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

ELO Smart Link for SAP® ERP
configuration guide

Table of contents

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Introduction

This documentation describes how to configure the ELO Smart Link for SAP® ERP interface, referred to as ELO Smart Link in the following. This interface also includes the previous functions of ELO Archive Link for SAP. In detail, ELO Smart Link contains the following functions:

- Filing documents in SAP to ELO
- Barcode upload
- Configuration interface
- Basic functions for ELO Connectivity Pack for SAP® ERP

This configuration guide is intended for the following ELOprofessional and ELOenterprise versions:

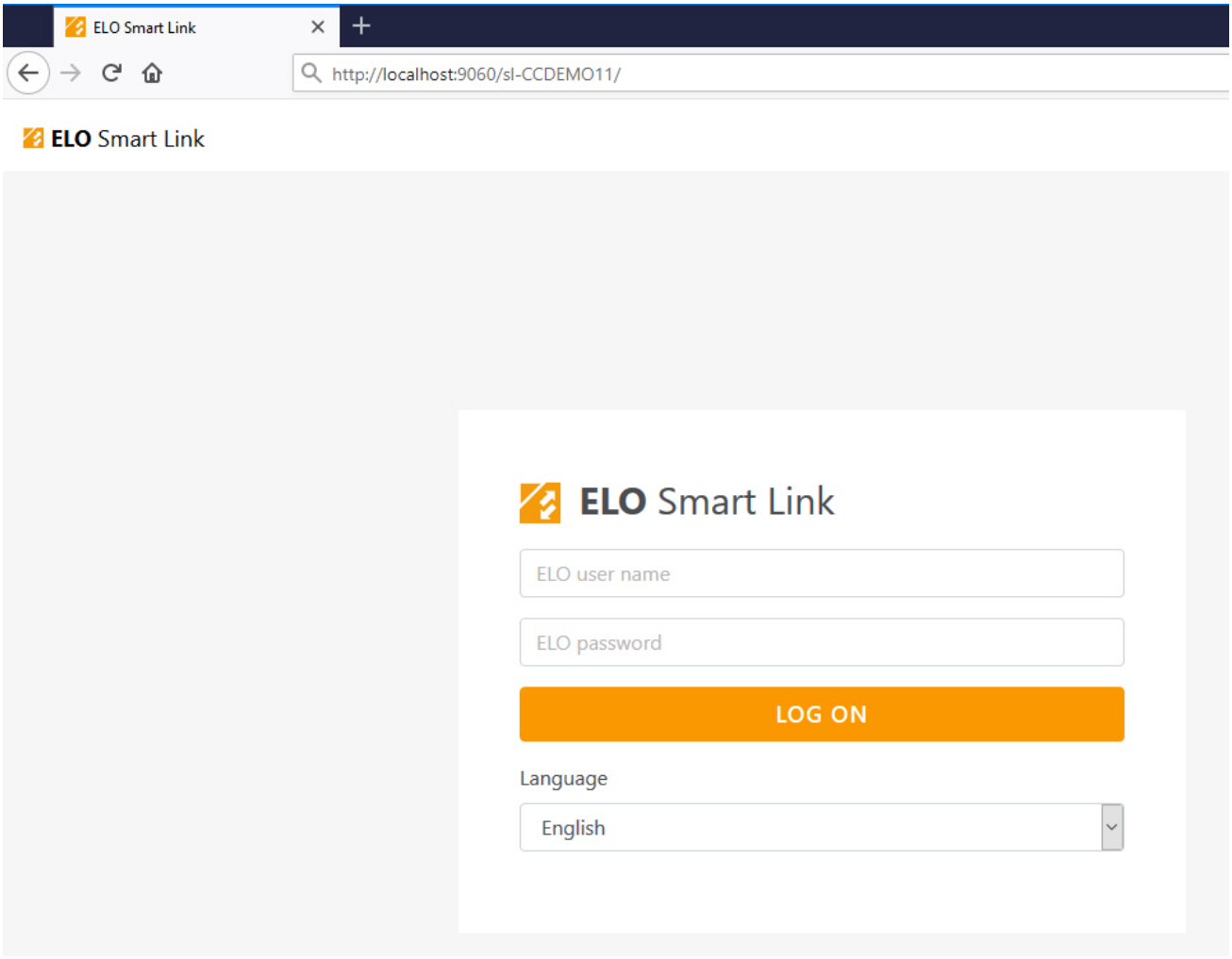
- ELOprofessional and ELOenterprise version 10.02.000 and higher

Basics

You must have already installed an ELO server (ELOprofessional or ELOenterprise) and an ELO Smart Link component. Refer to the ELO Smart Link installation guide.

ELO Smart Link configuration

Logon via the web interface



1. Open a browser and call the ELO Smart Link URL. Use the name created in the configuration files during installation.

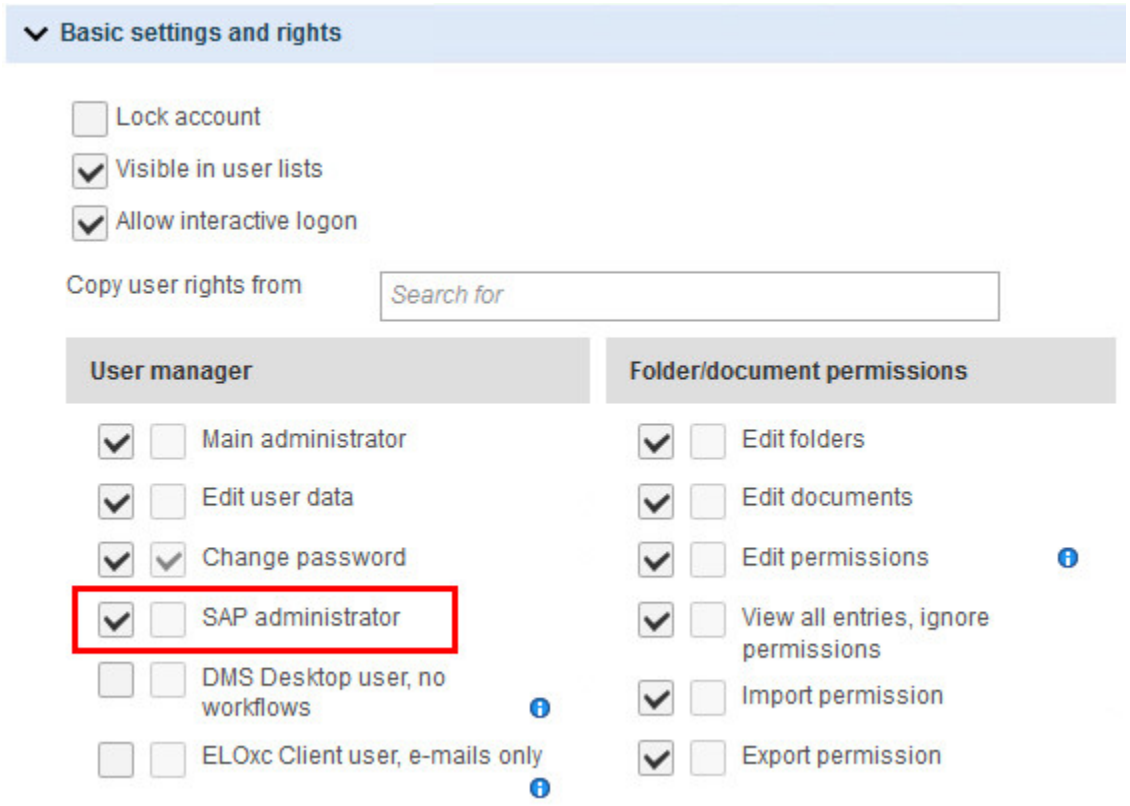
To configure the interface, we recommend using the current version of one of the following browsers:

- Firefox
- Google Chrome

In our example, the URL is as follows:

```
http://localhost:9060/sl-CCDEMO11/
```

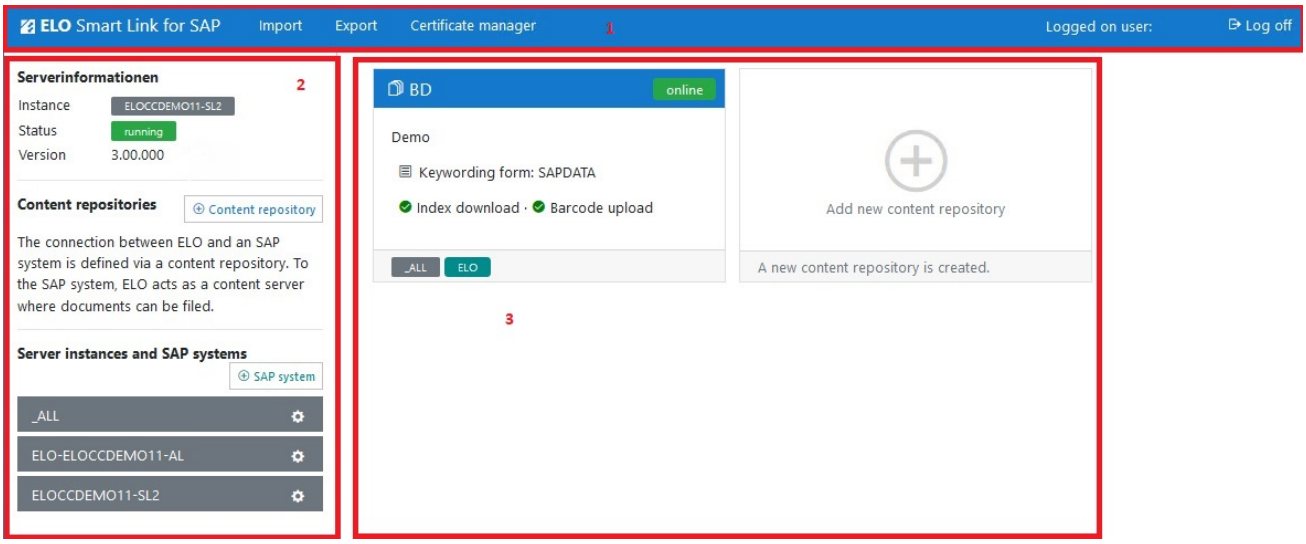
User right



Only users with the corresponding permissions in the ELO user manager can log on to the ELO Smart Link web interface. This requires the *SAP administrator* user right in the ELO Administration Console.

ELO Smart Link configuration start screen

After you successfully log on to the web interface, the ELO Smart Link start screen opens. The web interface is divided into different configuration areas.



1 Main toolbar: This contains several functions of the ELO Smart Link interface, specifically for importing and exporting configuration files as well as the certificate manager. You also see the account you are logged on with. Selecting the *Log off* button logs you out of ELO Smart Link.

2 Status bar: This bar is located on the left. It provides information on the status of the ELO Smart Link interface, the ELO Smart Link instance name, and the version currently in use.

3 Configuration area: You will find more details on configured content repositories here.

Create new configuration

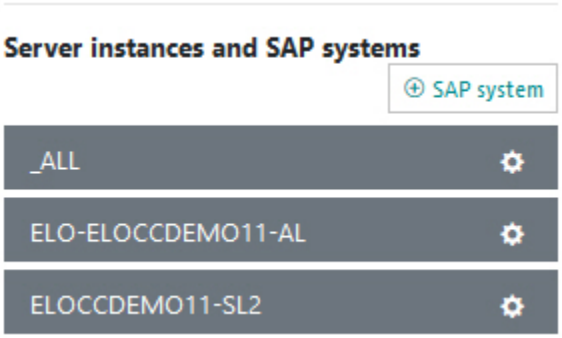
Instances

> **Information**
>
> Note that the ELO Smart Link web interface only shows instances if they are configured for the same repository. Otherwise, log on separately for each ELO Smart Link instance to perform configuration.

The ELO Smart Link instances are created by the installation wizard. The *_ALL* instance refers to the default instance. This is always supplied.

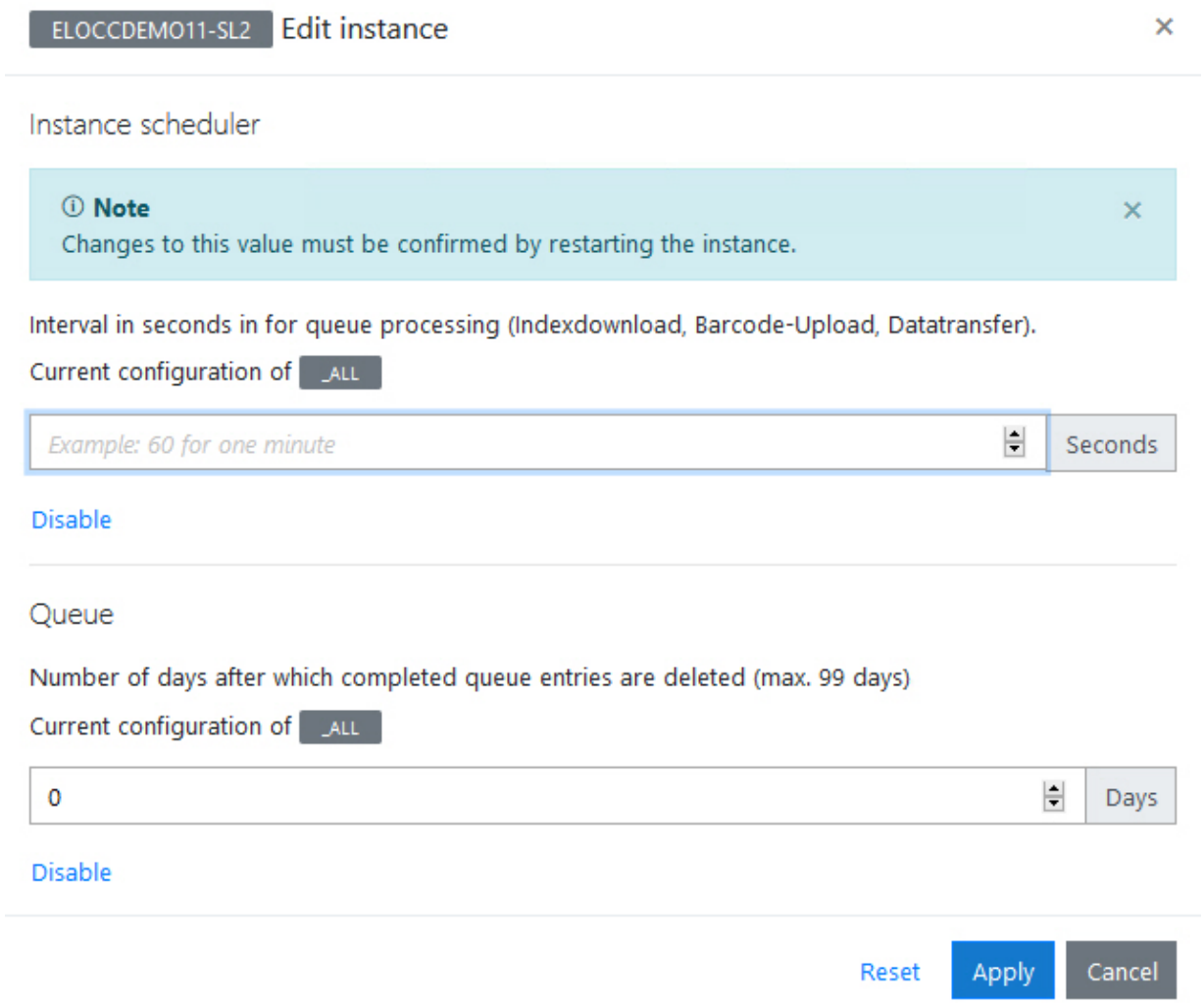
If a content repository is assigned to the *_ALL* instance, you can choose what instance the content repository should run on in the SAP configuration (transaction *OAC0*) (via the URL (server/port/path). As the *_ALL* name indicates, all ELO Smart Link instances visible in the web interface are possible.

