Spirent C1 Installation Instructions

Refer to the Release Notes for information on supported software applications, versions, and NIC configurations.

Note: The terms Spirent C1 and SPT-C1 are used interchangeably in this document.

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Safety Precautions

**Warning:** Calls attention to operating procedures or practices that should be followed to avoid bodily injury or damage to equipment.

**Caution:** Reflects conditions that could cause product damage or data loss.

**Note:** Describes limitations on the use of the equipment or procedure.

**No User-Serviceable Parts**

**Warning:** No user-serviceable parts inside. Do not open.

**Waarschuwing:** Er zijn geen door de gebruiker te vervangen onderdelen. Niet openen.

**Attention:** Aucune pièce se trouvant à l'intérieur ne peut être réparée ou remplacée par l'utilisateur. Ne pas ouvrir.

**Lasers Warning**

**Warning:** Because invisible radiation may be emitted from the aperture of the port when no fiber cable is connected, avoid exposure to radiation and do not stare into open apertures.

**Waarschuwing:** Aangezien onzichtbare straling vanuit de opening van de poort kan komen als er geen fiberkabel aangesloten is, dient blootstelling aan straling en het kijken in open openingen vermeden te worden.

**Attention:** Avant d'accéder à cet équipement connecté aux lignes électriques, ôter tout bijou (anneaux, colliers et montres compris). Lorsqu'ils sont branchés à l'alimentation et reliés à la terre, les objets métalliques chauffent, ce qui peut provoquer des blessures graves ou souder l'objet métallique aux bornes.

**Calibration**

At the time of manufacture, all components manufactured by Spirent Communications are calibrated in accordance with applicable procedures. Spirent Communications equipment is calibrated using national standards, consensus standards, and ratio-type measurements
based on self-calibration techniques. By design, the equipment has no user adjustments and does not require further calibration. Products are calibrated within the published environmental specifications for the products. At the time of shipment, this Spirent Communications product met its published operating specifications.

Unpacking

Before opening the product carton, examine it for damage. If damage is not visible, unpack the carton and check contents for damage. Save all packing materials. If damage is noted, forward an immediate request to the delivering carrier to perform an inspection and prepare a damage report. Save the container and packing material until contents are verified.

Concurrently, report the nature and extent of damage to Spirent Communications Customer Support so that action can be initiated to repair or replace damaged items, or instructions issued for returning items.

The responsibility of the manufacturer ends with delivery to the first carrier. All claims for loss, damage, or nondelivery must be made against the delivering carrier within 10 calendar days of receipt of shipment.

Damaged or Missing Equipment

If any equipment is damaged or missing, call (800) 774-7368 or (818) 676-2616 (international) for technical support. Registered users may also access the Spirent Communications support website at https://support.spirent.com. You may also email questions to support@spirent.com.

Certifications and Standards

FCC

Spirent C1 complies with the limits for a Class A digital device in accordance with Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. Operation is subject to the following two conditions:

• This device may not cause harmful interference.

• This device must accept any interference received, including interference that may cause undesired operation.

This device generates, uses, and can radiate radio frequency energy if not installed and used in accordance with the instructions in this manual. Operating this equipment in a residential area is likely to cause harmful interference, and the customer will be required to rectify the interference at his or her own expense. This product requires the use of external shielded cables to maintain compliance pursuant to Part 15 of the FCC Rules.
CE

The CE symbol on the product label (on the back of the box) indicates this network appliance is compliant with the EMC Directive and Low Voltage Directive of the European Union. This product meets the following technical standards:

• EN 55022 — “Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment”

• EN 55024 — “Limits and methods of measurement of immunity characteristics for information technology equipment”

• EN 60950 — “Safety of Information Technology Equipment”

TUV

This product carries the cTUVus mark.

Environmental Considerations

This label is on all Spirent-provided electrical and electronic products that are sold and shipped (see Figure 1).

