**Hardware Requirements Guide** SAP Business One Document Version: 1.08 – 2016-03-09

# SAP Business One Hardware Requirements Guide

Release 8.8 and higher

# **Typographic Conventions**

| Type Style          | Description  |  |
|---------------------|--|--|
| Example             | Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.  |  |
|                     | Textual cross-references to other documents.   |  |
| Example             | Emphasized words or expressions.   |  |
| EXAMPLE             | Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE. |  |
| Example             | Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.                                   |  |
| Example             | Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.  |  |
| <example></example> | Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.   |  |
| EXAMPLE             | Keys on the keyboard, for example, F2 or ENTER.  |  |

# **Document History**

| Version | Date       | Change   |
|---------|------------|--|
| 1.0     | 2014-02-18 | Release Version  |
| 1.01    | 2014-05-08 | SAP Note 1787431 link added on XL Reporter platform support restrictions   |
| 1.02    | 2014-07-14 | Latest News added and SAP Business One 9.1 added to the overview list and requirements updated   |
| 1.03    | 2014-07-23 | Minimum Hardware Requirements updated  |
| 1.04    | 2014-08-25 | Feedback on network bandwidth incorporated   |
| 1.05    | 2015-08-21 | Processor details updated  |
| 1.06    | 2015-12-03 | Overview updated for SAP Business One 9.2  |
| 1.07    | 2015-12-08 | Workstation display settings updated for SAP Business One 9.0 / 9.1 / 9.2 as well as support information on Internet Explorer as stipulated by Microsoft |
| 1.08    | 2016-03-09 | Network bandwidth and latency information updated  |

# **Table of Contents**

| 1   | Hardwa   | re Requirements Guide                               | 5 |
|-----|--|---|---|
| 1.1 | Latest N   | re Requirements Guide                               | 5 |
|     | 1.1.1  | Disclaimer  |   |
| 2   | SAP Bu   | siness One  | 6 |
| 2.1 | Minimu   | n Hardware Requirements for Non-hosted Environments | 6 |
|     | 2.1.1  | SAP Business One Servers                            | 6 |
|     | 2.1.2  | SAP Business One Workstations                       | 7 |
| 2.2 | 2.2 Minimum Hardware Requirements for the Integration Component 1.0 for SAP Business One |   | 8 |
|     | 2.2.1  | Foot Notes  | 8 |
| 2.3 | RAM Re   | quirements for SAP Add-Ons                          | 9 |
|     | 2.3.1  | Foot Notes  | 9 |
| 2.4 | Hardwa   | re Requirements for Hosted Environments             |   |
|     | 2.4.1  | RAM Requirements                                    |   |
|     | 2.4.2  | Processor and Network Bandwidth                     |   |
| 2.5 | Additior   | al System Requirements                              |   |
|     | 2.5.1  | Software Requirements – Server                      |   |
|     | 2.5.2  | Software Requirements – Client                      |   |

# **1** Hardware Requirements Guide

The requirements listed in this document apply to SAP Business One software in general and are independent of any underlying database, Microsoft SQL Server or SAP HANA.

Note that the **minimum** hardware requirements outlined here are just recommendations to support operational processes at lowest level. For smooth operations, any given installation should ideally have a configuration that is standard to the market.

### 1.1 Latest News

# Aug 19, 2015Support of Microsoft® SQL Server 2014 with SAP Business One.Read SAP Note 2139358 on how the new Microsoft licensing terms for SQL Server might affect<br/>your operation of the SQL Server 2014 and the resulting consequences.

## 1.1.1 Disclaimer

- In general, only the **English** platform versions are supported. Platform versions in other languages are supported as long as the issue is **not specific** to the platform version in a particular language.
- SAP Business One will no longer provide any support statements on virtualization software as we consider it the virtualization vendor's responsibility to ensure operating system compatibility. SAP Business One is running on virtualization software just as it is running on non-virtualized operating system platforms.
- SAP Business One will test only major versions of Microsoft's operating systems, databases and Office software products. Service Packs delivered by Microsoft in the course of a product's lifecycle will no longer be tested separately, but will automatically be officially supported for SAP Business One.
- If you encounter an issue with any of the Microsoft product Service Packs, SAP will solve this issue on a case-by-case basis as a bug (historically low rate of occurrence).
- For inquiries concerning supported platforms, open a ticket under component SBO-CRO-PLT via the <u>SAP Business One Product Support</u> page. For platform-related information specific to the SAP Business One XL Reporter, read SAP Note <u>1787431</u>.

