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## **Coveo Platform 7.0**

IBM Notes Connector Guide

## Notice

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# 1. IBM Notes Connector

## Deprecated

The Coveo IBM Notes (formerly known as Lotus Notes) connector allows a Coveo administrator to bring the content of IBM Notes databases into the unified index so that it becomes searchable by end-users.

**Note:** As of March 2, 2017, the IBM Notes connector is deprecated (see [What Does Deprecated Mean for a Coveo Connector?](#)).

## 1.1 Features

### Content Indexing

The connector can index all IBM Notes database content such as:

- Emails
- Address books
- Document library
- Documents
- Metadata
- Attachments
- OLE objects

### Security

Security permissions on IBM Notes items are indexed and can be fully mapped to their corresponding Windows permissions (see ["About the Notes Security Mapping File" on page 5](#)).

### Incremental Refresh

Updated documents in a database (content/security) are periodically re-indexed by the connector (see [Configuring and Indexing an IBM Notes Source](#)).

### Pause/Resume

When indexing IBM Notes databases, the connector can be paused and resumed.

### Miscellaneous

- All databases under a common folder can be indexed using a single address (see [Configuring and Indexing an IBM Notes Source](#)).
- Metadata mappings can be fully customized (mapping of IBM Notes fields to CES fields).
- Search results can redirect users to the original documents, which are directly in the IBM Notes Client.

## What's Next?

Review the deployment process for the IBM Notes connector (see ["IBM Notes Connector Deployment Overview" on page 3](#)).

## 2. IBM Notes Connector Deployment Overview

The following procedure outlines the steps needed to deploy the IBM Notes connector. The steps indicate the order in which you must perform configuration tasks on both IBM Notes (Domino) and Coveo servers.

To deploy the IBM Notes connector

1. Validate that your environment meets the requirements (see ["IBM Notes Connector Requirements" on page 4](#)).
2. Once IBM Notes Client is configured, open one database (which has the .nsf extension) stored on the targeted Domino server. Otherwise, the crawler will not be able to crawl anything. This critical step allows the Notes Client to configure your `notes.ini` so that the Notes API loads properly.

3. Create an IBM (Lotus) Notes user with the Reader Access

Before using the connector, an IBM Notes user must be configured with the Reader Access to all IBM Notes content that you wish to index.

4. Copy the `user.id` and the `notes.ini` files from the IBM Notes server to the Coveo Master server in the folder of your choice under the index configuration folder (`[Index_Path]\Config`) because these files are needed by the IBM Notes security provider and the connector.

**Example:** `D:\CES7\Config\Notes`

5. Create a security mapping file (see ["About the Notes Security Mapping File" on page 5](#)).
6. On the Coveo server, in the Coveo Administration Tool:

- a. Configure a user identity

The Coveo connector needs an account to crawl your IBM Notes content. For this purpose, select an existing IBM Notes account or create a new one that has read access to all the content that you want to index .

- b. Create a security provider

When you want to index IBM Notes security permissions, you must create a security provider (see ["Configuring an IBM Notes Security Provider" on page 13](#)).

- c. Configure and index an IBM Notes source.

The connector must know details about your IBM Notes instance to be able to index its content (see ["Configuring and Indexing an IBM Notes Source" on page 18](#)).

- d. If you encounter issues, verify if modifying the default value of hidden source parameters can help resolve the problems (see ["Modifying Hidden IBM Notes Source Parameters" on page 23](#)).

## 3. IBM Notes Connector Requirements

Your environment must meet the following requirements to be able to use the IBM Notes connector (formerly Lotus Notes connector):

- Coveo Enterprise Search 7.0

The connector is available in all CES 7.0 versions.

- IBM Notes/Domino versions:
  - Supported version: 8.5.1 (8.5 is recommended)
  - Deprecated support versions: 7, 8

- Coveo license for the IBM Notes connector

Your Coveo license must include support for the IBM Notes connector to be able to use this connector.

- IBM Notes Client (formerly Lotus Notes Client) installed on the Coveo Master server.

### Notes:

- Ensure your Coveo Master server meets the IBM Notes Client requirements (see [Index of system requirements for Notes](#)).
- The version of IBM Notes Client must be the same version as IBM Notes/Domino.

- At least one database on the targeted server using the IBM Notes client.

**Note:** This mandatory step is to ensure the Notes settings file (`notes.ini`) is properly configured.

### What's Next?

Create and configure an IBM Notes connector source (see "[Configuring and Indexing an IBM Notes Source](#)" on [page 18](#)).

## 4. About the Notes Security Mapping File

The Notes security provider connects to the Domino address book database to retrieve metadata fields for all Notes users. With these fields, the security provider can form valid Windows usernames and then, using a security mapping file (XML file that contains a set of rules defining how the mapping process must be achieved), map Notes users to Windows users. There are two ways to map users: direct mappings and resolution methods.

You can refer to the following subsections for details on how to create a Notes security mapping file:

- When you only have a handful of Notes users or some user's account name that do not follow any specific pattern, use direct mappings (see ["Creating a Notes Security Mapping File Using Direct Mappings" on page 5](#)).
- When you user's account name follow a specific pattern, use resolution methods along with the Notes Security Resolution tool to help you create and validate your Notes security mapping file (see ["Creating and Validating a Notes Security Mapping File Using Notes Security Resolution Tool" on page 7](#)).

### 4.1 Creating a Notes Security Mapping File Using Direct Mappings

Direct mappings directly maps an IBM Notes user to its corresponding Windows user. Use it whenever a user's account name does not follow any specific pattern. This also can be particularly useful when you only have a handful of users to map, or for diagnosis purposes.

**Important:** Whenever the security mapping file is modified, you have to restart the Notes security provider by clicking **Apply Changes** in the **Modify Security Provider** page of the Administration Tool. Otherwise, your security modifications will not be reflected in CES.

To create a Notes security mapping file using direct mappings

1. Open a text editor.
2. In the text editor, design direct mapping nodes (`<DirectMapping></DirectMapping>`) for each of your Notes users.

**Example:** Your security mapping file should look like the following:

```
<?xml version="1.0" encoding="utf-8" ?>
<SecurityMapping>
  <DirectMappings>
    <DirectMapping>
      <Lotus>John Smith</Lotus>
      <Windows>domain\user0124</Windows>
    </DirectMapping>
    <DirectMapping>
      <Lotus>CN=John Smith/O=domain @ domain</Lotus>
      <Windows>domain\user0135</Windows>
    </DirectMapping>
  </DirectMappings>
</SecurityMapping>
```

The first direct mapping node (<DirectMapping></DirectMapping>) directly maps the IBM Notes user John Smith to the Windows user domain\user0124.

The second direct mapping node uses the complete LDAP syntax as the username in the Lotus node, i.e. CN=John Smith/O=domain @ domain. The domain part represents the name of the Domino domain the server is member of. The @ character is mandatory.

**Note:** Remember that in the Domino address book on the server, each user has a field named **FullName**. This field is stored as an LDAP entry, such as CN=John Smith/O=[org]/OU=[orgUnit]. You can enter either only the CN part as the username in the Lotus node (<Lotus></Lotus>), i.e. John Smith, or the complete LDAP syntax as in the second direct mapping node.

