

Container Contents

Included in container

The list below shows components included in a SmartVDI-110 container.

- SmartVDI-110 Server
 - Chassis mounting rails and hardware
 - SATA DOM (for system startup)
 - Up to four storage drives (SSD, HDD, or both)
 - LSI SAS host bus adapter
 - NVIDIA GRID™ graphics card (optional, up to two)
 - Teradici® PCoIP® Offload card (optional)
 - Fiber NIC controller (optional)
 - Power cable(s)
 - This *Quick Start Guide*
 - Motherboard documentation
 - SAS host bus adapter documentation
 - If included in on server configuration, documentation for graphics card and PCoIP Offload card
-

Not included

The list below shows items not included with a SmartVDI-110 Server.

- Monitors
 - Ethernet cables (copper)
 - Fiber optic cables
 - Keyboard and mouse
-

SmartVDI-110 Overview and Features

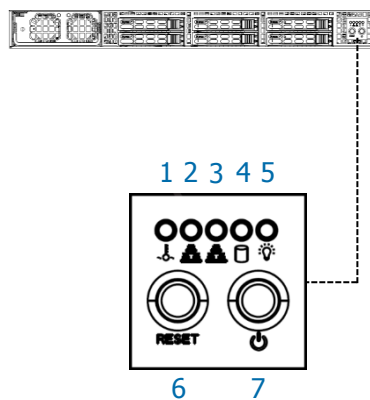
SmartVDI-110 overview

The SmartVDI-110 Server is a 1U, VDI-optimized, high-performance server based on the Intel® C612 chipset. The list below shows SmartVDI 110 features.

- Intel Xeon® E5-2600 v3 series processor (up to 18 cores and 145 W)
- 16 × DIMM slots, 288-pin DDR4
- Up to 512 GB DDR 4 ECC Registered Memory
- 16 or 32 GB RDIMM modules
- 4 × 2.5-inch SAS/SATA hot-swap drive bays
- 2 × 10GBASE-T (GbE) Ethernet LAN ports
- 1 × Ethernet dedicated IPMI port
- Support for IPMI 2.0

SmartVDI-110 front panel

The picture and table below show indicators and buttons on the front panel of a SmartVDI-110.



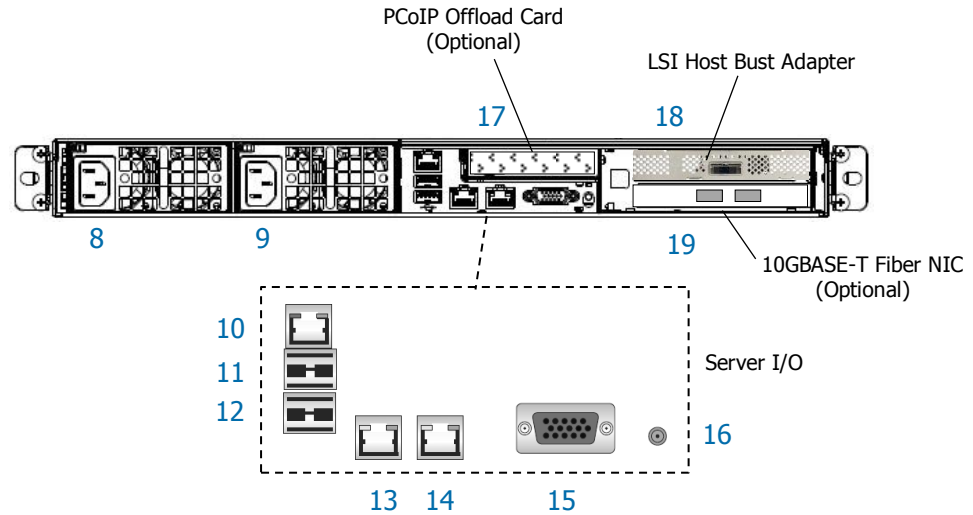
| | Indicator or Button | Description |
|---|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Overheat/ Fan Fail | Solid: overheat condition. Flashing: fan failure. To troubleshoot, ensure that cables do not obstruct air flow, ambient room temperature is appropriate, and all fans are installed and operating. Also ensure that the chassis cover, all airflow shrouds, and all heat sinks are installed properly. |
| 2 | NIC 2 | Flashing: network activity. |
| 3 | NIC 1 | Flashing: network activity. |
| 4 | HDD | Flashing: hard disk drive activity. |
| 5 | Power (Indicator) | Solid: power is supplied to the server. |
| 6 | Reset | Press to restart the server. |
| 7 | Power (Button) | Press to power on and power off the server. |

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SmartVDI-110 Overview and Features, Continued

SmartVDI-110 rear ports and connectors

The picture below shows ports, connectors, and buttons on the rear of a SmartVDI-110.



