Configuring Statistics-Related Policies

This chapter includes the following sections:

Configuring Statistics Collection Policies

Statistics Collection Policy

A statistics collection policy defines how frequently statistics are to be collected (collection interval) and how frequently the statistics are to be reported (reporting interval). Reporting intervals are longer than collection intervals so that multiple statistical data points can be collected during the reporting interval, which provides Cisco UCS Manager with sufficient data to calculate and report minimum, maximum, and average values.

For NIC statistics, Cisco UCS Manager displays the average, minimum, and maximum of the change since the last collection of statistics. If the values are 0, there has been no change since the last collection.

Statistics can be collected and reported for the following five functional areas of the Cisco UCS system:

- Adapter—statistics related to the adapters
- Chassis—statistics related to the chassis
- Host—this policy is a placeholder for future support
- Port—statistics related to the ports, including server ports, uplink Ethernet ports, and uplink Fibre Channel ports
- Server—statistics related to servers

Note Cisco UCS Manager has one default statistics collection policy for each of the five functional areas. You cannot create additional statistics collection policies and you cannot delete the existing default policies. You can only modify the default policies.

Configuring a Statistics Collection Policy

SUMMARY STEPS

1. UCS-A# **scope monitoring**
2. UCS-A/monitoring # **scope stats-collection-policy** {**adapter** | **chassis** | **host** | **port** | **server**}
3. UCS-A /monitoring/stats-collection-policy # **set collection-interval** {**1minute** | **2minutes** | **30seconds** | **5minutes**}
4. UCS-A /monitoring/stats-collection-policy # **set reporting-interval** {**15minutes** | **30minutes** | **60minutes**}
5. UCS-A /monitoring/stats-collection-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope monitoring**	Enters monitoring mode.
Step 2	UCS-A/monitoring # **scope stats-collection-policy** {**adapter**	**chassis**	**host**	**port**	**server**}	Enters statistics collection policy mode for the specified policy type.
Step 3	UCS-A /monitoring/stats-collection-policy # **set collection-interval** {**1minute**	**2minutes**	**30seconds**	**5minutes**}	Specifies the interval at which statistics are collected from the system.
Step 4	UCS-A /monitoring/stats-collection-policy # **set reporting-interval** {**15minutes**	**30minutes**	**60minutes**}	Specifies the interval at which collected statistics are reported.
Step 5	UCS-A /monitoring/stats-collection-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example creates a statistics collection policy for ports, sets the collection interval to one minute, the reporting interval to 30 minutes, and commits the transaction:

```
UCS-A# scope monitoring
UCS-A /monitoring # scope stats-collection-policy port
UCS-A /monitoring/stats-collection-policy* # set collection-interval 1minute
UCS-A /monitoring/stats-collection-policy* # set reporting-interval 30minutes
UCS-A /monitoring/stats-collection-policy* # commit-buffer
UCS-A /monitoring/stats-collection-policy #
```

Configuring Statistics Threshold Policies

Statistics Threshold Policy

A statistics threshold policy monitors statistics about certain aspects of the system and generates an event if the threshold is crossed. You can set both minimum and maximum thresholds. For example, you can configure

the policy to raise an alarm if the CPU temperature exceeds a certain value, or if a server is overutilized or underutilized.

These threshold policies do not control the hardware or device-level thresholds enforced by endpoints, such as the CIMC. Those thresholds are burned in to the hardware components at manufacture.

Cisco UCS enables you to configure statistics threshold policies for the following components:

- Servers and server components
- Uplink Ethernet ports
- Ethernet server ports, chassis, and fabric interconnects
- Fibre Channel port

Note You cannot create or delete a statistics threshold policy for Ethernet server ports, uplink Ethernet ports, or uplink Fibre Channel ports. You can only configure the existing default policy.