![Figure 1. Waste of Electrical and Electronic Equipment (WEEE) Label](image)

This label indicates that the product contains material that presents an environmental concern. Spirent encourages users of Spirent-provided electrical and electronic equipment to not dispose of the labeled products in waste collection units where the waste is destined for landfills. Electrical and electronic equipment should be collected separately and recycled, reused, and processed for recovery and waste treatment in accordance with your local, regional, and federal laws. If you have any questions regarding this labeling, please contact your Spirent Communications representative.
Requirements

This section describes the Spirent C1 (SPT-C1) system requirements, cable requirements, and network connectivity. Refer to “System Description” on page 9 for component descriptions.

SPT-C1 System Requirements

SPT-C1 requires standard AC input of 100-240V~, 6A, 50/60Hz.

Supported Applications and NIC Configurations

Refer to the Release Notes for information on supported software applications, versions, and NIC configurations.

Note: Not all configurations are available for all software applications.

Cable Requirements

You will need customer-supplied cables for connecting the SPT-C1 to your management network and for connecting the NIC test ports to your system under test. For detailed cabling information, refer to the sections under “Connector Panel” beginning on page 9.

PC Requirements

Refer to the Release Notes for information on the minimum PC requirements.

Network Connectivity

Note: The terms “management port” and “administrative port” are used interchangeably.

10/100/1000 Base-T Administrative Port

The administrative port must connect to a 10/100/1000 Base-T network. Spirent Communications recommends the SPT-C1 be connected through a switch and isolated from your test environment.

Tip: The administrative port can be connected to a different subnet from the test network. If traffic overwhelms the test network, having the administrative port on a different subnet enables you to access SPT-C1 and control the test currently running without contending with a heavily loaded network.
Test Ports

*Table 1* lists the NIC configurations for the test ports.

The ports are described under “Connector Panel” on page 9.

Refer to the Release Notes for information on supported software applications, versions, and NIC configurations. Not all configurations are available for all software applications.

<table>
<thead>
<tr>
<th>Appliance Model</th>
<th>NIC Part Number</th>
<th>10/100M Test Ports</th>
<th>1 GbE Test Ports</th>
<th>2.5/5GbE Test Ports</th>
<th>10 GbE Test Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPT-C1 2 x 10GbE</td>
<td>NIC-27</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>One dual-port NIC (SFP+ MM fiber)</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE</td>
<td>NIC-33</td>
<td>4* One quad-port NIC (all copper)</td>
<td>4* One quad-port NIC (all copper)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE</td>
<td>NIC-32</td>
<td>4* One quad-port NIC (all copper)</td>
<td>4* One quad-port NIC (all copper)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE</td>
<td>NIC-31</td>
<td>NA</td>
<td>4 One quad-port NIC (optical for MMF)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPT-C1 4 x 10/100M BroadR-Reach®</td>
<td>NIC-43</td>
<td>4 One quad-port NIC (via 2 DE9M connectors)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPT-C1 2 x 10GbE and 4 x 1GbE</td>
<td>NIC-27 and NIC-33</td>
<td>4* One quad-port NIC (all copper)</td>
<td>4* One quad-port NIC (all copper)</td>
<td>NA</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>One dual-port NIC (SFP+ MM fiber)</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE and 802.11 AC WAVE-1 WiFi</td>
<td>NIC-33 and NIC-51</td>
<td>4* One quad-port NIC (all copper)</td>
<td>4* One quad-port NIC (all copper)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
**Table 1.** NIC Configurations for SPT-C1 Appliance Models (continued)

<table>
<thead>
<tr>
<th>Appliance Model</th>
<th>NIC Part Number</th>
<th>10/100M Test Ports</th>
<th>1 GbE Test Ports</th>
<th>2.5/5GbE Test Ports</th>
<th>10 GbE Test Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPT-C1 4 x 1GbE and 802.1 ACN WAVE-1 WiFi</td>
<td>NIC-33 and NIC-52</td>
<td>4* One quad-port NIC (all copper)</td>
<td>4* One quad-port NIC (all copper)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE and 802.11 AC WAVE-2 WiFi</td>
<td>NIC-33 and NIC-56</td>
<td>4* One quad-port NIC (all copper)</td>
<td>4* One quad-port NIC (all copper)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE and 802.11 AC WAVE-2 WiFi</td>
<td>NIC-33 and NIC-57</td>
<td>4* One quad-port NIC (all copper)</td>
<td>4* One quad-port NIC (all copper)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE and 802.11 AC WAVE-2 WiFi</td>
<td>NIC-63 and NIC-57</td>
<td>4** One quad-port NIC (all copper)</td>
<td>4** One quad-port NIC (all copper)</td>
<td>4** One quad-port NIC (all copper)</td>
<td>4** One quad-port NIC (all copper)</td>
</tr>
<tr>
<td>SPT-C1 4 x 1GbE and 802.11 AC WAVE-2 WiFi</td>
<td>NIC-63 and NIC-60</td>
<td>4** One quad-port NIC (all copper)</td>
<td>4** One quad-port NIC (all copper)</td>
<td>4** One quad-port NIC (all copper)</td>
<td>4** One quad-port NIC (all copper)</td>
</tr>
</tbody>
</table>

