



CHAPTER 1

Configuring Session Manager

This chapter describes how to configure the Session Manager features in Cisco NX-OS.

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Information About Session Manager

Session Manager allows you to implement your configuration changes in batch mode. Session Manager works in the following phases:

- **Configuration session**—Creates a list of commands that you want to implement in session manager mode.
- **Validation**—Provides a basic semantic check on your configuration. Cisco NX-OS returns an error if the semantic check fails on any part of the configuration.
- **Verification**—Verifies the configuration as a whole, based on the existing hardware and software configuration and resources. Cisco NX-OS returns an error if the configuration does not pass this verification phase.
- **Commit**—Cisco NX-OS verifies the complete configuration and implements the changes atomically to the device. If a failure occurs, Cisco NX-OS reverts to the original configuration.
- **Abort**—Discards the configuration changes before implementation.

You can optionally end a configuration session without committing the changes. You can also save a configuration session.

Configuration Guidelines and Limitations

Session Manager has the following configuration guidelines and limitations:

- Session Manager supports only the ACL feature.
- You can create up to 32 configuration sessions.
- You can configure a maximum of 20,000 commands across all sessions.

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Configuring Session Manager

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Creating a Session

You can create up to 32 configuration sessions. To create a configuration session, perform this task:

	Command	Purpose
Step 1	switch# configure session <i>name</i>	Creates a configuration session and enters session configuration mode. The name can be any alphanumeric string.
Step 2	switch(config-s)# show configuration session [<i>name</i>]	(Optional) Displays the contents of the session.
Step 3	switch(config-s)# save <i>location</i>	(Optional) Saves the session to a file. The location can be in bootflash or volatile.

Configuring ACLs in a Session

You can configure ACLs within a configuration session. To configure ACLs within a configuration session, perform this task:

	Command	Purpose
Step 1	switch# configure session <i>name</i>	Creates a configuration session and enters session configuration mode. The name can be any alphanumeric string.
Step 2	switch(config-s)# ip access-list <i>name</i>	Creates an ACL.
Step 3	switch(config-s-acl)# permit <i>protocol source destination</i>	(Optional) Adds a permit statement to the ACL.
Step 4	switch(config-s-acl)# interface <i>interface-type number</i>	Enters interface configuration mode.
Step 5	switch(config-s-if)# ip port access-group <i>name in</i>	Adds a port access group to the interface.
Step 6	switch# show configuration session [<i>name</i>]	(Optional) Displays the contents of the session.

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Verifying a Session

To verify a session, use the following command in session mode:

Command	Purpose
switch(config-s)# verify [verbose]	Verifies the commands in the configuration session.

Committing a Session

To commit a session, use the following command in session mode:

Command	Purpose
switch(config-s)# commit [verbose]	Commits the commands in the configuration session.

Saving a Session

To save a session, use the following command in session mode:

Command	Purpose
switch(config-s)# save <i>location</i>	(Optional) Saves the session to a file. The location can be in bootflash or volatile.

Discarding a Session

To discard a session, use the following command in session mode:

Command	Purpose
switch(config-s)# abort	Discards the configuration session without applying the commands.

Session Manager Example Configuration

This example shows how to create a configuration session for ACLs:

```
switch# configure session name test2
switch(config-s)# ip access-list acl2
switch(config-s-acl)# permit tcp any any
switch(config-s-acl)# exit
switch(config-s)# interface Ethernet 1/4
switch(config-s-ip)# ip port access-group acl2 in
switch(config-s-ip)# exit
switch(config-s)# verify
switch(config-s)# exit
switch# show configuration session test2
```

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Verifying Session Manager Configuration

To verify Session Manager configuration information, use the following commands:

Command	Purpose
switch# show configuration session [<i>name</i>]	Displays the contents of the configuration session.
switch# show configuration session status [<i>name</i>]	Displays the status of the configuration session.
switch# show configuration session summary	Displays a summary of all the configuration sessions.