# **ELO system requirements**

Overview



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## **ELO system requirements**

## Basics

The following provides you with basic information about the ELO environment.

## **Difference between ELOprofessional and ELOenterprise**

- In terms of operating systems, ELOprofessional only supports Microsoft Windows. By contrast, ELOenterprise is platform-independent.
- Unlike ELOenterprise, ELOprofessional is not multi-tenant capable.
- ELOprofessional systems are only cluster-ready to a certain extent. They only allow for hot standby operation of individual components. ELOenterprise systems, however, are fully cluster-ready.
- With ELOprofessional, server processes may only be distributed within the same host, i.e. on a server system. By contrast, with ELOenterprise processes can be distributed across multiple hosts (VMs or physical servers).
- With ELOprofessional, the ELO server components (e.g. ELOas) can be distributed across multiple Tomcat servers as long as they are located on one server system (VM or physical server). In contrast, with ELOenterprise, Tomcat servers can be installed on multiple server systems (VMs or physical servers).

Area	ELOenterprise	ELOprofessional
Operating system	Platform-independent	Windows
Architecture	SOA-compliant modular client/ server architecture	SOA-compliant modular client/ server architecture
Maximum number of repositories	Unlimited	20 per repository server
Maximum number of users	Unlimited	1000
Maximum number of documents	2 billion per repository	100 million
Maximum levels per repository	254	254
Database	PostgreSQL/Microsoft SQL/Oracle/ IBM DB2	PostgreSQL/Microsoft SQL/Oracle/ IBM DB2
Multi-tenant capable	1	-
Portal integration	1	1
Status log for central monitoring systems	✓	•

Area					
	ELOenterprise	ELOprofessional			
Distributable server processes	✓	Single host			
Cluster capacity	1	Hot standby			

## Java support

## Please note

ELOprofessional and ELOenterprise should always be installed on a 64-bit operating system.

Overview of Java support on different operating systems

Windows	macOS	Linux
64-bit installation	Yes	Yes
32-bit installation (or AFM)	Installation allowed	Installation not allowed
Running the client	Only 64-bit	Only 64-bit

## Database support

ELO product	Microsoft SQL Server 2017	Microsoft SQL Server 2019	Microsoft SQL Server 2022	Oracle 19c	Oracle 21c	IBM DB2 11.5	PostgreSQL 13.xx and higher
ELOprofessional Server Windows	1	1	1	1	1	1	1
ELOenterprise Server Windows	1	1	1	1	1	1	1
ELOenterprise Server Linux	1	1	1	1	1	1	1
ELO BLP*	-	-	-	-	-	-	-
ELO DocXtractor II 5.x**	•	1		J.	1	-	-

\* MS Express is also supported if only Oracle is available.

\*\* Refer to the document *ELO DocXtractor II 5.x hardware and software requirements* in the ELO SupportWeb for a detailed list of supported database driver versions. Please note this file is only available in German.

**Please note** 

Microsoft SQL Server 2016 is no longer supported. This is because of security issues due to insecure encryption functions.

## **ELO** server

The following provides you with more information about the system requirements for the ELO Server Setup and the ELO Server.

## **ELO Server Setup**

Running the ELO Server Setup requires a current browser. ELO supports the following browsers:

- Mozilla Firefox The most current officially available version
- Google Chrome The most current officially available version
- Microsoft Edge The most current officially available version

## **ELOprofessional Server**

## Windows

#### **Operating system**

- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

## **Please note**

ELO BLP 5.2 requires Windows Server 2019 upgraded to version 1903 or higher. Otherwise, communication with TLS 1.3 will not work.

#### Databases

- Microsoft SQL Server 2017
- Microsoft SQL Server 2019
- Microsoft SQL Server 2022
- Oracle 19c
- Oracle 21c
- IBM DB2 11.5
- PostgreSQL 13.xx and higher

#### **Please note**

If used with PostgreSQL on Linux, there may be restrictions when finding entries with umlauts if sorted according to German language rules.

**Please note** 

You need to make some adjustments in the Oracle system. MAX\_STRING\_SIZE=EXTENDED must be set and the *objdesc* column of the *Objects* table needs to be wider. Max. 4k characters are supported.

For more information, refer to the guide <u>ELO server</u> - Installation and operation > <u>Preparations</u> > Oracle SQL Server > ELO Business Solutions on an Oracle database.

## **Please note**

Please note When using an Oracle database, please ensure that it uses the correct character set.

