



First approach: tightly coupled applications

The first type of integration that we discuss is the "tightly-coupled" approach, i.e. integrations to SAP Business One Cloud built with the SAP Business One SDK. The SDK provides two API's that are historically the oldest way to integrate with SAP Business One, namely the Data Interface (DI) and User Interface (UI) API's. Most extensions that have been built globally to integrate with SAP Business One have started using the SAP Business One SDK for integration to on-premise deployments.

When then moving an SDK-based solution from on-premise to the cloud, there are a few areas that need to be considered, and these revolve around shared resources such as memory, storing data such as tenant/user specific data, and also not exclusively owing resources such as the database instances, presentation server with respect to ports, files, etc. and other extensions that may be running on the same SAP Business One Cloud deployment.

For more detailed information on Best Practices for SAP Business One Cloud extensions, please see the SAP Business One Cloud "Extension Certification Guide" on SAP PartnerEdge. On this page, you will also find supported platforms and sizing tools for a multi-tenant environment.

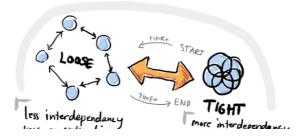


Going beyond the simple migration of a solution from on-premise to cloud, we can introduce what is called the "loosely-coupled" approach. Partners that are thinking about jumping in the SAP Business One Cloud world should also consider to take a leap of faith and decouple their add-ons and take the advantages this approach offers nowadays.

As SAP Business One professionals we are very familiar with tightly coupled solutions. Our add-ons share all kinds of resources with SAP Business One such as hardware, security, operating system, and the list goes on. This "shared relationship" has been of good use all those years and provided great solutions so far. But times has changed:

- The user experience has evolved tremendously with respect to how people interact with systems.

  The independence of platform, device and operating system became the new normal;
- Scalability concerns hence the # of transactions grows exponentially;
- The requirement for more agile deployment methods. Quick implementation of new features and bug corrections;
- And the need for more space in the software architecture, making use of third party services, libraries and other resources.





Bottom line: new requirements generated by the high interdependency.

With a loosely coupled architecture you can choose to locate your solution not "within" the SAP Business One Core, but instead host it somewhere else, you choose where and how. SAP Business One acts as a black-box. The key component that enables your solution to interface with it is the SAP Business One Service Layer, which wraps around all the business objects and processes of SAP Business One

This architecture provides freedom of options of UX approach; enables you to deploy new features without changing anything in the SAP Business One landscape; gives you control on which customers have access to what functionalities; and in the end, allows you to leverage other services that were not part of the original scope of your application. Think about Machine Learning, Mobility, IoT, blockchain and the like: all of them are great tools to boost your solution but are too complex to deal with in an on-premise environment.

Use cases

Let's look now at some examples, starting with the B1 Assistant

The solution's logic is hosted on another server, distinct from SAP Business One's. The app makes use of all the Natural Language Processing of the Alexa Skill Kit in addition to a customized logic served by AWS Lambda.

Again, SAP Business One is a black-box whose features are accessed only via the Service Layer interface. No dependencies on data, just dependencies on a set of interfaces, and then strong decoupling of the solution code from the SAP Business One core.

In short: decoupling your solution is good.

It's a great path to go if you are seeking more features and enhancements for your solution. As an SAP