The instance name *ELOCCDEMO11-SL2* used in this example was defined in the `<entry key="instancename">` parameter of the *config.xml* file during installation.

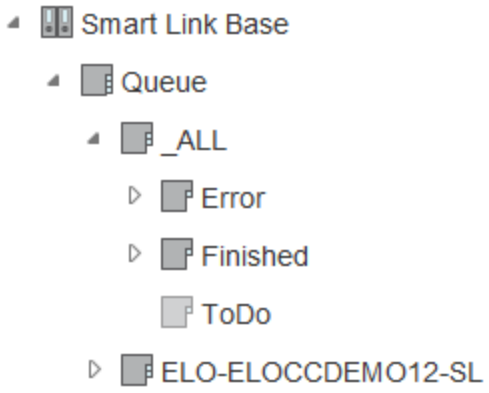


1. Selecting the gear icon opens the configuration for the instance.

> **Information**
>
> Changes to these values must be confirmed by restarting the Windows service for the instance.



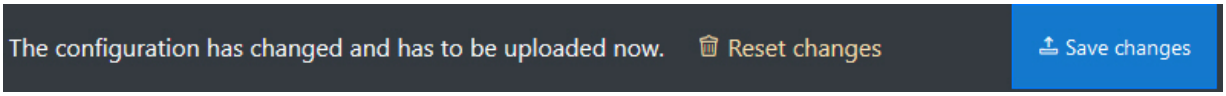
2. In the *Instance scheduler*, you can maintain two parameters.
    - The first parameter specifies the interval for processing the queue in seconds. This serves as a timer for processing individual jobs, such as index downloads, barcode uploads, and data transfers.
    - The second parameter *Queue* defines the working directory of ELO Smart Link for SAP and is created in the Administration folder of the ELO repository on installation (Smart Link Base). Here, individual processes are stored and logged in the form of a queue.



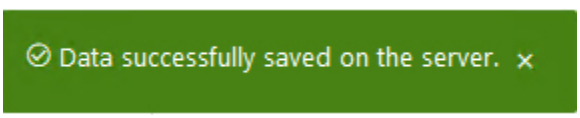
- Besides index download and barcode upload, the queue entries of the *Function module mapping* from ELO Connectivity Pack for SAP® ERP – Datatransfer are also filed here in JSON format (depending on the configuration – queue). Depending on the status (*ToDo*, *Error*, and *Finished*), it may be necessary for a system administrator to check this area.
- The parameter to be configured indicates the number of days after which completed entries (in the *Finished* folder) are marked for deletion. The maximum value is 99 days. The value *0 days* disables the function to mark objects for deletion for the *_ALL* instance. If an instance is defined (example *<ELOCCDEMO11-SL2>*), the value *0* inherits the settings of the *ALL* instance. The value *-1* disables the function. Note that one entry is written per process, meaning space is used in the ELO repository. We recommend configuring this parameter to ensure logging does not take up too much space. The ELO administrator can delete log data sets marked for deletion permanently.
- Click *Disable* to disable these functions. Please note here as well that in the *_ALL* instance, this function sets the value to *0* for all instances without an explicit configuration, thus disabling the function. For explicit instances, the value is set to *-1*, disabling processing for the selected instance.
- The *Apply global configuration* function applies the settings from your *_ALL* instance.
- The *Reset* function allows you to delete all configured value and configure the instance anew.

3. Confirm the configuration with the *Apply* button.

   In the footer of the web interface, you will see a note regarding changes to the configuration.



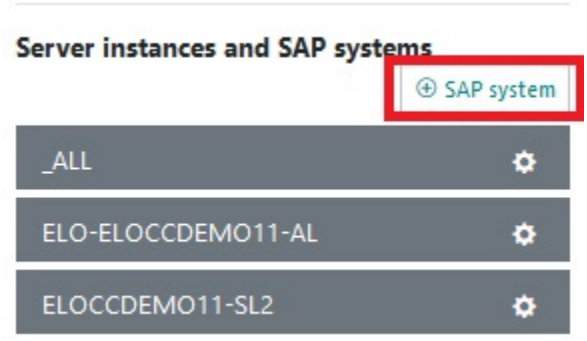
4. Confirm the changes with the *Save changes* button.



If the connection is successful, you will see a corresponding pop-up message.

SAP systems

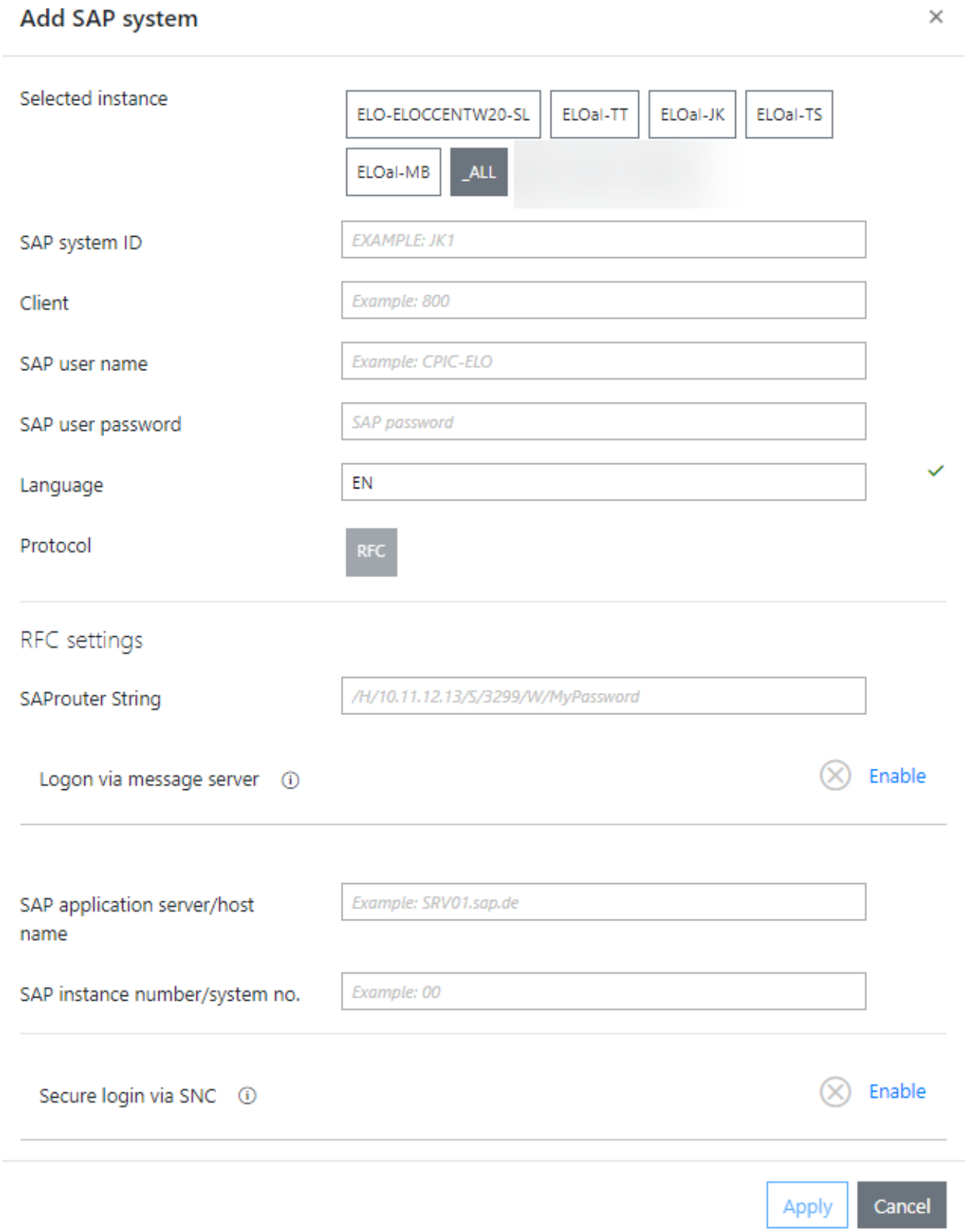
In the next configuration step, you add the SAP system.



1. Use the *Add SAP system* button for this in the status bar on the left of the web interface.

   The *Add SAP system* dialog box opens.

2. Select the ELO Smart Link instance you want to link to the SAP system.



3. Then, complete the additional mandatory fields according to the example. Use the *_ALL* instance if you want the SAP system to apply to all instances. Other possible parameters are described within this documentation.

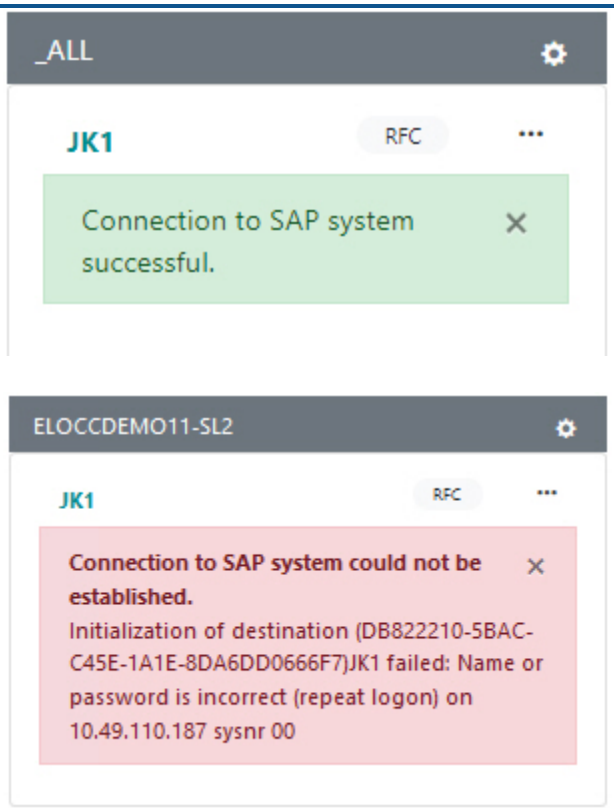
Parameter	Description	Example value
Selected instance	Select the instance you want to configure the SAP system on.	*_ALL*
SAP system ID	The name of the SAP system. This is a unique value and consists of at least 3 characters.	`TB1`
Client	SAP client to be connected to.	`900`
SAP user name	SAP system user for establishing a connection with the SAP system (system or service user)	`CPIC-ELO`
SAP user password	Password of the configured user for establishing a connection to the SAP system	`Password`
Language	Always enter a language so that data can be transferred in the localized language, for example in case of an index download. The language code must be entered according to ISO-639-1 (example: `DE`, `EN`, `FR`).	`EN`
SAP application server/host name	IP address or FQDN of the SAP system for RFC communication	`SAPCCDEMO` or `10.49.110.187`
SAP instance number/system no.	SAP instance number for RFC communication with the application server	`00`

4. Confirm the configuration by selecting the *Apply* button.

5. Upload the changes/the new SAP system by selecting the *Save changes* button.

   The system will provide feedback.

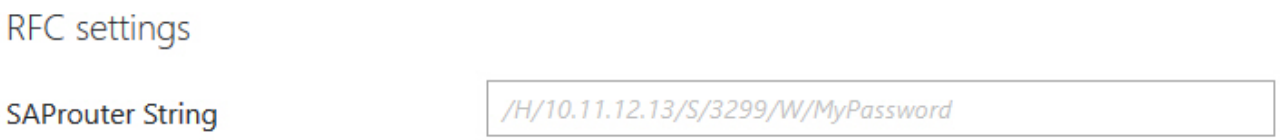
6. Check whether the SAP system has been added to your desired ELO Smart Link instance and perform a connection test using *Test SAP connection*.



If the connection is successful, you will see a corresponding pop-up message.

If the connection test is successful, you can begin configuring the content repositories.

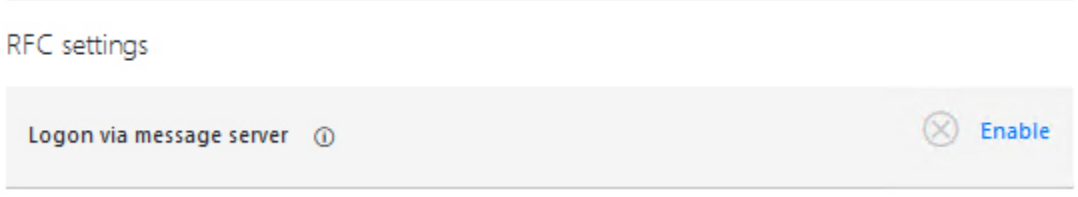
SAP systems when using an SAProuter string



The SAP system landscape may only be available through an SAProuter string. A route string describes a connection between two hosts through one or more SAProuter instances. Each of these SAProuter instances checks whether the connection between the predecessor and the successor is permitted based on the route permission table and in this case it establishes the connection.

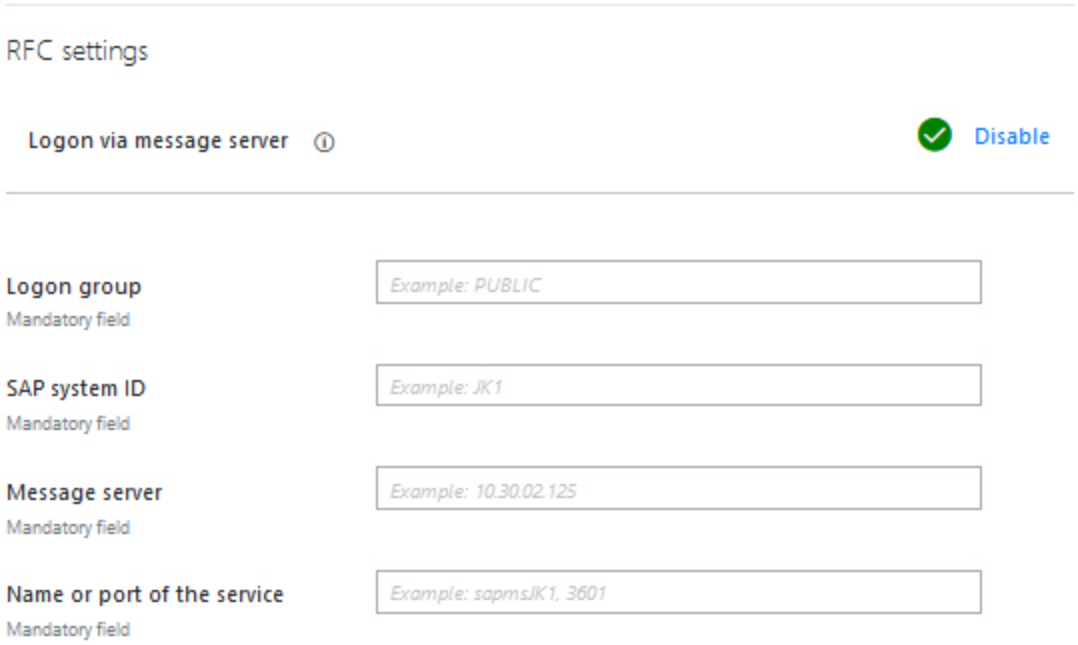
SAP systems when using a message server

To load-balance SAP systems, customer installations may have a message server.



