ELO server – Installation and operation

Basics

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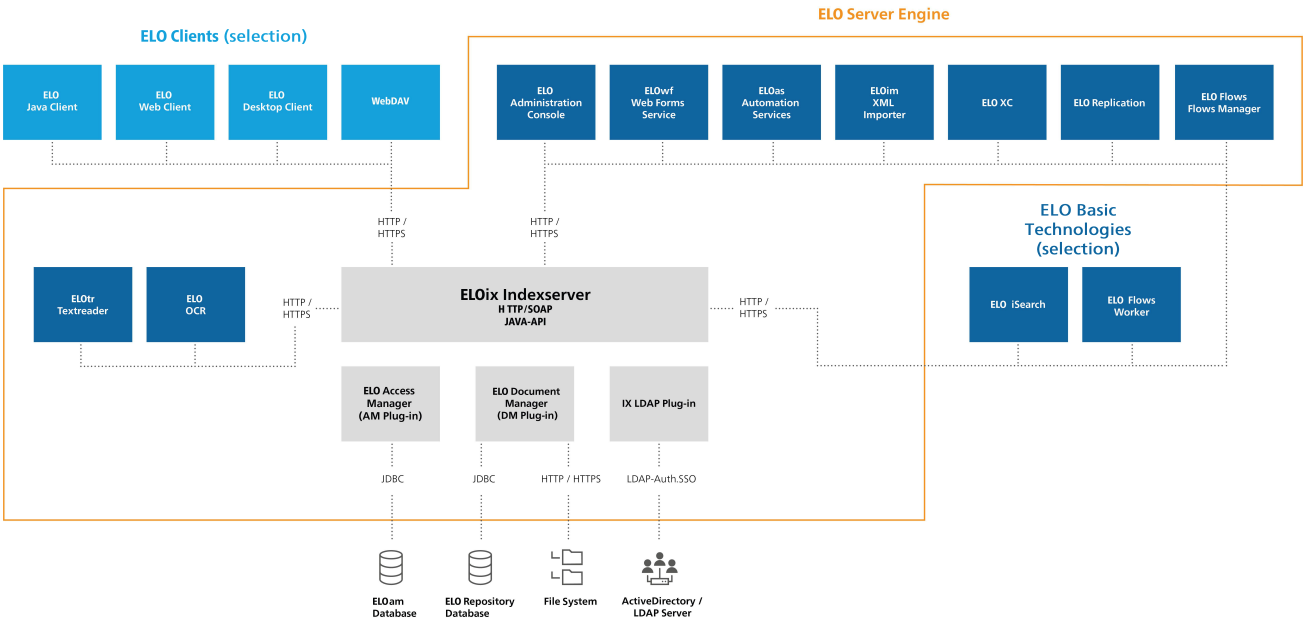
ELO server – Getting started