For more information, refer to the guide <u>ELO server</u> - Installation and operation > <u>Preparations > Oracle SQL Server</u>.

#### Information

After installation, the Elasticsearch program library used for ELO iSearch requires sufficient memory to re-index the documents for the full text search. An Elasticsearch index for one million data sets (documents) in ELO requires approximately 10 GB of disk space. If you have a 10 GB index, you will required an additional 30 GB of storage space for reindexing to create the index and for the Optimizer. You can use these figures as a guideline if you need to calculate storage requirements for installations with more documents.

#### Java and ELO Application Server

The following components are supplied by the ELO Server Setup:

- Java: OpenJDK 17.0.7 (64-bit)
- ELO Application Server: a modified Apache Tomcat 10.0.24 (64-bit).

## **ELOenterprise Server**

## Windows

#### **Operating system**

- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

#### **Please note**

ELO BLP 5.2 requires Windows Server 2019 upgraded to version 1903 or higher. Otherwise, communication with TLS 1.3 will not work.

Databases

- Microsoft SQL Server 2017
- Microsoft SQL Server 2019
- Microsoft SQL Server 2022
- Oracle 19c
- Oracle 21c
- IBM DB2 11.5
- PostgreSQL 13.xx and higher

#### **Please note**

If used with PostgreSQL on Linux, there may be restrictions when finding entries with umlauts if sorted according to German language rules.

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You need to make some adjustments in the Oracle system. MAX\_STRING\_SIZE=EXTENDED must be set and the *objdesc* column of the *Objects* table needs to be wider. Max. 4k characters are supported.

For more information, refer to the guide <u>ELO server</u> - Installation and operation > <u>Preparations</u> > Oracle SQL Server > ELO Business Solutions on an Oracle database.

#### **Please note**

Please note When using an Oracle database, please ensure that it uses the correct character set.

For more information, refer to the guide ELO server - Installation and operation > Preparations > Oracle SQL Server.

#### Information

After installation, the Elasticsearch program library used for ELO iSearch requires sufficient memory to re-index the documents for the full text search. An Elasticsearch index for one million data sets (documents) in ELO requires approximately 10 GB of disk space. If you have a 10 GB index, you will required an additional 30 GB of storage space for reindexing to create the index and for the Optimizer. You can use these figures as a guideline if you need to calculate storage requirements for installations with more documents.

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- Java: OpenJDK 17.0.7 (64-bit)
- ELO Application Server: a modified Apache Tomcat 10.0.24 (64-bit).

## Linux

Please use a current Linux Suse Enterprise distribution.

#### **Operating system**

The background service "systemd" in the Linux system is enabled.

- Red Hat Linux 8 and higher
- SUSE Linux Enterprise Server 12 (SLES) and higher
- Ubuntu 20.04 and higher

#### Databases

- Microsoft SQL Server 2017 and higher (on separate Windows Server)
- Oracle 19c
- Oracle 21c
- IBM DB2 11.5 for Linux, Unix, and Windows
- PostgreSQL 13.xx and higher

#### **Please note**

You need to make some adjustments in the Oracle system. MAX\_STRING\_SIZE=EXTENDED must be set and the *objdesc* column of the *Objects* table needs to be wider. Max. 4k characters are supported.

For more information, refer to the guide <u>ELO server</u> - Installation and operation > <u>Preparations > Oracle SQL Server > ELO Business Solutions on an Oracle database</u>.

#### **Please note**

Please note When using an Oracle database, please ensure that it uses the correct character set.

For more information, refer to the guide <u>ELO server - Installation and operation ></u> <u>Preparations > Oracle SQL Server</u>.

## Information

After installation, the Elasticsearch used for ELO iSearch requires sufficient memory to reindex the documents for the full text search. An Elasticsearch index for one million data sets (documents) in ELO requires approximately 10 GB of disk space. If you have a 10 GB index, you will required an additional 30 GB of storage space for reindexing to create the index and for the Optimizer. You can use these figures as a guideline if you need to calculate storage requirements for installations with more documents.

#### Java and ELO Application Server

The following components are supplied by the ELO Server Setup:

- Java: OpenJDK 17.0.7 (64-bit)
- ELO Application Server: a modified Apache Tomcat 10.0.24 (64-bit).

## **ELO Administration Console**

## Important

The version of the ELO Administration Console must be compatible with the corresponding ELO Indexserver. Please also read the notes in the server setup.

