

# Implementing Microsoft® Windows® Small Business Server 2011 on HP ProLiant servers

## Integration note

Introduction .....	2
Introduction to Small Business Server 2011 Standard .....	2
Small Business Server 2011 Premium Add-On .....	2
System configuration requirements .....	3
Recommended ProLiant servers .....	4
Recommended software and options .....	5
Installing Small Business Server 2011 on ProLiant servers .....	8
Pre-installation tasks .....	8
Manual installation of Small Business Server 2011 .....	8
Known issues and workarounds .....	9
Summary .....	10
For more information .....	11
Call to action .....	11



# Introduction

Microsoft® Windows® Small Business Server 2011 (SBS 2011) is an all-in-one server suite for small businesses that is available in the following editions:

- Microsoft Windows Small Business Server 2011 Standard
- Microsoft Windows Small Business Server 2011 Essentials
- Microsoft Windows Small Business Server 2011 Premium Add-on

---

## NOTE

SBS 2011 Essentials is a new SBS 2011 product. This document does not provide information about SBS 2011 Essentials.

For information on SBS 2011 Essentials, see the Microsoft Small Business Server Editions Overview website. For the link to the Editions Overview website, see the “For more information” section.

---

This integration note gives you guidance for installing SBS 2011 on HP ProLiant servers.

Key topics addressed in this paper:

- Recommended configurations of ProLiant servers
- Recommended server platforms
- Recommended software, storage options, and NICs
- Procedures for new installations
- Known issues

## Introduction to Small Business Server 2011 Standard

Small businesses with up to 75 users will benefit from SBS 2011 Standard. SBS 2011 Standard protects information by performing automatic daily backups and includes features like e-mail, Internet connectivity, internal Web sites, remote access, and file and printer sharing. Other advantages of SBS 2011 Standard include:

- **Increase your data and network protection**—The OS provides automatic local backup and restoration of all business critical data on the server. It also monitors client systems for antivirus status, update compliance, and security health.
- **Increase your business productivity**—The OS includes Microsoft Exchange Server 2010, Microsoft SharePoint Foundation 2010, and Windows Server Update Services for a complete server solution.
- **Improve scalability**—The OS provides solutions to add users, servers, and applications based on your business’s growth and needs.
- **Advance your e-mail, calendar, and document sharing capabilities**—The OS provides seamless communication with clients, vendors, and suppliers by providing access to e-mail, contacts, and your calendar from any location.

## Small Business Server 2011 Premium Add-On

The SBS 2011 Premium Add-On option provides data management and analysis solutions. Installed on an additional server, it includes a licensed copy of Microsoft® Windows Server® 2008 R2 Standard Edition as well as Microsoft SQL Server 2008 R2 Standard Edition for Small Business.

# System configuration requirements

Table 1 lists the system configuration requirements Microsoft has established for servers using SBS 2011. These requirements are subject to change. For system requirement updates, see the Microsoft introduction to the next version of Windows SBS page on the Microsoft website. For the link to the page, see the “For more information” section.

**Table 1.** System configuration requirements established by Microsoft for SBS 2011

Component	Requirement
Processor	<ul style="list-style-type: none"><li>• 2 GHz 64-bit Quad Core processor (or faster)</li><li>• Sockets: one – four</li></ul>
Physical memory (RAM)	<ul style="list-style-type: none"><li>• 8 GB–32 GB</li><li>• Recommended: 10 GB</li></ul>
Storage capacity	120 GB
DVD ROM drive	DVD ROM drive
Network adapter	One 10/100 Ethernet adapter
Monitor and video adapter	Super VGA (SVGA) monitor and video adapter with 1024 x 768 (or higher) resolution
Network devices	A router or firewall device that supports IPv4 Network Address Translation (NAT)
Internet connection	Internet connection present
Optional network devices	One or more switches to connect computers and other devices to the local network
Fax modem	Required if you need fax services

Table 2 lists the system configuration requirements Microsoft has established for servers that include the SBS 2011 Premium Add-On option.

