IBM WebSphere Information Integrator
OmniFind Edition

IBM

Release Notes

Version 8.3

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Before using this information and the product it supports, be sure to read the general information under "Notices."

Contents

Chapter 1. About the release notes

This document describes additional features, limitations, restrictions, workarounds, and document updates for the IBM® WebSphere® Information Integrator OmniFind™ Edition, Version 8.3. Read this document carefully before you install and use the product.

For more updates, see the technotes at the WebSphere Information Integrator OmniFind Edition Support Web site.

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Chapter 2. New features for version 8.3

IBM WebSphere Information Integrator OmniFind Edition, Version 8.3 (enterprise search) includes support for new data sources; enhancements to search quality, performance, and ease of use; significant improvements to the sample search application; and expanded text analytics capabilities.

Integration with desktop search products: Google and X1 Technologies

You can use the desktop search technologies from Google (Google Desktop Search for Enterprise) or X1 (X1 Technologies Desktop Search Solution) to search your desktop and enterprise search collections.

If you want to use Google Desktop Search to search enterprise search collections, you can install the WebSphere II OmniFind Edition plug-in for Google Desktop Search. The plug-in is shipped with WebSphere II OmniFind Edition. See the plug-in user guide (omnifind_gds_userguide_v83.pdf) on the root of the CD image in docs/en_US/pdf.

For more information about the X1 Technologies desktop, see the X1 Technologies Web site at http://www.x1.com/.

New supported data sources

The following data sources are new for version 8.3:
- WebSphere Portal Document Manager, Version 5.1.0.1
- IBM WebSphere Portal, Version 5.1.0.1 Web sites
- Lotus® Domino® Document Manager Version 6.5.1 (formerly Domino.Doc®)
- FileNet P8 CM 3.0 and 3.5
- Open Text Livelink Enterprise Server 9.2 and 9.5
- DB2 Universal Database™ for z/OS®, Version 8.x (new version)
- Lotus QuickPlace®, Version 6.5.1 (formerly called Team Workplace™ and QuickPlace)
- Sybase Version 11.9.2, 12.0, 12.5 or later
- Workplace Web Content Management, Version 2.5 and Version 5.1
- Mainframe sources accessible through IBM WebSphere Information Integrator Classic Federation for z/OS. (Separate purchase of WebSphere Information Integrator Classic Federation is required.)
  - VSAM
  - IMS
  - CA-Datacom
  - Software AG Adabas

Support for validating a user's current credentials with the native data source was extended to the following data sources:
- WebSphere Portal Document Manager
- WebSphere Portal
- Domino Document Manager

- Lotus QuickPlace
- FileNet CS
- Windows® file system
- Documentum

Search quality, relevance, and features

- Extensible ranking
  - Boost words dictionaries: to influence document relevance
  - Field boosting: to assign fields to boost classes and to assign boost values to boost classes
  - Static score control: to increase or decrease scores by using URI patterns, for example:

    ```
    http://servername/directory/*
    db2://dbname/schema.tablename/*
    domino://servername/dbname/*
    ```

- Full wildcard character support and wildcard characters in phrases
- Stop word dictionaries
- Better support for compound words that are used in languages such as Korean and German. For example, a query for the word *Vertrag* (contract) also returns documents that contain the word *Versicherungsvertrag* (insurance contract)
- Improved synonym support for multiple word units, for example, quotation marks are no longer required
- Enhanced linguistics for Chinese and Arabic
- Crawler plug-ins for all data sources, including the Web and NNTP

Scalability and performance

- Leverage WebSphere Information Integrator Event Publisher Edition to push DB2 Universal Database changes to the parser. (WebSphere Information Integrator Event Publisher Edition must be purchased separately.)
- Quick mode recrawl: enhances performance by avoiding processes that detect deleted documents
- Increased number of parser service sessions
- Reduced disk space consumption of the index and store, especially for collections with documents in Asian languages and collections with many fields

Usability and configuration

- Support for Solaris Operating Environment 9
- Search and index APIs to administer collections: Develop custom applications with the search and index API and deploy on non-enterprise search server
- DB2 Universal Database can be installed on a non-enterprise search server (remote server)
- WebSphere Application Server is still required, but you no longer need WebSphere Application Server Network Deployment (though it is still supported)
- Automatic installation of WebSphere Information Integrator Content Edition
- Operational shell commands to support automation
- Ability to override default Microsoft Exchange field mappings
- Support "handle as content" for data source crawlers: you can set user-defined fields to be used for categorization, summarization, and so on
- Simpler configuration and administration of the Web crawler

- Support paging in log viewer

Enhanced search application
- Can be customized by specifying options in a configuration file. You are no longer required to know Java server pages.
- Search results
  - Enhanced sorting and filtering (filters that you can customize to view documents of a particular file type, documents from a particular source type, or documents that match a predefined query)
  - Ability to remove redundant or meaningless text from document titles
  - Ability to configure a default format for date data
  - Document source icons identify the document origins
  - Fetch (click to view content)
  - Search within results
- Appearance
  - Configurable banner, toolbar, tabs, and links
  - Enhanced category searching and browsing
  - Enhanced ability to configure preferences
  - Simplified Search page with more space for working with search results
- Advanced search
  - New query builder
  - More search options

Reliability, availability, and serviceability
- Better tracking information for dropped documents
- More efficient logging format
- Help for errors from the administration console: links to more detailed information about error messages
- Number of deleted documents shown on data source monitor in the administration console
- Option to enable operator to view system information on system toolbar
- Display messages for failed index builds

Text analytics and semantic search capabilities
- Write text analysis results to a JDBC source (DB2 Universal Database and Oracle) to enable text mining capabilities:
  - The ability to generate LOAD scripts
  - Simple example: Annotated results that contain *people* can be mapped and added to a table with relevant columns for the people attributes
- Base enablement for user-provided CAS consumers, for example, putting items such as categories, lists of people, or metadata back into a content management system after first sending it to enterprise search. Adding content back into a repository is a manual process. See the appropriate technote on the Support Web site at http://www-306.ibm.com/software/data/integration/db2ii/supportwomnifind.html.
- Capability for named entity detection (available through IBM Services only):
  - Extend dictionaries with product names, competitor names, employees, and so on
  - Run annotators to annotate the documents with that information

– Enable semantic search for such things as *find all documents in which one of my employees is in the same paragraph as one of my competitor products*.

