Watchdog Commands on Cisco IOS XR Software

This module describes commands used to monitor the memory states and thresholds of routers running Cisco IOS XR software.

show critmon context

To display information about the context for the wd-critical-mon process, use the **show critmon context** command in EXEC mode and in administration EXEC mode.

show critmon context {**all** | **deadline** [**client** *client name*] | **ticker** | **watcher**} {**location** {*node-id* | **all**}}

Syntax Description

all	Displays all context information for the wd-critical-mon process.
deadline	Displays the context information for the deadline monitoring client application.
client	(Optional) Displays information only for the specified client.
client name	Name of the client.
ticker	Displays information for the ticker context for the wd-critical-mon process.
watcher	Displays information for the watcher context for the wd-critical-mon process.
location	Specifies a node to filter.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Use the **show critmon context** command to display information about the context for the wd-critical-mon process.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following sample output is from the **show critmon context** command:

```
RP/0/RP0/CPU0:router# show critmon context all location all

------------------------------------------------------------------------------
Ticker context info (Node: 0/5/CPU0)
------------------------------------------------------------------------------
 CPU#                      : 0
 Ticker counter            : 2245
 Ticker last ran timestamp : 02/10/2008 01:11:10



------------------------------------------------------------------------------
Watcher context info (Node: 0/5/CPU0)
------------------------------------------------------------------------------
 Watcher counter  : 751
 Watcher last ran : 02/10/2008 01:11:10


------------------------------------------------------------------------------
Deadline monitoring context info (Node: 0/5/CPU0)
------------------------------------------------------------------------------
 Client         : wdsysmon
 PunchTimestamp : 02/10/2008 01:11:09
 PunchCounter   : 226



------------------------------------------------------------------------------
Ticker context info (Node: 0/4/CPU0)
------------------------------------------------------------------------------
 CPU#                      : 0
 Ticker counter            : 74
 Ticker last ran timestamp : 02/10/2008 01:11:10



------------------------------------------------------------------------------
Watcher context info (Node: 0/4/CPU0)
------------------------------------------------------------------------------
 Watcher counter  : 24
 Watcher last ran : 02/10/2008 01:11:09


------------------------------------------------------------------------------
Deadline monitoring context info (Node: 0/4/CPU0)
------------------------------------------------------------------------------
 Client         : wdsysmon
 PunchTimestamp : 02/10/2008 01:11:10
 PunchCounter   : 8



------------------------------------------------------------------------------
Ticker context info (Node: 0/2/CPU0)
------------------------------------------------------------------------------
 CPU#                      : 0
```

```
 Ticker counter            : 61
 Ticker last ran timestamp : 02/10/2008 01:11:10



-------------------------------------------------------------------------------
Watcher context info (Node: 0/2/CPU0)
-------------------------------------------------------------------------------
 Watcher counter  : 21
 Watcher last ran : 02/10/2008 01:11:10


-------------------------------------------------------------------------------
Deadline monitoring context info (Node: 0/2/CPU0)
-------------------------------------------------------------------------------
 Client         : wdsysmon
 PunchTimestamp : 02/10/2008 01:11:09
 PunchCounter   : 6



-------------------------------------------------------------------------------
Ticker context info (Node: 0/1/CPU0)
-------------------------------------------------------------------------------
 CPU#                      : 0
 Ticker counter            : 2093
 Ticker last ran timestamp : 02/10/2008 01:11:10



-------------------------------------------------------------------------------
Watcher context info (Node: 0/1/CPU0)
-------------------------------------------------------------------------------
 Watcher counter  : 703
 Watcher last ran : 02/10/2008 01:11:10


-------------------------------------------------------------------------------
Deadline monitoring context info (Node: 0/1/CPU0)
-------------------------------------------------------------------------------
 Client         : wdsysmon
 PunchTimestamp : 02/10/2008 01:11:09
 PunchCounter   : 211
```

Table 46 describes the significant fields shown in the display.

Table 46 show critmon context Field Descriptions

Field	Description
Ticker context info	wd-critical-mon process ticker context information for the node.
CPU	CPU number.
Ticker counter	Current counter for the wd-critical-mon ticker thread. The ticker counter field specifies the number of times the ticker thread was run.
Ticker last ran timestamp	Timestamp for the last time the wd-critical-mon ticker thread was run.

