Evaluator Installation Guide

This document describes installation procedures for the Oracle Endeca Relevance Ranking Evaluator.

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Contents

Description	4
Distribution.....	4
Dependencies	4
Installation.....	5
Installing the Relevance Ranking Evaluator on Windows and UNIX.....	5
Testing Your Installation	8

Description

The Oracle Endeca Relevance Ranking Evaluator provides business users with an interactive tool for experimenting with and comparing the results of different relevance ranking strategies. The Relevance Ranking Evaluator is a Java Web application, and is distributed as a Web application directory within a zip file.

Distribution

The Relevance Ranking Evaluator is distributed as a zip file (**relrankEvaluator-[VERSION].zip**), which contains a self-contained directory tree that includes a Web application directory and supplemental documentation. The zip file can be unpacked at any location using WinZip or any other compression utility that supports this format. Unpacking the zip file creates the subdirectory structure **Endeca\Solutions\relrankEvaluator-[VERSION]**. The Relevance Ranking Evaluator Web application directory (**relrankEvaluator**) can be found in this directory.

For example, if you have installed Oracle Endeca software such as Platform Services and MDEX Engine on Windows in the following location:

```
C:\Endeca\
```

The Relevance Ranking Evaluator zip file should be unpacked into the following location:

```
C:\
```

Unpacking the zip file creates the following directory structure:

```
C:\Endeca\Solutions\relrankEvaluator-[VERSION]\
```

Finally, the Relevance Ranking Evaluator Web application directory is located here:

```
C:\Endeca\Solutions\relrankEvaluator-[VERSION]\relrankEvaluator\
```

Dependencies

The Oracle Endeca Relevance Ranking Evaluator is a Java Web application. It requires an Oracle Endeca Workbench installation.

Additionally, the Relevance Ranking Evaluator needs to connect to an existing MDEX Engine in order to provide results. The MDEX Engine should be an engine containing your company's data, and can be an existing engine that is used for another purpose, such as a staging or QA server. You do NOT have to install a separate instance of the MDEX Engine specifically for the Relevance Ranking Evaluator, unless that is a useful configuration for your infrastructure.

After you have determined which MDEX Engine will be powering the Relevance Ranking Evaluator, ensure that the machine on which you are running the Relevance Ranking Evaluator is able to make a connection to the machine and port on which you are running the MDEX Engine.

In order to see the most useful information in the Relevance Ranking Evaluator, the following configuration options are recommended (but not required) for the MDEX Engine that you are using for the Oracle Endeca Relevance Ranking Evaluator:

- The "--whymatch" command-line flag for the MDEX Engine should be used if using MDEX Engine version 6.1.4 or earlier, in order to return additional information regarding how each record was matched by the entered search term(s)
- The "--wordinterp" command-line flag for the MDEX Engine should be used, in order to return word interpretation considerations, such as thesaurus and stemming expansions
- The "--stat-brel" command-line flag for the MDEX Engine can be used to retrieve the relevance ranking "scores" the Engine calculates for each returned record.
- Snippeting should be enabled for all fields within each search interface, if using MDEX Engine version 6.1.4 or earlier

Because these settings can potentially have a detrimental performance impact for high-traffic sites, it is recommended that the MDEX Engine that is used for the Oracle Endeca Relevance Ranking Evaluator be a staging or QA engine rather than a production engine. However, the Oracle Endeca Relevance Ranking Evaluator can be used with any MDEX Engine, running any configuration.

Installation

Installing the Relevance Ranking Evaluator

In order to install the Relevance Ranking Evaluator, you must extract the package on the machine that is running your Oracle Endeca Workbench installation, and copy in the "endeca_navigation.jar" file from Endeca Platform Services.

After extracting the package and copying over the necessary file, you must deploy the Relevance Ranking Evaluator application into the Endeca Tools Service.

