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Document: Hardware and software specifications

Client:

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1. Introduction & Background

This is a sizing document detailing the hardware and software requirements for implementing SAP Business One (SAP BO), based on the following,

- SAP Business One
 - 20 users
 - 7 CRM
 - 14 Professional
- Addons
 - Not specified
- SDK
 - 1 User

This document is a guideline, more information is required to put together more accurate sizing and will depend on a number of factors including;

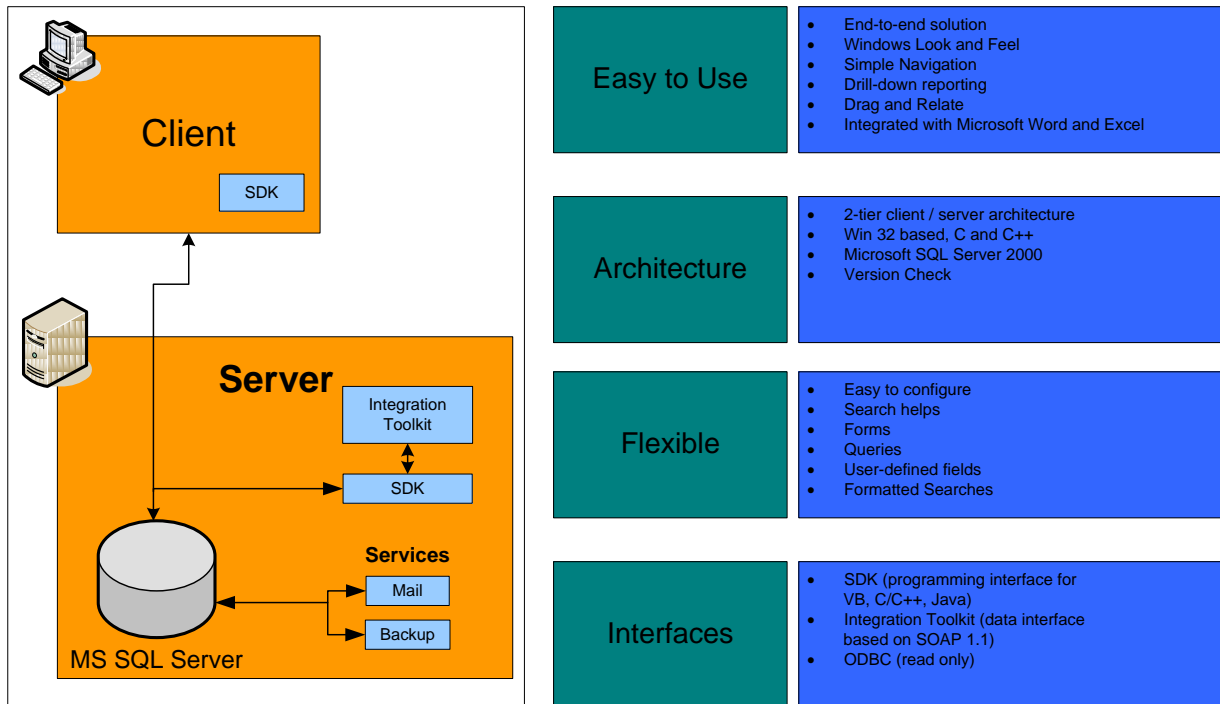
- Number of transaction
- Amount of reporting
- Languages in use

Please note that systems must be expandable to allow additional CPU and memory should the need arise.

Terminal Server\Citrix Server(s) are recommended for remote user.

2. Architecture

SAP Business One is based on a two-tier client/server architecture. The server runs Microsoft SQL Server 2005 and SQL Server 2008 as a central data repository. Most of the application resides on the client ("thick client") this means that processing is carried out locally and is largely independent on server performance.



SAP offers a Software Development Kit (SDK) for SAP Business One. You can use this kit to add your own functions programmed in Visual Basic (VB), C/C++, and Java. The SDK runs either on the server or on the client depending on its purpose. An integration toolkit provides an interface for converting data from SAP Business One to XML, based on the SOAP 1.1 protocol, and vice versa. Data can be read from the database using the standard ODBC interface of the SQL Server

SAP Business One is shipped with a service manager and two services for sending e-mails, faxes, and SMS from SAP Business One (mail service) and creating regular database backups (backup and service).