3. Using an administrator account, connect to the Coveo Master server.
4. Save the custom security mapping file on the Coveo Master server.

**Example:** C:\CES7\Config\IBMSecurityMappingFile.xml

5. Configure the connector to use the security mapping file in the IBM Notes security provider page (see "[Security Mapping File Path](#)" on page 16).

#### Notes:

- Direct mappings have priority over resolution methods. In other words, any mapping entered as a direct mapping is used as is by the security provider, even if it is invalid (invalid Notes or Windows user).
- Direct mappings with a complete LDAP syntax have priority over direct mappings with a common name part only. In the example above, if there is a single John Smith in your organization, then use the short form (common name only). If there is more than one John Smith in your organization, then use the long form (full LDAP syntax). By using the short form, you take the risk of mapping the wrong Windows username to the wrong Notes username, as the short form queries the address book for the very first entry corresponding to John Smith.
- Users not specified as direct mappings are mapped using one of the resolution methods provided (if any). The first method is executed on the first user found in the Domino address book and if the Windows username being formed is invalid, the second method is executed and so on. If all resolution methods fail, no Windows user is mapped to the current IBM Notes user.

## 4.2 Creating and Validating a Notes Security Mapping File Using Notes Security Resolution Tool

Resolution methods are expressions that dictate how Windows usernames are formed from the Notes user's fields in the Domino address book. Use resolution methods whenever Notes user account names follow a specific pattern enabling a mapping pattern to be applied between users. The user account name pattern can be formed of string constants, fields from the Domino address book and regular expressions. Resolution methods can be particularly useful when you have a large address book.

**Note:** When you need more than one resolution method to map all your users, enable the **Allow Multiple Resolution Methods** parameter in the Notes security provider configuration page (see [Configuring an IBM Notes Security Provider](#)).

The `NotesSecurityResolutionTool.exe` command line tool that comes with CES can perform different operations to help you create and validate the security mapping file when using resolution methods.

**Important:** Whenever the security mapping file is modified, you have to restart the Notes security provider by clicking **Apply Changes** in the **Modify Security Provider** page of the Administration Tool. Otherwise, your security modifications will not be reflected in CES.

## To create and validate a Notes security mapping file using the Notes security resolution tool

1. Understand how to design resolution methods.

**Example:** Resolution methods look like the following:

```
<?xml version="1.0" encoding="utf-8" ?>
<SecurityMapping>
  <ResolutionMethods>
    <ResolutionMethod MethodName="FirstAndLastNames">
      <Format>domain\{firstNameArg}{lastNameArg}</Format>
      <Arguments>
        <Argument Name="firstNameArg">%[FirstName]</Argument>
        <Argument Name="lastNameArg">%[LastName]</Argument>
      </Arguments>
    </ResolutionMethod>
    <ResolutionMethod MethodName="FirstLetterLastName">
      <Format>domain\{firstLetterArg}{lastNameArg}</Format>
      <Arguments>
        <Argument Name="firstLetterArg"Regex=".*\b(\w)">%[FirstName]</Argument>
        <Argument Name="lastNameArg">%[LastName]</Argument>
      </Arguments>
    </ResolutionMethod>
    <ResolutionMethod MethodName="DomainFirstAndLastNames">
      <Format>{domainArg}\{firstLetterArg}{lastNameArg}</Format>
      <Arguments>
        <Argument Name="domainArg">%[COVEO_ServerDomain]</Argument>
        <Argument Name="firstLetterArg"Regex=".*\b(\w)">%[FirstName]</Argument>
        <Argument Name="lastNameArg">%[LastName]</Argument>
      </Arguments>
    </ResolutionMethod>
  </ResolutionMethods>
</SecurityMapping>
```

The first resolution method node (<ResolutionMethod></ResolutionMethod>) combines the first name (%[FirstName]) and last name (%[LastName]) fields of IBM Notes users to form the corresponding Windows users. The syntax %[Field] identifies a specific field from the current Notes user in the Domino address book. For example, the current Notes user being mapped is John Smith. Its corresponding Windows user will be domain\JohnSmith.

The second resolution method node uses a regular expression to extract the first letter from the first name field of Notes users. It also uses the last name field, just like the first resolution method node does. If the first method fails while trying to map the user John Smith, the Windows user being mapped will be devdomain\JSmith.

The last method is almost identical to the second one, except that the domain name used to form Windows users is taken from the COVEO\_ServerDomain field (%[COVEO\_ServerDomain]). This is a special Coveo field with a value corresponding to the name of the current Domino server. If the second method fails and the current Domino server from which Notes users are extracted is named domino8.corp.domain.com; hence, the Windows user being mapped will be domino8.corp.domain.com\JSmith.

2. Open a text editor.
3. In a text editor, depending on your use case, write a basic file with a single resolution method.

**Example:** Your file content should look like the following:

```
<?xml version="1.0" encoding="utf-8" ?>
<SecurityMapping>
  <ResolutionMethods>
    <ResolutionMethod MethodName="FirstLetterLastName">
      <Format>domain\{firstLetterArg}{lastNameArg}</Format>
      <Arguments>
        <Argument Name="firstLetterArg"Regex=".*\b(\w)">[%{FirstName}</Argument>
        <Argument Name="lastNameArg">[%{LastName}</Argument>
      </Arguments> <ResolutionMethod MethodName="FirstLetterLastName">
    </ResolutionMethod>
  </ResolutionMethods>
</SecurityMapping>
```

4. Save the file with an XML extension (.xml) and remember the file path.
5. Open **Command Prompt**.
6. In **Command Prompt**, reach the folder where `CES.NotesSecurityResolutionTool.exe` is installed.

**Note:** The tool is located in the Coveo Enterprise Search 7\Bin\Win32 folder, for instance `C:\Program Files\Coveo Enterprise Search 7\Bin\Win32`.

7. Optionally, list all available fields for a Notes user by adapting the following command line to match your needs (see "[Notes Security Resolution Tool References](#)" on page 11):

```
Coveo.CES.NotesSecurityResolutionTool.exe /s:[MyDominoServer] /id:"[IDFilePath]" /p:"
[SecurityMappingFilePath]" /o:"[OutputFilePath]" /t:"[ToolTemporaryFilesPath]" /show+
```

For the `/p:<string>` parameter, enter the complete path to the file created in [step 3](#).

If your command line is valid, the tool will ask you to enter the password for the ID file you used.

**Note:** The output contains all available fields and their values. If needed, use this as a reference to design new resolution methods.

8. Optionally, generate a complete report about the resolution method(s) in the basic file created in [step 3](#) by adapting the following command line to match your needs (see "[Notes Security Resolution Tool References](#)" on page 11):

```
Coveo.CES.NotesSecurityResolutionTool.exe /s:[MyDominoServer] /id:"[IDFilePath]" /p:"
[SecurityMappingFilePath]" /show- /xml- /o:"[OutputFilePath]" /t:"[ToolTemporaryFilesPath]"
```

For the `/p:<string>` parameter, enter the complete path to the file created in [step 3](#) or updated in [step 7](#).

