INTEGRATION GUIDE

SAP Integration and Certification Center (SAP ICC)
# TABLE OF CONTENTS

1 INTRODUCTION ..............................................................................................................4

2 BUILD NEW APPS ........................................................................................................5

2.1 Cloud .........................................................................................................................5

2.1.1 SAP Cloud Platform ...........................................................................................5

2.1.2 SAP Business ByDesign ....................................................................................6

2.2 On-Premise (SAP NetWeaver, SAP HANA) ..........................................................6

2.2.1 ABAP Development and ABAP Add-On Deployment Certification ...................6

2.2.2 Java Applications running on SAP NetWeaver ...................................................7

2.2.3 Third Party Applications Deployment on SAP HANA .........................................7

2.3 SAP Mobile Platform ..............................................................................................8

3. EXTEND EXISTING SOLUTIONS FROM SAP .........................................................8

3.1 Cloud solutions from SAP as backend ....................................................................8

3.2 On-premise solutions from SAP as backend ..........................................................9

3.2.1 Public APIs .........................................................................................................9

SAP API Business Hub .................................................................................................9

Web Services (SOA) .....................................................................................................9

BAPIs ..........................................................................................................................10

RFMs ...........................................................................................................................10

IDOCs ..........................................................................................................................11

BC Sets .......................................................................................................................12

Data Transfer Programs : ............................................................................................12

3.2.2 Middleware .........................................................................................................12

SAP Cloud Platform Integration ................................................................................12

SAP Gateway (OData): ..............................................................................................13

SAP Process Integration (SAP PI) and SAP Process Orchestration (SAP PO)....13

3.2.3 Connectors ..........................................................................................................14

SAP Business Connector .............................................................................................14

SAP Java Connector ...................................................................................................14

SAP Connector for Microsoft.NET ............................................................................14

SAP NetWeaver RFC Library .....................................................................................14

4. SAP Business One ....................................................................................................14

5. SERVICES ..................................................................................................................15

5.1 Certification Services .............................................................................................16

5.1.1 SAP Pre-defined Certification ...........................................................................16

5.1.2 Partner Defined Certification .............................................................................16

5.1.3 Co-Innovated with SAP .....................................................................................16

5.1.5 Why certify an integration ..................................................................................16

5.2 System Access........................................................................................................16
5.3 Assessments .................................................................................................................. 17
5.3.1 Security Code Scan Assessment ......................................................................... 17
5.3.2 Integration Assessment ....................................................................................... 17
6. HOW TO GET STARTED .......................................................................................... 17
7. INFORMATIVE LINKS .............................................................................................. 17
8. SAP TRAINING ............................................................................................................. 18
1. INTRODUCTION

This guide describes what technologies developers should use, so that they build solutions that are eligible for integration certification from SAP.

Developers can work with the SAP Integration and Certification Center (SAP ICC), how to use these technologies to integrate a third-party product with SAP solutions or deploy it on SAP technology. Submitting their app or integration to SAP ICC for testing can make integration projects more successful for both SAP customers and independent software vendors (ISVs). Certified apps and integrations are generally more release-stable, have a reduced implementation time and will in most cases also ensure smoother release upgrades for SAP customers.

In this guide developers, will find the following use cases addressed:

- How to build new applications on SAP technology
- How to integrate third-party applications to SAP business solutions via endorsed and SAP supported technologies and connectors
- How to enhance SAP Business One solutions with partner add-ons and integrations

We hope this overview serves as an entry point for all developers working on behalf of SAP partners, ISVs or start-ups who are aiming to offer applications that connect with SAP technologies and solutions. For additional support, please review the enablement services section at the end of this document.
2. **BUILD NEW APPS**

2.1 **Cloud**

2.1.1 **SAP Cloud Platform**

SAP Cloud Platform is an open enterprise platform-as-a-service (enterprise PaaS) that provides comprehensive application development services and capabilities which lets you build, extend, and integrate business applications in the cloud.