The ELO environment



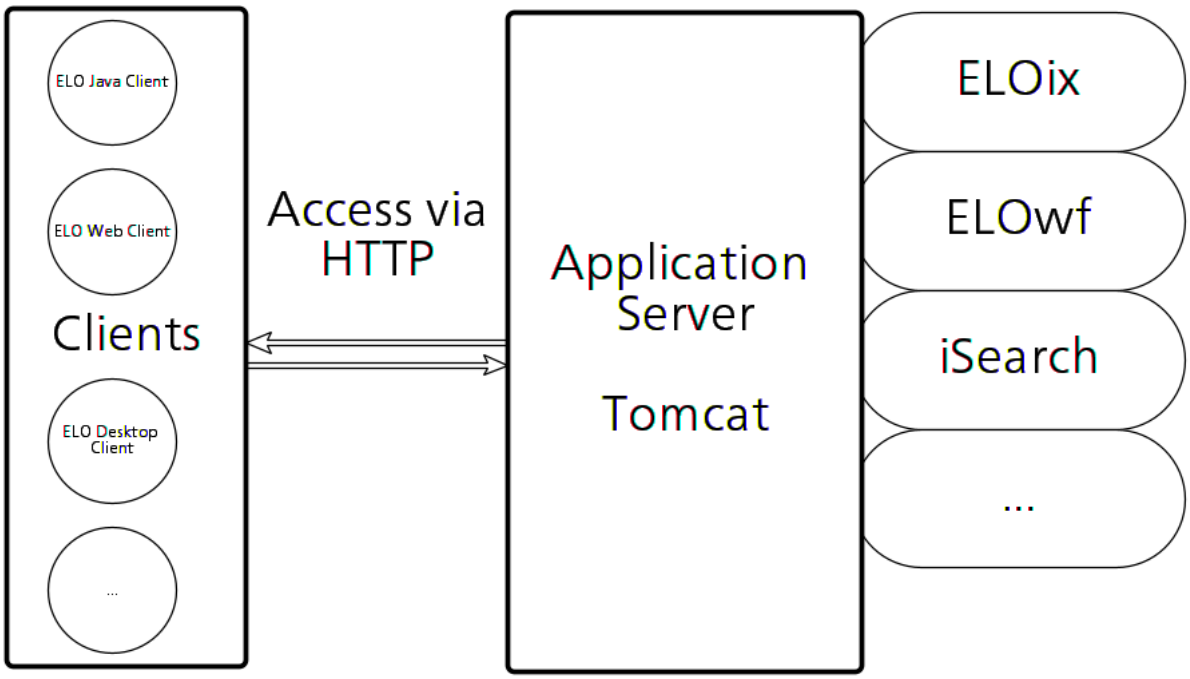
The image above depicts the ELO servers and ELO clients along with the protocols used to communicate between them. It helps you to understand the ELO system as a whole.

The four most fundamental components of the Apache Tomcat server engine are the ELO Indexserver, ELO Access Manager, ELO Document Manager, and ELO iSearch module.

Microserver architecture

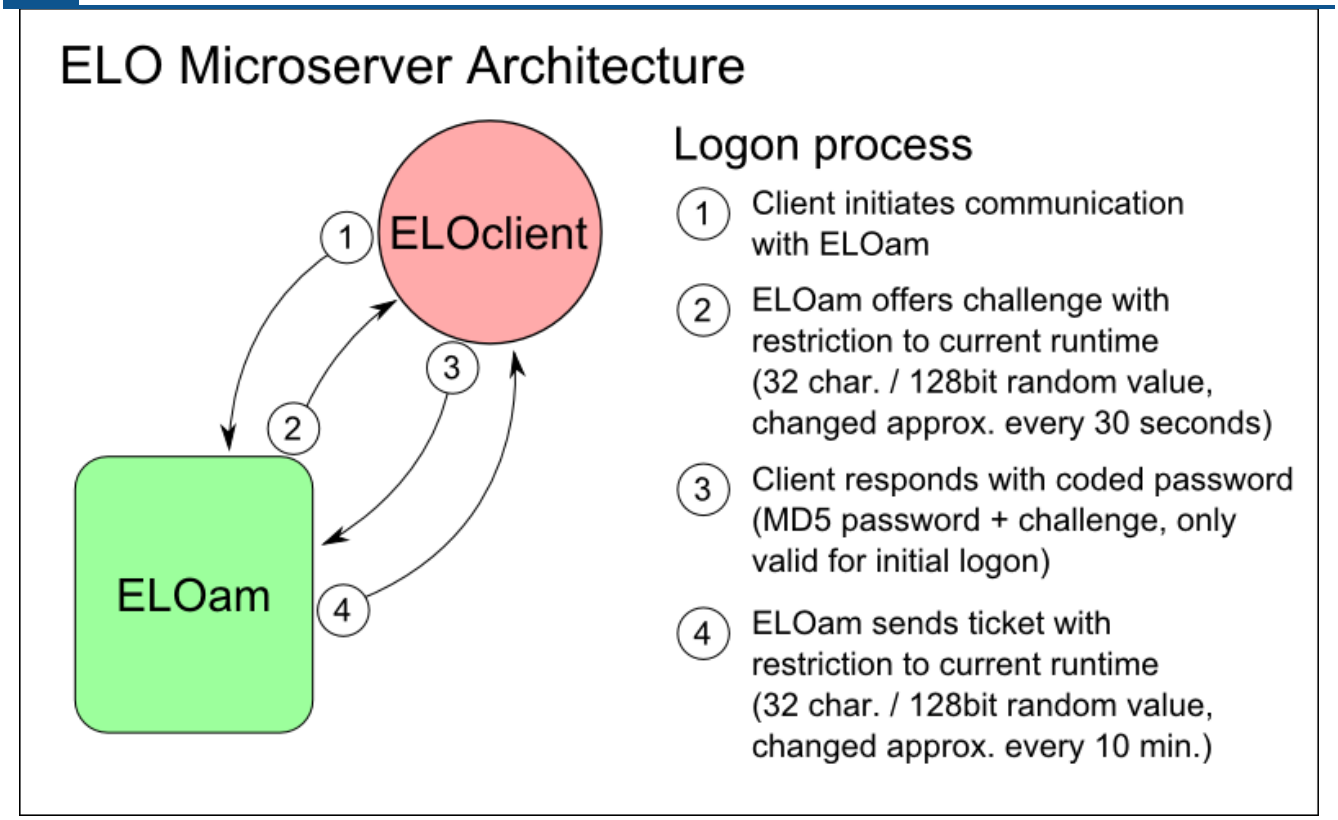
- The server components are programmed in Java, which offers a high level of portability.
- The microserver architecture makes the system highly scalable.
- Servlet implementation permits easy integration with existing systems.

