# **Client administration**

ELO WebDAV



## **Table of contents**

WebDAV	3
ELO WebDAV server address	3
Using ELO WebDAV on Windows	5
Using WebDAV on Linux	14
Using WebDAV on MAC OS X	16
Using WebDAV on Android	18
Using WebDAV on iOS	19
Overview: WebDAV clients	20
ELO WebDAV for SAP® ILM	22

## WebDAV

## **ELO WebDAV server address**

#### Information

ELO WebDAV is already integrated into the ELO Indexserver. You can access the ELO WebDAV directory from the browser. To do this, enter the ELO WebDAV address according to the following convention:

http://<server name>:<port>/ix-<repository name>/ixwebdav

#### Connecting using a fully qualified domain name

If you want to connect to a WebDAV server using a fully qualified domain name (FQDN), you must add the server to the corresponding *Local intranet* zone:

- 1. Open the Internet Options in the Control Panel.
- 2. Navigate to the *Security* tab.
- 3. Select the *Sites* button.

🚷 Lo	cal intranet	×
٢	Use the settings below to define which websites are included in the local intranet zone.	
	Automatically detect intranet network	
	Include all local (intranet) sites not listed in other zones	
	Include all sites that bypass the proxy server	
	Include all network paths (UNCs)	
What a	are intranet settings? Advanced OK Cancel	

The Local intranet dialog box opens.

- 4. Make sure that the Automatically detect intranet network setting is enabled.
- 5. Select Advanced.

🐏 Local intranet	×
You can add and remove websites from this zone. All websites this zone will use the zone's security settings.	in
Add this website to the zone:	
http://srvtdev02.elo.local:9090/ix-elo80/ixwebdav Add	
Websites:	
Require server verification (https:) for all sites in this zone	
Close	

An additional *Local intranet* dialog box opens.

6. Enter the server's fully qualified URL.

The following examples make the difference between a normal URL and a fully qualified URL clearer:

- o Normal URL: http://srvtdev02:9090/ix-elo80/ixwebdav
- Fully qualified URL: http://srvtdev02.elo.local:9090/ix-elo80/ixwebdav

7. Select Add.

- 8. Close the dialog box.
- 9. Close the other dialog boxes with OK.

## **Using ELO WebDAV on Windows**

Windows uses NTLM authentication. This means that passwords are only transferred to the server in encrypted form.

#### General note on using ELO WebDAV in Windows

This section contains notes on using ELO WebDAV in Windows.

#### **WebDAV Redirector**

In Windows Server 2016 and higher, you must install the *WebDAV Redirector* component server side.

You can find more information below under Using WebDAV Redirector.

#### WebClient

The Windows service *WebClient* must be running on the client computers. Ideally, the service should be set to start automatically.

1. You can set the startup type with the following PowerShell command:

Set-Service WebClient -StartupType Automatic

 $^{2.}$  You can start the service with the following PowerShell command:

Start-Service WebClient

#### Data transfer rate

With the default settings, a maximum of 47 MB can be transferred using WebDAV.

1. To enable a greater transmission rate, adjust the FileSizeLimitInBytes key in the registry.

You can find the key under:

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\WebClient\Parameters

Here you can enter values up to 4 GB (4294967295 bytes).

2. Next, restart the ELO Web Client service for the changes to take effect.

6

The maximum path length in Windows is 260 characters.