If your command line is valid, the tool will ask you to enter the password for the ID file you used.

**Note:** For each resolution method, the report file (output file generated by the `/o:<string>` parameter) lists all Windows users that were either successfully or unsuccessfully mapped from Notes users. Ensure that all the users that you want to map are validated in the report. If not, review your resolution method(s), before proceeding to [step 9](#).

9. Generate a complete security mapping file starting with a single resolution method:

- a. In a text editor, design a new resolution method with the information obtained in [step 7](#) and [step 8](#), or open the basic file created in [step 3](#).
- b. Under the closing `ResolutionMethods` node, add an empty `DirectMappings` node (`<DirectMappings></DirectMappings>`).
- c. Save the file.
- d. In **Command Prompt**, use the following command line adapted to your needs (see ["Notes Security Resolution Tool References"](#) on page 11):

```
Coveo.CES.NotesSecurityResolutionTool.exe /s:[MyDominoServer] /id:"[IDFilePath]" /p:"
[SecurityMappingFilePath]" /show- /xml- /o:"[OutputFilePath]" /t:"[ToolTemporaryFilesPath]"
/im- /vm+
```

For the `/p:<string>` parameter, enter the complete path to the file created in [step 3](#) or the modified file in [step 7](#) or [step 8](#) depending on your case.

If your command line is valid, the tool will ask you to enter the password for the ID file you used.

**Note:** For each successful user mapping (a corresponding Windows user was found for the Notes user being currently processed), a `DirectMapping` node is created and appended to the output XML file (generated by the `/o:<string>` parameter). By using `DirectMapping` nodes rather than `ResolutionMethod` nodes, validation is not required by the security provider and therefore processing them is much faster.

- e. In a text editor:
  - i. Open the output XML file.
  - ii. Copy all the direct mapping nodes (`<DirectMapping></DirectMapping>`) generated by the tool.
  - iii. Create a new file and paste the direct mapping nodes between security mappings nodes (`<DirectMappings></DirectMappings>`) in another XML file.

**Example:** Your security mapping file should look like the following:

```
<?xml version="1.0" encoding="utf-8" ?>
<SecurityMapping>
  <DirectMappings>
    <DirectMapping>
      <Lotus>John Smith</Lotus>
      <Windows>domain\jsmith</Windows>
    </DirectMapping>
    <DirectMapping>
      <Lotus>Jack Johnson</Lotus>
      <Windows>domain\jjohnson</Windows>
    </DirectMapping>
  </DirectMappings>
</SecurityMapping>
```

- iv. Save the file in the Coveo Enterprise Search 7\Config folder, for instance `C:\Program Files\Coveo Enterprise Search 7\Config`.
- v. Enter the path to this file in the **Security Mapping File Path** box in the Notes security provider creation page (see ["Security Mapping File Path"](#) on page 16).

#### 4.2.1 Notes Security Resolution Tool References

The following are the available parameters in the tool:

Parameter	Long form	Required	Short form	Description
Server Name	/ServerName:<string>	✓	/s:<string>	Domino server that contains the Global address book database.
User ID File Path	/UserIdFilePath:<string>	✓	/id:<string>	Complete path of the <code>user.id</code> file. If not specified, the default data path of the current IBM Notes installation is used.
Security Mapping File	/SecurityMappingFilePath:<string>	✓	/p:<string>	Complete path to the basic file containing your resolution method (s).
Output File Path	/OutputPath:<string>	✓	/o:<string>	Complete path to the output file. Format can be either text or XML, depending on the <code>XmlOutput</code> parameter.
Temporary Path	/TempPath:<string>	✓	/t:<string>	Folder used by the tool to store its temporary files.
IBM Notes Data Path	/NotesDataPath:<string>		/d:<string>	Complete path to the Data folder of the current IBM Notes installation.
IBM Notes Settings File Path	/NotesINIFilePath:<string>		/ini:<string>	Complete path to the Notes Settings file ( <code>notes.ini</code> ). To be used with a multi-user Notes install.
Show fields for user	/ShowFieldsForUser[+ -]		/show[+ -]	When the <code>show+</code> option is used, the tool lists the metadata fields available for IBM Notes users directly in the command prompt. The security mapping file is not validated. Default value is <code>show-</code> .
Xml Output	/XmlOutput[+ -]		/xml[+ -]	Whether a new XML security mapping file is output. When the <code>xml-</code> option is used, a report file is used. Use this in combination with the two following parameters. Default value is <code>xml-</code> .

Parameter	Long form	Required	Short form	Description
Include Valid Securities	/IncludeValidSecurities[+ -]		/vm[+ -]	Outputs or not (vm-) the valid user mappings found using the resolution methods as new <code>DirectMapping</code> nodes inside the XML output file (Xml Output parameter must be activated). Default value is <code>vm+</code> .
Include Invalid Securities	/IncludeInvalidSecurities[+ -]		/im[+ -]	Output or not (im-) the invalid user mappings found using the resolution methods as new <code>DirectMapping</code> nodes inside the XML output file (Xml Output parameter must be activated). Default value is <code>im-</code> .

## 5. Configuring an IBM Notes Security Provider

The Coveo IBM Notes connector fully supports the IBM Notes security model. When you want users searching for IBM Notes content in a Coveo search interface to only see the content to which they have access in IBM Notes, the connector needs a security provider to be able to index the permissions for each indexed IBM Notes item.

**Note:** You can get familiar with how Coveo components deal with permissions on documents both at indexing and query time.

To configure an IBM Notes security provider

1. On the Coveo server, access the Administration Tool.
2. Select **Configuration > Security**.
3. In the navigation panel on the left, click **Security Providers**.
4. In the **Security Providers** page, click **Add** to create a new security provider.
5. In the **Modify Security Provider** page:

The screenshot shows the 'MODIFY SECURITY PROVIDER' configuration page. The page title is 'MODIFY SECURITY PROVIDER' with a subtitle 'Defines the parameters of the security provider.' The left sidebar contains a navigation menu with 'Security Providers' selected. The main content area is a form with the following fields and values:

Name	Notes
Security Provider Type	Notes (x86)
Description	Notes Security Provider
DLL Path	win32\Coveo.CES.CustomCrawlers.Notes.dll
UserIdentity	Notes
Active Directory Security Provider	Active Directory
Domino Server Name	maple/IBM
User ID File Path	C:\CES7\Config\user.id
Security Mapping File Path	C:\CES7\Config\NotesSecurityMappingf
Temporary Working Folder Path	C:\Tmp
Notes Settings File (.ini) Path	C:\CES7\Config\notes.ini
Allow Multiple Resolutions Methods	<input type="checkbox"/>
Enable Safe Mode	<input type="checkbox"/>
Safe Mode Timeout Time	60000
Address Book Expansion Timeout Time	30000
Users Cache Life Time	1440
Global Query Timeout Time	30000
Parameters	Add Parameter ?
Allow Complex Identities	<input type="checkbox"/> ?
Used By	

At the bottom right of the page, there is an 'Apply Changes' button with a checkmark icon.

a. Configure the following required parameters:

**Name**

Choose a meaningful name to identify the security provider.