Server and Server Component Statistics Threshold Policy Configuration

Configuring a Server and Server Component Statistics Threshold Policy

SUMMARY STEPS

1. UCS-A# **scope org** *org-name*
2. UCS-A /org # **create stats-threshold-policy** *policy-name*
3. (Optional) UCS-A /org/stats-threshold-policy # **set descr** *description*
4. UCS-A /org/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	**Purpose**
Step 1	UCS-A# **scope org** *org-name*	Enters organization mode for the specified organization. To enter the root organization mode, type / as the *org-name* .
Step 2	UCS-A /org # **create stats-threshold-policy** *policy-name*	Creates the specified statistics threshold policy and enters organization statistics threshold policy mode.
Step 3	UCS-A /org/stats-threshold-policy # **set descr** *description*	(Optional) Provides a description for the policy. **Note** If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any **show** command output.

	Command or Action	Purpose
Step 4	UCS-A /org/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example creates the server and server component statistics threshold policy named ServStatsPolicy, provides a description for the policy, and commits the transaction:

```
UCS-A# scope org /
UCS-A /org* # create stats-threshold-policy ServStatsPolicy
UCS-A /org/stats-threshold-policy* # set descr "Server stats threshold policy."
UCS-A /org/stats-threshold-policy* # commit-buffer
UCS-A /org/stats-threshold-policy #
```

What to Do Next

Configure one or more policy classes for the statistics threshold policy. For more information, see "Configuring a Server and Server Component Statistics Threshold Policy Class, on page 5."

Deleting a Server and Server Component Statistics Threshold Policy

SUMMARY STEPS

1. UCS-A# **scope org** *org-name*
2. UCS-A /org # **delete stats-threshold-policy** *policy-name*
3. UCS-A /org # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope org** *org-name*	Enters organization mode for the specified organization. To enter the root organization mode, type / as the *org-name* .
Step 2	UCS-A /org # **delete stats-threshold-policy** *policy-name*	Deletes the specified statistics threshold policy.
Step 3	UCS-A /org # **commit-buffer**	Commits the transaction to the system configuration.

The following example deletes the server and server component statistics threshold policy named ServStatsPolicy and commits the transaction:

```
UCS-A# scope org /
UCS-A /org* # delete stats-threshold-policy ServStatsPolicy
UCS-A /org* # commit-buffer
UCS-A /org #
```

Configuring a Server and Server Component Statistics Threshold Policy Class

Before You Begin

Configure or identify the server and server component statistics threshold policy that will contain the policy class. For more information, see "Configuring a Server and Server Component Statistics Threshold Policy, on page 3."

SUMMARY STEPS

1. UCS-A# **scope org** *org-name*
2. UCS-A /org # **scope stats-threshold-policy** *policy-name*
3. UCS-A /org/stats-threshold-policy # **create class** *class-name*
4. UCS-A /org/stats-threshold-policy /class # **create property** *property-name*
5. UCS-A /org/stats-threshold-policy/class/property # **set normal-value** *value*
6. UCS-A /org/stats-threshold-policy /class/property # **create threshold-value** {**above-normal** | **below-normal**} {**cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning**}
7. UCS-A /org/stats-threshold-policy /class/property/threshold-value # **set** {**deescalating** | **escalating**} *value*
8. UCS-A /org/stats-threshold-policy /class/property/threshold-value # **commit-buffer**

DETAILED STEPS

	Command or Action	**Purpose**
Step 1	UCS-A# **scope org** *org-name*	Enters organization mode for the specified organization. To enter the root organization mode, type / as the *org-name* .
Step 2	UCS-A /org # **scope stats-threshold-policy** *policy-name*	Enters organization statistics threshold policy mode.
Step 3	UCS-A /org/stats-threshold-policy # **create class** *class-name*	Creates the specified statistics threshold policy class and enters organization statistics threshold policy class mode. The *class-name* argument can be any of the class name keywords available for the particular statistics threshold policy being configured. To see a list of the available class name keywords, enter the **create class ?** command in organization statistics threshold policy mode. **Note** You can configure multiple classes for the statistics threshold policy.
Step 4	UCS-A /org/stats-threshold-policy /class # **create property** *property-name*	Creates the specified statistics threshold policy class property and enters organization statistics threshold policy class property mode. The *property-name* argument can be any of the property name keywords available for the particular policy class being configured. To see a list of the available property name keywords, enter the **create property ?** command in organization statistics threshold policy class mode. **Note** You can configure multiple properties for the policy class.

