

Coveo Enterprise Search 6.0

Open Text Livelink Connector

Coveo's *Open Text Livelink* connector allows users to index *Open Text Livelink* repositories. It supports communication through the *Open Text Livelink* standard protocol, http tunnelling, as well as https tunnelling for a secure communication.

The *Open Text Livelink* connector supports all *Open Text Livelink* domains and securities, as well as active directory users using the *directory services* add-in provided by *Open Text Livelink*. To index securities in *Open Text Livelink*, it is important to add an *Open Text Livelink* security provider. For more information, refer to the [How to Setup a Security Provider](#).

Note: The *Open Text Livelink* connector cannot currently index the content from the inboxes.

Requirements

Open Text Livelink API 9.6 and all its features. The other versions might not provide the full functionality of the *Open Text Livelink* connector.

Note: The Livelink server does not necessarily have to be 9.6 as some of the more recent versions, such as 9.7, are retro-compatible with the 9.6 API.

Open Text Livelink API 9.6 also requires the additional steps in order to work properly:

1. Install Visual J# 1.1 redistributable package:
<http://www.microsoft.com/downloads/details.aspx?FamilyId=E3CF70A9-84CA-4FEA-9E7D-7D674D2C7CA1&displaylang=en>.
2. Install Visual J# 2.0 redistributable package (the API requires j# 1.1 as well as 2.0):
<http://www.microsoft.com/downloads/details.aspx?FamilyId=E9D87F37-2ADC-4C32-95B3-B5E3A21BAB2C&displaylang=en>.
3. Copy the *LAPI_SSPIp.dll* and *LAPI_NETp.dll* files from the *Livelink* API 9.6 directory (*C:\Program Files\Open Text\LAPI\Bin* by default) into the CES bin directory (*C:\Program Files\Coveo Enterprise Search 6\Bin* by default).
4. Restart the Coveo service (*Windows Start* menu > All Programs > Coveo Enterprise Search 6 > Service).

Installation

▶ How to Configure a User Identity

The *Open Text Livelink* connector requires a user identity in order to connect to the repositories. The user identity created must contain the username and password used by the connector to index *Open Text Livelink*. The username should be specified in the form *domain\user*. For example, the admin in the default domain of *Livelink* is referenced as *default\admin*.

Note: The user must have the *System administration rights* privileges in order for CES to be able to connect properly to *LiveLink* repository.

Parameter Name	Parameter Label	Description
Hostname	Hostname	The hostname where the <i>Open Text Livelink</i> repository resides.
ClickableBaseURI	Base of clickable URIs	The base of <i>clickableURIs</i> . It makes all the URIs clickable from the CES search interface. It should contain all the basic URIs up to the CGI parameters (e.g., http://livelinkhost/livelink/livelink.exe) Note: The URI must be valid.


If the user has specified only the previous parameters, the *Open Text Livelink* connector uses the default port (2099) with the default communication protocol.

Note: The *Open Text Livelink* connector supports http and https tunneling; however, it is important to specify additional parameters to use these protocols. The following lists the additional parameters:

Parameter	Default Value (if parameter not specified)	Description
Port	2099: Open Text Livelink protocol 443: https 80: http	The port used by CES to connect to <i>Open Text Livelink</i> . Default values are provided depending on which protocol is preferred; however if your server is not using default ports for those protocols, make sure a custom port is specified here.
CGIPath	--	If specified, CES uses http tunnelling to connect to <i>Open Text Livelink</i> (e.g., http://livelinkhost/livelink/livelink.exe) Note: The URI must be valid.
UseSSL	False	If set to <i>True</i> , the connection tries to use https instead of http. Note that it is important to specify a CGIPath.
Timeout	60	Connection timeout in seconds.

▶ How to Setup a Security Provider


To index securities in *Open Text Livelink*, it is important to create an *Open Text Livelink* security provider. The security provider allows CES to expand users and groups, public access, etc.:


1. In the Administration Tool (*Windows Start* menu > All Programs > Coveo Enterprise Search 6), open the **Security** page (Configuration > Security).
2. In the left navigation pane, click **Security Providers**. The **Security Providers** page is displayed.
3. Click . The **Modify Security Provider** page is displayed.
4. Enter the following information in the appropriate fields:






Field	Description
Name	A descriptive name for the security provider (e.g. Open Text Livelink Security Provider).
DLL Path	The full path to the additional connector's security provider handler. Usually, the path where <i>Coveo</i> is installed is used (e.g., <code>Coveo.CES.CustomCrawlersSecurityProvider.dll</code>).