**Example:** Notes

### Security Provider Type

In the drop-down list, select **Notes (x86)**.

### User Identity

In the drop-down list, select the user identity that you selected or created previously (see [IBM Notes Connector Deployment Overview](#)).

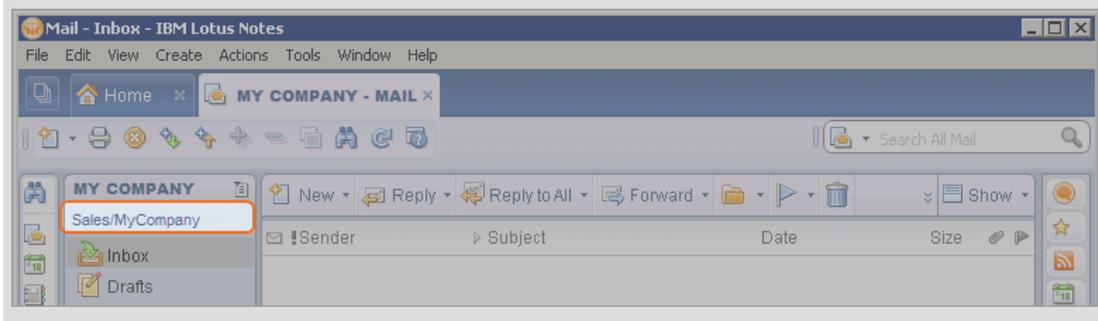
### Active Directory Security Provider

In the drop-down list, select **Active Directory** or the active directory security provider type that you created to allow this security provider to resolve and expand the groups (see [IBM Notes Connector Deployment Overview](#)).

### Domino Server Name

Enter the name of the Domino server that holds the IBM (Lotus) Notes address book (Domino Directory/*names.nsf*). You must leave the **Domino Server Name** box empty when the Personal address book is used. One of the possible name form is the Notes hierarchical format ([Department]/[Company name]).

**Note:** The Domino server name is located above the **Inbox** folder to the left of your **Mail Inbox** view.



#### Examples:

- Sales/IBM (Notes hierarchical format)
- domino8 [IBM (Lotus) Notes Server Version]
- maple.ibm.com (Website)
- 172.16.254.1 (IP address)

### User ID File Path

Enter the full path to the `user.id` file that you copied from the IBM Notes server to be used to be used by the connector to authenticate to the Domino server (see [IBM Notes Connector Deployment Overview](#)). If left empty, this parameter is assigned the complete path of the current or last user.id used in the IBM Notes client.

**Example:** C:\CES7\Config\user.id

### Security Mapping File Path

Enter the full path to the security mapping file you created (see [IBM Notes Connector Deployment Overview](#)).

**Example:** `C:\CES7\Config\NotesSecurityMappingFile.xml`

#### Notes:

- The mapping of IBM Notes users to their corresponding Windows users is achieved by the security provider using this file.
- When you are unable to create a security mapping file, contact [Coveo Support](#) for assistance.

### Temporary Working Folder Path

Enter the full path to the folder on the Coveo server where temporary files are stored by the security provider. This folder must be unique for each security provider.

**Example:** `C:\tmp\NotesSecurityProvider`

### Notes Setting File (.ini) Path

Enter the full path to the `notes.ini` file that you copied from the IBM Notes server to be used by the connector to initialize the Notes API (see [IBM Notes Connector Deployment Overview](#)). This file contains configuration information and user preferences. This is the `notes.ini` created by the IBM Notes Client installation (local `notes.ini`). If left empty, this parameter is assigned the path of the current IBM Notes installation.

**Example:** `C:\CES7\Config\notes.ini`

- b. Review the value for the following optional default parameters that often do not need to be modified:

#### Allow Multiple Resolution Methods

Whether the security mapping file contains multiple resolution methods. When enabled, this parameter make sure every Windows username being formed is validated against the Active Directory.

#### Enable Safe Mode

Whether the crawling safe-mode is enabled, to avoid conflicts when crawling corrupted Notes databases.

**Important:** When this parameter is used, you must also add the parameter to the corresponding security provider. Otherwise, the crawling in safe-mode is going to be in a deadlock state when two competing actions are each waiting for the other to finish, and thus neither ever does. Furthermore, crawling in safe-mode is significantly slower comparing to the normal crawling process.

#### Safe Mode Timeout Time

When the **Enable Safe Mode** option is selected, this parameter is used to define the timeout time (in milliseconds) on the global mutex that protects the Notes API by blocking the connection to one at a

time. The default value is 60000 ms.

**Important:** Do not change the value of this parameter unless instructed by [Coveo Support](#).

#### Address Book Expansion Timeout Time

The timeout value (in milliseconds) allowed for the initial expansion of the Domino address book. The default value is 30000 ms.

**Note:** This process normally takes less than 30 seconds, but with very large address books, the expansion can take as long as several minutes. Adjust this value according to your needs. Once the entire list is built, the connector goes through all users to retrieve the required fields.

#### Users Cache Life Time

The refresh interval (in minutes) of the users cache (local copy of the Domino address book). The default value is 1440 min (24 h).

**Example:** When you are performing permission tests, you can temporary reduce this value to a short period such as five minutes to ensure that your permissions changes and notes are quickly made available to the connector. Do not forget to return the parameter to its default value when you are done to prevent overloading the notes server.

**Note:** When your Domino address book is modified frequently (users are added or deleted), decrease the **Users Cache Life Time** parameter value here and in your Notes sources with the **UsersCacheLifeSpan** hidden parameter, so the users cache is updated regularly with the latest user additions/deletions in the Domino address book by synchronization (see "[Modifying Hidden IBM Notes Source Parameters](#)" on page 23).

#### Global Query Timeout Time

The timeout value (in milliseconds) allowed for a query to be executed against the Global address book database before sending an error message. The default value is 30000 ms.

**Note:** This process normally takes less than 30 seconds, but with very large systems, the process can take as long as several minutes. Adjust this value according to your needs.

- c. Click **Add Parameter** when you want to show and change the value of advanced source parameters (see "[Modifying Hidden IBM Notes Source Parameters](#)" on page 23).
- d. Leave the **Allow Complex Identities** cleared as it does not apply to this type of security provider.
- e. Click **Apply Changes**.

#### What's Next?

Create and index a source (see "[Configuring and Indexing an IBM Notes Source](#)" on page 18).

## 6. Configuring and Indexing an IBM Notes Source

A source defines a set of configuration parameters for a specific IBM Notes database (contained in a NSF file). When you want to index more than one IBM Notes database, configure one source with all the database paths.

