



# **ELO for SAP Solutions**

SAP Business One®



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# ELO Integration Service for SAP Business One®

## Introduction

This documentation describes how to set up the ELO Integration Service for SAP Business One®. It forms the technical platform for implementing the ELO Integration Client in an SAP Business One® system. The ELO Integration Client is available as an additional tab in configured views of the SAP Business One® client. When called, a configurable path in ELO is generated (if one doesn't already exist) and shown using the ELO Integration Client. The functions of the ELO Integration Client are available here and can be customized.

## Basics

To use the ELO Integration Service for SAP Business One® and ELO Integration Client within SAP Business One®, the systems must meet the following requirements:

- ELOprofessional or ELOenterprise version 12 or higher
- ELO Business Solutions Common version 1.07.000 or higher
- The ELO license must include the ELO Integration Client
- SAP Business One® version 10 or higher (64-bit client on Microsoft Windows)
- On the computers running the extension: Microsoft .NET Framework 4.7.2 or higher

## Preconfiguration in ELO

First, ELO Integration Service for SAP Business One® has to be installed and configured in the ELO system.

You will find the necessary installation packages on the ELO SupportWeb under *Integration > ELO for SAP BUSINESS ONE® > ELO Integration Service for SAP Business One®*.

- erp.sbo.integrationservice
- erp.sbo.integrationservice.custom

The ELO Integration Client also requires a configuration file in ELOapps.

- elo.integration.Client

### 'elo.integration.client' configuration file

The configuration file *elo.integration.client* in JSON format is required for the ELO Integration Client. You will find this file in ELO under:

*Administration // ELOapps // Configuration*

If this file already exists, you will have to add the entry *sbo*. This is the case if the ELO Integration Client is already integrated with Salesforce, for example. In this case, multiple profiles are used.

If the file does not exist, create it with the following parameters:

```
"sbo": {  
  "noForm": false,  
  "noFeed": false,  
  "noFulltext": false,  
  "noImagePreview": false,  
  "rFInit": "RF_erp_sbo_integrationservice_service_Init",  
  "newDocVersFct": true,  
  "saveDocFct": true,  
  "gotoFct": true,  
  "webClientURL": "http://<Server>:<Port>/ix-<Repository>/plugin/de.elo.ix.plugin.proxy/w  
  
  "editInOfficeFct": true,  
  "removeEntryFct": true,  
  "startWorkflowFct": false,  
  "startWorkflowTemplates": null,  
  "externalLinkFct": true,  
  "folderMask": "<GUID of folder form>",  
  "documentMask": "<GUID of document form>",  
  "hasSearch": true,  
  "referenceEntryFct": true,  
}
```

```
"refreshFct": true  
}
```

For more information on this configuration file, refer to the [ELO Integration Client](#) manual.

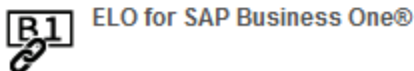
Check the following important functions:

- `rFInit`: Function that creates the folder path; provided with the *erp.sbo.integrationservice* package.
- `webClientURL`: To prevent the user from having to log on multiple times, the proxy behind the ELO Indexserver has to be configured. The ELO Web Client has to be configured as a plug-in behind the proxy.
- `folderMask`: Defines the metadata form that the ELO Integration Service for SAP Business One® uses to create new structures from within the SAP Business One® object.
- `documentMask`: Defines the metadata form that the ELO Integration Service for SAP Business One® uses when filing documents from the ELO Integration Client within SAP Business One®. You can use metadata forms that pass information onto the objects.

## Configuring the ELO Integration Service for SAP Business One®

### ELO Administration Console

- > System settings
- > Maintenance
- > Server modules
- > System information
- > Clients
- ▼ Solutions



Once you have successfully installed *erp.sbo.integrationservice*, you will find the configuration app in the ELO Administration Console.

## ELO Business Solutions

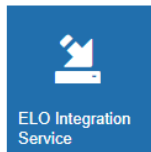
### ELO Integration Service For SAP Business One®

Business Solutions Custom ▾

Version: 1.00.003

Configuration of ELO Integration Service for SAP Business One® components

#### Configuration



#### Version history

1. Navigate to the app to view a selection of configurations.
2. Click the *ELO Integration Service* tile.

ELO Integration Service for SAP Business One®

Structures and folders | SAP Business One® configuration | Expert mode

Custom Save

#### General settings

Custom

Object type		Object description	Intermediate form	Folder form	Document form	
2	<input type="checkbox"/> is RegEx	Business Partner	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	⬆ ⬇ ✕
17	<input type="checkbox"/> is RegEx	Customer Order	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	⬆ ⬇ ✕
23	<input type="checkbox"/> is RegEx	Customer Offer	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	⬆ ⬇ ✕
.*	<input checked="" type="checkbox"/> is RegEx	Others	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	⬆ ⬇ ✕

+ Add entry

The *Structures and folders* tab appears.

## General settings

On the *Structures and folders* tab, you define the paths per object. You can create as many entries as you want here. Due to their complexity, objects are split into multiple areas:

- General settings
- Structure and metadata matching
-

## Assignment of user and group rights

General settings

Custom

Object type		Object description	Intermediate form	Folder form	Document form	
2	<input type="checkbox"/> is RegEx	Business Partner	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	^ v x
17	<input type="checkbox"/> is RegEx	Customer Order	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	^ v x
23	<input type="checkbox"/> is RegEx	Customer Offer	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	^ v x
.*	<input checked="" type="checkbox"/> is RegEx	Others	(E10E1000-E100-E100-E100	SBO-Folder	(E10E1000-E100-E100-E100	^ v x

+ Add entry

When performing calls, the system always checks from top to bottom. For example, if a certain object (such as 17 for *sales order*) is configured first, followed by a wildcard with a regular expression, the first entry is used when performing a call with object 17. For this reason, you should make sure to sort entries from specific to general (corresponding buttons).

### Default filing path

.*	<input checked="" type="checkbox"/> is RegEx	Others	(E10E
----	--	--------	-------

+ Add entry

**Object type:** In the *Object type* column, enter the number of the respective object type in SAP Business One®.

A general filing path is configured as standard. This path uses the wildcard character .\* (period and asterisk) in the *Object type* column. The option *is RegEx* is also enabled. This path handles all object types that do not have a more specific configuration.

**Intermediate form:** In the *Intermediate form* column, enter the metadata form for folders that may have to be created on storage so that the specified path can be generated.

**Folder form:** The final metadata form is specified in the *Folder form* column, e.g. *SBO-Folder*.

**Document form:** Reserved for future use cases. The same form should be entered here as in the ELO Integration Client configuration file.

## Structure and metadata matching

Intermediate form	Folder form	Document form	Repository path	ELO field matching			
(E10E1000-E100-E	SBO-Folder	(E10E1000-E100-E	/frag/{{{DocNum}}}	GRP	SBO_OBJTYP	{{{ObjType}}}	✕ ^ v ✕
				GRP	SBO_OBJECT	{{{DocNum}}}	✕
				+ Add entry			
(E10E1000-E100-E	SBO-Folder	(E10E1000-E100-E	/SAP Business One	GRP	SBO_OBJTYP	{{{ObjType}}}	✕ ^ v ✕
				GRP	SBO_OBJECT	{{{DocNum}}}	✕
				+ Add entry			

**Repository path:** The filing path is defined in the *Repository path* column. With Handlebars syntax, you can use variables from SAP Business One® that are defined for transfer in the advanced configuration.

**ELO field matching:** This is where you specify how to complete the fields on the metadata form defined under *Folder form*. In our example, this is the form *SBO-Folder*.

**Key field:** You can select a key field. The value of the key field is used to specify a property of the object that remains a unique identifier even when other data changes. For example, you can specify an ID that uniquely identifies an object. This ensures that an object is not created twice (with a new name) in the repository, for example. Instead, the corresponding folder is found and a new path is created according to the new name. The folder and its contents are moved to this new path. The documents that were stored under the old name remain in the folder with the new name.

**Add entry:** If necessary, you can add fields. You can enter additional variables with Handlebars syntax or a static string without additional syntax.

The fields have to be part of the metadata form and are not created automatically. Only the fields configured on the *SAP Business One® configuration* tab are available. The following variants are feasible:

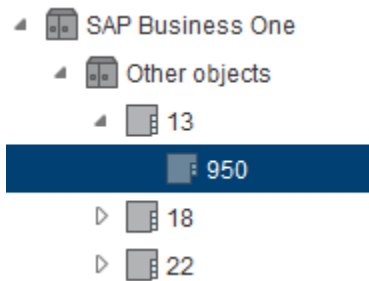
- a) The field was configured in the *Default fields for transferring object information* area.
- b) The field was configured in the *Configuration of SAP Business One Forms (objects)* area in the *Object-specific fields* column.

Refer to the Installation in SAP Business One® section for more information.

You can also use map fields.



## Example 1



In this example, the objects are filed to the default filing path in *Other objects* under the variables *ObjType* and *DocNum*.

## Filing path by object type

If necessary, you can create additional paths with special configurations for individual object types.

Structure and metadata matching						
Custom						
Object type	Object description	Intermediate form	Folder form	Document form	Repository path	ELO field matching
17	Sales order	(E10E1000-E100-E100)	SBO-Folder	(E10E1000-E100-E100)	is orders/{{{DocNum}}}	<div>GRP SBO_OBJTYPE {{{ObjType}}} ✕ ^ v ✕</div> <div>GRP SBO_OBJECTID {{{DocNum}}} ✕</div> <div>+ Add entry</div>

## Example 2

Object type: For this documentation, we use object type *17 (sales order)*.

