

SAP INTEGRATION: WHAT YOU NEED TO KNOW

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For wholesale companies running SAP, figuring out how an integration between SAP and their other business systems will work can be a challenge. The SAP software “ecosystem” is very complex, so companies need a strong understanding of the integration options available with their specific instance of SAP in order to create a solid strategy for their SAP integration.

Why Integrate SAP?

Companies that choose not to integrate their SAP systems with their third party applications run a number of risks – the most significant is that they will not get full value out of your SAP and third party software investments.

SAP is an extremely powerful ERP system, one that can give you deep business insight into important areas of your business. However, third party or best-of-breed applications, whether they be Software as a Service (SaaS) or on-premise, are necessary to providing a complete solution for your business and to handle specific business functions that SAP doesn't handle as well (or at all).

SAP Integration: Which SAP?

SAP offers a huge number of applications that can be adapted to meet the needs of almost any business; the array of options available when answering general questions about how to integrate it with other systems. The answer will usually vary depending on which version of SAP you are using, the underlying technology, and how it was implemented originally.

A few of the versions you could be running include MySAP, SAP All-in-One, SAP BusinessOne, the R/ series or SAP ECC, or SAP S/4 HANA. Most companies are likely to be running licensed, on-premise applications. Most older versions are written in the proprietary ABAP (Advanced Business Application Programming) language; newer versions have moved away from that standard.

The SAP landscape, however, is changing. Over the last few years, SAP has begun moving toward a Software as a Service (SaaS) model. A popular option with SAP's small and medium business (SMB) customers resides on the cloud.

In 2015, SAP released SAP S/4 HANA, the latest version of its business applications. S/4 HANA is offered in an on-premise, cloud, or hybrid deployment. A key component of SAP's strategy with S/4 HANA is the deployment of the HANA Cloud Platform, which will provide an SAP supported environment for certified third party applications. Over time, SAP will support only those interfaces that reside on the HANA Cloud Platform.

Any of these factors can impact your integration plans. Integrations with newer releases are handled differently than integrations with older versions. Integrations with cloud-based software differ from on-premise installations. Modifications can also impact your integration plans.

Choosing SAP Integration Tools

Because SAP has changed the way it builds software over the years, your integration path depends to a great extent on which version of SAP you are using.

running. The most common integration tools used with SAP include:

IDOC – Intermediate Documents. IDOC sends messages between systems, querying for information. There are over 600 IDOCs across versions.

ABAP Interfaces – Companies with the requisite expertise can write their own custom interfaces using ABAP. This is the most common of SAP; the disadvantage is that SAP doesn't support these interfaces and they can present a problem at upgrade time.

RFC – Remote Function Calls. These are programming hooks within ABAP that allow calls to external applications. These are supported by SAP.

BAPI's – Business Application Programming Interfaces. These are essentially API's written and supported by SAP to enable integration between SAP and third-party applications.

SAP NetWeaver – For companies using SAP ECC, NetWeaver is the preferred tool for moving data and triggering actions between SAP software.

Some third-party software providers, including Handshake, also offer Application Programming Interfaces (APIs) to connect SAP to other systems.

Developing an SAP Integration Path

ABAP, BAPI, RFC, IDOC, ECC, ERP – the list sounds like a bowl of alphabet soup. We can't blame you for feeling a bit confused.

The good news is, it's not as confusing as it sounds. Now that you understand the factors impacting your SAP integration, you can choose the right solution for your situation. It's simply a matter of asking the right questions.

To do this, you need to identify:

- Which SAP version and applications you have: are they ABAP based?
- Compatible interface types: which type of interface can you use with your current SAP system?
- Support requirements: do you have the IT expertise to support your own interface, does your software vendor support their SAP interface to be supported by SAP?
- Modifications that have been made: will these impact your integration plans?
- Your business needs: what should the integration allow you to do?
- Long term plans with SAP: do you have future upgrade plans? Could these impact your interface choice?

In many cases, a good option when it comes time to upgrading your SAP system will be to use the SAP published and supported interfaces.

NetWeaver. Another good option is to use the interfaces supported by the third party vendor. Only when these options are not a development be considered.

Because of the complexity of the SAP landscape, and the unique needs of each business, there are many factors to consider when added value of being able to take advantage of best-of-breed software solutions—and having those solutions fully connected with have questions about SAP integration, please let us know in the comments.