User Identity Select the user identity required to login to the *Open Text Livelink* server.

Parameters Enter the same parameters as in the *Open Text Livelink* source parameters: *Port*, *Hostname*, *CGIPath* and *UseSSL*. The syntax to use is *NameOfParameter=Value*. It is also important to specify an additional parameter named *AssemblyPath* and put the full path to the *Open Text Livelink* connector *dll* as its value. A typical parameter field looks like this:
AssemblyPath=Coveo.CES.CustomCrawlers.Livelink.dll;Hostname=vm-at-livelink.dev.coveo.com;Port=2099.

- In the **Option** section, select **Support access list**, **Support expand group** and **Support expand user**.
- Click  **Save**. The **Status** page is displayed.

 [Security - Security...](#)

Name	<input type="text" value="OpenText Livelink Security Provider"/>
DLL Path	<input type="text" value="Coveo.CES.CustomCrawlersSecurityProvider.dll"/>
User Identity	<input type="text" value="companyname/jsmith"/>   Add  Edit  Manage user identities
Parameters	<input type="text" value="AssemblyPath=Coveo.CES.CustomCrawlers.Livelink"/>
SAML Redirection URI	<input type="text"/>
SAML Artifact Resolver URI	<input type="text"/>
SAML Logout URI	<input type="text"/>
SAML Signature Certificate File Name	<input type="text"/>
SAML Signature Certificate Password	<input type="password"/>
SAML Artifact Argument Name	<input type="text" value="SAMLart"/>
SAML Post Response Argument Name	<input type="text" value="SAMLResponse"/>
SAML Back Target Argument Name	<input type="text" value="TARGET"/>
Authorization Cache Timeout	<input type="text" value="3600"/>
Authentication Cookie Expiration	<input type="text" value="1"/> 
Option	<input type="checkbox"/> Do not block exceptions <input type="checkbox"/> Require authorization <input checked="" type="checkbox"/> Support access list <input checked="" type="checkbox"/> Support expand group <input checked="" type="checkbox"/> Support expand user <input type="checkbox"/> Run in 64 bits

7. Add the newly created custom security provider by clicking **Permissions** in the left navigation pane.
8. Select **Use a security provider** and select the security provider created previously.

Note: All the parameters of the *Open Text Livelink* source must be specified on the security provider. The security provider tries to connect to the *Open Text Livelink* repository in order to expand users and groups and therefore, needs a valid configuration.

Important: In order for CES to detect security modifications on documents, it is important to activate **Permissions modification** checkbox (System administration > Administer Modified Date Triggers) in your *Open Text Livelink* repository; otherwise, CES does not detect security modifications or reindex documents.

Usability Scenarios

The following displays three different usability scenarios and their required parameters:

Important: All of the following scenarios require a user identity with a username and password.

Open Text Livelink Protocol

The *Open Text Livelink* connector can use the default *Open Text Livelink* protocol to connect to the *Open Text Livelink* server. This protocol uses the default port 2099 unless a port parameter is provided:

Parameter Name	Example
Hostname	machinename
ClickableBaseURI	http://machinename/Livelink/Livelink.exe

Using HTTP Tunnelling

The *Open Text Livelink* connector can connect to the *Open Text Livelink* server via the http tunnelling option. This option wraps the communication to the *Open Text Livelink CGI* application. Therefore, it is important to specify the *CGIPath* parameter (e.g., <http://livelinkhost/livelink/livelink.exe>).

Parameter Name	Example
Hostname	machinename
ClickableBaseURI	http://machinename/Livelink/Livelink.exe
CGIPath	http://machinename/Livelink/Livelink.exe

Using HTTPS Tunnelling

This connection method is basically the same as the http tunnelling; however, the connection is wrapped by a SSL tunnel.

