



Certificate

SAP INTEGRATION CERTIFICATION

SAP SE hereby confirms that the ABAP interface software
for the product

SmartExporter 6.0

of the company

AUDICON GmbH

has been certified for integration with SAP S/4HANA 1709 via the SAP integration
scenario *ABAP Add-On Deployment for SAP S/4HANA*.

This certificate confirms the technical and syntactical consistency of the Add-On in
accordance with SAP certification procedures.
SAP only certifies successful integration of the product with SAP solutions. Vendor is
responsible for the product itself and its error-free operation.

The certification test is documented in report no. 12126
and expires May 23, 2021.

Vendor Hardware: PC x86-64

Vendor Operating System: Linux

SAP Test System: SAP S/4HANA 1709

Used Integration Tools: certified ERPConnect (Theobald Software)

This configuration meets the requirements for deploying SmartExporter 6.0 on SAP
S/4HANA.

Certified Functions:

Assign Software Component with a registered Namespace

Package Add-On using SAP Add-On Assembly Kit (AAK)

Deploy using SAP Add-On Installation Tool (SAINT)

Integrate with SAP S/4HANA

Technical Uninstallation Test

SAP Solution Manager Ready functionality

Waldorf, May 23, 2018

Christoph Claus, SAP SE

SAP, R/3, and SAP NetWeaver are registered trademarks of SAP SE Germany.
All other names are registered or unregistered trademarks of the individual firms.
<http://www.sap.com/icc>



SAP[®] Certified
Integration with SAP S/4HANA[®]



Interface Certification

ABAP Add-On Deployment on SAP S/4HANA

Test Report

SAP Integration and Certification Center



Interface Certification #12126

SAP Interface incl. Release: ABAP Add-On Deployment for S/4HANA
SAP Product incl. Release: SAP S/4HANA 1709

Hardware used for SAP test system: PC x86-64
Operating System of SAP test system: Linux

Name of Vendor: AUDICON GmbH
Vendor Number (SAP internal): 758778

Vendor Product Name and Release: SmartExporter 6.0

Vendor Interface Software Name:
Release Vendor Interface Software:

Hardware used for Vendor Test System: PC x86-64
Operating System of Vendor Test System: Linux
Tools used for the technical integration:
certified ERPConnect (Theobald Software)

Language Version tested: German

Certification Date: May 23, 2018
Expiration Date: May 23, 2021
Location: remote
Persons present - Vendor: Thomas Horschmann, Ritu Vishwakarma Ram Sunkari, Klaus van der Meulen

Persons present - SAP: Christoph Claus

Certified Functions:

- Assign Software Component with a registered Namespace
 - Package Add-On using SAP Add-On Assembly Kit (AAK)
 - Deploy using SAP Add-On Installation Tool (SAINT)
 - Integrate with SAP S/4HANA
 - Technical Uninstallation Test
 - SAP Solution Manager Ready functionality
-

1. Product Information

Product information	
Product web page:	http://www.smartexporter.de
Which releases of the SAP Business Solutions does partner's software support?	<input checked="" type="checkbox"/> SAP S/4HANA 1709
Support contact information:	support@audicon.net

External Component of the Solution	
There's an external component, not written in ABAP, but integrated with the Add-On and belonging to the standard shipment of the solution.	
What is the programming language?	<input checked="" type="checkbox"/> C/C++ <input type="checkbox"/> Java <input type="checkbox"/> Microsoft .NET <input checked="" type="checkbox"/> Others Provide name(s): C#
List databases that the component supports	Microsoft Database
List server platforms that the component runs on	Microsoft Platforms
What protocol/tool is used to integrate the external component with SAP?	<input type="checkbox"/> RFC with SAP Java Connector, Version: <input type="checkbox"/> RFC with SAP Connector for Microsoft .NET, Version: <input type="checkbox"/> RFC with SAP NetWeaver RFC Library <input type="checkbox"/> Http/Https Integration through WebServices <input type="checkbox"/> File-based Integration <input checked="" type="checkbox"/> Others: Please specify: ERPCoconnect (Theobald Software)

2. Functional Overview

Supported Functions and Business Processes – General Description	
Overview on the functionality and the purpose of the 3 rd party product.	<p>SmartExporter is a software solution used to export and automatically prepare SAP data for further analysis. Access just the SAP data you need for your analysis fast and easy. SmartExporter is a Windows application that can be installed in no time. It meets your requirements for ad hoc analyses while keeping your data analysis expenses at a considerably low level.</p> <p>SmartExporter has only read access to SAP data. It does not run any Update/Insert/Delete operation on SAP standard tables</p>

3. Product Implementation

3.1 Complete List of used and *released* SAP objects

The list below has been given to SAP by the Vendor, for reference purposes. SAP cannot guarantee that it's a complete list.

