



# UCS Fault Suppression

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## Fault Suppression for System Maintenance

### Global Fault Policy

The global fault policy controls the lifecycle of a fault in a Cisco UCS domain, including when faults are cleared, the flapping interval (the length of time between the fault being raised and the condition being cleared), and the retention interval (the length of time a fault is retained in the system).

A fault in Cisco UCS has the following lifecycle:

1. A condition occurs in the system and Cisco UCS Manager raises a fault. This is the active state.
2. When the fault is alleviated, it enters a flapping or soaking interval that is designed to prevent flapping. Flapping occurs when a fault is raised and cleared several times in rapid succession. During the flapping interval, the fault retains its severity for the length of time specified in the global fault policy.
3. If the condition reoccurs during the flapping interval, the fault returns to the active state. If the condition does not reoccur during the flapping interval, the fault is cleared.
4. The cleared fault enters the retention interval. This interval ensures that the fault reaches the attention of an administrator even if the condition that caused the fault has been alleviated and the fault has not been deleted prematurely. The retention interval retains the cleared fault for the length of time specified in the global fault policy.
5. If the condition reoccurs during the retention interval, the fault returns to the active state. If the condition does not reoccur, the fault is deleted.

### Configuring the Fault Collection Policy

#### Procedure

	Command or Action	Purpose
Step 1	UCS-A# <b>scope monitoring</b>	Enters monitoring mode.

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 2</b>	UCS-A /monitoring # <b>scope fault policy</b>	Enters monitoring fault policy mode.
<b>Step 3</b>	UCS-A /monitoring/fault-policy # <b>set clear-action {delete   retain}</b>	Specifies whether to retain or delete all cleared messages. If the <b>retain</b> option is specified, then the length of time that the messages are retained is determined by the <b>set retention-interval</b> command.
<b>Step 4</b>	UCS-A /monitoring/fault-policy # <b>set flap-interval seconds</b>	Specifies the time interval (in seconds) the system waits before changing a fault state. Flapping occurs when a fault is raised and cleared several times in rapid succession. To prevent this, the system does not allow a fault to change state until the flapping interval has elapsed after the last state change. If the fault is raised again during the flapping interval, it returns to the active state, otherwise, the fault is cleared.
<b>Step 5</b>	UCS-A /monitoring/fault-policy # <b>set retention-interval {days hours minutes seconds   forever}</b>	Specifies the time interval the system retains all cleared fault messages before deleting them. The system can retain cleared fault messages forever, or for the specified number of days, hours, minutes, and seconds.
<b>Step 6</b>	UCS-A /monitoring/fault-policy # <b>commit-buffer</b>	Commits the transaction.

### Example

This example configures the fault collection policy to retain cleared fault messages for 30 days, sets the flapping interval to 10 seconds, and commits the transaction.

```
UCS-A# scope monitoring
UCS-A /monitoring # scope fault policy
UCS-A /monitoring/fault-policy # set clear-action retain
UCS-A /monitoring/fault-policy* # set flap-interval 10
UCS-A /monitoring/fault-policy* # set retention-interval 30 0 0 0
UCS-A /monitoring/fault-policy* # commit-buffer
UCS-A /monitoring/fault-policy #
```