Search quality tools

The search quality tools for enterprise search are command line tools that can help you improve query performance by validating query ranking, modifying metadata, eliminating duplicate documents, and monitoring Web crawling.

The search quality tools are available only on the DeveloperWorks Web site.

Translated enterprise search components

WebSphere II OmniFind Edition is translated into many languages. Not all components are translated into all languages.

Some or all components of WebSphere II OmniFind Edition are translated into the following languages:

Arabic	Hungarian	Slovak
Brazilian Portuguese	Italian	Slovenian
Czech	Japanese	Spanish
Danish	Korean	Swedish
Finnish	Norwegian (Bokmal)	Traditional Chinese
French	Polish	
German	Russian	
Hebrew	Simplified Chinese	

The following WebSphere II OmniFind Edition product components are translated into some or all languages:

Installation program
> All languages except Arabic and Hebrew.

FirstSteps program
> All languages except Arabic and Hebrew.

WebSphere Portal migration program
> All languages except Arabic and Hebrew.

Administration console and administration messages
> All languages except Arabic and Hebrew.

Search application and search application messages
> All languages.

Google Desktop Search plug-in
> English only.

Chapter 3. Restrictions, limitations, and workarounds

WebSphere Information Integrator OmniFind Edition has several restrictions, limitations, and workarounds.

WebSphere Information Integrator Content Edition technotes

Before you use the Content Edition crawler to create collections with data sources such as Documentum, FileNet, and so on, read the technotes for the appropriate data source. Go to the WebSphere Information Integrator Content Edition Support Web site at http://www-306.ibm.com/software/data/integration/db2ii/supportcontent.html. Under Self help, click **Technotes** or any of the technotes that are on the Support page.

Be sure to read the technotes for the following issues:
* Required settings for FileNet P8 Content Manager connector:

  If you plant to search a FileNet P8 Content Manager data source, you must use the following connector property:

  `Include System Properties = True`
* RMI proxy connector configuration is required to crawl FileNet CS data source:

  If you plan to search FileNet CS data source, you must configure RMI proxy connector on a Windows server.
* Additional configuration step to crawl Documentum repository in direct mode:

  Copy the native Documentum libraries (dmcl40.dll on Windows) into the *IICE_HOME*/bin directory.

Crawling native access control list information for Content Edition sources

When you start the Content Edition crawler to crawl all updates or to crawl new and modified documents, the Content Edition crawler cannot detect changes in native access control list information for crawled Content Edition documents.

If you want to index the changed native access control list information for indexed documents, you must start a full crawl when you start the Content Edition crawler.

Content Edition crawler: Port conflict with enterprise search services

By default, the data store server port for WebSphere Information Integrator Content Edition and the common communication layer port of WebSphere Information Integrator OmniFind Edition (enterprise search) use the same port of 6002.

If you plan to install the WebSphere Information Integrator Content Edition server with the full installation option (not the custom installation option) and the WebSphere Information Integrator OmniFind Edition server on the same server, you must change the port of the enterprise search common communication layer by using the WebSphere Information Integrator OmniFind Edition installation program.

Required settings for FileNet and Documentum

If you want to crawl FileNet or Documentum data sources, follow these instructions:

Required settings for FileNet P8 Content Manager connector
> If you plan to search a FileNet P8 Content Manager data source, you must use the following connector property:
>
> Include System Properties = True

The RMI proxy connector configuration is required to crawl FileNet CS data sources
> If you plan to search FileNet CS data source, you must configure the RMI proxy connector on a Windows server.

Additional configuration step to crawl Documentum repository in direct mode
> Copy the native Documentum libraries (dmcl40.dll on Windows) into the IICE_HOME/bin directory.

Using the search portlet

To support searching secured WebSphere Portal pages, you must submit searches from the WebSphere II OmniFind Edition search portlet. Searches submitted from the standard ESSearchApplication application will not have the proper credentials to properly verify the end user's access to the document in the index.

QuickPlace crawler

The QuickPlace crawler can crawl attachments in Imported Page, Microsoft® Word Page, Microsoft Excel Page, Microsoft PowerPoint Page, and Multiple Imported Pages only under the following conditions:

- The server uses Domino Internet Inter-ORB Protocol (DIIOP).
- Attachment crawling is enabled.
- The crawler is configured to crawl the "$FILE" field or all fields.

DB2 crawler and the event publishing queue manager

The DB2® crawler that uses event publishing connects to WebSphere MQ queues with a client connection. To establish the client connection, the queue manager should set its CCSID as 819.

As a WebSphere MQ administrator, run the following command:

```
runmqsc queue_manager_name
ALTER QMGR CCSID(819)
END
```

Private copy of cacerts file for Secure Sockets Layer (SSL) Web crawling

Two new configuration parameters for the Web crawler allow the use of a private cacerts file for HTTPS crawling.

In the crawl.properties file, the value of the **cacerts_path** parameter is a string that contains the absolute path name of the cacerts file to use.

Also, in the crawl.properties file, the value of the **cacerts_password** parameter is a string that contains the encrypted password to use when reading the keystore.

These parameters are not editable in the enterprise search administration console. If you have a private cacerts file, you can update X.509 certificates without super user permission and supply different crawlers with different certificates.

Permissions for crawling on Windows and UNIX file systems

The Windows and UNIX® file system crawlers crawl documents according to read permissions that are specified by the enterprise search administrator. For Windows, the administrator is the account of "IBM WebSphere Information Integrator OmniFind Edition" NT services.

On Windows, you can set the user ID and password for the crawled directory. However, the user ID and password are used only to connect to a shared network folder. In that case, the Windows file system crawler crawls files according to the read permission of this user ID for the shared network folder, not for local drives. Also, only one user is allowed to connect to a server or a network folder at a time.

