Chapter 9

Switch Environment Control

The following sections describe the commands that display temperature, fan, and power supply status:

- Section 9.1: Environment Control Introduction
- Section 9.2: Environment Control Overview
- Section 9.3: Configuring and Viewing Environment Settings
- Section 9.4: Environment Commands

The switch chassis, fans, power supplies, line cards, and supervisors also provide LEDs that signal status and conditions that require attention. The Quick Start Guide for the individual switches provides information about their LEDs.

9.1 Environment Control Introduction

Arista Networks switching platforms are designed to work reliably in common data center environments. To ensure their reliable operation and to monitor or diagnose the switch's health, Arista provides a set of monitoring capabilities available through the CLI or SNMP entity MIBs to monitor and diagnose potential problems with the switching platform.

9.2 Environment Control Overview

9.2.1 Temperature

Arista switches include internal temperature sensors. The number and location of the sensors vary with each switch model. Each sensor is assigned temperature thresholds that denote alert and critical conditions. Temperatures that exceed the threshold trigger the following:

- **Alert Threshold**: All fans run at maximum speed and a warning message is logged.
- **Critical Threshold**: The component is shut down immediately and its Status LED flashes orange.

In modular systems, cards are shut down when their temperatures exceed the critical threshold. The switch is shut down if the temperature remains above the critical threshold for three minutes.
9.2.2 Fans

Arista switches include fan modules that maintain internal components at proper operating temperatures. The number and type of fans vary with switch chassis type:

- **Fixed configuration switches** contain hot-swappable independent fans. Fan models with different airflow directions are available. All fans within a switch must have the same airflow direction.
- **Modular switches** contain independent fans that circulate air from front-to-rear panel. Power supplies for modular switches also include fans that cool the power supply and supervisors.

The switch operates normally when one fan is not operating. Non-functioning modules should not be removed from the switch unless they are immediately replaced; adequate switch cooling requires the installation of all components, including a non-functional fan.

Two non-operational fans trigger an *insufficient fan shutdown* condition. Under normal operations, this condition initiates a switch power down procedure.

Fans are accessible from the rear panel.

9.2.2.1 Power

Arista switches contain power supplies which provide power to internal components.

- **Fixed configuration switches** contain two power supplies, providing 1+1 redundancy.
- **Modular switches** contain four power supplies, providing a minimum of 2+2 redundancy.

Power supply LED indicators are visible from the rear panel.
9.3 Configuring and Viewing Environment Settings

9.3.1 Overriding Automatic Shutdown

9.3.1.1 Overheating

The switch can be configured to continue operating during temperature shutdown conditions. Ignoring a temperature shutdown condition is strongly discouraged because operating at high temperatures can damage the switch and void the warranty.

Temperature shutdown condition actions are specified by the `environment overheat action` command. The switch displays this warning when configured to ignore shutdown temperature conditions.

```
Switch(config)#environment overheat action ignore
====================================================================
WARNING: Overriding the system shutdown behavior when the system is overheating is unsupported and should only be done under the direction of an Arista Networks engineer. You risk damaging hardware by not shutting down the system in this situation, and doing so without direction from Arista Networks can be grounds for voiding your warranty. To re-enable the shutdown-on-overheat behavior, use the 'environment overheat action shutdown' command.
====================================================================
Switch(config)#
```

The `running-config` contains the `environment overheat action` command when it is set to `ignore`. When the command is not in `running-config`, the switch shuts down when an overheating condition exists.

