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

ELO SAP® OLE call

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Introduction

This documentation describes options for configuring documents or their folders filed in ELO to be shown from within an SAP transaction (e.g. attachment list).

The ELO Java Client provides a COM interface for direct communication with the SAP GUI. The following describes installation, configuration, and SAP customizing in order to be able to make an ELO Java Client call via the SAP system with OLE.

This implementation has been released for the following ELO Java Client versions:

- 10.09, 11.03, as well as all ELO 12 and ELO 20 versions
- ELO Business Solutions Common 1.04.000 and higher

Basics

Displaying a document in the ELO Java Client requires the standard ArchiveLink tables *TOA01*, *TOA02*, *TOA03*, or *TOAHR* to contain an entry for the document in the SAP system.

In ELO, the *SAPPATH* field in the metadata form is used for saving for the linked document.

SAPPATH schema: `<Repository>/<Archive-Doc-Id>/<Container>`

This *SAPPATH* contains all information from the SAP system and the link tables:

- <Repository>: SAP content repository, e.g. *E1*
- <Archive-Doc-ID>: SAP doc ID, e.g. *2FC6BF4CB7D98B6BE1000000253D3A73*
- <Container>: *data* or *document* depending on customizing

To call the ELO Java Client, ELO Business Solutions Common package 1.04 or higher also has to be installed.

SAP customizing

Application Maintenance

To call the ELO Java Client, you have to configure a custom application for ArchiveLink. Open Application Maintenance with transaction *OAA4.*
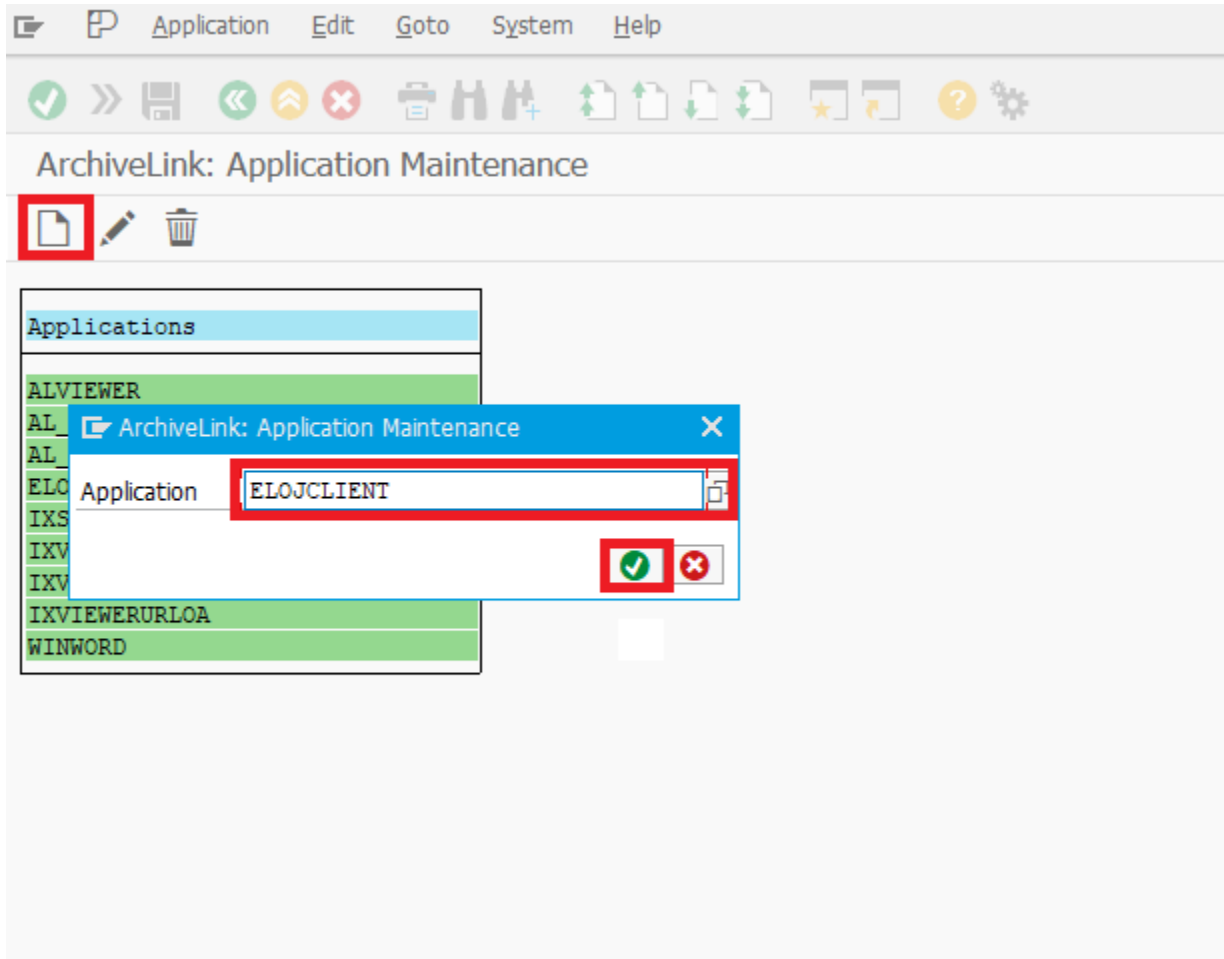
1. Create a new application using the document icon here.