To configure and index a source with the IBM Notes connector

1. On the Coveo server, access the Administration Tool.
2. Select **Index > Sources and Collections**.
3. In the **Collections** section:
  - a. Select an existing collection in which you want to add the new source.
  - OR
  - b. Click **Add** to create a new collection.
4. In the **Sources** section, click **Add**.
5. In the **General Settings** section of the **Add Source** page:

The screenshot shows the 'COLLECTION: IBM NOTES - ADD SOURCE' configuration page. The page has a navigation bar at the top with links for Status, Index, Content, Reports, Logs, Configuration, and Support. Below the navigation bar, there are tabs for Sources and Collections, Top Results, Ranking, Thesaurus, Mirrors, Remote Indexes, Search Scopes, Result Clustering, and Advanced. The main content area is titled 'COLLECTION: IBM NOTES - ADD SOURCE' and includes a 'Help' button. The 'General Settings' section contains the following fields:

- Name:** IBM Notes
- Source Type:** Notes
- Addresses:** notes://dominoserver.company.com/mail/tuser1.nsf, notes://dominoserver.company.com/mail/tuser2.nsf, notes://dominoserver.company.com/mail/tuser3.nsf
- Rating:** Normal
- Document Types:** Default
- Active Languages:** Default
- Fields:** Default Scheme
- Refresh Schedule:** Every day

Below the Addresses field, there is a note: 'Depends on the additional connector used. One entry per line.'

- a. Enter the appropriate value for the following required parameters:

**Name**

Enter a descriptive name of your choice for the connector source.

**Example:** IBM Notes

**Source Type**

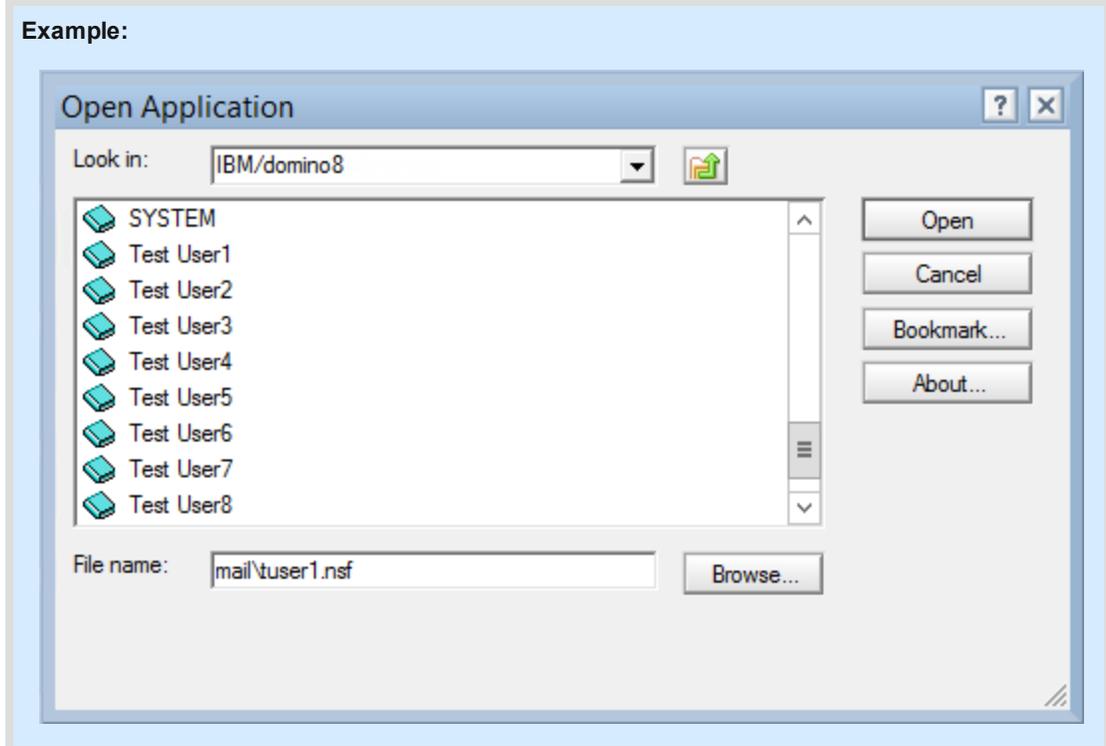
The connector used by this source. In this case, select **Notes**.

**Addresses**

Enter the list of starting addresses directly linking to the Notes Storage Facility files (.nsf) or the folder that contains the databases for the connector. When you want to have different security parameters for every database, you need to create a source for each database.

**Note:** For releases after IBM (Lotus) Notes 8, open the **Open Application** dialog (**File > Open > IBM (Lotus) Notes Application** or **CRTL + o**) and retrieve the Domino server name from the **Look in** field and the database path in the **File name** field.

**Example:**



**Examples:** The database file path can be:

- `notes://dominoserver/path/`
- `notes://dominoserver.company.com/mail/tuser1.nsf`
- `notes://111.111.111.111/path/database.nsf`
- `notes:///path/database.nsf/>ViewName`

**Note:** The scheme `notes:///` is used to index local Notes databases.

### Fields

In the drop-down list, select the **Default Scheme** to use the default fields. If you are using a custom mapping file, create a corresponding custom field set and select it.

- Review the default value for the following parameters that often do not need to be modified:

### Rating

Change this value only when you want to globally change the rating associated with all items in this source relative to the rating to other sources.

**Example:** If this source was for former employees email database, you may want to set this parameter to **Low**, so that in the search interface, results from this source appear later in the list compared to those from other sources.

### Document Types

If you defined custom document type sets, ensure to select the most appropriate for this source.

### Active Languages

If you defined custom language sets, ensure to select the most appropriate for this source.

### Refresh Schedule

Select the time interval at which a full refresh of the source is automatically performed to keep the index content up-to-date. The default and recommended value is `Every day` especially when you add and remove users regularly.

- In the **Specific Connector Parameters & Options** section of the **Add Source** page:

- a. Review the following parameters that need to be filled:

**User ID File Path**

Enter the full path to the same user.id file than the one specified in the security provider configuration (see "Configuring an IBM Notes Security Provider" on page 13). If left empty, this parameter is assigned the complete path of the current or last user.id used in the IBM Notes client. The same value than the one entered in the security provider.

**Example:** C:\CES7\Config\user.id

**Note Settings File Path**

Enter the full path to the same notes.ini file than the one specified in the security provider configuration (see "Configuring an IBM Notes Security Provider" on page 13). If left empty, this parameter is assigned the path of the current IBM Notes installation.

**Example:** C:\CES7\Config\notes.ini

- b. Review if you need to change the default values for the following parameters:

**Number of Refresh Threads**

Determines the number of threads used while crawling IBM Notes items. The default and recommended value is 1.

**Note:** When you use more threads, you increase the possibilities that the crawling process stops in a case of a database with corrupted documents.

**Max Number of Retries**

Number of retries done for each call to the Notes API. The default and recommended value is 3.

**Note:** After the retries, the current query is suspended often causing the crawling process to stop. In any case, this is handled as a timeout by the connector.

### Server Query Timeout

The maximum time (in seconds) allowed for a call to the Notes API to execute and complete. The default and recommended value is 30 sec.

### Ignored Form

The list of IBM Notes forms (formerly Lotus Notes Forms) ignored while crawling and indexing documents. By default, this parameter is assigned an exhaustive list of common forms that should not be indexed by the connector. You can update this parameter by appending semicolon separated values, where the value is the name of a form.