The following `running-config` file lists the `environment overheat action` command.

```
switch#show running-config
! Command: show running-config
! device: switch (DCS-7150S-64-CL, EOS-4.13.2F)

ip route 0.0.0.0/0 10.255.255.1
!
environment overheat action ignore
!
!
end
switch#
```

9.3.1.2 Insufficient Fans

The switch can be configured to ignore the `insufficient fan shutdown` condition. This is strongly discouraged because continued operation without sufficient cooling may lead to a critical temperature condition that can damage the switch and void the warranty.
Insufficient-fans shutdown override is configured by the `environment insufficient-fans action` command. The switch displays this warning when configured to ignore insufficient-fan conditions.

```
Switch(config)#environment insufficient-fans action ignore
```

WARNING: Overriding the system shutdown behavior when the system has insufficient fans inserted is unsupported and should only be done under the direction of an Arista Networks engineer. You risk damaging hardware by not shutting down the system in this situation, and doing so without direction from Arista Networks can be grounds for voiding your warranty. To re-enable the shutdown-on-overheat behavior, use the 'environment insufficient-fans action shutdown' command.

```
Switch(config)#
```

The `running-config` contains the `environment insufficient-fans action` command when it is set to `ignore`. When `running-config` does not contain this command, the switch shuts down when it detects an insufficient-fans condition.

### 9.3.1.3 Fan Speed

The switch can be configured to override the automatic fan speed. The switch normally controls the fan speed to maintain optimal operating temperatures. The fans can be configured to operate at a constant speed regardless of the switch temperature conditions.

Fan speed override is configured by the `environment fan-speed` command. The switch displays this warning when its control of fan speed is overridden.

```
switch(config)#environment fan-speed override 50
```

WARNING: Overriding the system fan speed is unsupported and should only be done under the direction of an Arista Networks engineer. You can risk damaging hardware by setting the fan speed too low and doing so without direction from Arista Networks can be grounds for voiding your warranty. To set the fan speed back to automatic mode, use the 'environment fan-speed auto' command.

```
switch(config)#
```

The `running-config` contains the `environment fan-speed override` command if it is set to override. When `running-config` does not contain this command, the switch controls the fan speed.
9.3.2 Viewing Environment Status

9.3.2.1 Temperature Status

To display internal temperature sensor status, enter `show environment temperature`.

```
switch> show environment temperature
System temperature status is: Ok
```

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Description</th>
<th>Temperature</th>
<th>Alert</th>
<th>Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Front-panel temp sensor</td>
<td>22.000C</td>
<td>65C</td>
<td>75C</td>
</tr>
<tr>
<td>2</td>
<td>Fan controller 1 sensor</td>
<td>23.000C</td>
<td>75C</td>
<td>85C</td>
</tr>
<tr>
<td>3</td>
<td>Fan controller 2 sensor</td>
<td>28.000C</td>
<td>75C</td>
<td>85C</td>
</tr>
<tr>
<td>4</td>
<td>Switch chip 1 sensor</td>
<td>40.000C</td>
<td>105C</td>
<td>115C</td>
</tr>
<tr>
<td>5</td>
<td>VRM 1 temp sensor</td>
<td>48.000C</td>
<td>105C</td>
<td>110C</td>
</tr>
</tbody>
</table>

System temperature status is the first line that the command displays. System temperature status values indicate the following:

- **Ok:** All sensors report temperatures below the alert threshold.
- **Overheating:** At least one sensor reports a temperature above its alert threshold.
- **Critical:** At least one sensor reports a temperature above its critical threshold.
- **Unknown:** The switch is initializing.
- **Sensor Failed:** At least one sensor is not functioning.

9.3.2.2 Fans

The `show system environment cooling` command displays the cooling and fan status.

**Example**

This command displays the fan and cooling status.

```
switch> show system environment cooling
System cooling status is: Ok
Ambient temperature: 22C
Airflow: port-side-intake
Fan Tray  Status           Speed
--------- --------------- ------
1         Ok                 35%
2         Ok                 35%
3         Ok                 35%
4         Ok                 35%
5         Ok                 35%
switch>
```

9.3.2.3 Power

The `show environment power` command displays the status of the power supplies.
Example

- This command displays the status of the power supplies:

```plaintext
switch> show environment power
Power Supply Model                Capacity  Input Current  Output Current  Output Power    Status
------- -------------------- --------- -------- -------- -------- -------- --------------
1       PWR-650AC                 650W    0.44A   10.50A   124.0W Ok
```

9.3.2.4 System Status

The `show system environment all` command lists the temperature, cooling, fan, and power supply information that the individual `show environment` commands display, as described in Section 9.3.2.1, Section 9.3.2.2, and Section 9.3.2.3.