# Connecting Windows Explorer as a network drive (Windows Vista and newer)

- 1. To connect ELO WebDAV as a network drive in Windows (Vista or higher), first open Windows Explorer.
- 2. Open the context menu for *Computer* or *Network*.
- 3. Select *Map network drive* from the context menu.

inel	> All Control Pan	el Items	
ttin	🔶 🍕 Map Ne	twork Drive	×
	What net Specify the	work folder would you like to map? drive letter for the connection and the folder that you want to connect to:	istore (
	Drive: Folder:	Z: ~ http://srvtdev02:9090/ix-elo80/ixwebdav ~ Browse Example: \\server\share	2-bit)
(32-		Reconnect at sign-in	n
		Connect using different credentials	Featur
		Connect to a Web site that you can use to store your documents and pictures.	lainter
			ng
			0
		Finish Cano	el

- 1. Select a free drive letter and enter the address of your ELO WebDAV under *Folder*.
- 2. Select Finish.

ht	tp://srvtdev02:9090/1x-elo80/1x		
_	Windows Security	×	
	Connect to srvtdev02		
rol	Connecting to srvtdev02	-	
S :	User name		
	Password		
n	Domain:		co
	Remember my credentials		
			в
01	OK Cancel		
	Connect using different conductive		
	Connect using different credentials		

If the user logged into Windows is in Active Directory and exists as a user in ELO, NTLM authentication is applied automatically and no logon information needs to be entered. Otherwise, the Windows Security dialog box asks for your user name and password.

3. Authenticate using your ELO user data.

#### **Please note**

In this case, the basic authentication procedure is used, and the password is sent to the server in plain text. You can secure the data transfer using SSL.

In the registry, change the value of the BasicAuthLevel key to "2" (decimal) accordingly. You can find the key under:

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\WebClient\Parameters

#### **Please note**

Copying documents clears the metadata.

This is because the Explorer sends the PUT command with the target path and content to ELOix, making it impossible to determine the SORD of the content since there is no SORD ID.

#### Slow connection to the WebDAV drive

If the connection to the WebDAV drive and Windows Vista is slow, check the following:

- 1. Open the Internet Options in the Control Panel.
- 2. Navigate to the *Connections* tab.
- 3. Select LAN settings.

🍖 Local Area Network (LAN) Settings	×
Automatic configuration Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.	
Automatically detect settings	
Use automatic configuration script	
Address	
Proxy server	
Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).	
Address: Port: 80 Advanced	
Bypass proxy server for local addresses	
OK Cancel	

The Local Area Network (LAN) Settings dialog box opens.

- 4. Clear the Automatically detect settings option.
- 5. Click *OK* to confirm.
- 6. Click OK to close the Internet Options.

#### In Windows XP

- 1. Open *My Computer* and select *Tools > Map network drive*.
- 2. Select the preferred drive letter.
- 3. Select the link to Sign up for online storage or connect to a network server.

The Windows dialog box to add network resources opens.

- 4. Select Next.
- 5. Select Choose a different network resource.
- 6.

Select Next.

- 7. Enter the ELO WebDAV address.
- 8. Select Next.
- 9. Enter a name for the network address.
- 10. Select Finish.

#### **Using WebDAV Redirector**

#### Windows Server 2016 and higher

In Windows Server 2016 and higher, you must install the *WebDAV Redirector* component server side.

Install as follows:

1. Use the following PowerShell command:

Install-WindowsFeature WebDAV-Redirector —Restart

 $^{2.}$  Check the status of the installation with the following PowerShell command:

Get-WindowsFeature Web	DAV-Redirector   Fo	rmat-Table –Autosize
Display Name  [X] WebDAV Redirector	Name  WebDAV-Redirector	Install State Installed

If WebDAV Redirector was successfully installed, the value Installed is output in the table.

#### WebDAV Redirector for versions older than Windows Server 2016

The following link provides information on using WebDAV via WebDAV Redirector (in Windows 7, Windows 8, Windows Server 2008, or Windows Server 2012):

https://learn.microsoft.com/en-us/iis/publish/using-webdav/using-the-webdav-redirector

#### Information

- Desktop Experience must be installed starting with version 2008.
- If you get the error message "System error 67 has occurred. The network name cannot be found" when adding the ELO WebDAV as a network drive, please check whether the Windows *WebClient* service is running and whether Desktop Experience is installed.