	Command or Action	**Purpose**
Step 5	UCS-A /org/stats-threshold-policy/class/property # **set normal-value** *value*	Specifies the normal value for the class property. The *value* format can vary depending on the class property being configured. To see the required format, enter the **set normal-value ?** command in organization statistics threshold policy class property mode.
Step 6	UCS-A /org/stats-threshold-policy /class/property # **create threshold-value** {**above-normal** | **below-normal**} {**cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning**}	Creates the specified threshold value for the class property and enters organization statistics threshold policy class property threshold value mode. **Note** You can configure multiple threshold values for the class property.
Step 7	UCS-A /org/stats-threshold-policy /class/property/threshold-value # **set** {**deescalating** | **escalating**} *value*	Specifies the de-escalating or escalating class property threshold value. The *value* format can vary depending on the class property threshold value being configured. To see the required format, enter the **set deescalating ?** or **set escalating ?** command in organization statistics threshold policy class property threshold value mode. **Note** You can specify both de-escalating and escalating class property threshold values.
Step 8	UCS-A /org/stats-threshold-policy /class/property/threshold-value # **commit-buffer**	Commits the transaction to the system configuration.

The following example creates the server and server component statistics threshold policy class for CPU statistics, creates a CPU temperature property, specifies that the normal CPU temperature is 48.5° C, creates an above normal warning threshold of 50° C, and commits the transaction:

```
UCS-A# scope org /
UCS-A /org* # scope stats-threshold-policy ServStatsPolicy
UCS-A /org/stats-threshold-policy* # create class cpu-stats
UCS-A /org/stats-threshold-policy/class* # create property cpu-temp
UCS-A /org/stats-threshold-policy/class/property* # set normal-value 48.5
UCS-A /org/stats-threshold-policy/class/property* # create threshold-value above-normal
warning
UCS-A /org/stats-threshold-policy/class/property/threshold-value* # set escalating 50.0
UCS-A /org/stats-threshold-policy/class/property/threshold-value* # commit-buffer
UCS-A /org/stats-threshold-policy/class/property/threshold-value #
```

Deleting a Server and Server Component Statistics Threshold Policy Class

SUMMARY STEPS

1. UCS-A# **scope org** *org-name*
2. UCS-A /org # **scope stats-threshold-policy** *policy-name*
3. UCS-A /org/stats-threshold-policy # **delete class** *class-name*
4. UCS-A /org/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope org** *org-name*	Enters organization mode for the specified organization. To enter the root organization mode, type **/** as the *org-name* .
Step 2	UCS-A /org # **scope stats-threshold-policy** *policy-name*	Enters the specified statistics threshold policy.
Step 3	UCS-A /org/stats-threshold-policy # **delete class** *class-name*	Deletes the specified statistics threshold policy class from the policy.
Step 4	UCS-A /org/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example deletes the server and server component statistics threshold policy class for CPU statistics and commits the transaction:

```
UCS-A# scope org /
UCS-A /org* # scope stats-threshold-policy ServStatsPolicy
UCS-A /org/stats-threshold-policy* # delete class cpu-stats
UCS-A /org/stats-threshold-policy* # commit-buffer
UCS-A /org/stats-threshold-policy #
```

Uplink Ethernet Port Statistics Threshold Policy Configuration

Configuring an Uplink Ethernet Port Statistics Threshold Policy

SUMMARY STEPS

1. UCS-A# **scope eth-uplink**
2. UCS-A /eth-uplink # **scope stats-threshold-policy default**
3. (Optional) UCS-A /eth-uplink/stats-threshold-policy # **set descr** *description*
4. UCS-A /eth-uplink/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope eth-uplink**	Enters Ethernet uplink mode.
Step 2	UCS-A /eth-uplink # **scope stats-threshold-policy default**	Enters Ethernet uplink statistics threshold policy mode. **Note** You cannot create (or delete) an uplink Ethernet port statistics threshold policy. You can only enter (scope to) the existing default policy.
Step 3	UCS-A /eth-uplink/stats-threshold-policy # **set descr** *description*	(Optional) Provides a description for the policy.