SAP Cloud Platform is SAP’s innovative cloud development and deployment platform. It is supported by multiple cloud infrastructure providers and enables innovative technologies such as the internet of things, machine learning, artificial intelligence and big data, thereby enabling you to achieve business agility and accelerate digital transformation across your business. SAP Cloud Platform offers two development environments – Cloud Foundry and Neo – and provides a broad choice of programming languages such as Java, HTML5, Hana, Mobile, node.js and so on. With SAP Cloud Platform, you can develop and run business applications in a fully-provisioned environment. Using a set of end-to-end services, capabilities, APIs and tools, you can build new cloud applications as well as extend and integrate applications in the cloud. You can also use SAP Cloud Platform to extend and integrate with existing on-premise systems (hybrid scenarios) or other cloud products.

SAP Cloud Platform enables you to do the following:

- Develop new cloud applications: Create new innovative cloud applications with a small capital investment in software and hardware. Rapidly build and run new cloud apps to solve new problems, engage new customers and drive new revenue.
- Develop on-premise and cloud extensions: Personalize and extend your existing applications regardless of whether they run on-premise or in the cloud to achieve agility and go to market faster. Quickly add new functionality to your existing cloud and on-premise apps to optimize your existing investments.
- Integrate on-premise and cloud solutions: Bring together disparate systems and IT landscapes to streamline your business processes and increase efficiency. Connect your cloud and on-premise apps to eliminate data silos and make digital access simple, secure, and scalable.

SAP Cloud Platform is the recommended platform for building cloud solutions.

**Reference:**

[SAP Cloud Platform](#) home page to know more on platform and its capabilities/services.

[SAP Cloud Platform certification](#) page to know more on offerings.
2.1.2 SAP Business ByDesign

SAP Business ByDesign gives fast-growing mid-market businesses the platform to turn growth potential into real results. This cloud-based ERP solution connects every function across your company – from finance to CRM – to time-tested best practices and in-depth analytics. You'll get the foundation to scale and compete without the complexity and cost so you can grow your business your way – anytime, anywhere and on almost any device.

✓ Run your entire business on one secure cloud suite
✓ Streamline end-to-end processes and maximize efficiency across your organization
✓ Gain timely business insights with integrated analytics and reporting
✓ Drive operational excellence with built-in business processes
✓ Manage your business from anywhere, at any time with built-in mobile apps

Please find more details regarding SAP Business ByDesign online: https://help.sap.com/viewer/p/SAP_BUSINESS_BYDESIGN

Certification for solutions integrated with SAP Business ByDesign can be certified either through the ByD-based-INTEG scenario, or through ByD-based-ADDON.

2.2 On-Premise (SAP NetWeaver, SAP HANA)

2.2.1 ABAP Development and ABAP Add-On Deployment Certification:

For the integration certification of non-SAP products, a software vendor is generally not encouraged to submit code programmed in ABAP, SAP's proprietary programming language as the integration via open APIs and SAP-endorsed integration technologies that are listed in this guide generally makes for easier integration into customer landscapes. Extending to the original ABAP code of a customer system requires a different certification approach. Therefore, SAP offers a separate ABAP Add-On Deployment certification with different technical requirements geared towards testing the third-party product’s ABAP code and its proper co-existence with other ABAP codes as well as its smooth installation in the SAP NetWeaver ABAP component.

ABAP Add-On Deployment certification can be obtained separately for different SAP platforms like SAP NetWeaver, SAP S/4HANA and SAP Business Suite.

2.2.2 Java Applications running on SAP NetWeaver

SAP NetWeaver supports fast deployment of high development productivity and advanced clustering for high availability and reliability. Many SAP customers are not only running SAP
solutions but also third-party and/or custom developed Java EE applications on SAP NetWeaver to achieve a streamlined infrastructure and lower TCO.

To further improve the customer’s experience of running third-party Java EE applications on SAP NetWeaver, SAP offers a certification program that tests the installation and deployment of third-party Java EE applications on SAP NetWeaver Application Server Java (SAP NetWeaver ASJava).

Deployment is regarded as the process of installing a J2EE 1.4 / EE 5 application in the form of an SCA file on the SAP NetWeaver Java Application Server following deployment/certification guidelines.

Reference: [Java deployment based certification page](#) to know more on offerings.

### 2.2.3 Third Party Applications Deployment on SAP HANA

SAP HANA is an in-memory data platform that is deployable as an appliance or in the cloud. At its core, it is an innovative in-memory relational database management system that makes full use of the capabilities of current hardware to increase application performance, to reduce cost of ownership and to enable new scenarios and applications that were not possible before.