1.

To connect ELO Smart Link to a message server, enable the option *Logon via message server*.



2. If this function is enabled, establishing a connection between ELO Smart Link and the SAP message server requires additional configurations.

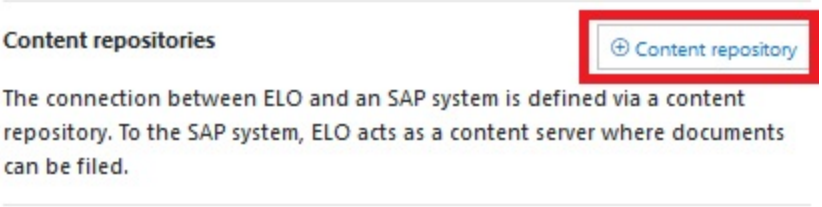
Parameter	Description	Example value
Logon group	Logon group of the SAP system	`PUBLIC`
SAP system ID	SAP system ID of the message server group	`JK1`
Message server	Message server host name or IP address	`10.49.110.187`
Name or port of the service	The name or port used by the message server service	`sapmsJK1` or `3601`

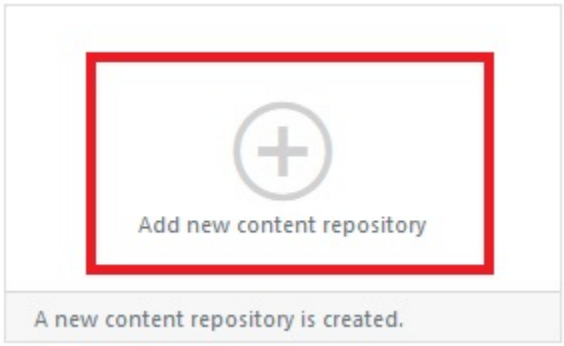
Secure login via SNC

You can learn how to set up secure communication for RFC using SNC in the Secure login via SNC chapter.

Content repository

The connection between ELO and an SAP system is established via a content repository. To the SAP system, ELO acts as a content server where documents can be filed.





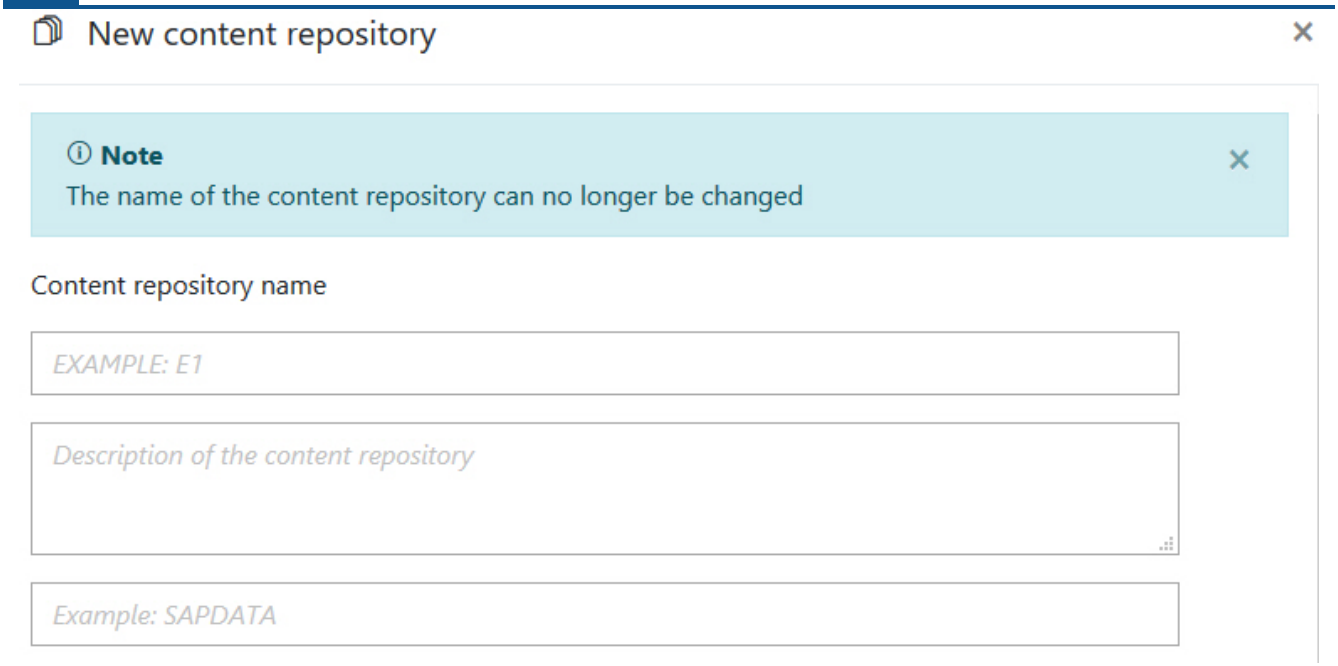
1. Create a new content repository with one of the following functions.

Please note

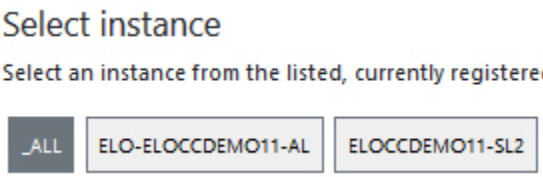
The name of the content repository can no longer be changed. In this case, you have to create a new content repository and delete the incorrect one.

Also note that the name of the content repository you want to connect must be identical to the name of the content repository in SAP (transaction *OAC0*).

From the point of view of the SAP system, a document can be uniquely identified based on a key in the content repository as well as the SAP ArchiveLink document ID. It is therefore important that you avoid using identical content repositories in different SAP systems.



1. In the first input field, enter the name of the content repository. Use the entry configured in SAP (transaction *OAC0*). The content repository name always consists of two characters. Note the capitalization rules, e.g. `E1` or `EL`.
2. The second input field is for describing the content repository. Enter a descriptive text corresponding to your configuration here. This can match the descriptive text from the SAP content repository (e.g. `EL0 document management`).
3. In the third field, enter the metadata form to be assigned to an object when filed to ELO. The *SAPDATA* metadata form can be configured/created as a default value in ELO.



4. Click an instance to select it. It will then be highlighted in dark gray.

5. In the next step, select the functions required for this content repository by *enabling* them.
   -

The *Index download* function determines possible metadata for a document from SAP and provides it in ELO for the filed document in the corresponding metadata form.

Information

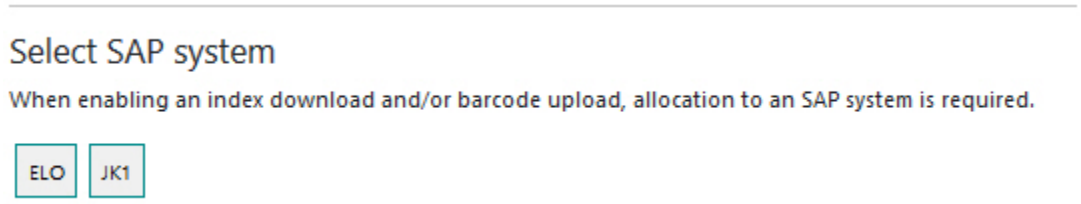
These functions require a valid license key for the ELO Connectivity Pack for SAP® ERP product. You should also note that this requires additional installations and configurations. You will find more information on ELO Connectivity Pack for SAP® ERP on the ELO SupportWeb under *Integrations > ELO for SAP® ERP > ELO Suite for SAP ArchiveLink®*.

- The *Barcode upload* function links scanned paper document and SAP objects via a barcode. You can find more information on this in the Barcode upload section.

Information

The *Barcode upload* function is part of ELO Smart Link and is therefore included with the respective license.

If you need and use index download in the project, enable the function and configure the RFC function from SAP here. The ELO default RFC function is: */ELO/KEY_EXPORT*. For more information, refer to the ELO Connectivity Pack for SAP® ERP – Indexdownload documentation.

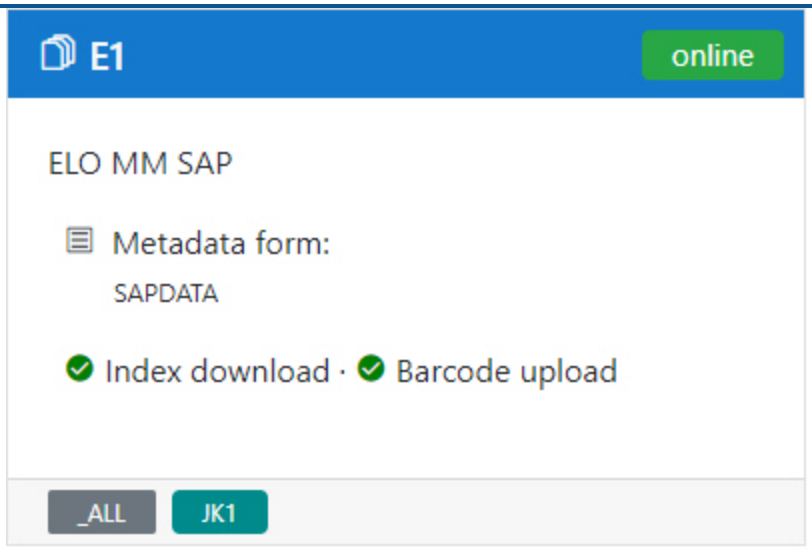


1. Finally, select the SAP system where the content repository is configured. When using index download or barcode upload, you must select an SAP system.

Please note

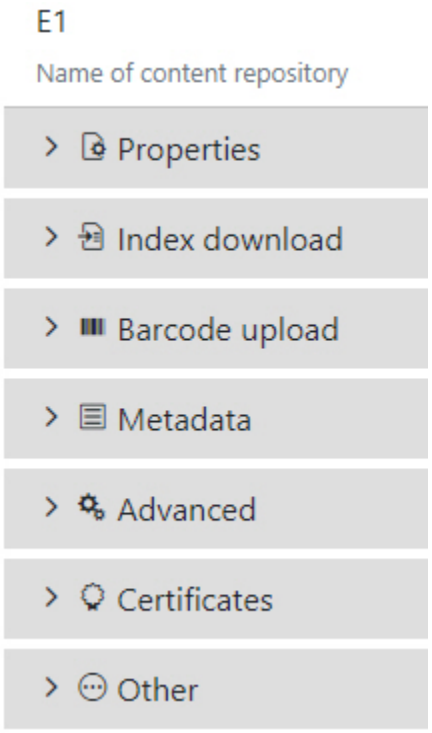
Only one SAP system, configured in the previously selected instance (defined instance or "_ALL"), can be allocated.

1. Confirm your configuration with *OK* and save the settings in the footer of the next dialog box.



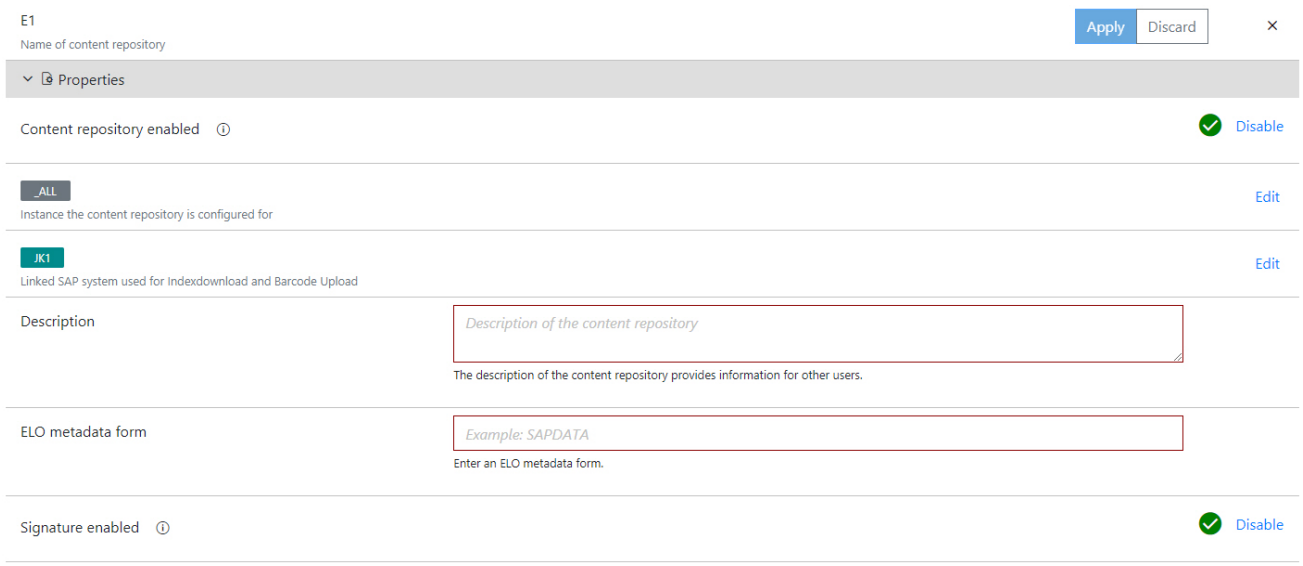
In the ELO Smart Link web interface, you now see your content repository with the parameters you configured.

The content repository has now been created and can be used.



2. Click the content repository to open it and configure additional settings.

Properties



In the *Properties* configuration area, you will find all general information, some of which you provided when creating the content repository.

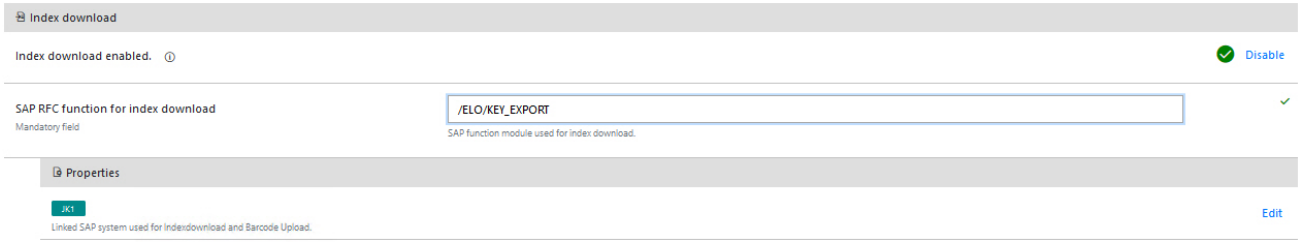
Disabling a content repository

You also have the option to disable and re-enable the content repository. After disabling the content repository, it can no longer be reached by the SAP system and no more documents can be filed.

Enabling signatures

The signature must match the SAP system configuration. If you do not want to use a signature, enable the *No signature* function in the content repository configuration. For more information on configuring SAP, refer to SAP ArchiveLink® configuration.

