Tiger Technology

Tiger Serve 2U Assembly Guide

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Manual Revision and Control

Revision Record

Date	Description	Version
18 Oct 2013	Initial Draft	1.0
12 Aug 2016	Updated information about monitoring system status LEDs on the front panel bezel.	1.0
29 Nov 2017	Initial setup of the appliance section added.	1.0
11 Jun 2018	Audible Alarm section added.	1.0

Congratulations on your purchase of Tiger Serve 2U, Tiger Technology's high availability shared storage manager. This manual describes how to install and connect Tiger Serve at your site - from unpacking the appliance to powering on the system and setting it up.

Before proceeding, make sure that you have read carefully all instructions, paying special attention to the following symbols used in this guide:


SAFETY WARNING


IMPORTANT NOTE


TIP

You can find the most up-to-date version of this manual at the following address: https://www.tiger-technology.com/software/tiger-store/docs

Product Overview

Tiger Serve 2U is a state of the art, high availability shared storage manager. Once connected to the shared storage via Fibre Channel, the compact rack-mountable appliance acts as a metadata controller to the shared storage volumes and lets SAN Tiger Clients (connected to the storage via FC) and LAN Tiger Clients (connected to the appliance via 1/10GbE) access the volumes concurrently, without risk of data corruption, utilizing the optimum of their connection.

Tiger Serve 2U can accommodate up to 2 server nodes in order to provide run-time metadata controller failover and constant availability of the shared storage.

The appliance is shipped fully configured to you. To deploy it you should simply:

1. Rack-mount the appliance or install it on a table top (see "Installing Tiger Serve" on page 7).
2. Connect the appliance to the shared storage and to client computers. (see "Cabling Tiger Serve 2U" on page 11).
3. Connect the appliance to the power source and turn it on (see "Connecting The Appliance to The Power" on page 9).
4. Perform the initial setup of the appliance (see "Initial Setup of the Appliance" on page 23).

Tiger Serve 2U Features

• 2U, 19" rack-mount chassis with 2 x server node drawers.

• 1 or 2 server nodes, pre-installed in the chassis' server node drawers, allowing for run-time failover.

• 8/16Gb Fibre Channel and/or 10GbE, and 1GbE ports on each server node for connection to the storage and client computers.

• Redundant power supply (a failed power module can be replaced while the system is operating).

• Tiger Store software for shared storage management and diagnostics.

Package Content

The package you have received weighs approximately 32kg and has the following dimensions:

It must contain the following:

- 1 x 2U, 19” rack-mount chassis with 1 or 2 server nodes installed.
- 1 x square-hole rack-mount rails kit:
  - 2 x slide rails.
  - 6 x screws for attaching the rails to the appliance.
  - 4 x screws for attaching the rails and the appliance to the rack.
  - printed instructions for installing the rails.
- 2 x power cables.
- 1 x 1.80m UTP network cable.
- 1 x front panel bezel.
- 1 x system restore USB flash drive.
- 1 x CD with instructions.

Important: *If any of the components listed above is missing from your shipment, please contact your reseller or Tiger Technology support immediately.*

Hardware Overview

Note: *The pictures used to illustrate the product in this manual may differ from the Tiger Serve appliance you have received depending on the model and firmware version.*

Technical Characteristics

Description	Specification
Chassis dimensions	25.5" (D) × 17.2" (W) × 3.47" (H) 647.7 mm (D) x 437 mm (W) x 88 mm (H)
Net weight (without the server nodes installed)	approx. 13kg/29lbs
Gross weight (with both server nodes installed)	approx. 24kg/53lbs
Power Supply Unit	High-efficiency 800w (1+1) redundant power supply W/ PFC, AC 100 ~ 240V Full Range, 50Hz ~ 60Hz
Temperature Range	Operating: 10°C ~ 40°C (50°F~104°F) Non-operating: -40°C ~ 70°C (-40°F~158°F)
Humidity Range	Operating: 8%~90% non-condensing Non-operating: 5% ~95% non-condensing

Front View

Tiger Serve's front features the front panel bezel flanges, the cooling fans and the controls of each server node:

• System reset button and system power button.

Tip: *The back of each node features a system reset and system power buttons, which can be used instead once you install the front panel bezel.*

• USB 2.0 port - for firmware updates and system recovery.

Tip: *The back of each node features a USB 2.0 port, which can be used instead once you install the front panel bezel.*

• LED indicators for monitoring system status and connectivity (see “Monitoring the System Status” on page 14).

Rear View

The back of the appliance features the following elements:

• 2 x power supply modules.

• 1 or 2 removable server nodes, each in its own drawer.

The back of each server node features the following elements:

• System power button and system reset button.

• UID button activating the UID LED on the front panel, for easier physical identification of the appliance and the server node.

• depending on the configuration you have purchased:

  • 8 Gb FC ports;

  • 10 Gb Ethernet ports;

• 1 x Public Ethernet port for communication with FC clients and Internet communication.

Tiger Serve supports the following types of cables for connection to the shared storage and client computers:

Storage — fibre optic cable with LC connectors for SFP+ transceivers.

Clients via Fibre Channel — fibre optic cable with LC connectors for SFP+ transceivers.

Clients via 10GbE — depending on the 10GbE adapter model:

- fibre optic cable with LC connectors for SFP+ transceiver or copper cable with SFP+ transceiver.
- patch cable with RJ-45 modular connectors.

Clients via 1GbE — patch cable with RJ-45 modular connectors.