Crawling DB2 databases on the classic data source server through WebSphere II Classic Federation for z/OS by using the ODBC Wrapper

The DB2 crawler can crawl a DB2 database on the classic data source server through WebSphere Information Integrator Classic Federation. To crawl a DB2 database on the classic data source server, the database must be federated with a DB2 database on the non-classic data source server by using the ODBC wrapper of WebSphere Information Integrator Classic Federation.

To federate the database:
1. Install WebSphere Information Integrator Classic Federation on the classic data source server.
2. Install the WebSphere Information Integrator Classic Federation client module on the non-classic data source server that has the database that will federate with the database on the classic data source server.
3. Configure the ODBC driver of WebSphere Information Integrator Classic Federation to connect to the classic data source server.
4. Connect to the federating database and create the ODBC wrapper to federate with the database on the classic data source server.
5. Specify the DB2 crawler to crawl the federating database on the non-classic data source server so that the database on the classic data source server can be crawled through WebSphere Information Integrator Classic Federation.

HTML parser

The HTML parser does not index all metadata of a document, and it uses a default list of tags. This list will be used for every new collection in version 8.3, and there is no migration for existing collections.

You can control and change the metadata mapping in the administration console. Go to the Parse page and click **Map HTML metadata to fields**. If you change the metadata mapping, the changes are not in effect until you recrawl and parse the documents again.

For more information about HTML metadata mapping, see the topic "Working with HTML search fields" or check for technotes about the HTML parser.

Crawler database conversion

If you upgrade from older version of WebSphere II OmniFind Edition to version 8.3, the first time that you start the crawler, the database for crawled documents will be converted to a new structure. Converting the old database to the new database takes about 15 minutes for one million documents.

You must wait until the conversion is complete. When the conversion is complete, the crawler will start crawling. You do not need to restart the crawler.

Pausing the Web crawler

In some cases when the Web crawler appears to be running but it does not appear to be crawling any new documents, it might be that the crawler reached the maximum number of crawled documents in temporary storage limit that is defined in the Advanced Web Crawler Properties page. To verify that the crawler reached this limit, you must check the number of documents in the webrds table. To check this table, run this DB2 command. For a four server installation, run this command on the crawler server:

```
db2 "select count(*) from schema_name.webrds"
```

where *schema_name* is the schema name for the crawler that is not crawling.

If the number of documents is equal to or slightly higher than the specified limit, then ensure that the parser is running. If the parser is running, then allow it to finish.

Chapter 4. Updates to the administration console

Several fields in the administration console were revised after the documentation was translated. The administration console is the main search administrator interface.

Options for Wildcard Characters page

The text for the **Support wildcard characters in queries that do not search fields** check box was changed to **Support wildcard characters in queries that search free text**.

The instruction text for the **Specify which fields support wildcard characters** options was changed to **Support wildcard characters in queries that search fields**. A new radio button, **No fields**, enables you to specify that no fields are to be searched by queries that include wildcard characters.

Options for an external JDBC source page

The following fields were removed from this page:
* **Free text search**
* **Fielded search**
* **Parametric search**

When you configure options for searching an external JDBC database table, you can specify whether the fields are searchable, whether the fields can be returned in the search results, and whether a field is used as a unique identifier field in the source database table.

Percentage of crawled directories for the Windows and UNIX file system crawlers

In the enterprise search administration console, for the Windows and UNIX file system crawlers, the progress bar on Crawler Details page means the number of crawled files as a percentage of the total number of files to be crawled.

In WebSphere II OmniFind Edition, Version 8.2.2, the progress bar referred to the number of crawled directories as a percentage of the total number of directories to be crawled.

Collapse Search Results page

The instructions on the Collapse Search Results page, and the documentation about collapsing search results, state that only documents from Web and NNTP sources can be collapsed in the search results. This statement is not true. You can configure rules for collapsing documents from the same source for all source types in a collection.

Collection security and site collapse

If collection security is enabled, search results from the same site will not be collapsed unless you specify that you do not want to validate user credentials

during query processing. When current credentials are validated, the source of
each document is inspected and possibly routed for validation. To enable search
results from secure collections to be collapsed:

1. On the Document Level Security page in the enterprise search administration
   console, select the **Do not validate current credentials during query processing**
   check box and click **OK**.

2. Monitor the collection, select the Search page, and stop and restart the search
   server processes.

When users query the collection, documents from sites that are configured to be
collapsed will be collapsed in the search results. In the sample search application,
users can view the collapsed results by clicking the **[More results from this same
source]** link.

Collection security and the Windows file system crawler

If collection security is enabled and you configure a Windows file system crawler,
user credentials cannot be validated during query processing if both of the
following conditions are true:

- The Windows server that you want to crawl is not a member of a domain
- The directory that you want to crawl is a remote directory (such as
  \\servername\hostname)

Chapter 5. Documentation updates

Several topics were revised after the documentation was translated. Information for WebSphere Information Integrator OmniFind Edition appears in the information center and in PDF documents.

Installation

Several sections in the installation documentation were changed after the information was translated. Installation information appears in PDF (iiysi.pdf) and in the information center.

Required settings for Solaris Operating Environment

If you see the following error, you must check that you are using the supported Solaris kernel:

```
This application requires a Java Run Time Environment
(JRE) to run. Searching for one on your computer was not successful.
Please use the command line switch -is:javahome to specify
a valid JRE. For more help use the option -is:help.
```

The supported kernel is kernel SunOS 5.9 Generic 112233-12 Mar 2004.

Required patches for Solaris Operating Environment

The *Installation Guide for Enterprise Search* states that the following level of Solaris is required: Sun Solaris 9 64-bit, kernel SunOS 5.9 Generic 112233-12 Mar 2004. In addition, ensure that the following patches are installed. If they are not installed, you must install them:

- SunOS 5.9 Patch 111722-04 04/16/2003
- Sun C++ 5.6 Patch 111711-12 2004/10/25

To check for the patches, run the following command:

```
>showrev -a |grep 111722
```

You should see information similar to the following output:

```
Patch: 111722-04 Obsoletes:  Requires:  Incompatibles:
Packages: SUNWlibms, SUNWlmsx, SUNWlibm
```

The patch level must be 04 or higher.