**Table 2.** System configuration requirements established by Microsoft for the Premium Add-On option for SBS 2011

Component	Requirement
Processor	2 GHz 64-bit processor
RAM	<ul style="list-style-type: none"><li>• Required: 2 GB – 32 GB</li><li>• Minimum RAM for Premium Add-On option: 4 GB</li></ul>
Available disk space	<ul style="list-style-type: none"><li>• Minimum: 40 GB</li><li>• Recommended: 80 GB</li></ul>

---

**NOTE**

SBS 2011 supports the following client operating systems:

- Windows XP Professional with SP 3
  - Windows Vista® Business, Enterprise, and Ultimate with SP2
  - Windows 7 Business, Enterprise, and Ultimate
  - Windows Mobile® 6.1.4 and 6.5 software
- 

## Recommended ProLiant servers

SBS 2011 should install on any ProLiant server listed in Table 3 if the server meets the hardware configuration established by Microsoft. Table 3 also lists the minimum ROM version required. For links to the HP on ProLiant support matrix and HP software and driver updates website, see the “For more information” section.

**Table 3.** Recommended ProLiant server platforms for SBS 2011

Server platform	ROM family	ROM date (minimum)
<b>ProLiant Blade/SL line servers</b>		
DL170h G6	O34	6/29/2010
DL2x170h G6	O34	6/29/2010
DL4x170h G6	O34	6/29/2010
BL260c G5	I20	6/24/2010
BL280c G5	I22	6/24/2010
BL460c G6	I24	6/24/2010
BL460c G7	I24	6/24/2010
BL465c G6	A13	12/8/2009
BL465c G7	A13	12/20/2010
BL490c G6	I21	6/24/2010
BL490c G7	I21	6/24/2010
BL495c G6	A14	1/12/2010
<b>ProLiant DL servers</b>		
DL120 G6	O26	3/3/2010
DL160 G6	O33	6/8/2010
DL165 G7	O37	5/25/2010
DL180 G6	O20	6/8/2010

**Table 3.** Recommended ProLiant server platforms for SBS 2011

<b>Server platform</b>	<b>ROM family</b>	<b>ROM date (minimum)</b>
DL320 G6	W07	6/24/2010
DL360 G6	P64	6/24/2010
DL360 G7	P68	6/24/2010
DL370 G6	P63	6/28/2010
DL380 G6	P62	12/1/2010
DL380 G7	P67	12/1/2010
DL385 G5p	A22	2/16/2010
DL385 G6	A22	2/16/2010
<b>ProLiant ML servers</b>		
ML110 G6	O27	3/03/2010
ML310 G5p	W08	9/10/2009
ML330 G6	W07	6/24/2010
ML350 G6	D22	6/24/2010
ML370 G6	P63	6/28/2010

## Recommended software and options

### Software drivers

During the installation, you can use the drivers that are available on the SBS 2011 media. After the installation completes, update drivers to the latest version by installing the latest HP ProLiant Support Pack or downloading the latest drivers from the HP download drivers and software website. For the link to the website, see the “For more information” section.

### Storage options

Table 4 lists storage options tested with SBS 2011. SBS 2011 should install on the recommended ProLiant servers configured with the storage controller options listed and meeting the hardware configuration established by Microsoft.

Some devices have firmware upgrades available through the options ROMPaq. You can download the options ROMPaq and the latest HP drivers from the HP website. For the link to the HP download drivers and software website, see the “For more information” section.

Certain drivers noted in the PSP 8.60 column are currently available on the PSP. Official support for SBS 2011 will be in the next release of SmartStart and the PSP.

**Table 4.** Tested ProLiant storage controller options

Option	Driver name	Driver location		
		Web download	Windows media	PSP 8.60
<b>Management drivers</b>				
SAS/SATA Notification Service	CISSESRV.EXE	✓		✓
StorageWorks Fibre Channel Array Notification Driver for Windows 2000/Server 2003	CPQFCAC.SYS	✓		
<b>Smart Array</b>				
E200	HPSAMD.SYS		✓	
E200i	(basic)			
E500				
P212	HPCISS2.SYS	✓		✓
P400	(full featured)			
P400i				
P410				
P410i				
P411				
P600				
P700m				
P711				
P712				
P800				
P812				
Storage Works 1210m	HPCISS2.SYS (full featured)	✓		✓
<b>Host bus adapters</b>				
6 Port SATA RAID Controller	AAC.SYS	✓		
8 Internal Port SAS HBA with RAID	LSI_SAS.SYS	✓	✓	✓
SC44Ge	LSI_SAS.SYS	✓	✓	✓
SC11Xe	LSI_SAS.SYS	✓	✓	✓
SC08Ge	LSI_SAS.SYS	✓	✓	✓