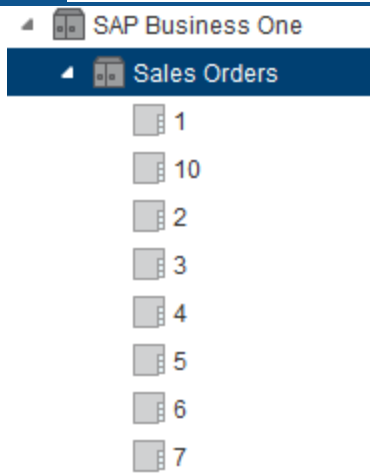
Intermediate form: As with the default filing path. Folder form: As with the default filing path.

Document form: As with the default filing path.

Repository path:

```
/SAP Business One/Sales orders/{{{DocNum}}}
```

ELO field matching: As with the default filing path.



In this example, we create a child folder *Sales orders* in the *SAP Business One* folder in ELO. Objects are stored in this folder under the *DocNum*.

If you request the object-specific fields *CardCode* and *CardName* in the advanced configuration for the order form, you can also build the path as follows:

```
/Business partner/Customer/{CardCode} - {CardName}/Orders/{DocNum}
```

## Assignment of templates, user and group rights

Object type	Path to template	Replace rights	Rights for users and groups									
2	/ExampleStructure	<input checked="" type="checkbox"/>	+ Add entry									
17	/ExampleStructure	<input checked="" type="checkbox"/>	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			{{Group}}	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Dupont	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			+ Add entry									

In this area, you can use a stored template (template structure) when creating an entry as well as assign user and group rights. The required template can be created in the configuration area of Business One under

// Administration // Business Solutions Custom // erp.sbo.serviceintegration // Configuration // FolderTemplates.

The template is only copied the first time the entry is created.

Assignment of user and group rights

Custom

Object type	Path to template	
2	<input type="text" value="Path to template"/>	<input type="checkbox"/> Replace rights

Path to template: Enter the path to the template structure here. For example, if you created a template structure *PurchaseOrder*, this would mean that when you call the ELO Integration Client in the Business One *purchase order* object, assuming all conditions are met, the structure is created under

*Administration // Business Solutions Custom // erp.sbo.integrationservice // Configuration // FolderTemplates // PurchaseOrder.*

At this point, you must use a separator to define a deeper folder structure. However, the separator used must be leading, e.g. if you enter */Vendor/Orders*, the slash is recognized as a separator. Handlebars syntax is also allowed, which enables you to control templates flexibly.

If you use Handlebars syntax to create the structure, you can only use metadata from the fields of the initial template, in this case *SBO folder*.

Rights for users and groups

☐ Replace rights

☐ R

☐ W

☐ D

☐ E

☐ L

☐ P

Replace rights: ELO takes on the rights of the parent element by default. If the *Replace rights* option is enabled, the rights of the parent element are discarded and only the set rights are assigned. Please note that this function only works if a folder structure does not yet exist.

Rights for users and groups: Enter the users or groups that you want to assign rights to here.

RWDELP: Use the check boxes to set the different permissions types for users or groups.

- R = View
- W = Change metadata
- D = Delete
- E = Edit
- L = Edit list
- P = Set permissions

For more information, refer to the documentation [Concept for assigning rights and permissions](#).

## Working with multiple companies/databases

ELO Integration Service for SAP Business One®

Structures and folders

Structure and metadata matching

Custom

Object type	Company	Object description
17	Company	Sales order

☐ is RegEx

If you work with multiple companies/databases in SAP Business One®, but manage them in a single ELO repository, you can configure the *Company* column.

Structures and folders

SAP Business One® configuration

☒ Expert mode

Object description

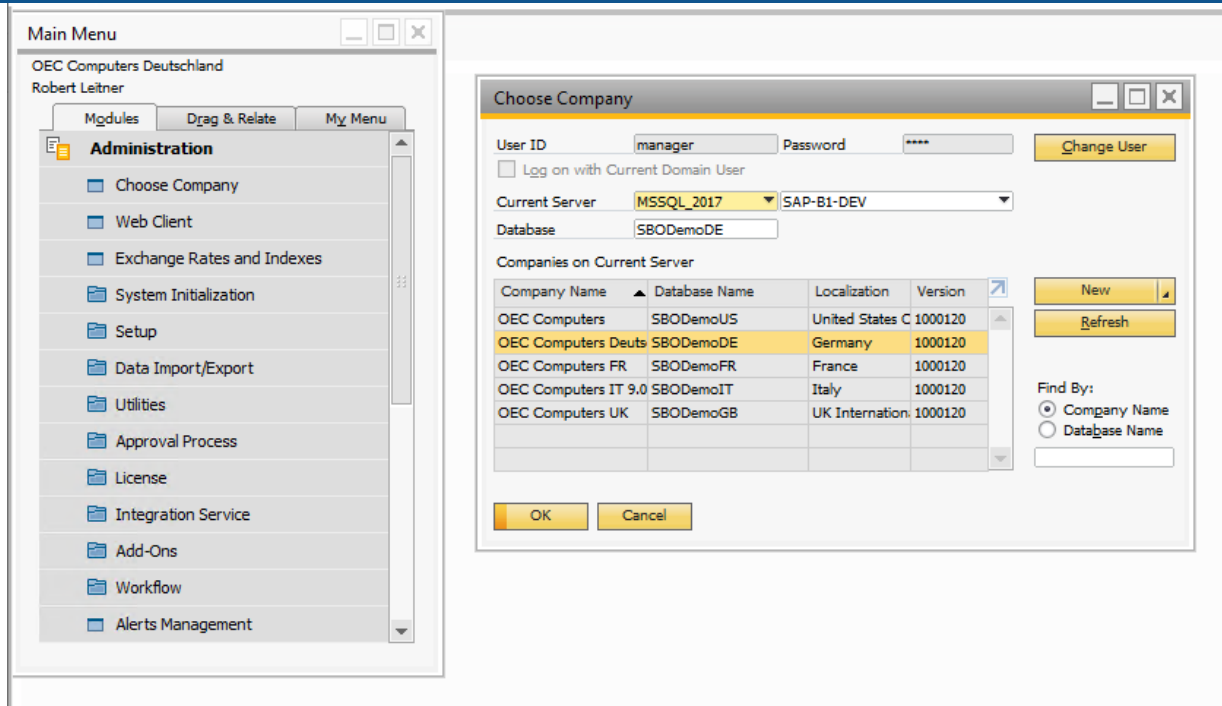
Intermediate form

Folder form

Document form

Sales order	(E10E1000-E100-E	SBO-Folder	(E10E1000-E100-E
-------------	------------------	------------	------------------

1. To show the *Company* column, you have to enable the *Expert mode* option.
2. In the *Company* column, you enter the technical name of the respective company.

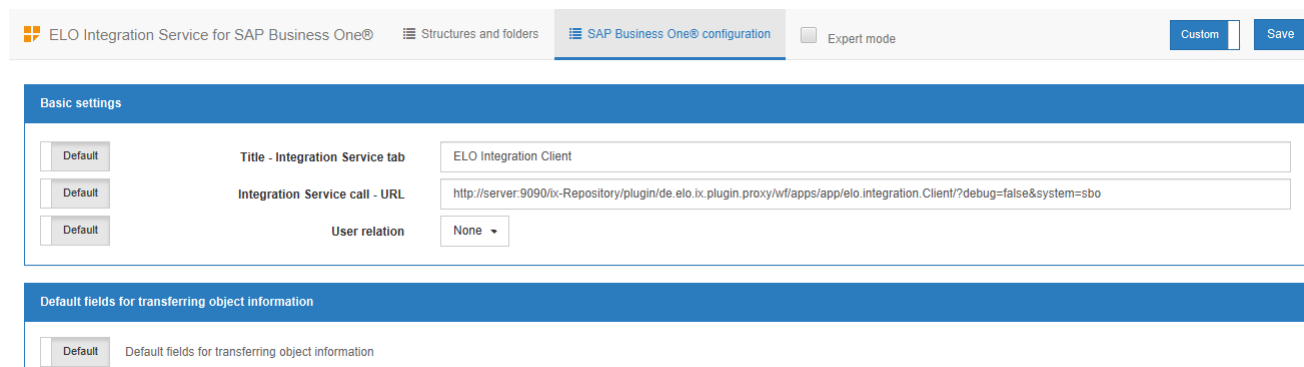


You will find it in SAP Business One® under *Administration > Choose Company*.

Using the *Company* column, you can define different paths for different databases.

## SAP Business One® configuration

To configure additional settings for ELO for SAP Business One®, switch to the tab *SAP Business One® configuration*.



The *SAP Business One® configuration* tab is divided into multiple areas.

### Basic settings

In the *Basic settings* area, you will find the fields described below.

The screenshot shows the SAP Sales Order form. The 'ELO Integration Client' tab is highlighted with a red rectangle. The form contains the following fields:

- Customer: C23900
- Name: Mikrochips GmbH
- Contact Person: Herbert Mayer
- Customer Ref. No.:
- Local Currency:

Below the tabs, there is a table with two rows:

Icon	Document Type	Access	User
PDF	Auftrag	Freie Eingabe	AdminElo
PDF	Konditionen	Freie Eingabe	Administrator

Title - Integration Client tab: Here, you enter a name for the ELO tab in SAP Business One®.