Usually, this parameter is used to ignore system forms used internally by Notes and do not contain any relevant information for indexing purposes.

**Note:** Any other form type in the database should have the corresponding field mappings defined.

- c. In the **Parameters** section, click **Add Parameter** to be able to change the default value of hidden parameters (see ["Modifying Hidden IBM Notes Source Parameters" on page 23](#)).
- d. In the **Option** section, review the default value of the following check boxes:

### Index the document's metadata

When selected, CES indexes all the document metadata, even metadata that are not associated with a field. The orphan metadata are added to the body of the document so that they can be searched using free text queries.

When cleared (default), only the values of system and custom fields that have the **Free Text Queries** attribute selected will be searchable without using a field query.

**Example:** A document has two metadata:

- `LastEditedBy` containing the value `Hector Smith`
- `Department` containing the value `RH`

In CES, the custom field `CorpDepartment` is bound to the metadata `Department` and its **Free Text Queries** attribute is selected.

When the **Index the document's metadata** option is cleared, searching for `RH` returns the document because a field is indexing this value. Searching for `hector` does not return the document because no field is indexing this value.

When the **Index the document's metadata** option is selected, searching for `hector` also returns the document because CES indexed orphan metadata.

### Generate a cached HTML version of indexed documents

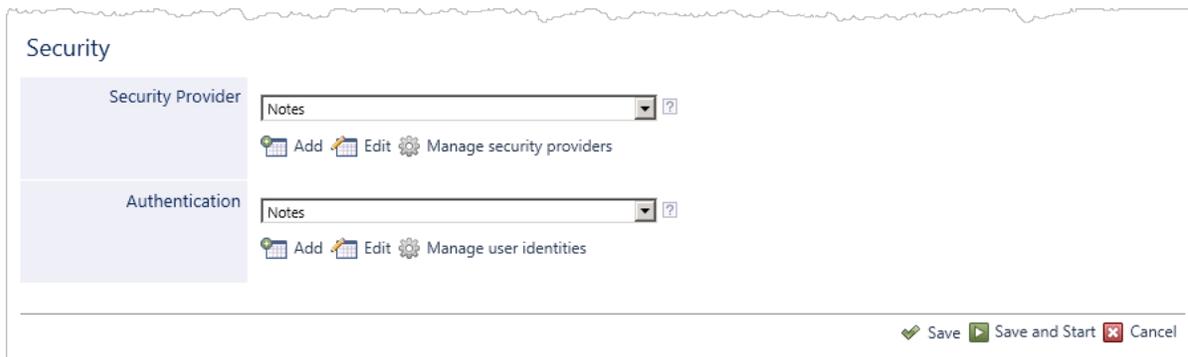
When you select this check box (recommended), at indexing time, CES creates HTML versions of indexed documents. In the search interfaces, users can then more rapidly review the content by

clicking the Quick View link rather than opening the original document with the original application. Consider clearing this check box only if you do not want to use Quick View links or to save resources when building the source.

### Open results with cached version

Leave this check box cleared (recommended) so that in the search interfaces, the main search result link opens the original document with the original application. Consider selecting this check box only when you do not want users to be able to open the original document but only see the HTML version of the document as a Quick View. In this case, you must also select **Generate a cached HTML version of indexed documents**.

7. In the **Security** section of the **Add Source** page:



- a. In the **Security Provider** drop-down list, when you chose to use a security provider, select the security provider that you created for this source (see ["Configuring an IBM Notes Security Provider" on page 13](#)).
  - b. In the **Authentication** drop-down list, select the user identity that you created for this source.
  - c. Click **Save** to save the source configuration.
8. On the toolbar, click **Start/Rebuild** to start indexing your source.
9. Validate that the source building process is executed without errors:
- In the navigation panel on the left, click **Status**, and then validate that the indexing proceeds without errors.
- OR
- Open the CES Console to monitor the source building activities.

### What's Next?

Set an incremental refresh schedule for your source to maintain your source up-to-date with the IBM Notes database between full refreshes.

## 6.1 Modifying Hidden IBM Notes Source Parameters

The **Add Source** and **Source: ... General** pages of the Administration Tool present the parameters with which you can configure the connector for most IBM Notes setups. More advanced and more rarely used parameters are

hidden. You can choose to make one or more of these parameters appear in the **Add Source** and **Source: ... General** pages of the Administration Tool so that you can change their default value. Consider changing values of hidden parameters when you encounter issues.

The following list describes the advanced hidden parameters available with IBM Notes sources. The parameter type (integer, string...) appears between parentheses following the parameter name.

#### **TreatLookupErrorsAsWarnings (Boolean)**

This is used to ignore any error during user lookup in the Domino address book at the beginning of an indexing run. The default value is `false`.

#### **HandledNetworkErrorCodes (String)**

This parameter is used to define the list of network error codes handled by the connector as fatal exceptions, that is, error codes that will stop any indexing run (without wiping out the entire index). The default values are `2055, 2561, 2562, 2570, 2604, 2645, 7267, 7287`.

#### **UsersCacheLifeSpan (Integer)**

This parameter is used to define the life span of the users cache built from the Domino address book. Once the default 24-hour period has passed, the next crawling run (Rebuild/Refresh/Live Indexing) will trigger an update of the users cache. This update is not a complete rebuild; the connector only considers modifications made to the Domino address book since the last rebuild/update of the users cache. The default value is `1440` min (24 h).

#### **AddressBookServerURL (String)**

This parameter is used to customize the address book server used by the connector. The address book is used to retrieve several fields from Notes users, such as their email address, mail filenames, etc. The correct syntax for this parameter is either: `notes://[server_name]` for a specific Domino server or `notes:///` for a local server (personal address book). The default value is `none`.

#### **LocalDatabaseMappingFilePath (String)**

This parameter is used to specify a mapping file specifically for local Notes databases. The mapping file can be used to override security permissions and to fill emailsearch-related fields on indexed documents, even if your Personal address book is incomplete. With a mapping file that is properly configured, you can crawl both remote and local databases using the same source, meaning that you can have a security provider assigned to your source (for remote databases) and also a mapping file (for local databases). When you don't use this parameter, the current security permission option in your source will be used for local databases. Basically, it means that emailsearch-related fields as well as security permissions may be incorrect on indexed documents. The default value is `none`.

#### **GetFormsTimeout (Integer)**

This is the time period (in seconds) allowed for the extraction of forms and fields when we access the **Fields** section of a Notes source. The extraction can take up to several minutes, depending on the complexity of your database design. The default value is `30` sec.

#### **DisableSecurityMappingCache (Boolean)**

Select `true` would disable the **SecurityMappingCache**. When every single document has a different security, changing the value to `true` could speed up the crawling. For most other setups, changing the

**DisableSecurityMappingCache** value for `true` significantly slows down the crawling process. The default value is `false`.

#### **IgnoreDatabaseSecurityChangeOnLiveIndexing (Boolean)**

The default value is `false`. True would disregard any security change on a database when live indexing. It still would update those changes to the internal structures, but would not reindex because of them. Unless you know that the security has not changed, it is not recommended to use this flag as it will go over security changes.