* Each physical port is configurable for 10/100/1000M operation.

** Each physical port is configurable for 10G/5G/2.5G/1G/100M operation.
System Description

The SPT-C1 hardware is maintenance-free and should not be disassembled. Servicing the units yourself jeopardizes your warranty.

Connector Panel

This section shows the connector panels and describes the necessary cabling for SPT-C1. SPT-C1 supports NIC configurations for the test ports, as listed in “Test Ports” on page 7.

SPT-C1 2 x 10GbE

The SPT-C1 2 x 10GbE connector panel is shown in Figure 2.

![Figure 2. SPT-C1 2 x 10GbE Connector Panel](image)

The network data cables (customer supplied) connected to these ports must be as follows:
- Ethernet CAT-5 cable for the management port (Eth0)
- Depending on the NIC configuration, the following for the test ports:
  - Two test ports (1 and 2)
    - Fiber: LC Fiber Optic connector, Multi-Mode Fiber (62.5um or 50um) cable.

SPT-C1 4 x 1GbE (NIC-33)

The connector panel is shown in Figure 3.

![Figure 3. SPT-C1 4 x 1GbE Connector Panel (NIC-33)](image)
The network data cables (customer supplied) connected to these ports must be as follows:

- Ethernet CAT-5 cable for the management port (Eth0)
- Four test ports (1-4)
  - Copper: RJ45 connector, Ethernet CAT-5 cable.

**SPT-C1 4 x 1GbE (NIC-32)**

The connector panel is shown in *Figure 4.*

![SPT-C1 4 x 1GbE Connector Panel (NIC-32)](image)

*Figure 4.* SPT-C1 4 x 1GbE Connector Panel (NIC-32)

The network data cables (customer supplied) connected to these ports must be as follows:

- Ethernet CAT-5 cable for the management port (Eth0)
- Four test ports (1-4)
  - Copper: RJ45 connector, Ethernet CAT-5 cable.

**SPT-C1 4 x BroadR-Reach® (NIC-43)**

The connector panel is shown in *Figure 5.*

![SPT-C1 4 x BroadR-Reach Connector Panel (NIC-43)](image)

*Figure 5.* SPT-C1 4 x BroadR-Reach Connector Panel (NIC-43)
The network data cables (customer supplied) connected to these ports must be as follows:

- Ethernet CAT-5 cable for the management port (Eth0)
- Four test ports (1-4)
  - The supported wiring is 1 pair of up to 15m UTP cabling for each port. Any wiring from the UTP cable to the DE9F connector should be of the shortest length possible to maintain signal integrity.
  - Each DE9M connector is wired for two BroadR-Reach ports. The pinout for the connectors is:
    Port 1 signals are on the left DE9 pins 1 and 2
    Port 2 signals are on the left DE9 pins 4 and 5
    Port 3 signals are on the right DE9 pins 1 and 2
    Port 4 signals are on the right DE9 pins 4 and 5

**SPT-C1 2 x 10GbE and 4 x 1GbE (NIC-27 and NIC-33)**

The connector panel is shown in Figure 6.
The network data cables (customer supplied) connected to these ports must be as follows:

- Ethernet CAT-5 cable for the management port (Eth0)
- Depending on the NIC configuration, the following for the test ports:
  - Two test ports (1 and 2)
    - Fiber: LC Fiber Optic connector, Multi-Mode Fiber (62.5um or 50um) cable.
  - Four test ports (3-6)
    - Copper: RJ45 connector, Ethernet CAT-5 cable.