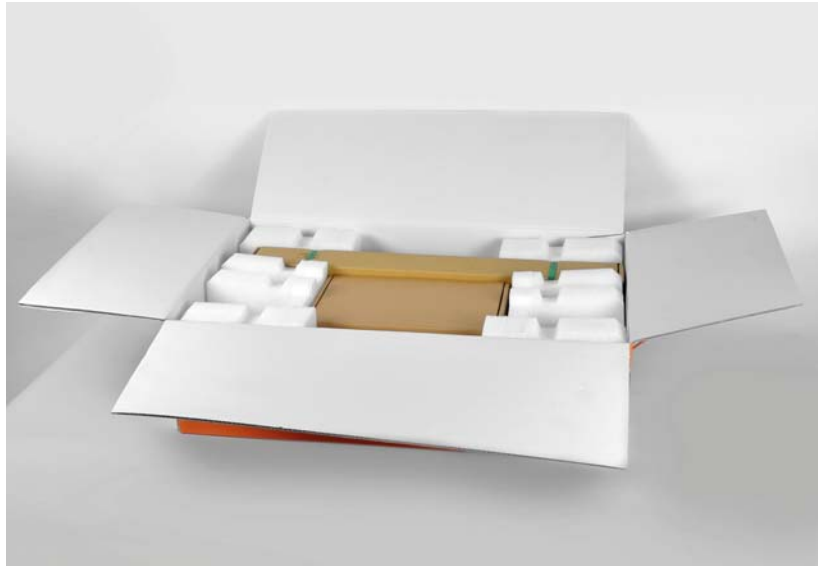
Site Installation

Unpacking Tiger Serve

Important: *Do not throw away any of the packaging components, until you ensure that the appliance works properly and there is no need to return any part.*

Tip: *It is advisable to keep all packaging components until the warranty of your appliance expires.*

1. Cut the straps of the box, cut or remove the tape and open the flaps.



2. Take out the rack-mount rails kit box and the box with documentation CD, system restore USB flash drive and the power and network cables.

3. Take out the two foam chassis protectors and take the appliance out of the box and place it on a surface, ensuring that the system remains stable.

Important: *Tiger Serve weighs approximately 24 kg. Attempting to move it without assistance could cause personal injury. Request assistance and use proper lifting techniques when lifting the appliance.*

4. Take out the front panel bezel.

Installing Tiger Serve

Before installing Tiger Serve in a rack or on a table top, consider the limitations for maximum cable lengths, when deciding on the location of the appliance within your facility. Also check the appliance's technical characteristics to make sure that the rack/the table meets the physical, electrical, and thermal specifications.

Rack-mounting Tiger Serve

You can mount Tiger Serve in a standard, 19-inch-wide, four-post rack. A square-hole rack-mount rails kit is included in your shipment.

To install Tiger Serve in a rack:

1. Loosen and remove the nuts holding the side protectors to the appliance and remove the protectors.

Keep the nuts holding the protectors and use them to attach the inner rails to the bolts on the sides of the appliance (at the exact same place the protectors have been installed).

2. Unpack the rack-mount rails kit included in the shipment, and follow the instructions to install the appliance.

Tip: *Install the heaviest devices in the lowest position in the rack.*

Installing Tiger Serve on a Table Top

If you do not plan to install your Tiger Serve in a rack, and you opt for tabletop installation, ensure that:

• the surface is clean and in a safe location;

• the appliance is stable, its bottom faces down and its top faces up.

Tip: *To determine the top and bottom of the appliance, use the text direction on the printed labels.*

• the appliance is installed off the floor (dust that accumulates on the floor is drawn into the interior of the appliance by the cooling fans. Excessive dust inside the appliance can cause overheating and component failures);

• there is at least 50cm (19 inches) of clearance at the front and rear of the appliance for accessing network cables or equipment;

• the appliance receives adequate ventilation (it is not being installed in an enclosed cabinet where ventilation is inadequate);

• the appliance is not in close proximity to devices that emit strong electromagnetic waves.

Installing The Front Panel Bezel

Tiger Serve is shipped with a bezel that covers the front panel. The bezel features an advanced protection filter that prevents dust from accumulating in the enclosure. It is advisable to clean the bezel filter every 3 months. For steps about removing and cleaning the bezel, refer to “Removing The Bezel and Cleaning the Filter” on page 15.

Tip: *You can install/remove the bezel at any time without having to turn off the server node(s) or dismount the appliance from the rack.*

To install the bezel:

1. Insert the tabs on each end of the bezel into the flanges on each side of the appliance's front panel.

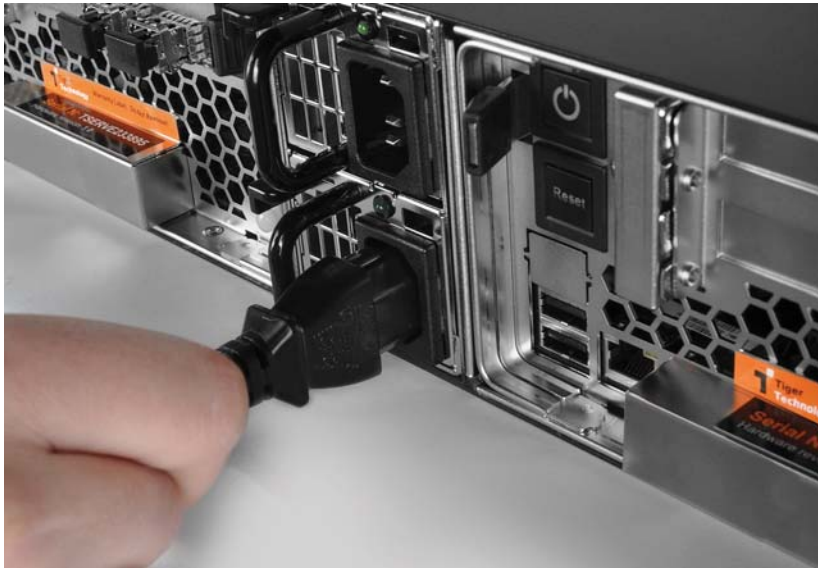
2. Screw the two thumb screws on either side clockwise.

