



# ***Microsoft Exchange Connector***



The *Microsoft Exchange* connector allows users to index *Microsoft Exchange* content. By using a unique special administrative account, all the mailboxes and public folders can be indexed.

## Features

The *Microsoft Exchange* connector can be used to index mailboxes. It allows *Coveo Enterprise Search (CES)* to crawl and index the content of a *Microsoft Exchange Server 2003* or *2007* installation. Furthermore, it offers a more efficient search than *Microsoft Exchange's* built-in search components.

### Feature List

The following details the features available in the *Microsoft Exchange* connector:

- Mailbox indexing
- Public Folder indexing
- **Security:** CES indexes security by combining *Microsoft Exchange* permissions set in *Microsoft Exchange* by users and Active Directory by administrators.
- **Live indexing:** Allows the connector to periodically query *Microsoft Exchange* for the latest edits, keeping the index content up to date.
- The *Microsoft Exchange* connector collects a maximum of metadata for emails, contacts, tasks and calendars.
- The *Microsoft Exchange* connector supports form-based authentication, which should be used when the OWA server is configured to use it. Two types of form-based authentications are supported:
  - Standard Exchange Form Based Authentication
  - ISA Server Form Based Authentication

## Requirements

The *Microsoft Exchange* connector supports the standard *Microsoft Exchange* server configuration, as described in the following article: [http://technet.microsoft.com/en-us/library/aa997482\(EXCHG.65\).aspx](http://technet.microsoft.com/en-us/library/aa997482(EXCHG.65).aspx).

## Installation

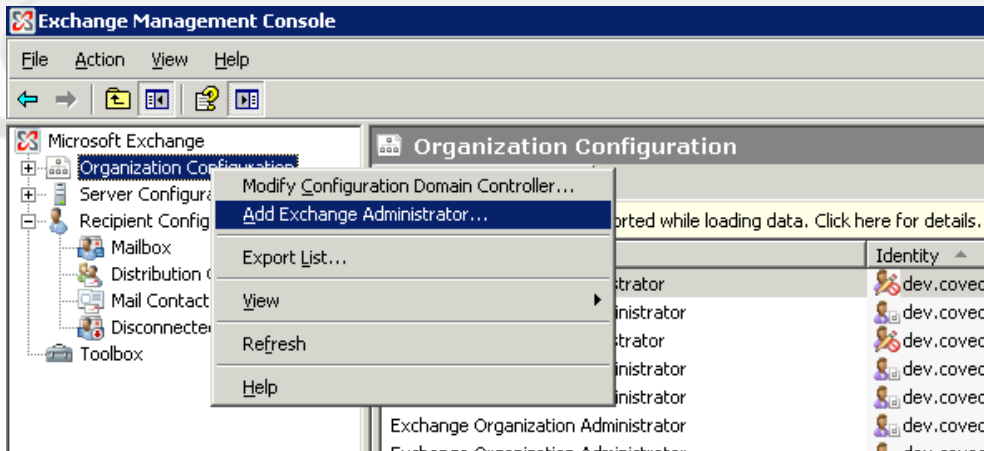
### How to Setup an Administrative Account

In order to crawl multiple mailboxes using a single source, it is important to setup a special account in the *Microsoft Exchange Server*. This account must be given read access on all the mailboxes to index, as well as the public folders if necessary.

For more information on how to setup such an account, click the following link for the *Microsoft Exchange Server 2003* setup <http://support.microsoft.com/default.aspx?scid=kb;EN-US;821897>.