**Note:** The timestamp circuitry between the two NICs is synchronized via firmware. Therefore, when generating and analyzing traffic between the 10G and 1G NIC ports, the latency measurements are not as accurate as traffic generated and analyzed between ports on the same NIC.

**SPT-C1 4 x 1GbE and 802.11 AC/ACN WAVE-1 WiFi (NIC-33 and NIC-51/NIC-52)**

The connector panel is shown in *Figure 7.*

![Figure 7. SPT-C1 4 x 1GbE and 802.11 AC/ACN WAVE-1 WiFi (NIC-33 and NIC-51/NIC-52)](image)

The network data cables (customer supplied) connected to these ports must be as follows:

- Ethernet CAT-5 cable for the management port (Eth0)
- For test ports (1-4)
  - Copper: RJ45 connector, Ethernet CAT-5e or better cable

The WiFi cables (provided in kit) connected as follows

- RF coax cable and SMA adapters to wireless device
SPT-C1 4 x 10G/5G/2.5G/1G/100M (NIC-63)

The connector panel is shown in *Figure 8.*

![Figure 8. SPT-C1 4 x 10G/5G/2.5G/1G/100M (NIC-63)](image)

The network data cables (customer supplied) connected to these ports must be as follows:

- Ethernet CAT-5 cable for the management port (Eth0)
- For test ports (1-4)
  - Copper: RJ45 connector, Ethernet CAT-5e or better cable

SPT-C1 4 x 1GbE and 802.11 AC WAVE-2 WiFi (NIC-33/NIC-63 and NIC-56/NIC-57/NIC-60)

The connector panel is shown in *Figure 9.*

![Figure 9. SPT-C1 4 x 1GbE and 802.11 AC WAVE-2 WiFi (NIC-33/NIC-63 and NIC-56/NIC-57/NIC-60)](image)

The network data cables (customer supplied) connected to these ports must be as follows:

- Ethernet CAT-5 cable for the management port (Eth0)
- For test ports (1-4)
  - Copper: RJ45 connector, Ethernet CAT-5e or better cable
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System Description

- For test ports (5-6)
  - SMA connector, 50 OHM RF cable
- For test ports (7-8) on NIC-57 only
  - SMA connector, 50 OHM RF cable

Power Supply

The power supply for the SPT-C1 is controlled by the power button on the front of the unit (Figure 10). The power cord socket is on the back of the unit.

**Tip:** Plug the SPT-C1 into a surge-protected outlet to protect it from electrical surges.

**Figure 10.** SPT-C1 Power Button and Power Cord Socket

Powering up the SPT-C1

Press the power button on the front of the unit (Figure 10 on page 14) to turn on the SPT-C1.

The typical boot time is two (2) minutes. Package switch times (switching from Spirent TestCenter to another product, or from another product to Spirent TestCenter) and firmware upgrades take approximately 10-15 minutes.

Powering down the SPT-C1

**Important:** Press and release the power button on the front of the appliance (Figure 10) to turn off the SPT-C1.

Do not unplug the appliance while it is in operation (blue indicator light on). Power off the appliance, before you unplug it.
Rack Mounting Considerations

The SPT-C1 requires 2U of rack-mount space (roughly 4” high x 10” deep x 13” wide). A rack-mount kit (ACC-0030) is available separately for revision D appliances only. Appliance models prior to revision D should use a rack shelf if rack-mounting is required.

**Note:** The SPT-C1 may require safety agency evaluation, certification, and licensing. Check with your building inspector for requirements applicable to your location.

**Notes on Rack Mounting**

- Elevated operating ambient—If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consider installing the equipment in an environment compatible with the maximum ambient temperature of 30°C (86°F).
- Reduced air flow—Install the equipment in a rack such that the amount of airflow required for safe operation of the equipment is not compromised.
- Mechanical loading—Mount the equipment in the rack such that a hazardous condition is not achieved due to uneven mechanical loading. Do not stack other equipment on top of a system that is already rack-mounted.
- Circuit overloading—Consider the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over-current protection and supply wiring. Refer to equipment rating labels to ensure appropriate electrical loading of this system in a rack.
- Reliable earthing—Maintain reliable earthing of rack-mounted equipment. Pay particular attention to supply connections other than direct connections to the branch circuit (for example, use of power strips).