**Table 4.** Tested ProLiant storage controller options

Option	Driver name	Driver location		
		Web download	Windows media	PSP 8.60
<b>Broadcom Serial ATA controller driver</b>				
HT1000	BCHTSW64.SYS	✓	✓	✓
<b>StorageWorks</b>				
DAT Autoloader 72*6	HPDAT.SYS			✓
DAT Autoloader 72*10	HPDATCHG.SYS			

**Network interface controllers**

Table 5 lists NICs tested with SBS 2011. SBS 2011 should install on the recommended ProLiant servers configured with the NICs listed and meeting the hardware configuration established by Microsoft.

Some devices have firmware upgrades available through the options ROMPaq. You can download the options ROMPaq and the latest HP drivers from the HP website. For the link to the HP download drivers and software website, see the “For more information” section.

Certain drivers noted in the PSP 8.60 column are currently available on the PSP. Official support for SBS 2011 will be in the next release of SmartStart and the PSP.

**Table 5.** Tested ProLiant NIC options

NIC	Driver name	Driver location		
		Web download	Windows media	PSP 8.60
NC325m NC326m NC7761	B57ND60A.SYS		✓	✓
NC370i NC371i NC373T/F/M/i NC375t/i NC380T NC382t/m/i	BXVBDA.SYS, BXND60A.SYS	✓	✓	
NC365T	E1R62X64.SYS	✓		
NC310F NC340T	N1G6032E.SYS	✓	✓	✓

**Table 5.** Tested ProLiant NIC options

NIC	Driver name	Driver location		
		Web download	Windows media	PSP 8.60
NC110T NC360m NC360T NC364T NC364m	E1E6232E.SYS		✓	✓
NC112t NC362i	E1Q62X64.SYS		✓	✓
NC532m/i	EVBDA.SYS, BXND60A.SYS	✓		
NC542m	MLX4_BUS.SYS, MLX4ETH6.SYS	✓		
NC550m/SFP NC551m/i CN1000E	BE2ND62.SYS ELXCNA.SYS	✓		
NC522m/SFP NC524SFP	HPND6X64.SYS	✓		

## Installing Small Business Server 2011 on ProLiant servers

### Pre-installation tasks

Perform the following tasks to prepare for installation:

- Make sure you are using a recommended server.
- Install the latest ROM for the server. For the ROM download, see the HP Business Support Center website. For the link to the website, see the “For more information” section.
- If necessary, use the ROM-Based Setup Utility (RBSU) to set date/time and configure the boot controller order.
- Use the Array Configuration Utility to configure the RAID settings for the server.
- If necessary, update iLO 2 or iLO 3 firmware to version 3.1 (or later).

### Manual installation of Small Business Server 2011

#### **NOTE**

When utilizing the iLO mounted DVD or USB DVD to install SBS 2011 installation times are longer.

Complete the following steps:



1. Make sure that the server has a DVD drive. Use the SBS 2011 media to install SBS 2011.

---

**NOTE**

A license key is required to use iLO virtual media with HP ProLiant servers.

---

2. Insert the SBS 2011 media into the DVD drive and boot the server to the DVD to begin the installation.
3. Follow the on-screen instructions to complete the installation. We recommend that you follow the Microsoft guidelines on the Microsoft TechNet website. For the link to the Microsoft TechNet website, see the "For more information" section.
4. If you do not find the drivers for the storage controller or NIC, download the drivers from the HP website as follows:
  - a. Go to the HP website.
  - b. Select the **Support and Drivers** tab.
  - c. Select **Download drivers and software (and firmware)** for step 1.
  - d. Type the server product name (for instance, ProLiant DL380 G6) for step 2.
  - e. Click **Go**.
  - f. Select **Microsoft Windows 2008 R2** for the operating system.
  - g. Under **Quick jumps to downloads**, select the appropriate **Driver – Storage Controller** and the **Driver – Network** for your component.
  - h. Save the driver to a USB key to use during the OS installation.