SAP Business One provides general functions that cover all business areas, as well as certain innovative enhancements, such as Customer Relationship Management (CRM), Contact Management, and Formatted Searches.

3. Recommendations - Hardware and Software Requirements

We have recommended a 2 server solution,

Database server for SAP BO databases, this server will

- ◆ Act as the SAP BO License Server
- ◆ Run SAP BO Server Components

Terminal/Citrix Server

- ◆ Run SAP BO client for remote users

3.1 Conditions

The figures are intended only as a guide and vary depending on a number of factors such as heavy reporting requirements, I/O subsystem performance, data volumes and network traffic. Other software requirements should also be considered.

It is recommended that all h/w is expandable so that additional CPU and Memory may be added if required.

Depending on usage additional may be required depending on usage of SAP BO.

3.2 Database Server

Symmetrical Multiprocessing (SMP) Servers can greatly improve the performance of SAP Business One. For smaller data volumes and few users, a single processor is adequate. Where performance is critical or data volumes and the number of users are greater, more than one processor is recommended.

| | |
|-------------------|--|
| Operating Systems | Microsoft Windows Server 2008 R2 (64 bit) |
| CPU | 1/2 X Intel Xeon Quadcore 2.6 GHz or equivalent AMD Processor(Quad Core is supported) |
| Ram Memory | 8 GB or above |
| HD | Systems partition : 50GB (Mirrored) Data partition : 100-150GB (RAID V) |
| CD Rom Drive | 24 X or Higher |
| Display | 1024 x 768 with 256 colors or higher |
| Software | Microsoft® IE 6.0 SP1 or higher Microsoft SQL Server 2008 R2 (64 bit) R2 or Microsoft SQL Server 2005 Standard Edition 32/64 bit Microsoft® Data Access Components 2.8 (MDAC) or above Microsoft .net 1.1 and 2.0, 3.5 SP1 |
| SQL Collation | SQL_Latin1_General_CP1_CI_AS This is mandatory |

Notes :

- a). This server should be dedicated for DB services and not be a PDC(Primary Domain Controller) or BDC(Backup Domain Controller).
- b). SAP B1 supports 64 bit OS and DB layers which allows for using memory above 4GB. 32 bit SQL Server can only use 2-3GB of Ram.
- c). SAP B1 is a 32 bit application
- d). Novell is not supported

3.3 Terminal\Citrix Server

This server will service remote users of SAP Business One. Sap Business One is not supported over WAN or VPN.

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| | |
|-------------------|--|
| Operating Systems | Microsoft Windows Server 2008 R2 (64 bit) or Running Terminal Services |
| CPU | 1 X Intel Xeon Dual/Quadcore 2.6 GHz or equivalent AMD Processor(Quad Core is supported) |
| Ram Memory | 4 GB or above - 5 Users |
| HD | 100GB (RAID 10) |
| CD Rom Drive | 24 X or Higher |
| Display | 1024 x 768 with 256 colors or higher |
| Software | Microsoft® IE 6.0 SP1 or higher Microsoft® Data Access Components 2.8 (MDAC) or above Microsoft .net 1.1 and 2.0, 3.5 SP1 Microsoft Office 2007\2010 32 bit Citrix Xenapp (optional) |

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3.4 LAN Client requirements

| | |
|-------------------|---|
| Operating Systems | Microsoft® Windows XP Professional XP SP2 Windows 7 With TS client for remote users Ica client (optional) for remote users if citrix is used |
| CPU | 1 X Intel Xeon 2.6 GHz or above Dual core is supported |
| Ram Memory | 2 GB recommended |
| HD | 5 GB |
| CD Rom Drive | 24 X or Higher |
| Display | 1024 x 768 with 256 colors or higher |
| Software | Microsoft® IE 6.0 SP1 or higher Microsoft® Data Access Components 2.8 (MDAC) or above |

4. Licenses

In addition to server licenses the following will be required;

- ▶ SQL Server
 - SQL Server CAL(Client Access License) per user
- ▶ Terminal Server CALs
 - Per number of remote users
- ▶ Citrix Server and user CALs(Optional)