Connecting to the SPT-C1

SPT-C1 connects and operates through your local network much like a standard PC. It boots with the IP address and subnet mask: 192.168.0.100/255.255.255.0. If you need to reconfigure the IP address information refer to “Setting the SPT-C1 Addressing mode, IP Address, Netmask and Gateway” on page 17.

**To connect to your product’s GUI:**

1. Configure a laptop or workstation with the IP address and subnet mask: 192.168.0.101/255.255.255.0.
2. Connect the laptop or workstation to the SPT-C1 administrative port (Figure 11 and Figure 12 on page 16) with a straight-through or crossover Ethernet cable or through a (preferably full-duplex) network switch or hub.
Figure 11. SPT-C1 Administrative Port (model revisions Rev J and later)

Figure 12. SPT-C1 Administrative Port (model revisions prior to Rev J)

Note: The hardware “Rev” letter for your SPT-C1 model is on the label on the bottom of the appliance.
Setting the SPT-C1 Addressing mode, IP Address, Netmask and Gateway

If you are connecting the SPT-C1 to a LAN, you will probably need to change the IP address information. Obtain an unused IP address, netmask, and default router from your IT department.

Use the appropriate method to change the SPT-C1 settings for your appliance model:

SPT-C1 Rev J (and later)
- Attach a USB keyboard and DVI monitor to the appliance (use the white DVI-D port).
  - It is recommended that these devices are connected while the appliance is powered off.
  - Use one of the black USB 2.0 or blue USB 3.0 connectors for the keyboard.
  - If you do not have a DVI monitor, use the blue VGA port.

SPT-C1 Rev letters prior to J
- Attach a USB keyboard and DVI monitor to the appliance (use the blue DVI-I port).
  - It is recommended that these devices are connected while the appliance is powered off.
  - Use one of the black USB 2.0 connectors for the keyboard.
  - If you do not have a DVI monitor, use the supplied DVI to VGA adapter.

All SPT-C1 models
- Use a communication program to SSH (secure shell) over the Ethernet administration port to the SPT-C1 default IP address.
  - The SPT-C1 default IP address is 192.168.0.100, with a netmask of 255.255.255.0

Whichever method you use to connect to the appliance, you will be prompted to log in when the appliance is fully booted up. Use the following system administrator login / password:

- Login: admin
- Password: spt_admin

Spirent TestCenter - Spirent Communications, Inc.

Device : 192.168.0.100 255.255.255.0 (static)
Gateway : 192.168.0.1

Welcome admin.
Type help for a list of commands

admin(hypervisor)>>
You can now use the following commands to set the addressing mode and/or set the IP address, netmask and gateway. When you have made your changes, you must activate the new settings and reboot the appliance:

```
admin(hypervisor)>> mode - shows the current IP addressing mode.
admin(hypervisor)>> mode dhcp - sets the IP addressing mode to DHCP.
admin(hypervisor)>> mode static - sets the IP addressing mode to static.
```

**Note:** You must manually set the IP address, netmask and gateway, if you use the static setting.

```
admin(hypervisor)>> ipaddress - shows the current IP address.
admin(hypervisor)>> ipaddress 192.168.1.10 - sets the IP address.

admin(hypervisor)>> netmask - shows the current netmask.
admin(hypervisor)>> netmask 255.255.255.0 - sets the netmask.

admin(hypervisor)>> gwaddress - shows the current gateway address.
admin(hypervisor)>> gwaddress 192.168.1.1 - set the gateway address.

admin(hypervisor)>> activate - Activates your new settings
```

**Note:** If you are connected using SSH, you will lose connectivity when you use the **activate** command. You must power cycle the appliance manually, or log back in to the appliance using the new IP address. You must then use the **reboot** command below, before the product’s GUI or script can access the appliance.

```
admin(hypervisor)>> reboot - Applies your settings and reboots the appliance.
```

When the SPT-C1 appliance restores, after the power cycle or reboot, it is ready for use with the product’s GUI or an automation script (if supported in your current release).