Example

- This command displays the temperature, cooling, fan, and power supply status:

```plaintext
switch> show system environment all
System temperature status is: Ok
Alert   Critical
Sensor  Description                            Temperature  Threshold  Threshold
------- ------------------------------------ ------------- ---------- ----------
1       Front-panel temp sensor                    22.750C        65C        75C
2       Fan controller 1 sensor                    24.000C        75C        85C
3       Fan controller 2 sensor                    29.000C        75C        85C
4       Switch chip 1 sensor                       41.000C       105C       115C
5       VRM 1 temp sensor                          49.000C       105C       110C
System cooling status is: Ok
Ambient temperature: 22C
Airflow: port-side-intake
Fan Tray Status           Speed
--------- --------------- -----
1         Ok                 35%
2         Ok                 35%
3         Ok                 35%
4         Ok                 35%
5         Ok                 35%
```

9.3.3 Locating Components on the Switch

When a component requires service, the switch administrator may use the `locator-led` command to assist a technician in finding the component. The command causes the status LED on the specified component to flash, and also displays a “service requested” message on the LCD panel of modular switches or lights the blue locator light on the front of fixed switches. Use the `show locator-led` command to display all locator LEDs currently enabled on the switch.
Examples

- This command enables the locator LED on fan tray 3:
  
  ```
  switch#locator-led fantray 3
  Enabling locator led for FanTray3
  switch#
  ```

- This command displays all locator LEDs enabled on the switch:
  
  ```
  switch#show locator-led
  There are no locator LED enabled
  switch#
  ```
9.4 Environment Commands

Environment Control Configuration Commands

- environment fan-speed
- environment insufficient-fans action
- environment overheat action
- locator-led

Environment Display Commands

- show environment power
- show environment temperature
- show locator-led
- show system environment all
- show system environment cooling
environment fan-speed

The environment fan-speed command determines the method of controlling the speed of the switch fans. The switch automatically controls the fan speed by default.

The switch normally controls the fan speed to maintain optimal operating temperatures. The fans can be configured to operate at a constant speed regardless of the switch temperature conditions.

The no environment fan-speed and default environment fan-speed commands restore the default action of automatic fan-speed control by removing the environment fan-speed override statement from running-config.

Important! Overriding the system fan speed is unsupported and should only be done under the direction of an Arista Networks engineer. You can risk damaging hardware by setting the fan speed too low. Doing so without direction from Arista Networks can be grounds for voiding your warranty.

Command Mode
Global Configuration

Command Syntax
environment fan-speed ACTION
no environment fan-speed
default environment fan-speed

Parameters
- **ACTION** fan speed control method. Valid settings include:
  - **auto** fan speed is controlled by the switch.
    
    This option restores the default setting by removing the environment fan-speed override command from running-config.
  - **override percent** fan speed is set to the specified percentage of the maximum. Valid percent settings range from 30 to 100.

Examples
- This command overrides the automatic fan speed control and configures the fans to operate at 50% of maximum speed.

  switch(config)#environment fan-speed override 50

  WARNING: Overriding the system fan speed is unsupported and should only be done under the direction of an Arista Networks engineer. You can risk damaging hardware by setting the fan speed too low and doing so without direction from Arista Networks can be grounds for voiding your warranty.
  To set the fan speed back to automatic mode, use the 'environment fan-speed auto' command

  switch(config)#

- This command restores control of the fan speed to the switch.

  switch(config)#environment fan-speed auto
  switch(config)#
environment insufficient-fans action

The environment insufficient-fans command controls the switch response to the insufficient fan condition. By default, the switch initiates a shutdown procedure when it senses insufficient fans.