# **2** SAP Business One

2.1 Minimum Hardware Requirements for Non-hosted Environments

## 2.1.1 SAP Business One Servers

| Component                | 8.8 / 8.81 / 8.82                              | 9.0 / 9.1 / 9.2                               |
|--------------------------|--|---|
| Processor <sup>(1)</sup> | 1x Intel® Pentium 4 ( or equivalent)           | 1x Intel® Xeon® E3 ( or equivalent)           |
| Memory                   | 1 GB   | 4 GB (minimum)<br>16 ~ 32 GB (recommended)    |
| Hard Disk                | System partition 0.5 GB<br>Data partition 2 GB | System partition 5 GB<br>Data partition 15 GB |
| Drive                    | DVD-ROM  | DVD-ROM                                       |
| Display                  | 640 x 480 with 256 colors or higher            | 800 x 600 with 16-bit colors or higher        |

# 2.1.1.1 Foot Notes

<sup>(1)</sup> Dual-core processors are supported by SAP Business One on both client and server side.

# 2.1.2 SAP Business One Workstations

| Component                | 8.8 / 8.81 / 8.82                                | 9.0 / 9.1 / 9.2  |
|--------------------------|--|--|
| Processor <sup>(1)</sup> | 1x Intel <sup>®</sup> Pentium 4 ( or equivalent) | 1x Intel <sup>®</sup> Core <sup>®</sup> i3 ( or equivalent)  |
| Memory <sup>(2, 3)</sup> | 1 GB   | 2 GB (minimum)<br>4 ~ 8 GB (recommended)   |
| Hard Disk                | System partition 1 GB<br>Data partition 0.5 GB   | System partition 2 GB<br>Data partition 1 GB   |
| Drive                    | DVD-ROM  | DVD-ROM  |
| Display                  | 800 x 600 with 24-bit colors or higher           | 1024 x 768 with 24-bit colors or higher<br>(minimum)<br>1280 x 800 with 24-bit colors or higher<br>(recommended) |

# 2.1.2.1 Foot Notes

<sup>(1)</sup> Dual-core processors are supported by SAP Business One on both client and server side.

<sup>(2)</sup> Some Add-Ons may require additional memory. For specific requirements, contact your solution provider. The Windows Vista operating system requires a hardware upgrade.

<sup>(3)</sup> For clients on which long reports are executed, it is recommended using a 64-bit client together with a high-end PC incl. large memory.



Memory consumption for Add-Ons can be significantly reduced by using the connection interface which was provided with SDK 2007 A.

# 2.2 Minimum Hardware Requirements for the Integration Component 1.0 for SAP Business One

| Integration Component | 1.0                                       |
|-----------------------|---|
|                       | Database system 2 GB                      |
| Memory <sup>(1)</sup> | Operating system 1 GB                     |
|                       | Integration component 1 GB <sup>(2)</sup> |

# 2.2.1 Foot Notes

<sup>(1)</sup> Using a 32-bit operating system, a maximum of 1 GB memory can be assigned to the integration component for SAP Business One. For higher performance requirements usage, a 64-bit operating system is recommended, allowing using more than 1 GB memory.

<sup>(2)</sup> When using a 64-bit operating system, the default value for the integration component for SAP Business One is set to 2 GB.

# 2.3 RAM Requirements for SAP Add-Ons

|   |                                | [  |
|---|--------------------------------|--|
| Add-On                                    | 8.8 / 8.81 / 8.82              | 9.0 / 9.1 / 9.2                                      |
| BTHF                                      | 10 MB ~ 15 MB <sup>(1)</sup>   | Discontinued   |
| Copy Express                              | 25 MB ~ 80 MB <sup>(1)</sup>   | Merged back into the SAP Business One<br>application |
| DATEV                                     | 25 MB ~ 70 MB <sup>(1)</sup>   | 25 MB ~ 70 MB <sup>(1)</sup>                         |
| ELSTER                                    | 30 MB ~ 50 MB <sup>(1)</sup>   | 30 MB ~ 50 MB <sup>(1)</sup>                         |
| Fixed Assets                              | 70 MB ~ 260 MB                 | Merged back into the SAP Business One application    |
| Format Definition                         | 40 MB ~ 80 MB                  | 30 MB ~ 150 MB <sup>(1)</sup>                        |
| Intrastat                                 | 25 MB ~ 150 MB <sup>(1)</sup>  | Merged back into the SAP Business One application    |
| Outlook Integration                       | 30 MB ~ 70 MB <sup>(1)</sup>   | 25 MB ~ 70 MB <sup>(1)</sup>                         |
| Payment Engine<br>(including Cash & Bank) | 110 MB ~ 130 MB <sup>(1)</sup> | 110 MB ~ 130 MB <sup>(1)</sup>                       |
| XL Reporter <sup>(3)</sup>                | Optional <sup>(2)</sup>        | Discontinued   |

# 2.3.1 Foot Notes

<sup>(1)</sup> Use *Multiple Add-On Mechanism* to share DI connection through UI API.