   The administrator is responsible for naming the application. We recommend naming the application *ELOJCLIENT*.

   After you create the application, it appears in the list of available applications.

2. Select the new application to customize its settings. Double-click to open the Application Maintenance area.

Function	Status	
Display Stored Document	Maintained	^
Retrieval on Frontend	Not maintained	v
Display Local File	Not maintained	
Archive from Frontend	Not maintained	
Store File on Frontend	Not maintained	
Close Window	Not maintained	

3. In the maintenance area, double-click and select the *Display Stored Document* entry.

```
SAP                                                                        X

Application    ELO.ENTERPRISE         🗗        Display Stored Document

M  S  G   Command
◉ ○ ○    runScriptFunction eloComViewDocFromSap,@URL
◉ ○ ○
◉ ○ ○
◉ ○ ○
◉ ○ ○
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        ☑ Release generated object after call

                                                            Back
```

The script and command area will now open.

4.

At this point, this system requires a physical application name. The administrator is once again responsible for naming the application. In our example, the application was named after the ELO system.

5. Enter the command in the line below. Select the object method *M*.

Application name: `ELO.ENTERPRISE`

Object methods: M

Command: `runScriptFunction eloComViewDocFromSap,@URL`

> **Please note**
>
> The *Release generated object after call* check box must be enabled.

1. Exit the Application Maintenance area by selecting the *Back* button.

2. Save your settings by selecting the floppy disk icon on the toolbar or by pressing CTRL+S.

   The status of the *Display Stored Document* function is shown as `Maintained`.
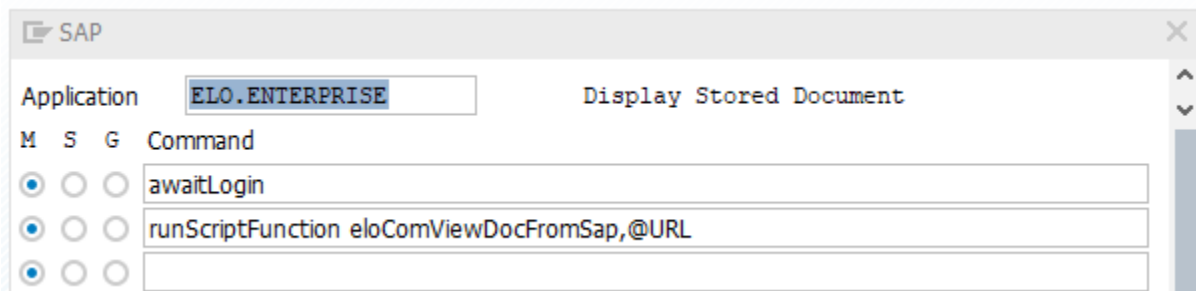
3. You can now exit the Application Maintenance area.

