



# Interface Certification: Test Report

## ABAP Add-On Deployment for SAP S/4HANA Cloud, extended edition

**Interface Certification, S4HC EX Annual Renewal Contract CertID: 18515**

<b>SAP Interface incl. Release</b>	<b>SAP S/4HANA Cloud, extended edition</b>
<b>SAP Product used for Test</b>	<b>SAP S/4HANA</b>
<b>SAP Release used for Test</b>	<b>2022</b>
<b>S4HC EX CertID number</b>	<b>21141</b>
<b>S4H any-premise CertID number</b>	<b>21142</b>

<b>Vendor Name</b>	<b>AUDICON GmbH</b>
<b>Vendor Number</b>	<b>758778</b>
<b>Vendor Product Name &amp; Release</b>	<b>SmartExporter 8.0</b>
<b>Vendor Interface Name &amp; Release</b>	
<b>Operating System of Vendor Test System</b>	<b>Linux</b>
<b>Tools used for the Technical Integration</b>	<b>SAP NetWeaver RFC Library</b>
<b>Language Version Tested</b>	<b>English</b>
<b>Certification Date</b>	<b>November 9, 2022</b>
<b>Expiration Date</b>	<b>November 9, 2025</b>
<b>Location</b>	<b>Walldorf</b>
<b>Person Present - Vendor</b>	<b>Klaus van der Meulen</b>
<b>Person Present - SAP</b>	<b>Christoph Claus</b>

<b><u>Certified Functions S4HC EX:</u></b>	<b><u>Certified Functions S4H any-premise</u></b>
<b>ABAP Add-On Deployment</b> <b>Security Code Scan using SAP CVA*</b> <b>Cloud Operational Requirements</b> <b>Cloud Technical Requirements</b> <b>Technical Uninstallation Test</b> <b>SAP Solution Manager Ready functionality</b>	<b>Assign Software Component and Namespace</b> <b>Package Add-On using SAP Add-On Assembly Kit</b> <b>Deploy using SAP Add-On Installation Tool (SAINT)</b> <b>Technical Uninstallation Test</b> <b>SAP Solution Manager Ready functionality</b> <b>Compatible with SAP S/4HANA</b> <b>Compatible with SAP S/4HANA Cloud, private edition</b> <b>Works with RISE with SAP</b>

## 1. PRODUCT INFORMATION

Product information	
Product web page:	https://www.smartexporter.com
Product is certified for:	SAP S/4HANA 2022
Support contact information:	support@audicon.net

ABAP Components of the Solution	
Following PAT file(s) and Software Component Versions belong to the Add-On solution and were deployed successfully:	
List of PAT Files: ACO0020980371_0000037.PAT, ACO0020980371_0000048.PAT, ACO0020980371_0000054.PAT	List of Software Component Versions: AUDIC 800_740
Comments:	

External Components of the Solution	
Is there an external component, not written in ABAP, but integrated with the Add-On and belonging to the standard shipment of the solution?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Used Programming Languages:	C/C++, Microsoft .NET
Supported Databases:	n.a.
Supported Server Platforms:	n.a.
Used protocol/tool to integrate the external component:	RFC with SAP NetWeaver RFC Library, ERPCoconnect (Theobald Software)

<b>Integration with other SAP Solutions through HTTP-based API (both REST and SOAP) or OData service exposed by SAP Applications</b>	
<b>Transfer of Application Interface Register Key (AIR Key)</b>	
If ABAP Add-On integrates with other SAP Solutions through HTTP-based API using http/http(s) communication protocol, then the transfer of AIR Key must be implemented	
AIR Key transfer implemented.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
AIR Key value	n.a.

<b>Compatibility with SAP S/4HANA Cloud, private edition</b>	
Confirmation below was given to SAP by the vendor.	
	<input checked="" type="checkbox"/> yes, ABAP Add-On is compatible with SAP S/4HANA Cloud, private edition, because: <ul style="list-style-type: none"> <li>• Add-On does not require operating system-level access.</li> <li>• Add-On does not have dependencies on additional components outside the ABAP stack, but within the S/4HANA Cloud environment.</li> </ul> <input type="checkbox"/> no, ABAP Add-On is not compatible  <input type="checkbox"/> no, because this certification is not valid for SAP S/4HANA