#### With the command line

To map ELO WebDAV to a network drive, use the following command in the Windows command line:

```
net use Z: \\<host name>:<port>/ix-<repository name>/ixwebdav/persistent:yes
```

Use the /persistent parameter to define whether the network drive should remain available after a restart. If you set the value no here, the connection will not be reestablished.

#### With NetDrive

-				NetDri	ve 1.3.2.0		X
<b>Option</b>	<b>₩</b> Export	Import	ю Неір	<b>I</b> nfo	Anguage	Monitor	NetDrive™
⊡ 🎸 Si ⊕{	te Public Site	s				Site name ELO	
	ELO					Site IP or URL http://localhost/ix-el	Port 8080
						Server Type WebDav	Drive I:
						Connect as anonyn Account Administrator	nous
						Password	
						Automatic login wh	Save password en system starts en NetDrive starts
New Site	New Folder	Delete	Сору	Rename	Advanced	Connect Sav	e Quit

- 1. Select New Site and enter a name for the connection.
- 2. Enter the ELO WebDAV address under Site IP or URL.
- 3. Open the drop-down menu for *Server Type* and select the entry *WebDav*.
- 4. Enter the server port into the *Port* field.
- 5. Select the drive letter you want to use.
- 6. Enter your ELO logon credentials under Account and Password.
- 7.

To enable SSL encryption, select Advanced and select Use HTTPS.

- 8. To use SSL encryption, change the port from 8080 to 443.
- 9. Select *Save* to save the connection.
- 10. Select *Connect* to establish the connection.

#### With BitKinex



Unlike Windows Explorer and NetDrive, BitKinex does not support WebDAV connections as network drives. Instead, it uses its own interface. However, BitKinex does support a wide range of features including the ability to lock folders and files and move and copy files on the server without having to download the files first.

- 1. To connect BitKinex to ELO WebDAV, select *Connect* or *Quick Connect* under the *File* menu option.
- 2. Enter the ELO WebDAV Internet address and the ELO user data.
- 3. Select Connect.

🕼 Open				×
$\leftrightarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ 🗄 $\Rightarrow$ This PC $\Rightarrow$ Documents	√ Ū	Search Documents		Q
Organize 🔻 New folder			-	?
Quick access Desktop Downloads Comments Add-in Express ELO				
File name: http://srvtdev02.elo.local:9090/ix-elo80/ixwebdav		→ All Word Documents	;	$\sim$
	Tools	▼ Open	Cancel	

## Using WebDAV with Microsoft Office applications

Microsoft Office uses its own WebDAV client. This means you can open an ELO repository in Office applications like Microsoft Word, Microsoft Excel, and Microsoft PowerPoint without connecting ELO WebDAV to a network drive first.

- 1. In the *Open* dialog box, enter the Internet address as a file name.
- 2. Confirm your input with the ENTER key.



#### General note on using ELO WebDAV with Microsoft Office applications

With the default settings, some Microsoft Office programs only open documents from a hyperlink in read-only mode. In the registry, change the value of the OpenDocumentsReadWriteWhileBrowsing key to "1" (DWORD) accordingly.

You can find the key under:

.

HKEY\_CURRENT\_USER\Software\Microsoft\Office\<version>\Common\Internet

The following website provides instructions: <u>http://www.webdavsystem.com/server/documentation/</u><u>ms\_office\_read\_only</u>.

If a logon dialog box is shown every time you open Office documents, the following settings have to be changed.