Integration Client call URL: Here, you enter the ELO Integration Client URL. ELOwf provides the ELO Integration Client and, like the ELO Web Client, has to be configured behind the proxy server. The server name and port have to be identical for the call URL and the ELO Web Client URL so that the logon ticket is applied automatically (SSO).

URL schema:

```
http://<Server_name
  >:<Port
    >/ix-<Repository
      >/plugin/de.elo.ix.plugin.proxy/wf/app.integration.Client/?debug=false&system=sbo
    ></Port
  ></Server_name
>
```

User relation: In this field, you configure how ELO maps users.

- a) Users in ELO and in SAP Business One® have identical names: Select the *ELO user name* menu item.
- b) Users in ELO and SAP Business One® are not identical: The user name from SAP Business One® has to be configured in ELO as a user property. In this case, select the corresponding user property.

## Information

If ELO is configured with SSO via Kerberos, you can select the option *None* under *User relation*.

In this case, the URL has to be adjusted. Replace `/plugin/` with `/plugin-auth/`.

### Default fields for transferring object information

The screenshot shows a configuration interface with a blue header bar containing the text "Default fields for transferring object information". Below the header, there is a tab labeled "Default" and a subtitle "Default fields for transferring object information". The main area contains three text input fields with the values "DocEntry", "ObjType", and "DocNum". At the bottom left, there is a blue button with a white plus sign and the text "Add entry".

Here, you can specify which fields can be used for the filing path structure on the *Structures and folders* tab. The fields entered here are requested for all forms. Additional fields with a specific reference to individual forms can be entered under *Object-specific fields* in the respective form.

### Configuring the display

In the *Configuration of SAP Business One Forms (objects)* area, you can configure how the embedded ELO system looks.

**Configuration of SAP Business One Forms (objects)**

Custom

Configuration of SAP Business One Forms (objects)

Forms ID	Element ID	Margin left	Margin top
139	38	0	-22
142	38	0	-22
149	38	0	-22

**Forms ID:** With the *Forms ID* field, you can specify the form in SAP Business One® the settings apply to by entering an ID.

**Element ID:** With the *Element ID* field, you can specify the form element in SAP Business One® to serve as a basis for display by entering an ID.



[illegible]

Margin (left, top, etc.): The margin fields allow you configure custom settings for indents and margins. The values are relative to the element entered in *Element ID*.

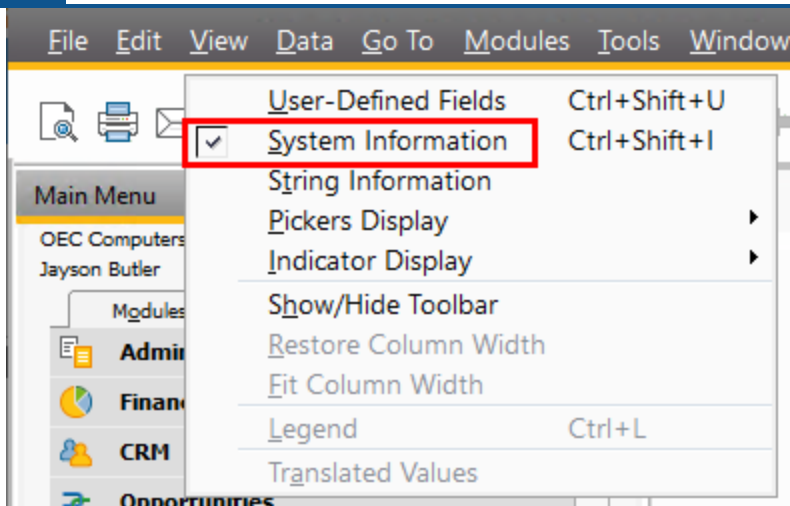
Adjacent tab (left): Enter the ID of the tab to be shown next to the ELO tab.

Object-specific fields: Click *Add entry* to add fields that will then be available for structuring.

These fields and the corresponding identifiers depend on the type of form selected and have to be identified first.

Customer/Vendor Code  
C23900 [Form=139 Item=4 Pane=0 Variable=1 ORDR,CardCode]

In this example, the *Customer* field has the identifier *CardCode*.



### Information

The technical field names are only shown if you have enabled the *System Information* option under *View*.

### Calling the ELO Integration Client within an object

**ELO Integration Service for SAP Business One®**

Der ELO Integration Client steht erst zur Verfügung, nachdem der Datensatz gespeichert wurde.  
 The ELO Integration Client is not available until after the data set has been saved.  
 ELO Integration Client n'est disponible qu'après l'enregistrement du jeu de données.

Vertriebs-MA: -Kein Vertriebsmitarbeiter-  
 Eigentümer:

Bemerkungen:

Buttons: Hinzufügen ..., Abbrechen, Kopieren von, Kopieren nach

Summary fields:

Nr.	Hardware	345
Status		Offen
Buchungsdatum		11.03.2022
Gültig bis		
Belegdatum		11.03.2022

Gesamt vor Rabatt	
Rabatt	%
Fracht	→
Rundung	0,00 EUR
Steuer	
Gesamt	0,00 EUR

If a new document is created within an object (e.g. a customer offer) in SAP Business One®, the ELO Integration Client will not be displayed until the corresponding data set has been saved and

the offer number can be used as identifier. This is necessary because the temporary ID assigned by SAP Business One® (e.g. the offer number) could change before the document is stored.

### **Additional fields for compatibility reasons**

The following fields can be enabled in expert mode:

- Display level
- UID folder item
- UID browser control

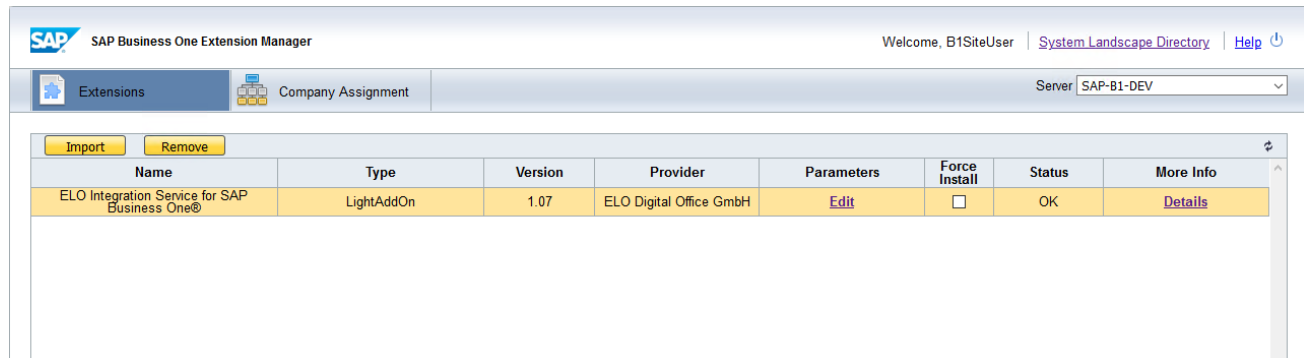
#### **Please note**

These fields are available for compatibility reasons. Normally, these values do not have to be changed. However, there may be forms already using the display level. Or, other extensions may be installed that use the same display level or UID. In these cases, you will have to make some changes.

## Installation in SAP Business One®

After ELO has been configured, the service is installed in SAP Business One®. You need the installation files that are provided as a ZIP file (*EloIntegrationServiceB1-1.0.zip*; with the corresponding version number).

You will find the ZIP file as a download on the ELO SupportWeb under *Integration > ELO for SAP® ERP > [ELO for SAP Business One®](#)*.



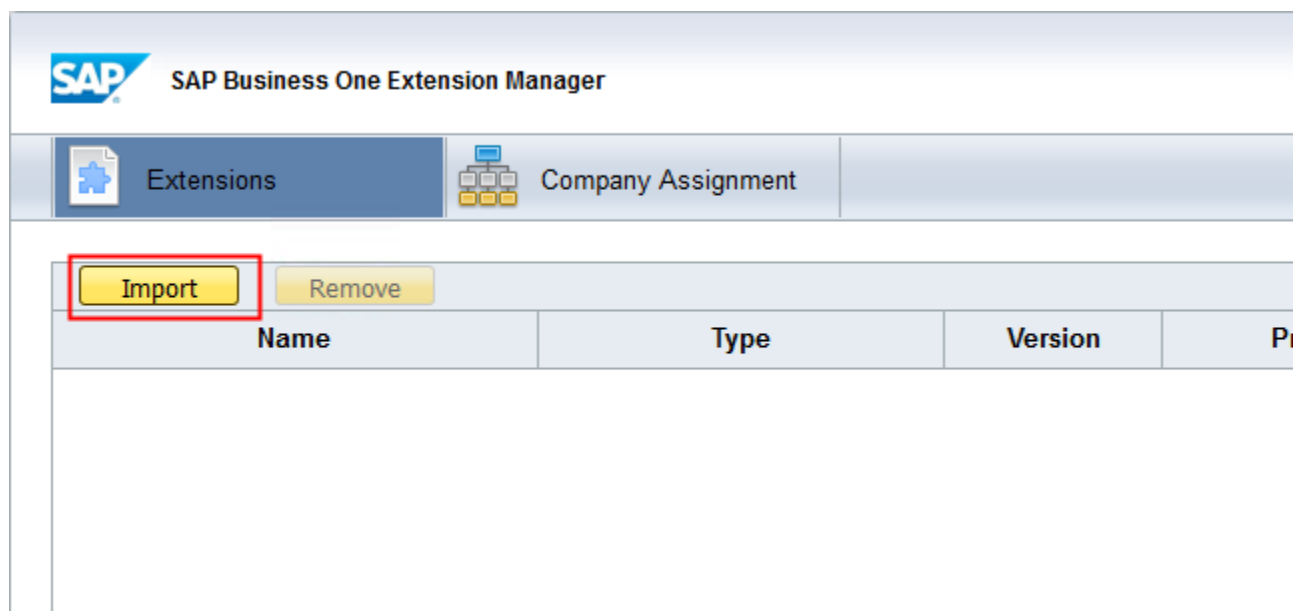
1. Open SAP Business One® Extension Manager. This tool is supplied with the SAP System Landscape Directory.