## 2. FUNCTIONAL OVERVIEW

Supported Functions and Business Processes – General Description
<p>Overview on the functionality and the purpose of the 3<sup>rd</sup> party product.</p> <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>
<p>The diagram, titled "Online", illustrates the data flow between an Auditor PC and a Company's SAP System. On the Auditor PC side, the process begins in IDEA / SmartAnalyzer with "Select Audit Tests", followed by "Data Request", "Data Preparation (Standard Import Routine)", and "Run Audit Tests". An optional step is "Optional: Further Analyses in IDEA". The SmartExporter component on the Auditor PC side includes "SAP® Data Dictionary", "Select SAP® Tables, Fields, Filters", "Estimate Volume", "Data Request" (with sub-options for "Asynchronous" and "Synchronous"), and "Save SAP® Data". On the Company side, the SAP® System (indicated by the SAP logo) receives "Run Data Request synchronously" and "Run Data Request asynchronously" from SmartExporter. The asynchronous path involves a "Start „Job“" step. Both paths lead to "Save SAP® Data" on the Company side.</p>

### 3. PRODUCT IMPLEMENTATION

#### 3.1 List of used 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.

<b>List of used SAP Function Modules / BAPIs / RFCs / IDocs / Classes ... or other SAP building blocks</b>
--

CL_ABAP_CHAR_UTILITIES CL_ABAP_CONV_IN CL_ABAP_CONV_IN_CE CL_ABAP_CONV_OUT CL_ABAP_CONV_OUT_CE CL_ABAP_EXPIMP CL_ABAP_GZIP_BINARY_STREAM CL_ABAP_SESSION_TEMPERATURE CL_ABAP_ZIP CL_DB_SYS CL_GUI_ALV_GRID CL_GUI_FRONTEND_SERVICES CL_IXML CL_REST_HTTP_CLIENT CL_SEC_SXML_WRITER CL_SWDC_CLIENT CL_ABAP_MESSAGE_DIGEST CL_ABAP_TYPEDESCR CL_ABAP_CLASSDESCR CL_ABAP_DATADESCR CL_ABAP_ELEMDSCR CL_ABAP_STRUCTDESCR CL_ABAP_TABLEDESCR ADK_CCMS_GET_OBJECTS AIND_NAMETAB_GET ARCHIVE_CLOSE_FILE ARCHIVE_GET_NEXT_OBJECT	ARCHIVE_GET_TABLE ARCHIVE_OPEN_FOR_READ ARCHIVE_READ_OBJECT AS_API_INFOSTRUC_SELECT AS_API_INFOSTRUC_SELECT AS_API_READ BP_JOB_DELETE BP_JOBLOG_SHOW_SM37B CONVERSION_EXIT_ISOLA_INPUT CONVERSION_EXIT_ISOLA_OUTPUT DB_COMMIT DD_SHLP_CALL_FROM_DYNP DDIF_FIELDINFO_GET DYNP_VALUES_READ ENQUE_SLEEP F4UT_RESULTS_MAP FILE_GET_NAME FILE_VALIDATE_NAME FTP_COMMAND FTP_CONNECT FTP_DISCONNECT FUNCTION_EXISTS GET_GLOBALS_FROM_SLVC_FULLSCR GET_JOB_RUNTIME_INFO GET_MESSAGES GET_PRINT_PARAMETERS GUID_CREATE	JOB_CLOSE JOB_OPEN LIST_FROM_MEMORY LIST_TO_ASCII LVC_FIELDCATALOG_MERGE POPUP_TO_CONFIRM REUSE_ALV_EVENTS_GET REUSE_ALV_GRID_DISPLAY_LVC RFC_CLIENT_INFO RFC_GET_ATTRIBUTES RS_FUNCTION_ACTIVE_CHECK RSAQ_READ_INSTALLED_LANGUAGES SCMS_BASE64_DECODE_STR SCMS_STRING_TO_XSTRING SCMS_TEXT_TO_XSTRING SCP_CODEPAGE_FOR_LANGUAGE SCP_GET_HTTP_NAME SHOW_FILEPATH_FREESPACE SLIC_GET_CUSTKEY SLIC_GET_LICENCE_NUMBER SSFC_BASE64_DECODE SSFC_BASE64_ENCODE SUSR_USER_GROUP_GROUPS_GET TH_SERVER_LIST TH_USER_INFO VIEW_AUTHORITY_CHECK VIEW_ENQUEUE
--	--	--

### 3.2 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

There is a conversion strategy available, that supports customers to migrate the Add-On from SAP Business Suite to SAP S/4HANA:

**No changes to the existing Add-On are required.**

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.