Table 46 show critmon context Field Descriptions (continued)

Field	Description
Watcher context info	wd-critical-mon watcher thread context information that is used for the node.
Watcher counter	Current counter for the wd-critical-mon watcher thread. The watcher counter field specifies the number of times the watcher thread was run
Watcher last ran	Timestamp that is used for the last run of the wd-critical-mon watcher thread.
Deadline monitoring context info	wd-critical-mon deadline montoring information that is used for the node.
Client	Client name for deadline monitoring.
PunchTimestamp	Timestamp that is used for the last run of the client application.
PunchCounter	Current counter for the deadline monitoring client. This field specifies the number of times that the client application can punch the counter.

Related Commands

Command	Description
show critmon deadline	Displays information about the deadline for monitoring.
show critmon statistics	Displays information about critical statistics.
show critmon trace all	Displays information about all traces for a critical monitor.
show critmon trace error	Displays information about error traces for a critical monitor.
show critmon trace info	Displays trace data for an information type for the critical monitor.
show critmon trace lib-error	Displays information about the trace data for the library error for the critical monitor.
show critmon trace lib-info	Displays trace data for the library information for the critical monitor.

show critmon deadline

To display information about deadline monitoring, use the **show critmon deadline** command in EXEC mode and in administration EXEC mode

show critmon deadline {**registration**} [**client** *client name*] {**location** {*node-id* | **all**}}

Syntax Description

registration	Displays the deadline monitoring registration information.
client	(Optional) Displays information only for the specified client.
client name	Name of the client.
location	Specifies a node to filter.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Use the **show critmon deadline** command to display information about the deadline monitoring.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following sample output is from the **show critmon deadline** command:

```
RP/0/RP0/CPU0:router# show critmon deadline registration location all
```

```
------------------------------------------------------------------------------
Deadline monitoring registration info (Node: 0/5/CPU0)
------------------------------------------------------------------------------
 ID ClientName                Activated  tick address  timeout vale(sec)
 -- ------------------------  ---------  ------------  ----------------
 0  wdsysmon                  Yes        0x6023d000    60


------------------------------------------------------------------------------
Deadline monitoring registration info (Node: 0/4/CPU0)
------------------------------------------------------------------------------
 ID ClientName                Activated  tick address  timeout vale(sec)
 -- ------------------------  ---------  ------------  ----------------
 0  wdsysmon                  Yes        0x38146000    60


------------------------------------------------------------------------------
Deadline monitoring registration info (Node: 0/2/CPU0)
------------------------------------------------------------------------------
 ID ClientName                Activated  tick address  timeout vale(sec)
 -- ------------------------  ---------  ------------  ----------------
 0  wdsysmon                  Yes        0x38146000    60


------------------------------------------------------------------------------
Deadline monitoring registration info (Node: 0/1/CPU0)
------------------------------------------------------------------------------
 ID ClientName                Activated  tick address  timeout vale(sec)
 -- ------------------------  ---------  ------------  ----------------
 0  wdsysmon                  Yes        0x38101000    60
```

Table 47 describes the significant fields shown in the display.

Table 47 show critmon deadline Field Descriptions

Field	Description
Deadline monitoring registration info	Deadline monitoring registration information that is used for the node.
ID	Client ID that is internally managed by the wd-critical-mon process.
ClientName	Name of the client.
Activated	Field specifies that deadline monitoring is activated or not.
tick address	Tick memory address for the client application.
timeout vale(sec)	Deadline timeout value.