The switch operates normally when one fan is not operating. Non-functioning modules should not be removed from the switch unless they are immediately replaced; adequate switch cooling requires the installation of all components, including a non-functional fan.

Two non-operational fans trigger an insufficient fan shutdown condition. This condition normally initiates a power down procedure.

The no environment insufficient-fans and default environment insufficient-fans commands restore the default shutdown response to the insufficient-fans condition by removing the environment insufficient-fans action ignore statement from running-config.

Important! Overriding the system shutdown behavior when the system has insufficient fans inserted is unsupported and should only be done under the direction of an Arista Networks engineer. You risk damaging hardware by not shutting down the system in this situation, and doing so without direction from Arista Networks can be grounds for voiding your warranty.

Command Mode
Global Configuration

Command Syntax
environment insufficient-fans action REMEDY
no environment insufficient-fans action
default environment insufficient-fans action

Parameters
- **REMEDY** configures action when switch senses an insufficient fan condition. Settings include:
  - **ignore** switch continues operating when insufficient fans are operating.
  - **shutdown** switch shuts power down when insufficient fans are operating.

The shutdown parameter restores default behavior by removing the environment insufficient-fans command from running-config.

Examples
- This command configures the switch to continue operating after it senses insufficient fan condition.
  ```
  switch(config)#environment insufficient-fans action ignore
  WARNING: Overriding the system shutdown behavior when the system has insufficient fans inserted is unsupported and should only be done under the direction of an Arista Networks engineer. You risk damaging hardware by not shutting down the system in this situation, and doing so without direction from Arista Networks can be grounds for voiding your warranty. To re-enable the shutdown-on-overheat behavior, use the 'environment insufficient-fans action shutdown' command.
  switch(config)#
  ```

- This command configures the switch to shut down when it senses an insufficient fan condition.
  ```
  switch(config)#environment insufficient-fans action shutdown
  switch(config)#
  ```
environment overheat action

The environment overheat command controls the switch response to an overheat condition. By default, the switch shuts down when it senses an overheat condition.

**Important!** Overriding the system shutdown behavior when the system is overheating is unsupported and should only be done under the direction of an Arista Networks engineer. You risk damaging hardware by not shutting down the system in this situation, and doing so without direction from Arista Networks can be grounds for voiding your warranty.

Arista switches include internal temperature sensors. The number and location of the sensors vary with each switch model. Each sensor is assigned temperature thresholds that denote alert and critical conditions. Temperatures that exceed the threshold trigger the following:

- **Alert Threshold**: All fans run at maximum speed and a warning message is logged.
- **Critical Threshold**: The component is shut down immediately and its Status LED flashes orange.

In modular systems, cards are shut down when their temperatures exceed the critical threshold. The switch normally shuts down if the temperature remains above the critical threshold for three minutes.

The no environment overheat action and default environment overheat action commands restore the default shutdown response to the environment overheat condition by removing the environment overheat action ignore statement from running-config.

**Command Mode**

Global Configuration

**Command Syntax**

```
environment overheat action REMEDY
no environment overheat action
default environment overheat action
```

**Parameters**

- **REMEDY** reaction to an overheat condition. Default value is `shutdown`.
  - `shutdown` switch shuts power down by an overheat condition.
  - `ignore` switch continues operating during an overheat condition.

**Examples**

- This command configures the switch to continue operating after it senses an overheat condition.
  ```
  switch(config)#environment overheat action ignore
  ```
  WARNING: Overriding the system shutdown behavior when the system is overheating is unsupported and should only be done under the direction of an Arista Networks engineer. You risk damaging hardware by not shutting down the system in this situation, and doing so without direction from Arista Networks can be grounds for voiding your warranty. To re-enable the shutdown-on-overheat behavior, use the 'environment overheat action shutdown' command.
  ```
  switch(config)#
  ```

- This command configures the switch to shut down when it senses an overheat condition.
  ```
  switch(config)#environment overheat action shutdown
  switch(config)#
  ```
locator-led

When a component requires service, the `locator-led` command activates a locator to assist a technician in finding the component. The command causes the status LED on the specified component to flash, and also displays a “service requested” message on the LCD panel of modular switches or lights the blue locator light on the front of fixed switches. The available locators vary by platform; to see a list of the locator LEDs available on the switch, use the `locator-led ?` command. To disable the locator LED, use the `no locator-led` command.