Architecture



Authentication

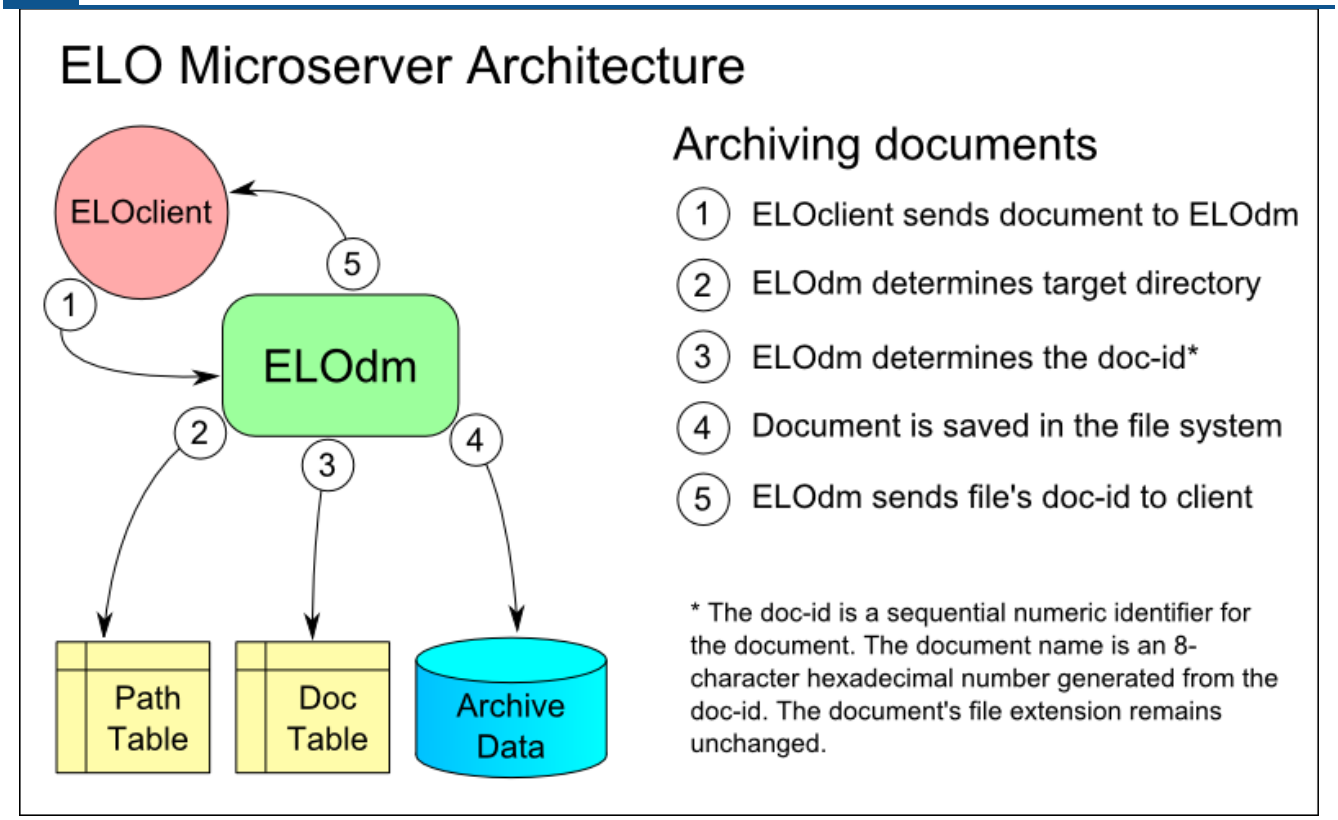
The ELO Access Manager is responsible for the central administration of the user list, the users currently logged on, the user rights and permissions, and the key lists. Each client and each server process authenticates to the ELO Access Manager at startup. The ELO Access Manager creates a ticket to identify the client and communicate with the ELO server processes.