<u>Complete List of used BAPIs / RFCs / IDocs / ESs or other SAP building blocks that are officially released by SAP.</u>		
POPUP_TO_CONFIRM	ARCHIVE_GET_TABLE	
CONVERSION_EXIT_ISOLA_INPUT	ARCHIVE_CLOSE_FILE	
CONVERSION_EXIT_ISOLA_OUTPUT	ARCHIVE_READ_OBJECT	
JOB_OPEN	ARCHIVE_OPEN_FOR_READ	
JOB_CLOSE	ARCHIVE_GET_NEXT_OBJECT	
DYNP_VALUES_READ	AS_APL_READ	
ADK_CCMS_GET_OBJECTS	GET_PRINT_PARAMETERS	
SCP_CODEPAGE_FOR_LANGUAGE	AS_APL_INFOSTRUC_SELECT	
FILE_GET_NAME	FILE_VALIDATE_NAME	

3.2 Complete List of used and *unreleased* SAP objects

The list below has been given to SAP by the Vendor, for reference purposes. SAP cannot guarantee that it's a complete list. In addition, the correct functionality of the objects listed below is not in the scope of this ABAP Add-On Deployment certification.

Complete List of used but <u>unreleased</u> SAP objects, such as function modules and reports.		
SHOW_FILEPATH_FREESPACE	REUSE_ALV_GRID_DISPLAY_LVC	TH_USER_INFO
DB_COMMIT	GET_GLOBALS_FROM_SLVC_FULLSCR	ENQUE_SLEEP
SLIC_GET_CUSTKEY	BP_JOBLOG_SHOW_SM37B	GET_JOB_RUNTIME_INFO
SLIC_GET_LICENCE_NUMBER	VIEW_ENQUEUE	BP_JOB_DELETE
SCMS_STRING_TO_XSTRING	SUSR_USER_GROUP_GROUPS_GET	CL_ABAP_ZIP
RS_FUNCTION_ACTIVE_CHECK	DD_SHP_CALL_FROM_DYNP	CL_ABAP_CONV_IN
TH_SERVER_LIST	RSAQ_READ_INSTALLED_LANGUAGES	CL_ABAP_CONV_IN_CE
F4UT_RESULTS_MAP	AS_APL_INFOSTRUC_SELECT	CL_ABAP_CONV_OUT
GET_MESSAGES	VIEW_AUTHORITY_CHECK	CL_ABAP_CONV_OUT_CE
LIST_FROM_MEMORY	GUID_CREATE	CL_GUI_ALV_GRID
LIST_TO_ASCII	SCP_GET_HTTP_NAME	CL_GUI_FRONTEND_SERVICES
SCMS_TEXT_TO_XSTRING	DDIF_FIELDINFO_GET	CL_ABAP_CHAR_UTILITIES
REUSE_ALV_EVENTS_GET	AIND_NAMETAB_GET	CL_ABAP_EXPIMP
LVC_FIELDCATALOG_MERGE	RFC_CLIENT_INFO	SSFC_BASE64_DECODE
	RFC_GET_ATTRIBUTES	SSFC_BASE64_ENCODE
		CL_DB_SYS
		CL_ABAP_SESSION_TEMPERATURE

3.3 SAP S/4HANA Conversion Strategy

The Add-On has been successfully adjusted for SAP S/4HANA. The appropriate S/4HANA Readiness Check, provided by SAP Code Inspector tool has been used. All entries of the worklist have been checked, and corrected where necessary.		<input checked="" type="checkbox"/> Yes
There is a conversion strategy available, that supports customers to migrate the Add-On from SAP Business Suite to SAP S/4HANA:		
Details:	<p>No changes to the existing Add-On are required.</p> <p>Customer can apply the very same Add-On for SAP S/4HANA. An appropriate Attribute Change Package (ACP) with the necessary import conditions is provided, to support the conversion of the customer's SAP system to SAP S/4HANA.</p>	

4. Quality

The Information below is provided by the 3rd party Add-On provider.
It has neither been tested nor validated by SAP.

4.1 Performance and Scalability

Overview on the architecture and design of the product including performance and scalability.	SmartExporter implements certain techniques that will ensure the stability during runtime. For example, a packed reading approach is used to avoid RFC timeouts. For large data volume requests SmartExporter will use the SAP background processing system to schedule data collection jobs instead of blocking a dialogue work process. SmartExporter separates relevant business process steps such as checking the request, estimating the request and executing the request.
---	---

4.2 Quality Assurance

Overview on Quality Assurance procedures from the vendors to assure that the interface design and performance consistently conform to specified requirements.	SmartExporter has been developed on five parallel major releases. Each development system is accompanied by a quality assurance system in which the developed objects are transported for full scale test drives.
The following quality documents exist:	
Test Plan Documentation	<input checked="" type="checkbox"/> yes Comments:
Test Report Documentation	<input type="checkbox"/> yes Comments:
Benchmark Results Documentation	<input type="checkbox"/> yes Comments:

4.3 Security

The Add-On Development Lifecycle ensures security	OK
The Add-On does not contain any Cross-Site Scripting (XSS) vulnerabilities	OK
The Add-On does not contain any memory corruption vulnerabilities	OK
The Add-On does not contain any SQL or other data query and manipulation language injection vulnerabilities	OK
The Add-On does not contain any Path Traversal vulnerabilities	OK
The Add-On does not contain any intentionally hidden and non-documented features that circumvent security measures (backdoor)	OK
Remark to Path Traversal vulnerabilities: SmartExporter SAP components access to files and directories is limited to customized directories (logical files) and no other directories are accessed. There is no way to change the locations without appropriate permissions to the customization (transactions FILE, SF01). All accesses are checked by a call to function module FILE_VALIDATE_NAME if this function module exists in the SAP system.	

5. Software Product Assessment

5.1 Check Documentation

Functional Documentation	<input type="checkbox"/> yes Comments:
Installation Documentation	<input checked="" type="checkbox"/> yes Comments:
Maintenance Documentation	<input type="checkbox"/> yes Comments:
End User Documentation	<input checked="" type="checkbox"/> yes Comments:
Uninstallation Documentation, according to SAP Note 1883223 .	<input checked="" type="checkbox"/> yes Comments:

5.2 Install and Configure Product for SAP Integration

How is the installation and setup of the product integration part done?	<input checked="" type="checkbox"/> good <input type="checkbox"/> average <input type="checkbox"/> poor
Remarks	

6. Test Cases

6.1 Deployment of Add-On Solution	
Following PAT file(s) belong to the Add-On solution and were deployed successfully:	AC80020604464_0000006.PAT AC80020604464_0000007.PAT
Remarks:	

6.2 Checks performed by the Add-On Assembly Kit (AAK)	
Invalid objects	OK
Existence of objects and table entries to be delivered	OK
Assignment to namespace	OK
Delivery of CVERS entries (R3TR VERS) not possible	OK
New objects (entries) in Support Package/CRT	OK
Table entries (check if delivery-relevant/delivery behavior)	OK
Assignment to development class and software component	OK
Table entries in customer name range (protected: TRESK)	OK
Included AAK Log of Performed Checks	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Remarks: No log included, because everything was ok.	

6.3 Technical Uninstallation Test	
Add-On can be uninstalled	<input checked="" type="checkbox"/> yes

<p>Without special precautions, the uninstallation leads to a complete removal of all data and tables that were created and implemented with the Add-On in the system. In this case, it is in the responsibility of the Add-On supplier together with the customer, to save the data that is legally relevant and should not be deleted. In addition, it can be useful to perform a system copy in advance and/or to create a backup.</p> <p>The handling of data that was created with the Add-On has neither been checked explicitly, nor certified.</p>	
After deployment, Add-On is displayed in transaction SAINT as “uninstallable”	OK
Vendor provides a detailed uninstallation documentation, including: <ul style="list-style-type: none"> • A list of workbench objects that need to be handled manually • The handling of data that was produced with the Add-On 	OK
Add-On was successfully uninstalled after the deployment, i.e. the objects located in vendor’s namespace were deleted.	OK
Remarks:	

6.4 Describe test steps to be executed during functional test

The test cases below are executed to check that the Add-On could run successfully in the SAP environment. SAP does not validate or confirm the correct functionality of the Add-On.

1 Logon / Authorization test	OK
2 DDIC download	OK
3 Request check	OK
4 Request volume estimation	OK
5 Synchronous request execution (RFC)	OK
6 Hybrid request execution using buffer methods table / file / cluster	OK
7 Cancelation of Hybrid request execution	OK
8 Asynchronous request execution using a background job to create data files	OK
9 Transfer of data files of asynchronous request	OK
10 Cancelation of asynchronous request using a background job	OK
11 Customizing of SmartExporter settings	OK
12 Status overview of running and completed data requests using the corresponding SAP transaction	OK
13 Deletion of request files using the corresponding SAP transaction	OK
14 Verification of Data Privacy (Anonymization, Encryption, Decryption)	OK
15 Access archived data	OK

6.5 Describe performance load test steps to be executed during functional test

The test cases below are executed within a reasonable time.

1 Data transfer of large volume through synchronous mode (RFC)	OK
2 Data transfer of large volume through hybrid mode (Buffer table / file / cluster)	OK
3 Data transfer of large volume through asynchronous mode (file)	OK

7. Partner Confirmation

Partner states that by following the guidelines of the ICC Integration Assessment or ICC Integration Guide, only the integration technologies listed in this document are used in the described interface software.

ABAP Add-On Deployment Certification is only valid for the SAP release and partner product release noted in this document; in the event of SAP or partner release changes SAP offers re-certification of the interface software.

The partner solution **has not been deployed or tested on SAP Solution Manager** as part of the certification procedure. It's therefore not "certified for SAP Solution Manager".

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. See <http://www.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.

Version 2018-1