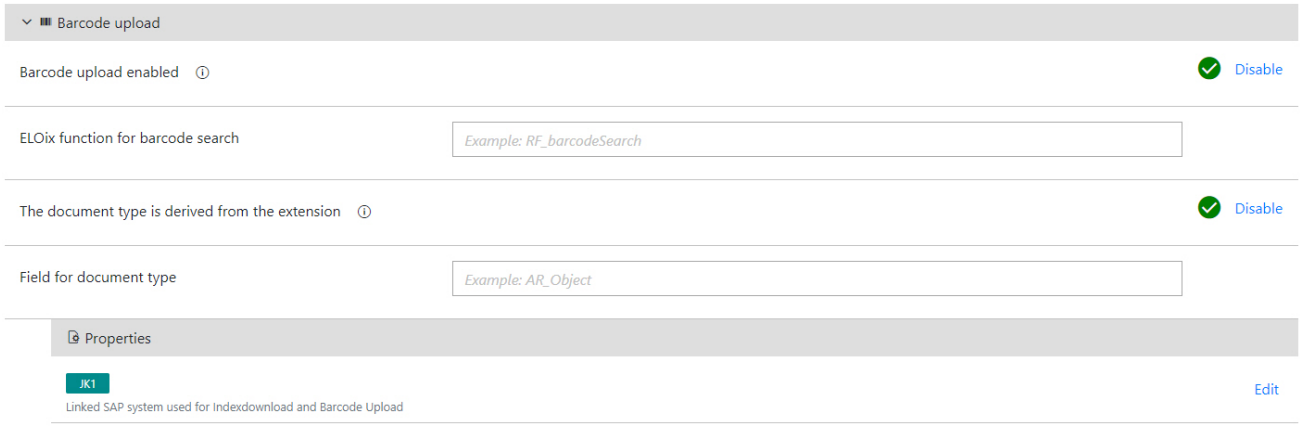
Index download



In the *Index download* area, you can enable/disable index downloads and make changes to the applicable SAP RFC function. The SAP system performing the index download in this content repository is configured in the *Properties* area.

Barcode upload

If the *Barcode upload* function is enabled, you can configure additional settings in the following area. The SAP system performing the index download in this content repository is configured in the *Properties* area.



Enable/disable barcode upload

To enable/disable barcode upload for this content repository, click *Enable* or *Disable*.

Enable/disable extension derivation

With barcode uploads, a document class is reported to the SAP system. By default, this is the document class *FAX*, which is entered into the TOA tables in SAP when using the function. By enabling the *Derive document class from extension* function, the actual extension is transferred to SAP as the document class in capital letters.

File extension from metadata field

Alternatively, you can use the *Metadata field for document class* function to create your own field and pass on the document class to this field for each document.

This process is as follows:

- If a value is entered to *Field for document class* and this field also has a value in the document to be processed, this value is applied for uploading the document via barcode upload.
- If no value is configured for *Field for document class* but a document class is entered to the *Derive document class from extension* field, this entry is used.
- If neither of these parameters is configured, the default value *FAX* is applied.

ELOix function for barcode search

You can enter an ELO Indexserver function into the *ELO Indexserver function for barcode search* configuration parameter in order to find documents with barcode entries to be transferred. This can be necessary, for example, to define a more performant database query if there are issues performing normal searches on specific database systems. It is also possible to perform upstream

actions in the configured script, such as creating a correct *SAPPATH*. In most cases, it is not necessary to use an additional function.

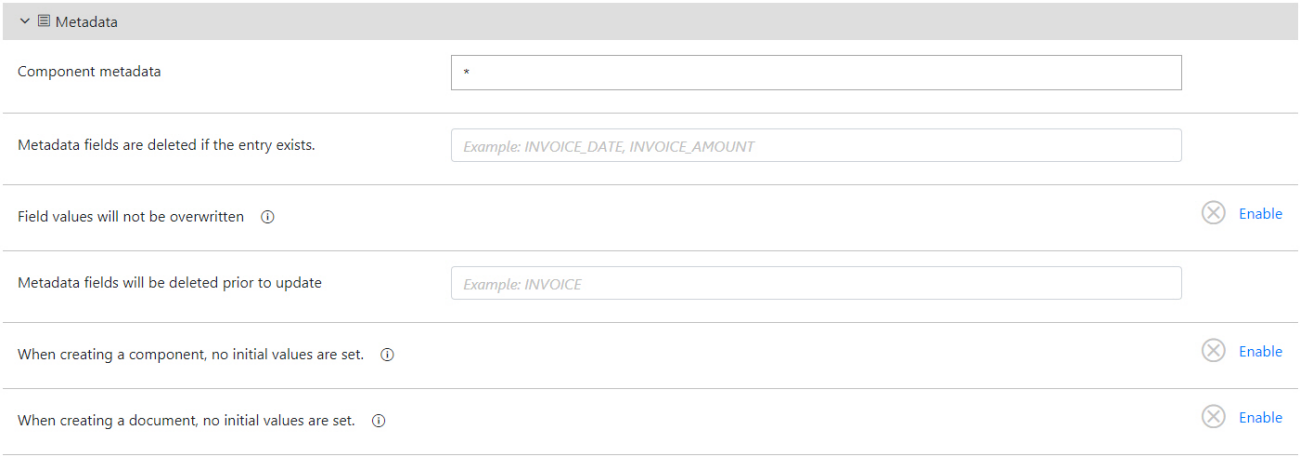
The specified scripts must be located in the ELO *Indexserver Scripting Base* administration folder in the corresponding directory for the ELO Smart Link for SAP® ERP instance (in our example, the *_ALL* directory). An example of a script could look like this:

```
/**
* Import Indexserver API classes
*/
importPackage(Packages.de.elo.ix.client);

/**
* This function collects barcode documents for the ELO Archive Link
* @param {de.elo.ix.client.IXServerEventsContext} ec Execution context, members:
*           ec.user UserInfo object, readonly.
*           ec.ci ClientInfo object, readonly.
*           ec.url String IndexServer URL, readonly.
* @param {Object} args Argument array sent by the client application.
* @returns {Object} Array of Object IDs
**/
function RF_findBarcodeDocs(ec, args) {
  var db = new Packages.de.elo.ix.jscript.DBConnection(),
      ret = [], repositoryName, maskName, bcReposLine;

  if (log.isDebugEnabled()) {
    log.debug("RF_findBarcodeDocs(" + ec + ", args=" + args);
  }

  repositoryName = args[0];
  if (log.isDebugEnabled()) {
    log.debug("reposName=" + repositoryName);
  }

  maskName = args[1];
  if (log.isDebugEnabled()) {
    log.debug("maskName=" + maskName);
  }

  bcReposLine = args[2];
  if (log.isDebugEnabled()) {
    log.debug("bcReposLine=" + bcReposLine);
  }

  //  The keywording form is currently ignored.
  //  This is how to obtain the ID of the keyording form,
```

```
  //  if it has to be included in the statement:
  //
  //    var maskId = parseInt(maskName);
  //    log.info("maskId=" + maskId);
  //    if (isNaN(maskId)) {
  //      var mask = ix.checkoutDocMask(ec.ci, maskName, DocMaskC.mbAll, LockC.NO);
  //      maskId = mask.id;
  //      log.info("maskId=" + maskId);
  //    }

  ret = db.query("select distinct k1.parentid from objkeys k1, objkeys k2 " +
                         "where k1.parentid=k2.parentid and " +
                         "k1.okeydata like '?%' and " +
                         "k1.okeyname like 'SAPBARC' and " +
                         "k2.okeydata like '" + repositoryName +"/%' and " +
                         "k2.okeyname like 'SAPPATH'");

  if (log.isDebugEnabled()) {
    log.debug("#rows=" + ret.length);
  }

  if (log.isDebugEnabled()) {
    log.debug(")RF_findBarcodeDocs");
  }
  return ret;
}
```

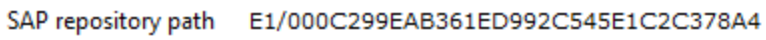
Metadata

In the following configuration area, you can define and set parameters related to the metadata. Please note that the following knowledge is required to configure these parameters.



The SAP system transfers both the actual document and the corresponding header data to ELO Smart Link during filing.

A document also always transfers a linked path, which is configured in a field on the metadata form. In the SAP context, this path is named *SAP repository path* and is structured as follows:



Component metadata

You have three options for configuring the *Component metadata* field:

- If the component ID is entered, e.g. `data`, the fields are saved in the specified component.
- If * is entered as the component ID, the fields are saved in all components.
- If the component ID is blank, the fields of the document (document header) are set.

Ignore metadata fields

In the *Metadata fields are deleted if the entry exists* input field, you can define a range of fields that are left blank if values already exist. The fields are listed separated by commas.

- Example: `INVOICE_DATE, INVOICE_AMOUNT` etc....

Overwrite field values

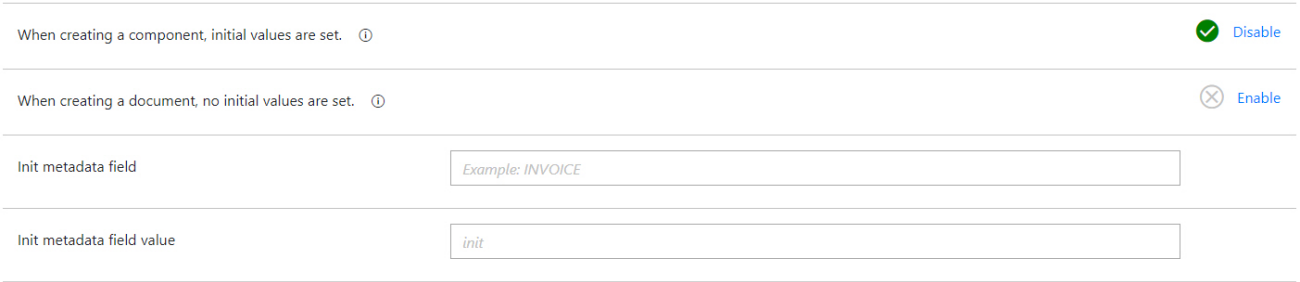
This setting in the configuration prevents field values from being overwritten. If you enable this function, field values can be overwritten. Use the input field below it: *Prior to update, metadata fields are deleted.* The fields are listed separated by commas.

- Example: `INVOICE, INVOICE_STATE` etc....

Setting initial values

In this configuration parameter, initial values can be written to a field during document filing (component/data) or from the header file (document). You may want to do this to start a workflow via an ELOas script, for example. For more information, refer to Advanced > Document header name.

If you enable one of the two functions *When creating a component, no initial values are set* or *When creating a document, no initial values are set*, two additional fields are shown in the configuration interface.



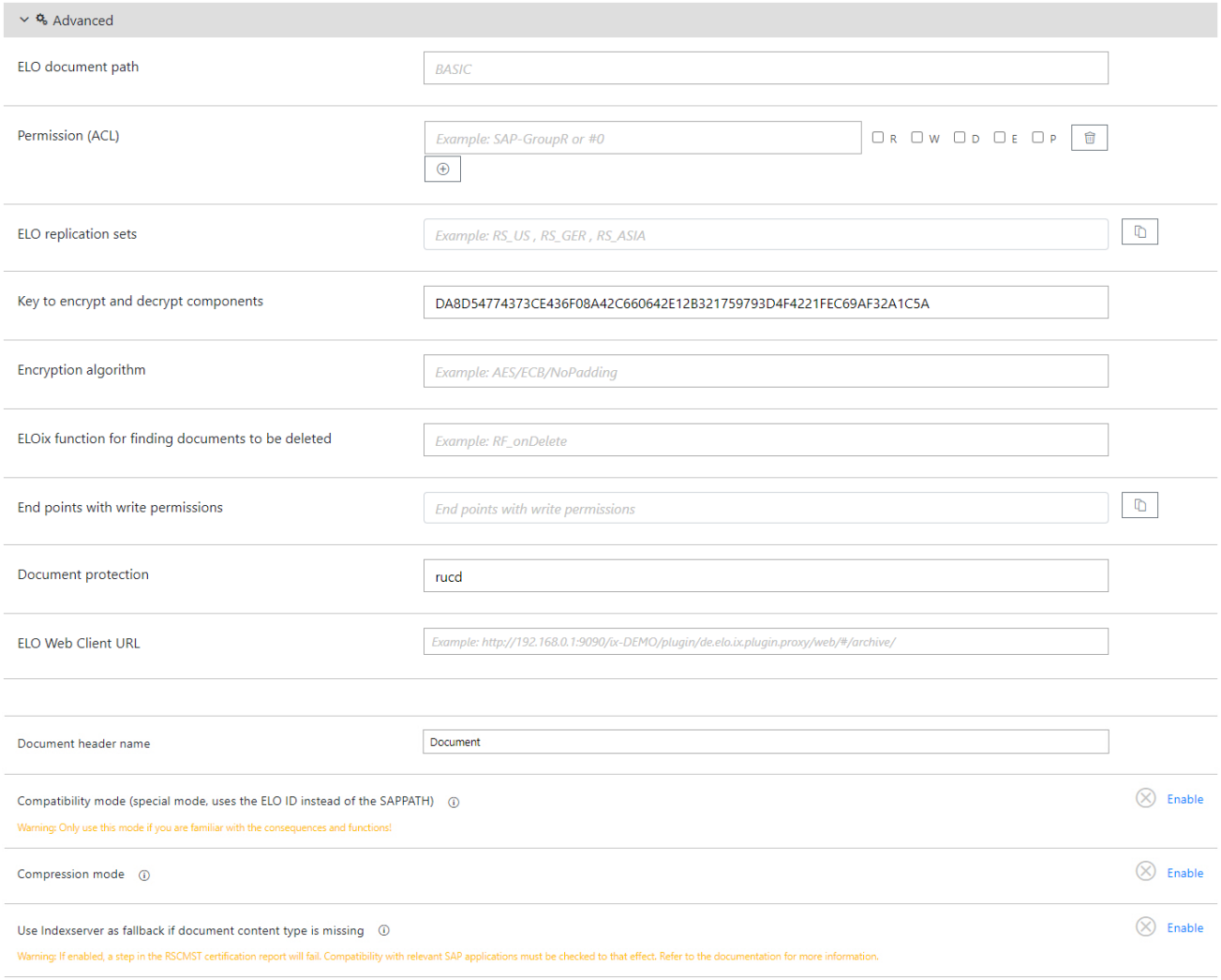
-

The field *Init metadata field* specifies the field you want to complete automatically. For example, the *WF_STATE* field.

- The *Init metadata value* field specifies the fixed value you want to enter into the defined field. For example, the value `Start`.

Advanced

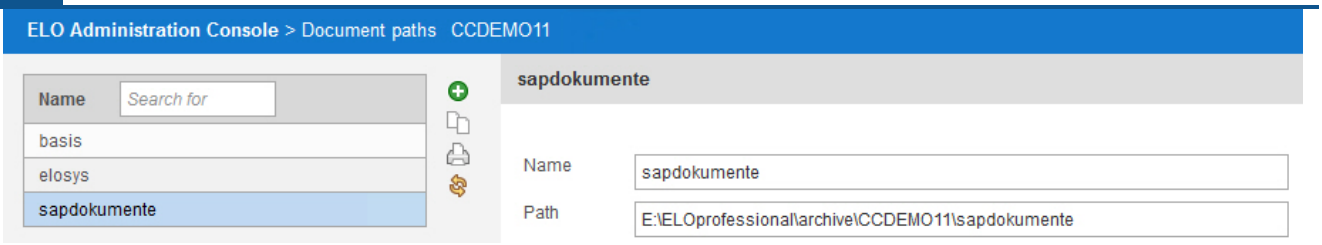
You will find more configuration options under *Advanced*.