**Command Mode**

Privileged EXEC

**Command Syntax**

```
locator-led {fantray tray_num | interface interface | module module_num | powersupply supply_num}
no locator-led {fantray tray_num | interface interface | module module_num | powersupply supply_num}
```

**Parameters**

- **fantray tray_num** activates locator on specified fan tray.
- **interface interface** activates locator on specified interface.
- **module module_num** activates locator on specified module.
- **powersupply supply_num** activates locator on specified power supply.

**Examples**

- This command enables the locator LED on fan tray 3.
  
  ```
  switch#locator-led fantray 3
  Enabling locator led for FanTray3
  switch#
  ```

- This command disables the locator LED on fan tray 3.
  
  ```
  switch#no locator-led fantray 3
  Disabling locator led for FanTray3
  switch#
  ```

- This command displays the locator LEDs available on the switch.
  
  ```
  switch#locator-led ?
  fantray Fan tray LED
  interface Interface LED
  module Module LED
  powersupply Power supply LED
  switch#
  ```
show environment power

The show environment power command displays the status of all power supplies in the switch.

Command Mode
EXEC

Command Syntax
show environment power [INFO_LEVEL]

Parameters
- **INFO_LEVEL** specifies level of detail that the command displays. Options include:
  - <no parameter> displays current and power levels for each supply.
  - detail also includes status codes that can report error conditions.

Example
- This command displays the status of power supplies on the switch.

```
switch>show environment power
Power Supply Model Capacity Input Current Current Output Power Status
------- -------------------- --------- -------- -------- -------- --------------
1       PWR-760AC         760W    0.81A   11.00A   132.8W Ok
2       PWR-760AC         760W    0.00A    0.00A     0.0W AC Loss
switch>
```
**show environment temperature**

The show environment temperature command displays the operating temperature of all sensors on the switch.

**Command Mode**

EXEC

**Command Syntax**

`show environment temperature [MODULE_NAME][INFO_LEVEL]`

**Parameters**

- **MODULE_NAME** Specifies modules for which data is displayed. This parameter is only available on modular switches. Options include:
  - `<no parameter>` All modules (identical to all option).
  - `linecard line_num` Line card module. Number range varies with switch model.
  - `supervisor super_num` Supervisor module. Number range varies with switch model.
  - `mod_num` Supervisor (1 to 2) or line card (3 to 18) module.
  - `all` All modules.
- **INFO_LEVEL** specifies level of detail that the command displays. Options include:
  - `<no parameter>` displays table that lists the temperature and thresholds of each sensor.
  - `detail` displays data block for each sensor listing the current temperature and historic data.

**Display Values**

- **System temperature status** is the first line that the command displays. Values report the following:
  - `Ok` All sensors report temperatures below the alert threshold.
  - `Overheating` At least one sensor reports a temperature above its alert threshold.
  - `Critical` At least one sensor reports a temperature above its critical threshold.
  - `Unknown` The switch is initializing.
  - `Sensor Failed` At least one sensor is not functioning.