For a complete list of the admin commands available for the SPT-C1 appliance, refer to *Table 2 on page 21*.
Appliance Firmware Support

With the dual boot feature, you can switch between two installed versions of Spirent TestCenter using the command line interface. You can identify the current version and standby version using the appropriate commands described in this section.

For SPT-C1 appliances, the feature applies to Spirent TestCenter releases 4.94 and later. When you initially upgrade to release 4.94 or later, both installed versions will be 4.94 or later. Subsequent upgrades to releases later than 4.94 will result in two separate partitions, containing the current version and the standby version, respectively.

**Notes:**
- Downgrading to a Spirent TestCenter version below 4.94 removes this feature.
- If you are using Spirent TestCenter version 4.53 or earlier, and you want to upgrade to version 4.94, log in to the Customer Service Center (CSC) Knowledge Base, and follow the instructions in FAQ11021.
- Downgrading to 4.81 or below is a two-step process (if you are at 4.94 or above). First downgrade to 4.81 and then to the version you intend to use.

To see the available Spirent TestCenter versions using the command line interface:

1. SSH to Spirent TestCenter as an admin.
2. Use the applicable command
   - Type `version` to identify the active Spirent TestCenter version.
   - Type `standby_version` to see the standby version.

```
admin> version
Chassis OS : 4.94.6346
Hypervisor Version : 1.5.0
admin> standby_version
standby Version : 4.94.6346
admin> 
```

To switch between two installed versions using the command line interface:

1. SSH to Spirent TestCenter as an admin.
2. Type `help` to view the list of options.
3. Select `switch_version` with `yes` as an option to switch to the standby version.

**Note:** A reboot is required to switch versions. Select `yes` if you want to reboot and use the standby version. If you select `no`, the switch to the standby version will take effect with the next reboot.

```
admin> switch_version
This command will boot the system to standby version (if available). Please use the standby_version command, to find the standby version.
do you want to continue 'yes' or 'no' ? yes
rebooting the chassis to switch the standby version
do you want to reboot now: 'yes' or 'no' ? yes
```


Using Authenticate Mode (optional)

Authenticate mode allows the user to set a password on the chassis or appliance, so only authorized users can access the equipment. The Authenticate commands can only be accessed when the user is directly connected to the chassis or appliance using a USB keyboard and DVI video monitor. If SSH is used to access the chassis or appliance, these commands will not be available.

When authenticate is “on” or “reset,” a password must be generated using simple ascii text, but it cannot be left blank. Once the password is generated, the Spirent TestCenter GUI or API user will be required to enter the generated password when they attempt to connect to the chassis or appliance.

Follow these instructions to use Authenticate mode on your chassis:

1. Connect to chassis via console (keyboard and display connected)
2. Login as user admin (password: spt_admin)
   
   admin>

   To turn authenticate mode on:
   
   admin> authenticate on
   authenticate mode is currently disabled

   Enter Password to Enable Authenticate Mode:
   Re-Enter Authenticate Mode Password:
   Authenticate Mode is now enabled!

   To turn authenticate mode off:
   
   admin> authenticate off
   authenticate mode is currently enabled

   Enter the Saved Password to Disable Authenticate Mode:
   Authenticate Mode is now disabled!

   To reset the password:
   
   admin> authenticate reset
   authenticate mode is currently enabled

   Enter a new Password to Reset/Enable Authenticate Mode:
   Re-Enter the new Authenticate Mode Password:
   Authenticate Mode is now enabled with a new password!
## Table 2. Spirent C1 Admin Commands