Related Commands

Command	Description
show critmon context	Displays information about the context for the critical monitor.
show critmon statistics	Displays information about critical statistics.
show critmon trace all	Displays information about all traces for a critical monitor.
show critmon trace error	Displays information about error traces for a critical monitor.
show critmon trace info	Displays trace data for an information type for the critical monitor.
show critmon trace lib-error	Displays information about the trace data for the library error for the critical monitor.
show critmon trace lib-info	Displays trace data for the library information for the critical monitor.

show critmon statistics

To display information about the critical monitor statistics, use the **show critmon statistics** command in EXEC mode and in administration EXEC mode.

show critmon statistics {**all** | **congestion** | **deadline** {**client** *client name*} | **ticker** | **watcher**} {**last** *hours*} {**location** {*node-id* | **all**}}

Syntax Description

all	Displays all the information for the critical monitor.
congestion	Displays all the CPU congestion information for the critical monitor.
deadline	Displays all the statistics information for the deadline monitor.
client	Displays information only for the specified client.
client name	Name of the client.
ticker	Displays the ticker statistics for the wd-critical-mon process.
watcher	Displays the watcher statistics for the wd-critical-mon process.
last	Displays only the last number of hours.
hours	Number of last hours. The range is from 1 to 24.
location	Specifies a node to filter.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Use the **show critmon statistics** command to display information about the critical monitor statistics.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following sample output is from the **show critmon statistics** command:

```
RP/0/RP0/CPU0:router# show critmon statistics all last 5 location all

------------------------------------------------------------------------------
Ticker statistics info (Node: 0/5/CPU0)
------------------------------------------------------------------------------
 Period        SnapShotTimestamp                Frequency
 (min)  CPU#   MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ------ ------ -------------------  ----------  ------------
 15     cpu:0  10/22/2007 14:33:39  4478        298
 15     cpu:0  10/22/2007 14:48:39  4477        298
 15     cpu:0  10/22/2007 15:03:39  4478        298
 15     cpu:0  10/22/2007 15:18:39  4477        298
 15     cpu:0  10/22/2007 15:33:39  4478        298
 15     cpu:0  10/22/2007 15:48:39  4478        298
 15     cpu:0  10/22/2007 16:03:39  4477        298
 15     cpu:0  10/22/2007 16:18:39  4478        298
 15     cpu:0  10/22/2007 16:33:39  4477        298
 15     cpu:0  10/22/2007 16:48:39  4478        298
 15     cpu:0  10/22/2007 17:03:39  4477        298
 15     cpu:0  10/22/2007 17:18:39  4478        298
 15     cpu:0  10/22/2007 17:33:39  4477        298
 15     cpu:0  10/22/2007 17:48:39  4478        298
 15     cpu:0  10/22/2007 18:03:39  4477        298
 15     cpu:0  10/22/2007 18:18:39  4478        298
 15     cpu:0  10/22/2007 18:33:39  4478        298
 15     cpu:0  10/22/2007 18:48:39  4477        298
 15     cpu:0  10/22/2007 19:03:39  4477        298
 15     cpu:0  10/22/2007 19:18:39  4478        298


------------------------------------------------------------------------------
Watcher statistics info (Node: 0/5/CPU0)
------------------------------------------------------------------------------
 Period SnapShotTimestamp                 Frequency
 (min)  MM/DD/YYYY hh:mm:ss  watch count  (count/min)
 ------ -------------------  -----------  ------------
 15     10/22/2007 14:33:39  1498         99
 15     10/22/2007 14:48:39  1497         99
 15     10/22/2007 15:03:39  1498         99
 15     10/22/2007 15:18:39  1497         99
 15     10/22/2007 15:33:39  1498         99
 15     10/22/2007 15:48:39  1497         99
 15     10/22/2007 16:03:39  1498         99
 15     10/22/2007 16:18:39  1497         99
 15     10/22/2007 16:33:39  1498         99
 15     10/22/2007 16:48:39  1497         99
