### 2952067 - Electronic Document Service

**Version** 7 **Type** SAP Business One Notes

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**Component** SBO-SD-ELD ( Electronic Documents )

Please find the original document at <a href="https://launchpad.support.sap.com/#/notes/2952067">https://launchpad.support.sap.com/#/notes/2952067</a>

#### **Symptom**

A new service is required to process and communicate electronic documents and reports for SAP Business One and SAP Business One, version for SAP HANA.

The new *Electronic Document Service* provides a replacement for some existing methods of handling electronic documents and electronic reporting, and complements other existing methods. *Electronic Document Service* enhances the management of electronic marketing documents processed to, and from, SAP Business One. *Electronic Document Service* is required in certain scenarios that use *Electronic File Manager*, as detailed in the *Solution* section of this SAP Note.

Electronic Document Service was initially made available in the Czech localization of SAP Business One and SAP Business One, version for SAP HANA, as described in SAP Note 2915221.

#### Solution

SAP intends to provide a feature package or feature packages to solve the problem described. The section **References** below lists the relevant feature packages once they become available, and the **Related Info** content of relevant feature packages available in the SAP Support Portal, show this SAP Note. Be aware that these references can only be set at feature package release date. SAP delivers feature packages only for selected releases at its own discretion, based on the business impact and the complexity of the implementation.

To allow for this requirement, the following changes are available in SAP Business One and SAP Business One, version for SAP HANA:

Electronic Document Service (EDS) is a new service that allows you to process and communicate electronic documents and reports for SAP Business One and SAP Business One, version for SAP HANA. EDS provides an electronic document and reporting framework and enhances the management of marketing documents processed from, and to, SAP Business One, electronically. A web-based dashboard is available to monitor EDS.

You must install the *Electronic Document Service* server component to process and communicate electronic documents through EDS using SAP Business One. The EDS component must be installed on the server where SAP Business One is located. The EDS component must be installed for certain listed scenarios that use *Electronic File Manager* (EFM).

- EDS runs on Windows or Linux and works in the background with the user interface and DI API.
- EDS collects data through System Landscape Directory (SLD) and Service Layer.
- EDS sends documents to the authorities and writes to the SAP Business One database through Service Layer.
- EDS is registered in System Landscape Directory on the Services tab.

- Access the user interface monitor for EDS through the link in SLD.
- Refer to the Administrator's Guide for SAP Business One or Administrator's Guide for SAP Business
  One 10.0, version for SAP HANA on the SAP Help Portal (<u>SAP Business One</u> or <u>SAP Business One</u>,
  version for <u>SAP HANA</u>) for more information on installing and configuring EDS.
- Log files are available for EDS and are located as described in SAP Note 2441140.

Follow the steps below to install EDS:

- 1. Install SLD with at least one database server that is registered using host-name or IP address.
- 2. Install Service Layer and EDS using the *Component Wizard*. Ensure that all host-names and addresses are in the same format as the database server in the SLD registration.
  - Calls by EFM send the current database server and database name which must match the registration details in SLD components.
  - The EDS Service Unit (column server) must be same as in Service Layer.
- 3. Open the file path "c:\Program Files\SAP\SAP Business One EDS\conf\appsettings.json" or " /usr/sap/SAPBusinessOne/EDS/conf/appsettings.json" and enable the relevant protocol connectors by setting the parameter "Active" to "true" (instead of "false"). For more information about the json file, see the *Appsettings.json File* section below.
- 4. Restart EDS (SAP Business One EDF back end or SAPB1EDFBackend)
  - To restart EDS on Windows, open EDS as a services app and choose the appropriate action.
  - To start, stop or restart EDS on Linux specific to HANA, use the following commands:
    - · systemctl start sapb1edfbackend
    - · systemctl stop sapb1edfbackend
    - · systemctl restart sapb1edfbackend
- 5. In *Document Settings* in SAP Business One, set the *Processing Target* to an EDS target. For more information about processing targets, see the section *Document Settings* below.

Electronic documents with a *Generation Type* of *Generate* are processed by EDS if all the relevant setup is in place. EDS must be installed for all scenarios where *Electronic File Manager* is used to generate electronic invoice documents.