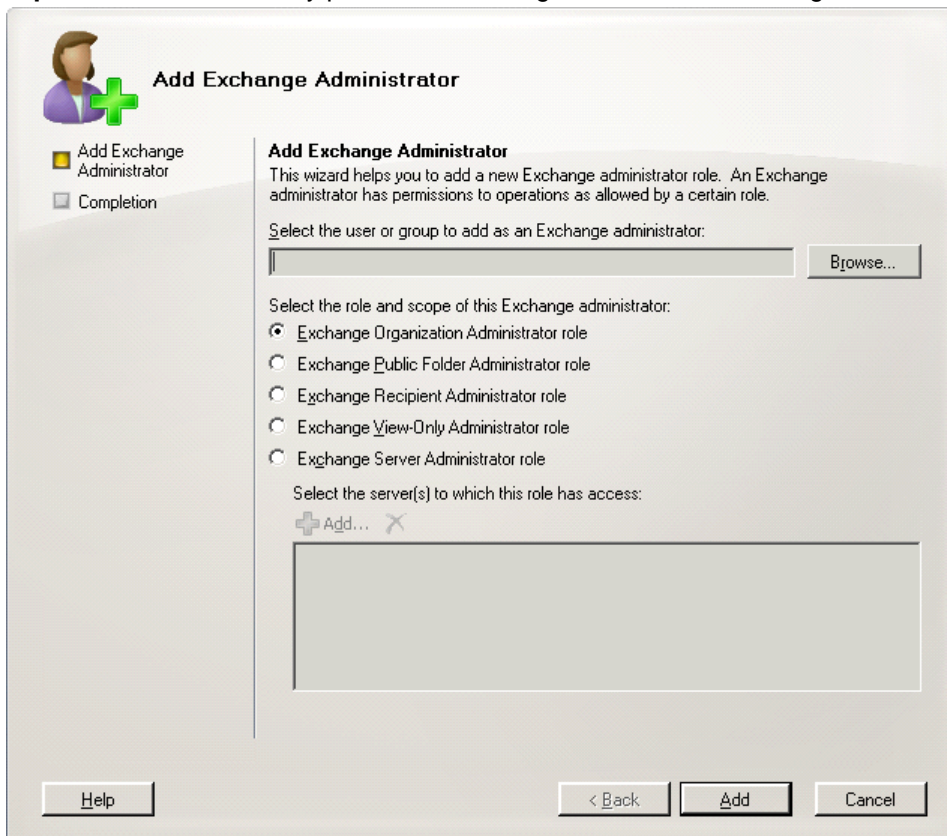
As for the *Microsoft Exchange Server 2007* setup, the following procedure gives sufficient rights to a user to crawl using WebDav or WebServices.

To setup the user correctly, open the *Exchange Management Console*, right-click on **Organization Configuration** and click **Add Exchange Administrator....**



In the **Add Exchange Administrator** wizard, specify the user that will crawl and make him an *Exchange View-only Administrator*. It is important to note that the user promoted to *View-Only Administrator* must not be part of the *Domain Administrators*, *Enterprise Administrators* or *Organization Administrators*. This is because these groups automatically receive explicit denied permissions on the *Read/Write* and *Read-Only* permissions for each mailboxes.



**Important:** This is the only procedure allowing the user to crawl using both WebDav and WebServices.

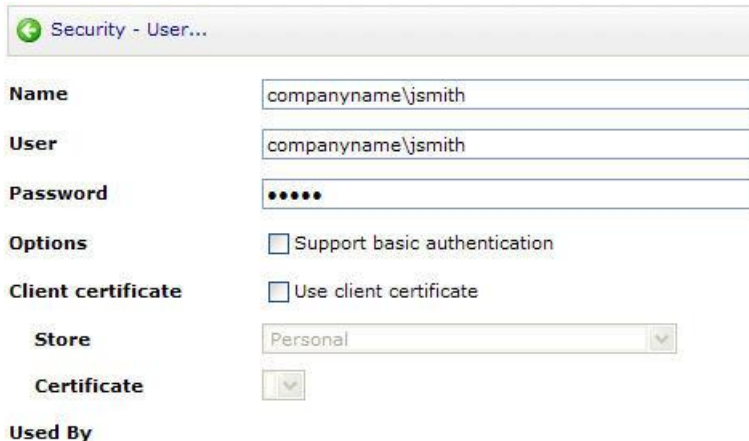


The *Microsoft Exchange* connector supports the common implementations of front-end and back-end server suggested by *Microsoft*. For more information, refer to [http://technet.microsoft.com/en-us/library/aa997482\(EXCHG.65\).aspx](http://technet.microsoft.com/en-us/library/aa997482(EXCHG.65).aspx) and [http://technet.microsoft.com/en-us/library/bb124804\(EXCHG.65\).aspx](http://technet.microsoft.com/en-us/library/bb124804(EXCHG.65).aspx)

## How to Configure a User Identity based on an Administrative Account

Once the connector's administrative account has been setup, it is necessary to configure a CES user identity:

1. In the Administration Tool, access the **Administrators** page (Configuration > Security).
2. In the left navigation pane, click **User Identities**. The **User Identities** page is displayed.
3. Click . The **Modify User Identity** page is displayed.
4. In the **Name**, **User** and **Password** fields, enter the credentials of the administrative account.
5. Click .



Security - User...

**Name**

**User**

**Password**

**Options**  Support basic authentication

**Client certificate**  Use client certificate

**Store**

**Certificate**

**Used By**


## Configuration

The *Microsoft Exchange* connector has two entries in the **Source Type** drop-down list of the **Add Source** page: *Exchange (WebDav)* and *Exchange (WebServices)*. Both are roughly equivalent; however, it is important to define which source type is used at the creation of the source. Once created, it is not possible to change to the other method—to do so, another source has to be created.

The *WebDav* is faster than the *WebServices* connector, and is also compatible with *Microsoft Exchange Server 2003*. However, it can be harder to configure it correctly at the beginning because of form authentications and similar issues. Also, 2007 servers must have the 2003 Compatibility mode installed. The *WebServices* can only be used with *Microsoft Exchange 2007 Servers*, but usually does not need any configuration to work.