Normally, the call is carried out via a URL with the following structure:

```
https://<server>/40000/ExtensionManager/
```

A Business One Site User is required to log on. This is a general user and is not managed via the SAP database.

## Import



1. Click *Import*.

A dialog box opens.

2. Click *Browse*.

3. Select the ZIP file with the installation data.

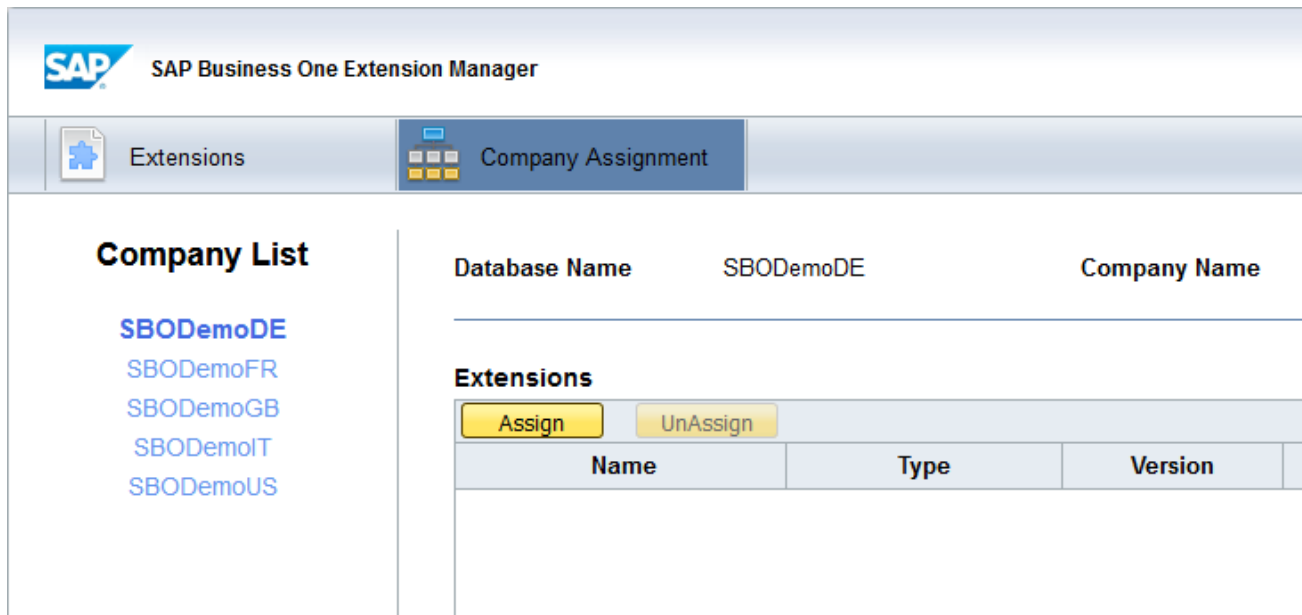
4. Click *Upload*.

The data is loaded.

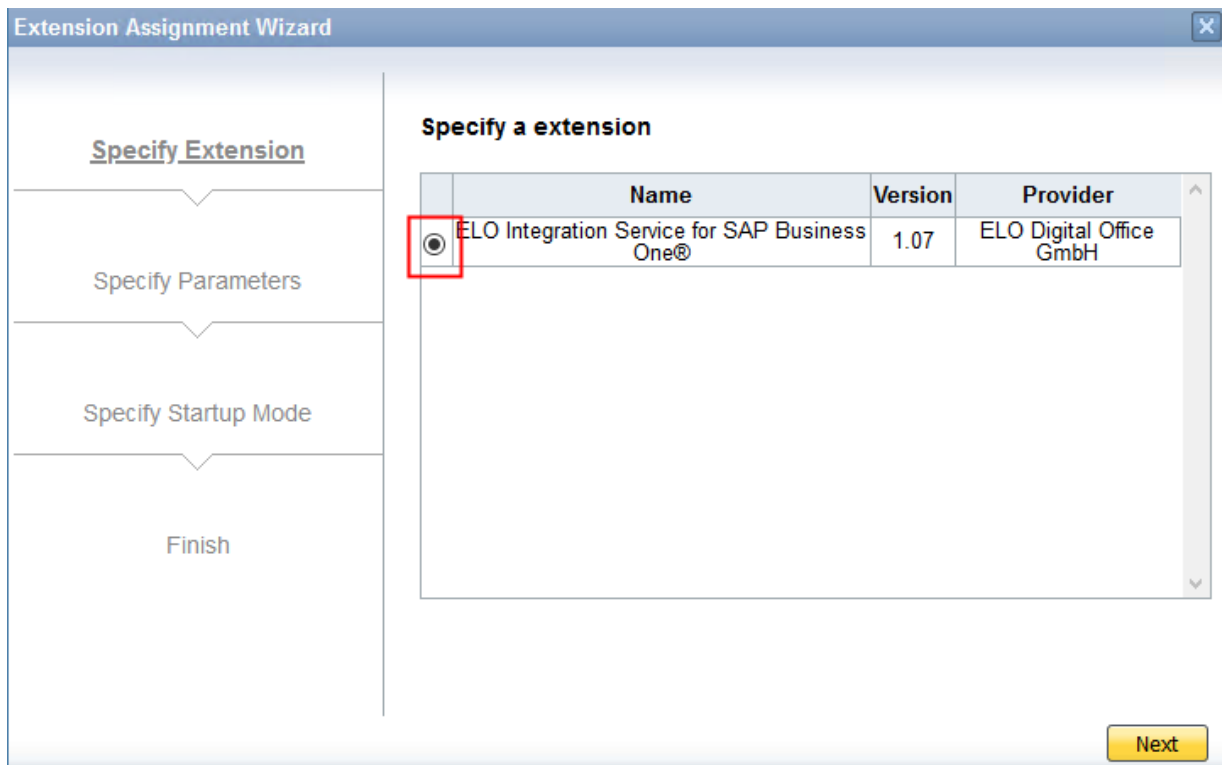
5. Click *Next*.

6. Skip the *Specify Shared Parameters* page and upload by clicking *Finish*.

## Assignment



1. Open the *Company Assignment* tab.
2. Select the desired company/database.
3. Click *Assign*.



4. Select the extension *ELO Integration Service for SAP Business One®*.
- 5.

Click *Next*.

**Extension Assignment Wizard**

**Specify Extension** ✓

**Specify Parameters**

**Specify Startup Mode**

**Finish**

**Parameters** ⓘ

Name	Value	Description
configPath	/erp.sbo.integrationservice /Configuration /integrationService.config ⓘ	Path to the config in the ELO repository
ixUrl	http://server:9090/ix-Repository/ix ⓘ	URL of the ELO Indexserver
user	ELO Service ⓘ	Username of the ELO service user
password	52-247-139-10-8-11-59-34 ⓘ	Password of the ELO service user (can be encrypted with AdminConsole)

**Next**

6. Edit the parameters:

- ixUrl: Enter the URL to the ELO Indexserver.
- user: Enter the ELO service account (normally *ELO Service*).
- configPath: The config path for the ELO Integration Client. It can be changed when used at different companies.
- password: Enter the password for the ELO service account used above. You can encrypt the password first in the ELO Administration Console and then enter the encrypted password here.

7. Click *Next* to confirm.

Extension Assignment Wizard

Specify Extension ✓










Specify Parameters ✓

Specify Startup Mode

Finish

Default Startup Mode: Manual

User Preference ⓘ

User Name	Startup Mode
manager	Automatic 
bernhard	Default 
hermann	Default 
kolman	Default 
friedric	Default 
ingolf	Default 
olaf	Default 
gustav	Default 
hinrich	Default 

Next

8. If needed, edit the startup mode. You can choose whether you want to select the same mode for all users or configure custom settings per user.

9. Click *Next* and then *Finish*.

### Please note

The Windows user who starts the Business One Client must have appropriate rights in the add-on directory of the Business One Client installation.

The following rights must be granted:

- Change
- Read
- Execute
- Write

Example path: *C:\Program Files\SAP\SAP Business One\AddOns\ELO\ELO Integration Service for SAP Business One®\X64Client*



# ELO Output Link for SAP Business One®

## Introduction

This document describes how to set up ELO Output Link for SAP Business One®.

ELO Integration Service for SAP Business One® is required as the foundation for ELO Output Link to function. This not only forms the technical platform for implementing the ELO Integration Client in an SAP Business One® system, but also acts as the interface between ELO and SAP Business One® for the ELO Output Link for SAP Business One®.

## Basics

To use ELO Output Link for SAP Business One®, the following system requirements must be met:

- ELOprofessional or ELOenterprise version 12 or higher
- ELO Business Solutions Common version 1.15.000 or higher
- The ELO license must include the ELO Integration Client
- SAP Business One® version 10 or higher (64-bit client on Microsoft Windows)
- On the computers running the extension: Microsoft .NET Framework 4.7.2 or higher
- Configured ELO Integration Service for SAP Business One®

## Preconfiguration in ELO

First, ELO Output Link for SAP Business One® has to be installed and configured in the ELO system.