	Command or Action	Purpose
		Note If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any **show** command output.
Step 4	UCS-A /eth-uplink/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example enters the default uplink Ethernet port threshold policy, provides a description for the policy, and commits the transaction:

```
UCS-A# scope eth-uplink
UCS-A /eth-uplink* # scope stats-threshold-policy default
UCS-A /eth-uplink/stats-threshold-policy* # set descr "Uplink Ethernet port stats threshold
 policy."
UCS-A /eth-uplink/stats-threshold-policy* # commit-buffer
UCS-A /eth-uplink/stats-threshold-policy #
```

What to Do Next

Configure one or more policy classes for the statistics threshold policy. For more information, see "Configuring an Uplink Ethernet Port Statistics Threshold Policy Class, on page 8."

Configuring an Uplink Ethernet Port Statistics Threshold Policy Class

SUMMARY STEPS

1. UCS-A# **scope eth-uplink**
2. UCS-A /eth-uplink # **scope stats-threshold-policy default**
3. UCS-A /eth-uplink/stats-threshold-policy # **create class** *class-name*
4. UCS-A /eth-uplink/stats-threshold-policy /class # **create property** *property-name*
5. UCS-A /eth-uplink/stats-threshold-policy /class/property # **set normal-value** *value*
6. UCS-A /eth-uplink/stats-threshold-policy /class/property # **create threshold-value** {**above-normal** | **below-normal**} {**cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning**}
7. UCS-A /eth-uplink/stats-threshold-policy /class/property/threshold-value # **set** {**deescalating** | **escalating**} *value*
8. UCS-A /eth-uplink/stats-threshold-policy /class/property/threshold-value # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope eth-uplink**	Enters Ethernet uplink mode.
Step 2	UCS-A /eth-uplink # **scope stats-threshold-policy default**	Enters Ethernet uplink statistics threshold policy mode.

	Command or Action	**Purpose**
Step 3	UCS-A /eth-uplink/stats-threshold-policy # **create class** *class-name*	Creates the specified statistics threshold policy class and enters Ethernet uplink statistics threshold policy class mode. The *class-name* argument can be any of the class name keywords available for the particular statistics threshold policy being configured. To see a list of the available class name keywords, enter the **create class ?** command in Ethernet uplink statistics threshold policy mode. **Note** You can configure multiple classes for the statistics threshold policy.
Step 4	UCS-A /eth-uplink/stats-threshold-policy /class # **create property** *property-name*	Creates the specified statistics threshold policy class property and enters Ethernet uplink statistics threshold policy class property mode. The *property-name* argument can be any of the property name keywords available for the particular policy class being configured. To see a list of the available property name keywords, enter the **create property ?** command in Ethernet uplink statistics threshold policy class mode. **Note** You can configure multiple properties for the policy class.
Step 5	UCS-A /eth-uplink/stats-threshold-policy /class/property # **set normal-value** *value*	Specifies the normal value for the class property. The *value* format can vary depending on the class property being configured. To see the required format, enter the **set normal-value ?** command in Ethernet uplink statistics threshold policy class property mode.
Step 6	UCS-A /eth-uplink/stats-threshold-policy /class/property # **create threshold-value** {**above-normal** | **below-normal**} {**cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning**}	Creates the specified threshold value for the class property and enters Ethernet uplink statistics threshold policy class property threshold value mode. **Note** You can configure multiple threshold values for the class property.
Step 7	UCS-A /eth-uplink/stats-threshold-policy /class/property/threshold-value # **set** {**deescalating** | **escalating**} *value*	Specifies the de-escalating or escalating class property threshold value. The *value* format can vary depending on the class property threshold value being configured. To see the required format, enter the **set deescalating ?** or **set escalating ?** command in Ethernet uplink statistics threshold policy class property threshold value mode. **Note** You can specify both de-escalating and escalating class property threshold values.
Step 8	UCS-A /eth-uplink/stats-threshold-policy /class/property/threshold-value # **commit-buffer**	Commits the transaction to the system configuration.