With SAP HANA, ISVs and partners have the opportunity to build applications that integrate the business control logic and the database layer with unprecedented performance.

SAP HANA-based applications can be distinguished into these two broad categories:

- Traditional client-based scenarios, where an external application access the SAP HANA data model (tables, analytic views, etc.) via client interfaces such as ODBC and JDBC and only uses SQL and native SQL script procedures.
- Web-based application that take full advantage of the SAP HANA Extended Application Services. In this scenario, clients access SAP HANA data using standard OData or XML for Analysis (XMLA) interfaces or directly use a Web-based GUI that was developed using SAP UI5 toolkit and that uses custom-developed server-side JavaScript as well as native SQL Script procedures.

SAP ICC offers certification for such applications running on SAP HANA; details can be found [here](#).

### 2.3 SAP Mobile Platform:

SAP Mobile Platform is an agile and open mobile enterprise application platform (MEAP) that enables developers to use their preferred tools and the latest mobile software development kits to rapidly build and deploy OData-based mobile apps. SAP Mobile Platform offers seamless integration with SAP as well as an enterprise-grade, mobile-first experience.
For more information related to SAP Mobile Platform
https://www.sap.com/community/topic/mobile-platform.html
https://help.sap.com/viewer/p/SAP_MOBILE_PLATFORM

Certification Details: SAP Mobile Platform – Mobile Application Certification (SMP-MA)

3. EXTEND EXISTING SOLUTIONS FROM SAP

3.1 Cloud solutions from SAP as backend

SAP Cloud Platform Integration, Web services, OData, REST, SOAP API’s can be used for extending the cloud based solutions. Please refer Middleware (3.2.2) and Public API’s (3.2.1) sections to get more details on these technologies.

Solutions:

- SAP S/4HANA Cloud (ERP Cloud for large enterprise and midsize business)
- SAP Business ByDesign (ERP Cloud for Midsize Business)
- SAP Business One Cloud (ERP Cloud for Small Business)
- SAP SuccessFactors
- SAP Hybris solutions
- SAP Analytics Cloud
- SAP Jam
- SAP Ariba
- Concur
- SAP Fieldglass

SAP does certify extensions to some of the above listed cloud solutions. Please refer our ICC Finder for SAP defined certification scenarios. Some of the cloud solution extension scenarios are not defined yet, reach out to icc@sap.com for information. ICC team would be happy to evaluate the required scenarios for partners.

SAP Cloud Platform is the recommended platform for extending cloud solutions from SAP.

For more details: https://www.sap.com/trends/cloud.html

3.2 On-Premise solutions from SAP as backend

SAP Cloud Platform Integration, SAP Gateway, Web Services and SAP PI/PO (SAP Process Integration / SAP Process Orchestration) can be used for extending the on-premise solutions. Please refer Middleware (3.2.2) section to get more details on these technologies. Beside that, SAP on-premise solutions provide a plenty of public APIs based on various technologies (e.g.
remote function modules, BAPIs, IDOC messages, web services). Please find more details in section.

**Solutions:**
- SAP ERP
- SAP Customer Relationship Management
- SAP Supplier Relationship Management
- SAP S/4HANA
- SAP Business Suite
- SAP NetWeaver

SAP does certify most of the on-premise integration scenarios, please refer our [ICC Finder](https://iccfinder.sap.com) for SAP defined certification scenarios or reach out to [icc@sap.com](mailto:icc@sap.com) for more details.

### 3.2.1 Public APIs

**SAP API Business Hub**
SAP API Business Hub is the central catalog of all SAP and partner APIs for developers to build sample apps, extensions and open integrations with SAP. Find the one your business needs, build sample apps, extensions, and integrations easily. Discover and consume digital content packages with APIs, pre-packaged integrations and sample apps from SAP and select partners.