Connecting The Appliance to The Power

Your Tiger Serve is shipped with two power supply modules, installed in the rear of the appliance. These modules supply redundant power to Tiger Serve - should a power supply module fail, you can replace it while the system is operating (see “Replacing a Failed Power Module” on page 21). You can replace a failed power module only with a power module of the same model.

To connect the appliance to the power supply:

1. Plug the power cord in the power socket of the power supply module.



2. Connect the power cord to the power outlet.

If the appliance is properly connected, the power module LED indicator will start blinking in green. If there's problem with the module installation, its LED indicator is red (blinking or solid) or there is no light at all.

Powering On The Appliance

Powering on the appliance means to power up at least one of the server nodes installed in it. You can power up the other server node at any time, while the appliance is operating.

To power on a server node:

1. Press once the power button at the back of the server node.

2. Wait until the button (or the power status LED at the front) becomes solid green.

To turn off a server node:

Important: *It is advisable to always attempt to shut down the server node through the web UI, before resorting to hard shut down.*

Press continuously the power button at the back of the server node, until its light goes off.

To restart a server node:

It is advisable to always attempt to restart the server node through the web UI, before resorting to forced restart of the system.

Press the Reset button at the back of the server node.

Cabling Tiger Serve 2U

Tiger Serve can connect to the shared storage via Fibre Channel (directly or using a Fibre Channel switch).

Important: *If you want to connect the appliance through the Fibre Channel ports using multipathing, prior to connecting it, contact Tiger Technology support for instructions.*

The appliance can connect to client computers via 1GbE and/or 10GbE. When a client computer is connected to the appliance via 10GbE (directly or using an Ethernet switch), there's no need to connect that computer through the Public port as well.

To connect Tiger Serve to the shared storage via FC:

Note: *Your Tiger Serve shipment doesn't include fiber optic and copper Fibre Channel cables. The FC ports are with optical SFPs.*

1. Remove the protective black cap from the Fibre Channel port.

2. If your fiber-optic cable has protective caps, remove them.

3. Plug one end of the fiber-optic cable into the SFP socket of the FC port.

4. Do one of the following:

• Plug other end of the fiber-optic cable in the port of the Fibre Channel card of the storage.

• Plug other end of the fiber-optic cable in the port of the Fibre Channel switch that is connected to the shared storage.

Note: *If you opt for interconnection via switch, refer to your switch documentation for further setup instructions.*

To interconnect Tiger Serve through the 10GbE port:

Note: *Your Tiger Serve shipment does not include copper and fiber-optic cables. The ports of the 10GbE cards do not feature SFP+ sockets.*

1. Remove the protective black cap from the 10GbE port.

2. If your fiber-optic cable has protective caps, remove them.

3. Plug one end of the cable into the 10GbE port of the appliance.

4. Do one of the following:

- Plug other end of the cable in the 10GbE port of a client computer.
- Plug other end of the cable in the 10GbE port of the Ethernet switch that is connected to client computers.

Note: *If you opt for interconnection via switch, refer to your switch documentation for further setup instructions.*

To interconnect Tiger Serve through the Public port:

Note: *Your Tiger Serve shipment doesn't include twisted pair cables.*

5. Plug one end of the network cable into the Public port of the appliance.

6. Plug other end of the network cable in the port of the Ethernet switch that interconnects computers on the network.

Hardware Monitoring

Audible Alarm

The appliance sounds an audible alarm (beeping) in one of the following cases:

• overheat or fan failure;

• power supply error;

For identification of the exact problem indicated by the audible alarm, check the LED indicators on the front panel (see "Monitoring the System Status" on page 14).

To silence the audible alarm of the appliance, remove the front panel bezel and press the alarm mute button  .

Important: *Pressing the alarm mute button only silences the alarm. The alarm light stays on until the problem is resolved.*

Monitoring the System Status

The LEDs on the front panel bezel of Tiger Serve allow you to monitor the system status.

Indicator	LED color	Status	Description
network activity LED 	amber	blinking	The Public port is online and there's LAN activity through it.
	-	-	The Public port is offline or there's no transaction.
nodes communication LED 	amber	blinking	The node can communicate normally with the other node of the appliance.
	-	-	The two nodes of the appliance cannot communicate with one another or one of the nodes is offline.
unit ID LED 	red	solid	The UID button on the back of the server node is pressed. **Tip:** *Press the UID button again to turn off the unit ID LED*
fan failure LED 	red	blinking	Overheat or fan failure.
	-	-	OK.
power status LED 	-	-	Power is off
	green	solid	Power is on
	red	solid	Power supply error or no power.
power supply LED  **Note:** *This LED is not visible when the front panel bezel is installed.*	-	-	The power supply modules are working OK.
	red	solid	A power supply module is not inserted or there is a problem with it (see "Monitoring Power Supply" on page 15).

Monitoring Connectivity

You can monitor the connectivity of the appliance to the storage using the LED indicators on the FC ports.

You can monitor the connectivity of the appliance to the network using the LED indicator on the 1GbE ports (Public and Admin).

FC ports

Your configuration can include a 8 Gb FC card. The FC card is set up to work in auto mode i.e. its port transmits data depending on the connectivity mode of the storage's (or the switch's) FC card. You can view the transmission mode through the FC port using the LED indicators above it. If the FC port LED's light is off the port is inactive.