To install the Relevance Ranking Evaluator:

1. Unzip the distribution zip file (**relrankEvaluator-[VERSION].zip**) into the same root directory as your Oracle Endeca Workbench installation. For instance, if your Oracle Endeca installation is located in:

```
C:\Endeca\
```

Then the Relevance Ranking Evaluator zip file should be unpacked directly into the "C:" drive. Doing so will create the following directory structure:

```
C:\Endeca\Solutions\relrankEvaluator-[VERSION]\
```

Similarly, if your Oracle Endeca installation is located in:

```
/usr/local/Endeca/current
```

Then the Relevance Ranking Evaluator zip file should be unpacked into the "/usr/local" directory. Doing so will create the following directory structure:

```
/usr/local/Endeca/Solutions/rellrankEvaluator-[VERSION]/
```

2. Copy the file "endeca_navigation.jar," found in the "\lib\java\" subdirectory of your Endeca Platform Services installation, into the "\rellrankEvaluator\WEB-INF\lib\" subdirectory of the Relevance Ranking Evaluator's installation directory.

For instance, if your Oracle Endeca Platform Services installation is located here:

```
C:\Endeca\PlatformServices\6.1.0
```

And you have unpacked the Relevance Ranking Evaluator zip file to the "C:" drive as described in step #1, resulting in the following Relevance Ranking Evaluator installation directory:

```
C:\Endeca\Solutions\rellrankEvaluator-[VERSION]\
```

Then, you should copy the file:

```
C:\Endeca\PlatformServices\6.1.0\lib\java\endeca_navigation.jar
```

Into the following directory:

```
C:\Endeca\Solutions\rellrankEvaluator-[VERSION]\rellrankEvaluator\WEB-INF\lib\
```

3. If the MDEX Engine to which you want to connect the Relevance Ranking Evaluator is NOT located on the same machine as the Relevance Ranking Evaluator install, OR if it is running on a port other than port 15000, then you will need to modify the Relevance Ranking Evaluator's web.xml.

Edit the file "web.xml" in the "\rellrankEvaluator\WEB-INF\" subdirectory of the Relevance Ranking Evaluator's installation directory. Modify the "env-entry-value" values for "eneHost" and "enePort" appropriately to specify the default location of your MDEX Engine and the port on which it is running.

For instance, if you are running your MDEX Engine on a machine located at staging.endeca.mycompany.com, using port 8500, and if you have unpacked the Relevance Ranking Evaluator zip file such that it creates the following directory:

```
C:\Endeca\Solutions\rellrankEvaluator-[VERSION]\
```

Then you should edit this file:

```
C:\Endeca\Solutions\relrankEvaluator-[VERSION]\relrankEvaluator\WEB-INF\web.xml
```

To specify that your MDEX Engine is running on staging.endeca.mycompany.com port 8500, you will then need to modify the following code, and change the following bolded values:

```
<env-entry>
  <env-entry-name>eneHost</env-entry-name>
  <env-entry-value>localhost</env-entry-value>
  <env-entry-type>java.lang.String</env-entry-type>
</env-entry>

<env-entry>
  <env-entry-name>enePort</env-entry-name>
  <env-entry-value>15000</env-entry-value>
  <env-entry-type>java.lang.Integer</env-entry-type>
</env-entry>
```

To read as follows:

```
<env-entry>
  <env-entry-name>eneHost</env-entry-name>
  <env-entry-value>staging.endeca.mycompany.com</env-entry-value>
  <env-entry-type>java.lang.String</env-entry-type>
</env-entry>

<env-entry>
  <env-entry-name>enePort</env-entry-name>
  <env-entry-value>8500</env-entry-value>
  <env-entry-type>java.lang.Integer</env-entry-type>
</env-entry>
```

4. If your data contains a large number of properties, or if you would like to review further configuration options for the Relevance Ranking Evaluator, you may also need to edit the "evaluator.properties" file located in the "\relrankEvaluator\WEB-INF\conf\" subdirectory of the Relevance Ranking Evaluator's installation directory. Please refer to the Relevance Ranking Evaluator Usage Guide section on Optional Relevance Ranking Evaluator Configuration for further information regarding this file.
5. Stop the Endeca Tools Service.
6. Copy the relrankEvaluator.xml file from the Relevance Ranking Evaluator's root directory to your %ENDECA_TOOLS_CONF%\conf\Standalone\localhost directory.

For example, if you have installed your Endeca components to the default locations, you

must copy the

C:\Endeca\Solutions\relrankEvaluator-[VERSION]\relrankEvaluator.xml file
into the
C:\Endeca\Workbench\workspace\conf\Standalone\localhost directory.

