In this topic we will cover the software components and licensing for SAP Business One.
Objectives

Objective:
- Describe the architecture and components of SAP Business One and the process for installation
- Explain when the site user password is required
- Explain the purpose and functions of the Service Manager
- Follow the license key request process and install a license key

In this topic, you will learn about the architecture and components of SAP Business One and the process for installation.

You will be able to explain when the site user password is required, and the purpose and functions provided by the Service Manager.

Lastly, you will be able to follow the SAP processes to request a license key and install it in SAP Business One.
Before you download and install the SAP Business One software for the first time, you need to verify the following for release 9.0:

- The system and hardware requirements
- The installation process and sequence for installing components
- The various landscape options for deploying SAP Business One
- SAP's licensing model.
The first part of this topic examines the architecture and components of SAP Business One.
**Architecture Basics**

- Client-server architecture with client installed on each user’s workstation
- Client executable contains GUI and business objects
- The SAP Business One server stores only data
- Client agent service facilitates silent updates
- Support for mobile clients

SAP Business One uses a client-server architecture.

The client executable is installed on each user’s workstation (also on the server for local administration purposes). The client is available in 32 bit and 64 bit versions. You can run both versions on the same machine.

The client executable consists of a graphical user interface and the business object classes connecting to the database. The SAP Business One server stores only data and does not use triggers.

The client agent is installed automatically with the client install. This is a Microsoft Windows service that runs in the background. It saves any parameters that you provide during the client installation, for possible future use. It also facilitates “silent” updates to the client and any installed add-ons on the client workstation.

SAP Business One also supports mobile clients using the Mobile App for iPhone and iPad.

If the Microsoft Outlook Integration add-on is installed, there a server component and the add-on must be installed on the client as well.
Server components include the server tools. The server tools run as services. The Service Manager is installed with the server tools and provides an interface for configuring, starting and stopping these services:

- The DI Server enables partners to use SAP Business One data in a browser without the need to install any SAP Business One component on the client or the application server of the web-based application. A separate license is required for the DI-Server. One license is needed per machine.
- The License Manager tracks user sessions and purchased licenses, and is automatically installed during the SAP Business One installation. You have the option to install it on a different machine from the main server, in which case the license server is accessed using an IP address and port number.
- The System Landscape Directory database is also installed, and is used for managing the landscape and authenticating users.
- The optional Workflow service allows users to visually design the flow of tasks for a work process and assign tasks to different users to complete the process.
- The optional Mailer service allows for the sending of emails and faxes from the SAP Business One client to external users.

The SLD database is installed with the Server Tools and is used for authentication of users.
The SAP Business One server components include the database server, the common database (SBO-Common) and the individual company databases. Each SAP Business One company uses a separate database on the server. The common database holds system, version and upgrade information and does not hold any company data. The common database does not appear in the list of company databases.

The Remote Support Platform (RSP) service is installed with the server installation, and has its own database on the server. RSP proactively manages the maintenance and support of the server, and is used for distribution of software patches.
Optional client side components that can be installed include the Software Development Kit, the Data Transfer Workbench, and the Solution Packager tools. The Software Development Kit (SDK) allows partners to extend SAP Business One using APIs and other features. The SDK consists of:

- The User Interface API. This SDK component is used by add-ons and allows the add-on to access and edit GUI forms and menus.
- The Data Interface API. This SDK component is used by add-ons to access SAP Business One objects. Most SAP Business One objects are exposed in this API.
- The SAP Business One Studio. SDK developers can use the Studio to create add-ons, and partners can use the Studio to design and implement workflows in SAP Business One.

A development environment, for example, Microsoft Visual Basic .NET, or Microsoft Visual Studio 6.0, is required to use the APIs and the SAP Business One Studio.

The Data Transfer Workbench and Solution Packager tools can be installed on the desktop with or without the client. They use the DI API to communicate to the SAP Business One server, and this is installed automatically with these tools. If these tools are installed during the server installation, they are also accessible from within the Implementation Center in the SAP Business One client.

Note that the SDK includes documentation for SAP Business One objects and tables. This is a useful resource for partners who migrate data using the Data Transfer Workbench.
The client is normally installed on each user’s workstation; however, it only needs to be installed once if using client presentation software such as Windows Terminal Services or Citrix Server.
Demo – Software Download

This demo will show you the Software Download Center.
The next part of this topic covers the installation process for SAP Business One.
You can download the installation files from the PartnerEdge portal, or purchase an installation DVD. The installation process is easy to follow, since it is driven by a wizard. The process is described step-by-step in the Administrator’s Guide distributed with the product.

The prerequisites before installation are:

- SAP Crystal Reports, version for SAP Business One. You can download this software from the PartnerEdge portal.
- Microsoft SQL Server installed and login credentials available. Note that Microsoft SQL Server licenses can be optionally purchased from SAP.
- Web browser on the server machine, for access to the System Landscape Directory.

