Replace Chassis Components

Replace Fan Modules for Cisco 8100 Series Routers

The fan module is designed to be removed and replaced while the system is operating without presenting an electrical hazard or damage to the system. Please keep the replacement fan modules ready prior to attempting this task.

The router supports the following types of fan modules:

- port-side intake airflow - FAN-2RU-PI-V2
- port-side exhaust airflow - FAN-2RU-PE-V2
- port-side intake airflow - FAN-1RU-PI-V2
- port-side exhaust airflow - FAN-1RU-PE-V2

Note For Cisco 8111-32EH-O router, port-side exhaust configuration is not supported.

Note The airflow direction must be the same for all power supply and fan modules in the chassis. Depending upon the required airflow direction, you can change the fan type. You must then also change the power supply.

Figure 1: Airflow Direction for Cisco 8102-64H-O Router

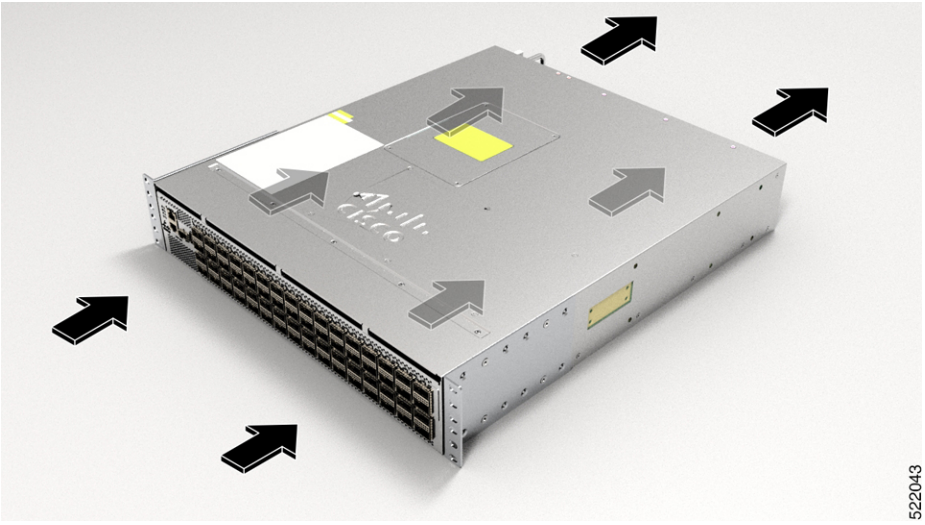


Figure 2: Airflow Direction for Cisco 8101-32H-O Router

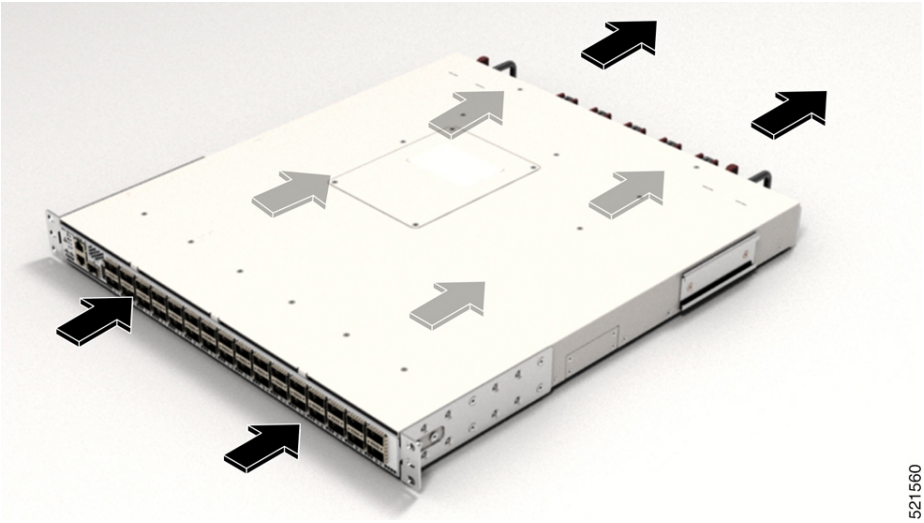
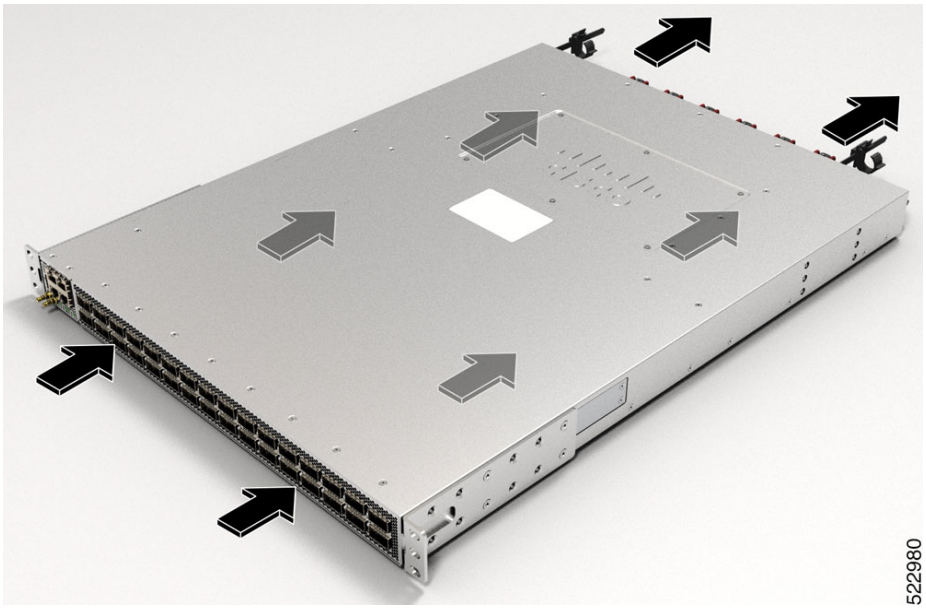


Figure 3: Airflow Direction for Cisco 8111-32EH-O Router



Step 1 To remove a fan module, follow these steps:

a) Press two latches on the fan module and grasp the handle of fan module.