EDS is required in certain scenarios that use EFM, as detailed below. Details on the different protocols in localizations and the associated support for EDS is shown in the following table:

Protocol Code	Protocol Name	Applicable Localizations by Code	Minimum Version and Patch or Feature Package	EDS with B1i	Introduction of EDS	Connector	EDS "Native" Connector Introduction	EDS XML Connector
GEN	Generic	AE, AT, ANZ, BE, CA, CL, CN, CY, DE, DK, FI, FR, GB, GR, HU, CH, IL, IN, JP, KR, NO, PL, PT, RU, SE, SG, SK, TR, UA, UK, US, ZA.		o.o.	10.0 FP2008			Yes
FF1 1	Elektroni cká	CZ	9.3 PL06	B1WSConne ctor	10.0 PL02	EETConnector v1	10.0 PL02	-

	2002007							
	Evidence Tržeb					EETConnec tor v2		
FPA	FatturaPA	IT	9.3 PL07	B1WSConne ctor	10.0 FP2008			Yes
MTD	Making Tax Digital	UK	9.3 PL08	No EDS No back end				-
EWB	E-Way Bills	IN	9.3 PL09	No EDS No back end				-
GEN	Panama	PA	9.3 PL09	B1WSConne ctor	10.0 FP2008			Yes
CFDI	Comproban te Fiscal Digital Internet	MX		B1WSConne ctor		0.01	10.0 FP2008	Yes
H()I	Online Invoicing	HU	10.0 PL01	B1WSConne ctor	10.0 FP2008			Yes
IIS	Immediate Informati on Supply	ES	10.0 PL02	B1WSConne ctor	10.0 FP2008			Yes
IIS_Annua I	Immediate Informati on Supply Annual	ES	10.0 PL02	B1WSConne ctor	10.0 FP2008			Yes
EIS	Electroni c Documents Spain	ES	9.3 PL00	-				Yes
E-Books	E-Books	GR	10.0 FP2008	-	10 0 FP2008	EBookConn ector	10.0 FP2008	No
PEPPOL	Pan-Europ ean Public Procureme nt On-Line		10.0 PL02	B1WSConne ctor	10.0 FP2008			Yes
DIGIPOORT	EU Sales report / BAS report	NL	10.0 PL02	No EDS No back end				-
MYF	MYF report	GR	10.0 PL02	No EDS No back end				-

## Appsettings.json File

The appsettings.json file is a configuration file for setting up EDS and connections with EDS. The appsettings.json file is located by default at the path "c:\Program Files\SAP\SAP Business One EDS\conf\appsettings.json" for Windows or "/usr/sap/SAPBusinessOne/EDS/conf/appsettings.json" for Linux. EDS must be restarted for any changes to the appsettings.json file to take effect. Changes are possible in three areas for the appsettings.json file and EDS to work according to your requirements:

- · Activate or deactivate connectors
- Set up connector "pooling parameters"
- · Limit database data sources by using filters

#### **Activating and Deactivating Connectors**

- Follow the json path Connectors → [Any-Connector] → Active.
- Connectors are deactivated by default and must be activated according to your requirements. Your
  chosen processing target determines which connectors must be activated, see the section EDS
  Connector Enablement by Processing Targets below for more information.
- There are two values to define whether a connector is active or not: "true" for active or "false" for not active.
- Set up the connectors according to your requirements for your localization, company, and protocol if EDS is used as a processing target.

#### **Connector Pooling**

- You can define more than one connector for a processing type and so "pool connectors"
- Follow the json path: Connectors → [Any-Connector] → Entry Poller.
- Parameter *Worker count*: defines the count (number) of electronic document processors working in parallel. The value depends on the connection setup of the authorities.
- Parameter *Reload interval*: defines the interval for reloading documents from data source for a connector. The value is defined based on the database load.
- Parameter Reload strategy: do not modify.

#### **Filters**

- Follow the json path: *Connectors* → SLClient-1 → Filter.
- Parameter *RuleXXX*: is a rule definition which contains the following:
  - Parameter *Type*: defines the type of rule. Can be "Include" or "Exclude".
  - Parameter *DBHost*: defines the regular expression of database servers included or excluded as data sources where ".\*' means all servers.
  - Parameter *DBName*: defines the regular expression of database names included or excluded as data sources where ".\*' means all databases.

#### Storage Manager

In the *appsettings.json* file, the Components:StorageManager-1:Parameters:StaleEntityCleaner json section configures the Storage Manager's Stale Entity Cleaner.

