LifeSize® ClearSea™
Installation Guide

LifeSize ClearSea

This guide describes how to install and configure LifeSize ClearSea hardware and the LifeSize ClearSea virtual machine.

Installing	Describes the installation and rack mounting process for LifeSize ClearSea.	LifeSize ClearSea
	Describes the installation process for the LifeSize ClearSea virtual machine.	LifeSize ClearSea Virtual Machine
Troubleshooting	Provides instructions for accessing the server console and replacing faulty drives.	Troubleshooting

The server's network location determines who can access the server and how you must configure your firewall. Refer to the *LifeSize ClearSea Administrator Guide* for a discussion of firewall implications and initial configuration steps.

Related documentation is available from lifesize.com/support.

Section 1: LifeSize ClearSea

LifeSize ClearSea ships with the following components:

- 1U (44.45 mm, 1.75") rack-mountable LifeSize ClearSea Server

- face plate and key

- rack rail hardware:

  - two front inner rails (attached to the server chassis)

  - two rear inner rails for the chassis

  - two rails for the rack

  - one bag of brackets and screws

- power cord

For best performance, use Category 6 Ethernet cables (not included) to connect LifeSize ClearSea to your network. At minimum, use Category 5e cables.

Choose a clean, dust-free, well-ventilated location near a grounded power outlet. Avoid areas where heat, electrical noise, and electromagnetic fields are generated. If you intend to mount the server in a rack, refer to Installing LifeSize ClearSea into a Rack.
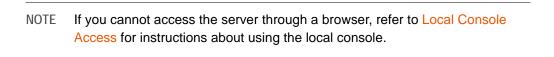
LifeSize recommends that you install the server on a non-lossy gigabit Ethernet network for optimal performance.

Installing LifeSize ClearSea

Before you install LifeSize ClearSea, read the *Safety and Regulatory Notices* for important safety information.

1. Remove all components from the product packaging and place them in the desired position in your environment.

2. If applicable, follow the instructions in Installing LifeSize ClearSea into a Rack before continuing.

3. Insert a network cable from your LAN into the left network port as you face the back panel of the server. This is the Internal (LAN) interface. By default this interface uses DHCP.

4. Insert a network cable into the right network port as you face the back panel of the server. This is the external (WAN) interface. By default, the IP address for this interface is 192.168.0.99, and the network mask is 255.255.255.0

5. Insert one end of the power cord into the back of the server and the other end into a power outlet on the wall.

6. Press the power button on the front of the server. Refer to Power and Reboot.

7. Attach the face plate:

    a. Fit the left side of the face plate into the slots on the front of the server.

    b. Press and hold the release button, place the right side of the face plate against the front of the server, and release the button to lock the face plate into the slots.

    c. Lock the face plate to the chassis with the key.

8. From a computer on your LAN or a computer connected directly to the WAN Ethernet cable, open a browser and enter the IP address for the server, and then follow the initial configuration instructions in the *LifeSize ClearSea Administrator Guide*.

> NOTE   If you cannot access the server through a browser, refer to Local Console Access for instructions about using the local console.

Installing LifeSize ClearSea into a Rack

Use the included rack rail hardware to install LifeSize ClearSea into your rack. The rack mounting procedure may vary according to rack type. Refer to the installation instructions included with your rack in conjunction with these instructions.
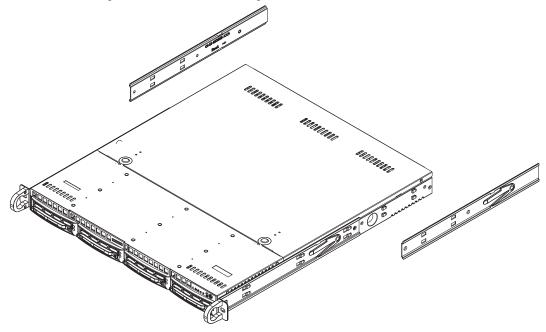
Consider the following as you plan the rack installation:

Rack Stability	Ensure that the leveling jacks on the bottom of the rack are fully extended to the floor with the full weight of the rack resting on them. In a single rack installation, attach stabilizers to the rack. In multiple rack installations, couple the racks together.
Airflow and Access	Leave approximately 63.5 centimeters (25 inches) of clearance in front of the rack and approximately 76 centimeters (30 inches) of clearance in back of the rack to allow for sufficient airflow and ease in servicing.
Ambient Operating Temperature	If you install LifeSize ClearSea in a closed or multi-unit rack assembly, the operating temperature of the rack environment might be greater than the ambient temperature of the room. The maximum operating temperature is 35 degrees Celsius.
Circuit Overloading	Consider the connection of this equipment to the power supply circuitry and the effect that it might have on overcurrent protection and power supply wiring. Give appropriate consideration to equipment nameplate ratings when addressing this concern.
Reliable Ground	Because a reliable ground must be maintained at all times, ensure that the rack itself is grounded. Pay particular attention to power supply connections other than the direct connections to the branch circuit (the use of power strips, for example).

Attach the rear inner rails to the server chassis and the rack rails to the rack.

Installing the Rear Inner Rails

1. Beginning with the rail for the right side of the chassis as you face the chassis, align the two square holes on the rail against the hooks on the right side of the chassis.

2. Securely attach the rail to the chassis with the flat head screws provided.

3. Repeat the previous steps to install the left rear inner rail to the left side of the chassis.

The chassis rails have locking tabs that lock the server into place when it is pushed fully into the rack (its normal operating position). These tabs also lock the server in place to prevent the server from coming completely out of the rack when you extend it for servicing.
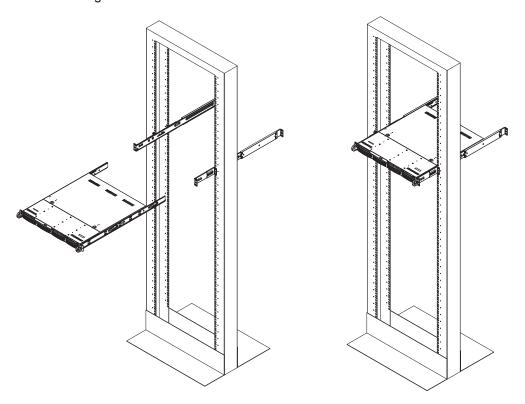
Installing the Rack Rails in Non-Telco Racks

1. Position a chassis rail guide (rack rail) in the desired location in the rack. Keep the sliding rail guide facing the inside of the rack.

2. With screws appropriate for the rack, attach the assembly securely to the rack by using the brackets provided with the rack rails.

3. Attach the other assembly to the opposite side of the rack. Ensure that both assemblies are at the same height and that their rail guides face inward.

Installing the Rack Rails in Telco Racks

Use two of the provided L-shaped brackets on either side of the rack (four total) to attach the rack rails to a telco-type rack.

1. Using screws appropriate for the rack, attach a bracket to the front and rear of one side of the rack at the same height.

2. Position the rail for one side of the rack so that the server will be stable when locked into place. Keep the sliding rail guide facing the inside of the rack.

3. Attach the rack rail to the brackets on the rack, using the screws provided.

4. Repeat the process for the opposite rail.

Placing the Server into the Rack

After you attach rails to both the chassis and the rack unit, place the server into the rack.

1. Line up the rear of the chassis rails with the front of the rack rails.

2. Slide the chassis rails into the rack rails. Keep the pressure even on both sides. (You might have to depress the locking tabs while inserting the rails.)

3. Push the server completely into the rack until you hear the locking tabs click.

Power and Reboot

The faceplate covers the reset and power buttons on the server chassis. Remove the faceplate to use these buttons.

The reset button on the front panel reboots the server. The power button controls the main system power. Turning off the system power removes the main power, but standby power remains available to the system while it is connected to the power line.