8 Gb Cards

Indicator	LED color	Status	Description
left	green	solid	2 Gb mode
right	green	solid	4 Gb mode
both	green	solid	8 Gb mode

10 GbE Ports

You can view the status of the appliance's connection through a 10GbE port using the LED indicator above it.

Indicator	LED color	Status	Description
activity LED (left indicator)	green	blinking	The adapter is sending or receiving network data at up to 10Gbps.
	-	-	No network activity on the link.
link LED (right indicator)	amber	solid or blinking	The 10GbE LAN card is initialized.
	-	-	The adapter is not receiving power or the 10GbE LAN card is not initialized.

1 GbE Ports

You can view the status of your connection through an 1 GbE port using the LED indicators above it.

Indicator	LED color	Status	Description
speed LED (left indicator)	amber	solid	Operating as a Gigabit connection (1000 Mbps).
	green	solid	Operating as a 100-Mbps connection.
	-	-	Operating as a 10-Mbps connection.
link LED (right indicator)	green	blinking	There is activity on this port.
	-	-	No link is established.

Monitoring Power Supply

You can monitor the activity of the power modules using their LED indicator:

Indicator	LED color	Status	Description
power module	green	blinking	system is in stand by mode
		solid	normal mode
	red	blinking	no power
		solid	power module failure

Post Installation Maintenance

Removing The Bezel and Cleaning the Filter

You can remove and install the bezel at any time without having to turn off any of the server nodes or dismount the appliance from the rack. The bezel features an advanced protection filter that prevents dust from accumulating in the enclosure. It is advisable to clean the bezel filter every 3 months.

To remove the bezel:

1. Loosen the thumb screws on either side of the bezel.

2. Gently pull away the bezel from the front panel of the appliance.

To clean the bezel filter:

1. Remove the bezel (see steps on page 16).

The filter is snapped on the inside frame of the bezel.

2. Take the filter off by hand and wash it under running water, then leave it to dry.

3. When the filter is completely dry, fit it inside the bezel by snapping its magnetic strips to the inside frame of the bezel.

4. Install the bezel (see steps on page 9).

Installing and Uninstalling the Server Nodes

Usually Tiger Serve 2U is shipped to you with both server nodes pre-installed in the chassis. The steps below will guide you in case you need to replace a failed server node or install a new server node to allow for Tiger Serve's failover capability.

There's no need to shut down an operating server node, when installing the other server node in the free drawer. There's no need to uninstall the appliance from the rack, in order to install or uninstall a server node.

Warning: *Before proceeding, make sure that the power cord of the server node you are installing/uninstalling is disconnected from the power source!*

Important: *To prevent electrostatic discharge (ESD), touch grounded metal before touching any of the appliance components. You can also prevent electrostatic discharge (ESD), by touching the appliance enclosure with the other hand.*

To install a server node:

1. Unscrew the screws of the server drawer protector and remove it.

2. Unpack the server node from its box.

3. Open the side levers at a 90° angle and slide the server node into the corresponding drawer until it makes contact with the enclosure.

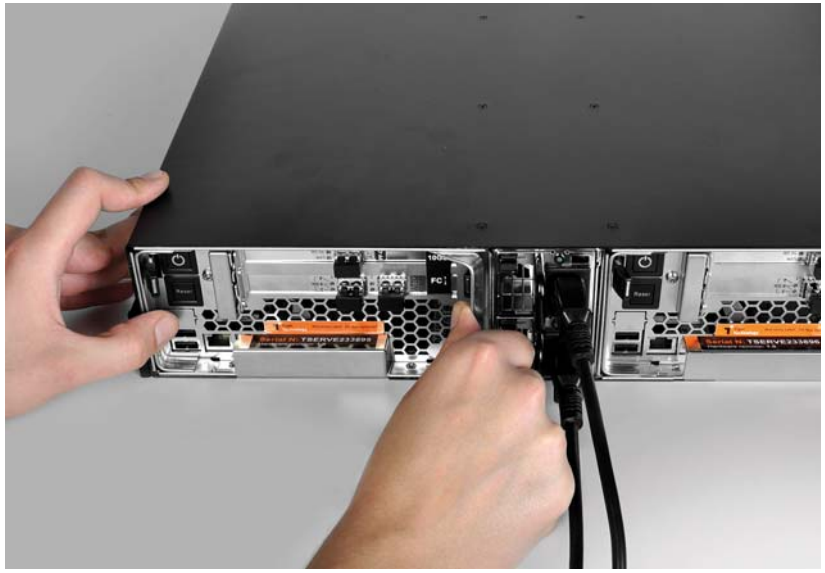
Important: *Make sure the server node is not upside down. To determine the top and bottom of the server node, use the text direction on the printed labels.*

4. Holding the levers, gently push the server node into the drawer, until you hear a clicking sound.

Important: *Take care not to press any of the buttons, ports or adapters.*

Tip: *To check that the server node is properly installed and makes full contact with the enclosure, try to pull it out without unlocking the side tabs. If the server node can be pulled out, repeat the steps for installing it from the beginning.*

5. Push the levers to the sides



6. Proceed with cabling the server node (see “Cabling Tiger Serve 2U” on page 11) and powering it on (see “Powering On The Appliance” on page 10).