You will find the necessary installation packages on the ELO SupportWeb under *Integration*. The ELO installation package contains the following files:

- erp.sbo.outputlink
- custom\_erp.sbo.outputlink

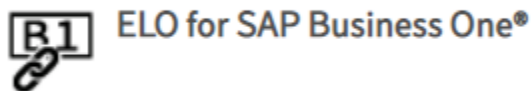
### Configuring ELO Output Link for SAP Business One®

The configuration is rolled out via the Integration Service package for version 1.00.004 and higher. This is therefore a requirement.

Like the Integration Service, Output Link includes a sample configuration. This includes the following objects:

- Sales orders
- Sales quotations
- Delivery notes
- Invoices
- Credits
- Purchase orders

Once you have successfully installed the ELO packages, you will find the configuration app in the ELO Administration Console under *Solutions > ELO for SAP Business One® > ELO Output Link*.



Click the *ELO Output Link* tile to access the configuration interface of ELO Output Link for SAP Business One®.

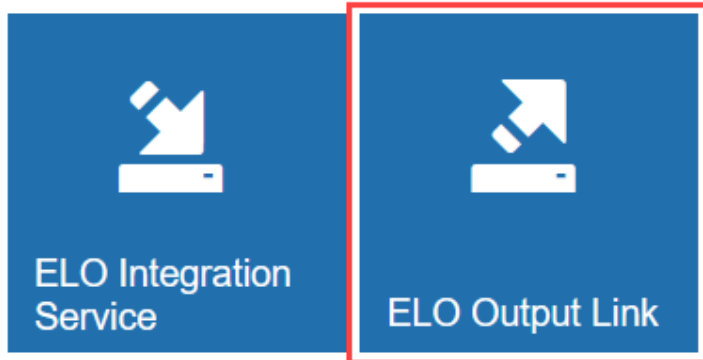


## ELO For SAP Business One®

**Version: 1.00.004**

Configuration of ELO for SAP Business One® components


### Configuration



#### General settings

In the *General settings* area, you define an object type. With customer extensions within SAP Business One®, this could also be an ID defined by development. The object type helps you identify the configuration entry.

As soon as you add a new entry in this area, corresponding lines are automatically created in the *Structures and metadata matching* and *Assignment of user and group rights* areas.

<  ELO Output Link for SAP Business One® ☒ Expert mode Default Save

---

**General settings**

Default

Object type	Company	Document form	Version comment	
17	Company	SBO-PrintedDoc	printed sales order	<input checked="" type="checkbox"/> delete afterwards <input type="checkbox"/> Only one version <span>✕</span>

**Object type:** In this column, enter the ID that uniquely identifies an object.

**Company:** You can enter a company here to distinguish between several companies in use. Multiple entries can exist for one object type. Under structure and metadata matching, you can configure a separate path for the respective company for each entry.

**Document form:** This is where you specify which metadata form to use for documents filed via ELO Output Link for SAP Business One®. You can enter the same form as in the ELO Integration Client configuration file, or a separate one for each SAP Business One® object.

**Version comment:** The comment is entered for the document filed from SAP Business One® and is visible in the document's feed. If a report or an object is printed again, ELO generates a new version, which is saved in the comment/feed with the entry configured here.

**Delete afterwards:** If this option is enabled, a PDF document is deleted after it has successfully been transferred to ELO.

**In detail:** If the document comes from the *Archived Documents* child folder within the attachments folder, the PDF file there is deleted. If the PDF comes from the attachments folder and it was also linked on the *Attachments* tab in the application, the PDF is deleted along with the entry in the SAP Business One® database.

**Only one version:** No other versions will be filed. If a document already exists, the previous metadata remain unchanged.

## Structure and metadata matching

As described in the chapter [General settings](#), when you create an entry under *General settings*, a separate entry for the object type is automatically created in the *Structure and metadata matching* area.

Structure and metadata matching						
Default						
Object type	Repository subpath	ELO field matching				
17	/Sales Order {{{DocNum}}}	GRP	SBO_OBJTYPE	{{{ObjType}}}	<input type="checkbox"/> Key field	<input type="button" value="✕"/>
		GRP	SBO_OBJECTID	{{{DocNum}}}	<input type="checkbox"/> Key field	<input type="button" value="✕"/>
		GRP	SBO_KEY	Output/{{{ObjType}}}/{{{DocNum}}}	<input checked="" type="checkbox"/> Key field	<input type="button" value="✕"/>
		<input type="button" value="+ Add entry"/>				

**Object type:** The entry is copied directly from the *General settings* area and can also only be modified in that area.

**Repository subpath:** The filing path in ELO is defined in the *Repository subpath* column. In this field, you can also enter SAP Business One® variables, e.g. using Handlebars syntax.

**ELO field matching:** This is where you specify how to complete the fields on the metadata form defined under *Document form* (see chapter [General settings](#)).

**ELO field:** Choose between *GRP* for metadata fields and *MAP* for map fields and enter the technical name of the field here. In MAP fields, it is possible to use iteration by attaching the value `{i}` to the technical name. This is useful in relation to the value in *Alternative table* if a table of lines is specified there and multiple values can be transferred. If the metadata fields do not exist in the metadata form, the corresponding values will be lost and written as a warning in the log.

**Value in Handlebars:** The value entered here is stored in the corresponding ELO field in the ELO entry. To copy the value of the transfer parameter from the URL, it must be enclosed in triple curly brackets.

If the values are iterated, you can use the `{i}` identifier to indicate the Handlebar.

### Please note

If an iteration is defined but there is no `{i}` in the ELO field, all values will be concatenated in this field up to a maximum of 255 characters. Any values above this will be rejected.

**Key field (expert mode):** You can select one key field. The value of the key field is used to specify a property of the object that remains a unique identifier even when other data changes. For example, you can specify an ID that uniquely identifies an object. New versions of the object are created at the new location when moving the object instead of creating it (and therefore a duplicate) at the old location, for example.

## Assignment of user and group rights

Assignment of user and group rights

Custom

Object type

17 ☐ Replace rights

Rights for users and groups

User or group name

☐ R ☐ W ☐ D ☐ E ☐ L ☐ P

+ Add entry

Replace rights: ELO inherits the rights of the folder by default. If this option is enabled, the rights of the folder are discarded and only the set rights are assigned.

Rights for users and groups: Enter the users or groups that you want to assign rights to here.

RWDELP: Use the check boxes to set the different permissions types for users or groups.

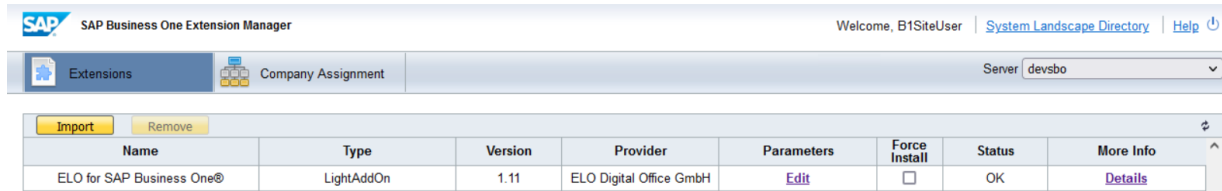
- R = View
- W = Change metadata
- D = Delete
- E = Edit
- L = Edit list
- P = Set permissions

For more information, refer to the documentation [Concept for assigning rights and permissions](#).

## Installation in SAP Business One®

After you have completed the configuration in ELO, you have to configure SAP Business One®.

1. Open SAP Business One® Extension Manager.
2. Import the ELO for SAP Business One® add-on by clicking *Import*.



3. Assign the add-on to the company via the *Company Assignment* tab.



The settings you are familiar with from the Integration Service have been added to use the new *configPathOI*.

### Client start

Start the SAP Business One® client with administrator rights if the client has been started for a user for the first time or after updates have been installed.

### Requirements for printing documents

Output Link bases its behavior on the system default. This means PDF files with a defined name structure are expected in the attachments folder in the child folder *Archived Documents* or in the main folder. These folders are linked via the document attachments. The *PrintEvent* also has to be triggered. If using add-ons or custom developments that work differently or affect the system behavior, this may impact function in part or completely.

Once Output Link is in use, SAP Business One® should be avoided during ELO maintenance windows. Otherwise, any failed transfers while the system was unavailable will have to be repeated manually (see section 'queue' folder). This work may accumulate on different computers due to the architecture of SAP Business One®.