ELO document path

With the ELO document path, you can file archived documents to your own document path (physical storage location).

Example:



1. Log on to the ELO Administration Console and create your own document path.
2. Next, enter the name of the document path into the *ELO document path* input field in the *Advanced* menu of the ELO Smart Link configuration. For example, the value `sapdocuments`. If this value is left blank, the default path is used.

Permission (ACL)

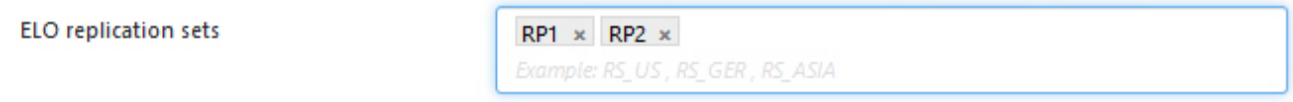
The configured permissions are applied globally to all filed SAP documents from this content repository. To configure multiple permissions, create separate entries for the corresponding groups or IDs. Use the access right codes used by ELO as the abbreviations for the rights. If using the ID, make sure to enter the # character before the group or user ID.

R (Read), *W* (Write), *D* (Delete), *E* (Edit), and *P* (Permission).

> **Information**
>
> Starting with ELO 12, you can use the new right *Permission (P)*. If you use ELO 11 or an older version, you cannot use the *Permission (P)* right. Otherwise, all entries with the *Permission (P)* right will become invalid! Whenever possible, avoid performing configuration at the user level.

ELO replication sets

Another configuration option is available for ELO replication sets. You have the option to assign the stored documents from this content repository to one or more ELO replication sets.



Option 2: [#]Replication ID

Use the replication set name or replication set ID as a configuration parameter in the *Content repository – Advanced* area of ELO Smart Link for SAP. If you leave the parameter field empty, no replication set will be used. To configure multiple replication sets, use the ENTER key, commas, or the TAB key after inputting an entry.

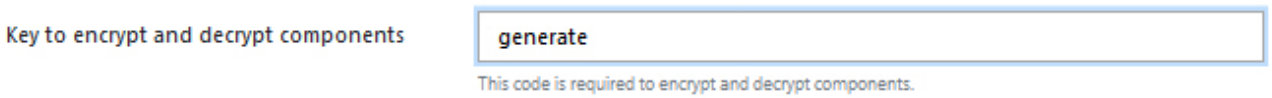
Key to encrypt and decrypt components

If you want to store documents using ELO Smart Link, you can encrypt them before filing to the repository. The AES algorithm of the Java SE platform is used for this. By default, the ELO Smart Link interface generates 128-bit keys. If the *Unlimited Strength Jurisdiction Policy Files* modules from Java Cryptography Extension (JCE) are installed, 256-bit keys are generated.

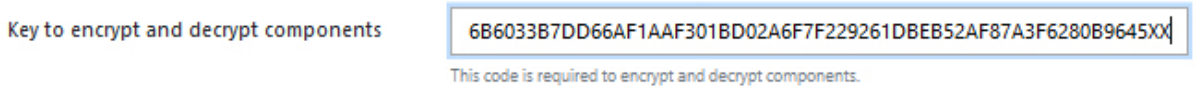
> **Information**
>
> If performing a migration for files that were previously 128-bit encrypted, this encryption must be maintained, as the system automatically enters the key. Do not switch to a higher encryption type.

The encrypted documents are saved with the extension *.eloaes*. The file streams contain a simple header specifying the size and extension of the original document. The encryption process and header layout can be requested from ELO.

ELO Smart Link can also generate a key. These keys are only generated with the AES algorithm. To do so, proceed as follows:



1. In the *Key to encrypt and decrypt components* field, enter `generate`.
2. Apply the configuration settings by clicking the *Apply* button at the top right and save your changes.



3. Open the *Advanced* content repository configuration again and check whether a key has been entered into the *Key to encrypt and decrypt components* input field.

> **Warning**
>
> If the encryption code is lost, you will no longer be able to decrypt encrypted documents. Keep this key in a secure location.

Encryption algorithm

If encryption is used, complete the *Encryption algorithm* input field. This parameter must be configured together with *Key to encrypt and decrypt components*. The values *AES* and *AES/ECB/NoPadding* have been tested by quality assurance.

To ensure compatibility with older installations running Java 7, you have to select *AES/ECB/NoPadding* for the key to work.

If you'd like to use encryption, we recommend setting the value *AES/ECB/NoPadding*. If you leave this configuration parameter blank, encryption is not performed.

> **Please note**
>
> If using encryption, documents can only be displayed directly via SAP with direct access via ELO Smart Link. SAP has to be set to the internal SAP document viewer. No other ELO client can decrypt the documents. Other functions, such as going straight to the ELO Java Client or ELO Web Client, cannot be used either, for example.

ELOix function for finding documents to be deleted

The *ELOix function for finding documents to be deleted* configuration parameter should only be used in case of issues or as needed. In the past, performance issues arose when deleting documents for some database systems/ELO versions. In this case, this option can be used. Enter a registered ELOix function configured in ELO in the Indexserver Scripting Base. This ELO Indexserver function should contain optimized searches at the database level.

Example: When searching for documents with an Oracle database using the normal approach, timeout errors could occur.

The following sample script was developed for this specific case:

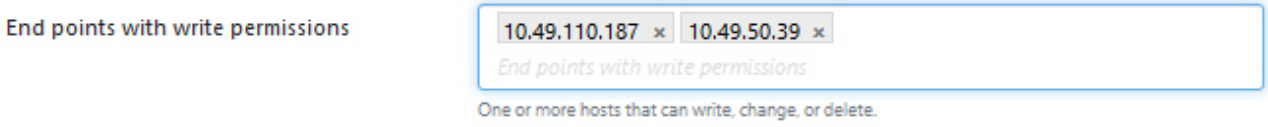
```
/**
* Example script to replace the SQL statement in componentDelete.
 *
 * Copy this script file into the archive folder
 * \Administration\ELO Indexserver Scripting Base\_ALL
*/

/**
* Statement to be used to find the ELO archive entries of a SAP document.
* The placeholders {0} and {1} are replaced by the SAPPATH when the statement is executed.
*/

var stmt_findSordForDeleteDocument =
      "select objid from objekte o, objkeys objk0"
                        + " where"
                        + " o.objid=objk0.parentid"
                        + " and (objk0.okeyname like N'SAPPATH')"

    // ORACLE: use okeyudata
```

```
                        + " and ((objk0.okeydata like N'{0}')"
                        + "   or  (objk0.okeydata  like N'{1}/%'))"

    // ORACLE : + " and (rownum<=10001)"

                    + " and (o.objstatus=0)"
                          + " and (o.objid>1)"
                    ;

/**
* Import Indexserver API classes
*/
importPackage(Packages.de.elo.ix.client);

/**
* Registered function called from ELO Smart Link
* @param ec Execution Context
* @param args Array of arguments
* @returns Table of results
*/
function RF_findSordForDeleteDocument(ec, args) {
      if (log.isDebugEnabled()) log.debug("RF_findSordForDeleteDocument(" + ec + ", args="

      //var repositoryName = args[0];
      //var maskName = args[1];
      var sappath = args[2];

      var db = new Packages.de.elo.ix.jscript.DBConnection();

      var ret = db.query(stmt_findSordForDeleteDocument, [sappath, sappath]);

      if (log.isDebugEnabled()) log.debug(")RF_findSordForDeleteDocument");
      return ret;
}
```

End points with write permissions

In this configuration parameter, you can specify host names or IP addresses with write, edit, and/or delete permissions.

Example:



Only SAP systems with the IP addresses *10.49.110.187* and *10.49.50.39* may create, change, or delete documents.

Document protection

Document protection determines whether the content server requires signed access. Normally, the degree of protection of a document is set by SAP for each document on creation and saving. If it is not set, the value specified here is used (*r* = read, *u* = update, *c* = create, *d* = delete). The default value means that only signed access is permitted (maximum security).

ELO Web Client URL

If you enter the URL for the ELO Web Client here, all Get access (document calls) are forwarded to the URL of the ELO Web Client. The configured URL must contain the path to the repository.

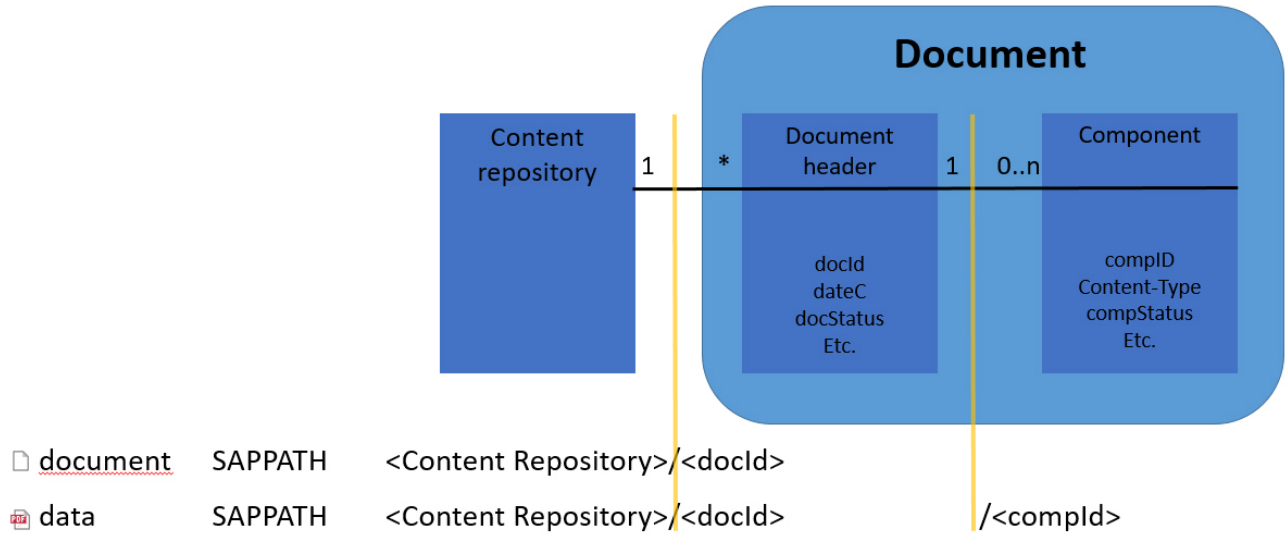
Example:


```
http://192.168.0.1:9090/ix-DEMO/plugin/de.elo.ix.plugin.proxy/web/#/archive/
```

Entering the ELO Web Client URL allows you to go from the SAP attachment list to the ELO Web Client when opening a document from the attachment list. However, this requires additional configurations in SAP, which are described in the chapter ELO Web Client configuration.

Document header name

The parameter maintained here indicates the name of the document header, which is generated together with the document filed via SAP. If this field is left empty, the default value *Document* is used. Note the following explanations.



In SAP ArchiveLink®, two files are always stored for each document filed. The following graphic explains the default storage process in SAP. In ELO, this is a document and header file, and in SAP it is a component/*data* and a *document*.

Compatibility mode

> **Please note**
>
> Only use this mode if you are familiar with the consequences and functions.

If compatibility mode has been enabled, objects can be requested via the ELO ID instead of the SAPPATH generated by SAP. Furthermore, there are no separate repository entries for separating documents and component properties. The *writeBarcodeFile* function is also performed differently than the standard. In compatibility mode, write access is also disabled. As a result, you cannot create any components, for example.

Compression mode

If this parameter was enabled, documents to be filed from the SAP system are compressed before they are transferred to ELO. The standard ZIP compression algorithm of the Java platform is used, and the files are transferred to ELO zipped.

Use Indexserver as fallback if document content type is missing

By default, no content type is transferred in the header when requesting a document from ELO from the SAP system, unless a content type is explicitly set in field *SAPCONT*. This can cause issues with the SAP system, as the SAP system may set an incorrect extension for the document (e.g. the SAP system sets *.mdb* as the extension).

If you enable this menu item, a fallback value will be set based on the file type on the Indexserver and transferred to the SAP system. Please note that this could cause a certification test for ELO Smart Link for SAP® ERP (SAP ArchiveLink) on your SAP system to fail. Another option is to maintain the *SAPCONT* field in ELO with the corresponding content type (or mime type).

Certificate configuration

If the *Signature* parameter is enabled in the ELO Smart Link *Properties* menu (see Properties > Enabling signatures), ELO Smart Link for SAP only accepts signed requests from an SAP system. However, the connected SAP system can sign and send its requests with a (public key) certificate. For ELO Smart Link to verify the request, the certificate must be sent from SAP to ELO Smart Link, where it has to be accepted and approved. This ensures only authorized systems have access. For more information on sending a certificate, refer to the section Security settings.

We recommend managing certificates sent by SAP systems using the certificate manager. If this is not possible, you can configure the system to accept sent certificates via the following parameters.

Accept next transferred certificate

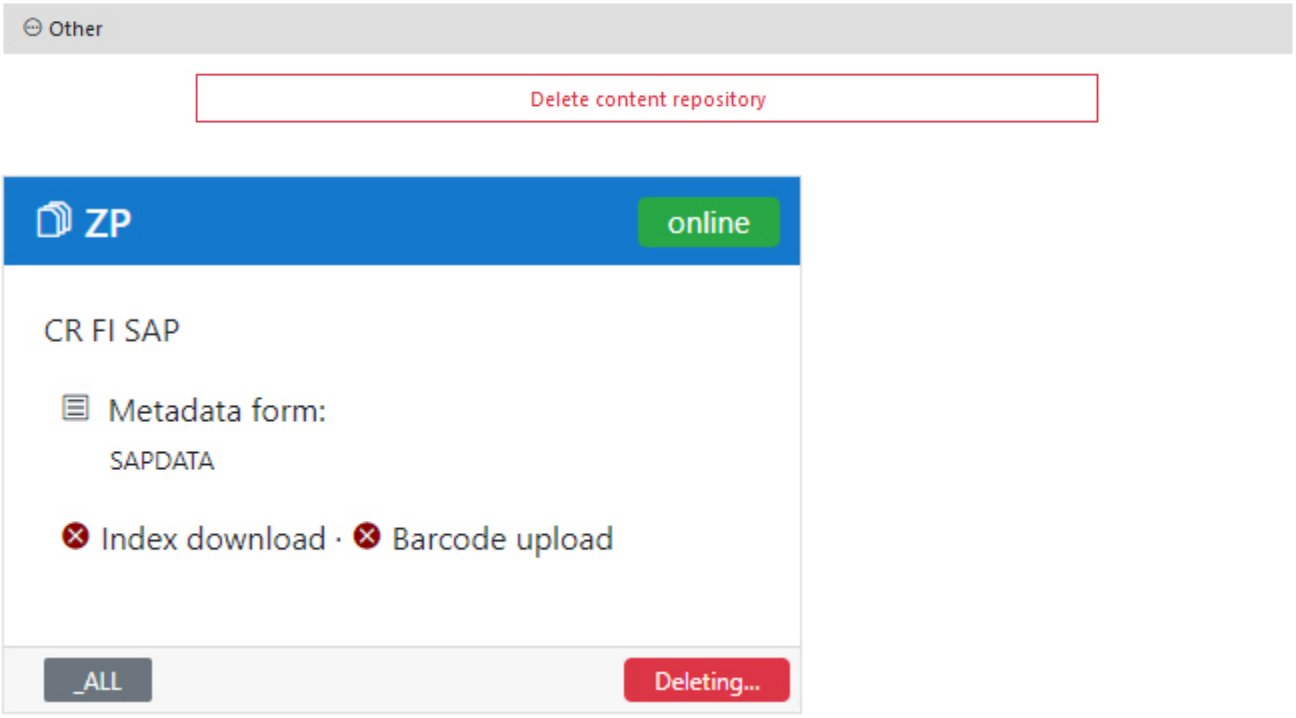
If this parameter is enabled, ELO Smart Link will automatically accept the next certificate sent by an SAP system. The parameter is then disabled again. If using this function, the certificate should be sent from the corresponding SAP system to ELO Smart Link in a timely manner.