## Software

- ELO Indexserver version 23.000 and higher
- ELO Application Server or an ELOenterprise installation

## Web browser

• Current versions of Mozilla Firefox or Google Chrome

## **ELO clients**

The following provides you with more information about the system requirements for the ELO clients.

## **ELO Java Client**

## Hardware

• The hardware recommended for the configuration of the operating system in use is also required to run ELO.

## Scanner

- TWAIN-compatible scanner systems
- Network scanner

## Software

## **Operating system**

- Microsoft Windows 10
- Microsoft Windows 11
- macOS Big Sur 11.6
- macOS Monterey 12.5
- macOS Ventura 13.2
- Linux (tested with openSUSE 13.2)

## **Microsoft Office**

Versions supported:

- Microsoft Office 2016 Professional
- Microsoft Office 2016 Home and Business (with certain known restrictions, for example the viewer)
- Microsoft Office 2019 (Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Windows Explorer), full versions of the Microsoft Office applications
- Microsoft Office 365 Microsoft Office 365 ProPlus, full version

## Information

The online versions included in Office 365 are not supported.

## Information

A preview is a simplified display that may deviate from how the document is displayed in the application. If there are major differences, or no preview is offered, use the application to show the document type.

#### Java

Windows:

• OpenJDK 17 64-bit

## macOS:

• JRE 12 64-bit (included)

## Linux:

Current Oracle JDK version 17 64-bit

## Or:

Current version of OpenJDK 17 64-bit and OpenJFX

## **ELO Web Client**

## Software - browser

The desktop versions of:

- Mozilla Firefox The most current officially available version
- Apple Safari The most current officially available version
- · Google Chrome The most current officially available version
- Microsoft Edge The most current officially available version

#### Information

A preview is a simplified display that may deviate from how the document is displayed in the application. If there are major differences, or no preview is offered, use the application to show the document type.

## **ELO Desktop Client**

## Software - Operating system

• Windows 10 or higher

## Software - Microsoft Office

Microsoft Office 2016 (Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Windows Explorer), full versions of the Microsoft Office applications

- Microsoft Office 2019 (Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Windows Explorer), full versions of the Microsoft Office applications
- Microsoft Office 365 Microsoft Office 365 ProPlus, full version
- Microsoft OneNote 2016 or higher

## Information

The online versions included in Microsoft Office 365 are not supported.

• Microsoft .NET Core (included in setup)

## **ELO Desktop Client Plus**

• No additional requirements, see ELO Desktop Client.

## Information

A preview is a simplified display that may deviate from how the document is displayed in the application. If there are major differences, or no preview is offered, use the application to show the document type.

## **ELO Integration Client**

The ELO Integration Client is an ELO app and therefore has the same minimum requirements as ELOwf. This means that the client can only be integrated into systems with web viewers that have the same scope of functions as the browser versions listed here.

- Current Microsoft Edge
- Current Google Chrome

## **ELO for Mobile Devices**

## **ELO for Mobile Devices**

## **Operating system**

- Android 7 and higher
- iOS 12.0 or higher

## ELO QuickScan (for ELOoffice; for ELOprofessional / ELOenterprise)

• iOS 10 or higher

## **ELO Connect**

Android 4

## ELO WebDAV

## Please note

ELO WebDAV cannot be used via a terminal server environment.

## **ELO modules**

The following provides you with more information about the system requirements for additional ELO modules.

The modules for ELO are designed for ELOprofessional and ELOenterprise. If there are any limitations on a module's use, they will be specifically mentioned with the module.

## **ELO Flows**

See: ELOprofessional and ELOenterprise Server.

## ELO XC

## **Operating system**

- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

## Supported Exchange servers

- Microsoft Exchange Server 2016
- Microsoft Exchange Server 2019
- Microsoft Exchange Online (Microsoft 365)

## **Required for integration with Microsoft 365**

- Windows Management Framework 5.1
- Microsoft PowerShell 5 (possibly Microsoft PowerShell 7 as well)

## Supported browsers for ELO XC Manager

- Current version of Google Chrome
- Current version of Mozilla Firefox
- Current version of Microsoft Edge

## **Other requirements**

- Windows Management Framework 5.1
- Exchange Online PowerShell V3 module

## **ELO COLD**

## Hardware

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The hardware recommended for the configuration of the operating system in use is also required to run ELO.

## Software

- Installed ELO Windows Client (plus DLL)
- TIFF Printer
- XML Importer (only for ELO COLD ENTERPRISE)

## **ELO Barcode**

• ELO Java Client

## **ELO Replication**

See: ELOprofessional and ELOenterprise Server.