Enable the option Automatic logon with current user name and password (found under: Internet Options > Security > Local Intranet > Custom Level > User authentication > Logon)

- The ELOix server must be in the intranet zone. This requires two entries:
  - One with FQN: (e.g.: http://srvtdev.elo.local)
  - One without FQN: (e.g.: http://srvtdev.elo.local)

In the Windows registry, create the entry (REG\_MULTI\_SZ) with the name *AuthForwardServerList* under:

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\WebClient\Parameters

- As the value, use the host name of the IX server.
- This requires two entries:
  - One with FQN: (e.g.: http://srvtdev.elo.local)
  - One without FQN: (e.g.: http://srvtdev.elo.local)

#### Embedding objects from ELO in Microsoft Office applications

Object		?	×
<u>Create New</u> Create from <u>File</u>			
File <u>n</u> ame:			
http://srvtdev02.elo.local:9090/ix-elo80/ixwebdav	<u>B</u> rowse		
Result Inserts the contents of the file into your document so that you can edit it later using the application which created the source file.	☐ Lin <u>k</u> to file ☐ Displ <u>a</u> y as icon		
	ОК	Cance	1

ELO WebDAV also allows you to embed files stored in ELO as objects.

## **Using WebDAV on Linux**

NTLM authentication is not used on Linux. Instead, Linux uses basic authentication. For this reason, we recommend that you secure the data transfer through SSL.

### Davfs2 (command line)

1. Use the following command:

sudo mount.davfs -o userid=<LINUX-USER> http://<server name>:<port>/ix-<repository name>/i

<sup>2.</sup> Replace the placeholders with your own values.

#### **Gnome/Nautilus**

					Co	mput	er		
File	e Edit	View	Go	Bookmarks	Help				
+	+	<b>+</b> 4	ົ		Compute	r			
•				Connect to	o Server			×	
► II	Serve	r Detai	ils						
	Serve	er:		localhost		Port:	443	- +	
	Type:		(	Secure WebD	AV (HTTPS)			•	
	Folde	er:		/ix-elo80/ixwebdav					
	User D	etails							
	User	name:		Admin					
	Passv	vord:	(	•••••					
				🗌 Remember	this passwo	rd			
	Н	elp			Can	cel	Con	nect	
								_	

- 1. In Nautilus, select *Locations > Connect to server*, or select *File > Connect with a server*.
- 2. Enter the following settings:

Field	Notes
Server	The server name
Port	The port used; default for HTTPS 443

#### Field Notes

Folder The path to the respective WebDAV directory

User name Name of the ELO account used

Password Password of the ELO account used

### **KDE/Dolphin**

Open the ELO WebDAV address with Dolphin or Konqueror.

## Using WebDAV on MAC OS X

NTLM authentication is not used on Mac OS X. Instead, Linux uses basic authentication. For this reason, we recommend that you secure the data transfer through SSL.

#### **Command line**

1. Use the following command:

mount -t webdav http://<server name>:<port>/ix-<repository name>/ixwebdav/<mount point >

 $^{\rm 2.}$  Replace the placeholders with your own values.

#### Finder

- 1. In the Finder, select *Go to > Connect to server*.
- 2. Enter the Internet address of ELO WebDAV into Server address.
- 3. Select Connect.

#### Information

While working with the Finder, many temporary files will be generated, uploaded to ELO, and deleted again afterwards. Additionally, the files are also created in the ELO root folder. For this reason, the user who is logged on must have write permissions to the root folder.

#### Cyberduck

Unlike the Finder, the free Cyberduck tool does not generate temporary files.

- 1. After installing Cyberduck, start Cyberduck from your dock or program folder.
- 2. Select New connection.

Open Connection			×			
MebDAV (Web-based Distributed Authoring and Versioning)						
Server:	localhost	Port:	9090 🜲			
URL:	http://Administrator@localhost:9090/ix-elc	90/ix	4			
Username:	Administrator					
Password:	•••					
	Anonymous Login					
SSH Private Key:	None	$\sim$	Choose			
	Save Password					
		Connec	t Cancel			
More Options						
Path:	/ix-elo90/ixwebdav					
Connect Mode:	Default		$\sim$			
Encoding:	Default		$\sim$			

1. Enter the following settings:

<b>Field/option</b>	Notes
Server	The server name
Port	The port used
User name	Name of the ELO account used
Password	Password of the ELO account used

Save password Enabled

Path The path to the respective WebDAV directory

## **Using WebDAV on Android**

#### WebDAV File Manager

- 1. To connect to ELO WebDAV, you first need to configure a new server (*Add Server* menu item).
  - $^{\circ}$  Name: Name of the connection (such as "ELO")
  - URL: Internet address of ELO WebDAV

#### **Please note**

A port number cannot be entered here.