WARNING   Using the reset button initiates a hard reboot of the server. Instead, reboot and power down the server from the web administration interface. Use the reset and power buttons on the server only if the web administration interface is unresponsive.

LED Status

The LED indicators on the server indicate the following conditions:

LED	Icon	Indicator
Overheat/Fan Failure	~⌀~	When flashing, indicates a fan failure. When on continuously, the LED indicates the server is overheated, which might be caused by cables obstructing the system airflow or high ambient room temperature. Ensure that the chassis cover is installed securely. This LED remains flashing or on continuously for as long as the condition persists.
NIC2		Reserved for future use.
NIC1		When flashing, indicates network activity on LAN1.
HDD		Indicates channel activity for all hard disk drives. When flashing, this LED indicates SATA drive activity.
Power		Indicates power is being supplied to the system's power supply unit.

Section 2: LifeSize ClearSea Virtual Machine

Installation Prerequisites

Your virtual appliance is delivered as a VM image file for VMware.

NOTE   You must dedicate resources to the LifeSize ClearSea virtual machine. Check
your VMware product documentation for additional requirements.

VM Host Software Requirements

• VMware ESXi v4.1 on the host machine on which you intend to install LifeSize ClearSea Server.

• VMware vSphere Client v4.1 (Windows only) on the computer from which you intend to access the VMware server.

Minimum Hardware and Virtual Machine Requirements

Model	Host	Virtual Machine
CS100	Intel Xeon Nehalem Processor 2 GHz	2 VCPUs 2 GB RAM 10 GB free hard disk space 2 network adapters
CS150	Intel Dual Quad-core Xeon Nehalem E5620 Processor 2.40 GHz	8 VCPUs 3 GB RAM 10 GB free hard disk space 2 network adapters

Installing the LifeSize ClearSea Virtual Machine

NOTE   Consult with your LifeSize representative for license options and trials.

1. Copy the LifeSize ClearSea virtual machine **.ova** file to the host machine.

2. Start the VMware vSphere Client and use the following credentials to log in to the server:

    -   IP address of the VMware ESXi server

    -   administrator username and password

3. From the VMware vSphere Client, select the server: **Home > Inventory**.

4. Select **File > Deploy OVF Template**.

5. Click **Browse** to select the virtual machine you copied in step 1.

6. Follow the prompts to install the LifeSize ClearSea virtual machine.

7. Adjust the settings to ensure that the virtual machine meets the VCPU, memory, and disk space requirements in Minimum Hardware and Virtual Machine Requirements.

    CS150 only: Depending on your operating system, you might be required to configure the number of cores for each VCPU. From the VMware vSphere Client, edit the virtual machine:

    a. In **Hardware**, set the number of virtual CPUs to 8.

    b. In **Options : Advanced - General**, click **Configuration Parameters** to add a new **cpuid.coresPerSocket** parameter.

    c. Set the value of the new parameter to 2, 4, or 8, depending on the number of cores per socket.

    Refer to the the VMware knowledge base article 1010184 for more information.

8. Power on the virtual machine.

9. From a computer on your LAN or a computer connected directly to the WAN Ethernet cable, open a browser and enter the IP address for the server. Follow the initial configuration instructions in the *LifeSize ClearSea Administrator Guide*.

    By default the LAN IP address is determined by DHCP, and the WAN IP address is 192.168.0.99, with the network mask of 255.255.255.0.

    NOTE   If you cannot access the server through a browser, refer to Local Console Access for instructions about using the local console.

Section 3: Troubleshooting

Local Console Access

If you cannot access the server through the web administration interface, access the console:

*   *From the hardware appliance:* Connect a monitor directly to the VGA output on the back of the server, and connect a keyboard directly to the server with USB or PS/2 connectors.

*   *From VMware:* Use the emulated system console provided by VMware.

NOTE   The local console has very restricted functionality and should only be used to set up the network for the first time to access the full web-based Control Panel, or to recover administrative passwords.

The local console will also show your system ID in the upper-right corner of the user interface.

If the local console is locked, enter the following credentials:

username : console

password : console