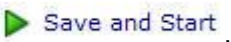
### How to Index a *Microsoft Exchange* Source


To use a single source to index all *Microsoft Exchange* mailboxes, enter a single URL in the **Addresses** box that stops at the mailboxes root (i.e. <https://owa.acme.com/exchange>). To index all public folders, enter a URL that stops at public folders root (i.e. <https://owa.acme.com/public>).

1. In the Administration Tool, access the **Sources and Collections** page (Index> Sources and Collections).
2. In the **Sources** section, click . The **Add Source** page is displayed.
3. Enter the appropriate values of the selected *Microsoft Exchange* server.

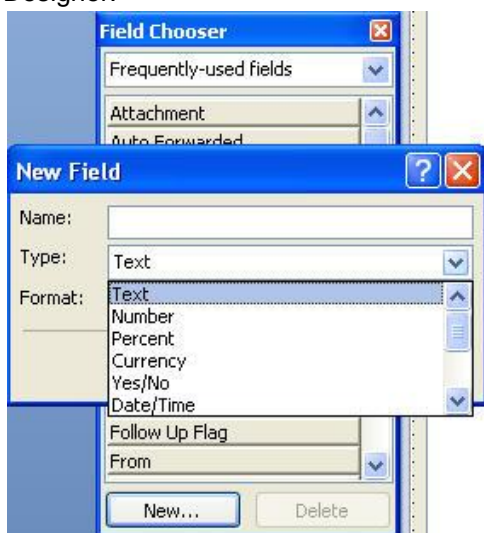
Field	Description	Example
Name	Any descriptive name.	All Microsoft Exchange mailboxes
Source Type	The connector used by this source.	Exchange
Addresses	List of starting points for the connector, one address per line.	Addresses are in the form of: <a href="https://servername/exchange">https://servername/exchange</a> <a href="https://servername/exchange/mailboxname">https://servername/exchange/mailboxname</a> <a href="https://servername/public">https://servername/public</a> The connector supports both http and https. Ex.: <a href="https://owa.acme.com/exchange/johnsmith">https://owa.acme.com/exchange/johnsmith</a>
Max Number of Retries*	Number of retries to perform when a request fails due to an <i>Microsoft Exchange Server</i> downtime or temporary unavailability.	The default value is 3.
Retry Delay*	Delay between each retry attempt.	The default value is 30 seconds.
Exchange Folder*	Name of the folder hosting all the mailboxes.	The default value is <i>exchange</i> . It corresponds to the segment of the URI that is after the server name and points to the mailboxes: <a href="https://servername/exchange/">https://servername/exchange/</a> .
Use Form Authentication	Whether to use form based authentication or not.	The default value is <i>False</i> . Necessary when <b>Form Based Authentication</b> is enabled on the <i>Microsoft Exchange</i> server. Two form authentications are supported: <ul style="list-style-type: none"> <li>• Standard <i>Microsoft Exchange</i> form authentication</li> <li>• ISA server form authentication: When an ISA filter is put in front of the <i>Microsoft Exchange</i> OWA server.</li> </ul>
Index Exchange Security	Whether to index the securities specified in <i>Microsoft Outlook</i> or not.	The default value is <i>True</i> . Useful to prevent <i>Coveo</i> from indexing user defined securities. Only Active Directory Securities are used.
Index Active Directory Contacts	Whether to index contacts from Active Directory or not.	The default value is <i>False</i> . Useful to let everyone see the contact information available in Active Directory.
Public Folder	Name of the public folder.	The default value is <i>public</i> . It corresponds to the segment of the URI that is after the server name and that points to public folders: <a href="https://servername/public/">https://servername/public/</a> .
Index Junk E-mails	Whether to index junk emails or not.	Junk emails are indexed if the checkbox is selected.
Skip Archived Items	Whether to skip items archived by <i>Symantec Enterprise Vault</i> or not.	Useful to make the <i>Microsoft Exchange</i> connector ignore email stubs left behind by <i>Symantec Enterprise Vault</i> . The default value is <i>true</i> .

\* These parameters are optional.

4. Click  .

The following custom source parameters are not displayed in the source. They must be created or added to the connector in the **Modify the parameters of the additional connector** page (Administration Tool > Configuration > Connectors > Additional Connector > Symantec Enterprise Vault >  [Add Parameter](#) ):