| Description | |
|------------------------------|----------------------------------------------------------------------------|
| Server I/O Connectors | |
| 8 | Power connector |
| 9 | Power connector |
| 10 | Dedicated IPMI LAN port |
| 11 | USB 1 port |
| 12 | USB 0 port |
| 13 | LAN 1 port |
| 14 | LAN 0 port |
| 15 | VGA port |
| 16 | Unit ID Button (press to illuminate LED for visual identification in rack) |
| I/O Cards | |
| 17 | PCoIP offload card (optional) |
| 18 | LSI Host bus adapter |
| 19 | 10GBASE-T (10 GbE) fiber NIC (optional) |



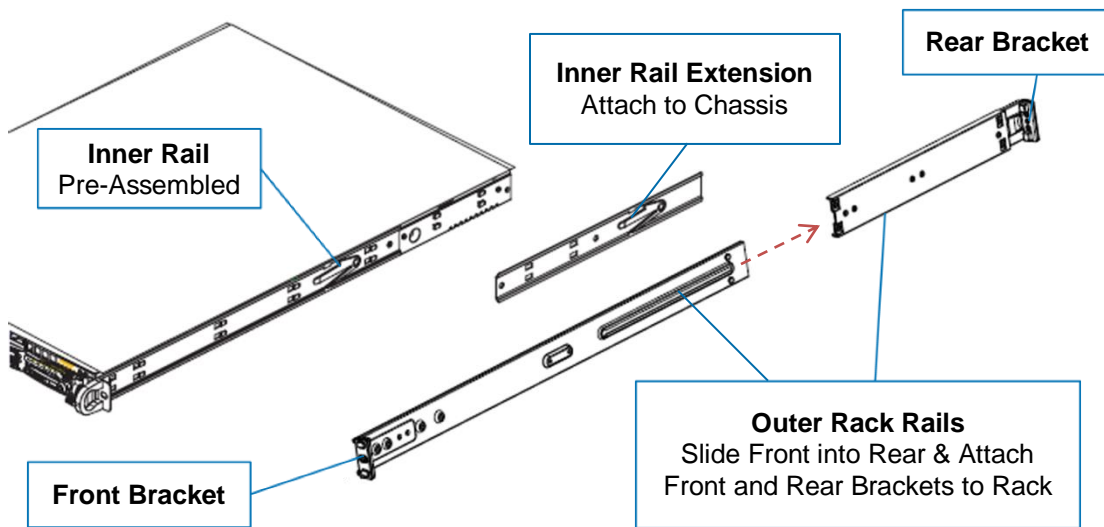
Rack Rails and Mounting

Rack rail components

Two rack rail assemblies are included with a SmartVDI-110 Server. Each assembly has two sections:

- **Inner rails:** attach to the workstation chassis (the inner rail is pre-attached), and
- **Outer rack rails:** attach to rack

The picture below shows the inner chassis rails and the outer rack rails.



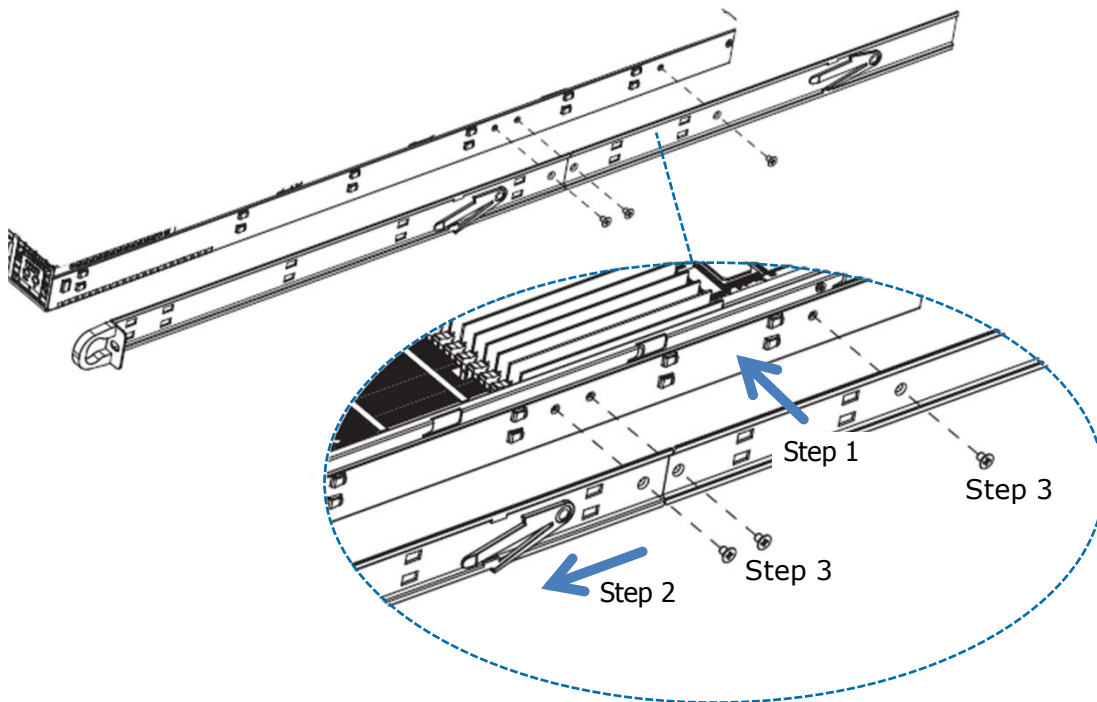
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Rack Rails and Mounting, Continued