To uninstall a server node:

1. Find the server node that you want to uninstall and turn it off (see “Powering On The Appliance” on page 10).

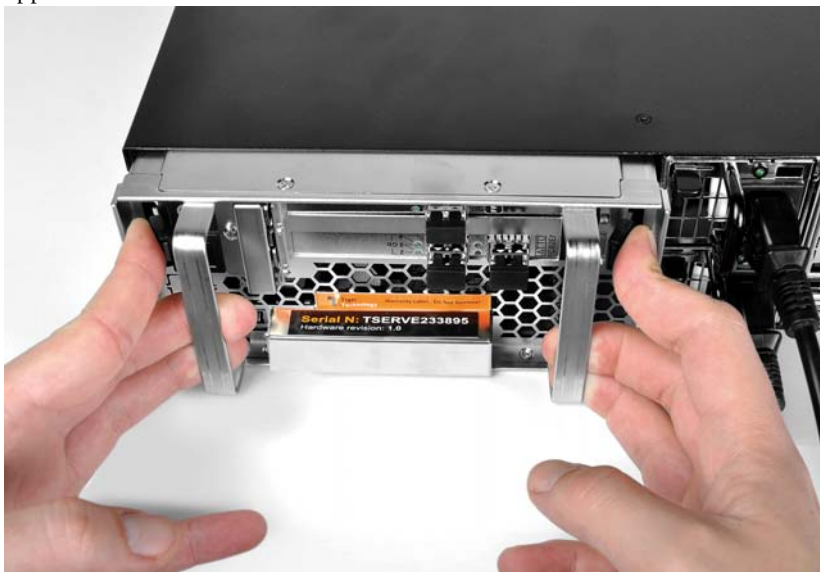
Tip: *Press the UID button on the back of the node, to identify it physically on your rack.*

2. Unplug its cables (FC, 10GbE and all available network cables).

3. Open the side levers at 90° angle.

4. Holding the levers, with both index fingers press the two side tabs.

5. While pressing the tabs, pull the node by the levers and gently slide it out the appliance.I



Replacing a Failed Power Module

Your Tiger Serve 2U is shipped to you with two power supply modules, installed in the rear of the appliance. These modules supply redundant power to Tiger Serve - should a power supply module fail, you can replace it while the system is operating. You can replace a failed power module only with a power module of the same model.

To replace a failed power module:

1. Find the failed power module (the light of its LED indicator is solid red or there's no light at all).

2. Unplug its power cable from the module's socket.

3. Press the tab of the module to release it and holding the lever, slide it out of the appliance.

4. Insert the new power module until it makes full contact with the enclosure and you hear a clicking sound.

Tip: *To check that the power module is properly installed, try to pull it out without pressing the side tab. If the power module can be pulled out, repeat the step again.*

5. Plug the power cable in the module's socket.

System Restore

Use the USB flash drive included in your Tiger Serve appliance shipment to restore the appliance or each server node in your appliance to the factory default settings in case of system malfunction or failure.

Important: *All your settings (IP addresses, defragmentation preferences, password for the web interface, etc.) will be lost after restoring the system to the default factory settings.*

Follow the instructions below or contact Tiger Technology support for assistance at: support@tiger-technology.com

To perform system restore:

1. Shut down the appliance/both its server nodes.
2. Plug the USB flash drive in the USB port of the appliance/one of its server nodes and press the power button to start it.

   When the system restore finishes, the appliance/the server node automatically shuts down.
3. Unplug the USB flash drive and press the power button of the appliance/the respective server node to start it.
4. Wait several minutes until the appliance/the server node shuts down again and then press the power button to start it.

   Note: *On appliances shipped before 20 December 2016, the system restarts automatically instead of shutting down one last time before the appliance is ready. To ensure that the system restore is finalized, wait between 5 and 10 minutes before attempting to access it.*
5. On appliances with two server nodes, repeat the same steps for the secondary server node.

Initial Setup of the Appliance

Before you begin work with the product on a Tiger Serve appliance, you need to perform its initial setup. The initial setup includes the following procedures:

• Configure the IP address of each network port of the appliance (see “Configure the IP Addresses of the Appliance” on page 25).

• Change the name of the appliance (see “Change the Name of The Appliance” on page 27).

• Specify the time and date settings of the appliance (see “Specify The Time and Date Settings of the Appliance” on page 27).

• Set the environment in which Tiger Serve operates - workgroup or Active Directory domain (see “Select The Deployment Environment of Tiger Serve” on page 28).

Important: *If your Tiger Serve 2U appliance features two server nodes, in order to synchronize the settings specified during the initial setup between the server nodes, it is advisable both of them to be turned on.*

Once you go through the initial setup, Tiger Serve can operate normally without having to change any of its settings. Later on you can change any of the settings that you have specified during the initial setup from any computer that has access to Tiger Store's web interface.

You can perform the initial setup of the appliance in the web interface of the appliance.

Access the Web Interface of the Appliance

Tiger Serve appliances are shipped to you with preset IP address of the Public port (172.16.100.100).

To access the web interface of the appliance for the first time, your computer should be connected to the Public port of the appliance and should use an IP address that is on the same subnet as the preset IP address of the Public port. During the initial setup of Tiger Serve, you can change the IP address of the Public port and of all other network ports of the appliance, letting all computers on the same network (with or without the Tiger Client software installed) access Tiger Store's web interface.

For Tiger Serve 2U appliances with two server nodes, as long as both nodes are online, regardless of whose IP address you have entered, the web UI displays the cluster view of the interface i.e. the settings that are valid for the appliance, and not for just the specific node. Changes applied to the web interface are synchronized automatically among the server nodes as long as both of them are online. To apply changes on a specific server node only, you should access the node view of the web UI, which displays just the information valid for the node, but not for the cluster (see Tiger Store's Administration Guide).