Accept all certificates

If this parameter is enabled, ELO Smart Link will automatically accept all incoming certificates.

> **Information**
>
> Only use this mode for test purposes.

Other

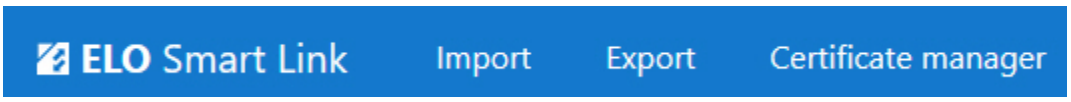


Under *Other*, you can delete an existing content repository.

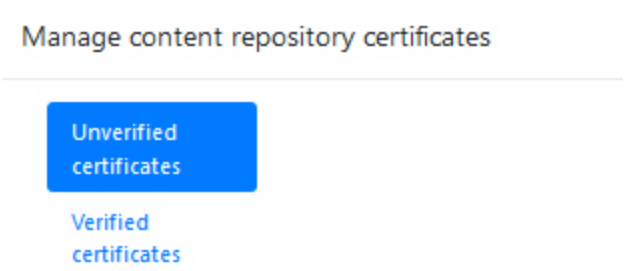
1. Apply the changes by selecting the *Save changes* button in the footer.

Certificate manager

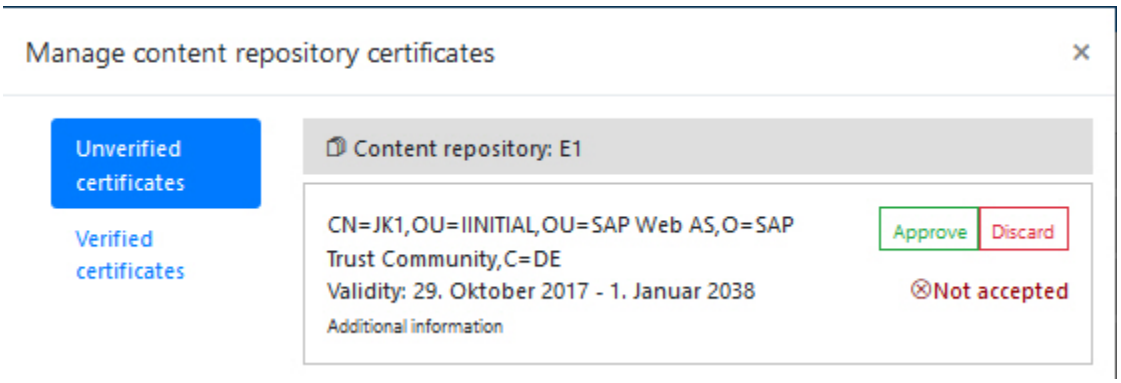
To work with the certificate manager, you should first set up corresponding content repositories and configure them in the connected SAP systems. For more information, refer to the chapter SAP ArchiveLink® configuration.



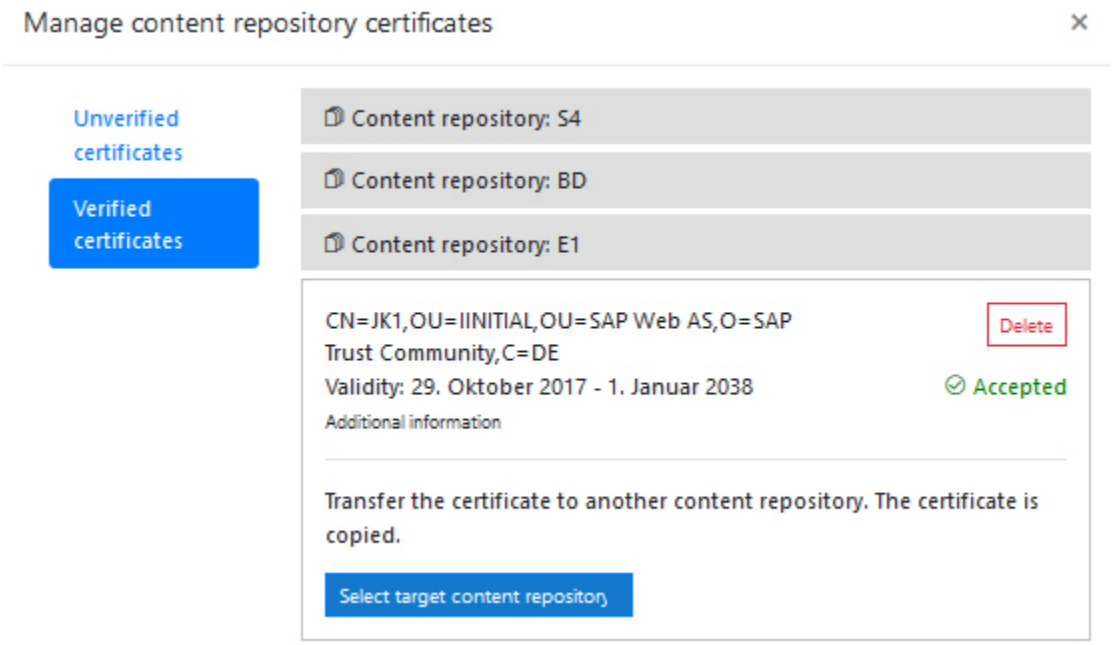
You will find the certificate manager on the toolbar of the ELO Smart Link web interface.



The certificate manager is split up into two different areas: *Unverified certificates* and *Verified certificates*.



If a certificate is sent by an SAP system as described under Security settings, you will find it in the *Unverified certificates* area. You now have the option to accept the certificate (*Approve*) or discard it.



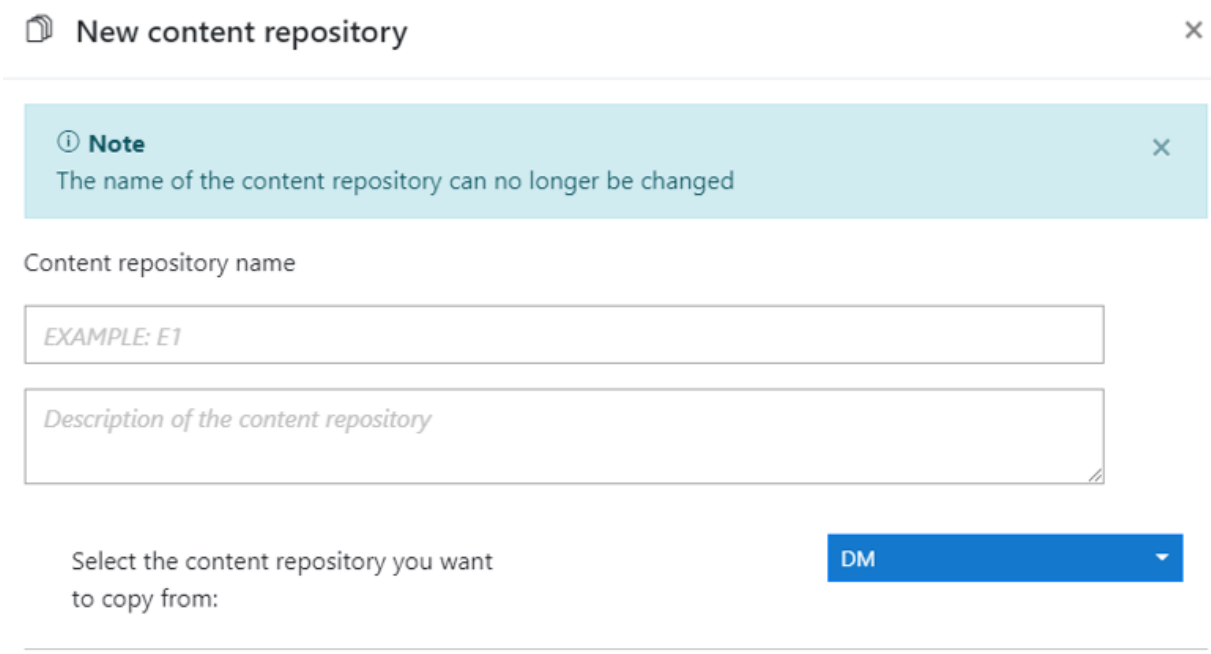
Once you have accepted the unverified certificate, you will find it under *Verified certificates*.

If additional content repositories have been created for the same SAP system, you can copy the existing and accepted certificate to another content repository. Under *Verified certificates*, you can use the *Transfer certificate to another content repository* function.

Copy content repository

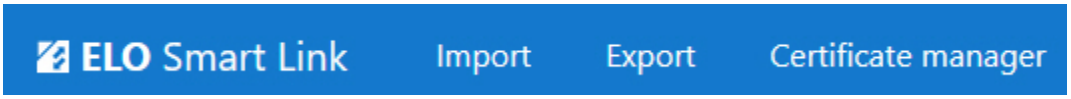
When creating a new content repository, you can copy configurations you have already made for an existing content repository.

1. To do this, you need to enable the option *Copy from content repository*.



2. If the option is enabled, you can enter the name and description of the new content repository and select the content repository whose configuration parameters you want to copy.

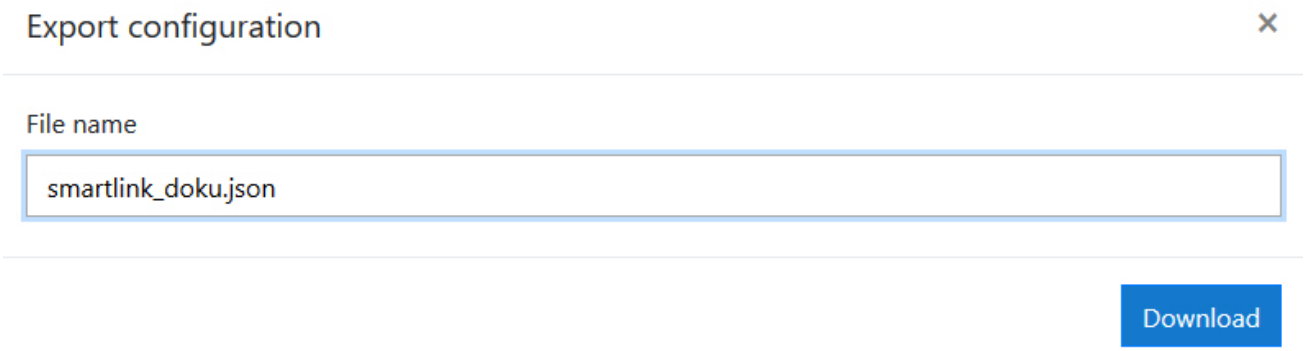
Migrating existing configurations



With ELO Smart Link, you can import an old ELO Archive Link for SAP configuration or migrate configurations from a test system to a live ELO Smart Link system. On the toolbar, you will find the *Import* and *Export* entries, which can be used for the following purposes.

Exporting a configuration file

The *Export* function allows you to save the current configuration in a directory on your local file system.

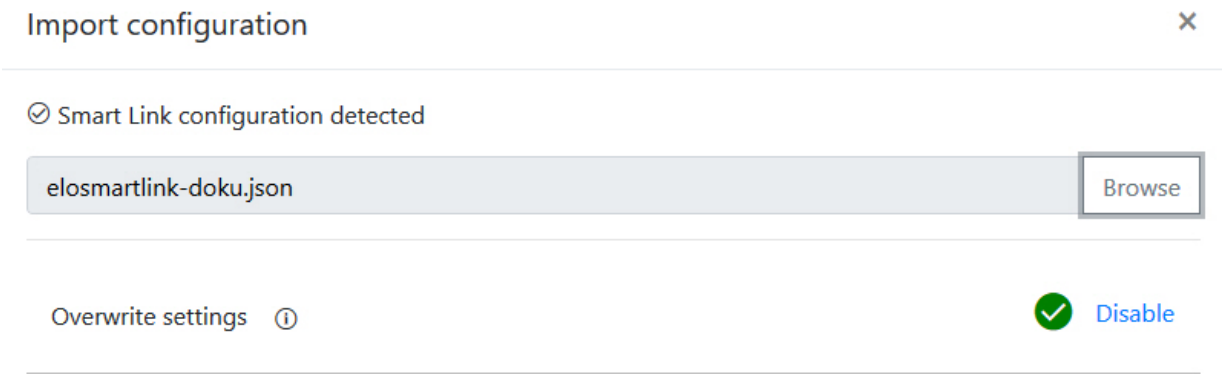


Generated in JSON format, the file contains the complete configuration of ELO Smart Link and can therefore also act as a backup.