Document storage

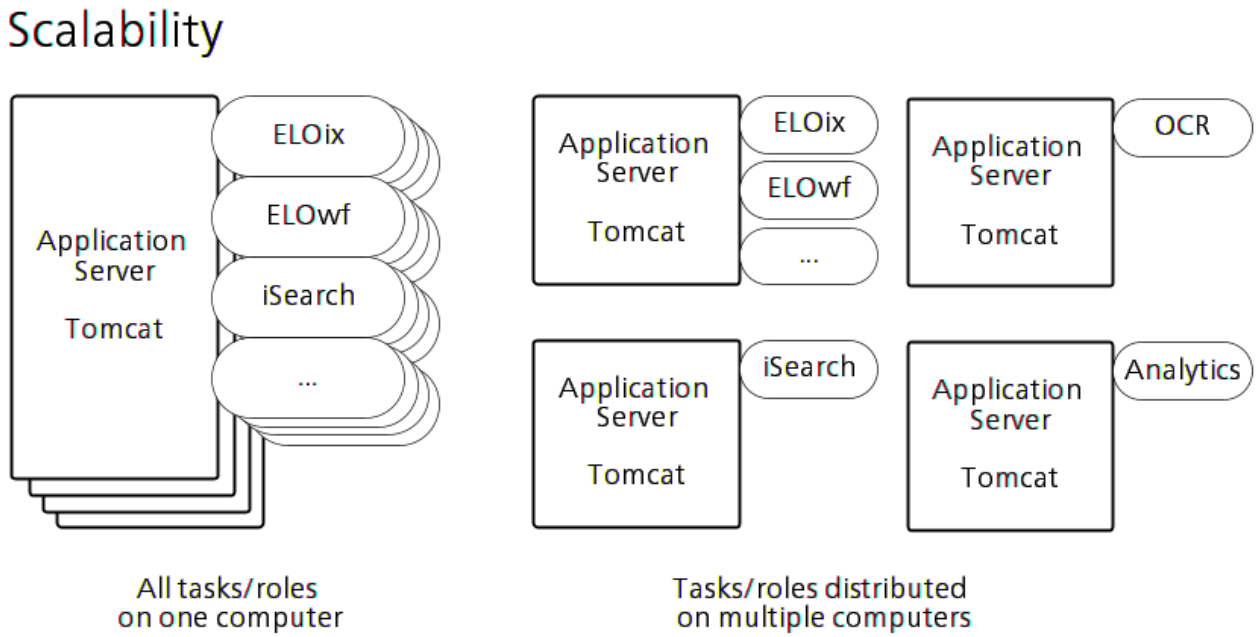
A separate ELO Document Manager is required for each repository. The ELO Document Manager saves, manages, and delivers each document on request. When using Microsoft SQL Server, a separate database is created for each repository. When using Oracle, an independent user with the same name as the repository is created for each separate repository.