Command – awaitLogin

> **Information**
>
> The *awaitLogin* command is available in ELO Java Client versions 10.09, 11.03, and higher as well as all ELO 12 and ELO 20 versions.

If a user double-clicks and selects a document in the attachment list before starting the ELO Java Client, the ELO Java Client logon dialog box is shown. Once the user has logged on to ELO, the default start screen is displayed in the ELO Java Client, and not the selected document. This is because ELO loses the information for opening the document when starting the logon process. After logging on, the user has to double-click the document in the attachment list again. To prevent this, you can add the command *awaitLogin*. Add this to the *M* object method in the Application Maintenance.
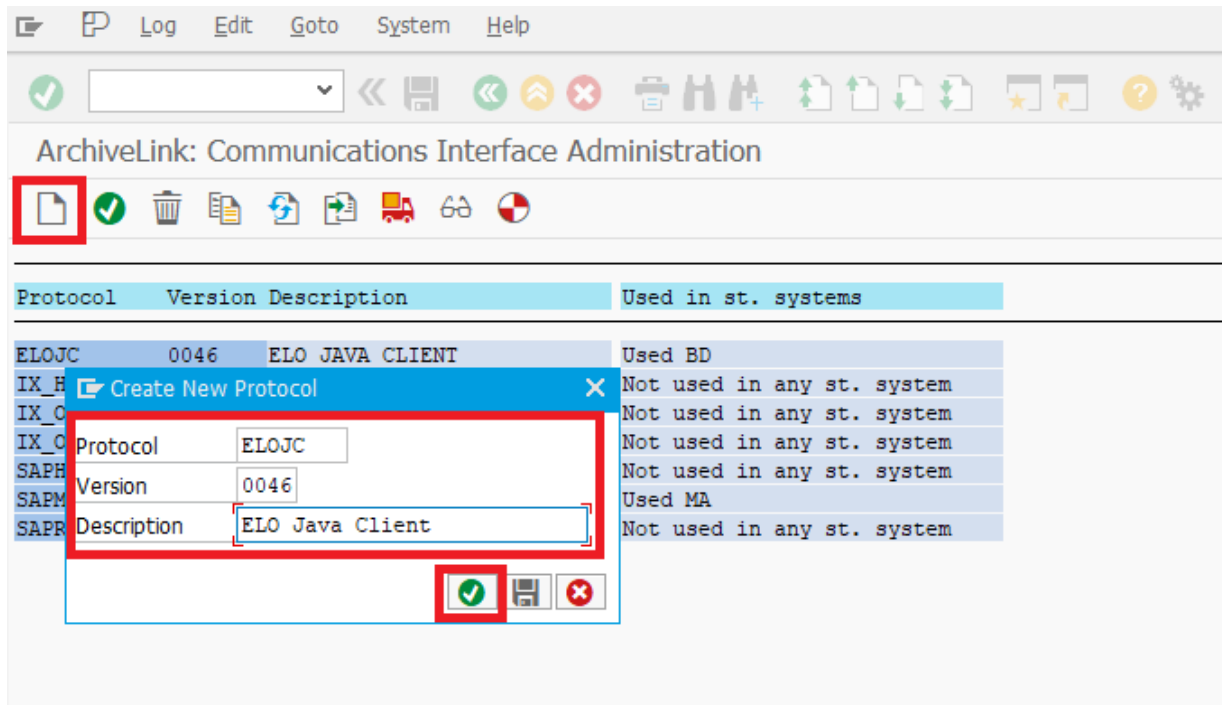
> **Please note**
>
> If *awaitLogin* is added, the SAP frontend client *SAP GUI* waits for the user to log on to the ELO Java Client, blocking the SAP session.