Also, run the following command:

```
>showrev -a |grep 111711
```

You should see information similar to the following output:

```
Patch: 111711-12 Obsoletes:  Requires:  Incompatibles:
Packages: SUNWlibC
```

The patch level must be 12 or higher.

If the command does not return any information, you need to install the patches by using Solaris Management Console or the patchadd utility.

Hardware and disk space requirements

Under "Large installation," the text "8 GB of RAM on each server (4 GB of RAM for Windows)" is incorrect. The required RAM for Windows is 8 GB for a large installation.

Also, the recommended paging space for all operating systems is 8 GB.

Starting the WebSphere II OmniFind Edition installation launchpad

The topics "Installing WebSphere II OmniFind Edition on a single server," "Installing the crawler component," "Installing the search component," and "Installing the index component" each contain a typographical error in the code examples for starting the installation launchpad. Use the following corrected text:

AIX: Log in as the root user and enter ./install-aix.bin

Linux: Log in as the root user and enter ./install-linux.bin

Solaris: Log in as the root user and enter ./install-solaris.bin

Removing WebSphere II OmniFind Edition from AIX, Linux, and Solaris systems

In the third paragraph, the example should read:
```
./uninstall.bin -silent -options response_file_name
```

Step 3 in the procedure should read:

Enter `./uninstall.bin`

Starting enterprise search on AIX, Linux, and Solaris

Step 3 and Step 5 for starting WebSphere Application Server Network Deployment contain typographical errors. The steps should read:

3. Enter ./startManager.sh

5. Enter
```
./startNode.sh
./startServer.sh servername
```

Crawling Web data sources for the first time with version 8.3

Before you install WebSphere II OmniFind Edition, ensure that you back up your data.

WebSphere II OmniFind Edition, Version 8.3, uses a new database schema to store crawled documents. When you start a Web crawler for the first time, the database will be automatically converted to a new schema. For more information, see "Crawler database conversion" on page 10.

Administration and configuration

Several sections in the administration documentation were changed after the information was translated. Administration and configuration information appears in PDF (iiysa.pdf) and in the information center.

Starting and stopping the ESSearchApplication and server1 applications in WebSphere Application Server

The instructions in the administration information are incorrect for starting and stopping the ESSearchApplication and server1 applications. The instructions are different for WebSphere Application Server, Version 6.0 and version 5.1. Use the following instructions to start or stop these applications.

To stop the applications:
* For WebSphere Application Server, Version 6.0:
    1. Log on as the root user and change to the bin directory where WebSphere Application Server is installed.
    2. Run the following commands:

       AIX, Linux, and Solaris:
       ```
       ./stopServer.sh server1
       ./stopServer.sh ESSearchServer
       ```
       Windows:
       ```
       stopServer server1
       stopServer ESSearchServer
       ```
* For WebSphere Application Server, Version 5.1, open the WebSphere Application Server Administrative Console and stop the applications.

To start the applications:
* For WebSphere Application Server, Version 6.0:
    1. Log on as the root user and change to the bin directory where WebSphere Application Server is installed.
    2. Run the following commands:

       AIX, Linux, and Solaris:
       ```
       ./startServer.sh ESSearchServer
       ./startServer.sh server1
       ```
       Windows:
       ```
       startServer ESSearchServer
       startServer server1
       ```
* For WebSphere Application Server, Version 5.1, open the WebSphere Application Server Administrative Console and stop the applications.

Updating security settings for the enterprise search

If you enable WebSphere Application Server security after you install enterprise search (WebSphere II OmniFind Edition), do all of the steps in this procedure.

If you enable WebSphere Application Server security before you install enterprise search, do only step 2. The enterprise search installation program automatically updates the es.cfg file with WebSphere user name and password (steps 3 and 4).

To update enterprise search security settings:

1. Ensure that the enterprise search administrator ID is entered as a valid user in the user registry used by WebSphere Application Server.
2. For the ESSearchApplication application, go to the following directory:

   ES_INSTALL_ROOT/installedApps/ESSearchApplication.ear/
   ESSearchApplication.war/WEB-INF

   Update the user name and password entries in the config.properties file of the ESSearchApplication application with a valid WebSphere Application Server user ID.
3. Update the `WASUser` entry in the ES_NODE_ROOT/nodeinfo/es.cfg file with a valid WebSphere Application Server user ID.
4. Change the `WASPassword` entry in the es.cfg file by using the eschangewaspw.bat or eschangewaspw.sh command. See the following section for instructions on how to change this password.

To change the password on single server installation:
1. Log in as the enterprise search administrator.
2. Stop the server by entering this command: `esadmin stop`
3. Stop the server1 and ESSearchServer enterprise applications. and
   - For WebSphere Application Server, Version 6.0:
     a. Log on as the root user and change to the bin directory where WebSphere Application Server is installed.
     b. Run the following commands:

        AIX, Linux, and Solaris:
        ```
        ./stopServer.sh server1
        ./stopServer.sh ESSearchServer
        ```
        Windows:
        ```
        stopServer server1
        stopServer ESSearchServer
        ```
   - For WebSphere Application Server, Version 5.1, open the WebSphere Application Server Administrative Console and stop the applications.
4. Change the system password for the enterprise search administrator user ID by using AIX, Linux, or Solaris operating system commands or the Microsoft Windows change password facility.
5. Run the following script, where *newValue* is the password that you specified in step 4:
   - AIX, Linux, and Solaris: `eschangewaspw.sh` *newValue*
   - Windows: `eschangewaspw` *newValue*
6. Start the server1 and ESSearchServer applications:
   - For WebSphere Application Server, Version 6.0:
     a. Log on as the root user and change to the bin directory where WebSphere Application Server is installed.
     b. Run the following commands:

        AIX, Linux, and Solaris:
        ```
        ./startServer.sh ESSearchServer
        ./startServer.sh server1
        ```
        Windows:
        ```
        startServer ESSearchServer
        startServer server1
        ```

- For WebSphere Application Server, Version 5.1, open the WebSphere Application Server Administrative Console and stop the applications.
7. Recycle the WebSphere II OmniFind Edition common communication layer (CCL) by entering the following commands:
   - AIX, Linux, and Solaris:
     ```
     stopccl.sh
     startccl.sh -bg
     ```
   - Windows:
     ```
     stopccl
     startccl
     ```
8. Restart enterprise search by entering this command: `esadmin start`

To change the password for a multiple server installation:
1. On the computer where you installed the index server, log in as the enterprise search administrator.
2. Start the system maintenance mode by entering this command: `esadmin system maintenance`
3. Change the system password for the enterprise search administrator user ID by using AIX, Linux, or Solaris operating system commands or the Microsoft Windows change password facility.
4. Run the following script, where *newValue* is the password that you specified in step 3:
   - AIX, Linux, or Solaris: `eschangewaspw.sh` *newValue*
   - Windows: `eschangewaspw` *newValue*
5. Recycle the WebSphere II OmniFind Edition common communication layer (CCL) by entering the following commands on the index server:
   - AIX, Linux, or Solaris:
     ```
     stopccl.sh
     startccl.sh -bg
     ```
   - Windows:
     ```
     stopccl
     startccl
     ```
6. On the computer where you installed the crawler server, log in as the enterprise search administrator.
7. Change the system password for the enterprise search administrator user ID by using UNIX operating system commands or the Windows change password facility. This password must match the password that you specified in step 3.
8. Run the following script, where *newValue* is the password that you specified in step 4:
   - AIX, Linux, or Solaris:
     ```
     eschangepw.sh newValue
     ```
   - Windows:
     ```
     eschangepw newValue
     ```
9. Recycle CCL on the crawler server by entering the following commands:
   - AIX, Linux, or Solaris:
     ```
     stopccl.sh
     startccl.sh -bg
     ```
   - Windows:

```
      stopccl
      startccl
```

10. On one of the computers where you installed a search server, log in as the enterprise search administrator.

11. Stop the IBM HTTP Web Server. (This step prevents the Network Dispatcher from routing queries to this server.)

12. Stop CCL on the search server by entering the following commands:
    - AIX, Linux, or Solaris:
      ```
      stopccl.sh
      ```
    - Windows:
      ```
      stopccl
      ```

13. Open the WebSphere Application Server Administrative Console and stop the server1 and ESSearchServer applications.

14. Change the system password for the enterprise search administrator user ID by using UNIX operating system commands or the Windows change password facility. This password must match the password that you specified in step 3.

15. Run the following script, where *newValue* is the password that you specified in step 3:
    - AIX, Linux, or Solaris:
      ```
      eschangepw.sh newValue
      ```
    - Windows:
      ```
      eschangepw newValue
      ```

16. Restart CCL on the search server by entering the following commands:
    - AIX, Linux, or Solaris:
      ```
      startccl.sh -bg
      ```
    - Windows:
      ```
      startccl
      ```

17. On the second search server, repeat steps 10 to 16.

18. Start the IBM HTTP Web Server.

19. In the WebSphere Application Server Administrative Console, start the server1 and ESSearchServer enterprise applications.

20. On the computer where you installed the index server, log in as the enterprise search administrator, and enter this command to start enterprise search:
    ```
    esadmin start
    ```

21. Log in to the enterprise search administration console, monitor a collection, click the Search page, and then click **Stop** and **Start** to restart the search servers. Repeat this step for each collection in your enterprise search system.

Recrawling after you install WebSphere II OmniFind Edition, Version 8.3

After you install WebSphere II OmniFind Edition, Version 8.3, all documents except for those that were crawled by Web and NNTP crawlers will be recrawled.

The first time that you start the non-Web and non-NNTP crawlers after you install version 8.3, all documents in all data sources will be crawled and indexed again, not only documents that are new or that changed since the last time a data source was crawled.

After crawling all documents in each table, directory, or folder in the collection, the crawlers switch to the normal update processing and begin crawling only new or changed documents. Usually, a full recrawl is necessary only when changes to the crawler's configuration require it. For example, if the display names for fields or columns in a data source change, then the crawler must recrawl all documents so that the new information can be indexed with the documents.

Reverting to default values for ranking properties

If you adjust ranking properties, you can set the properties back to default values by editing the ES_NODE_ROOT/master_config/*colid*.runtime.*nodeid*/runtime.properties file.

In multiple server system, edit the runtime.properties file for each search server. These files are on the index server in the ES_NODE_ROOT/master_config/*colid*.runtime.*nodeid* directory, for example:

```
ES_NODE_ROOT/master_config/mycolid.runtime.node3/runtime.properties
ES_NODE_ROOT/master_config/mycolid.runtime.node4/runtime.properties
```

node3 and *node4* are the server IDs of each search server.

To restore ranking property values to default values for a collection:
1. Identify the collection ID that you want to restore default ranking values to. The collection ID is in the ES_NODE_ROOT/master_config/collections.ini file. Sort this file for easier viewing as in the following example:

   ```
   % sort $ES_NODE_ROOT/master_config/collections.ini | more
   collection1.configfile=col1_config.ini
   collection1.datadir=/home/jperez/node/data/col1
   collection1.description=
   collection1.displayname=Collection1
   collection1.flags=0
   collection1.id=col1
   collection1.sectiontype=collection
   collection1.type=1
   ...
   ```
   In this example, for collection1, the ID is col1.
2. In a text editor, open the ES_NODE_ROOT/master_config/*colid*.runtime.*nodeid*/runtime.properties file where *colid* is the ID for the collection that you want to change and *nodeid* is the ID of the search server where this search session runs. Make the following changes to the *colid*.runtime.*nodeid*/runtime.properties file:
   - Delete the following properties:
     ```
     trevi.autorank.dfthreshold1
     trevi.autorank.dfthreshold2
     trevi.autorank.dfthreshold3
     trevi.autorank.rc0.*
     trevi.autorank.rc1.*
     ```
   - If trevi.sourcetype=1 (link rank collection) in the runtime.properties file that you are editing, open the ES_INSTALL_ROOT/default_config/runtime.1/runtime.properties file and copy and paste the following default properties to the*colid*.runtime.*nodeid*/runtime.properties file:
     ```
     trevi.autorank.dfthreshold1
     trevi.autorank.dfthreshold2
     trevi.autorank.dfthreshold3
     trevi.autorank.rc0.*
     trevi.autorank.rc1.*
     ```