**Examples**

- This command displays a table that lists the temperature measured by each sensor.

```
switch>show environment temperature
System temperature status is: Ok

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Description</th>
<th>Temperature</th>
<th>Alert Threshold</th>
<th>Critical Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Front-panel temp sensor</td>
<td>30.750C</td>
<td>65C</td>
<td>75C</td>
</tr>
<tr>
<td>2</td>
<td>Fan controller 1 sensor</td>
<td>32.000C</td>
<td>75C</td>
<td>85C</td>
</tr>
<tr>
<td>3</td>
<td>Fan controller 2 sensor</td>
<td>38.000C</td>
<td>75C</td>
<td>85C</td>
</tr>
<tr>
<td>4</td>
<td>Switch chip 1 sensor</td>
<td>50.000C</td>
<td>105C</td>
<td>115C</td>
</tr>
<tr>
<td>5</td>
<td>VRM 1 temp sensor</td>
<td>60.000C</td>
<td>105C</td>
<td>110C</td>
</tr>
</tbody>
</table>
```

switch>
This command lists the temperature detected by each sensor, and includes the number of previous alerts, the time of the last alert, and the time of the last temperature change.

```bash
switch> show environment temperature detail
TempSensor1 - Front-panel temp sensor
<table>
<thead>
<tr>
<th>Current State</th>
<th>Count</th>
<th>Last Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td></td>
<td>30.750C</td>
</tr>
<tr>
<td>Max Temperature</td>
<td></td>
<td>35.000C</td>
</tr>
<tr>
<td>Alert</td>
<td></td>
<td>False</td>
</tr>
</tbody>
</table>

TempSensor2 - Fan controller 1 sensor
<table>
<thead>
<tr>
<th>Current State</th>
<th>Count</th>
<th>Last Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td></td>
<td>32.000C</td>
</tr>
<tr>
<td>Max Temperature</td>
<td></td>
<td>36.000C</td>
</tr>
<tr>
<td>Alert</td>
<td></td>
<td>False</td>
</tr>
</tbody>
</table>

TempSensor3 - Fan controller 2 sensor
<table>
<thead>
<tr>
<th>Current State</th>
<th>Count</th>
<th>Last Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td></td>
<td>38.000C</td>
</tr>
<tr>
<td>Max Temperature</td>
<td></td>
<td>41.000C</td>
</tr>
<tr>
<td>Alert</td>
<td></td>
<td>False</td>
</tr>
</tbody>
</table>

TempSensor4 - Switch chip 1 sensor
<table>
<thead>
<tr>
<th>Current State</th>
<th>Count</th>
<th>Last Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td></td>
<td>51.000C</td>
</tr>
<tr>
<td>Max Temperature</td>
<td></td>
<td>53.000C</td>
</tr>
<tr>
<td>Alert</td>
<td></td>
<td>False</td>
</tr>
</tbody>
</table>

TempSensor5 - VRM 1 temp sensor
<table>
<thead>
<tr>
<th>Current State</th>
<th>Count</th>
<th>Last Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td></td>
<td>60.000C</td>
</tr>
<tr>
<td>Max Temperature</td>
<td></td>
<td>62.000C</td>
</tr>
<tr>
<td>Alert</td>
<td></td>
<td>False</td>
</tr>
</tbody>
</table>
```

switch>
show locator-led

The `show locator-led` command displays the status of locator LEDs enabled on the switch.

**Command Mode**

  Privileged EXEC

**Command Syntax**

  `show locator-led`

**Example**

  - This command displays all locator LEDs enabled on the switch.
    
    `switch#show locator-led`
    
    There are no locator LED enabled
    
    `switch#`
show system environment all

The `show system environment all` command displays temperature, cooling, and power supply status.