Figure 4: Cisco 8102-64H-O Router — Remove Fans

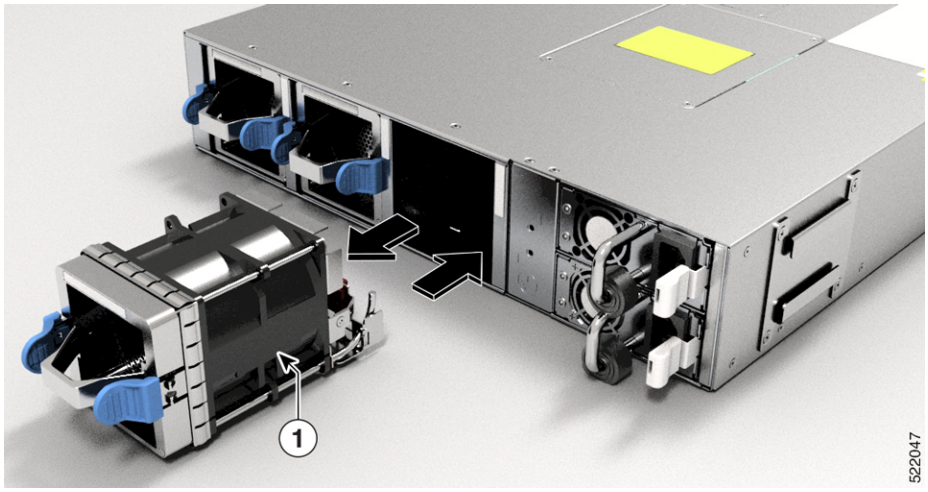


Figure 5: Cisco 8101-32H-O Router — Remove Fans

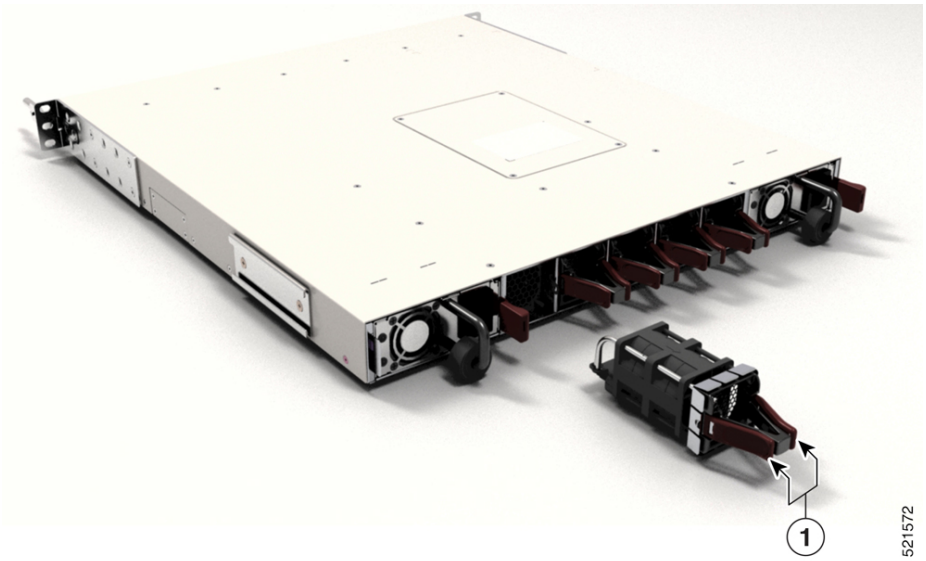
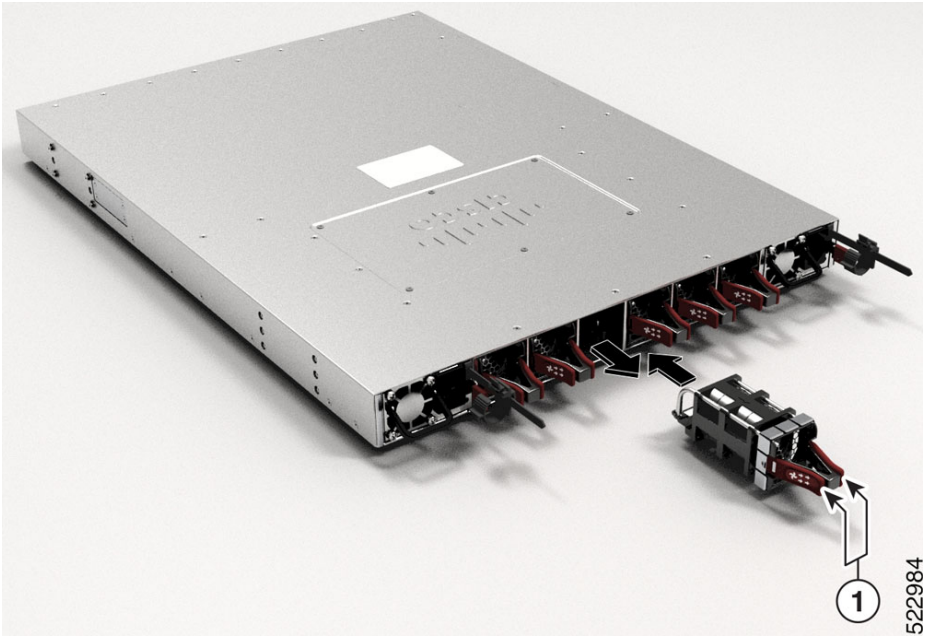


Figure 6: Cisco 8111-32EH-O Router — Remove Fans



1	Latched fan module

b) As you simultaneously press the latches pull the fan module fully out of the chassis.

Step 2 To install a fan module, follow these steps:

a) Hold the fan module with the LED at the top.

b) Align the fan module to the open fan tray slot in the chassis, and press the module all the way into the slot until the left and right latches click and are locked on the chassis.

Note If the fan module does not go all the way into the slot, do not force it. Remove the fan module and verify that it is the correct type for your router and in the correct orientation. To verify the status of fans and the speed, use the **show environment fan** command.

c) If the chassis is powered on, listen for the sound of the fans in operation. You should immediately hear them in operation. If you do not hear them, ensure that the fan module is inserted completely in the chassis.