- Uses: REST, ODATA, SOAP
- Both Cloud and on-premise version
- Build using APIGee/Google API solution

For more details: [https://api.sap.com/](https://api.sap.com/)

**Web Services (SOA):**
Service-oriented architecture (SOA) is an adaptable, flexible, and open IT architecture, where functionality is grouped around business processes and packaged as interoperable services. SAP makes it easy to adopt service-oriented architecture (SOA) by delivering SOA-enabled business applications, enterprise services and SAP NetWeaver as the enabling technical foundation for SOA. All enterprise services communicate using Web services standard scan be described in a central repository and are created and managed by tools provided by SAP NetWeaver.

**BAPIs:**
Business Application Programming Interfaces (BAPIs) are standard SAP interfaces that enable software vendors to integrate their software with SAP solutions. BAPIs are technically implemented using RFC (Remote Function Call) enabled function modules inside SAP systems.
BAPIs are defined in the Business Object Repository (BOR) as methods for SAP business objects that perform specific business tasks. They allow integration at business level, not technical level. This makes it much easier to find suitable BAPIs compared to non-BAPI based function modules.

Once SAP has released a BAPI, its interface definitions and parameters will usually remain stable in the long term, which means third-party application programs may not be affected by changes to the underlying SAP software or data. If upward-compatible enhancements are made to the BAPIs, the integration of the existing applications is not affected. If incompatible changes to the BAPI become necessary, SAP will create a new BAPI and mark the old BAPI as “obsolete”. Obsolete BAPIs are guaranteed to work at least in two subsequent functional releases, starting with the one in which they are declared obsolete. This gives developers approximately two years, depending on SAPs then current release cycle, to change their existing integration from using the obsolete BAPI to the usage of the new BAPI.

The BAPI Explorer is available as of SAP Basis Release 4.6A and can be used to get an overview of BAPIs in the BOR. To call the BAPI Explorer in the SAP system, choose Tools → Business Framework → BAPI Explorer (transaction BAPI).

RFMs:
The SAP development environment supports several ways of structuring software. ABAP function modules are equivalent to what most programming languages call “functions”. The SAP system contains thousands of function modules - for example more than 110,000 in SAP R/3 Release 4.6C.

Only a subset of those can be called from external systems using a protocol called Remote Function Call (RFC). RFC allows for remote calls between two SAP systems (for example SAP R/3 and SAP Business Warehouse) or between an SAP system and a non-SAP system. These remotely callable functions are called RFC-enabled function modules or RFMs in short. SAP R/3 Release 4.6C for example contains more than 10,000 RFMs. They can have import and export parameters to send and receive data between systems.

Only RFMs with a ‘released for customer/released for external use’ status will remain stable in long term. Only these should be used for third-party integration projects and are eligible for integration certification. As the special set of RFMs that are linked as methods of the business objects in the SAP systems, BAPIs are explicitly released for customer usage.

Software vendors can search the function builder for existing released RFC-enabled function modules. To call the function builder in the SAP system, choose Tools → ABAP Workbench → Development → Function Builder (transaction SE37).

IDOCs:
Intermediate documents (IDocs) were originally invented by SAP to support Electronic Data Interchange (EDI) in a generic fashion. Later, IDocs were also used in the SAP Application Link
Enabling (ALE) technology as data containers which allow exchange of business information between an SAP system and other SAP or non-SAP systems.

IDocs are based on a hierarchical, tree-like segment structure. The syntax for each IDoc type is defined in the SAP system (transactions WE30/WE31).

IDocs can be used in the following business scenarios:
- Application Link Enabling (ALE): Communication between logical systems (intra-company relations). Logical systems can be either SAP systems or non-SAP systems. ALE distribution models are based on message types and BAPIs that indicate the appropriate IDoc types.
- Electronic Data Interchange (EDI): Communication between SAP systems and the third-party EDI subsystem which is typically connected to an EDI VAN (inter-company relation).

IDocs are created when message types and (object) methods are distributed. The message type is the semantic information which identifies the usage of business data. The IDoc type defines the syntactical format in which the data for a specific business process is transferred.

To gain an overview of all message types defined in an SAP system, choose Tools → Business Communication → IDoc-Basis → Development → Message types (transaction WE81).
To see the IDoc types related to a message type, choose Tools → Business Communication → IDoc-Basis → Development → IDoc type / message (transaction WE82).
To display the documentation for a particular IDoc type, choose Tools → Business Communication → IDoc-Basis → Documentation → IDoc types (transaction WE60).