## 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

<p>Overview on the architecture and design of the product including performance and scalability.</p>	<p>SmartExporter implements certain techniques that will ensure the stability during runtime. For example, a packed reading approach is used to avoid RFC timeouts.</p> <p>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.</p> <p>SmartExporter separates relevant business process steps such as checking the request, estimating the request and executing the request.</p>
--	--

## 4.2 Quality Assurance

<p>Overview on Quality Assurance procedures from the vendors to assure that the interface design and performance consistently conform to specified requirements.</p>	<p>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.</p>
<p>The following quality documents exist:</p>	
<p>Test Plan Documentation</p>	<p><input checked="" type="checkbox"/> yes</p>
<p>Test Report Documentation</p>	<p><input type="checkbox"/> yes</p>
<p>Benchmark Results Documentation</p>	<p><input type="checkbox"/> yes</p>
<p>Comments</p>	



### 4.3 Security

The Add-On Development Lifecycle ensures security	OK
The Add-On does not contain any <b>Cross-Site Scripting (XSS)</b> vulnerabilities	OK
The Add-On does not contain any <b>memory corruption</b> vulnerabilities	OK
The Add-On does not contain any <b>SQL or other data query and manipulation language injection vulnerabilities</b>	OK
The Add-On does not contain any <b>Path Traversal vulnerabilities</b>	OK
The Add-On does not contain any <b>intentionally hidden and non-documented features</b> that circumvent security measures (backdoor)	OK
<p>Comments:</p> <p>Exemption about SafeCode: Building dynamic SQL Statements is a central functionality of our product. See also Priority 2 findings in the SLIN_SEC Report. All tables, fields and where conditions used, are checked against existence and authorization before any SQL statement is executed.</p>	

## 5. SOFTWARE PRODUCT ASSESSMENT

### 5.1 Check Documentation

Functional Documentation	<input type="checkbox"/> yes
Installation Documentation	<input checked="" type="checkbox"/> yes
Maintenance Documentation	<input type="checkbox"/> yes
End User Documentation	<input checked="" type="checkbox"/> yes
Uninstallation Documentation, according to <a href="#">SAP Note 1883223</a> .	<input checked="" type="checkbox"/> yes
Comments :	documentation is available online at <a href="https://docu.audicon.net/SmartExporter/2022R1/Components/en/Content/Home.htm">https://docu.audicon.net/SmartExporter/2022R1/Components/en/Content/Home.htm</a>

## 6. TEST CASES

6.1 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
<b>Comments: No log included, because everything was ok.</b>	

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

<p>Without special precautions, the uninstallation leads to a complete <b>removal of all data and tables</b> 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><b>The handling of data that was created with the Add-On has neither been checked explicitly, nor certified.</b></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"> <li>• A list of workbench objects that need to be handled manually</li> <li>• The handling of data that was produced with the Add-On</li> </ul>	OK
Add-On was successfully uninstalled after the deployment, i.e. the objects located in vendor’s namespace were deleted.	OK
<b>Comments:</b>	

### **6.3 Describe test steps to be executed during functional test**

The test cases below were executed to check that the Add-On could run without problems in the SAP environment. SAP does not validate or confirm the correct functionality of the Add-On.

**All test cases below were executed successfully:**

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

<b>6.4 Additional technical checks for SAP S/4HANA Cloud, extended edition</b>	
<b>Security Code Scan</b> All priority 1 and priority 2 security issues found in the Code Vulnerability Analysis (CVA) tool were corrected, or mitigated.	OK
<b>Modification / Enhancement Framework</b> There are no modifications of SAP objects included, and Extension Framework is not used.	OK
<b>HANA Artifacts</b> No HANA Calculation Views used No HANA XSA used No extension of HANA Calculation Views No direct access to low level HANA DB	OK
<b>Additional Technologies that must not be used:</b> No AMDP (ABAP Managed Database Procedures) BAdIs used No Logical Databases used No Clones of SAP objects in the Add-On No Field Exits in the Add-On No Automated Code Generation used No Dynamic Programming used No direct update/ insert/ change / delete of data in SAP tables No External form routine calls used in the Add-On	OK
<b>Remarks: No log included, because everything was ok.</b>	

## 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".

[www.sap.com/contactsap](http://www.sap.com/contactsap)

© 2022 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 [www.sap.com/trademark](http://www.sap.com/trademark) for additional trademark information and notices.