Install inner rail extensions

The picture and table below show how to attach and secure the inner rail extensions.



| Step | Action |
|------|-----------------------------------------------------------------------------------------|
| 1 | Align the hooks on the side of the chassis with the slots on the inner rail extension. |
| 2 | Slide the extension rail toward the front of the chassis. |
| 3 | Secure the extension rail with the screws provided. |
| 4 | Repeat these steps to attach the other extension rail on the other side of the chassis. |

Next step: assemble outer rack rails.

Assemble outer rack rails

Outer rack rails consist of two sections: a longer front section and a shorter rear section. Slide these together to assemble the rail.

| Step | Action |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Identify the left and right outer rack rails by examining the ends (brackets). These brackets bend outward as shown in “Rack rail components.” |
| 2 | Slide the front section of the outer rack rail into the rear outer rack rail as shown in “Rack rail components.” |
| 3 | Repeat these steps to assemble the other outer rack rail. |

Next step: install outer rack rails in a rack.

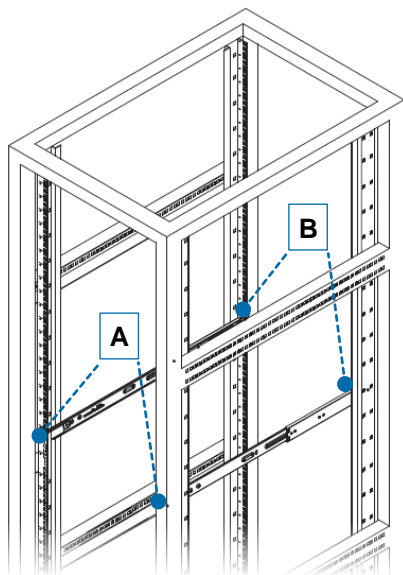
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Rack Rails and Mounting, Continued

Install outer rack rails

The picture and table below shows how to install the assembled outer rack rails in a rack.



| Step | Action |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Adjust the outer rack rails so that the outer rails fit snugly in the rack. |
| 2 | Align the holes on the front of the outer rail with the holes on the front of the rack and secure with the screws provided (see A in the adjacent picture). |
| 3 | Align the holes on the rear of the outer rack rail with the holes on the rack and secure with the screws provided (see B in the adjacent picture). |
| 4 | Repeat these steps with the other outer rack rail assembly. |

Next step: Install the workstation in a rack.

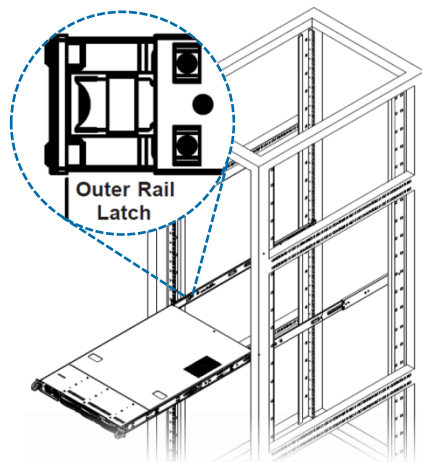
Installing in rack

To install a SmartVDI-110 Server in a rack:

1. While carefully lifting the workstation, slide the inner rail extensions into the front of the outer rack rails.
2. Push the workstation into the rack until it clicks into the locked position.

Removing from rack

This picture and table below show how to remove a SmartVDI-110 Server from a rack.



1. Press the outer rack rail latch to release the workstation chassis (the latch is shown in the adjacent picture).
2. Carefully slide the chassis forward off of the outer rack rails and out of the rack.