The backup service and the EMC Centera interface are also run by the ELO Document Manager, provided that these additional modules have been purchased.



Scalability

The ELOenterprise services are scalable. Nearly all of the services can be installed on a single computer or they can each be installed on dedicated individual computers.



The different services can be installed to custom locations and, with a few exceptions that are described in the respective chapters, any combination of the services can be installed on different computers as required and depending upon the actual system requirements.

ELO server modules

This chapter contains basic information regarding the ELO server modules. Refer to the separate documentation for more information. You will find the relevant links in the following sections.

ELO Access Manager (ELOam)

This section contains information about the ELO Access Manager (ELOam).

The ELO Access Manager is an ELO Indexserver plug-in (ELOix). There is no separate WAR file for ELOam. You can access the status page of ELOam from the ELO Indexserver status page (*ELOix Status Report > Configure Options > AM Status*).

One ELO Access Manager may be used to run any number of ELO repositories. All of these repositories share the same users and certain other settings.

The ELO Access Manager has its own database, by default named *eloam*.

> **Information**
>
> The ELO Access Manager is an ELO Indexserver plug-in (ELOix). There is no separate WAR file for ELOam. You can access the status page of ELOam from the ELO Indexserver status page (*ELOix Status Report > Configure Options > AM Status*).

ELOam is automatically installed with the ELO Indexserver when you run the ELO Server Setup. The application is in the directory *<ELO>/prog\webapps\ix-plugins\private/*.

ELO Document Manager (ELOdm)

This section contains information about the ELO Document Manager (ELOdm).

You must install at least one ELO Document Manager for each repository. ELOdm manages all documents, folders, and document metadata (including permissions) within it.

Each ELO Document Manager has its own database, which has the same name as the repository itself.

> **Information**
>
> The ELO Document Manager is an ELO Indexserver plug-in (ELOix). There is no separate WAR file for ELOdm. You can access the status page of ELOdm from the ELO Indexserver status page (*ELOix Status Report > Configure Options > DM Status*).

ELOdm is automatically installed with the ELO Indexserver when you run the ELO Server Setup. The application is in the directory *<ELO>/prog\webapps\ix-plugins\private/*.

Please note

If you use the ELO document redaction function, read the Document redaction section.

ELO Indexserver (ELOix)

The ELO Indexserver acts as the interface between the ELO repository and most ELO clients. In addition, the ELO Indexserver provides iSearch functionality to all ELO clients.

Any number of ELO Indexservers may be installed for any number of repositories. You will find more information under *ELO server > Optimization > ELO Indexserver load balancing*.

Client applications can connect to the ELO Indexserver either via HTTP or HTTPS via SOAP or a proprietary Indexserver interface.

For more information, refer to the *ELO Indexserver*, *ELO Indexserver programming guide*, and *ELO Indexserver script development* documentation.

ELO Automation Services (ELOas)

ELO Automation Services are used to automate tasks within a repository. ELOas works by processing any number of rulesets. Rulesets are XML-based instructions for a specific type of action that are stored within the *Administration* folder of the repository. You can install any number of ELOas instances for each repository. The process is described in this chapter.

There are two types of rulesets: *interval-controlled* rulesets and *direct* rulesets.

Interval-controlled rulesets are executed automatically in time intervals defined in the ruleset. They do not require user interaction.

Information

These intervals refer to the time between ruleset *starts*. If you create a ruleset that takes a long time to complete, and the interval between ruleset executions is short, this may result in the rule being executed multiple times at the same time.