The following example creates the uplink Ethernet port statistics threshold policy class for Ethernet error statistics, creates a cyclic redundancy check (CRC) error count property, specifies that the normal CRC error count for each polling interval is 1000, creates an above normal warning threshold of 1250, and commits the transaction:

```
UCS-A# scope eth-uplink
UCS-A /eth-uplink* # scope stats-threshold-policy default
UCS-A /eth-uplink/stats-threshold-policy* # create class ether-error-stats
```

```
UCS-A /eth-uplink/stats-threshold-policy/class* # create property crc-delta
UCS-A /eth-uplink/stats-threshold-policy/class/property* # set normal-value 1000
UCS-A /eth-uplink/stats-threshold-policy/class/property* # create threshold-value above-normal
 warning
UCS-A /eth-uplink/stats-threshold-policy/class/property/threshold-value* # set escalating
1250
UCS-A /eth-uplink/stats-threshold-policy/class/property/threshold-value* # commit-buffer
UCS-A /eth-uplink/stats-threshold-policy/class/property/threshold-value #
```

Deleting an Uplink Ethernet Port Statistics Threshold Policy Class

SUMMARY STEPS

1. UCS-A# **scope eth-uplink**
2. UCS-A /eth-uplink # **scope stats-threshold-policy default**
3. UCS-A /eth-uplink/stats-threshold-policy # **delete class** *class-name*
4. UCS-A /eth-uplink/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope eth-uplink**	Enters Ethernet uplink mode.
Step 2	UCS-A /eth-uplink # **scope stats-threshold-policy default**	Enters Ethernet uplink statistics threshold policy mode.
Step 3	UCS-A /eth-uplink/stats-threshold-policy # **delete class** *class-name*	Deletes the specified statistics threshold policy class from the policy.
Step 4	UCS-A /eth-uplink/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example deletes the uplink Ethernet port statistics threshold policy class for Ethernet error statistics and commits the transaction:

```
UCS-A# scope eth-uplink
UCS-A /eth-uplink # scope stats-threshold-policy default
UCS-A /eth-uplink/stats-threshold-policy # delete class ether-error-stats
UCS-A /eth-uplink/stats-threshold-policy* # commit-buffer
UCS-A /eth-uplink/stats-threshold-policy #
```

Server Port, Chassis, and Fabric Interconnect Statistics Threshold Policy Configuration

Configuring a Server Port, Chassis, and Fabric Interconnect Statistics Threshold Policy

SUMMARY STEPS

1. UCS-A# **scope eth-server**
2. UCS-A /eth-server # **scope stats-threshold-policy default**
3. (Optional) UCS-A /eth-server/stats-threshold-policy # **set descr** *description*
4. UCS-A /eth-server/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope eth-server**	Enters Ethernet server mode.
Step 2	UCS-A /eth-server # **scope stats-threshold-policy default**	Enters Ethernet server statistics threshold policy mode.
		Note You cannot create (or delete) a server port, chassis, and fabric interconnect statistics threshold policy. You can only enter (scope to) the existing default policy.
Step 3	UCS-A /eth-server/stats-threshold-policy # **set descr** *description*	(Optional) Provides a description for the policy.
		Note If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any **show** command output.
Step 4	UCS-A /eth-server/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example enters the default server port, chassis, and fabric interconnect statistics threshold policy, provides a description for the policy, and commits the transaction:

```
UCS-A# scope eth-server
UCS-A /eth-server* # scope stats-threshold-policy default
UCS-A /eth-server/stats-threshold-policy* # set descr "Server port, chassis, and fabric
interconnect stats threshold policy."
UCS-A /eth-server/stats-threshold-policy* # commit-buffer
UCS-A /eth-server/stats-threshold-policy #
```

What to Do Next

Configure one or more policy classes for the statistics threshold policy. For more information, see "Configuring a Server Port, Chassis, and Fabric Interconnect Statistics Threshold Policy Class, on page 12."