- If the trevi.sourcetype=2 (date rank collection) in the *colid*.runtime.*nodeid*/runtime.properties file, open the ES_INSTALL_ROOT/default_config/runtime.2/runtime.properties file and copy and paste the following properties to the *colid*.runtime.*nodeid*/runtime.properties file:

```
trevi.autorank.dfthreshold1
trevi.autorank.dfthreshold2
trevi.autorank.dfthreshold3
trevi.autorank.rc0.*
trevi.autorank.rc1.*
```

- If the trevi.sourcetype=3 (no rank collection) in the *colid*.runtime.*nodeid*/runtime.properties file, open the ES_INSTALL_ROOT/default_config/runtime.0/runtime.properties file and copy and paste the following properties to the *colid*.runtime.*nodeid*/runtime.properties file that you are editing:

```
trevi.autorank.dfthreshold1
trevi.autorank.dfthreshold2
trevi.autorank.dfthreshold3
trevi.autorank.rc0.*
trevi.autorank.rc1.*
```

3. In the administration console, stop and restart the search process for this collection so that the new values take effect.

Repeat these steps for every collection that you want to restore default ranking values to.

Web crawler HTTP return codes

A proprietary HTTP return code 618 was added to identify documents that were originally redirected (3xx) but which lack a redirect URL. These return codes are not passed through the enterprise search system because they do not contain useful content.

Crawling only new and modified documents

You can start the crawlers except Web and NNTP to crawl only new and modified documents. In this case, the crawler does not crawl an older document than all documents that were crawled during a previous crawl.

For example, for the Windows and UNIX file system crawlers, if you copy a file into the crawled directory and the last modified date of the file is older than last modified date of all crawled documents, the crawler does not crawl the file. The crawler does not crawl the file even if it was just copied.

Index build status example

Some of the index build status example is incorrect. The following text replaces the example in the topic called "Enterprise search commands, return codes, and session IDs":

```
<?xml version="1.0"?>
<Monitor Type="MainIndexHistory" Count="1">
    <IndexStatus Id="1">
    <StartTime>1131987633901<StartTime>
    <Progress>0</Progress>
    <CurrentPhase>0</CurrentPhase>
    <TotalPhase>0</TotalPhase>
    <IndexCopyTime>49822</IndexCopyTime>
    <CurrentServer>0</CurrentServer>
```

```
      <TotalServer>0</TotalServer>
      <IndexBuildTime>46158</IndexBuildTime>
      <Status>0</Status>
      <JobID>1131987633899</JobID>
      <MessagesAvailable>false</MessagesAvailable>
      <StopTime>1131987734199</StopTime>
      <TotalTime>100298</TotalTime>
      <NumberOfDocuments>43</NumberOfDocuments>
      </IndexStatus>
    <CurrentIndexWildCardSupport/>
    <NextIndexWildCardSupport Type="None"  Limit="0"/>
   <ScheduleStatus>
      <Status>1</Status>
      <ScheduledTime Enabled="false"></ScheduledTime>
    <ScheduleStatsu>
</Monitor>
```

Elements for the index build status command

The table for elements for the index build status command in the topic called "Enterprise search commands, return codes, and session IDs," shows incorrect attributes and descriptions:

The attribute `progress` is specified twice. Replace the second `progress` attribute with the attribute `Status` with the following description: "0 indicates index build and copy, -1 indicate index build request failure, and 1 indicates index build or copy or both are in progress."

The description for `IndexCopyTime` is incorrect. The correct description is "Total time to copy index to all the search servers."

The description for the attribute `IndexBuildTime` is missing. The correct description is "The total time for all phases of index build."

There are two new attributes with the following descriptions:

JobID   A unique ID that is associated with each request for an index build

MessagesAvailable
          A boolean value that indicates whether error messages are available (in case of failure)

Configuring concurrent index builds

After you enable concurrent index builds within a single collection (by checking the box **Index reorganization and refresh requests for individual collections can run concurrently**), you might see error messages about index refreshes being stopped. In specific phases of the reorganization of the index, the system forcibly stops refresh builds from running and prevents any new refresh build from starting to allow the reorganized index build to finish.

You might see the following messages:

FFQC001E: Force stop on index copy for
collection *collection ID*.

FFQC0008E: An error occurred while building
index build type index for
collection *collection ID*.

You can ignore these messages.

Also, if you enable concurrent index builds within single collection, the parser also runs in parallel with the index builds. Ensure that you have enough system resources for both index builds and parsing processes.

Text analysis integration

Several sections in the text analysis integration documentation were changed after the information was translated. Text analysis information appears in PDF (iiyst.pdf) and in the information center.

Storing analysis results in a database

The following information supplements the text analysis integration information.

If you want to use a DB2 database or load files to store results from the Cas2Jdbc consumer, use the JDBC type 3 driver, not the type 4 driver.

Uploading a Cas2Jdbc mapping file that references the type 4 driver (as recommended in the original documentation) can cause an error so that the file cannot be uploaded successfully. On some system configurations, referencing the type 4 driver might cause the enterprise search system to freeze.

Use the type 3 driver (named COM.ibm.db2.jdbc.net.DB2Driver) which is also known as the "net-driver" instead. Using this driver requires DB2 to run a special applet server. To run the applet server, see the DB2 Universal Database documentation that is available in the WebSphere II OmniFind Edition package.