Common uses of ELOas include:

- Moving entries with certain metadata within the repository
- Automatically performing functions in workflows, such as assigning users
- Notifying users when specific criteria in the repository are met
- Various backup and maintenance tasks

For more information, refer to the *ELO Automation Services* documentation.

ELO Web Forms Services (ELOwf)

ELO Web Forms Services is a web application that handles several tasks, including:

- ELO workflow form components
- ELO apps framework as the basis for:
  - ELO Business Solutions apps
  - ELO Integration Client
  - ELO Workflow Client
  - ELO Teamroom Client
- Running ELO apps such as:
  - ELO Forms 2.0
  - ELO Workspaces
  - ELO Teamspaces
  - ELO Flows activity UI

Refer to the respective documentation for more information on each of these topics.

Run multiple ELOwf instances

ELOwf allows you to run multiple instances. The URLs of the other instances must be passed to each ELOwf instance. This is done by inserting a comma-separated list of URLs in the ELOwf *config.xml* file under the entry `wfInstances`.

For example, the following entry is made in the ELOwf *config.xml* file on serverA for a scenario with three instances (serverA, serverB, serverC):

```
<entry key="wfInstances">http://serverB:9090/wf-Repository, http://serverC:9090/wf-Reposito
```

On serverB:

```
<entry key="wfInstances">http://serverA:9090/wf-Repository, http://serverC:9090/wf-Reposito
```

On serverC:

```
<entry key="wfInstances">http://serverA:9090/wf-Repository, http://serverB:9090/wf-Reposito
```

> **Please note**
>
> The URL of the ELOwf instance is entered in the ELO Indexserver proxy plug-in. Each ELOwf instance then forms a unit with one other ELOix instance. The sessions are distributed upstream for each unit.

ELO feed

The ELO Indexserver plug-in "ELO feed" provides the following pages and information:

- The *Feed* area for the entries
- The *Feed* area in ELO Teamspaces
- The *My ELO* work area with the *Current hashtags* area
- The profile pages and profile images

Refer to the respective documentation for more information on each of these topics.

> **Information**
>
> The following list provides links to the ELO Java Client as an example. The functions are similar in other clients.

ELO Textreader (ELOtr)

ELO Textreader extracts text from documents and saves it in text files. After conversion, the document contents are available to the ELO iSearch module for indexing.

> **Please note**
>
> Starting with ELO 21.4, ELO Textreader (gen. 2) replaces the previous ELO Textreader (ELOtr), ELO Preview Converter (ELOpreview), and ELO OCR Service (ELOocr).
>
> For more information, refer to the *ELO Textreader (gen. 2)* documentation.

ELO OCR

One of the most important aspects of the ELO system is the large range of search functions. The server-side processes supporting these functions consist of the OCR module, ELO Textreader, and ELO iSearch.

ELO OCR is an optional module which can be used with the ELO ECM Suite. It is installed automatically with other ELO server modules.

The ELO OCR Service converts documents into a machine-readable format. This section goes into detail on this function.

The OCR module runs as a server-based process on the repository server. The stored documents are automatically indexed at regular intervals for the ELO iSearch database. Since the process runs on the server, it does not affect the performance of the client applications. Each word within a document is assigned an index value. The index values are structured in such a way to optimize search times for each term.

Please note

Starting with ELO 21.4, ELO Textreader (gen. 2) replaces the previous ELO Textreader (ELOtr), ELO Preview Converter (ELOpreview), and ELO OCR Service (ELOocr).

For more information, refer to the *ELO Textreader (gen. 2)* documentation.

ELO iSearch

An ELO iSearch environment is made up of nodes and shards.

Nodes are the individual instances of the iSearch service. Each repository has one node by default. Multiple nodes may be installed to improve search availability and performance. All iSearch nodes are usually combined within the same cluster.

Shards are the atomic parts of the iSearch index. There is one shard per repository by default. Increasing the number of shards across different iSearch nodes should improve indexing performance.