Setting up a SmartVDI-110 Server

Cabling

This section shows how to connect cables. Numbers in parentheses correspond to labels shown in “[SmartVDI-110 front panel](#)” and in “[SmartVDI-110 rear ports and connectors](#)” to ease identification.

| Step | Action |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Install the included mounting rails to the server chassis and then install the chassis in a rack. |
| 2 | Connect one or more Ethernet cables to the LAN ports (13) and (14) on the rear of the chassis and connect the other end of the cable(s) to a network router or switch. |
| 3 | Connect one or more Ethernet cables to the Dedicated IPMI port (10) on the rear of the chassis and connect the other end of the cable to a network router or switch. |
| 4 | From the rear of the chassis, connect the included power cables to the power connectors (8 and 9) on the rear of the server, and connect the power cable to a power outlet. |
| 5 | From the front of the chassis, press the power button (7) to power on the server. |

Power option

Press the **power button** (7) on the front of the chassis to power on and power off a workstation. Standby power is present when a workstation is powered off.

Important BIOS Settings

About BIOS settings

Some SmartVDI-110 Server hardware configurations require specific BIOS settings. The sections below show how to access the BIOS, how to configure the BIOS for an IPMI controller, and how to configure the BIOS for NVIDIA® GRID graphics cards.

Accessing the BIOS

The table below shows how to access the SmartVDI-110 Server BIOS.

| Step | Action |
|------|-------------------------------------------------------------------------------------------------------------------------|
| 1 | Connect a keyboard and VGA monitor to the server. |
| 2 | Power on the server or reset server power. |
| 3 | Watch the server splash screen for prompts. When prompted, press the DELETE key to enter the BIOS setup utility. |

You can now use the arrow keys on the keyboard to navigate the BIOS menus.

IPMI configuration

SmartVDI-110 Servers include an IPMI 2.0 + KVM (keyboard, video and mouse) management controller. This IPMI controller uses a dedicated IP address, and the default setting is for a DHCP-assigned network address. ClearCube recommends giving the controller a static IP address. You can easily change this setting from the BIOS.

| Step | Action |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Access the BIOS as shown above in " Accessing the BIOS. " |
| 2 | Use the keyboard arrow keys to select the IPMI menu. |
| 3 | Select BMC Network Configuration . Press ENTER . |
| 4 | Select Update IPMI LAN Configuration , and press ENTER . Select Yes , and then press ENTER . |
| 5 | Select Configuration Source and press ENTER . |
| 6 | Select Static and press ENTER . |
| 7 | Use the keyboard to configure the Station IP Address , Subnet Mask , and Gateway IP addresses as appropriate for your environment. Select each item and press ENTER to activate the text entry field. Enter an IP address for each item and press ENTER to set the address. |
| 8 | If your server configuration includes one or more NVIDIA GRID graphics cards, continue to the next section. Otherwise, press the F4 key to save your changes and exit the BIOS. See the note below about accessing IPMI utilities. |

Next steps: After saving your changes you can use a Java®-enabled browser or the Supermicro® IPMI tool to access the server's IPMI utilities. The default user name is **ADMIN** and the default password is **ADMIN** (both values are case-sensitive.)

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Important BIOS Settings, Continued

NVIDIA GPU configuration

If your server includes one or more optional NVIDIA GRID graphics cards, set the graphics card memory access point below the system's first 4 GB of physical memory. Specify this setting in the BIOS to guarantee the memory configuration. The steps below show how to change the BIOS setting.

| Step | Action |
|------|---------------------------------------------------------------------------|
| 1 | Access the BIOS as shown above in " Accessing the BIOS. " |
| 2 | Use the keyboard arrow keys to select the Advanced menu. |
| 3 | Select the Above 4G Decoding option. Press ENTER . |
| 4 | Select Disable and press ENTER . |
| 5 | Press the F4 key to save your changes and exit the BIOS. |

Related Information and Support

Related information

The table below shows additional documents about server configuration, operation, and maintenance.

| For information about ... | See ... |
|--------------------------------------------|--------------------------------------------------------------------|
| Deployment guidelines for SmartVDI servers | <i>SmartVDI Converged Infrastructure Platform Deployment Guide</i> |
| NVIDIA GRID graphics card configuration | GPU <i>Quick Install Guide</i> included with the SmartVDI server |
| Installation services | Contact ClearCube or your Authorized ClearCube Reseller. |

ClearCube documentation is located at <http://www.clearcube.com/support/>.

Contacting Support

| | |
|------------------|----------------------------------------------------------------------------|
| Web | www.clearcube.com/support/ |
| Email | support@clearcube.com |
| Toll-free | (866) 652-3400 |
| Direct | (512) 652-3400 |

WEEE Disposal Guidelines

In the European Union, this electronic product falls under the European Directive (2002/96/EC) WEEE. When it reaches the end of its useful life or is no longer wanted, it should not be discarded with conventional waste, but disposed of at an approved designated recycling and/or treatment facility. Laws are different in each country, so please check with your local authorities for proper disposal instructions. For assistance, contact ClearCube at recycle@clearcube.com.