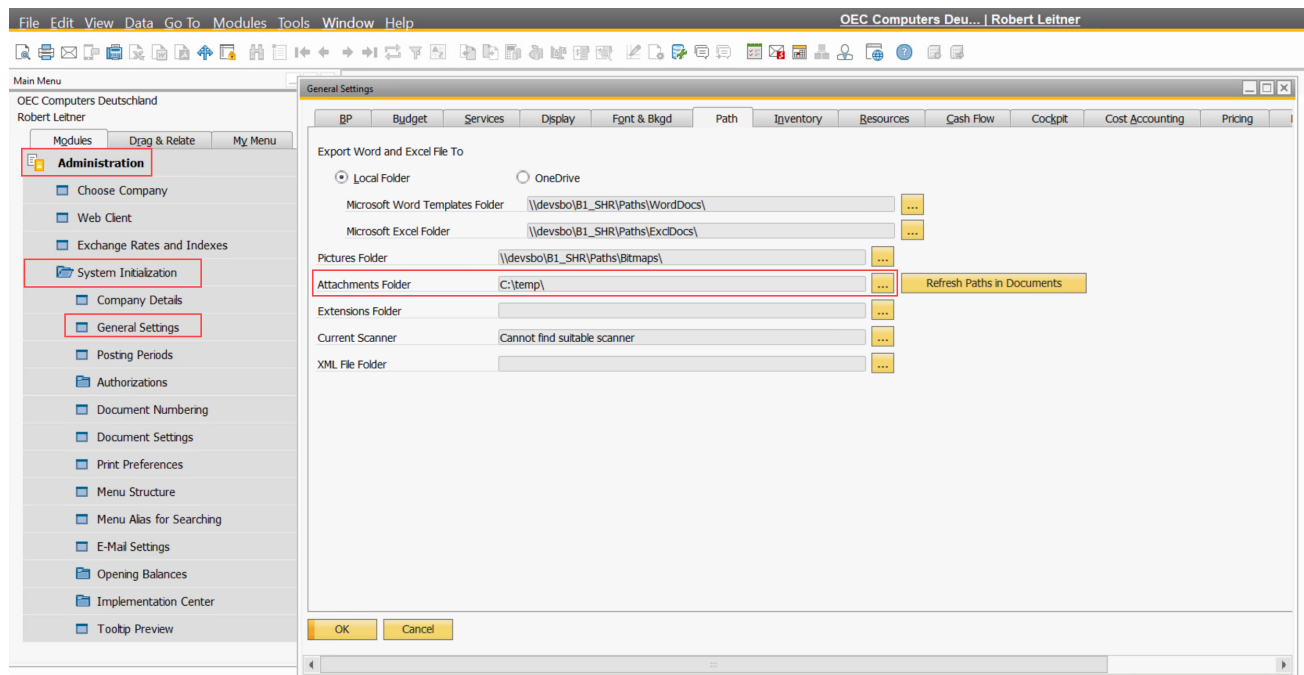
## Attachments folder

A valid path for attachments has to be configured in the connected SAP Business One® system. This setting should generally be coordinated with a system administrator.

Clients should be able to access the path at all times and the user accounts running the SAP Business One® client should have read/write and, if necessary, delete rights.

The path is configured here:

*Main menu > Modules tab > Administration > System Initialization > General Settings > Path tab > Attachments folder field*



## Generate PDF

For both manual and serial printing, the *Generate PDF when printing* option has to be enabled. A PDF with a specific file name is then created in the *Archived Documents* child folder within the attachments folder for all print actions.

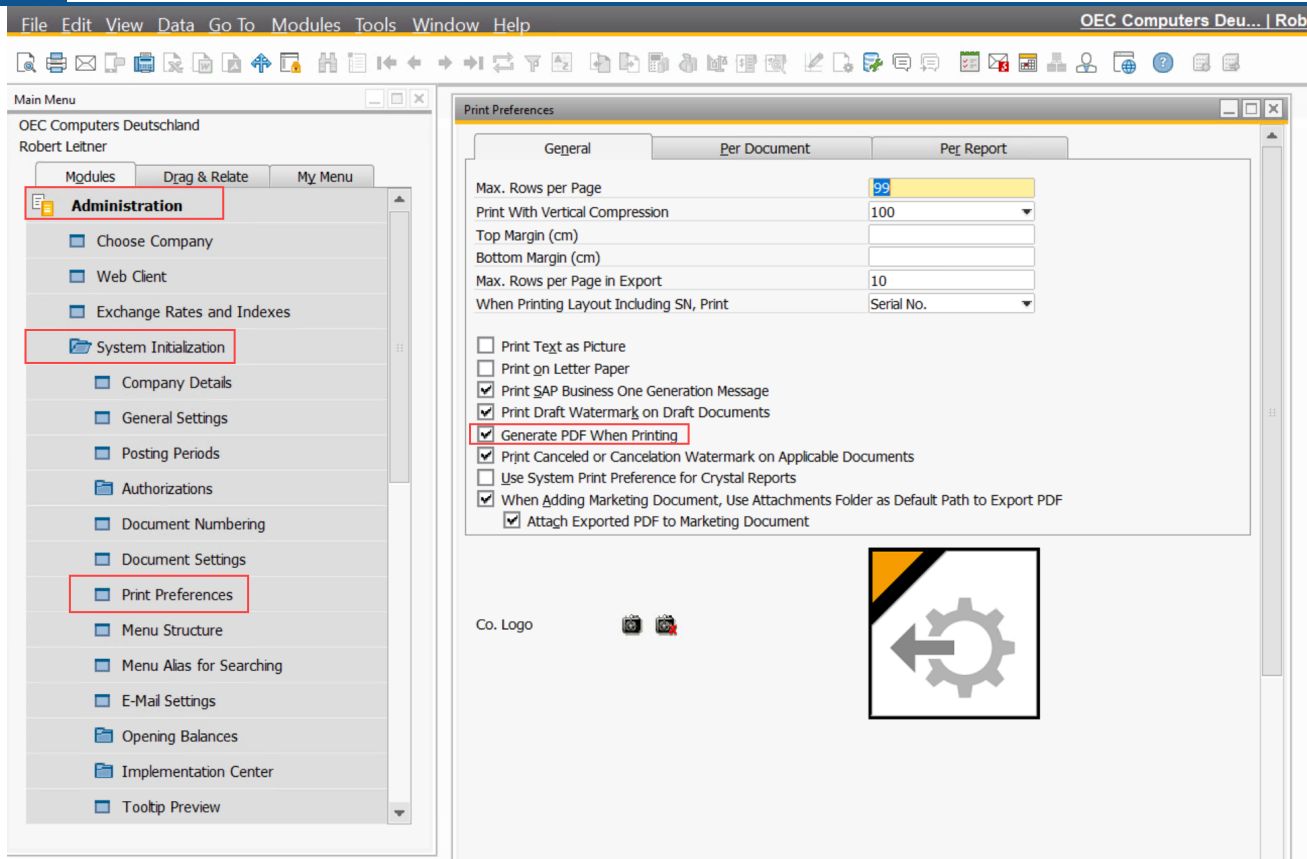
Example: <object type>\_<document number>\_<date>\_<time>\_<report>\_<user>.pdf results in 17\_971\_20220708\_075850\_RDR20005\_manager.pdf.

If this doesn't happen even though the box has been checked, Output Link will not work.

The option can be set here:

*Main menu > Modules tab > Administration > System Initialization > Print Preferences > General tab > Generate PDF When Printing check box*





## Generate PDF per document

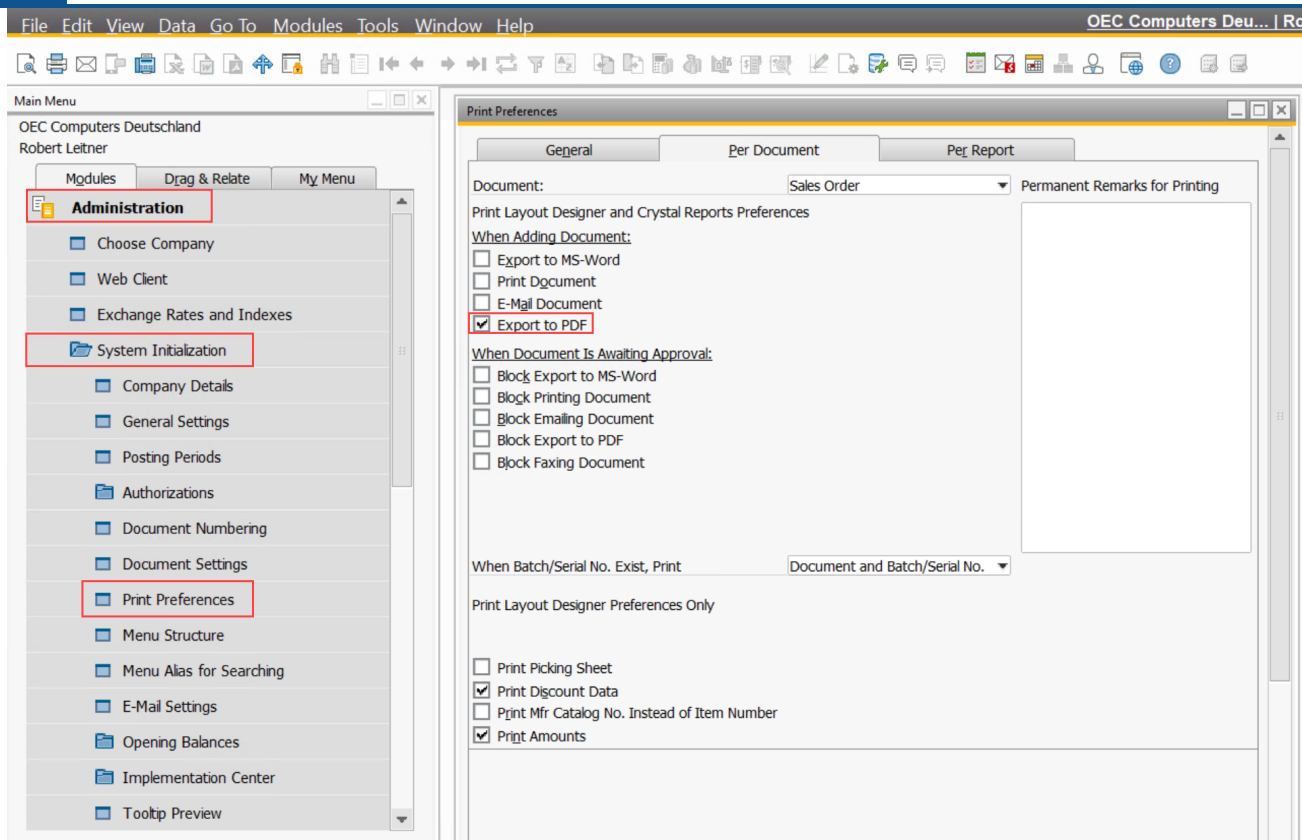
To generate a PDF when adding a sales order or outgoing invoice and transfer it to ELO, this has to be configured per document. This configuration generates a PDF, files it to the attachments folder, and writes an entry to the document's attachments. This function can also be tested without Output Link.