Ensure that the driver libraries are always at the same maintenance level as the DB2 applet server. Reference the following driver libraries from the Java directory of your DB2 Universal Database installation in your Cas2Jdbc mapping file: db2java.zip, db2jcc.jar.

The following example of a Cas2Jdbc mapping file uses the type 3 driver and the correct ZIP and JAR files:

```
. . .

<databaseConnection>
  <connectionUrl>db2://hostname:port/databasename
  </connectionUrl>
  <driver type="jdbc">COM.ibm.db2.jdbc.net.DB2Driver</driver>


  <authentication>
    <username>username</username>
    <password>password</password>
  </authentication>

  <driverLibraries>
    <driverLibrary>/opt/IBM/db2/V8.1/java/db2java.zip
    </driverLibrary>
    <driverLibrary>/opt/IBM/db2/V8.1/java/db2jcc.jar
    </driverLibrary>
  </driverLibraries>
</databaseConnection>

. . .
```

Stop word removal

The following text is added to help clarify what happens if all the words in a query are stop words. Stop word dictionaries are described in "Custom stop word dictionaries" in the *Text Analysis Integration* document (iiyst.pdf) and in "Controlling query behavior" in the *Programming Guide and API Reference* (iiysp.pdf).

If all of the words in a query are stop words, then no stop words are removed during query processing.

If all the query terms are removed during stop word processing, then the result set is empty. To ensure that search results are returned, stop word removal is disabled when all of the query terms are stop words.

For example, if the word *car* is a stop word and you search for *car*, then the search results contain documents that match the word *car*. If you search for *car buick*, the search results contain only documents that match the word *buick*.

Built-in features

In the topic called "Built-in features" near the end of the topic, the following text is incorrect:

> You can retrieve just the parts of a document that match the query exactly by mapping the relevant feature structures to both the index or database and specifying the span in the semantic search query.

The correct is:

> You can retrieve just the parts of a document that match the query exactly by mapping the relevant feature structures to both the index **and** database and specifying the span in the semantic search query.

Retrieving parts of a document that match a semantic search query

In the topic called "Retrieving parts of a document that match a semantic search query," the following text is incorrect: "Parse the string that is returned by Result.getProperty ("TargetElement") to find at the occurrence IDs."

The correct text is: "Parse the string that is returned by Result.getProperty ("TargetElement") to find **all** the occurrence IDs."

Installing and running the enterprise search base annotators

The following text should be added to the topic "Installing and running the enterprise search base annotators":

"To set the classpath for the OmniFind annotators you must call the `setOFAnnotEnv` script at the end of the `setUIMAClasspath` script."

Rebuilding synonym dictionaries

To use a synonym dictionary that you created for WebSphere Information Integrator OmniFind Edition version 8.2.2 with a version 8.3 system, you must migrate the dictionary (.dic) file.

After you install WebSphere Information Integrator OmniFind Edition, Version 8.3, take the following steps to migrate a custom synonym dictionary:

1. In the Collections view, on the Configure search server options page, remove the old synonym dictionary from the collection.
2. In the System view, on the Configure Synonym Dictionaries page, delete the old synonym dictionary from the enterprise search system.
3. Convert the source XML file for the synonym dictionary to a new dictionary (.dic) file.

   See *"Creating a synonym dictionary"* in *"Text Analysis Integration"* for instructions on how to use the essyndictbuilder tool.
4. In the System view, on the Configure Synonym Dictionaries page, add the new synonym dictionary to the enterprise search system. If the .dic file is smaller than 8 MB, the file can be on your system. If the .dic file is larger than 8 MB, the file must be on the index server.
5. In the Collections view, on the Configure search server options page, associate the new synonym dictionary with the collection that is to use it.

Repeat these steps for each custom synonym dictionary in the enterprise search system.

Programming and APIs

Several sections in the application programming and API reference documentation were changed after the information was translated. Programming and API reference information appears in PDF (iiysp.pdf) and in the information center.

Installing the client toolkit for administration APIs

In the numbered list, the following changes apply:

- Step 1: For a multiple server installation, the es.siapi.toolkit.jar archive file is on both search servers.
- Step 3: The es.client.cfg file is no longer required. The configuration file that is required to communicate with the server is packaged in es.siapi.toolkit.jar file and is called es.cfg file. The file is extracted in the root of the directory where you extracted the toolkit. However, you must edit this file and add the following entries at the end of the file:
  - `es_server_hostname=`*fully qualified host name of the enterprise search index server*

    This is a mandatory field that specifies the index server host name, for example, omnifind.server.ibm.com.
  - `.logFileName=`*absolute path of a log file*

    This is an optional field that registers the trace information in a specific log file, for example, c:\temp\siapi.log.

Adding documents to a collection

In step 4 of the topic "Adding documents to a collection," the following APIs are not supported:
- Field createField (java.lang.String fieldName, boolean[] value)
- Field createField (java.lang.String fieldName, double[] value)
- Field createField (java.lang.String fieldName, int[] value)
- Field createField (java.lang.String fieldName, java.lang.Sting[] value)

Reorganizing and refreshing indexes

You can set a fragmentation count property that tells the search and index API code when indexes should be refreshed or reorganized.

The value "2" in the following property setting means the index will be reorganized after two index refreshes:

```
indexes.index.setProperty
(IAdminConstants.BUILD_FRAGMENTATION_COUNT, 2)
```

See the index build sample for more examples.

Administration sample applications

You must register an application ID before you create an application ID. See the topic called "Registering application IDs" for a sample application.

Compiling sample administration applications

In step 3 of the topic called "Compiling sample administration applications," replace the file called `es.client.cfg` with `es.cfg` for all operating systems.

getInternalFieldName method

This method shows incorrect syntax. The correct syntax is:

```
getInternalFieldName
```

Compiling sample search and data listener applications

Under the section "ESSearchApplication search application," the text after Windows provides the wrong directory. The correct text is "Windows: C:\Program Files\IBM\es\samples\ESSearchApplication."