Creating protocols

The next step in customizing SAP is to create a custom protocol.

1. Open transaction *OAA3 – ArchiveLink: Communications Interface Administration*.

2. Click the document icon to create a new protocol for ELO.

   Protocol: ELOJC

   Version: 0046 (must match the OAC0 entry)

   Description: ELO Java Client

   In the *Version* field, enter the version of the *SAP ArchiveLink* communications protocol.

   If you do not know it, check the version in the transaction *OAC0* and the respective content repository.

3. Confirm your input by selecting the button with the green check mark and save your settings.

Maintaining protocols

ArchiveLink: Communications Interface Administration

Protocol	Version	Description	Used in st. systems
ELOJC	0046	ELO JAVA CLIENT	Used BD
IX_HTTP2	0045	IXOS HTTP-PROTOCOL VER. 2.2	Not used in any st. system
IX_OLEN1	0031	IXOS OLE-PROTOCOL VER. 1.3	Not used in any st. system
IX_OLEU1	0045	IXOS OLE_URL PROTOCOL V.1.1	Not used in any st. system
SAPHTTP	0045	SAPHTTP 0045	Not used in any st. system
SAPMA	0046	PROTOKOLL FÜR CREP MA	Used MA
SAPRFC	0031	SAPRFC	Not used in any st. system

The new protocol now appears in the list of available protocols.

1. To maintain the protocol, double-click the entry *ELOJC*.

ArchiveLink Protocols: Overview of Protocol

Application maintenance

ELOJC	0046 ELO JAVA CLIENT
Last changed by	on 04.06.2018 at 12:00:57

Functions

Display Stored Document

    Retrieval Frontend

    Display Local File

Archive from frontend

    Store File on Frontend

Close Window

The application maintenance for the *ELOJC* protocol opens.