For more information, refer to the *ELO iSearch* documentation.

ELO XML Importer (ELOim)

The ELO XML Importer is an ELO application used to import documents automatically into an ELO repository based on an XML control file. The ELO XML Importer monitors a specific directory at regular intervals to start an import process.

For more information, refer to the *ELO XML Importer* documentation.

ELO Web Client (ELOweb)

The ELO Web Client allows users to log on to the ELO repository via most common Internet browsers. For more information on using the ELO Web Client, see the corresponding documentation.

Please note

A separate license is required to use the full ELO Web Client functionality. If you install the ELO Web Client without purchasing a license, access will be restricted to devices running *ELO for Mobile Devices*.

For more information, refer to the *ELO Web Client* and *ELO Web Client administration* documentation.

Full vs. FMD Web Client

The ELO Web Client provides two different versions: the web client and the web client for mobile devices.

If you have purchased a license for the ELO Web Client, you can log on to the ELO repository via any Internet browser. You may also access the ELO repository via the ELO for Mobile Devices apps for Android and iOS.

If you have not purchased a license for the ELO Web Client, it will install as an FMD version. This means that you can log on to the ELO repository via the ELO for Mobile Devices apps, but not via a browser.

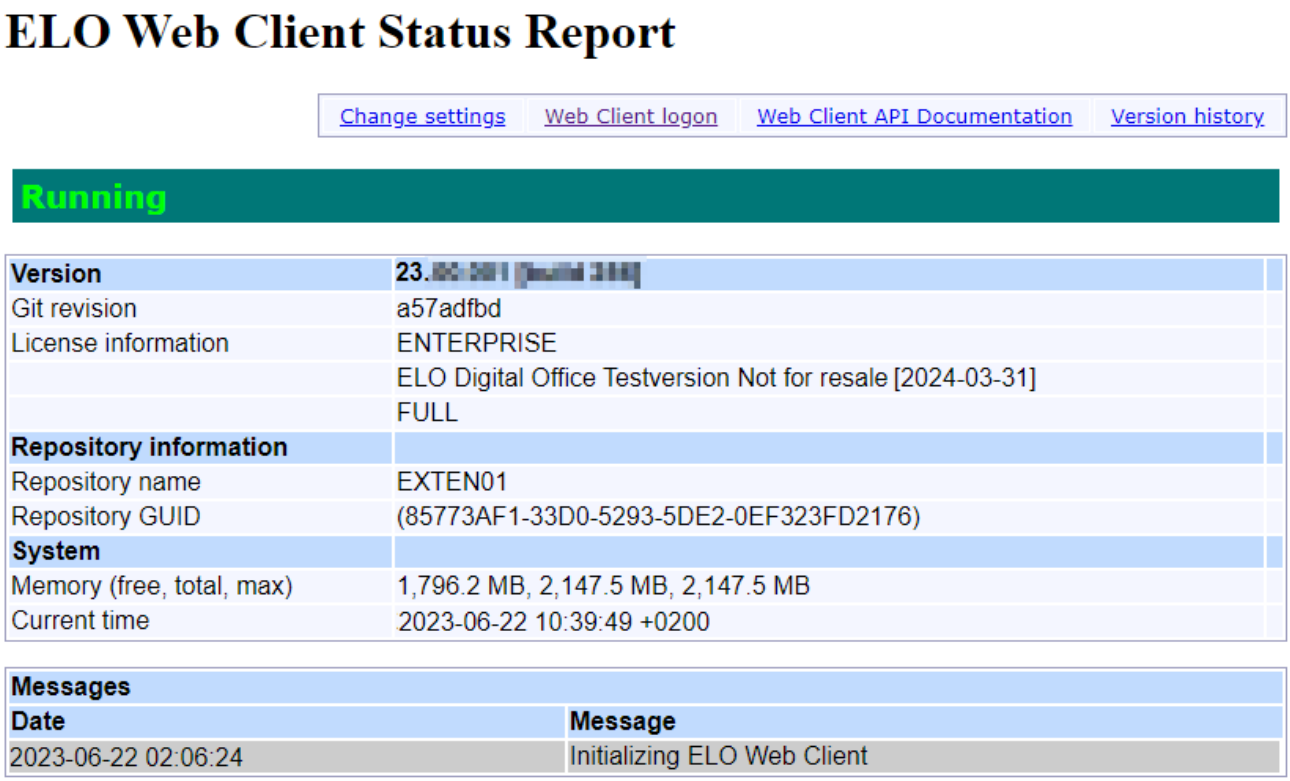
If you install the ELO Web Client and later decide to purchase a full license, you do not need to reinstall the ELO Web Client server application. Instead, change the ELO server license in the ELO Server Setup program or in the *amoptions* table in the ELO Access Manager. Restart the ELO server after changing the license number.