**Command Mode**
EXEC

**Command Syntax**
`show system environment all`

**Examples**
- This command displays the switch’s temperature, cooling, and power supply status

```plaintext
switch>show system environment all
System temperature status is: Ok

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Description</th>
<th>Temperature</th>
<th>Alert Threshold</th>
<th>Critical Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Front-panel temp sensor</td>
<td>31.000C</td>
<td>65C</td>
<td>75C</td>
</tr>
<tr>
<td>2</td>
<td>Fan controller 1 sensor</td>
<td>32.000C</td>
<td>75C</td>
<td>85C</td>
</tr>
<tr>
<td>3</td>
<td>Fan controller 2 sensor</td>
<td>38.000C</td>
<td>75C</td>
<td>85C</td>
</tr>
<tr>
<td>4</td>
<td>Switch chip 1 sensor</td>
<td>50.000C</td>
<td>105C</td>
<td>115C</td>
</tr>
<tr>
<td>5</td>
<td>VRM 1 temp sensor</td>
<td>60.000C</td>
<td>105C</td>
<td>110C</td>
</tr>
</tbody>
</table>

System cooling status is: Ok
Ambient temperature: 31C
Airflow: port-side-intake

<table>
<thead>
<tr>
<th>Fan Tray</th>
<th>Status</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ok</td>
<td>52%</td>
</tr>
<tr>
<td>2</td>
<td>Ok</td>
<td>52%</td>
</tr>
<tr>
<td>3</td>
<td>Ok</td>
<td>52%</td>
</tr>
<tr>
<td>4</td>
<td>Ok</td>
<td>52%</td>
</tr>
<tr>
<td>5</td>
<td>Ok</td>
<td>52%</td>
</tr>
</tbody>
</table>

Power

<table>
<thead>
<tr>
<th>Supply</th>
<th>Model</th>
<th>Capacity</th>
<th>Input Current</th>
<th>Output Current</th>
<th>Output Power</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PWR-760AC</td>
<td>760W</td>
<td>0.81A</td>
<td>11.00A</td>
<td>132.6W</td>
<td>Ok</td>
</tr>
<tr>
<td>2</td>
<td>PWR-760AC</td>
<td>760W</td>
<td>0.00A</td>
<td>0.00A</td>
<td>0.0W</td>
<td>AC Loss</td>
</tr>
</tbody>
</table>
```

switch>
```
show system environment cooling

The **show system environment cooling** command displays fan status, air flow direction, and ambient temperature on the switch.

**Command Mode**

EXEC

**Command Syntax**

```
show system environment cooling [INFO_LEVEL]
```

**Parameters**

- **INFO_LEVEL** specifies level of detail that the command displays. Options include:
  - `<no parameter>` displays the fan status, air flow direction, and ambient switch temperature.
  - `detail` also displays actual and configured fan speed of each fan.

**Display Values**

- **System cooling status**
  - **Ok** no more than one fan has failed or is not inserted.
  - **Insufficient fans** more than one fan has failed or is not inserted. This status is also displayed if fans with different airflow directions are installed. The switch shuts down if the error is not resolved.

- **Ambient temperature** temperature of the surrounding area.

- **Airflow** indicates the direction of the installed fans:
  - **port-side-intake** all fans flow air from the front (port side) to the rear of the chassis.
  - **port-side-exhaust** all fans flow air from the rear to the front (port side) of the chassis.
  - **incompatible fans** fans with different airflow directions are inserted.
  - **Unknown** The switch is initializing.

- **Fan Tray Status** table displays the status and operating speed of each fan. Status values indicate the following conditions:
  - **OK** The fan is operating normally.
  - **Failed** The fan is not operating normally.
  - **Unknown** The system is initializing.
  - **Not Inserted** The system is unable to detect the specified fan.
  - **Unsupported** The system detects a fan that the current software version does not support.
Example

- This command displays the fan status, air flow direction, and ambient switch temperature.

```
switch>show system environment cooling
System cooling status is: Ok
Ambient temperature: 30C
Airflow: port-side-intake

<table>
<thead>
<tr>
<th>Fan Tray</th>
<th>Status</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ok</td>
<td>51%</td>
</tr>
<tr>
<td>2</td>
<td>Ok</td>
<td>51%</td>
</tr>
<tr>
<td>3</td>
<td>Ok</td>
<td>51%</td>
</tr>
<tr>
<td>4</td>
<td>Ok</td>
<td>51%</td>
</tr>
<tr>
<td>5</td>
<td>Ok</td>
<td>51%</td>
</tr>
</tbody>
</table>

switch>
```