BC Sets:
Customized settings can be collected by processes into Business Configuration Sets (BC Sets). BC Sets make customizing more transparent by documenting and analyzing the customizing settings. BC Sets allow to capture customizing settings and to store them in a container, separate from the actual customizing tables.

Software vendors can create own BC Sets for specific industries and applications and pre-package these as templates. Any BC Set’s name must contain a registered namespace of the software vendor to ensure that it will not be overwritten by BC Sets delivered by SAP.

- To maintain BC Sets, choose Tools → Customizing → Business Configuration Sets → Display and Maintain BC Sets (transaction SCPR3)
- To activate BC Sets, choose Tools → Customizing → Business Configuration Sets → Activation of BC Sets (transaction SCPR20)
- To see BC Set activation logs, choose Tools → Customizing → Business Configuration Sets → BC Set activation logs (transaction SCPR20PR).
**Data Transfer Programs:**
Some SAP applications provide data transfer programs that can be used to transfer data into or out of SAP systems. The Data Transfer Workbench is a tool that supports the transfer of data into the SAP system with these data transfer programs. The Data Transfer Workbench is particularly useful for business objects with large data volumes. It guarantees that data is transferred efficiently and ensures that data in the SAP system remains consistent. The data transfer is performed in a batch-like fashion. The Data Transfer Workbench was designed for the initial transfer of data. If you want to transfer data repeatedly at regular intervals, SAP recommends using tools such as ALE (through the IDoc interface) or SAP NetWeaver Process Integration (SAP NetWeaver PI).

To call the data transfer workbench choose Tools → Data Transfer Workbench (transaction SXDA). Information of the data transfer programs and the transactions are listed in the relevant application specific parts of the SAP Library.

### 3.2.2 Middleware

**SAP Cloud Platform Integration**
SAP Cloud Platform Integration integrates processes and data between cloud apps, third party applications and on-premise solutions. It's an open, flexible, on-demand integration system running as a core service on SAP Cloud Platform.

- ✓ Build on Apache Camel
- ✓ Flexible Message Flow
- ✓ Only on Cloud
- ✓ Redelivered content to standard integration
- ✓ Can use Apache Adapter/Components out of the box

For more information related to SAP Cloud Platform Integration, please check:

**Certification Details:**
- SAP Cloud Platform Integration– PI Content Certification (HCI-PI-CNT)
- SAP Cloud Platform Integration – PI Adapter Certification (HCI-PI-ADK)

**SAP Gateway (OData):**

SAP Gateway is an open standard-based framework that developers can use to more easily connect non-SAP applications to SAP applications. It is also used to connect to and access SAP applications from mobile devices. SAP Gateway uses OData protocol. OData is based on industry standards and offers database-like access to business data using REST-based architecture. For its consumption outside of SAP, no knowledge of SAP structures is required and it supports object
navigation. Dynamic binding takes place at runtime. OData can be easily consumed by various platforms and it offers flexibility (filtering, query options). OData for SAP comprises OData plus SAP annotations.

The integration with SAP Gateway happens on two levels: providing SAP Gateway content, and consuming this SAP Gateway content. Certification is offered for end-to-end scenarios (covering both content and consumption) or may focus on consumption or content only.

For more information related to SAP Gateway:
https://www.sap.com/community/topic/gateway.html
https://help.sap.com/viewer/p/SAP_GATEWAY

Certification details: SAP Gateway 2.0 Certification (NW-GW-INT).

**SAP Process Integration (SAP PI) and SAP Process Orchestration (SAP PO)**

SAP NetWeaver also represents a platform for process integration based on the exchange of XML messages. It enables you to connect systems from different providers (non-SAP and SAP), different versions and different programming languages (Java, ABAP, etc.). SAP Process Integration (SAP PI) is based on an open architecture, primarily uses open standards (in particular those from the XML and Java environments) and offers those services that are essential in a heterogeneous and complex system landscape:

- ✓ Modeling and design of messages, transformations and cross-component integration processes
- ✓ Configuration options for managing collaborative processes and message flow
- ✓ Runtime for message and process management
- ✓ Adapter engine for integrating heterogeneous system components
- ✓ Central monitoring for monitoring message flow and processes

You can find more details regarding SAP PI online:

With SAP PI, SAP offers a complete EAI solution that integrates SAP business applications and third-party solutions (A2A). SAP offers two certification scenarios to ensure a standardized and aligned development process:

- **SAP Process Integration - Content Certification (NW-XI-CNT)** to certify process integration content for SAP PI and SAP PO
- **SAP Process Integration - Adapter Framework Certification (NW-XI-AF)** to certify adapters running in SAP PI.