- **LDAPSearchRoot (string):** Root of the search in Active Directory for the current domain. For more information, refer to the appendix on LDAP Searches.
- **LDAPFilters (string):** Filter applied to the search of Active Directory in order to find mailboxes. For more information, refer to the appendix on LDAP Searches.
- **MaxNumberPrefetchChanges (integer):** Maximum number of items that can be stored in the prefetch cache, this cache is useful to reduce the delay between each query to *Microsoft Exchange*. The default value is 200. Increasing this value increases performance, but also the amount of memory used by the connector. If the connector is running on a server with limited memory resources, lowering this number to 100 or 50, can prevent out of memory issues.
- **Batchsize (integer):** Number of items to fetch per request made to the *Microsoft Exchange Server*. The default value is 50. The minimum value is 1 and the maximum 512. A small value forces the connector to make small but frequent queries to *Microsoft Exchange*. On the other hand, a bigger value leads to scarcer connections, but longer ones.
- **IndexJunkattachments (boolean):** When this parameter is set to *true*, the attachment of junk emails is indexed, otherwise it is ignored. The default value is *false*.
- **UserDefinedFields (string):** This parameter can be added in order to retrieve user defined fields from *Microsoft Exchange* Items. This string is in the following format : *FieldType:FieldName;FieldType:FieldName*, etc. The *FieldType* value is taken directly from the *Microsoft Exchange* Form Designer. The *FieldName* value is the name of the field as entered in the Form Designer.



<b>Name</b>	All Microsoft Exchange mailboxes ?
<b>Source Type</b>	Exchange
<b>Addresses</b>	https://servername/exchange <small>Depends on the additional connector used. One entry per line.</small>
<b>Rating</b>	Normal ?
<b>Document Types</b>	Default ?
<b>Fields</b>	Default Scheme ?
<b>Refresh Schedule</b>	Every day ?
<b>Max Number of Retries</b>	3 ?
<b>Retry Delay</b>	30 ?
<b>Exchange Folder</b>	exchange ?
<b>Use Form Authentication</b>	<input type="checkbox"/> ?
<b>Index Exchange Security</b>	<input type="checkbox"/> ?
<b>Index Active Directory Contacts</b>	<input type="checkbox"/> ?
<b>Use Web Services</b>	<input type="checkbox"/> ?
<b>Public Folder</b>	public ?
<b>Index Junk E-mails</b>	<input checked="" type="checkbox"/> ?
<b>Skip Archived Items</b>	<input checked="" type="checkbox"/> ?
<b>Option</b>	<input checked="" type="checkbox"/> Index subfolders ? <input type="checkbox"/> Index the document's metadata ? <input checked="" type="checkbox"/> Generate a cached HTML version of indexed documents ? <input type="checkbox"/> Open results with cached version ?
<b>Authentication</b>	User Identity (none) ?

## How to Index All Mailboxes using a Single Source

To index all *Microsoft Exchange* mailboxes using a single source, enter a single URL in the **Addresses** box that stops at the mailboxes root (i.e. <https://owa.acme.com/exchange>). To index all public folders, enter a URL that stops at public folders root (i.e. <https://owa.acme.com/public>).

## Appendix

### LDAP Searches

LDAP Searches are an important part of the *Microsoft Exchange* connector. For example, when the starting address <https://servername> or <https://servername/exchange> is used, a query is performed against the Active Directory of the current domain in order to find out the mailboxes available.

The results should reflect all the users in Active Directory that own a mailbox. Depending on the configuration of the Active Directory, it is possible the results will not match the results anticipated. Two parameters of the connector allow to fine tune the search.

- **LDAPSearchRoot:** Specifies to the connector where to start looking in Active Directory. When this parameter is not specified, the connector looks at the root of Active Directory, which can be extremely large. By specifying a value, it is possible to refine the search. For example, to search only within the OU "companynameOU" within the domain "corp.companyname.com", enter: "LDAP://OU=companynameOU, DC=corp, DC=companyname, DC=com".
- **LDAPFilters:** Allows to add properties to the results the connector is looking for. The default filter is: "(&(mail=\*)(objectclass=user)(objectclass=person))". This AND operation is performed on a few

properties in order to find the most mailboxes without receiving any unwanted ones. If this filter is not specific enough, it is possible to complete the filter by adding a value to it. The value entered is added to the AND operation on the filter. For example, if the value “cn=JohnSmith” is entered in the parameter, the resulting filter is: “(&(mail=\*)(objectclass=user)(objectclass=person)(cn=JohnSmith)”.

### Starting Addresses for *Microsoft Exchange Server 2007*

In *Microsoft Exchange Server 2007*, the URI used to connect to OWA through the browser is no longer the same as the one used by the connector. *Microsoft* has performed several modifications on OWA and the virtual sites for *Microsoft Exchange*. While the URI used to connect to OWA is different, the starting address for the connector does not change. The connector communicates with the *Microsoft Exchange* virtual site in IIS; therefore, the starting addresses are not different.

Furthermore, the *Microsoft Exchange* virtual site can no longer be accessed by default. It is important to install the *2003 Compatibility* module on the *Microsoft Exchanger Server 2007*; hence recreating the 2003 virtual sites. By default, the WebDav protocol is prohibited in IIS. It is important to make sure it is allowed.