<sup>(2)</sup> With SAP Business One Release 8.8, *SAP Crystal Solutions* have been introduced as the standard reporting and printing platform for SAP Business One.

<sup>(3)</sup> Read SAP Note <u>1787431</u> – *Central Note for SAP Business One XL Reporter* on important topics such as platform support restrictions.

# 2.4 Hardware Requirements for Hosted Environments

# 2.4.1 RAM Requirements

Citrix XenApp Edition or Windows Terminal Services hardware requirements, as stipulated by the manufacturer.

#### Recommendation

For WAN connections, use the *Remote Desktop Protocol* (RDP).

#### Per concurrent user:

- SAP Business One application 1 GB
- Citrix or WTS Client Sessions For recommended requirements, refer to Citrix or WTS documentation.
- For other applications like partner add-ons or e-mail clients, contact your solution provider for recommended requirements.

#### Example:

Your system is required to run:

- Windows Server and Citrix Server 8 GB
  - For details, refer to the Microsoft Windows system requirements and the respective Citrix document.
- 10 SAP Business One concurrent users
- Citrix session and partner add-on use 0.25 GB per concurrent users

#### Calculate the required memory as follows:

- Each concurrent user requires **1 GB** for SAP Business One + **0.25 GB** for Citrix session and partner add-ons = **1.25 GB**
- Total memory required is **8 GB** for Windows and Citrix server + 10 concurrent users x **1.25 GB** for each user = **20.5 GB**

# 2.4.2 Processor and Network Bandwidth

#### Processors:

- Each physical CPU core can support 5~8 SAP Business One concurrent users, which depends on actual CPU performance.
- In a virtualized environment, each vCPU can support less than five SAP Business One concurrent users.
  - Contact your solution provider for configuration details.

If, for example, other applications with a high transaction volume or long reports are executed, contact your solution provider for recommended requirements.

Additional CPUs are required for third-party add-ons, format search and other extensions which consume CPU resources. For partner- or project-specific customization and extensions, the CPU consumption needs to be figured out through partner testing.

For CPU overcommitted cloud environments, run benchmark tools to determine the true CPU performance.

#### Network bandwidth:

• Each concurrent user who is accessing Citrix or WTS sessions via WAN requires 0.5 Mbps (512 Kbps) external bandwidth.

#### Example:

For 32 concurrent users, an external bandwidth of 16 Mbps is required.

Network latency, screen resolution and other factors might impact Citrix or WTS sessions. Contact your solution provider for configuration details.

#### Latency and bandwidth requirements:

• All SAP Business One components must be installed in the same LAN (local area network). Putting client and server into two different locations (e.g. VPN) will have an impact on the performance of SAP Business One. Thus, latency should be as low as possible (<1 ms).

#### Same LAN means:

- Sufficient bandwidth > 100M
- Small latency < 1 ms
- o Same WINS server
- o Same local DNS server, if configured
- o Same AD server, if AD is being used

# 2.5 Additional System Requirements

## 2.5.1 Software Requirements - Server

Microsoft<sup>®</sup> Internet Explorer 8.0 or higher

Microsoft<sup>®</sup> Data Access Components 2.6 (MDAC) or higher

## 1 Note

As stipulated by Microsoft, beginning on **January 12, 2016**, only the most current version of Internet Explorer available for a supported operating system will receive technical support and security updates. Internet Explorer 11 is the last version of Internet Explorer, and will continue to receive security updates, compatibility fixes, and technical support on Windows 7, Windows 8.1, and Windows 10.

# 2.5.2 Software Requirements - Client

Microsoft<sup>®</sup> Internet Explorer 8.0 or higher

Microsoft® Data Access Components 2.6 (MDAC) or higher

## **1** Note

As stipulated by Microsoft, beginning on **January 12, 2016**, only the most current version of Internet Explorer available for a supported operating system will receive technical support and security updates. Internet Explorer 11 is the last version of Internet Explorer, and will continue to receive security updates, compatibility fixes, and technical support on Windows 7, Windows 8.1, and Windows 10.

## 1 Note

To send faxes from SAP Business One, it is recommended to install *Microsoft® Fax Services*. *Symantec WinFax Pro 10.0* is no longer supported by Symantec, but may be used with SAP Business One if it is already installed.

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