To access the web interface of the appliance for the first time:

1. Connect your computer to the Public port of the appliance directly or through an Ethernet switch.

   Important: *It is advisable to connect directly to the Public port if another computer on the network has the same IP address (172.16.100.100) as conflicts may arise.*

2. Make sure the IP address of your computer is on the same subnet as the Public port (set it to 172.16.100.101, for example).

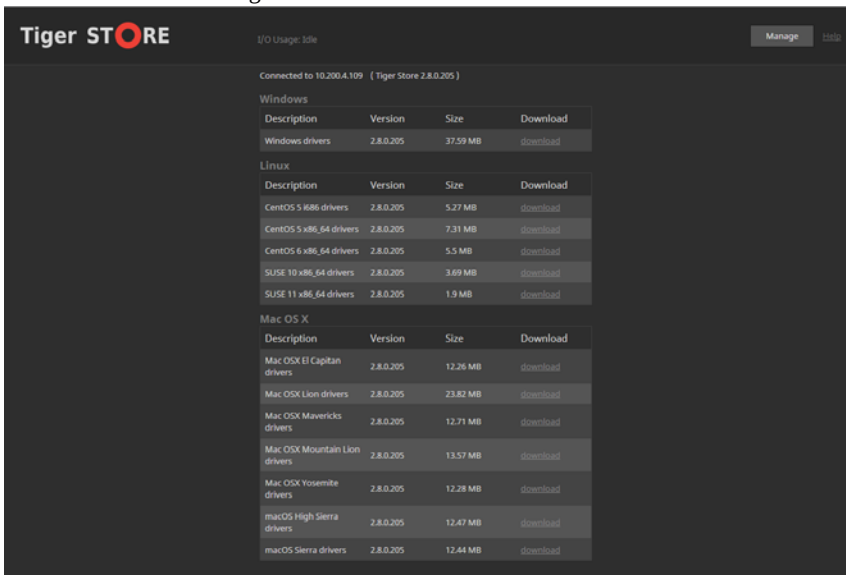
   Note: *For more details about changing your IP address, refer to the documentation of your operating system).*

   Tip: *Once you finish the initial setup and set another IP address to the Public port, you can revert back to your old IP address.*

3. In a web browser, type the pre-defined IP address of the appliance for the Public port: **172.16.100.100**

4. Press Enter.

   The web interface of Tiger Store loads.



5. Click Manage and enter the following password:
   admin

Configure Appliance Identification and Connectivity Settings

Each Tiger Serve appliance is identified in the network by IP address and name (by default, this is the serial number of the appliance).

The appliance must have an IP address for each network port through which it communicates with Tiger Clients (directly or via an Ethernet switch). The IP address

of each network port must be on the same LAN as the Tiger Client that will communicate with the appliance through this port. For more information, refer to “Configure the IP Addresses of the Appliance” on page 25.

Tiger Serve supports teaming of the ports of each network card. If you choose to team the ports of a network card, all its ports will be accessible through just one IP address. To benefit from ports teaming, you must use an Ethernet switch, which supports Link Aggregation Control Protocol (IEEE 802.1ax, LACP) and is set up for teaming.

Additionally, Tiger Serve allows you to assign two or more IP addresses to the same network card, thus making it accessible from networks on different subnets.

Changing the name of the appliance can be useful to more easily identify your appliance on the network or, if you deploy more than one Tiger Serve appliances in your organization, to facilitate you in distinguishing them. For more information, refer to “Change the Name of The Appliance” on page 27.

Team/Unteam Network Ports

To facilitate you with assigning IP addresses to the network ports of the appliance, Tiger Serve allows you to team the ports of a single network card. This way all ports of a network card will be accessible through a single IP address.

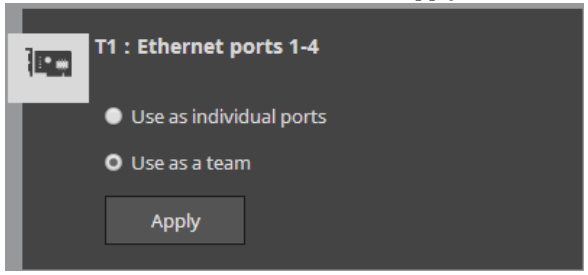
Important: *To benefit from ports teaming, you must use an Ethernet switch, which supports Link Aggregation Control Protocol (IEEE 802.1ax, LACP) and is set up for teaming.*

You can unteam the ports of a network card at any time. When you unteam the ports of a network card, they are automatically assigned the IP addresses they have had before teaming them - either the default ones assigned by the appliance, or the ones you have manually specified. Should you decide to team the ports again, you will have to specify the IP address manually again.

To team/unteam the ports of a network card:

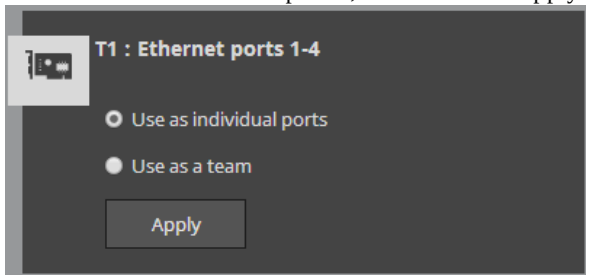
1. In the left pane of the web interface, click System and then Network Configuration.
   The page lists all detected network cards, except the Public port.
2. In the tile of a network card, do one of the following:

• Select Use as a team, and then click Apply.



The teamed ports are listed on the IP Configuration page, where you can assign an IP address to them.

• Select “Use as individual ports”, and then click Apply.



The ports are listed on the IP Configuration page individually with their previous IP addresses (the ones you have manually specified, or, if none has been specified, the default ones).

