

Revised: September 29, 2025

SDM Templates

Feature History for SDM Templates

This table provides release and platform support information for the features explained in this module.

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature Name and Description	Supported Platform
Cisco IOS XE 17.18.1	SDM Templates: Switch Device Manager (SDM) templates optimize system resources for specific features depending on the network role of the switch	Cisco C9350 Series Smart Switches Cisco C9610 Series Smart Switches

SDM Templates

Switch Device Manager (SDM) templates optimize system resources for specific features depending on the network role of the switch. Based on the configured template, resources such as MAC addresses, Access Control Lists (ACLs), and multicast groups maximize performance for specific features.

Supported SDM Templates

The Cisco C9350 Series Smart Switches supports the Access template. Access template optimizes system resources for ACLs. This is the only supported default template and no customizable templates are supported.

The Cisco C9610 Series Smart Switches supports the Core template. Core template optimizes system resources for unicast routing and forwarding. Each supervisor models of the Cisco C9610 Series Smart Switches, Cisco C9610 series Supervisor 3 Module (C9610-SUP-3) and Cisco C9610 series Supervisor 3XL Module (C9610-SUP-3XL), supports a unique core template. This is the only supported default template and no customizable templates are supported.

Configure an SDM Template

In Cisco IOS XE 17.18.1, the default SDM template cannot be changed.

View information about the configured SDM templates

The following is a sample output of the **show sdm prefer core** on the Cisco C9610 series Supervisor 3 Module (C9610-SUP-3) model.

```
Device# show sdm prefer core
Showing SDM Template Info
```

```
This is the Core template.
```

Feature-Name	Reserved-Scale
Unicast MAC addresses	131072
FIB Host Route	131072
OGACL	2048
SGACL Hosts	24576
SGACL Cells	24576

```

Max MPLS Label                65536
L3 Multicast entries           32768
L2 Multicast entries           16384
Number of VLANs                4094  (**)
Overflow Unicast MAC addresses  512  (**)
Overflow L2 Multicast entries   512  (**)
Overflow L3 Multicast entries   512  (**)
Ipv4/Ipv6 shared unicast routes 131072 (**)
Overflow shared unicast routes 1000000 (**)
STP Instances                   4094  (**)
Tunnels                         1024  (**)
VRF                             3839  (**)
Max MPLS VPN Routes Per-Vrf label mode 1000000 (**)
Max MPLS VPN Routes Per-Prefix label mode 65536 (**)
Max L3 adjacency                131072 (**)
Max L3 Interface                12288  (**)
Max MPLS TE TUNNEL              4096  (**)
Security ACL IN                 21504
Security ACL OUT                21504
QOS ACL IN                      5120
QOS ACL OUT                     5120
PBRNAT ACL IN                   8192
PBRNAT ACL OUT                  8192
MIRROR ACL IN                   1024
MIRROR ACL OUT                  1024
FNF ACL IN                      2048
FNF ACL OUT                     2048
FNF FLOW IN                     32768
FNF FLOW OUT                    32768

```

(**) - SDM library is referred to only obtain scale

```

Resource scale information
EM                1280000
HCAM              131072
OTHER             0

```

Verify SDM templates

To display information about the SDM templates, use one of the privileged EXEC commands listed in this table.

Command	Description	Supported
show sdm prefer	Displays the currently active Switch Database Management (SDM) template	Cisco C9350 Series Smart Switches Cisco C9610 Series Smart Switches
show platform software fed active sdm resource	Display detailed information about the hardware resource utilization as managed by the Forwarding Engine Driver (FED) on the active supervisor. This command provides insights into how the currently active Switch Database Management (SDM) template is impacting the allocation and consumption of Ternary Content Addressable Memory (TCAM) and other hardware forwarding resources.	Cisco C9610 Series Smart Switches
show ip route	Displays the IP routing table.	Cisco C9350 Series Smart Switches Cisco C9610 Series Smart Switches

Command	Description	Supported
show mac-address table	Displays the contents of the MAC address table	Cisco C9350 Series Smart Switches Cisco C9610 Series Smart Switches