## Information

ELO Replication is installed as a WAR module on the Tomcat and is not restricted to specific databases.

## **ELO XML Importer**

See: ELOprofessional and ELOenterprise Server.

## **ELO Signature**

• Requirements same as for ELO Java Client

## **ELO BLP**

See: The ELO BLP documentation for the respective release on the ELO SupportWeb.

## **ELO for Microsoft 365**

The *Check out to OneDrive* function can only be used with the *OAuth* authentication method, as Microsoft OneDrive requires an OAuth2 token. The *SAML* method cannot be used for the *Check out to OneDrive* function.

## ELO for Microsoft SharePoint (ELOsp)

• Microsoft SharePoint 2016 or higher

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## **ELO Business Solutions**

The system requirements for the ELO Business Solutions are available in the documentation area of each Business Solution under <u>ELO SupportWeb > Business Solutions</u>.

## **Please note**

OSGi plug-ins and ELO Indexserver scripting may not be disabled when using ELO Business Solutions. These are the default settings when using ELO Cloud on Kubernetes.

See also: ELO Cloud on Kubernetes > Global settings

## **ELO Cloud**

There are different modes of operation for ELO Cloud. There are different requirements depending on the mode of operation. Below is some information about each mode of operation.

## **ELO Cloud Business Edition**

ELO Digital Office GmbH provides the entire server infrastructure for ELO Cloud Business Edition. The following conditions apply when using this mode:

## Hardware

- Internet connection with sufficient bandwidth for all users (at least 2.4 Mbit/s for uploads and 16Mbit/s for downloads)
- End devices such as desktops or laptops

## Software

The usage requirements correspond to the requirements for ELO Web Client and, if it is used, ELO Java Client.

The minimum requirement is a web browser in the latest official version. The following browsers are supported:

- Mozilla Firefox
- Apple Safari
- Google Chrome
- Microsoft Edge

## **Please note**

When using the ELO Cloud on mobile devices, such as a tablet or cell phone, we strongly recommend installing the respective ELO app.

## Partner Managed Cloud (based on a VM)

With this mode, a partner operates an environment themselves on a VM and makes this available via the cloud.

## Server

ELO 23.1 is the version intended for operating cloud environments.

• The requirements for the partner correspond to the requirements of an on-premises installation.

The ELO Indexserver must be able to connect to the license servers on the web at any time: license.services.elo.cloud and license.elo.com. It may be necessary to configure the firewall.

• When using the Business Solutions (gen. 1), please note the system requirements for each solution. These can be found in the <u>ELO SupportWeb under Business Solutions</u>.

#### **Please note**

OSGi plug-ins and ELO Indexserver scripting may not be disabled when using ELO Business Solutions.

See also: ELO Cloud on Kubernetes > Global settings

#### Use

• See requirements for ELO Cloud Business Edition.

## Partner Managed Cloud (based on Kubernetes)

With this mode, the partner provides a Kubernetes environment analog to ELO Cloud Business Edition. This results in the following system requirements:

#### Server

ELO 23.1 is the version intended for operating cloud environments.

• The ELO Indexserver must be able to connect to the license servers on the web at any time: license.services.elo.cloud and license.elo.com. It may be necessary to configure the firewall.

#### Base load (idle phase) per client

• at least 2.2 GB RAM

#### **Recommended limits**

- ELO Server (base): 2-4 GB RAM
- ELO iSearch: 2-3 GB RAM and sufficient block storage for data
- ELO Flows: 1 GB RAM
- ELO Flows Worker: 1 GB RAM
- ELO Textreader (gen. 2): 2-6 GB RAM

When using the Business Solutions (gen. 1), the limits must be increased accordingly. Please note the system requirements for each solution. These can be found in the <u>ELO SupportWeb</u> <u>under Business Solutions</u>.

## **Please note**

OSGi plug-ins and ELO Indexserver scripting may not be disabled when using ELO Business Solutions. These are the default settings when using ELO Cloud on Kubernetes.

See also: ELO Cloud on Kubernetes > Global settings

• For other modules, such as ELO Automation Services, additional limits may be necessary.

#### Database

• Different system requirements may be needed depending on the type of externally operated databases.

#### **Document paths**

• Different system requirements may be needed depending on the type of data storage used.

#### Use

• See requirements for ELO Cloud Business Edition.