2. Double-click the *Display Stored Document* function.

The list of document types for the *Display Stored Document* function opens.
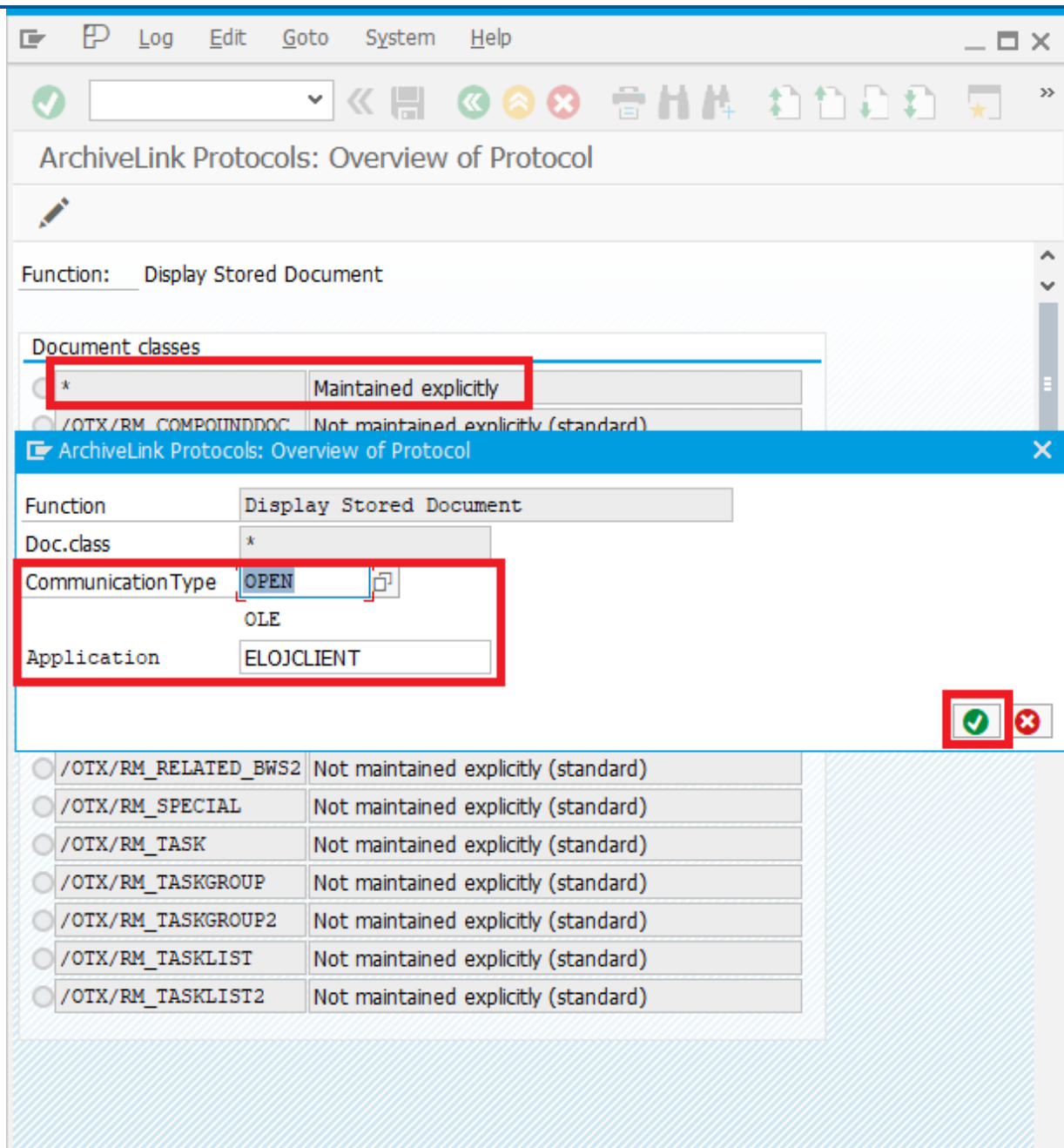
3. To open the ELO Java Client for all document types, select the top entry with *. It currently has the status `Not maintained explicitly (standard)`. Double-click to open the maintenance window for all document types.

4. In the *Communication Type* field, enter `OPEN`.

5. In the *Application* field, enter the new *ELOJCLIENT* application you created.

6. Confirm your input by clicking the button with the green checkmark and save your settings. The document type * is now shown with the status *Maintained explicitly*.

Protocol – assigning a content repository

As the final step in customizing ArchiveLink, now assign the new protocol to the content repository linked to ELO.

1. Switch to transaction *OAC0 – Display Content Repository* and double-click the relevant content repository to select it.

2. Now, click the icon to switch to change mode for the transaction and enter the new protocol *ELOJC* to the *Protocol* field.

3. Save your input with the *Save* button or by pressing CTRL+S.

ELO – Installation and implementation

The basis for technical implementation of the scripts is the ELO Business Solutions Common 1.04 package (or higher). If this has not been installed in your ELO system, install it now. This package provides the class framework, namespaces, and architectural concepts for services, actions, and function modules.

1. To start installation, log on to the ELO Java Client as Administrator.

2. You can install the individual packages from the ELO SupportWeb with a single click.

   Alternative: You can download the package containing the *.eloinst* files on the ELO SupportWeb.

3. Then, install the *erp.sap.comaccess* package.

   You will now find the configuration and scripts for the SAP OLE call in the *Business Solutions* folder in the ELO repository.

How the script works

The implemented ELO script searches for a document with data from SAP (content repository, document ID, and container) as an entry in the *SAPPATH* field via ELO Indexserver call. The search string follows this pattern: `<contRep>/<docID>/data`.

If the script finds hits for this search string, the document is shown depending on the number of hits and filing location.