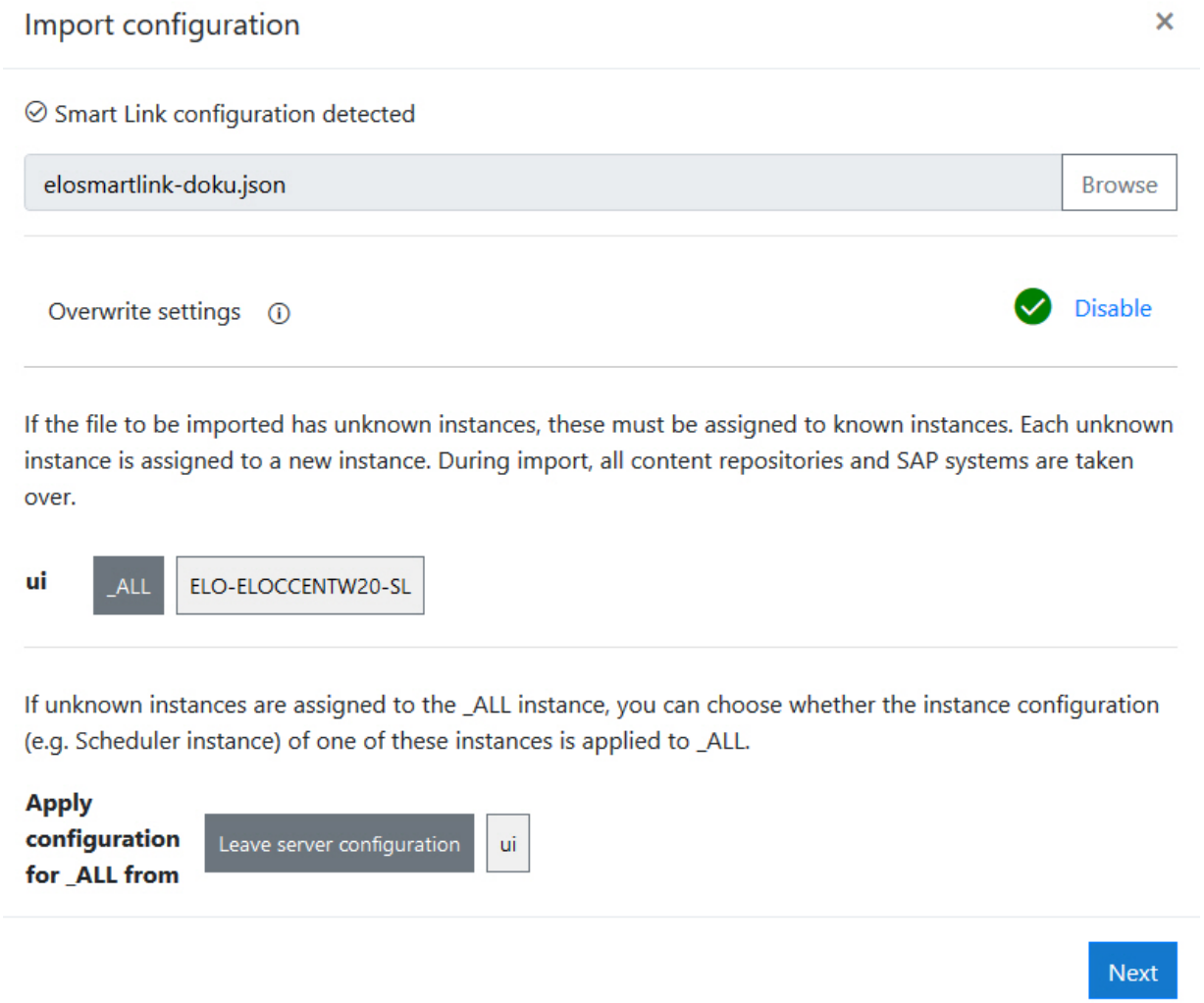
Importing a configuration file

> **Please note**
>
> The *Overwrite settings* function is enabled by default. The existing configuration is deleted on import.

1. Switch to the ELO Smart Link installation where you want to upload the configuration using the *Import* function.
2. On the toolbar, click *Import* and select the file you exported to your directory.

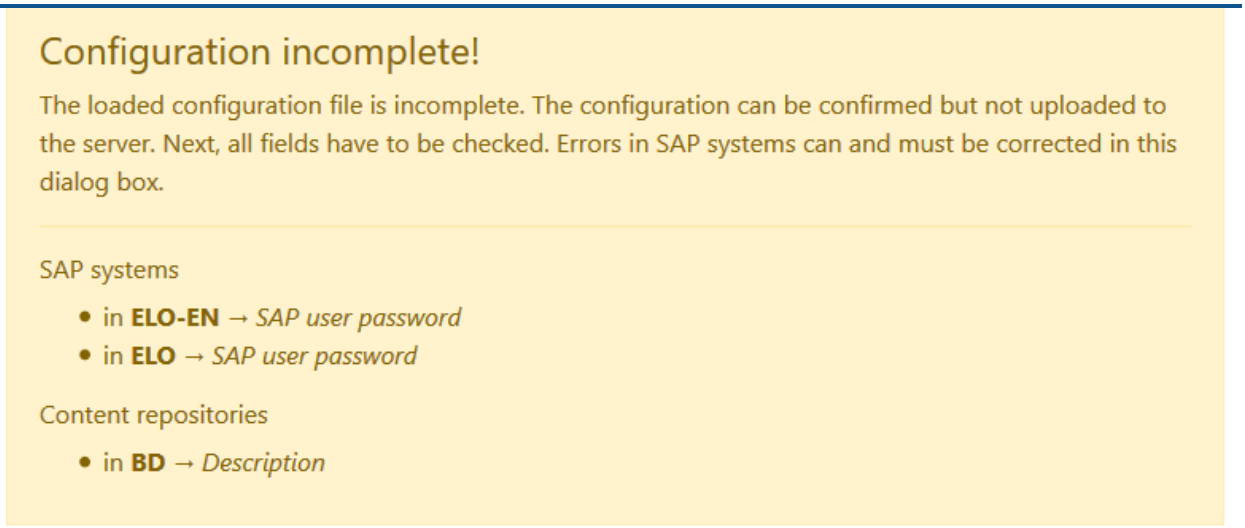


3. The selected file is shown and you can disable the function to overwrite existing entries.



When importing instances, the instance to be imported may not yet be entirely known to the system. If this is the case, the instance is shown and you can choose which of the existing instances you want to perform the import function on. If you select the default instance *_ALL* here, you also have to choose which configuration is applied: the configuration for the *_ALL* instance available on the server or the configuration of the instance that will be imported.

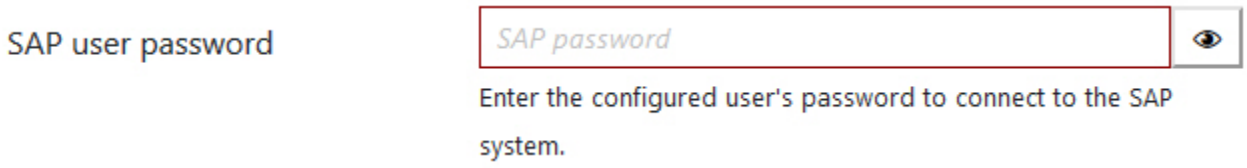
4. Next, the SAP systems to be imported are shown. Add the name of the SAP system, as well as the password associated with the SAP user name. It is not possible to import an entry without the name of the SAP system from an old ELO Archive Link for SAP configuration.



Please note

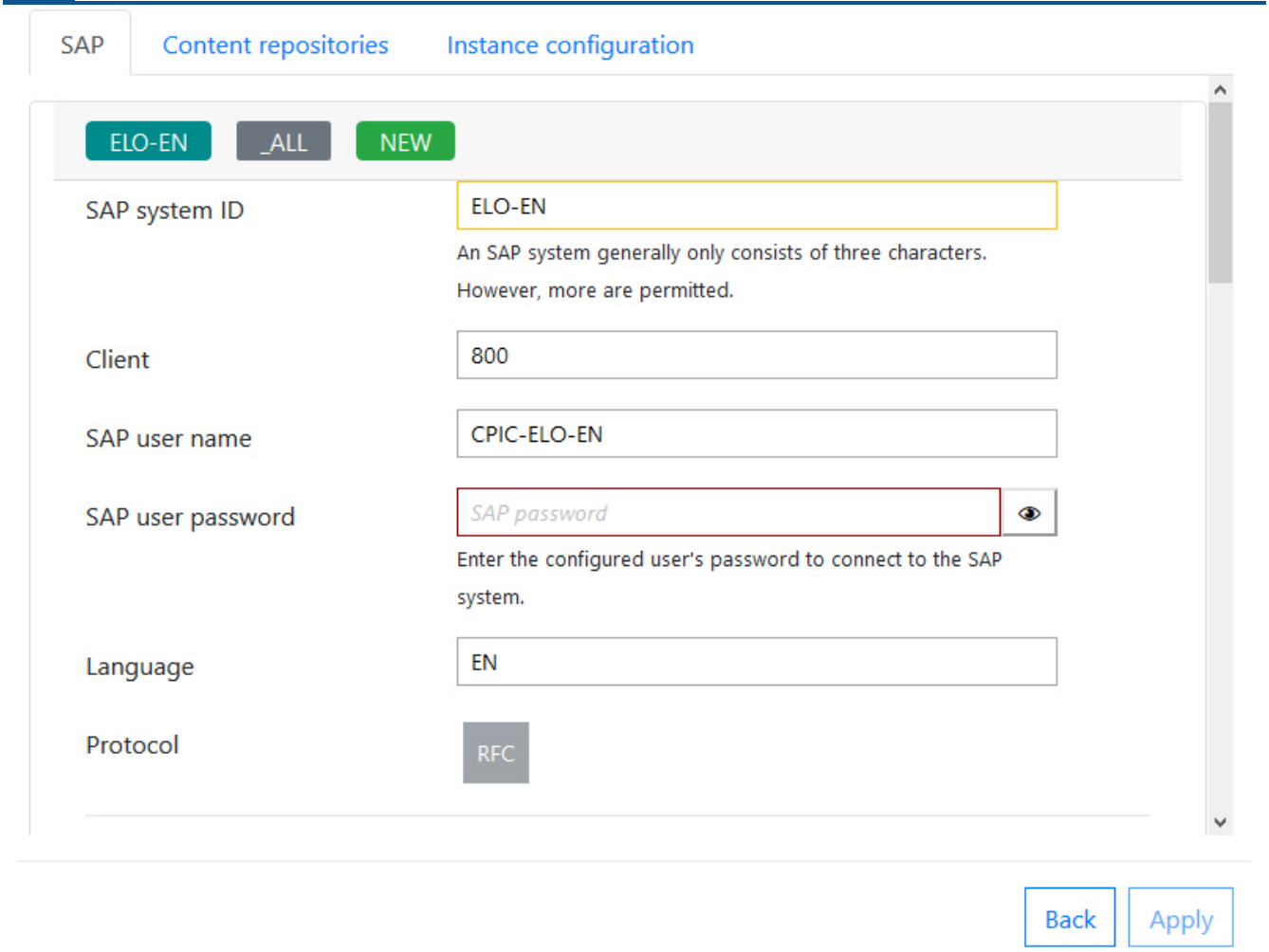
In the ELO ArchiveLink for SAP configuration, it was possible to enter incomplete configurations. This did not have an effect on functionality. During import, these configuration fragments are now allocated logically, but do not result in a complete configuration. The incomplete SAP system has to be removed following import. You will have to first remove the link in the corresponding content repository and then delete the SAP system.

Allocation of SAP systems in a content repository is necessary for ELO Connectivity Pack for SAP® ERP functions, such as the index download and barcode upload scenarios.

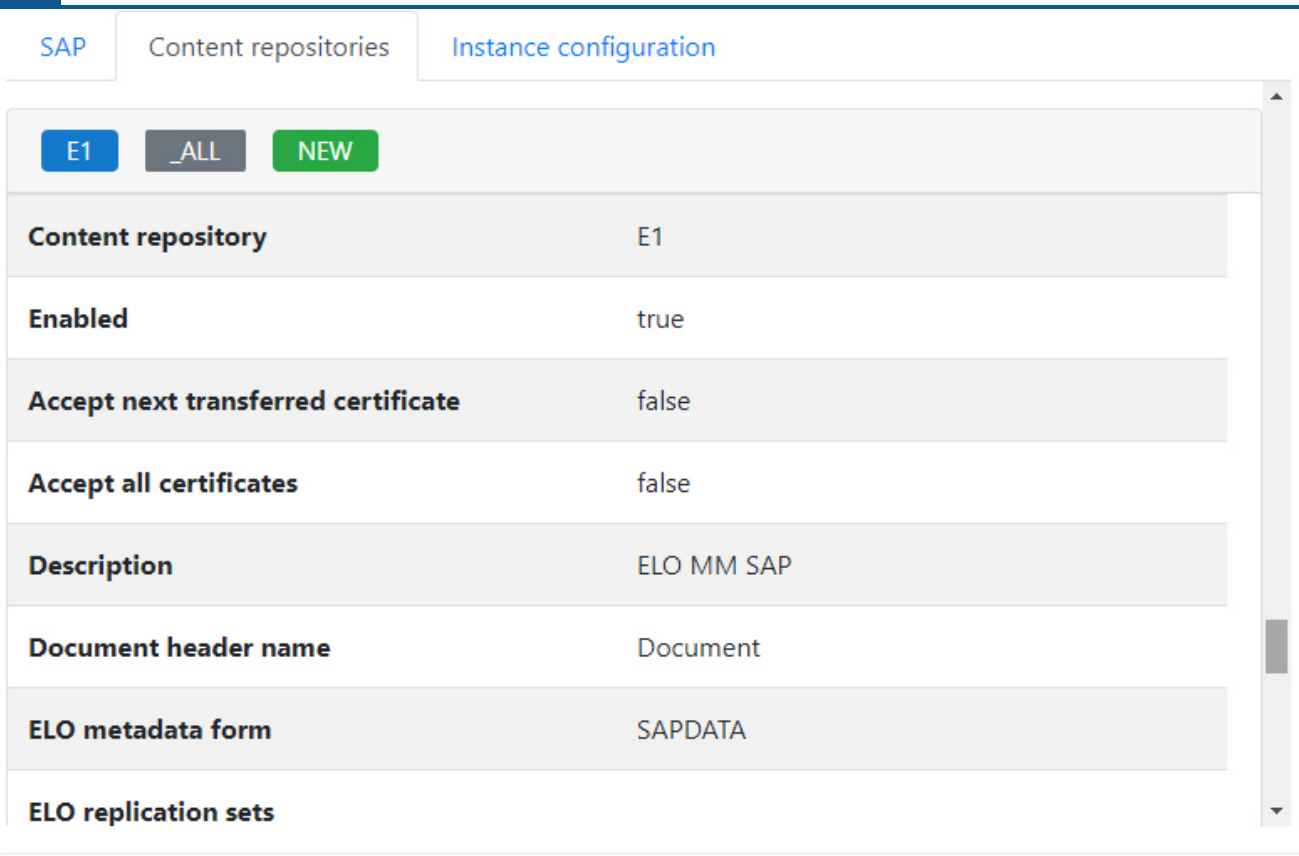


The system indicates the missing parameters and marks the fields with a red border.