### 3.2.3 Connectors

To call RFC-enabled function modules, BAPIs or IDOC messages from external systems, there are various connectors available for different platforms and development environments:
• SAP Java Connector
The SAP Java Connector (SAP JCo) is a toolkit that allows a Java application to communicate with any SAP System. It combines an easy to use API with unprecedented flexibility and performance. The package supports both: Java to SAP System as well as SAP System to Java calls.

• SAP Connector for Microsoft .NET
SAP Connector for Microsoft .NET allows developers to use BAPIs and remote-enabled function modules in any .NET application (inside-out). You can also access .NET components from any ABAP application by implementing an RfcServer in .NET (outside-in).

• SAP NetWeaver RFC Library
The SAP NW RFC Library offers a C/C++ interface for connecting to SAP Systems from release R/3 4.0B up to today's NetWeaver Systems. It allows to develop programs that call ABAP functionality (RFC clients) as well as programs that can be called from ABAP (RFC servers).

You can find more details regarding these connectors online. As part of the SAP Remote Access and Connectivity (SAP RAC) service, the connectors can be downloaded by subscribers: https://service.sap.com/connectors.

4. SAP Business One
Solutions for small business include the SAP Business One application which is developed by SAP and delivered by SAP Channel Partners who provide local services and support. Third-party solutions that conform to SAP Business One integration standards and conventions are eligible for SAP Business One interface certification. Channel Partners of SAP can develop SAP Business One add-on programs under a special SAP Business One SDK development license and certify their add-ons (B1-SDK certification).

As of the release of this version of Endorsed Integration Technologies 2017, below four certifications are available for partners.

✓ SAP Business One Add On Solution Certification for SAP HANA (B1 HANA)
✓ SAP Business One Add-on Solution Certification (B1-SDK)
✓ SAP Business One Cloud Certification (B1 Cloud)
✓ Integration Framework for SAP Business One (B1-IFW)

Certification details: SAP Business One Certification

Business One solution:
✓ Capture all of your business information in a single scalable system
✓ Get answers to your most pressing questions with integrated business intelligence
✓ Give employees on-the-go access to the software via an intuitive mobile app
✓ Deploy on premise or in the cloud in as little as two to eight weeks*
Partners can build as well as extend their applications using the Business One platform. Both on-premise and cloud scenarios are supported here.

For more details on SAP Business One solution:

5. SERVICES

SAP Partner Innovation Lifecycle Services, engages and enables the SAP Partner ecosystem to transform their ideas into innovative commercial solutions by offering a multitude of services to partners including SAP Integration and Certification Center, SAP Outsourcing Partner Certifications, Partner Qualification and Co-Innovated with SAP. SAP Partner Innovation Lifecycle Services is structured to offer partners end to end build support, access to SAP integration experts, ensure compliance across SAP product standards, accelerate partner’s enablement, and much more.

The SAP Integration and Certification Center (SAP ICC) was established in 1996 to provide services around third-party software integration with SAP solutions. We offer an open program for any partner or independent software vendor who has an app or a solution and wishes to have their solution or interface certified with the latest SAP technologies. Certification helps ensure high-quality deployment and integration of partner solutions and a smooth flow of business data between SAP solutions and partner applications over open interfaces.

5.1 Certification services

5.1.1 SAP Pre-defined Certification

To accelerate the certification process, SAP ICC has created a set of pre-defined integration scenarios. A pre-defined integration scenario is an integration profile established in advance by SAP ICC. These pre-defined scenarios are created based on customer and partner demand for the specific integration. Additionally, these scenarios are created once the API for the specific technology becomes generally available.

Typically, a partner’s integration will be categorized based on the following factors:

- Depending where the partner’s integration or interfaces connects to SAP functionality (i.e. “SAP backend”)
- The technology your product is built on (e.g.: ABAP, J2EE, NET, C#, etc.)