- User Name: ELO user name
- Password: Password for the ELO account
- 2. Select the Optionally specify a port number setting and enter the port.
- 3. Select Registration.

#### WebDAV Nav Lite

- 1. Select the plus icon to add a new WebDAV server.
- 2. Enter the following values:
  - $^{\circ}$  Name: Name of the connection (such as "ELO")
  - Server URL: Internet address of ELO WebDAV
  - User name: ELO user name
  - $^{\circ}$  Password: Password for the ELO account

## **Using WebDAV on iOS**

#### **WebDAV Navigator**

- 1. Select the plus icon to add a new WebDAV server.
- 2. Enter the following values:
  - $^{\circ}$  Name: Name of the connection (such as "ELO")
  - $^{\circ}$  Server address: Internet address of ELO WebDAV
  - User name: ELO user name
  - $^{\circ}$  Password: Password for the ELO account

#### **Over-the-air**

- 1. Select Add Server.
- 2. Enter the following values:
  - $\circ$  Display name: Name of the connection (such as "ELO")
  - URL: Internet address of ELO WebDAV
  - User ID: ELO user name
  - $^{\circ}$  Password: Password for the ELO account

## **Overview: WebDAV clients**

ELO WebDAV has been tested with the following WebDAV clients:

Client	Operating systems	Connected as drive	LOCK	PROPPATCH	MOVE/ COPY	Free	Comments
Windows Explorer	Windows	Yes	No	No		N/A	
BitKinex	Windows	No	Yes	No	Yes	Yes	
WebDrive	Windows, Mac	Yes	Yes	No	No	No	Generates temp files
NetDrive	Windows	Yes	No	No	No	Yes, for non- commercial use	
Cyberduck	Windows, Mac	No	No	Yes	No	Yes	
Cross FTP Pro	Windows, Mac, Linux	No	Yes	No	Yes	No	
CarotDAV	Windows	No		Yes	Yes	Yes	
TotalCommander WebDAV plug-in	Windows, Android	No	No	No		Free for Android	
Transmit	Мас	Drive and own Ul	No	No	Yes	No	Generates temp files
Finder	Мас	Yes	No	No	No	N/A	Saves temp files in root folder and current folder
Cadaver	Linux	No	Yes	Yes	Yes	Yes	Command line
Dolphin	Linux	No	No	No	Yes	Yes	
Nautilus	Linux	No	No	No	No	Yes	
davfs2	Linux	Yes	No	No	No	Yes	Generates temp files
Microsoft Office	Windows, Mac	No	No	No	No	No	
WebDAV File Manager	Android	No	No	No	Yes	Yes	
WebDAV Nav Lite	Android	No	No	No	Yes	Yes	
FolderSync Lite	Android	No	No	No	Yes	Yes	

Client	Operating systems	Connected as drive	LOCK	PROPPATCH	MOVE/ COPY	Free	Comments
WebDAV Navigator	iOS	No	No	No	Yes	Yes	
OverTheAir	iOS	No	No	No		Yes	Not for editing. Only to read and upload files.

## **ELO WebDAV for SAP® ILM**

ELO WebDAV 3.1 for SAP® ILM is an add-on integrated in the ELO Indexserver that enables you to use the ELO Indexserver as the storage location in SAP Information Lifecycle Management scenarios (ILM).

#### **Please note**

The *WebDAV ILM* metadata form is automatically created to store SAP properties, but only if the request originates in SAP.

For more information, see:

ELO Suite for SAP ArchiveLink® (SAP NetWeaver® & SAP S/4HANA®) > ELO WebDAV for SAP® ILM