Configuring a Server Port, Chassis, and Fabric Interconnect Statistics Threshold Policy Class

SUMMARY STEPS

1. UCS-A# **scope eth-server**
2. UCS-A /eth-server # **scope stats-threshold-policy default**
3. UCS-A /eth-server/stats-threshold-policy # **create class** *class-name*
4. UCS-A /eth-server/stats-threshold-policy /class # **create property** *property-name*
5. UCS-A /eth-server/stats-threshold-policy /class/property # **set normal-value** *value*
6. UCS-A /eth-server/stats-threshold-policy /class/property # **create threshold-value** {**above-normal** | **below-normal**} {**cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning**}
7. UCS-A /eth-server/stats-threshold-policy /class/property/threshold-value # **set** {**deescalating** | **escalating**} *value*
8. UCS-A /eth-server/stats-threshold-policy /class/property/threshold-value # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope eth-server**	Enters Ethernet server mode.
Step 2	UCS-A /eth-server # **scope stats-threshold-policy default**	Enters Ethernet server statistics threshold policy mode.
Step 3	UCS-A /eth-server/stats-threshold-policy # **create class** *class-name*	Creates the specified statistics threshold policy class and enters Ethernet server statistics threshold policy class mode. The *class-name* argument can be any of the class name keywords available for the particular statistics threshold policy being configured. To see a list of the available class name keywords, enter the **create class ?** command in Ethernet server statistics threshold policy mode. **Note** You can configure multiple classes for the statistics threshold policy.
Step 4	UCS-A /eth-server/stats-threshold-policy /class # **create property** *property-name*	Creates the specified statistics threshold policy class property and enters Ethernet server statistics threshold policy class property mode. The *property-name* argument can be any of the property name keywords available for the particular policy class being configured. To see a list of the available property name keywords, enter the **create property ?** command in Ethernet server statistics threshold policy class mode. **Note** You can configure multiple properties for the policy class.
Step 5	UCS-A /eth-server/stats-threshold-policy /class/property # **set normal-value** *value*	Specifies the normal value for the class property. The *value* format can vary depending on the class property being configured. To see the required format, enter the **set normal-value ?** command in Ethernet server statistics threshold policy class property mode.

	Command or Action	Purpose
Step 6	UCS-A /eth-server/stats-threshold-policy /class/property # **create threshold-value {above-normal** | **below-normal} {cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning}**	Creates the specified threshold value for the class property and enters Ethernet server statistics threshold policy class property threshold value mode. **Note** You can configure multiple threshold values for the class property.
Step 7	UCS-A /eth-server/stats-threshold-policy /class/property/threshold-value # **set {deescalating** | **escalating}** *value*	Specifies the de-escalating or escalating class property threshold value. The *value* format can vary depending on the class property threshold value being configured. To see the required format, enter the **set deescalating ?** or **set escalating ?** command in Ethernet server statistics threshold policy class property threshold value mode. **Note** You can specify both de-escalating and escalating class property threshold values.
Step 8	UCS-A /eth-server/stats-threshold-policy /class/property/threshold-value # **commit-buffer**	Commits the transaction to the system configuration.

The following example creates the server port, chassis, and fabric interconnect statistics threshold policy class for chassis statistics, creates an input power (Watts) property, specifies that the normal power is 8kW, creates an above normal warning threshold of 11kW, and commits the transaction:

```
UCS-A# scope eth-server
UCS-A /eth-server* # scope stats-threshold-policy default
UCS-A /eth-server/stats-threshold-policy* # create class chassis-stats
UCS-A /eth-server/stats-threshold-policy/class* # create property input-power
UCS-A /eth-server/stats-threshold-policy/class/property* # set normal-value 8000.0
UCS-A /eth-server/stats-threshold-policy/class/property* # create threshold-value above-normal
 warning
UCS-A /eth-server/stats-threshold-policy/class/property/threshold-value* # set escalating
11000.0
UCS-A /eth-server/stats-threshold-policy/class/property/threshold-value* # commit-buffer
UCS-A /eth-server/stats-threshold-policy/class/property/threshold-value #
```

Deleting a Server Port, Chassis, and Fabric Interconnect Statistics Threshold Policy Class

