Balabit's Privileged Session Management 5 F6 Packaging Checklist

June 19, 2018

Abstract
Hardware Installation Guide for Balabit's Privileged Session Management (PSM)



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This product includes open source software components. For details on the licenses and availability of these software components, see *Appendix E*, *Open source licenses* in *The Balabit's Privileged Session Management* 5 F6 Administrator Guide.

Appendix A. Package contents inventory

Carefully unpack all server components from the packing cartons. The following items should be packaged with the Balabit's Privileged Session Management:

- A Balabit's Privileged Session Management appliance, pre-installed with the latest Balabit's Privileged Session Management firmware.
- Balabit's Privileged Session Management accessory kit, including the following:
 - Balabit's Privileged Session Management 5 F6 Packaging Checklist (this document).
 - GPL v2.0 license.
- Rack mount hardware (depending on appliance type).
- Power cable.

The default BIOS and IPMI passwords are in the documentation.

Appendix B. Balabit's Privileged Session Management Hardware Installation Guide

This document describes how to set up the Balabit's Privileged Session Management (PSM) hardware. Refer to the following documents for step-by-step instructions:

- Balabit's Privileged Session Management T-1: see the SC512 Chassis Series User's Manual, Chapter 6: Rack Installation, available online at http://www.supermicro.com/manuals/chassis/1U/SC512.pdf.
- Balabit's Privileged Session Management T-4: see the SC815 Chassis Series User's Manual, Chapter 6: Rack Installation, available online at http://www.supermicro.com/manuals/chassis/1U/SC815.pdf.
- Balabit's Privileged Session Management T-10: see the SC219 Chassis Series User's Manual, Chapter 5: Rack Installation, available online at http://www.supermicro.com/manuals/chassis/2U/SC219.pdf.
- For details on how to install a single PSM unit, see *Procedure B.1*, *Installing the PSM hardware* (*p. 3*).
- For details on how to install a two PSM units in high availability mode, see *Procedure B.2*, *Installing two PSM units in HA mode (p. 6)*.

B.1. Procedure – Installing the PSM hardware

Purpose:

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All questions, comments or inquiries should be directed to <info@balabit.com> or by post to the following address: One Identity LLC 1117 Budapest, Alíz Str. 2 Phone: +36 1 398 6700 Fax: +36 1 208 0875 Web: https://www.balabit.com/

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To install a single PSM unit, complete the following steps.

Steps:

- Step 1. Unpack PSM.
- Step 2. *Optional step*: Install PSM into a rack with the slide rails. Slide rails are available for all PSM appliances.
- Step 3. Connect the cables.
 - Step a. Connect the Ethernet cable facing your LAN to the Ethernet connector labeled as 1. This is physical interface 1 of PSM. This interface is used for the initial configuration of PSM, and for monitoring connections. (For details on the roles of the different interfaces, see Section 2.16, Network interfaces in The Balabit's Privileged Session Management 5 F6 Administrator Guide.)
 - Step b. *Optional step:* To use PSM across multiple physical (L1) networks, you can connect additional networks using physical interface 2 (Ethernet connector *2*) and physical interface 3 (Etherner connector *3*).
 - Step c. Connect an Ethernet cable that you can use to remotely support the PSM hardware to the *IPMI* interface of PSM. For details, see the following documents:

 For PSM T4 and T10, see the <u>X9 SMT IPMI User's Guide</u>. For PSM T1, see the <u>SMT IPMI User's Guide</u>.



Warning

Connect the IPMI before plugging in the power cord. Failing to do so will result in IPMI failure.

It is not necessary for the IPMI interface to be accessible from the Internet, but the administrator of PSM must be able to access it for support and troubleshooting purposes in case vendor support is needed. The following ports are used by the IPMI interface:

- Port 623 (UDP): IPMI (cannot be changed)
- Port 5123 (UDP): floppy (cannot be changed)
- Port 5901 (TCP): video display (configurable)
- Port 5900 (TCP): HID (configurable)
- Port 5120 (TCP): CD (configurable)
- Port 80 (TCP): HTTP (configurable)

Access to information available only via the IPMI interface is not mandatory, but highly recommended to speed up the support and troubleshooting processes.

Step d. *Optional step:* Connect the Ethernet cable connecting PSM to another PSM node to the Ethernet connector labeled as *4*. This is the high availability (HA) interface of PSM. (For details on the roles of the different interfaces, see <u>Section 2.16</u>, <u>Network interfaces</u> in *The Balabit's Privileged Session Management 5 F6 Administrator Guide.*)

Step e. *Optional step:* The T-10 appliance is equipped with a dual-port SFP+ interface card labeled A and B. Optionally, connect a supported SFP+ module to these interfaces.



