



Certificate

SAP INTEGRATION CERTIFICATION

SAP SE hereby confirms that the interface software **inforwarder 3.0** for the product **inforwarder 3.0** of the company **AC EDWARDS, LLC DBA InForwarder** has been certified for deployment on SAP S/4HANA On Premise 2020 via the SAP integration scenario **ABAP Add-On Deployment for SAP S/4HANA**.

This certificate confirms the technical compliance of **inforwarder 3.0** with SAP certification procedures.

The certification test is documented in report no. **19929** and expires on **Sep. 8th 2025**.

SAP Test System: SAP S/4HANA 1909

The certification is listed on the SAP Certified Solutions Directory: sap.com/csd.

Certified Functions:

- Assign Software Component and Namespace
- Package Add-On using SAP Add-On Assembly Kit
- Deploy using SAP Add-On Installation Tool (SAINT)
- Integrate with SAP S/4HANA On Premise 1909
- Technical Uninstallation Test
- SAP Solution Manager Ready functionality

Forrest Hu

Remote from Toronto, Sep. 8th 2022

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

THE BEST RUN 

SAP certification focuses on technical integration with SAP solutions. Vendor is responsible for the product itself, its error-free operation, and adherence to applicable laws.



Interface Certification: Test Report

ABAP Add-On Deployment for SAP S/4HANA

Interface Certification: 19929

SAP ICC Integration Scenario	ABAP Add-On Deployment for SAP S/4HANA
SAP Product incl. Release used for Test	Integrate with SAP S/4HANA On Premise 1909
SAP Solution	SAP S/4HANA

Vendor Name	AC EDWARDS, LLC DBA InForwarder
Vendor Number	2386806
Vendor Product Name & Release	inforwarder 3.0
Vendor Interface Name & Release	inforwarder 3.0
Operating System of Vendor Test System	N/A
Tools used for the Technical Integration	N/A
Language Version Tested	English
Certification Date	Sep. 8th 2022
Expiration Date	Sep. 8th 2025
Location	Remote from Toronto
Person Present - Vendor	Sam Arra
Person Present - SAP	Forrest Hu

Certified Functions:

**Assign Software Component and Namespace
 Package Add-On using SAP Add-On Assembly Kit
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 Integrate with SAP S/4HANA On Premise 2020
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 SAP Solution Manager Ready functionality**

1. TECHNICAL PRODUCT INFORMATION

Product information	
Product/Company web page:	inforwarder.com
Product is certified for:	Integrate with SAP S/4HANA On Premise 1909
Support contact information:	support@inforwarder.com

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: A4H0021196491_0000015.PAT	List of Software Component Versions: SAPK-100COININFORWRDR
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Used Programming Languages:	
Supported Databases:	
Supported Server Platforms:	
Used protocol/tool to integrate the external component:	

Integration with other SAP Solutions through REST / oData Transfer of Application Interface Register Key (AIR Key)	
If ABAP Add-On integrates with other SAP Solutions through REST APIs or oData services using http/http(s) communication protocol, then the transfer of AIR Key must be implemented	
Integration through REST APIs / oData services and AIR Key transfer implemented.	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
AIR Key value	

Compatibility with SAP S/4HANA Cloud, private edition	
Confirmation below was given to SAP by the vendor.	
	<input type="checkbox"/> yes, ABAP Add-On is compatible with SAP S/4HANA Cloud, private edition, because: <ul style="list-style-type: none"> • Partner solution does not require the installation of any custom/ partner/ 3rd party software (e.g. shell-scripts, executables, agents, ...) onto the S/4HANA application or database server, or any other server managed by SAP.
	<input checked="" 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
Overview on the functionality and the purpose of the 3 rd party product.
<p>InForwarder uses the SAP RFC Interface to act as a client and registered server to a specific NetWeaver instance.</p> <p>InForwarder is normally installed on each server or virtual machine where a NetWeaver instance is running. This eliminates bulky RFC network transmissions and allows SAP security credentials to remain on SAP managed systems. InForwarder runs as an unprivileged user on the host operating system.</p> <p>For monitoring TCodes (ST03, ST06, STAD, SM21, etc.), InForwarder accesses the associated NetWeaver instance to retrieve the required information before forwarding it to files (JSON).</p> <p>For optional on-site extensibility, ABAP reports can be scheduled to run in NetWeaver to forward output to InForwarder’s RFC destination endpoint. SAP Administrators are under complete control of the ABAP reports, their priority and how often they run. Customers can extend the data sent to files (JSON) by adding their own ABAP reports - no InForwarder software updates are required.</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.