 15     10/22/2007 17:03:39  1498         99
 15     10/22/2007 17:18:39  1497         99
 15     10/22/2007 17:33:39  1498         99
 15     10/22/2007 17:48:39  1497         99
 15     10/22/2007 18:03:39  1498         99
 15     10/22/2007 18:18:39  1497         99
 15     10/22/2007 18:33:39  1498         99
 15     10/22/2007 18:48:39  1497         99
 15     10/22/2007 19:03:39  1498         99
 15     10/22/2007 19:18:39  1497         99
```

```
------------------------------------------------------------------------------
CPU congestion history (Node: 0/5/CPU0)
------------------------------------------------------------------------------

 No congestion history


------------------------------------------------------------------------------
Deadline monitoring statistics info (Node: 0/5/CPU0)
------------------------------------------------------------------------------
 client                  SnapShotTimestamp               Frequency
 (name)                  MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ----------------------- -------------------  ----------  ------------
 wdsysmon                10/22/2007 14:33:39  450         30
 wdsysmon                10/22/2007 14:48:39  450         30
 wdsysmon                10/22/2007 15:03:39  450         30
 wdsysmon                10/22/2007 15:18:39  449         29
 wdsysmon                10/22/2007 15:33:39  450         30
 wdsysmon                10/22/2007 15:48:39  450         30
 wdsysmon                10/22/2007 16:03:39  450         30
 wdsysmon                10/22/2007 16:18:39  449         29
 wdsysmon                10/22/2007 16:33:39  450         30
 wdsysmon                10/22/2007 16:48:39  450         30
 wdsysmon                10/22/2007 17:03:39  450         30
 wdsysmon                10/22/2007 17:18:39  450         30
 wdsysmon                10/22/2007 17:33:39  449         29
 wdsysmon                10/22/2007 17:48:39  450         30
 wdsysmon                10/22/2007 18:03:39  450         30
 wdsysmon                10/22/2007 18:18:39  450         30
 wdsysmon                10/22/2007 18:33:39  449         29
 wdsysmon                10/22/2007 18:48:39  450         30
 wdsysmon                10/22/2007 19:03:39  450         30
 wdsysmon                10/22/2007 19:18:39  450         30


------------------------------------------------------------------------------
Ticker statistics info (Node: 0/4/CPU0)
------------------------------------------------------------------------------
 Period        SnapShotTimestamp                Frequency
 (min)  CPU#   MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ------ ------ -------------------  ----------  ------------
 15     cpu:0  10/22/2007 14:25:38  4454        296
 15     cpu:0  10/22/2007 14:40:38  4455        297
 15     cpu:0  10/22/2007 14:55:38  4454        296
 15     cpu:0  10/22/2007 15:10:37  4455        297
 15     cpu:0  10/22/2007 15:25:37  4454        296
 15     cpu:0  10/22/2007 15:40:37  4455        297
 15     cpu:0  10/22/2007 15:55:37  4454        296
 15     cpu:0  10/22/2007 16:10:37  4455        297
 15     cpu:0  10/22/2007 16:25:37  4455        297
 15     cpu:0  10/22/2007 16:40:37  4454        296
 15     cpu:0  10/22/2007 16:55:37  4455        297
 15     cpu:0  10/22/2007 17:10:37  4455        297
 15     cpu:0  10/22/2007 17:25:37  4455        297
 15     cpu:0  10/22/2007 17:40:37  4454        296
 15     cpu:0  10/22/2007 17:55:37  4455        297
 15     cpu:0  10/22/2007 18:10:37  4454        296
 15     cpu:0  10/22/2007 18:25:37  4454        296
 15     cpu:0  10/22/2007 18:40:37  4455        297
 15     cpu:0  10/22/2007 18:55:36  4455        297
 15     cpu:0  10/22/2007 19:10:36  4455        297
```

```
------------------------------------------------------------------------------
Watcher statistics info (Node: 0/4/CPU0)
------------------------------------------------------------------------------
 Period SnapShotTimestamp                 Frequency
 (min)  MM/DD/YYYY hh:mm:ss  watch count  (count/min)
 ------ -------------------  -----------  ------------
 15     10/22/2007 14:25:38  1496         99
 15     10/22/2007 14:40:38  1495         99
 15     10/22/2007 14:55:38  1495         99