If there is no entry in the document's attachments after adding the document, Output Link will not work.

The option can be set here:

*Main menu > Modules tab > Administration > System Initialization > Print Preferences > Per Document tab > Export to PDF*

Example for adding a sales order:



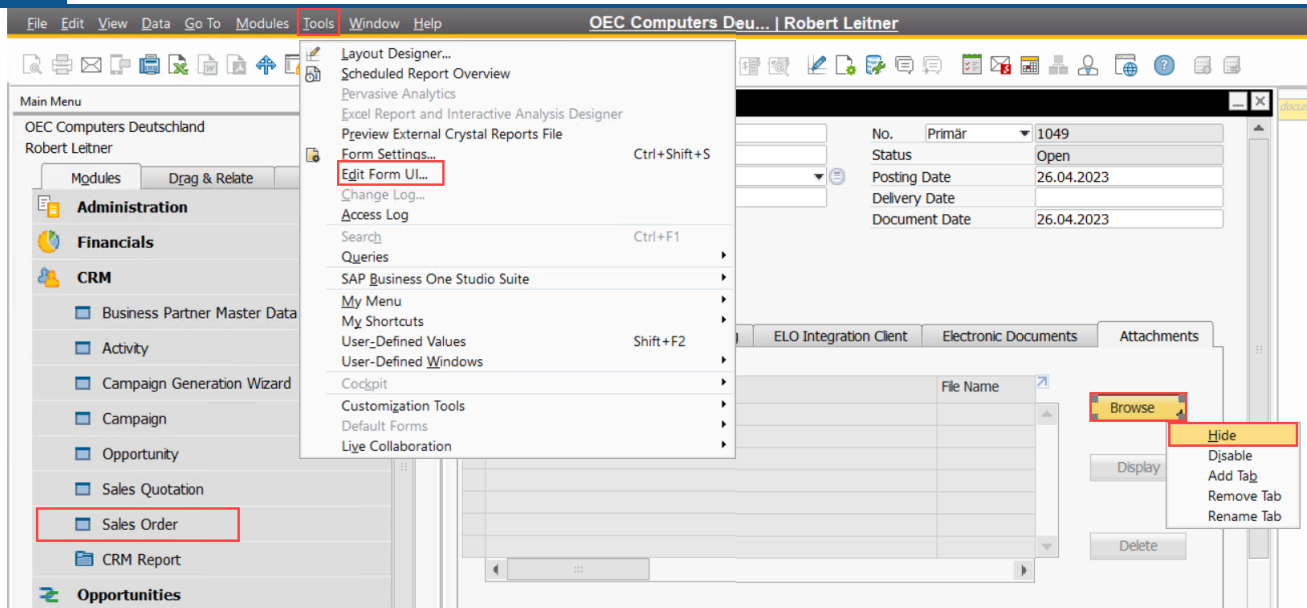
## Optional settings

If using the Integration Service, you can restrict access to the standard *Attachments* function for users. There are different ways to do this. Besides the more complicated option of editing the form in SAP Business One® Studio, you can also hide the button for adding new attachments in UI edit mode.

1. Select *Extras > Edit Form UI....*

The *UI edit mode* window opens.

2. Click *Browse* and select the *Hide* menu item.



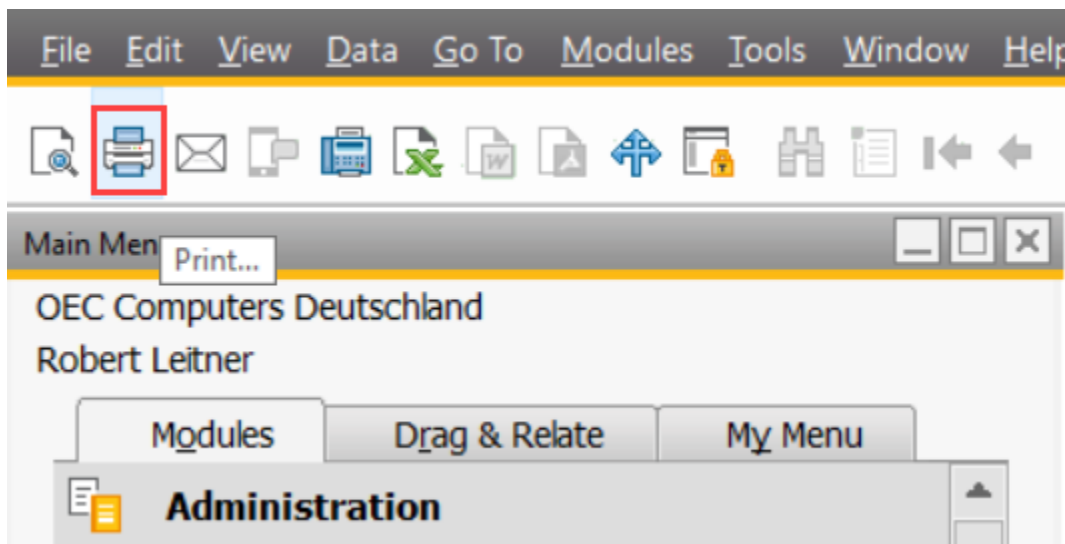
## Functionality

ELO Output Link for SAP Business One® responds to the *Application PrintEvent* of the SAP Business One® client. If the object being printed has been configured accordingly, the document is transferred to ELO and removed in SAP Business One® depending on the configuration.

To transfer a document to ELO, saving of the PDF must be enabled in the configuration.

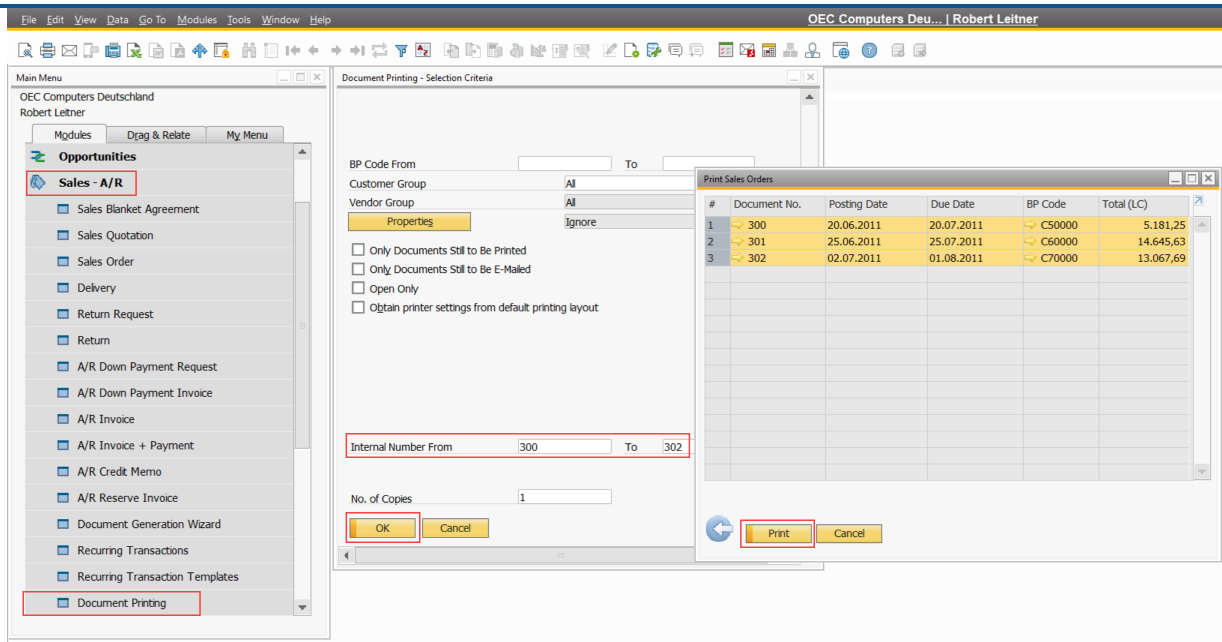
There are different actions that can trigger the event and creation of a PDF:

- Manual printing via the *Print* button



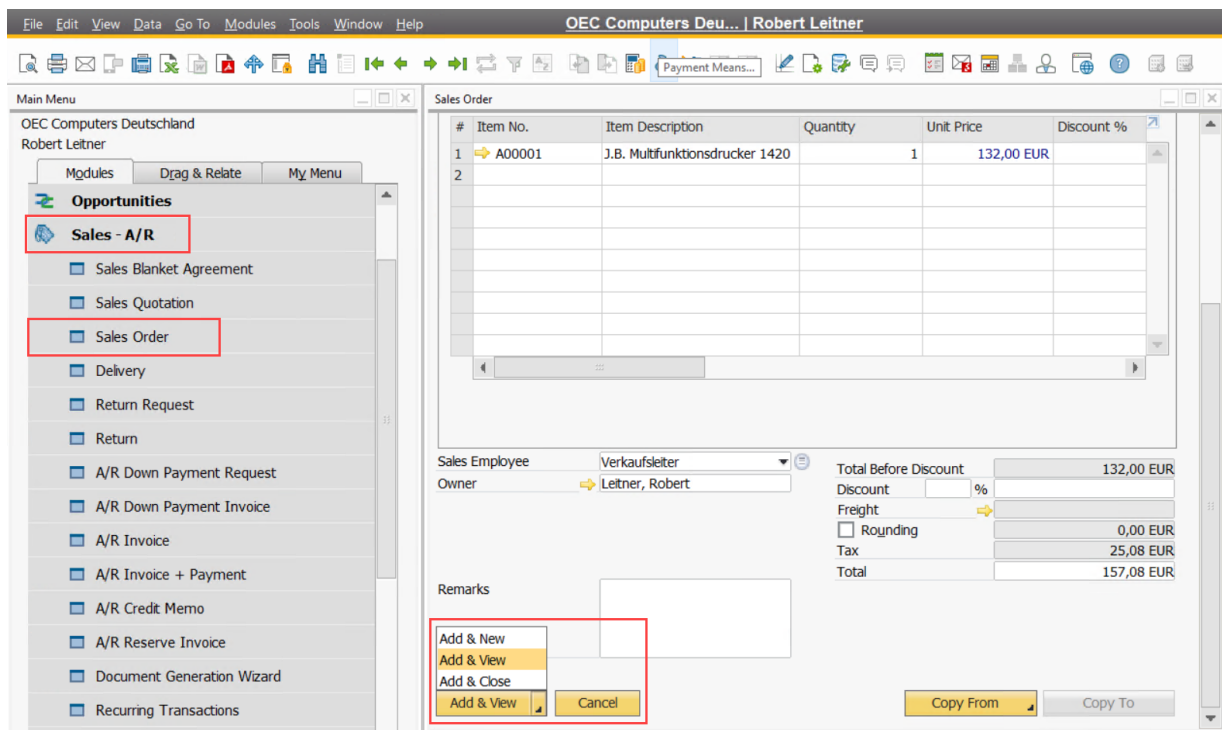
- Serial printing via the *Document Printing* function (also suitable for *subsequent archiving*).

Available in: *Main menu > Modules tab > Sales > Document Printing > Internal Number From field > OK button > Print button*



- For certain document actions, such as adding a new document. Different options are available in SAP Business One® depending on the document type. This depends on what the system offers.

Example for a *sales order*:



## Troubleshooting

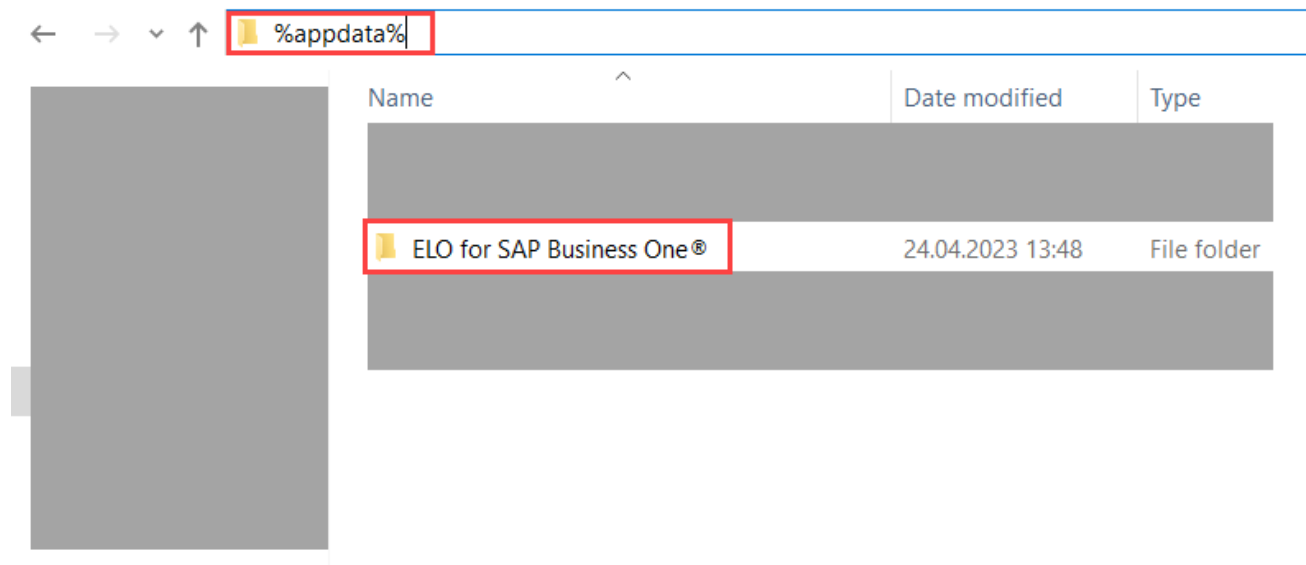
This chapter features possible solutions for frequent issues.

### 'AppData' directory

The add-on creates different folders in the *AppData* directory of the executing user.

To find the directory, proceed as follows:

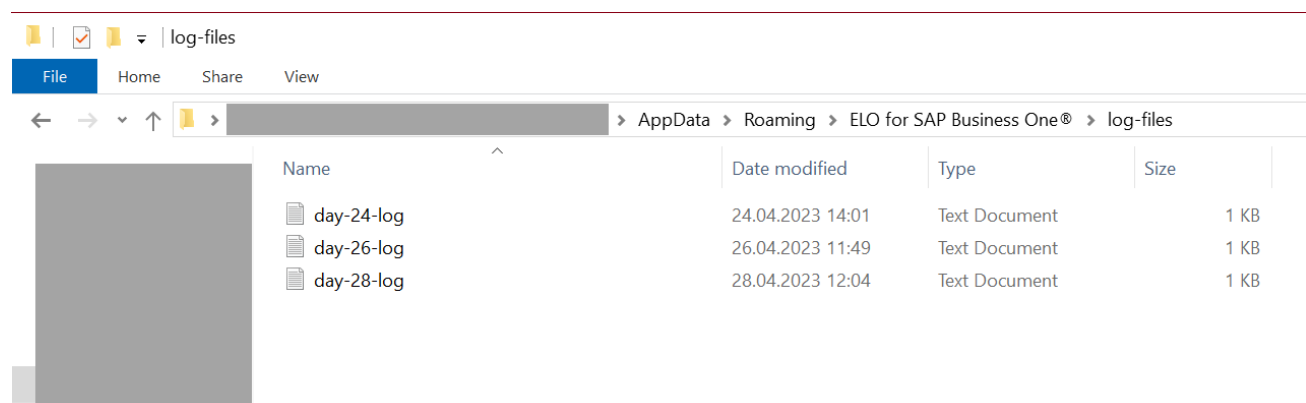
In the Windows Explorer Address Bar, enter %appdata% and navigate to the *ELO for SAP Business One®* folder.



### 'log-files' folder

A log file is written to the *log-files* folder for each day of the month. It is overwritten completely when a new month starts. This is a rolling log to keep the hard drive from filling up and to keep the installation maintenance-free.

You will find the *log-files* folder in the *\AppData > Roaming > ELO for SAP Business One®* directory.



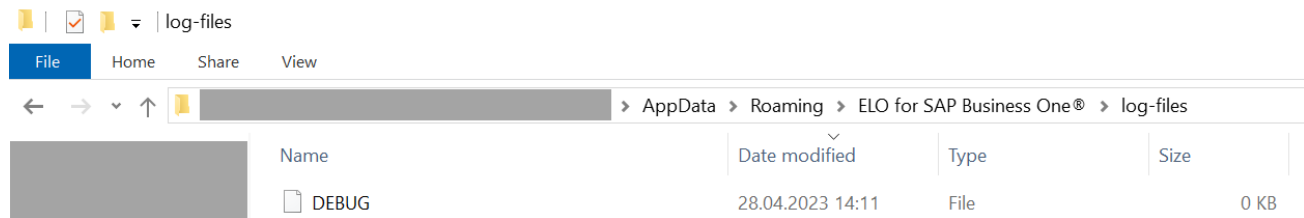
## Debug mode

Sometimes, a more detailed debug log is required for support reasons. To enable this log, proceed as follows:

1. In the *ELO for SAP Business One®* folder, create a file named *DEBUG* without an extension, e.g. via *context menu (right-click) > New > Text document*.

If the file name extensions are not shown, you will have to enable this option and remove the extension *.txt*.

2. Once the file has been created, restart the add-on or better yet the entire SAP Business One® client.



## 'queue' folder

Internally, Output Link works with a queue to repeat any failed transfers or to continue after a crash. JSON files that reflect the current status of a transfer are stored in the *queue* folder. They are processed and cleaned up automatically.

If the ELO system is down for a longer period of time and SAP Business One® is still used in this time, you will have to inspect the *queue* folders for all users. Check whether the *error* child folder has been created there and whether it contains entries. If this is the case, you can move the entries back to the queue folder. Within these files, check whether the *RetryCount* is greater than 10. It may have to be set back to the value 0. When the SAP Business One® client (including the ELO add-on) is started back up, the files are processed.



Extensions



Company Assignment

Server: 

## Company List

SBODemoDE

Database Name	SBODemoDE	Company Name	OEC Computers Deutschland	Version	1000120
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## Extensions

Extension Assignment Settings

Parameters

Startup Mode

Name	Value
configPathOI	/erp.sbo.outputlink/Configuration/outputlink.config
configPath	/erp.sbo.integration.service/Configuration/integrationService.config
ixUrl	
user	ELO Service
password	

Status

OK