7. If you are installing on UNIX, modify the `relrankEvaluator.xml` file so that it reflects the correct location for your installation. The default values are for a Windows installation.
8. Open the `%ENDECA_TOOLS_CONF%\conf\ws-extensions.xml` file.
9. Add the following `<extension>` element within the main `<extensions>` element:

```
<extension id="relrankEvaluator"
  defaultName="Rel. Ranking Evaluator"
  defaultDescription="The Relevance Ranking Evaluator allows you to
  evaluate your relevance ranking strategies to optimize the search
  experience for end users of your application."
  url="http://staging.endeca.mycompany.com:8006/relrankEvaluator"
  launchImageUrl="/images/icon_admin.png"
  role="admin" />
```

You must change the specified hostname in the `url` attribute to point to the machine name or IP address of the machine running your Workbench installation.

Note: If you are not using the default port (8006) for your Workbench installation, you must update the value in the `url` attribute to point to the correct port.

10. Save and close the file.
11. Open the `%ENDECA_TOOLS_CONF%\conf\ws-mainMenu.xml` file.
12. Add a `<menuitem>` element within the `<mainmenu>` element:

```
<menuitem id="relrankEvaluator" onLaunchPage="true"/>
```

Optionally, set the `onLaunchPage` element attribute to `false` if you do not want the tool to appear on the Workbench launch page. You may also choose to include the Relevance Ranking Evaluator as a `<menuitem>` within a `<menunode>` instead.

13. Save and close the file.
14. Start the Endeca Tools Service.

Testing Your Installation

After you have installed the Oracle Endeca Relevance Ranking Evaluator, you can test your installation as follows:

1. Access the Relevance Ranking Evaluator from the machine on which you installed it by navigating to your Endeca Workbench URL:

<http://localhost:8006>

If you would like to test the Relevance Ranking Evaluator from a machine other than the one on which you installed it, substitute the IP or hostname of the machine on which Oracle Endeca Workbench is installed for the value "localhost" in the URL above.

2. Login to Oracle Endeca Workbench.
3. Select "Rel. Ranking Evaluator" from the menu.
4. If your Relevance Ranking Evaluator is installed correctly, you should see a screen similar to the following:

The screenshot displays the Oracle Endeca Relevance Ranking Evaluator web interface. At the top, there is a search bar labeled 'Search 1' with a '+' icon, a 'Clear All' button, a 'Change MDEX Engine' button, and a 'Show 10' dropdown. Below the search bar is a 'Search Name' field containing 'Search 1' and a 'Go' button. The 'Search Criteria' section includes a 'Search Interface' dropdown set to 'All', a 'Match Mode' dropdown set to 'All > Partial', a 'Search Term(s)' input field, and a 'Rollup Key' dropdown set to 'None'. The 'Search Filters' section is titled 'Relevance Ranking' and contains a 'Strategies' list with radio buttons for 'Retail Strategy', 'Document Strategy', and 'Custom Strategy'. To the right, there are two list boxes: 'Available Modules' (containing Exact, Field, First, Freq, Glom, Interp, Maxfield) and 'Selected Modules' (empty). Arrows indicate the ability to move modules between these lists. At the bottom, a 'Search Results Comparison' section contains the text: 'To see results, please configure your relevance ranking strategy.' The footer of the interface reads: 'Copyright © 2003, 2012 Oracle and/or its affiliates. All rights reserved.'

If you receive an error which states that the Relevance Ranking Evaluator is unable to connect to the MDEX Engine, it is likely that the default MDEX Engine is misconfigured in the Relevance Ranking Evaluator's "web.xml" file (see step #3 in the "Installing the Relevance Ranking Evaluator," above). To change the default MDEX Engine, modify your web.xml file appropriately, as described in that installation step, and restart your application server or the Endeca Tools Service as necessary. If you'd like to continue the test without modifying your web.xml, you may also click on the "Change MDEX Engine" button to temporarily specify a different location for your MDEX Engine.

For additional information regarding the use of your Relevance Ranking Evaluator, please refer to the Usage Guide located in the "doc" directory of your Oracle Endeca Relevance Ranking Evaluator installation directory.