SUMMARY STEPS

1. UCS-A# **scope eth-server**
2. UCS-A /eth-server # **scope stats-threshold-policy default**
3. UCS-A /eth-server/stats-threshold-policy # **delete class** *class-name*
4. UCS-A /eth-server/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope eth-server**	Enters Ethernet server mode.
Step 2	UCS-A /eth-server # **scope stats-threshold-policy default**	Enters Ethernet server statistics threshold policy mode.
Step 3	UCS-A /eth-server/stats-threshold-policy # **delete class** *class-name*	Deletes the specified statistics threshold policy class from the policy.
Step 4	UCS-A /eth-server/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example deletes the server port, chassis, and fabric interconnect statistics threshold policy class for chassis statistics and commits the transaction:

```
UCS-A# scope eth-server
UCS-A /eth-server* # scope stats-threshold-policy default
UCS-A /eth-server/stats-threshold-policy* # delete class chassis-stats
UCS-A /eth-server/stats-threshold-policy* # commit-buffer
UCS-A /eth-server/stats-threshold-policy #
```

Fibre Channel Port Statistics Threshold Policy Configuration

Configuring a Fibre Channel Port Statistics Threshold Policy

SUMMARY STEPS

1. UCS-A# **scope fc-uplink**
2. UCS-A /fc-uplink # **scope stats-threshold-policy default**
3. (Optional) UCS-A /fc-uplink/stats-threshold-policy # **set descr** *description*
4. UCS-A /fc-uplink/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope fc-uplink**	Enters Fibre Channel uplink mode.
Step 2	UCS-A /fc-uplink # **scope stats-threshold-policy default**	Enters Fibre Channel uplink statistics threshold policy mode. **Note** You cannot create (or delete) an uplink Fibre Channel port statistics threshold policy. You can only enter (scope to) the existing default policy.
Step 3	UCS-A /fc-uplink/stats-threshold-policy # **set descr** *description*	(Optional) Provides a description for the policy.

	Command or Action	Purpose
		Note If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any **show** command output.
Step 4	UCS-A /fc-uplink/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example enters the default uplink Fibre Channel port statistics threshold policy, provides a description for the policy, and commits the transaction:

```
UCS-A# scope fc-uplink
UCS-A /fc-uplink* # scope stats-threshold-policy default
UCS-A /fc-uplink/stats-threshold-policy* # set descr "Uplink Fibre Channel stats threshold
 policy."
UCS-A /fc-uplink/stats-threshold-policy* # commit-buffer
UCS-A /fc-uplink/stats-threshold-policy #
```

What to Do Next

Configure one or more policy classes for the statistics threshold policy. For more information, see "Configuring a Fibre Channel Port Statistics Threshold Policy Class, on page 15."

Configuring a Fibre Channel Port Statistics Threshold Policy Class

SUMMARY STEPS

1. UCS-A# **scope fc-uplink**
2. UCS-A /fc-uplink # **scope stats-threshold-policy default**
3. UCS-A /fc-uplink/stats-threshold-policy # **create class** *class-name*
4. UCS-A /fc-uplink/stats-threshold-policy /class # **create property** *property-name*
5. UCS-A /fc-uplink/stats-threshold-policy /class/property # **set normal-value** *value*
6. UCS-A /fc-uplink/stats-threshold-policy /class/property # **create threshold-value** {**above-normal** | **below-normal**} {**cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning**}
7. UCS-A /fc-uplink/stats-threshold-policy /class/property/threshold-value # **set** {**deescalating** | **escalating**} *value*
8. UCS-A /fc-uplink/stats-threshold-policy /class/property/threshold-value # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope fc-uplink**	Enters Fibre Channel uplink mode.
Step 2	UCS-A /fc-uplink # **scope stats-threshold-policy default**	Enters Fibre Channel uplink statistics threshold policy mode.