Please see the list below for the most frequently requested integration scenarios:

Top Application Scenarios:

- **ABAP Add-On Deployment Certification (ABAP-DEP)**
- **SAP Business One Certification**
- **SAP Archive Link Integration of Business Documents (BC-AL)**
- **SAP Cloud Platform Certification**
- **SAP Process Integration - Content Certification (NW-XI-CNT)**
5.1.2 Partner Defined Certification

If the partner integration falls outside these pre-defined parameters, this would potentially be considered an Integration Assessment-based certification scenario. An Integration Assessment can be a good starting point to kick-start a completely new integration project with the help of an SAP ICC expert. It is also valuable to review an existing integration whether it is implemented based on SAP endorsed integration technologies or if new technologies can help update an existing integration.

5.1.3 Co-Innovated with SAP

Any partner or start-up who want to adopt SAP Cloud Platform and SAP technologies, with “co-innovated with SAP” program, SAP Partner Innovation Lifecycle Services, address partner’s adoption concerns and provide feedback after consulting SAP experts. SAP Partner Innovation Lifecycle Services will provide a high touch engagement in a structured end to end framework for partners, with services designed to accelerate various phases of development lifecycle from targeted enablement to technical coaching, guidance and assessment on various SAP’s product standards and certification of partner’s innovative solutions while accelerating adoption of SAP platforms and technologies. **SAP Partner Innovation Lifecycle Services will be your trusted advisor from inception through realization and will collaborate with SAP experts to help accelerate your innovation lifecycle.**

5.1.5 Why certify an integration

Gaining SAP certification demonstrates that your technology offerings integrate smoothly with SAP solutions and help customers feel confident in their investment decision. Certification from SAP ICC often helps SAP partners expand their customer base and reduce the overall sales cycle.

✓ Improve customer reassurance in your products
✓ Faster sales cycles with proven SAP integration
✓ Certification serves as a proof point for technical alignment with SAP
✓ Certified Logo
✓ Listing in Certified Solutions Directory, opportunity to participate in SAP App Center
✓ Exclusive invite to SAP ICC Partner Meetup Events
✓ Press Release

5.2 System access

The SAP Remote Access and Connectivity Service (SAP RAC) is offering partners a highly flexible, low-cost, no-maintenance, SAP system landscape. This service enables subscribers to easily work on their SAP consulting projects or test their own products integration with an SAP solution using pre-defined SAP integration scenarios. Almost all SAP systems available with SAP
RAC include the extensive database of IDES (Internet Demo and Evaluation System). Subscribers can access all necessary transactions and create own test data. They can choose between exclusive-use or low-cost shared systems.

5.3 Assessments:

5.3.1 Security Code Scan

Get a confirmation, that you have successfully scanned your ABAP coding with SAP NetWeaver Application Server, add-on for code vulnerability analysis. Security Code Scan assessment is also available for non-ABAP solutions. [Know more]

5.3.2 Integration Assessment

An Integration Assessment can be a good starting point to kick-start a completely new integration project with the help of an SAP ICC expert. It is also valuable to review an existing integration whether it is implemented based on SAP-endorsed integration technologies or if new technologies can help update an existing integration. [Know more].

6. HOW TO GET STARTED

As a starting point, the [SAP ICC Homepage](https://www.sap.com/partner/certify-my-solution/icc-finder.html) contains a well-rounded description of the complete SAP integration and certification program and the integration options.

Please fill in [SAP ICC online application form](https://www.sap.com/dmc/exp/2013_09_adpd/enEN/index.html) with information about your company and about the software application that you want to integrate in order to apply for an integration certification. You can also contact us via email at icc@sap.com

To view all the SAP certified solutions, please visit our online listing at [Certified Solutions Directory](https://www.sap.com/partner/certify-my-solution/icc-finder.html).

7. INFORMATIVE LINKS ARE PROVIDED BELOW FOR MORE DETAILS ON DIFFERENT SAP SERVICES AND PLATFORMS.

<table>
<thead>
<tr>
<th>Service</th>
<th>URL</th>
</tr>
</thead>
</table>
8. **SAP TRAINING**

Technical training is available for the Integration technologies.  