List of used SAP Function Modules / BAPIs / RFCs / IDocs / Classes ... or other SAP building blocks
cl_syslog TH_SERVER_LIST ENQUEUE_READ SALP_SM_CALC_TIME_DIFFERENCE TH_WPINFO TRFC_QOUT_GET_HANGING_QUEUES TRFC_QOUT_GET_CURRENT_QUEUES TRFC_QIN_GET_HANGING_QUEUES TRFC_QIN_GET_CURRENT_QUEUES SWNC_COLLECTOR_GET_AGGREGATES SAPWL_WORKLOAD_GET_STATISTIC SCSI_GET_SYSTEM_INFO GET_TOP_SINGLE GET_CPU_SINGLE GET_MEM_ALL GET_PRC_SINGLE GET_DISK_SINGLE GET_LAN_SINGLE GET_FSYS_SINGLE BDL_SYSTEM_INFO /SDF/EWA_GET_ABAP_DUMPS RFCPING SYSTEM_RESET_RFC_SERVER RFC_FUNCTION_SEARCH RFC_GET_FUNCTION_INTERFACE DDIF_FIELDINFO_GET, RFC_METADATA, RFC_METADATA_GET /SDF/GET_DUMP_LOG GET_SYSTEM_TIME_REMOTE SWNC_GET_WORKLOAD_SNAPSHOT TH_USER_LIST /SDF/GET_SYSTEM_TIMEZONE RFC_READ_TABLE SWNC_STATREC_READ_INSTANCE

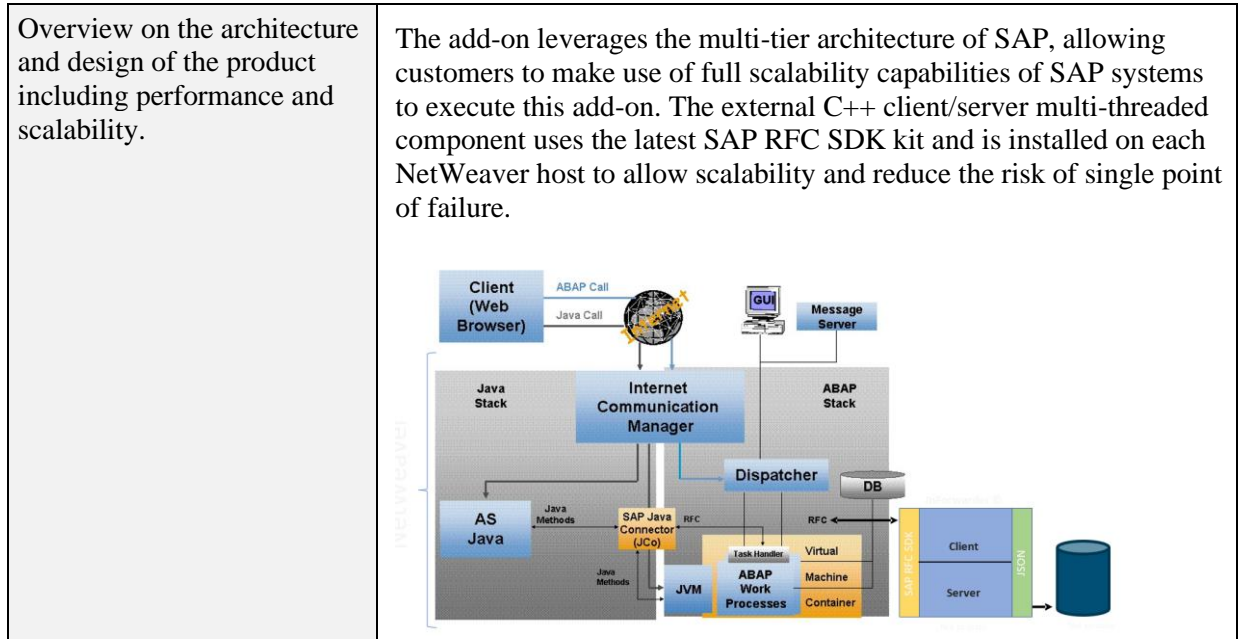
3.2 SAP S/4HANA Conversion Strategy

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
The Add-On is a new development for SAP S/4HANA only. There is no version for SAP ERP / Business Suite.

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



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.	Code is tested in a multi environment/operating system setup to ensure portability and adherence to best practices. In addition to passing all the extended code checks the add-on kit tool provides.
The following quality documents exist:	
Test Plan Documentation	<input checked="" type="checkbox"/> yes
Test Report Documentation	<input checked="" type="checkbox"/> yes
Benchmark Results Documentation	<input checked="" 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
Comments:	

5. SOFTWARE PRODUCT ASSESSMENT

5.1 Check Documentation

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

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
Comments: No log included, because everything was ok.	

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 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
Comments:	

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) Testcase 1:

After executing the installation, proceed to perform the post-installation configuration steps, this will include the execution of the /INFRWRDR/SCHEDULER job, once this job is executed, validate that the output files (*.json.gz) exist within the file system, these files contain within the T-Code output related to the extracted data.

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".

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