The installation order for the components is:

1. The SAP Business One Server Tools. The license server is installed in this step.
2. The SAP Business One Server. This step creates the SBO-Common database and registers the SAP add-ons.
4. The SAP Business One Client. Always run the client setup executable with Administrator privileges. When installing multiple clients, run the installation from the shared folder created on the SAP Business One Server.
5. Optional client components, such as add-ons, the SDK, Solution Packager and DTW.
6. Integration components for the SAP Business One Server, if required.

For information on supported hardware and software platforms, refer to http://channel.sap.com/sbo/platforms.
The site user is created during the installation of the server tools, and you will be prompted to create a password. The site user (b1siteuser) provides an additional layer of security in SAP Business One, that is higher than the super user. The site user is not associated with a user account.

The site user password should be carefully controlled in the client company, since it is required to:

- Configure the Service Manager settings for a new installation
- Create new companies
- Run the upgrade wizard
- Assign credentials to the read-only database user
- Access the System Landscape Directory (SLD)
After installing SAP Business One, you need to configure and start the services in the Service Manager:

- **License Manager**
- **DI Server**
- **Workflow**
- **Mailer (optional)**

The License Manager service must run continuously, to allow users to login. Therefore you should select the *Start when operating system starts* checkbox. The other services can be started when required.

Once the system is up and running, you can use the Service Manager to start and stop the these services. Alternately, you can start and stop these services from Microsoft Windows.
During the installation, the SAP provided add-ons are registered and you can now install them. To install an add-on, choose *Administration > Add-Ons > Add-on Administration*.

Note that some add-ons are available in 64 bit version; however, if the SAP Business One client is 32 bit, you can only run 32-bit add-ons.

Note that the Fixed Assets, Intrastat, and Copy Express add-ons from previous releases have been integrated into the core in release 9.0.

<table>
<thead>
<tr>
<th>32-bit Add-ons</th>
<th>64-bit Add-ons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic File Manager</td>
<td>Electronic File Manager</td>
</tr>
<tr>
<td>Microsoft Outlook Integration</td>
<td>Microsoft Outlook Integration</td>
</tr>
<tr>
<td>Payment Engine</td>
<td>Payment Engine</td>
</tr>
<tr>
<td>Screen Painter</td>
<td>Screen Painter</td>
</tr>
<tr>
<td>Datev FI Interface</td>
<td></td>
</tr>
<tr>
<td>ELSTER Electronic Tax Return (for EU countries)</td>
<td></td>
</tr>
</tbody>
</table>
During installation, the **B1_SHR** folder is created on the SAP Business One server, in the path specified during the server installation. The **B1_SHR** directory should be accessible from all client workstations. This folder contains the installation files for the client software. You should install the client software on the client workstations from this path.

Make sure that the client workstations have permissions to access the shared folders on the server.
You can also store common files and templates in the SAP Business One server folders. These folders are used by the system when users perform functions such as exporting a document as a PDF file.

You must first define the paths for the common folders. Choose *Administration* → *System Initialization* → *General Settings* and then select the *Path* tab. After the paths are set, they apply to all SAP Business One users.

Note that you do not have to use the *B1_SHR* directory for these paths; you can use any shared folder on the server that is accessible by all users.
The shared folders are used as follows:

- The WordDocs folder contains templates for exporting data to Microsoft Word. There are templates provided for each localization.
- The ExcelDocs folder is used for exporting data to Microsoft Excel.
- In the Pictures folder you can store images for use in master data and print layouts. If you do not specify a path for the Pictures folder, you cannot perform certain actions, such as adding images to master data records, printing documents with company logos, and so on.
- The Attachments folder is used to export data to a PDF, and also for attachments used in internal e-mails, contacts, and so on. The attachments folder is also required when adding a user-defined field that will hold a Web address.
- In the Extensions folder you can store secured images, include official stamps, which, due to legal requirements, can be saved on your computer as *.dll files only, and not as picture formats.
- If a document scanner is connected to the system, it is automatically detected when you choose the Browse button for the Current Scanner path. The scanner location is then stored in this path, allowing scanned documents to be integrated with relevant screens. For example, when you enter an item, you can scan an image directly from the images tab for a master record.
- The XML Files folder is used by the system when you export to XML.
This demo will show the use of shared folders.
The final part of this topic covers the licensing aspects of SAP Business One.
A license must be assigned to a specific user in SAP Business One, in accordance with the contract.

- Whenever a logged-in user accesses a form in SAP Business One, the license server checks if the user has the required license for that form. This check takes place before the general authorization validation. If a user is not authorized to a function provided by the license type, the user will receive an error from the license server if they try to access these functions.

- The contract specifies the user license types and the localizations. When the partner enters the order in the SAP channel partner portal, the number and type of the licenses is recorded. When a user first logs on to SAP Business One, they are prompted to sign the End User License Agreement (EULA). To see a record of EULAs, choose Administration → License → End User License Agreement.
There are several types of licenses for SAP Business One, at different prices for access to different functionality:

- The **Professional** license type provides unrestricted access to all SAP Business One functionality, and the SDK tools. If the user is a super user (checkbox in user account), you should assign a **Professional** license type.
- The **Limited CRM**, **Limited Logistics**, and **Limited Financials** license types are aimed for employees that perform daily operational tasks. Limited licenses do not provide access to all functionality in SAP Business One. However, you can assign multiple limited license types to a user, if needed. In this case the highest authorization will apply.
- The **Starter Package** license type provides access to all functionality available with the Starter Package. A maximum of 5 users is allowed for this license type.