Note

For a list of compatible connectors, see *Linux Base Driver for 10 Gigabit Intel Ethernet Network Connection*. Note that SFP transceivers encoded for non Intel hosts may be incompatible with the Intel 82599EB host chipset found in PSM.

- Step 4. Power on the hardware.
- Step 5. Change the BIOS password on the Balabit's Privileged Session Management. The default password is ADMIN or changeme, depending on your hardware.
- Step 6. Change the IPMI password on the Balabit's Privileged Session Management. The default password is ADMIN or changeme, depending on your hardware.



Note

Ensure that you have the latest version of IPMI firmware installed. You can download the relevant firmware from *the Balabit Knowledge base*.

To change the IPMI password, connect to the IPMI remote console.



Note

If you encounter issues when connecting to the IPMI remote console, add the DNS name or the IP address of the IPMI interface to the exception list (whitelist) of the Java console. For details on how to do this, see the Java FAQ entry titled *How can I configure the Exception Site List?*.

- Step 7. Following boot, PSM attempts to receive an IP address automatically via DHCP. If it fails to obtain an automatic IP address, it starts listening for HTTPS connections on the 192.168.1.1 IP address. To configure PSM to listen for connections on a custom IP address, complete the following steps:
 - Step a. Access PSM from the local console, and log in with username *root* and password *default*.
 - Step b. In the Console Menu, select **Shells** > **Core shell**.
 - Step c. Change the IP address of PSM:
 ifconfig eth0 <IP-address> netmask 255.255.255.0

Replace <IP-address> with an IPv4 address suitable for your environment.

Step d. Set the default gateway using the following command: route add default gw <IP-of-default-gateway>

Replace <IP-of-default-gateway> with the IP address of the default gateway.

Step e. Type exit, then select **Logout** from the Console Menu.

Step 8. Connect to the PSM web interface from a client machine and complete the Welcome Wizard as described in *Chapter 3, The Welcome Wizard and the first login* in *The Balabit's Privileged Session Management 5 F6 Administrator Guide*.



Note

The <u>The Balabit's Privileged Session Management 5 F6 Administrator Guide</u> is available on the <u>One Identity Documentation page</u>.

B.2. Procedure – Installing two PSM units in HA mode

Purpose:

To install PSM with high availability support, complete the following steps.

Steps:

- Step 1. For the first PSM unit, complete *Procedure B.1*, *Installing the PSM hardware (p. 3)*.
- Step 2. For the second PSM unit, complete Steps 1-3 of *Procedure B.1*, *Installing the PSM hardware (p. 3)*.
- Step 3. Connect the two units with an Ethernet cable via the Ethernet connectors labeled as 4.
- Step 4. Power on the second unit.
- Step 5. Change the BIOS and IPMI passwords on the second unit. The default password is ADMIN or changeme, depending on your hardware.
- Step 6. Connect to the PSM web interface of the first unit from a client machine and enable the high availability mode. Navigate to **Basic Settings > High Availability** . Click **Convert to Cluster**, then reload the page in your browser.
- Step 7. Click **Reboot Cluster**.
- Step 8. Wait until the slave unit synchronizes its disk to the master unit. Depending on the size of the hard disks, this may take several hours. You can increase the speed of the synchronization via the PSM web interface at **Basic Settings > High Availability > DRBD sync rate limit**.

Appendix C. Hardware specifications

PSM appliances are built on high performance, energy efficient, and reliable hardware that are easily mounted into standard rack mounts.

Product	Redundant PSU	Processor	Memory	Capacity	RAID	IPMI
PSM T-1	No	Intel(R) Xeon(R) X3430 @ 2.40GHz	2 x 4 GB	2 x 1 TB	Software RAID	Yes
PSM T-4	Yes	Intel(R) Xeon(R) E3-1275V2 @ 3.50GHz	2 x 4 GB	4 x 2 TB	LSI MegaRAID SAS 9271-4i SGL	Yes

Product	Redundant PSU	Processor	Memory	Capacity	RAID	IPMI
PSM T-10		2 x Intel(R) Xeon(R) E5-2630V2 @ 2.6GHz	8 x 4 GB	13 x 1 TB	LSI 2208 (1GB cache)	Yes

Table C.1. Hardware specifications

The PSM T-10 appliance is equipped with a dual-port 10Gbit interface. This interface has SFP+ connectors (not RJ-45) labeled A and B, and can be found right of the Label 1 and 2 Ethernet interfaces. If you want faster communication, for example, in case of high data load, you can connect up to two 10Gbit network cards. These cards are not shipped with the original package and have to be purchased separately.