Command Mode EXEC Privilege

Command History

Version 8.3.3.1	Introduced on the S60.
Version 7.7.1.0	Introduced on S-Series

Related Commands

show environment (S-Series)	View S-Series system component status (for example, temperature, voltage).

Buffer Tuning Commands

The buffer tuning commands are:

- buffer (Buffer Profile)
- buffer (Configuration)
- buffer-profile (Configuration)
- buffer-profile (Interface)
- show buffer-profile
- show buffer-profile interface

⚠ **Warning:** Altering the buffer allocations is a sensitive operation. Do not use any buffer tuning commands without first contacting the Dell Force10 Technical Assistance Center.

buffer (Buffer Profile)

C S Allocate an amount of dedicated buffer space, dynamic buffer space, or packet pointers to queues 0 to 3.

Syntax **buffer** [**dedicated** | **dynamic** | **packets-pointers**] **queue0** *number* **queue1** *number* **queue2** *number* **queue3** *number*

Parameters

dedicated	Enter this keyword to configure the amount of dedicated buffer space per queue.
dynamic	Enter this keyword to configure the amount of dynamic buffer space per Field Processor.
packets-pointers	Enter this keyword to configure the number of packet pointers per queue.
queue0 *number*	Enter this keyword to allocate an amount of buffer space or packet pointers to Queue 0. Dedicated Buffer Range: 0-2013 Dynamic Buffer Range: FP: 0-2013 CSF: 0-131200 (in multiples of 80) Packet Pointer Range: 0-2047

queue1 *number*	Enter this keyword to allocate an amount of buffer space or packet pointers to Queue 1. Dedicated Buffer Range: 0-2013 Dynamic Buffer Range: FP: 0-2013 CSF: 0-131200 (in multiples of 80) Packet Pointer Range: 0-2047
queue2 *number*	Enter this keyword to allocate an amount of buffer space or packet pointers to Queue 2. Dedicated Buffer Range: 0-2013 Dynamic Buffer Range: FP: 0-2013 CSF: 0-131200 (in multiples of 80) Packet Pointer Range: 0-2047
queue3 *number*	Enter this keyword to allocate an amount of buffer space or packet pointers to Queue 3. Dedicated Buffer Range: 0-2013 Dynamic Buffer Range: FP: 0-2013 CSF: 0-131200 (in multiples of 80) Packet Pointer Range: 0-2047

Defaults None

Command Mode BUFFER PROFILE

Command History

Version 7.7.1.0	Introduced on S-Series
Version 7.6.1.0	Introduced on C-Series

Related Commands

buffer-profile (Configuration)	Create a buffer profile that can be applied to an interface.

buffer (Configuration)

C S

Apply a buffer profile to all Field or Switch Fabric processors in a port-pipe.

buffer [**csf** | **fp-uplink**] **linecard** *slot* **port-set** *port-pipe* **buffer-policy** *buffer-profile*

Parameters

csf	Enter this keyword to apply a buffer profile to all Switch Fabric processors in a port-pipe.
fp-uplink	Enter this keyword to apply a buffer profile to all Field Processors in a a port-pipe.
linecard *slot*	Enter the keyword **linecard** followed by the line card slot number.
port-set *port-pipe*	Enter the keyword **port-set** followed by the port-pipe number. Range: 0-3 on C-Series, 0-1 on S-Series
buffer-policy *buffer-profile*	Enter the keyword **buffer-policy** followed by the name of a buffer profile you created.

None

Command Mode BUFFER PROFILE

Usage Information If you attempt to apply a buffer profile to a non-existent port-pipe, FTOS displays the following message. However, the configuration still appears in the running-config.

%DIFFSERV-2-DSA_BUFF_CARVING_INVALID_PORT_SET: Invalid FP port-set 2 for linecard 2. Valid range of port-set is <0-1>

Usage Information When you remove a buffer-profile using the command **no buffer-profile** [**fp** | **csf**] from CONFIGURATION mode, the buffer-profile name still appears in the output of **show buffer-profile** [**detail** | **summary**]. After a line card reset, the buffer profile correctly returns to the default values, but the profile name remains. Remove it from the show **buffer-profile** [**detail** | **summary**] command output by entering **no buffer** [**fp-uplink** | **csf**] **linecard port-set buffer-policy** from CONFIGURATION mode and **no buffer-policy** from INTERFACE mode.