Also, under the section "Data listener client applications," the text after Windows is incorrect. The correct text is "Windows: C:\Program Files\IBM\es\samples\datalistener."

Crawler plug-ins for non-Web sources

The list of supported crawlers is incomplete. You can write applications (plug-ins) for all crawlers that are supported in version 8.3.

Retrieving targeted XML elements

The sentence "In the opaque term that specifies the semantic search, you can prepend a pound or hash sign (#) to one XML element (or annotation) in the xmlf2 query term to one XML element in the xmlf2 query term" has duplicate text.

The correct sentence is "In the opaque term that specifies the semantic search, you can prepend a pound or hash sign (#) to one XML element (or annotation) in the xmlf2 query term."

Query syntax

In the section that describes double quotation marks (" ") for queries, the following example is incorrect: "A standalone wildcard character (*) within a phrase is ignored, and the query `"app* pea*"` should yield the same results as *apples pears*."

The correct sentence is "A standalone wildcard character (*) within a phrase is ignored, and the query `"apples * pears"` should yield the same results as *apples pears*."

Sample search applications

In the topic called "Sample search applications," the links to two topics are incorrect. The link called "Simple search" should be called "Simple and advanced search." This link goes to a topic that describes simple and advanced sample search applications.

The link called "Advanced search" incorrectly goes to a topic about compiling search applications.

Chapter 6. Troubleshooting the information center

If the you click the help button and no topic appears or if you try to start the information center and it does not start, your information center configuration might be incorrect.

To correct the problem, stop and restart the information center. For a multiple server installation, the information center is installed on both search servers, so you must start and stop the information center on both servers.

To stop and restart the information center:
1. Stop the information center by running the following command. For a multiple server installation, run the following command on the search server:

    AIX   `/usr/IBM/WebSphereIIInformationCenter/ibm_help/IC_end.sh`

    Linux and Solaris
    `/opt/IBM/WebSphereIIInformationCenter/ibm_help/IC_end.sh`

    Windows
    `cd C:\WebSphereIIInformationCenter\ibm_help`

    `IC_end.bat`
2. Remove all the files from the /ibm_help/eclipse/configuration directory except for config.ini.
3. Start the information center:

    AIX   `/usr/IBM/WebSphereIIInformationCenter/ibm_help/IC_start.sh &`

    Linux and Solaris
    `/opt/IBM/WebSphereIIInformationCenter/ibm_help/IC_start.sh &`

    Windows
    `cd C:\WebSphereIIInformationCenter\ibm_help`

    `IC_start.bat`
    After you enter the command to start the information center, you will not see a confirmation that the information center is started.
4. Test the information center by typing the following URL in a browser: http:\\localhost:8888

Enterprise search documentation

You can read the WebSphere Information Integrator OmniFind Edition documentation in PDF or HTML.

The WebSphere Information Integrator OmniFind Edition installation program can automatically install the information center. The installation program installs the information center on the search server. For a multiple server installation the information center is installed on both search servers. If you do not install the information center, when you click help, the information center on an IBM Web site opens. To see HTML topics for enterprise search, you start the information center.

To see PDF documents, go to docs/*locale*/pdf. For example, to find documents in English, go to docs/en_US/pdf. You also can view the PDF documentation, downloads, fixes, technotes, and the information center from the WebSphere Information Integrator OmniFind Edition support site.

The following table shows the available documentation, file names, and locations.

Table 1. PDF and information center documentation for enterprise search

Document	File name	Location
Installation Guide for Enterprise Search (Topics for this document are also available in the information center.)	iiysi.pdf	docs/*locale*/pdf/
Quick Start Guide	iiyss.pdf	docs/*locale*/pdf/
Administering Enterprise Search (Topics for this document are also available in the information center.)	iiysa.pdf	docs/*locale*/pdf/
Programming Guide and API Reference for Enterprise Search (Topics for this document are also available in the information center.)	iiysp.pdf	docs/*locale*/pdf/
Messages Reference (Topics for this document are also available in the information center.)	iiysm.pdf	docs/*locale*/pdf/
Installation Requirements for Enterprise Search (Topics for this document are also available in the information center.)	iiysr.txt or iiysr.htm	docs/*locale*/ (This file can also be launched from the First Steps program.)
Text Analysis Integration (Topics for this document are also available in the information center.)	iiyst.pdf	docs/*locale*/pdf/

Table 1. PDF and information center documentation for enterprise search (continued)

Document	File name	Location
Plug-in for Google Desktop Search	omnifind_gds_userguide_v83.pdf	docs/en_US/pdf/(This file is available in English only.)
Release Notes	iiysn.pdf	Available only on the IBM WebSphere Information Integrator OmniFind Edition documentation Web site.

Accessing information about WebSphere Information Integration

Information about WebSphere Information Integration products is available by telephone or on the Web.

The phone numbers provided here are valid in the United States:
- To order products or to obtain general information: 1-800-IBM-CALL (1-800-426-2255)
- To order publications: 1-800-879-2755

You can also find information about WebSphere Information Integration on the Web at www.ibm.com/software/data/integration/db2ii/. This site contains the latest information about:
- Product documentation
- Product downloads
- Fix packs
- Release notes and other support documentation
- News about WebSphere Information Integration
- Links to Web resources, such as white papers and IBM Redbooks™
- Links to newsgroups and user groups
- Links to online information centers for WebSphere Information Integration products
- Ordering books

To access product documentation:
1. Visit the Web at www.ibm.com/software/data/integration/db2ii/.
2. Select a product from the drop-down list, for example, WebSphere Information Integrator OmniFind Edition.
3. Click the Support link on the left side of the page.
4. In the Learn section, select the link that you want. If an information center is available for the product that you selected, you can select the link for the information center. See Figure 1 on page 32 for an example.

Learn

→ **Product documentation and manuals** (2 items)

→ **Redbooks** (1 item)

→ **V8.2 Documentation and release notes**

Information Center

Provides fast, online centralized access to product information.

→ 1.0

Figure 1. Example of links to product documentation on a WebSphere Information Integration Support Web site

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