Configuring System Port Profiles

This chapter contains the following sections:

Information About System Port Profiles

System port profiles allow the Cisco Nexus 1000V VEM to place ports in Forwarding port mode even before the communication is established between Cisco Nexus 1000V VSM and VEM. To allow a port to start forwarding traffic as soon as it comes, the network segment that the port uses must also be defined as a **system network segment**.

The following ports are typically defined with the system port profile and the system network segment:

- Host Mgmt virtual ethernet port and uplink carrying management traffic.
- Storage virtual ethernet port and uplink carrying storage traffic.
- VSM virtual Ethernet ports on VEM.

For a summary of the default settings used with port profiles, see Default Settings.

Guidelines and Limitations for System Port Profiles

- For maximum system port profiles per host and logical switch, see the Port Profile Configuration Limits.

Creating a System Port Profile

A system port profile must be of the vEthernet type because it is used for physical ports.

Before You Begin

- You are logged in to the CLI in EXEC mode.
- You have configured the following:
  - Profile admin status is active (no shutdown).

Procedure

	Command or Action	Purpose
Step 1	switch# **configure terminal**	Enters global configuration mode.
Step 2	switch(config)# **port-profile type vethernet** *name*	Enters port profile configuration mode for the named port profile. If the port profile does not already exist, it is created using the following characteristics: • *name*—The port profile name can be up to 80 characters and must be unique for each port profile on the Cisco Nexus 1000V. • **type**—The port profile type is vEthernet.
Step 3	switch(config-port-prof)# **description** *profile-description*	(Optional) Adds a description of up to 80 ASCII characters in length to the port profile. This description is automatically pushed to Microsoft SCVMM server.
Step 4	switch(config-port-prof)# **state enabled**	Enables the state.
Step 5	switch(config-port-prof)# **no shutdown**	Applies no shutdown status.
Step 6	switch(config-port-prof)# **system port-profile**	Configures the system port profile.
Step 7	switch(config-port-prof)# **publish port-profile**	Publishes the port profile on the Microsoft SCVMM.
Step 8	switch(config-port-prof)# **show port-profile** [**brief** | **expand-interface** | **usage**] [*name profile-name*]	(Optional) Displays the configuration for verification.
Step 9	switch(config-port-prof)# **copy running-config startup-config**	(Optional) Saves the change persistently through reboots and restarts by copying the running configuration to the startup configuration.

This example shows how to create a system port profile:

```
switch# configure terminal
switch(config)# port-profile type vethernet AccessProf
switch(config-port-prof)# no shutdown
switch(config-port-prof)# state enabled
switch(config-port-prof)# system port-profile
```

```
switch(config-port-prof)# publish port-profile
switch(config-port-prof)# end
switch#
switch# show port-profile name AccessProf

port-profile AccessProf
 type: Vethernet
 description:
 status: enabled
 max-ports: 32
 min-ports: 1
 inherit:
 config attributes:
  no shutdown
 evaluated config attributes:
  no shutdown
 assigned interfaces:
 port-group: AccessProf
 system vlans:
 capability l3control: no
 capability iscsi-multipath: no
 capability vxlan: no
 capability l3-vn-service: no
 port-profile role: none
 port-binding: static

switch(config-port-prof)#
```

Feature History for System Port Profiles

Feature Name	Release	Feature Information
System Port Profiles	5.2(1)SM1(5.1)	Configure the system port profiles.