Command History

Version 7.7.1.0	Introduced on S-Series
Version 7.6.1.0	Introduced on C-Series

Related Commands

buffer-profile (Configuration)	Create a buffer profile that can be applied to an interface.

buffer-profile (Configuration)

C S

Create a buffer profile that can be applied to an interface.

Syntax **buffer-profile** {{**fp** | **csf**} *profile-name* | **global** {**1Q**|**4Q**}

Parameters

fp	Enter this keyword to create a buffer profile for the Field Processor.
csf	Enter this keyword to create a buffer profile for the Switch Fabric Processor.
profile-name	Create a name for the buffer profile.
global	Apply one of two pre-defined buffer profiles to all of the port-pipes in the system.
1Q	Enter this keyword to choose a pre-defined buffer profile for single queue (i.e non-QoS) applications.
4Q	Enter this keyword to choose a pre-defined buffer profile for four queue (i.e QoS) applications.

Defaults global 4Q

Command Mode CONFIGURATION

Command History

Version 7.8.1.0	Added **global** keyword.
Version 7.7.1.0	Introduced on S-Series
Version 7.6.1.0	Introduced on C-Series

Related Commands

buffer (Buffer Profile)	Allocate an amount of dedicated buffer space, dynamic buffer space, or packet pointers to queues 0 to 3.

Usage Information

The **buffer-profile global** command fails if you have already applied a custom buffer-profile on an interface. Similarly, when **buffer-profile global** is configured, you cannot not apply buffer-profile on any interface.

If the default buffer-profile (4Q) is active, FTOS displays an error message instructing you to remove the default configuration using the command no **buffer-profile global**.

You must reload the system for the global buffer-profile to take effect.

buffer-profile (Interface)

C S

Apply a buffer profile to an interface.

Syntax

buffer-profile *profile-name*

Parameters

profile-name	Enter the name of the buffer profile you want to apply to the interface.

Defaults

None

Command Mode

INTERFACE

Command History

Version 7.7.1.0	Introduced on S-Series
Version 7.6.1.0	Introduced on C-Series

Related Commands

buffer-profile (Configuration)	Create a buffer profile that can be applied to an interface.

show buffer-profile

C S

Display the buffer profile that is applied to an interface.

Syntax

show buffer-profile {**detail** | **summary**} {**csf | fp-uplink**}

Parameters

detail	Display the buffer allocations of the applied buffer profiles.
summary	Display the buffer-profiles that are applied to line card port-pipes in the system.
csf	Display the Switch Fabric Processor buffer profiles that you have applied to line card port-pipes in the system.
fp-uplink	Display the Field Processor buffer profiles that you have applied to line card port-pipes in the system.

Defaults

None

Command Mode

INTERFACE

Command History

Version 7.7.1.0	Introduced on S-Series
Version 7.6.1.0	Introduced on C-Series

Example

Figure 46-1. show buffer-profile Command Example

```
Force10#show buffer-profile summary fp-uplink
Linecard             Port-set             Buffer-profile
0                    0                    test1
4                    0                    test2
Force10#
```

Related Commands

buffer-profile (Configuration)	Create a buffer profile that can be applied to an interface.

show buffer-profile interface

C S

Display the buffer profile that is applied to an interface.

Syntax

show buffer-profile {**detail** | **summary**} **interface** *interface slot/port*

Parameters

detail	Display the buffer allocations of a buffer profile.
summary	Display the Field Processors and Switch Fabric Processors that are applied to line card port-pipes in the system.
interface *interface*	Enter the keyword interface followed by the interface type, either **gigabitethernet** or **tengigabitethernet**.
slot/port	Enter the slot and port number of the interface.

Defaults

None

Command Mode

INTERFACE

Command History

Version 7.7.1.0	Introduced on S-Series
Version 7.6.1.0	Introduced on C-Series

Example

Figure 46-2. show buffer-profile interface Command Example

```
Force10#show buffer-profile detail csf linecard 4 port-set 0
Linecard 4 Port-set 0
Buffer-profile test
Queue#               Dedicated Buffer     Buffer Packets
                     (Bytes)
0                    36960                718
1                    18560                358
2                    18560                358
3                    18560                358
4                    9600                 64
5                    9600                 64
6                    9600                 64
7                    9600                 63
Force10#
```

Related Commands

buffer-profile (Configuration)	Create a buffer profile that can be applied to an interface.