If there is exactly one hit, the document is shown in the folder structure. If multiple hits are found or one document is "only" located in the chaos folder, the ELO Java Client search opens and the document(s) is (are) shown there.

If there are no hits with *..../data*, the script performs a new search with the container *..../data1*. This method corresponds to the ArchiveLink protocol method for the *get* method call.

If this search is unsuccessful, another search is run with *..../*.*

Function test – script without SAP

To test the function of the script without direct SAP access, you can use the attached *testView-woSap.vbs* file.

Assign this script the *content repository* and *document ID* for a document filed to your ELO that contains this information in the *SAPPATH*, and run the script.

Creating links from the ELO Intray

With this function, you can file documents in the ELO Intray from within an SAP transaction and link them to the corresponding SAP business object.

> **Information**
>
> This function is available in ELO Java Client versions 10.07, 11.02, and higher as well as all ELO 12 and ELO 20 versions.

1. To configure this, go to transaction *OAA4* in your SAP system and select the *ELOJCLIENT* entry you created before (see chapter Application Maintenance).

Function	Status	
Display Stored Document	Maintained	︿
Retrieval on Frontend	Not maintained	﹀
Display Local File	Not maintained	
Archive from Frontend	Maintained	
Store File on Frontend	Not maintained	
Close Window	Not maintained	

A menu opens.

2. Select the item *Archive from Frontend*.

3.

Next, create the following entries Application Maintenance area. Note the correct object methods (M – S – G).

Application name: `ELO.ENTERPRISE`

Object methods Command

M	`runScriptFunctionEx eloComCheckDti,@DTI`
G	`@DTI=getLastScriptResult`
M	`runScriptFunctionEx eloComGetStoreError,@UID`
G	`@ETX=getLastScriptResult`
G	`@EID=getLastScriptResult`
M	`runScriptFunctionEx eloComStoreDoc,@AID`
G	`@DID=getLastScriptResult`
M	`runScriptFunctionEx eloComGetStoreError,@UID`
G	`@ETX=getLastScriptResult`
G	`@EID=getLastScriptResult`

Please note

The *Release generated object after call* check box must be enabled.

1. Exit the Application Maintenance area by selecting *Back*.

2. Save your settings by selecting the the floppy disk icon on the toolbar or by pressing CTRL+S.

   The status of the *Archive from Frontend* function is shown as `Maintained`.

3. You can now exit the Application Maintenance area.

The permitted file format from the ELO Intray depends on the file type selected in SAP as well as the linked document type. It can be maintained in transaction *OAC2*.

Please note

If a document with document type *FAX* or *TIF* is maintained, only the file extensions *TIF* and *TIFF* are accepted for filing in ELO. For all other document types, the extension must match that of the selected document type.

Information and tips

This chapter contains additional useful information. You will learn how to disable security information in the SAP GUI.

Security information in the SAP GUI
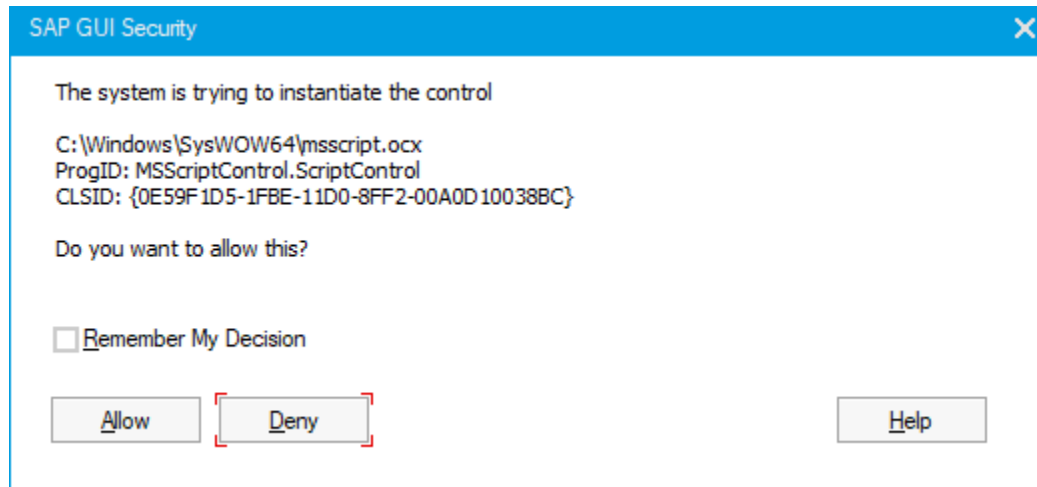
When opening a document using the ELO Java Client from in SAP, a security prompt may appear in the SAP GUI, depending on how the local SAP GUI is configured.