Note During the fan module replacement, the other fans adjust their speed to allow for proper initialization of the new module. When you insert a new fan module, the fans may run at lower or higher speeds for a few minutes.

d) Verify that the fan module LED turns green. If the LED is not green, one or more fans are faulty. If this situation occurs, contact your customer service representative for replacement parts.

Replace Power Supply

Note We recommend that you occupy both the power supply slots of the fixed port routers with power supplies. In case a power module fails, it is recommended to retain the failed power module in its slot until it is replaced with a new power module. This recommendation ensures that the system airflow is not impacted adversely, which may then result in the overheating of the router and its components.

When there are two PSUs in the router, use the following steps to replace the PSUs (AC to DC or vice-versa (or) 2KW to 3KW or vice-versa) to a different type. Routers can operate normally only with the same type of PSU in both the power slots. During replacement of PSU from one type to another, the router exhibits unexpected behaviour and the Cisco IOS XR software raises the PID mismatch alarm due to the presence of different types of PSUs. You must therefore replace the PSUs in both slots with the same type.

Be sure to power down the fixed configuration PDU (power distribution unit) before removing it from the chassis.

Step 1 Ensure that both the PSUs are powered on.

Step 2 If the power supply is connected to an AC or DC circuit, shut off the circuit at the circuit breaker or PDU.

Step 3 Disconnect the power cable of the PSU that must be replaced.

Note To remove the Saf-D-Grid power cord (AC or HVDC) or the low voltage DC power cord from the power supply, press the latch before pulling the power cord out.

Step 4 Press the tab inward to unlatch the PSU, and pull the handle to remove the PSU.

Step 5 Insert the new PSU.

Note If the PSU does not go all the way into the slot, do not force it. Remove the PSU and verify that it is the correct type for your router and in the correct orientation.

Step 6 Connect the PSU cable. If the power supply is connected to an AC or DC circuit, turn on the circuit at the circuit breaker or PDU.source. Wait till the PSU LED color turns green. After replacing the PSU, verify the power using the **show environment power** command.

Step 7 Repeat steps 1 through 6 to replace the PSU in the second slot.