Status page

The default URL to the ELO Web Client is:

`http://<server name>:<port>/web-<repository name>`

Add `/status` to the end of the URL to go to the ELO Web Client status page: To see the complete status page, select *More information*. You have to log on with the administrator account for the ELO Application Server.



ELO Web Client Status Report

Change settings | Web Client logon | Web Client API Documentation | Version history

Running

Version	23.
Git revision	a57adfbd
License information	ENTERPRISE
	ELO Digital Office Testversion Not for resale [2024-03-31]
	FULL
Repository information	
Repository name	EXTEN01
Repository GUID	(85773AF1-33D0-5293-5DE2-0EF323FD2176)
System	
Memory (free, total, max)	1,796.2 MB, 2,147.5 MB, 2,147.5 MB
Current time	2023-06-22 10:39:49 +0200

Messages	
Date	**Message**
2023-06-22 02:06:24	Initializing ELO Web Client

From here, you can access the ELO Web Client settings, the API documentation, and so on.

> **Information**
>
> This status page also indicates whether you have the full version or only the FMD version. If the license information displays *FMD* here, you cannot use the ELO Web Client in the browser.

ELO Administration Console (ELOac)

The ELO Administration Console allows you to perform administrative tasks, such as setting up and managing groups, creating metadata forms, ELOas rulesets, and backup settings, or editing client configurations and so on.

For more information, refer to the *ELO Administration Console* documentation.

ELO XC

ELO XC is integrated in the ELO server. You need to install the ELO XC Workspace to use the functions of this product.

For more information, refer to the *ELO XC* documentation.

ELO Teamroom (ELOtrm)

You can install the *ELO Teamroom Service* application from the ELO Server Setup.

ELO Teamroom (ELOtrm) is designed for collaboration on group projects. An ELO Teamroom contains parts of the ELO repository and can be used by ELO users as well as external project members.

For more information, refer to the *ELO Teamroom* documentation and *ELO Teamroom user documentation*

ELO Smart Link (ELOsl)

You can install the *ELO Smart Link* application from the ELO Server Setup.

ELO Smart Link (ELOsl) is designed for use with SAP. The interface also includes the previous functions of ELO Archive Link for SAP.

> **Information**
>
> We recommend installing ELO Smart Link for SAP on a separate ELO Application Server (Apache Tomcat).

For more information, refer to the *ELO Suite for SAP ArchiveLink® (SAP NetWeaver® & SAP S/4HANA®* documentation under *ELO Smart Link for SAP® ERP*.

ELO Smart Input (ELOsi)

You can install the *ELO Smart Input* application from the ELO Server Setup.

ELO Smart Input analyzes the full text of a document and extracts data from it, such as addresses, sums, or e-mail addresses. Users receive suggestions for automatically detected data, which they can apply to the metadata.

For more information, refer to the *ELO Smart Input* documentation.

ELO Rest Service

> **Warning**
>
> The ELO REST API Service is DEPRECATED.
>
> The ELO Indexserver has provided a REST interface since ELO 20.
>
> We recommend using the ELO Indexserver client library for programming in Java and .NET.
>
> Other programming platforms can address the ELO Indexserver REST interface.