 15     10/22/2007 15:10:37  1495         99
 15     10/22/2007 15:25:37  1495         99
 15     10/22/2007 15:40:37  1495         99
 15     10/22/2007 15:55:37  1495         99
 15     10/22/2007 16:10:37  1495         99
 15     10/22/2007 16:25:37  1495         99
 15     10/22/2007 16:40:37  1495         99
 15     10/22/2007 16:55:37  1495         99
 15     10/22/2007 17:10:37  1495         99
 15     10/22/2007 17:25:37  1495         99
 15     10/22/2007 17:40:37  1495         99
 15     10/22/2007 17:55:37  1495         99
 15     10/22/2007 18:10:37  1495         99
 15     10/22/2007 18:25:37  1495         99
 15     10/22/2007 18:40:37  1495         99
 15     10/22/2007 18:55:36  1495         99
 15     10/22/2007 19:10:36  1495         99


------------------------------------------------------------------------------
CPU congestion history (Node: 0/4/CPU0)
------------------------------------------------------------------------------

 No congestion history


------------------------------------------------------------------------------
Deadline monitoring statistics info (Node: 0/4/CPU0)
------------------------------------------------------------------------------
 client                   SnapShotTimestamp                 Frequency
 (name)                   MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ------------------------ -------------------  ----------  ------------
 wdsysmon                 10/22/2007 14:25:38  449         29
 wdsysmon                 10/22/2007 14:40:38  450         30
 wdsysmon                 10/22/2007 14:55:38  449         29
 wdsysmon                 10/22/2007 15:10:37  450         30
 wdsysmon                 10/22/2007 15:25:37  449         29
 wdsysmon                 10/22/2007 15:40:37  450         30
 wdsysmon                 10/22/2007 15:55:37  449         29
 wdsysmon                 10/22/2007 16:10:37  450         30
 wdsysmon                 10/22/2007 16:25:37  449         29
 wdsysmon                 10/22/2007 16:40:37  450         30
 wdsysmon                 10/22/2007 16:55:37  449         29
 wdsysmon                 10/22/2007 17:10:37  450         30
 wdsysmon                 10/22/2007 17:25:37  449         29
 wdsysmon                 10/22/2007 17:40:37  450         30
 wdsysmon                 10/22/2007 17:55:37  449         29
 wdsysmon                 10/22/2007 18:10:37  450         30
 wdsysmon                 10/22/2007 18:25:37  449         29
 wdsysmon                 10/22/2007 18:40:37  450         30
 wdsysmon                 10/22/2007 18:55:36  449         29
 wdsysmon                 10/22/2007 19:10:36  450         30
```

```
--------------------------------------------------------------------------------
Ticker statistics info (Node: 0/2/CPU0)
--------------------------------------------------------------------------------
 Period        SnapShotTimestamp                Frequency
 (min)  CPU#   MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ------ ------ -------------------  ----------  ------------
 15     cpu:0  10/22/2007 14:25:41  4454        296
 15     cpu:0  10/22/2007 14:40:41  4455        297
 15     cpu:0  10/22/2007 14:55:41  4454        296
 15     cpu:0  10/22/2007 15:10:41  4455        297
 15     cpu:0  10/22/2007 15:25:41  4455        297
 15     cpu:0  10/22/2007 15:40:41  4454        296
 15     cpu:0  10/22/2007 15:55:41  4455        297
 15     cpu:0  10/22/2007 16:10:41  4454        296
 15     cpu:0  10/22/2007 16:25:41  4455        297
 15     cpu:0  10/22/2007 16:40:41  4454        296
 15     cpu:0  10/22/2007 16:55:40  4455        297
 15     cpu:0  10/22/2007 17:10:40  4455        297
 15     cpu:0  10/22/2007 17:25:40  4455        297
 15     cpu:0  10/22/2007 17:40:40  4454        296
 15     cpu:0  10/22/2007 17:55:40  4455        297
 15     cpu:0  10/22/2007 18:10:40  4454        296
 15     cpu:0  10/22/2007 18:25:40  4455        297
 15     cpu:0  10/22/2007 18:40:40  4454        296
 15     cpu:0  10/22/2007 18:55:40  4455        297
 15     cpu:0  10/22/2007 19:10:40  4455        297


--------------------------------------------------------------------------------
Watcher statistics info (Node: 0/2/CPU0)