- "StaleEntityCleaner:Active" 'true' or 'false': activates/deactivates the stale entity cleaning. The default setting is 'false'.
- "StaleEntityCleaner:CleanPeriods": the subsection "Default" is mandatory, while all other subsections are optional:
  - "StaleEntityCleaner:CleanPeriods:Default"
  - "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.EntryEvent"

- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.CompanyEvent"
- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.ComponentEvent"
- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.DatasourceEvent"
- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.FlowManagementEvent"
- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.FlowManagementEvent"
- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.ImportEntryEvent"
- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.MappingEvent"
- "StaleEntityCleaner:CleanPeriods:EDFBackend.Events.ProtocolEvent"

**Configuration of the frequency of cleaning:** Each section name refers to a database table to be cleaned. The "Default" section configures all tables that do not have a specific configuration.

- "StaleEntityCleaner:CleanPeriods:Default:CleanPeriod": the time period (in seconds) between two cleaning attempts of a specific table. If unspecified, the default 'CleanPeriod' is 60 seconds (1 minute).
- "StaleEntityCleaner:CleanSilentPeriod": the delay (in seconds) between two cleaning periods. By default, the delay is set to 60 seconds (1 minute).
- "StaleEntityCleaner:CleanEntitiesOlderThan": sets the time after which the event history will be cleaned. Examples: 14d for 14 days, 4h for 4 hours. The default setting is 14d.
- "StaleEntityCleaner:BatchSize": the clean batch size (in other words, the maximum number of entities to be cleaned during one clean attempt for an individual table). The default setting is 10.
- "StaleEntityCleaner:CleanStartTime" and "StaleEntityCleaner:CleanFinishTime": Specifies the specific time of day in which the cleaning is to be performed. Refers to the local date and time of the server running the Electronic Document Service. Examples: 00:00:00, 23:59:59.

#### **Document Settings in SAP Business One for EDS**

Settings are required in *Document Settings* (follow path *Administration* → System Initialization → Document Settings) in SAP Business One to use EDS. Any changes to *Document Settings* must be made in "single-user mode". SAP Business One client and EDS must be restarted for any changes to *Document Settings* to take effect. Depending on your localization in SAP Business One, the sections and labels vary in *Document Settings*. Not all document settings are mentioned below:

- Processing Targets:
  - Electronic Document Service v1: choose this option to process electronic documents through EDS using B1i web service functionality. Can be used instead of Business One Client B1 Connector.
  - Electronic Document Service EET Connector v1: only available for the Czech localization. C
    hoose this option to process electronic documents through EDS, connecting directly
    communicates with the authorities.
  - Electronic Document Service CFDi Connector v1: only available for the Mexico localization. C
    hoose this option to process electronic documents through EDS, connecting directly
    communicates with the authorities.
  - Electronic Document Service E-Books Connector v1: only available for the Greece localization. Choose this option to process electronic documents through EDS, connecting directly communicates with the authorities.
  - Business One Client B1 Connector: choose this option to process electronic documents through the legacy B1i web service instead of EDS.
  - Business One Client Event Sender: choose this option to process electronic documents through B1i using event sender (SEVT) instead of EDS.
- B1i Server URL: only valid for the Processing Targets of Business One Client B1 Connector and E lectronic Document Service v1. Automatically updated based on SLD to SBO-Common attributes in the SAP Business One Integration Framework (B1i).

- Web Service Password: only valid for the Processing Targets of Business One Client B1 Connector and Electronic Document Service v1. This password must match the password in the related B1i package.
- PAC: only valid for Mexico. Use with the Processing Targets of Business One Client B1 Connector and Electronic Document Service v1 to only generate electronic documents as XMLs.
- Certificate: certificates are required and uploaded to EDS where specified by the authorities.
   Certificates are also required by B1i and Windows Certificate Storage depending on your chosen setup.
- EDS Export Base Path: use this field to define the base path for processed documents from EDS for XML connectors or direct communication methods between EDS and the authorities.
  - The base path must be to the server machine where EDS is installed. The use of network share is recommended.
  - If EDS is used as a processing target then EDS Export Base Path replaces any XML Path that is defined in General Settings.
  - If direct communication methods are used between EDS and the authorities then the base path
    is generated based on the protocol settings. For CFDi in Mexico, the format is <EDS-BasePath>/<Emisor-RFC>/<Period-Year>-<Period-Month>/<Receptor-RFC>/<DocType>/<DocUUID>.xml for example c:\export\EKU9003173C9\2020-8\XAXX010101000\IN\0A2B0CF3-7E574ACE-8B0B-C9F12B3798BD.xml
  - If an XML connector is used with EDS then the base path format is <EDS-Base-Path>/<DB-Server>/<DB-Name>/<DocType>\_<DocNum>.xml