#### **SampleDatabase (Boolean)**

The default value is `true`. Change the value to `false` when you want to edit the field mappings.

Use the following procedure only when you want to modify one or more of the above hidden source parameters.

#### To modify hidden IBM Notes source parameters

1. Refer to ["Adding an Explicit Connector Parameter" on page 25](#) to add one or more IBM Notes hidden source parameters.
2. For a new IBM Notes source, access the **Add Source** page of the Administration Tool to modify the value of the newly added advanced parameter:
  - a. Select **Index > Sources and Collections**.
  - b. Under **Collections**, select the collection in which you want to add the source.
  - c. Under **Sources**, click **Add**.
  - d. In the **Add Source** page, edit the newly added advanced parameter value.
3. For an existing IBM Notes source, access the **Source: ... General** page of the Administration Tool to modify the value of the newly added advanced parameter:
  - a. Select **Index > Sources and Collections**.
  - b. Under **Collections**, select the collection containing the source you want to modify.
  - c. Under **Sources**, click the existing IBM Notes source in which you want to modify the newly added advanced parameter.
  - d. In the **Source: ... General** page, edit the newly added advanced parameter value.
4. Rebuild your IBM Notes source to apply the changes to the parameters.

## 6.2 Adding an Explicit Connector Parameter

Connector parameters applying to all sources indexed using this connector are called explicit parameters.

When you create or configure a source, the Coveo Enterprise Search (CES) 7.0 Administration Tool presents parameters with which you can configure the connector for most setups. For many connectors, more advanced and more rarely used parameters also exist but are hidden by default. CES then uses the default value associated with each of these hidden parameters.

You can however choose to make one or more of these parameters appear in the **Add Source** and **Source: ... General** pages of the Administration Tool so that you can change their default value.

To add an explicit connector parameter

1. On the Coveo server, access the Administration Tool.
2. Select **Configuration > Connectors**.
3. In the list on the **Connectors** page, select the connector for which you want to show advanced hidden parameters.
4. In the **Parameters** section of the selected connector page, click **Add Parameter** for each hidden parameter that you want to modify.

**Note:** The **Add Parameter** button is present only when hidden parameters are available for the selected connector.

5. In the **Modify the parameters of the connector** page:

- a. In the **Type** list, select the parameter type as specified in the parameter description.
- b. In the **Name** box, type the parameter name exactly as it appears in the parameter description. Parameter names are case sensitive.
- c. In the **Default Value** box, enter the default value specified in the parameter description.

**Important:** Do not set the value that you want to use for a specific source. The value that you enter here will be used for all sources defined using this connector so it must be set to the recommended default value. You will be able to change the value for each source later, in the **Add Source** and **Source: ... General** pages of the Administration Tool.

- d. In the **Label** box, enter the label that you want to see for this parameter.

**Example:** To easily link the label to the hidden parameter, you can simply use the parameter name, and if applicable, insert spaces between concatenated words. For the **BatchSize** hidden parameter, enter `Batch Size` for the label.

**Note:** To create multilingual labels and quick help messages, use the following syntax: `<@ln>text</@>`, where *ln* is replaced by the language initials—the languages of the Administration Tool are English (en) and French (fr).

**Example:** `<@fr>Chemin d'accès du fichier de configuration</@><@en>Configuration File Path</@>` is a label which is displayed differently in the French and English versions of the Administration Tool.

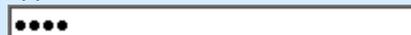
**Tip:** The language of the Administration Tool can be modified by pressing the following key combination: `Ctrl+Alt+Page Up`.

- e. Optionally, in **Quick Help**, enter the help text that you want to see for this parameter when clicking the question mark button  that will appear beside the parameter value.

**Tip:** Copy and paste key elements of the parameter description.

- f. When **Predefined values** is selected in the **Type** parameter, in the **Value** box that appears, enter the parameter values that you want to see available in the drop-down parameter that will appear in the Administration Tool interface. Enter one value per line. The entered values must exactly match the values listed in the hidden parameter description.
- g. Select the **Optional parameter** check box when you want to identify this parameter as an optional parameter. When cleared, CES does not allow you to save changes when the parameter is empty. This parameter does not appear for **Boolean** and **Predefined values** parameter types.
- h. Select the **Sensitive information** check box for password or other sensitive parameter so that, in the Administration Tool pages where the parameter appears, the typed characters appear as dots to mask them. This parameter appears only for the **String** type.

**Example:** When you select the **Sensitive information** check box for a parameter, the characters typed appear as follows in the text box:



- i. Select the **Validate as an email address** check box when you want CES to validate that the text string that a user enters in this parameter respects the format of a valid email address. This parameter appears only for the **String** type.
- j. In the **Maximum length** box, enter the maximum number of characters for the string. This parameter

appears only for the **String** type. When you enter 0, the length of the string is not limited.

k. Click **Save**.

6. Back in the **Connector** page, click **Apply Changes**.

The hidden parameter now appears in the **Add Source** and **Source: ... General** pages of the Administration Tool for the selected source. You can change the parameter value from these pages. Refer to the documentation for each connector for details.

**Note:** When you want to modify a hidden source parameter, you must first delete it, and then redefine it with the modified values.

## 7. Customizing IBM Notes Field Mappings

The Administration Tool has a dedicated page for IBM Notes sources that lists field mappings and allows you to add or modify fields on the available forms of your IBM Notes database(s) such as appointment and bookmark.

Once you successfully indexed your IBM Notes databases, you can consider customizing the field mappings to fine-tune the indexed content or include other system fields on the IBM Notes forms.

To customize IBM Notes field mappings

1. Access the **Source: [IBM Notes source name] - Fields** page of your IBM Notes source:
  - a. In the top menu, click **Index**.
  - b. Under **Sources**, click the name of your IBM Notes source.
  - c. In the sidebar on the left, click **Fields**.
2. In the **Source: [IBM Notes source name] - Fields** page:

The screenshot shows the 'Source: IBM NOTES - FIELDS' configuration page. The top navigation bar includes 'Status', 'Index', 'Content', 'Reports', 'Logs', 'Configuration', and 'Support'. Below this, there are links for 'Sources and Collections', 'Top Results', 'Ranking', 'Thesaurus', 'Mirrors', 'Remote Indexes', 'Search Scopes', 'Result Clustering', and 'Advanced'. The main header reads 'SOURCE: IBM NOTES - FIELDS' with a subtitle 'Specifies field sets to use for this source.' and a 'Help' button.

The sidebar on the left contains the following menu items: Status, General, Filters, Schedules, **Fields**, XML Document Definition, Document Types, Active Languages, Conversion Scripts, Permissions, Refresh Documents, and Advanced.

The main content area has a 'Field Set' dropdown menu set to 'Default Scheme'. Below it, there is a text box containing 'notes://dominosever/mail/tuser1.nsf' and an 'Add' button. A descriptive paragraph explains that this section allows selecting Lotus Notes databases as templates.