Configure the IP Addresses of the Appliance

Your Tiger Serve appliance can have any of the following network ports:

Public port — 1GbE port designed to connect the appliance to your corporate network and provide it with access to shared resources and the Internet and also used for metadata exchange between the appliance and Fibre Channel Tiger Clients.

1/10GbE ports — designed to provide for both data and metadata traffic of Tiger Clients connected to the appliance via 10GbE connection.

You must set an IP address for each network port through which the appliance is connected to Tiger Clients (directly or via an Ethernet switch) - the Public port and all other available network ports or port teams. The IP address you assign to each network port must be on the same subnet as the Tiger Client that will communicate with the appliance through this port. If computers in your facility are already interconnected in a LAN, you can simply assign an IP address to the Public port in the same subnet.

When a LAN client can reach the appliance both through the Public port and another faster port, to ensure that the Tiger Client always mounts the shared volumes over the faster connection, it is advisable to set the IP addresses of the faster ports of both the appliance and the Tiger Client to be on a separate subnet of the LAN used by the Public port. For more information refer to the "Assigning IP Addresses to Network Ports" best practices topic in the latest version of the product release notes.

On a Tiger Serve appliance with two server nodes, to guarantee the failover between the two nodes, the network ports/port teams with identical names on both nodes (the Public ports, for example) must be on the same subnet. To facilitate you in this task, Tiger Serve attempts to automatically synchronize the IP settings of the two nodes, when you specify these settings in cluster view of the web UI. Thus, when you set an IP address of the Public port, for example, Tiger Serve assigns it to the Public port of the current primary node and automatically assigns a consecutive IP address in the same subnet to the Public port of the secondary node. In case the consecutive IP address is already in use or the secondary node is offline, the automatic synchronization fails and you will have to manually specify the IP addresses of the secondary node's network ports in node view. You can ensure that the IP settings of both nodes are synchronized in the HA Nodes page of the web UI. For more information, refer to the Tiger Store Administration Guide.

Important: *Whenever you introduce changes to the IP settings of Tiger Serve, on all Tiger Clients you may have to re-add the appliance to the storage servers list, in order to ensure that they can connect to it.*

IP Addresses Limitations

When assigning IP addresses to the network ports of Tiger Serve, make sure that you avoid the following IP addresses as they are either link-local addresses or are in use by Tiger Serve services:

• Link-local addresses in the range 169.254.0.0 - 169.254.255.255

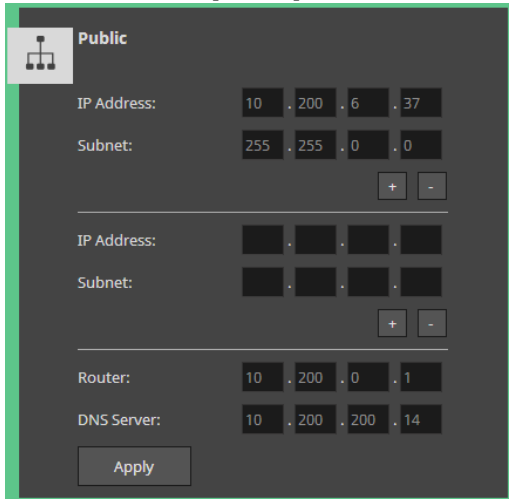
• IPMI addresses in the range 1.1.1.0 - 1.1.1.255

To assign an IP address to a network port in cluster view:

1. In the left pane of the web interface, click System and then IP Configuration.

   The IP Configuration page loads. It lists the tiles of the Public port and all individual and/or teamed network ports.

2. In the tile of the respective port or team, enter the IP address and subnet mask.



   Note: *As the Public port is also used for connection to the Internet, you can also specify router and DNS server details.*

3. (optional, to assign additional IP address) Click the + button and add an additional IP address and subnet mask for the same network port.

   Tip: *You can add as many IP addresses to the same port, by clicking the "+" button. To remove one of the IP addresses, simply click "-" next to it.*

4. Click Apply.

   For appliances with two server nodes, as long as the secondary node is also online, Tiger Serve attempts to automatically synchronize the IP settings of both nodes and assign consecutive IP addresses to the identical network ports of the secondary node. In case the secondary node is offline or Tiger Serve is unable to assign consecutive IP addresses to the ports of the secondary node, to ensure the high

availability of the appliance, you must manually configure the IP addresses of one or both nodes in the node view of the respective node.

To assign an IP address to a network port in node view:

Note: *To configure the IP address of a network port, the port adapter must be online.*

1. In the left pane of cluster view, click HA Nodes.
2. In the tile of the server node whose IP settings you want to configure, click Manage Node.

   The node view for the selected server node opens in a new tab/window of your web browser.
3. Click Manage and then enter the password for the web interface.

   Tip: *If you have changed the password for the cluster view of the web interface, while this node has been online - enter the new password. In other cases enter the default password* - **admin**.
4. In the left menu of the node view, click System and then IP Configuration.
5. In the tile of the respective port or team, enter the IP address and subnet mask.

   As the Public port is also used for connection to the Internet, you can also specify router and DNS server details.
6. Click Apply.

   Tiger Serve applies the new settings only to the selected node.