	Command or Action	Purpose
Step 3	UCS-A /fc-uplink/stats-threshold-policy # **create class** *class-name*	Creates the specified statistics threshold policy class and enters Fibre Channel uplink statistics threshold policy class mode. The *class-name* argument can be any of the class name keywords available for the particular statistics threshold policy being configured. To see a list of the available class name keywords, enter the **create class ?** command in Fibre Channel uplink statistics threshold policy mode. **Note** You can configure multiple classes for the statistics threshold policy.
Step 4	UCS-A /fc-uplink/stats-threshold-policy /class # **create property** *property-name*	Creates the specified statistics threshold policy class property and enters Fibre Channel uplink statistics threshold policy class property mode. The *property-name* argument can be any of the property name keywords available for the particular policy class being configured. To see a list of the available property name keywords, enter the **create property ?** command in Fibre Channel uplink statistics threshold policy class mode. **Note** You can configure multiple properties for the policy class.
Step 5	UCS-A /fc-uplink/stats-threshold-policy /class/property # **set normal-value** *value*	Specifies the normal value for the class property. The *value* format can vary depending on the class property being configured. To see the required format, enter the **set normal-value ?** command in Fibre Channel uplink statistics threshold policy class property mode.
Step 6	UCS-A /fc-uplink/stats-threshold-policy /class/property # **create threshold-value** {**above-normal** | **below-normal**} {**cleared** | **condition** | **critical** | **info** | **major** | **minor** | **warning**}	Creates the specified threshold value for the class property and enters Fibre Channel uplink statistics threshold policy class property threshold value mode. **Note** You can configure multiple threshold values for the class property.
Step 7	UCS-A /fc-uplink/stats-threshold-policy /class/property/threshold-value # **set** {**deescalating** | **escalating**} *value*	Specifies the de-escalating or escalating class property threshold value. The *value* format can vary depending on the class property threshold value being configured. To see the required format, enter the **set deescalating ?** or **set escalating ?** command in Fibre Channel uplink statistics threshold policy class property threshold value mode. **Note** You can specify both de-escalating and escalating class property threshold values.
Step 8	UCS-A /fc-uplink/stats-threshold-policy /class/property/threshold-value # **commit-buffer**	Commits the transaction to the system configuration.

The following example creates the uplink Fibre Channel port statistics threshold policy class for Fibre Channel statistics, creates an average bytes received property, specifies that the normal average number of bytes received for each polling interval is 150MB, creates an above normal warning threshold of 200MB, and commits the transaction:

```
UCS-A# scope fc-uplink
UCS-A /fc-uplink* # scope stats-threshold-policy default
UCS-A /fc-uplink/stats-threshold-policy* # create class fc-stats
```

```
UCS-A /fc-uplink/stats-threshold-policy/class* # create property bytes-rx-avg
UCS-A /fc-uplink/stats-threshold-policy/class/property* # set normal-value 150000000
UCS-A /fc-uplink/stats-threshold-policy/class/property* # create threshold-value above-normal
 warning
UCS-A /fc-uplink/stats-threshold-policy/class/property/threshold-value* # set escalating
200000000
UCS-A /fc-uplink/stats-threshold-policy/class/property/threshold-value* # commit-buffer
UCS-A /fc-uplink/stats-threshold-policy/class/property/threshold-value #
```

Deleting an Uplink Fibre Channel Port Statistics Threshold Policy Class

SUMMARY STEPS

1. UCS-A# **scope fc-uplink**
2. UCS-A /fc-uplink # **scope stats-threshold-policy default**
3. UCS-A /fc-uplink/stats-threshold-policy # **delete class** *class-name*
4. UCS-A /fc-uplink/stats-threshold-policy # **commit-buffer**

DETAILED STEPS

	Command or Action	Purpose
Step 1	UCS-A# **scope fc-uplink**	Enters Fibre Channel uplink mode.
Step 2	UCS-A /fc-uplink # **scope stats-threshold-policy default**	Enters Fibre Channel uplink statistics threshold policy mode.
Step 3	UCS-A /fc-uplink/stats-threshold-policy # **delete class** *class-name*	Deletes the specified statistics threshold policy class from the policy.
Step 4	UCS-A /fc-uplink/stats-threshold-policy # **commit-buffer**	Commits the transaction to the system configuration.

The following example deletes the uplink Fibre Channel port statistics threshold policy class for Fibre Channel statistics and commits the transaction:

```
UCS-A# scope fc-uplink
UCS-A /fc-uplink # scope stats-threshold-policy default
UCS-A /fc-uplink/stats-threshold-policy # delete class fc-stats
UCS-A /fc-uplink/stats-threshold-policy* # commit-buffer
UCS-A /fc-uplink/stats-threshold-policy #
```