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>activate [deviceName] &lt;ipaddress&gt; &lt;netmask&gt; [gwaddress] dhcp ipv6 [deviceName] ipv6address ipv6gwaddress</td>
<td>Save and activate the network configuration</td>
</tr>
<tr>
<td>authenticate [on</td>
<td>off</td>
</tr>
<tr>
<td>console &lt;vm name&gt;</td>
<td>Connect to a VM's console</td>
</tr>
<tr>
<td>date [MMDDhhmm][CC][YY][.ss]</td>
<td>Show or set the date. e.g. date 01312359</td>
</tr>
<tr>
<td>dns <code>&lt;address1&gt;</code> <code>&lt;address2&gt;</code></td>
<td>Set the static DNS servers</td>
</tr>
<tr>
<td>exit</td>
<td>Exit</td>
</tr>
<tr>
<td>gwaddress <code>&lt;address&gt;</code></td>
<td>Change the gateway address for the device</td>
</tr>
<tr>
<td>help</td>
<td>List all commands</td>
</tr>
<tr>
<td>hostname</td>
<td>Display or change the system hostname</td>
</tr>
<tr>
<td>ipaddress <code>&lt;address&gt;</code></td>
<td>Change the IP address for the device</td>
</tr>
<tr>
<td>ipv6address <code>&lt;address&gt;</code></td>
<td>Change the address for the IPv6 device</td>
</tr>
<tr>
<td>ipv6gwaddress <code>&lt;address&gt;</code></td>
<td>Change the gateway address for the IPv6 device</td>
</tr>
<tr>
<td>launcher</td>
<td>Relaunch cookies</td>
</tr>
<tr>
<td>listvms</td>
<td>Show any running virtual machines</td>
</tr>
<tr>
<td>logout</td>
<td>Log out</td>
</tr>
<tr>
<td>macaddress</td>
<td>Display the MAC address</td>
</tr>
<tr>
<td>mode [static</td>
<td>dhcp]</td>
</tr>
<tr>
<td>netmask <code>&lt;address&gt;</code></td>
<td>Change the netmask for the device</td>
</tr>
<tr>
<td>network</td>
<td>Show the current network settings</td>
</tr>
<tr>
<td>ntp</td>
<td>Display or change the ntp settings</td>
</tr>
<tr>
<td>password</td>
<td>Change the password</td>
</tr>
<tr>
<td>ping <code>&lt;ipaddress&gt;</code></td>
<td>Ping an IP address</td>
</tr>
</tbody>
</table>
Table 2.  Spirent C1 Admin Commands (continued)

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ping6 &lt;ipv6address&gt;</td>
<td>Ping an IPv6 address</td>
</tr>
<tr>
<td>ptp</td>
<td>Display or change the ptp settings</td>
</tr>
<tr>
<td>reboot</td>
<td>Reboot the system</td>
</tr>
<tr>
<td>recovery &lt;chassis</td>
<td>tm&gt; &lt;enable</td>
</tr>
<tr>
<td>resethost</td>
<td>Reset all network settings to the factory defaults</td>
</tr>
<tr>
<td>restartsysmgr</td>
<td>Restart system manager</td>
</tr>
<tr>
<td>securemode [on</td>
<td>off]</td>
</tr>
<tr>
<td>serialno</td>
<td>Show the appliance serial number</td>
</tr>
<tr>
<td>shutdown</td>
<td>Shut down the system</td>
</tr>
<tr>
<td>status</td>
<td>Show the status summary</td>
</tr>
<tr>
<td>switch_version</td>
<td>Switches to the standby partition and reboots the system</td>
</tr>
<tr>
<td>standby_version</td>
<td>Displays the version of the standby partition (non-active)</td>
</tr>
<tr>
<td>version</td>
<td>Display the current version</td>
</tr>
</tbody>
</table>
Related Documentation

Additional documentation related to this guide are listed below.

- *Spirent C1 Quick Reference* – Provides a summary of the major steps you use to set up an SPT-C1 appliance.
- *Release Notes* – Contain information that may affect product installation, test configuration, or test results, including last-minute requirements or product changes. It is highly recommended that you review all Release Notes before you install or use the SPT-C1 appliance.

**Spirent Knowledge Base**

The Spirent Customer Service Center (CSC) ([https://support.spirent.com](https://support.spirent.com)) includes a powerful Knowledge Base with tens of thousands of articles to serve your technical information needs. The Knowledge Base offers an easy-to-use browse mode, along with an intelligent search that offers quick answers to your network analysis and measurement questions. Log in with your CSC user ID and password to gain access to additional content that is available only to customers – user manuals, help files, release notes, technical bulletins, and software and firmware downloads.
How to Contact Us

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