1. By selecting the button *Allow*, you enable the function to upload a document.
2. Check the box next to *Remember My Decision* to prevent the message from appearing again.

However, the security prompt is transaction-dependent in this case: If the user opens a document from within another transaction, the security prompt will appear again. The local system administrator can choose between two SAP GUI settings to disable the message.
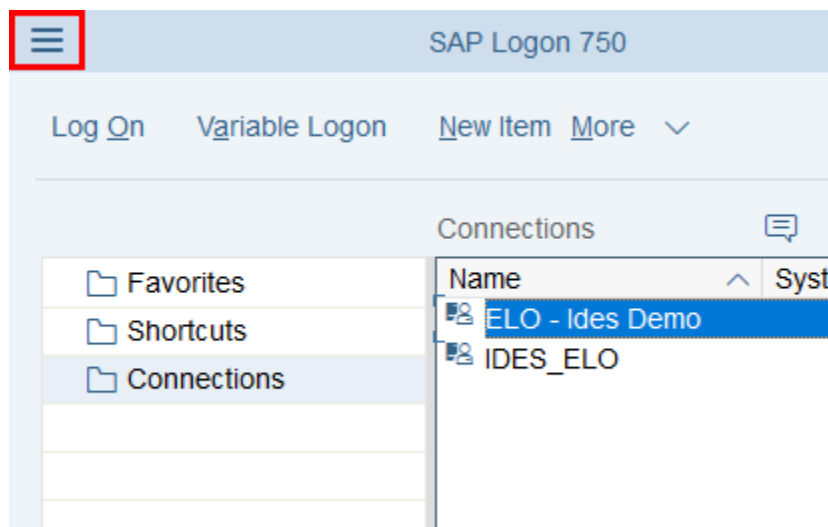
1. Open the *Options* menu item for your SAP logon menu by clicking the menu icon.
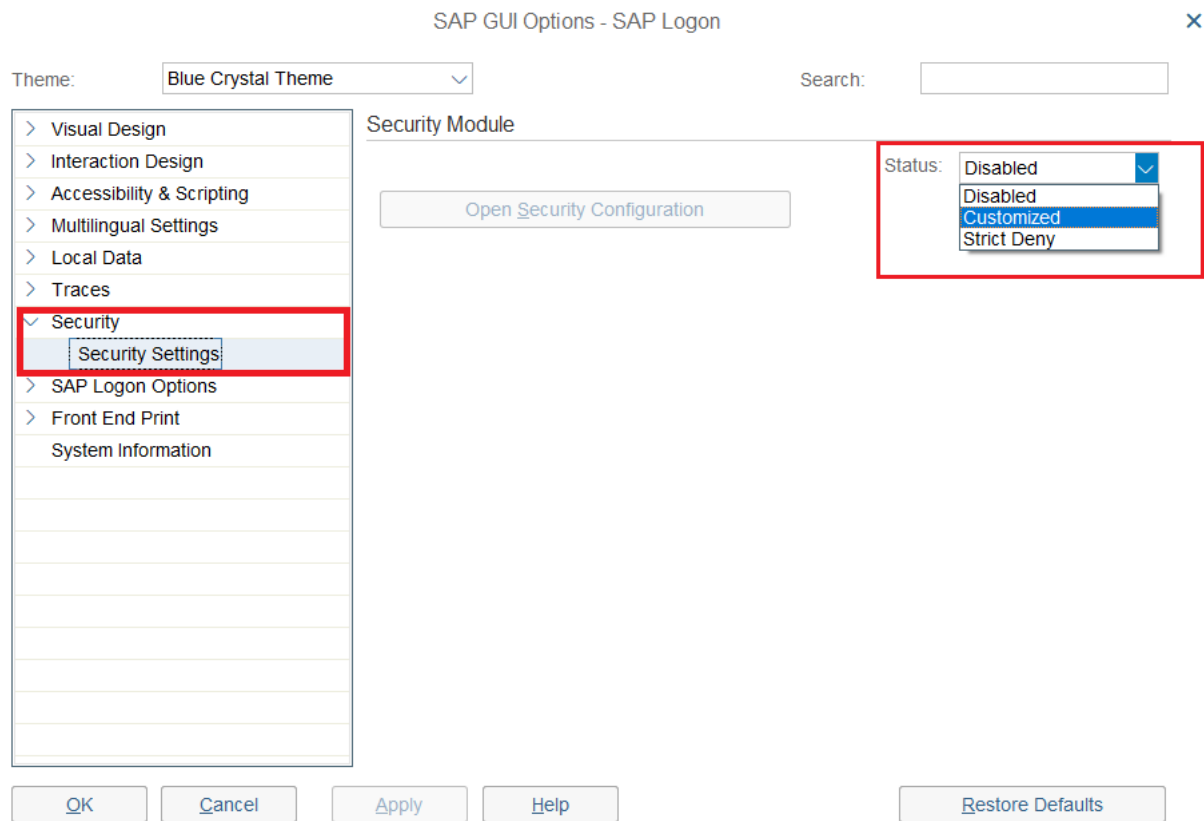
2. On the left side of the open dialog box, select *Security > Security Settings*. Now, you can choose one of the three status options.