Below the database selection, another descriptive paragraph explains that this section helps set mappings between system fields and Lotus Notes metadata. It includes a list of available metadata for the 'Appointment' form.

Fields	Value
Document Title	<input type="text" value=" %[Subject]"/>
Document Body	<input type="text" value=" [Automatic]"/>
sysauthor	<input type="text" value=" %[From]"/>
sysaboutme	<input type="text" value=""/> Add
Available Metadata	%[\$ExpandGroups], %[AppointmentType], %[Body], %[BookFreeTime], %[DispBookFreeTime], %[DispOrgConfidential], %[Encrypt], %[EndDate], %[EndTime], %[Form], %[From], %[Location], %[Logo], %[MailOptions], %[Notes], %[OrgConfidential], %[OrganizerInclude], %[Repeats], %[Resources], %[RoomToReserve], %[SaveOptions], %[Sign], %[StartDate], %[StartTime], %[Subject], %[WebCategory], %[tmpNoActionBar], %[tmpOEMClient], %[tmpOwnerHW]

- a. In the second drop-down menu, select the IBM Notes database(s) that will be used as template(s) to retrieve forms and fields in the section below.

**Notes:**

- Click **Add** next to the drop-down menu to select one or more databases.
- If you don't add any database, the first one will be used as the template.

- b. In the section below, under **Fields**, in the drop-down menu, select one of the system fields available.
- c. In the **Value** box, enter one of more metadata in the list of **Available Metadata**.

**Note:** You can also edit the mapping value(s) of the existing fields (Document Title, Document Body, ...).

- d. (Optionally) Click **Add** next to the **Value** box to add another system field.
3. Click **Apply Changes** to save the modified field mappings.
  4. Click **Rebuild** to make your changes effective.

**Note:** If you get the following error message in the CES console: `The source parameter "SampleDatabase" doesn't exist. The modifications were not saved.`, add the `SampleDatabase` parameter in the source configuration page (see [Modifying Hidden IBM Notes Source Parameters](#) and [Configuring and Indexing an IBM Notes Source](#)).

## 8. Troubleshooting IBM Notes Connector Issues

NameLookups are limited on this server to a size smaller than what would be returned. See your Domino Administrator for more information.

### Possible cause

The global address book on the server contains too many entries to be returned in a single batch. The server is not configured to handle this.

### Possible solution

Add the `NAMELOOKUP_MAX_MB` variable in `notes.ini` on the server. Assign it a value of 2 (MB), then increase it gradually until you no longer see the error message. Otherwise, it is possible to add the custom source parameter `TreatLookupErrorsAsWarnings` and set it to `True` (see [Modifying Hidden IBM Notes Source Parameters](#)). However, expect the metadata fields to have incorrect email addresses.

Unable to instantiate the Lotus Notes classes: Failed to read from an IPC port: The pipe has been ended.

### Possible causes

- The timeout value is not large enough when initializing the Notes API.
- The `notes.ini` file being used by the connector is invalid.
- More than one Notes source is running and one of them is currently crawling a corrupted database. Thus, one of the sources stopped.

### Possible solutions

- Increase the value of the source parameter **Server Query Timeout**.
- Configure the `notes.ini` file properly by opening at least one database on the targeted Domino server using the Notes client installed on the CES server.
- Add the parameter **EnableSafeMode** on all Notes sources and on the Notes security provider (see ["Modifying Hidden IBM Notes Source Parameters" on page 23](#) and ["Configuring an IBM Notes Security Provider" on page 13](#)).

Mapping (FormType) not found in the metadata mappings.

### Possible cause

There is no mapping defined for the specified form type.

### Possible solution

Define the mapping for the specified form type through the **Fields** section of your source. Otherwise, ignore this form by adding it to the **Ignored Forms** source parameter (see ["Modifying Hidden IBM Notes Source Parameters" on page 23](#)).

Closing the Notes processes and resetting the API. Additionally, if CES is running in standalone mode (CESService7.exe –standalone), you may see empty command prompt windows popping up intermittently.

**Possible cause**

The connector tried to retrieve a corrupted document but the Notes API crashed by doing so.

**Possible solution**

There is no required user action; the connector handles this situation automatically by resetting the API to a proper state and resuming the crawling where it stopped.

**Note:** Any other process using the Notes API will be aborted (Lotus Notes client, Domino Administrator, Domino Designer, ...). If other Notes sources may run at the same time, refer to the Configuration section of this documentation, specifically for the **EnableSafeMode** parameter (see ["Modifying Hidden IBM Notes Source Parameters" on page 23](#)).

Cannot load security provider: [error/warning message]

**Possible cause**

An invalid parameter prevents the security provider from loading.

**Possible solution**

Read the error message carefully as it describes the cause of the error. In case no error/warning message is displayed, either the **DLL Path** or the **AssemblyPath** parameter is incorrect (see ["Configuring an IBM Notes Security Provider" on page 13](#)).

Only one Resolution Method is allowed for the Notes Security Provider. To use several resolution methods, use the **AllowMultipleResolutionMethods** parameter.

**Possible cause**

The security mapping file contains either no resolution method or several resolution methods although the **Allow Multiple Resolutions Methods** parameter was not enabled (see ["Configuring an IBM Notes Security Provider" on page 13](#)).

**Possible solutions**

- Define at least one resolution method in the security mapping file if it does not contain any.
- In case several resolution methods are used, select the **Allow Multiple Resolutions Methods** checkbox in the security provider parameters list (see ["Configuring an IBM Notes Security Provider" on page 13](#)).

class Notes::DatabaseOpenFailedException: Unable to find path to server. Check that your network connection is working. If you have a working connection, go to Preferences - Notes Ports and click Trace to discover where it breaks down. (2051)

**Possible cause**

Either the `notes.ini` file or the `user.id` file used by the connector or the security provider is invalid for the targeted Domino server.

**Possible solution**

Make sure that the `notes.ini` file is properly configured to connect to the targeted Domino Server. Otherwise, verify that the `user.id` file has proper access to the Domino server.

Getting a blank page when accessing the Fields section of a Notes source.

**Possible symptoms**

- As soon as you try to access the section, you get a blank page.
- You try to access the section but it takes a while before you get the blank page (about 1min 30sec)

**Possible causes**

- The credentials you use in your source are incorrect (user identity), or there is some network problem (server unreachable).
- Retrieving the fields and forms from the database(s) in the starting address(es) takes too much time, either because the design complexity of these database(s) is high or because the network connection is slow.

**Possible solutions**

- Fix the user identity used by your source. The password is most likely incorrect. Also, make sure that you can ping the servers pointed to by your starting addresses.
- Add the `GetFormsTimeout` parameter to your source. The default value is 30 sec. Increase its value until you no longer get the blank page (see [Modifying Hidden IBM Notes Source Parameters](#)).

The source parameter "SampleDatabase" doesn't exist. The modifications were not saved.

**Possible cause**

- You try to edit the field mappings.

**Possible solutions**

- Add the `SampleDatabase` parameter to your source. The default value is `true`. Change that value to `false` when you want to edit the field mappings (see [Modifying Hidden IBM Notes Source Parameters](#)).