Figure 7: Cisco 8102-64H-O Router — Remove Power Supply

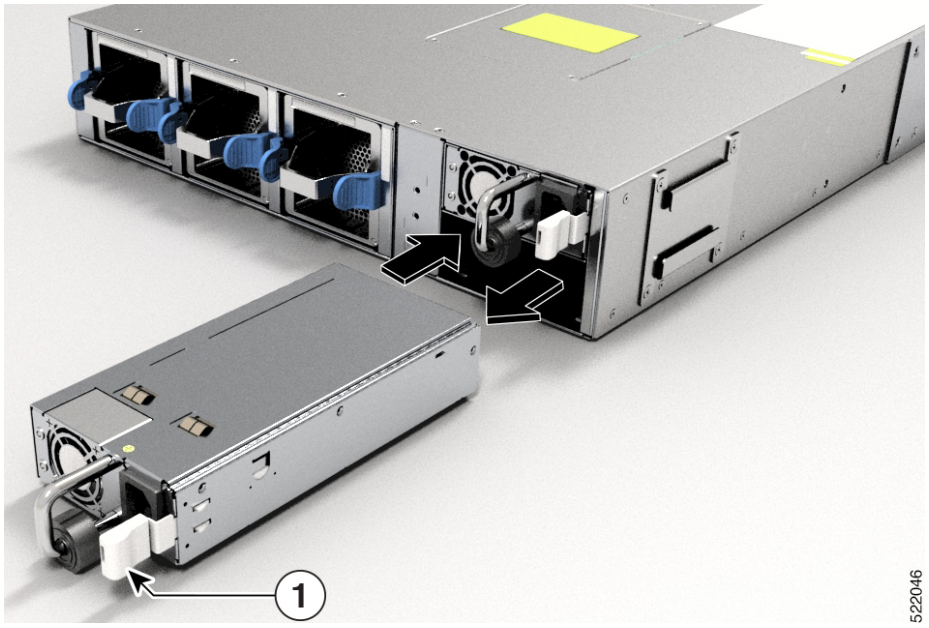


Figure 8: Cisco 8101-32H-O Router — Remove Power Supply