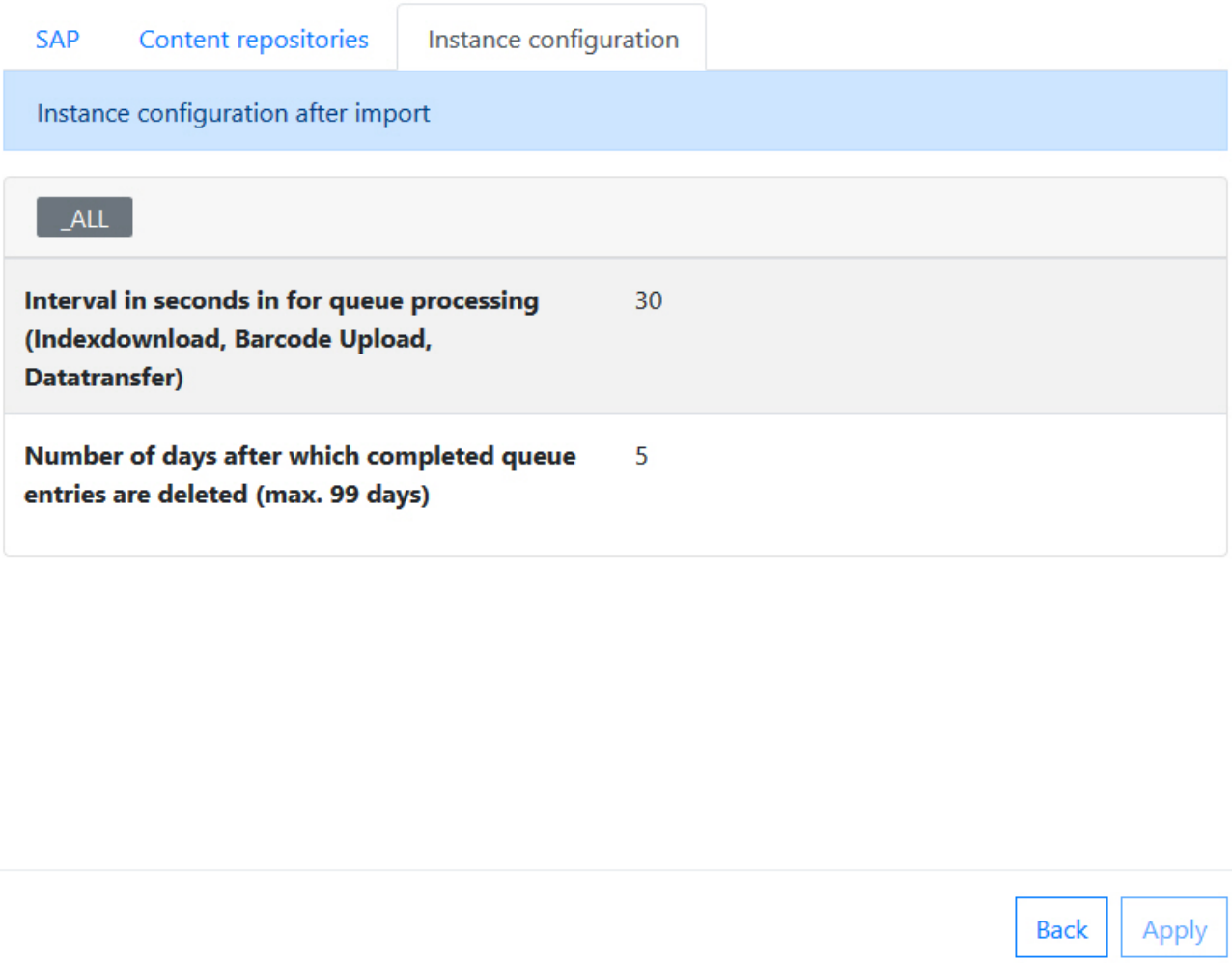
In addition, all configuration items in all three areas are displayed on three tabs:



- Information on the SAP system



- All information on the content repositories



- All information on the instance configuration

> **Please note**
>
> If the *Overwrite settings* function was disabled, the selected configuration is updated by existing functions.

Migrating ELO Archive Link for SAP configurations

ELO Smart Link for SAP is backwards compatible with ELO Archive Link. This means you can migrate valid configuration files from ELO Archive Link for SAP.

1. Copy the configuration file from the old ELO Archive Link for SAP server to the new server or your local client where you have access to the new ELO Smart Link.
2. Use the *Import* function on the toolbar as described in Importing a configuration file.
3. Clicking *Apply/update* enters all listed entries into the ELO Smart Link configuration.
4. Next, apply the configuration with *Save changes* in the footer.

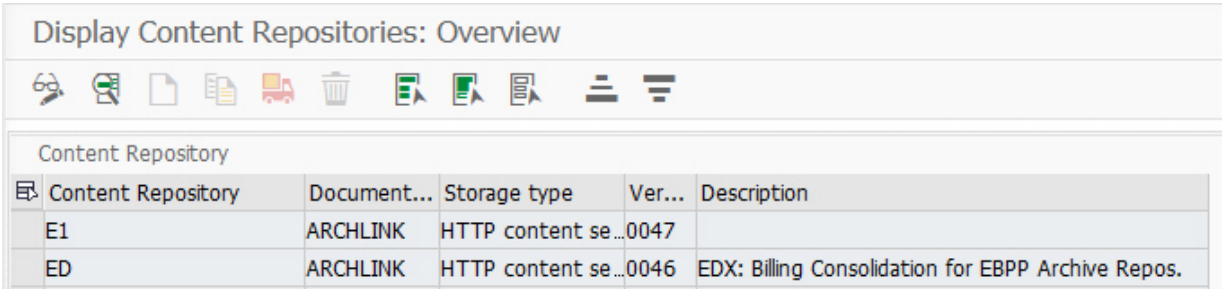
Please note

It is not possible to import message server configurations from ELO Archive Link to ELO Smart Link for SAP using this import function. Message server configurations have to be updated manually.

SAP ArchiveLink® configuration

Besides configuring ELO Smart Link, you need to set up a corresponding content repository on your SAP system. In this guide, we will create and configure the content repository *E1* as an example.

1. Log on to your SAP system and start the transaction *OAC0*.



   You can see some SAP content repositories in the overview. These are used by SAP for different purposes and shouldn't be deleted.

2. Switch to edit mode in the transaction (icon) and click the icon to create a new content repository.

   We use the following data in this example: There are two different view modes you can switch between in the toolbar (*simple* and *full administration*).

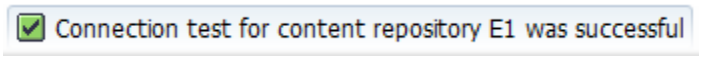
Parameter	Description	Example value
Content rep.	For SAP ArchiveLink, the entry must have two characters.	E1
Document area	Selection list of document areas – Mandatory – ArchiveLink	ArchiveLink
Storage type	Storage type in SAP	HTTP content server ELOJC
Protocol	SAP client/server communication (SAPHTTP by default)	The *ELOJC* protocol was created by the Competence Center SAP. You will find more information in the ELO SAP® OLE call documentation.
Version no.	Must be identical to the log version	0046
HTTP server	Address of the ELO Indexserver	10.49.110.198
Port number	Port used for creating the ELO ArchiveLink for SAP	9060
HTTP script	http script of the ELO Smart Link instance (plus *ContentServer*)	sl-CCDEMO11_2/ContentServer

Parameter	Description	Example value
Exchange directory	Path of the SAP application server (cache memory). Transfers the global directory suggested by system from *physical base* path	E:\usr\sap\ELO\SYS\global\
Output device (Full administration)	ArchiveLink – Printer name for *Print and file* function	ARCH

Information

The output device *ARCH* may need to be configured by an SAP administrator. (Device type: *ARCHLINK*, device class: Enable *Archiver* and *Sequential order processing*).

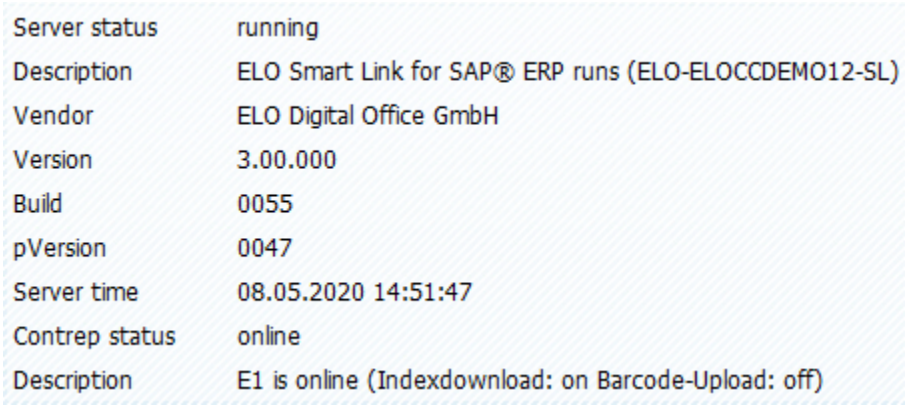
1. Once you have made all settings and the ELO Smart Link service is running, you can test the connection to ELO Smart Link in the content repository transaction.

   If the test was successful, this is displayed in the SAP status line.

2. For more details, click the information icon (*Status Information*).

Server status	running
Description	ELO Smart Link for SAP® ERP runs (ELO-ELOCCDEMO12-SL)
Vendor	ELO Digital Office GmbH
Version	3.00.000
Build	0055
pVersion	0047
Server time	08.05.2020 14:51:47
Contrep status	online
Description	E1 is online (Indexdownload: on Barcode-Upload: off)

Security settings

The next step is to check and configure the security settings. This setting also equates to the value defined in the section Enabling signatures.

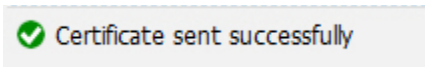
1. If the *No signature* check box is selected in SAP, you must disable the *Signature enabled* parameter in the ELO Smart Link configuration.

   If the check box is not selected in SAP, you must enable the *Signature enabled* parameter in the ELO Smart Link configuration.

2. Now, you can send the certificate from SAP to ELO Smart Link. Click *Send certificate* (envelope icon).

   SAP now sends a certificate with public key to ELO Smart Link.

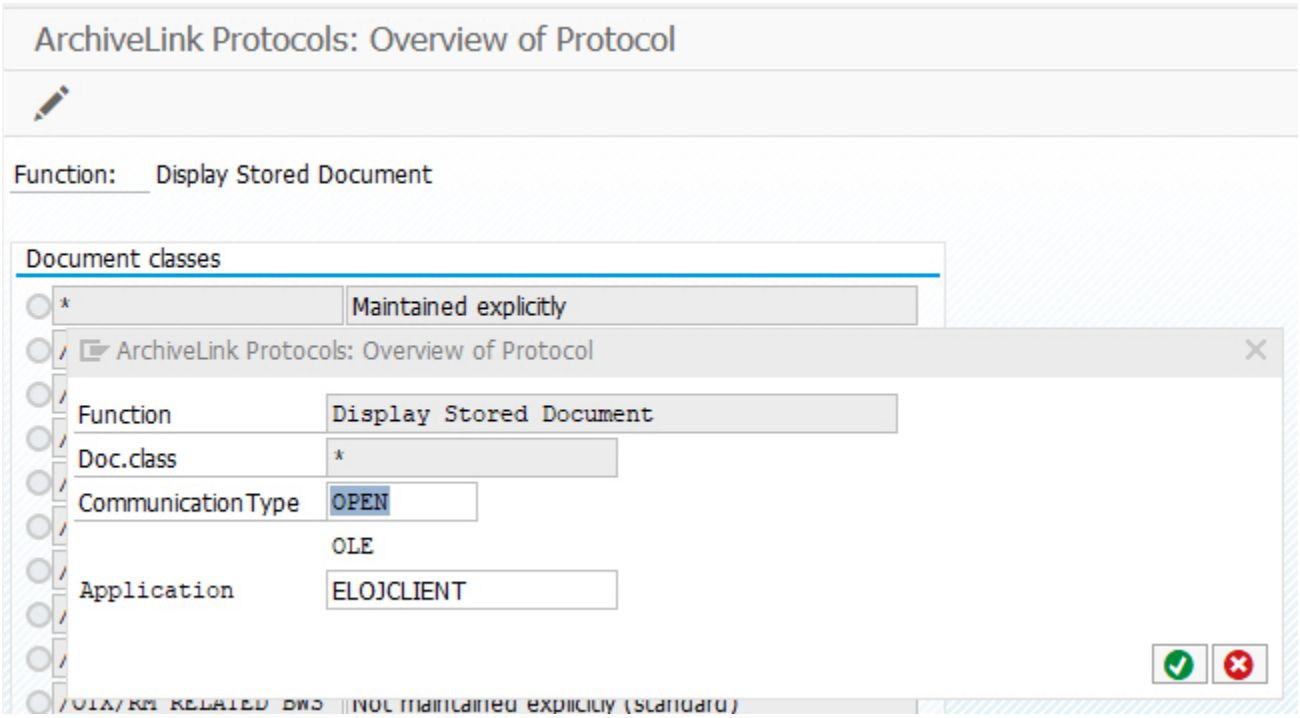
   The configuration of the SAP ArchiveLink® interface is now completed.

3. As described in the section Certificate manager, accept the transmitted certificate.

The content repository can now communicate with ELO Smart Link.

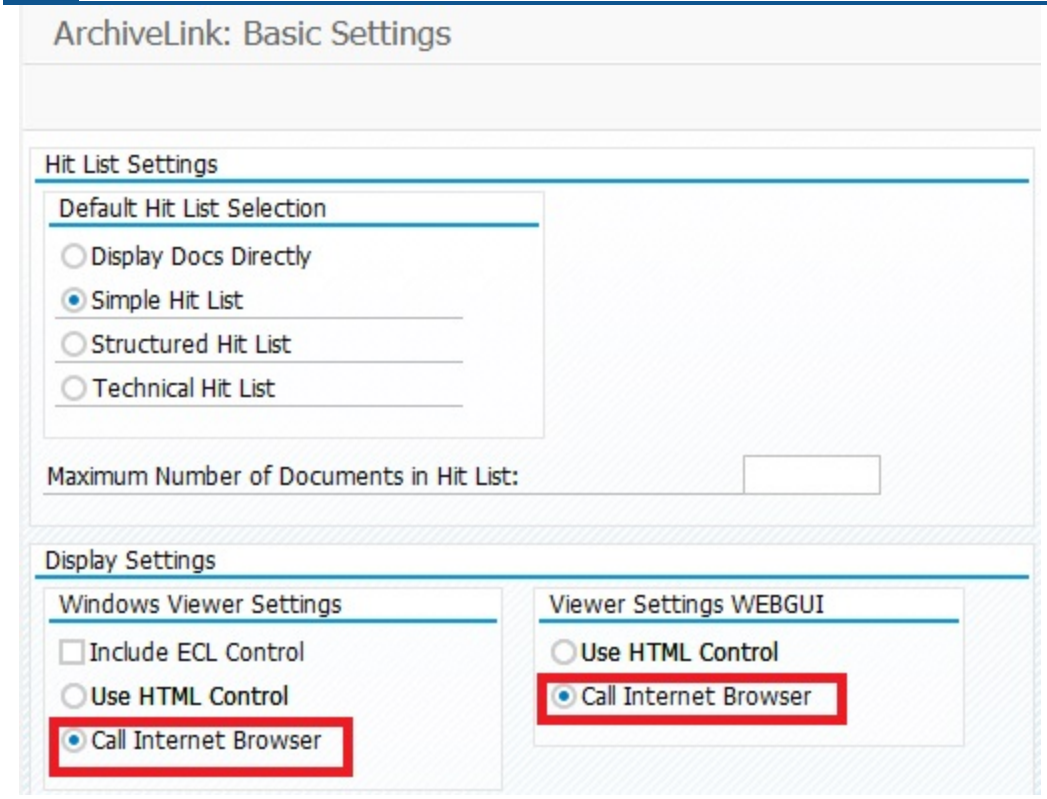
> **Information**
>
> Several SAP ArchiveLink® customizings, such as document types and links, still have to be configured for filing documents from SAP.

ELO Web Client configuration



If the URL to the ELO Web Client is entered into the configuration of a content repository in ELO Smart Link (see the section Advanced > ELO Web Client URL), several configurations have to be made in SAP to call the ELO Web Client. For example, a protocol (transaction *OAA3*) must be maintained in the content repository configuration in SAP (transaction *OAC0*), which has communication type *http* configured for the *Display Stored Document* function.

You can either use an existing protocol or create a new one. You will find more information in the ELO SAP® OLE call documentation.



The display settings under *Windows viewer settings* and under *WEBGUI viewer settings* should also be set to *Call Internet Browser* in transaction *OAG1*.