#### **EDS Connector Enablement by Processing Targets**

EDS Connector	Processing Target
ConnectorXML-1 if XML is chosen as processing targets for the authorities	Electronic Document Service v1 or Electronic Document Service - CFDi Connector v1
ConnectorEET-1	Electronic Document Service - EET Connector v1
ConnectorCFDi-1	Electronic Document Service - CFDi Connector v1
ConnectorEBooks-1	Electronic Document Service - E-Books Connector v1
ConnectorB1WS	Electronic Document Service v1

## **Products**

SAP B1 10.0 FOR SAP HANA SAP BUSINESS ONE 10.0

# This document refers to

SAP Note/KBA	Title
2915221	CZ_Electronic Document Service
2880322	Generic Web Service Enhancement in Version 10.0

2441140	Central Note for Log File Locations of SAP Business One Components
2257970	Electronic Documents Framework in SAP Business One version 9.2

# This document is referenced by

SAP Note/KBA	Title
3193164	Empty eDoc Format Field on Electronic Documents
3156938	IT_Electronic Invoice Changes Including Connectors
3145267	IT_Corrupted Export Files for A/R Electronic Documents
3131474	EDS Fails to Write Files to Shared CIFS Folder on Linux
3130712	EDS and EDF Updates in 10.0 FP 2202
3090838	MX_CFDI Input Message Handling
3112629	EDS and EDF Updates in 10.0 FP 2111
3112664	NL_Electronic Reporting Through EDS
3113259	Automatic and Manual Generation of XMLs Is Not Possible
3103473	Automatic XML Generation by EDS on Linux Does Not Work When Using Network XML Path
3103321	EDS Uses 100% of RAM Resources
3090810	EDS and EDF Updates in 10.0 FP 2108
3083412	Electronic Document Service Cannot Handle More Than 20 Company Database Connections
3065042	Incorrect Structure of XML File Names
3064585	MX_Handling Electronic Documents Using Electronic Document Service
3063119	Electronic Document Service Cannot Process Large Documents
3059912	GR_E-Books and myDATA Updates Including Expense Classifications
3053701	HU_ No Result File After Creating BAS Report and No Error Message Displayed
3057499	EDS and EDF Updates in 10.0 FP 2105
3045119	ES_Handling Electronic Documents Using Electronic Document Service
3047091	IN_Generation of E-Way Bills Requires EDS
3037262	IN_Handling Electronic Documents Using Electronic Document Service
3034774	EDS Related Information and Collection of Logs to Help Troubleshoot EDS Related Issues When

	Handling Electronic Documents
3030726	EDS Consumes 100% CPU on Linux
3031597	Random Errors Occur When Adding or Updating Documents
3029113	IT_Handling Electronic Documents Using Electronic Document Service
3024085	EDS and EDF Updates in 10.0 FP 2102
3017487	GB_UK_MTD Requires EDS to Generate BAS Reports
3005339	IT_Electronic XML File Names Missing Country/Region Code Prefixes
3006722	ES_Sending Documents Using 'AR_DocumentWithCancel' Mapping Through IIS Fails
2997768	'EDS Export Base Path' Is Not Applied After Change in Document Settings
2957995	DE_XRechnung File Format Implementation for Electronic Invoicing in Public Procurement
2993586	Size of 'EDFbackend.db' Exceeds 10 GB
2990497	EDS Uses 100% of CPU Resources
2889943	HU_Online Invoicing v2.0
2666498	IT_Electronic Invoicing Central Note
2915144	Electronic Documents Functionality for PEPPOL
2494985	ES_Immediate Information Supply – Communication Setup
2985283	GR_E-Books and myDATA Updates
2983713	EDS and EDF Updates in 10.0 FP 2011
2983682	Electronic Document Service Not Available on SAP Business One Cloud
2441140	Central Note for Log File Locations of SAP Business One Components
1765361	Troubleshooting - Electronic Document CFDi Not Generated or Error Received from PAC
2980758	IN_E-Invoicing Is Not Working on SAP Business One 10.0 FP 2008
2979687	Cannot Use Electronic Document Service
2977318	SAP Business One Does Not Upload EFM Mapping to EDS on First Use
2977330	Cannot Create Electronic Document Using EDS
2976275	Electronic Document Service Cannot Import Certificates
2959235	Electronic Documents Framework Changes
2845264	GR_E-Books and myDATA
2948656	Overview Note for SAP Business One 10.0 FP 2008, version for SAP HANA

2948670	Overview Note for SAP Business One 10.0 FP 2008
2956659	MX_CFDi Electronic Account Statements and EDS

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