Parameter Name	Example
Hostname	machinename
ClickableBaseURI	http://machinename/Livelink/Livelink.exe
CGIPath	http://machinename/Livelink/Livelink.exe
UseSSL	True

Using HTTPS Tunnelling (client certificate required)

The following lists the two methods used if the *Open Text Livelink* Web server requires the connector to specify a client certificate:

- In the connector's user identity, specify a client certificate present in a local computer certificate store. It provides that certificate when connecting to the *Open Text Livelink* Web server.
- Specify a certificate file by adding the following parameter to the *Open Text Livelink* source:

Parameter Name	Example
CertificateFilePath	C:\mycertificate.cert

Note: If you are using a multi-slice setup, the certificate file must be in the same path on all the slice machines, as the *Open Text Livelink* security provider on all the slices needs that information.

Configuration


▶ How to Setup the Open Text Livelink Repository

It is important to perform specific procedures on the *Open Text Livelink* repository to index in order to enable all the features of the *Open Text Livelink* connector. It is possible to skip certain steps; however, note that by doing so, some features might not be available. The following describes the options that might need to be modified:


- **Indexing of NTLM Permissions:** In order to be able to index the NTLM permissions in *Open Text Livelink*, it is important to install the *Open Text Livelink* active directory add-in. For more information concerning the add-in, refer to the [Open Text Livelink documentation](#).
- **Detecting Security Modifications for Live Indexing:** In order to detect security modifications during live indexing, the **Permission modification** option must be selected in the *Open Text Livelink* repository. To do so, perform the following procedure:
 1. Access the *Open Text Livelink* administration page (System Administration > Administer Modified Date Triggers).
 2. Select **Permission modification**.


Note: *Open Text Livelink API 9.6* also needs to be installed on the CES machine. The *Open Text Livelink* connector requires the API to be installed on the same machine. If the API is installed using the install kit provided by *Open Text Livelink*, the assemblies should be in the GAC and accessible to CES.

▶ How to Index an Open Text Livelink Source

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

Field	Description	Example
Name	Any descriptive name.	Livelink Source name
Source Type	The connector used by this source.	OpenText Livelink
Addresses	List of starting points for the connector, one address per line.	Addresses are in the form of: livelink://hostname:port/specificDirs The port number depends on other specified source parameters. For more information, refer to the How to Configure a User Identity section.
Hostname	The Open Text Livelink server hostname.	
Base of Clickable URIs	Base URI used for all clickable URIs	The URI displayed when a user clicks on a result must be valid and pointing to the CGIPath: http://servername/Livelink/Livelink.exe.
Parameters	The user identity connecting to the repository must at least have a viewing access to the files to index.	For more information, refer to the How to Configure a User Identity section.
Authentication	User identity for this connector.	The user identity should contain the username and password required in order to connect to the Open Text Livelink connector.

Important: It is possible to specify additional parameters by clicking  [Add Parameter](#) .

Name	<input type="text" value="Livelink Source Name"/> ?
Source Type	<input type="text" value="OpenText Livelink"/>
Addresses	<input style="width: 100%; height: 50px;" type="text" value="livelink://hostname:port/specificDirs"/> <small>Example: livelink://svr-livelink:2099/ Example: livelink://svr-livelink:2099/specificDir One entry per line.</small>
Rating	<input type="text" value="Normal"/> ?
Document Types	<input type="text"/> ?
Fields	<input type="text" value="Default Scheme"/> ?
Refresh Schedule	<input type="text" value="Every day"/> ?
Hostname	<input type="text" value="servername.companyname.com"/> ?
Base of clickable URIs	<input type="text" value="http://servername/Livelink/Livelink"/> ?
Parameters	 Add Parameter ?
Option	<input checked="" type="checkbox"/> Index subfolders ? <input type="checkbox"/> Index the document's metadata ? <input type="checkbox"/> Document's addresses are case-sensitive ? <input checked="" type="checkbox"/> Generate a cached HTML version of indexed documents <input type="checkbox"/> Open results with cached version ?
Authentication	User Identity <input type="text" value="(none)"/> ?

Searching an Open Text Livelink Source in CES

Because the security provider used allows native *Open Text Livelink* securities, the users need to logon to CES using their *Open Text Livelink* information before performing a query. If domains are activated in the *Open Text Livelink* repository, the user needs to enter the appropriate username in the following format: *Username: domain/username*.

Troubleshooting

▶ The “unknown database type” error

This probably means CES was unable to access the *Livelink* database. This is mostly caused by the insufficient rights given to the user CES has used to connect to *Livelink*. Make sure that user has the *System administration rights* privileges.