--------------------------------------------------------------------------------
 Period SnapShotTimestamp                 Frequency
 (min)  MM/DD/YYYY hh:mm:ss  watch count  (count/min)
 ------ -------------------  -----------  ------------
 15     10/22/2007 14:25:41  1495         99
 15     10/22/2007 14:40:41  1495         99
 15     10/22/2007 14:55:41  1495         99
 15     10/22/2007 15:10:41  1495         99
 15     10/22/2007 15:25:41  1495         99
 15     10/22/2007 15:40:41  1495         99
 15     10/22/2007 15:55:41  1495         99
 15     10/22/2007 16:10:41  1495         99
 15     10/22/2007 16:25:41  1495         99
 15     10/22/2007 16:40:41  1496         99
 15     10/22/2007 16:55:40  1495         99
 15     10/22/2007 17:10:40  1495         99
 15     10/22/2007 17:25:40  1495         99
 15     10/22/2007 17:40:40  1495         99
 15     10/22/2007 17:55:40  1495         99
 15     10/22/2007 18:10:40  1495         99
 15     10/22/2007 18:25:40  1495         99
 15     10/22/2007 18:40:40  1495         99
 15     10/22/2007 18:55:40  1495         99
 15     10/22/2007 19:10:40  1495         99


--------------------------------------------------------------------------------
CPU congestion history (Node: 0/2/CPU0)
--------------------------------------------------------------------------------

 No congestion history


--------------------------------------------------------------------------------
```

```
Deadline monitoring statistics info (Node: 0/2/CPU0)
------------------------------------------------------------------------------
 client                   SnapShotTimestamp                Frequency
 (name)                   MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ------------------------ -------------------  ----------  ------------
 wdsysmon                 10/22/2007 14:25:41  449         29
 wdsysmon                 10/22/2007 14:40:41  450         30
 wdsysmon                 10/22/2007 14:55:41  449         29
 wdsysmon                 10/22/2007 15:10:41  450         30
 wdsysmon                 10/22/2007 15:25:41  449         29
 wdsysmon                 10/22/2007 15:40:41  450         30
 wdsysmon                 10/22/2007 15:55:41  449         29
 wdsysmon                 10/22/2007 16:10:41  450         30
 wdsysmon                 10/22/2007 16:25:41  449         29
 wdsysmon                 10/22/2007 16:40:41  450         30
 wdsysmon                 10/22/2007 16:55:40  449         29
 wdsysmon                 10/22/2007 17:10:40  450         30
 wdsysmon                 10/22/2007 17:25:40  449         29
 wdsysmon                 10/22/2007 17:40:40  450         30
 wdsysmon                 10/22/2007 17:55:40  449         29
 wdsysmon                 10/22/2007 18:10:40  450         30
 wdsysmon                 10/22/2007 18:25:40  449         29
 wdsysmon                 10/22/2007 18:40:40  450         30
 wdsysmon                 10/22/2007 18:55:40  449         29
 wdsysmon                 10/22/2007 19:10:40  450         30


------------------------------------------------------------------------------
Ticker statistics info (Node: 0/1/CPU0)
------------------------------------------------------------------------------
 Period        SnapShotTimestamp                Frequency
 (min)  CPU#   MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ------ ------ -------------------  ----------  ------------
 15     cpu:0  10/22/2007 14:33:53  4456        297
 15     cpu:0  10/22/2007 14:48:53  4455        297
 15     cpu:0  10/22/2007 15:03:53  4456        297
 15     cpu:0  10/22/2007 15:18:53  4455        297
 15     cpu:0  10/22/2007 15:33:53  4455        297
 15     cpu:0  10/22/2007 15:48:53  4456        297
 15     cpu:0  10/22/2007 16:03:53  4455        297
 15     cpu:0  10/22/2007 16:18:52  4456        297
 15     cpu:0  10/22/2007 16:33:52  4455        297
 15     cpu:0  10/22/2007 16:48:52  4456        297
 15     cpu:0  10/22/2007 17:03:52  4455        297
 15     cpu:0  10/22/2007 17:18:52  4456        297
 15     cpu:0  10/22/2007 17:33:52  4455        297
 15     cpu:0  10/22/2007 17:48:52  4455        297
 15     cpu:0  10/22/2007 18:03:52  4456        297
 15     cpu:0  10/22/2007 18:18:52  4455        297