   Tip: *To make sure that the IP settings of both nodes are synchronized, go to the HA Nodes page of the web UI (see Tiger Store's Administration Guide).*

Change the Name of The Appliance

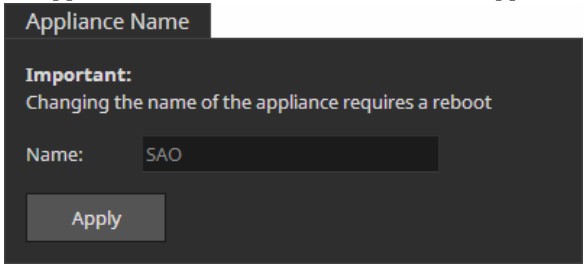
By default, each Tiger Serve appliance is shipped to you with a pre-configured name - the appliance's serial number, printed at the back of the chassis and visible in the About page of the web UI. On appliances with two server nodes, the name of each node is comprised of the name of the appliance plus an automatically added suffix. Tiger Serve takes care to automatically synchronize the name setting between the nodes in order to ensure failover can take place. Thus, when you change the name of the appliance on one node, as long as the other node is also online, its name is updated (but with different suffix) as well. When you change the name of the appliance on one node, while the other node is offline (or not available), it is advisable to manually synchronize the name setting across nodes when both of them are online.

Note: *If you rename a Tiger Serve appliance after client computers have already added it to their storage servers list, you may have to manually edit the appliance's name on client computers (refer to the "Tiger Client User's Guide").*

To rename the appliance:

Important: *To rename the appliance you will have to reboot it.*

1. In the left pane of the web interface, click System and then Settings.
2. In Appliance Name, enter a new name of the appliance and click Apply.



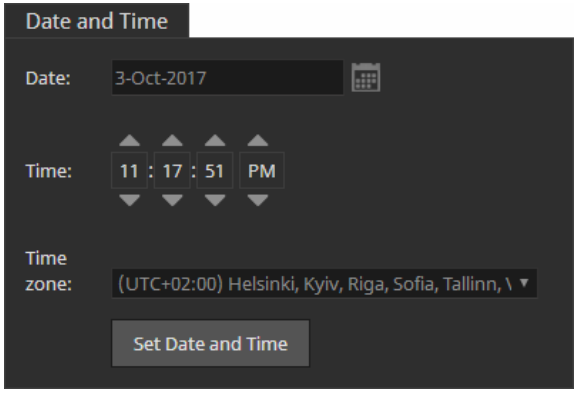
3. Confirm that you want to change the name of the appliance when prompted.
4. In the left pane, select System and then Maintenance.
5. In System Reset drop down box, select "Full system reboot" and then click Full system reboot.

Specify The Time and Date Settings of the Appliance

To ensure the normal work of Tiger Serve, you should set the time and date of the appliance as soon as you turn it on. It is advisable to use the same date and time settings on all computers on your Tiger Serve network.

To specify the time and date settings of the appliance:

1. In the left pane of the web interface, click System and then Settings.
2. In Date and Time, select the desired date, time zone and specify the exact time.



3. Click Set Date and Time.

Select The Deployment Environment of Tiger Serve

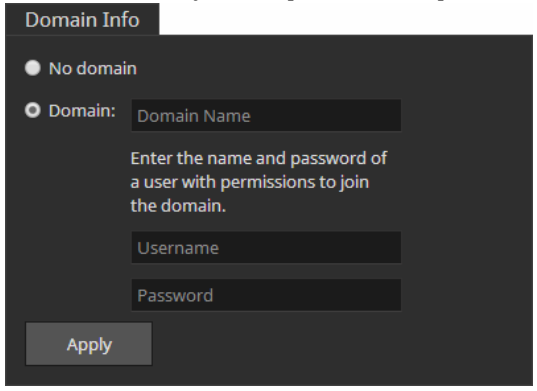
By default, Tiger Serve is configured to operate in workgroup environment - the appliance is pre-configured as a member of the WORKGROUP workgroup and any user that can connect to it, has access to all resources on the shared volumes. If your appliance is on the same network as an Active Directory domain controller, you can add the appliance to the domain and benefit from access permissions to files and folders for domain users. For the purpose, you should simply specify the domain name and authenticate as a user that has permissions to join computers to the selected Active Directory domain.

You can switch the network environment in which Tiger Serve is deployed from workgroup to domain and vice versa at any time.

Important: *Setting the network environment of Tiger Serve requires that you reboot the appliance.*

To set domain environment for Tiger Serve:

1. In the left pane of the web interface, click System and then Settings.
2. In Domain Info, click Domain.
3. In the respective fields, enter the domain name and the user name and password of a user that can join computers to the specified Active Directory domain.

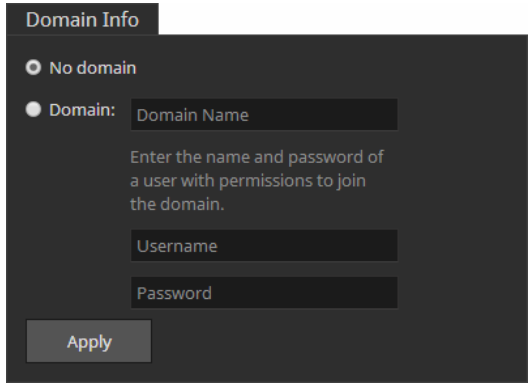


4. Click Apply.
5. In the left pane, select System and then Maintenance.
6. In System Reset drop down box, select Full System Reboot and then click Full system reboot.

   When the appliance is online again, accesses to files/folders on the shared volumes are authenticated against the specified Active Directory domain.

To set workgroup environment for Tiger Serve:

1. In the left pane of the web interface, click System and then Settings.
2. In Domain Info, click No domain.



   The domain controller may require that you authenticate yourself as a user authorized to remove computers from the domain.

3. Click Apply.
4. In the left pane, select System and then Maintenance.
5. In System Reset drop down box, select Full System Reboot and then click Full system reboot.

   When the appliance is online again, all users that can mount the shared volumes have unrestricted access to all files/folders on it.