## Known issues and workarounds

Table 6 lists one known issue with ProLiant servers and SBS 2011.

**Table 6.** Known issues on ProLiant servers and SBS 2011

Issue	Details
<b>Issue 1</b>	SBS 2011 does not install on the HP ProLiant Servers configured with the Intel® 82801FR SATA RAID Controller.
Description	While installing the OS, the SATA hard drives connected to the Intel 82801FR SATA RAID controller do not appear when selecting the drive for the OS.
Workaround	Support for RAID functionality with SBS 2011 on servers configured with the Intel 82801FR SATA RAID controller will be available in March 2011. As a workaround, you can disable the RAID functionality of the Intel 82801 FR SATA RAID Controller, and then continue the installation. <b>IMPORTANT:</b> If you choose to work around this issue and disable the RAID functionality, and then later decide to add RAID support, you must reinstall the OS.
Solution	When an Intel 82801FR SATA RAID controller driver update is available in March 2011, update the driver during the SBS 2011 installation.

## Summary

Recommended ProLiant servers, along with tested storage options and NICs complement SBS 2011 Standard to provide enterprise-quality functionality and productivity capabilities for small businesses. This combination offers flexibility, growth potential, and enables you to deploy a simplified server solution to help your business run more efficiently.

## For more information

Resource description	Web address
HP software and driver updates	<a href="http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp?lang=en&amp;cc=us&amp;taskId=135">http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp?lang=en&amp;cc=us&amp;taskId=135</a>
Windows on ProLiant support matrix	<a href="http://h10018.www1.hp.com/wwsolutions/windows/index.html">http://h10018.www1.hp.com/wwsolutions/windows/index.html</a>
HP download drivers and software	<a href="http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp?lang=en&amp;cc=us&amp;taskId=135">http://h20000.www2.hp.com/bizsupport/TechSupport/ProductRoot.jsp?lang=en&amp;cc=us&amp;taskId=135</a>
HP Business Support Center	<a href="http://www.hp.com/go/bizsupport">www.hp.com/go/bizsupport</a>
HP and Microsoft Frontline Partnership website	<a href="http://www.hp.com/go/microsoft">www.hp.com/go/microsoft</a>
Microsoft website	<a href="http://www.microsoft.com">www.microsoft.com</a>
Windows SBS product documentation	<a href="http://go.microsoft.com/?linkid=9738094">http://go.microsoft.com/?linkid=9738094</a>
Microsoft TechNet	<a href="http://technet.microsoft.com/en-us/library/cc514417.aspx">http://technet.microsoft.com/en-us/library/cc514417.aspx</a>
Microsoft Windows SBS Blog	<a href="http://blogs.technet.com/sbs/default.aspx">http://blogs.technet.com/sbs/default.aspx</a>
Microsoft Windows SBS product website	<a href="http://www.microsoft.com/sbs/en/us/default.aspx">www.microsoft.com/sbs/en/us/default.aspx</a>
Microsoft Small Business Server 2011 Editions Overview	<a href="http://www.microsoft.com/sbs/en/us/editions-overview.aspx">http://www.microsoft.com/sbs/en/us/editions-overview.aspx</a>
Installing SBS 2011 Essentials on ProLiant servers integration note	<a href="http://h20000.www2.hp.com/bc/docs/support/SupportManual/c02510044/c02510044.pdf">http://h20000.www2.hp.com/bc/docs/support/SupportManual/c02510044/c02510044.pdf</a>

## Call to action

Send comments about this paper to [TechCom@HP.com](mailto:TechCom@HP.com).



Follow us on Twitter: <http://twitter.com/ISSGeekatHP>

© Copyright 2011 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel is a trademark of Intel Corporation in the United States and other countries.  
TC110204IN, February 2011