This slide shows a partial list of the functions for each license type. For a full list, see the license comparison chart on the PartnerEdge portal at [http://sappartneredge.com/B1/license](http://sappartneredge.com/B1/license).

The above license types cover the SAP Business One mobile application for the iPhone and iPad.

There is another license type, the **Indirect Access** type, which provides access to licensed third party add-ons developed with the SAP Business One DI-API. The user is not authorized to any of the standard SAP Business One screens, and will require a limited or professional license to access SAP Business One functionality.
The Indirect Access license type is included by default in all the other license types.
The license key is country specific, meaning that users are only permitted to access companies of the licensed localization. Customers who will be operating across multiple localizations need multiple license keys – one for each localization.

Multiple license keys can be loaded in the license server, and you can select the localization license when you assign a license to a user.

Note that a single, global license to cover multiple localizations is only available by special request.

The license server can be installed on a separate server within the network, and user workstations can access the license server using the IP address and port number.

For more information on the licensing architecture, reference the *License Guide* supplied with the installation software.
You can run the newly-installed SAP Business One product version for 31 days without a license. To continue working with the application after 31 days, you must request and install a valid license key assigned by SAP.

In addition, you must request a new license key when:

- The hardware key has changed
- The number of users has changed
- Additional SAP components are added to the contract

To install a valid license key, you first obtain the Hardware Key from the server. The hardware key is generated from the hardware data (motherboard) of the server on which the license manager is installed. To obtain the hardware key for the server, open the Service Manager and select the License Manager service. Choose Settings to open the General Settings screen, and copy the string for the Hardware Key field. The Hardware Key is also available from the Help > About SAP Business One menu in the application.
To request the license key, navigate to the license key request page on the PartnerEdge portal at [http://service.sap.com/smb/sbo/licensekeys](http://service.sap.com/smb/sbo/licensekeys).

You need an S-user with the authorization "License key request for partner" for the corresponding installation number.

The super-admin within your organization can provide you with this authorization.

To see the contracted license types, select the customer installation and system. If this is a new system, you can add it.

Enter the required fields and paste the string for the hardware key.

Select the component license types and enter the number of users for each license type.

Submit the license request.

Note that, you need to request a license for every localization that the client will run, and if you select any third-party add-ons, the third-party partner will receive a list of licenses that have been given out to customers.
Shortly after you submit the request, your license key will be available for download on the SAP Channel Partner Portal, and you will also receive the license key text file by e-mail.

You need to import the text file into SAP Business One. To do this, open the Service Manager and select the License Manager service. Choose Settings in the License Manager.

Next, browse for the saved text file and select Import License File. Alternately, you can import the license text file from the License Administration screen in SAP Business One. To access this screen, choose the menu Administration → License → License Administration.
After you install the license key you can view and assign licenses. Choose *Administration → License → License Administration*.  
Select a user name and select the appropriate license type from the available licenses.

Once assigned, the license is not specific to a company database and the same user can access up to two databases at the same time. License localization checks apply. This is designed primarily for access to a test and a production server, and is not designed to circumvent licenses.

If you want to change the license assignment for a user, the user must be logged off from the system. Only super users can change the license assignment.

If you want to remove a user account from the system, you need to first remove the license assigned to the user. The license goes back into the pool of available licenses.
License Validation Service (LVS)

- Collects information and suggests license requirements based on actual usage

The license validation service is a free tool that reports the real-life view of SAP Business One license usage.

You can download this tool from the SAP Community Network. There is a server and client components. The server component is installed on the database server and the client component must be installed on each client machine, as an add-on).

The LVS tool captures the accesses by the users.

An ideal time to run this tool is after the customer has been using the new system for several weeks.

The report compares actual use versus users licensed by the contract. This allows you to fine tune the licenses.
In this demo you will see the license request process and how to assign licenses to users.
Here are some key points to take away from this session.

SAP Business One uses a client-server architecture. The client can be installed on each user’s workstation, or accessed through Windows Terminal Server or Citrix. Mobile clients are also supported.

In the installation process, Crystal Reports version for SAP Business One and the SAP Business One Server Tools must be installed before the SAP Business One Server.

The site user password is set during installation and is required to:
- Configure the Service Manager settings for a new installation (one time)
- Create new companies
- Run the upgrade wizard
- Assign credentials to the read-only database user
- Access the System Landscape Manager

You can run the newly-installed SAP Business One product version for 31 days without a license. To continue working with the application after 31 days, you must request and install a valid license key assigned by SAP.

SAP uses a named user licensing model. A license must be assigned to a specific user name. The license key is localization specific.

After you install the license key, you assign the individual licenses installed by the license file to your named users.
You have completed the topic for SAP Business One Software and Licensing.

Thank you for your time!