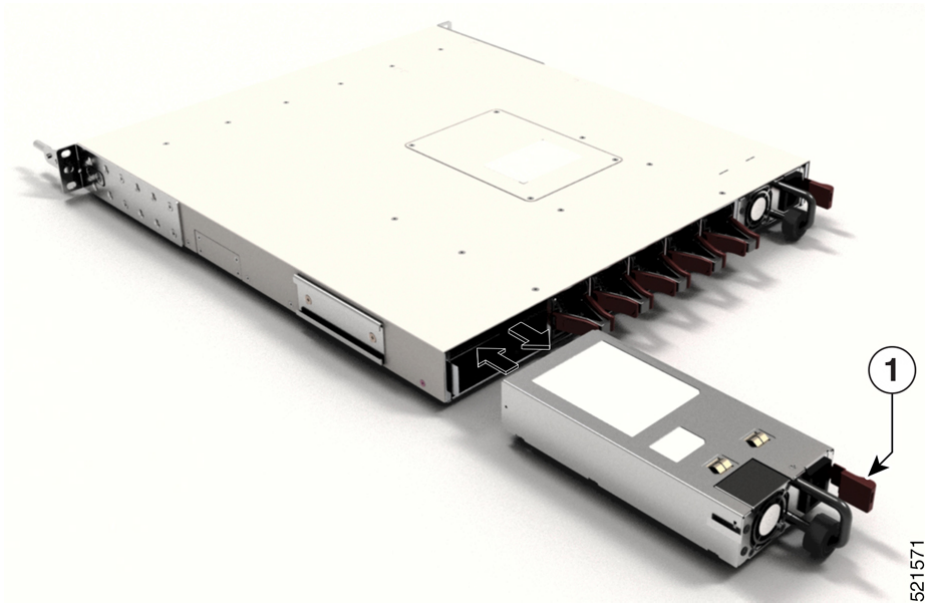
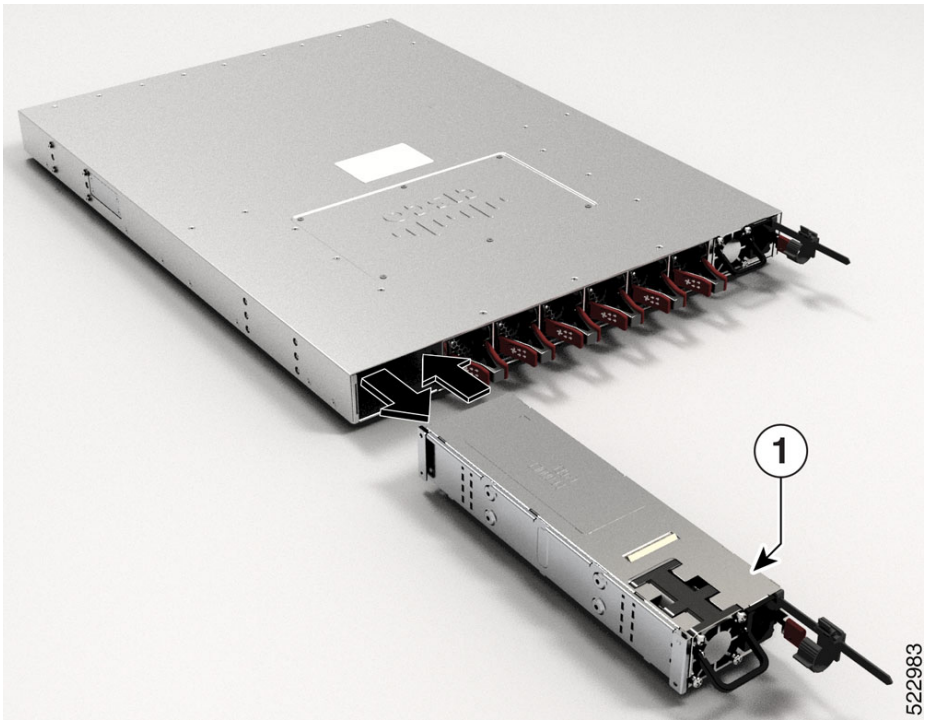


Figure 9: Cisco 8111-32EH-O Router — Remove Power Supply



1	Remove power supply