Information

Status option *Strict Deny* blocks use of ELO functions.

Security module – 'Disabled' status

If you set the status to *Disabled*, no security check is performed when calling the ELO Java Client. The security prompt is therefore also disabled and no longer shown to the user.

Security module – 'Customized' status

Once you have set the status to *Customized*, you can adjust other settings by selecting the *Open Security Configuration* button.

Prio... ∧	Object	Type	Access Types	Action	St
▷ 724	/H/10.49.110.187/S/3200	Command Li	Execute	Cont...	Enabl
🌐 725	elo.enterprise.1	Control	Execute	Cont...	Enabl
🌐 726	elo.enterprise.1	Control	Execute	Cont...	Enabl

If you set *Remember my Decision* to disable the previous security prompt, the security configuration will already contain entries.

The *elo.enterprise.1* entry stands for calling the ELO Java Client within a transaction in SAP. This entry is transaction-independent.

1. Double-click it to see the entry details.

Rule Properties ✕

Origin: User
Type: Control
Object: elo.enterprise.1
Action: Context-Dependent   Access Types: Context-Dependent
☑ Rule is active

Security Rule Context

System	Network	Cli	Transaction	Screen Na	Screen Num	Access Types	Act	State
JK1		800	*	*	*	Execute	Allow	Enabled

2. To open/call the ELO Java Client for all transactions, enter an asterisk (*) in place of the values specified in the *Transaction*, *Screen Na*, and *Screen Num* table fields.

Information

The settings made here depend on the system and client. If needed, they can also be replaced with an asterisk (*).

If these two settings have been made, the security prompt is no longer shown to the SAP GUI user. Deleting these entries restores the state on initial installation.

Attachments

You will find the *OLE SAP OLE call* zip file in the ELO SupportWeb under [ELO Smart Link for SAP® ERP](#).