 15     cpu:0  10/22/2007 18:33:52  4456        297
 15     cpu:0  10/22/2007 18:48:52  4455        297
 15     cpu:0  10/22/2007 19:03:52  4456        297
 15     cpu:0  10/22/2007 19:18:52  4455        297


------------------------------------------------------------------------------
Watcher statistics info (Node: 0/1/CPU0)
------------------------------------------------------------------------------
 Period SnapShotTimestamp                 Frequency
 (min)  MM/DD/YYYY hh:mm:ss  watch count  (count/min)
 ------ -------------------  -----------  ------------
 15     10/22/2007 14:33:53  1495         99
 15     10/22/2007 14:48:53  1495         99
 15     10/22/2007 15:03:53  1495         99
```

```
 15      10/22/2007 15:18:53  1495         99
 15      10/22/2007 15:33:53  1495         99
 15      10/22/2007 15:48:53  1495         99
 15      10/22/2007 16:03:53  1495         99
 15      10/22/2007 16:18:52  1495         99
 15      10/22/2007 16:33:52  1496         99
 15      10/22/2007 16:48:52  1495         99
 15      10/22/2007 17:03:52  1495         99
 15      10/22/2007 17:18:52  1495         99
 15      10/22/2007 17:33:52  1495         99
 15      10/22/2007 17:48:52  1495         99
 15      10/22/2007 18:03:52  1495         99
 15      10/22/2007 18:18:52  1495         99
 15      10/22/2007 18:33:52  1495         99
 15      10/22/2007 18:48:52  1495         99
 15      10/22/2007 19:03:52  1495         99
 15      10/22/2007 19:18:52  1495         99


--------------------------------------------------------------------------------
CPU congestion history (Node: 0/1/CPU0)
--------------------------------------------------------------------------------

 No congestion history


--------------------------------------------------------------------------------
Deadline monitoring statistics info (Node: 0/1/CPU0)
--------------------------------------------------------------------------------
 client                  SnapShotTimestamp               Frequency
 (name)                  MM/DD/YYYY hh:mm:ss  tick count  (count/min)
 ----------------------- -------------------  ----------  ------------
 wdsysmon                10/22/2007 14:33:53  449         29
 wdsysmon                10/22/2007 14:48:53  450         30
 wdsysmon                10/22/2007 15:03:53  449         29
 wdsysmon                10/22/2007 15:18:53  450         30
 wdsysmon                10/22/2007 15:33:53  449         29
 wdsysmon                10/22/2007 15:48:53  450         30
 wdsysmon                10/22/2007 16:03:53  450         30
 wdsysmon                10/22/2007 16:18:52  449         29
 wdsysmon                10/22/2007 16:33:52  450         30
 wdsysmon                10/22/2007 16:48:52  449         29
 wdsysmon                10/22/2007 17:03:52  450         30
 wdsysmon                10/22/2007 17:18:52  449         29
 wdsysmon                10/22/2007 17:33:52  450         30
 wdsysmon                10/22/2007 17:48:52  449         29
 wdsysmon                10/22/2007 18:03:52  450         30
 wdsysmon                10/22/2007 18:18:52  450         30
 wdsysmon                10/22/2007 18:33:52  449         29
 wdsysmon                10/22/2007 18:48:52  450         30
 wdsysmon                10/22/2007 19:03:52  449         29
 wdsysmon                10/22/2007 19:18:52  450         30
```

Table 48 describes the significant fields shown in the display.

Table 48 show critmon statistics Field Descriptions

Field	Description
Ticker statistics info	Ticker thread statistics information that is used for the node.
Period	Statistics sampling period.

Table 48 show critmon statistics Field Descriptions (continued)

Field	Description
CPU	CPU number.
SnapShotTimestamp	Timestamp that the statistics is saved.
tick count	Ticker counter for the sampling period
Frequency	Frequency for ticker or watcher punch count.
Watcher statistics info	Watcher thread statistics information that is used for the node.
watch count	Watcher count that is used for the sampling period.
CPU congestion history	History of CPU congestion.
Deadline monitoring statistics info	Deadline monitoring statistics information that is used for the node.
client	Name of deadline monitoring client.

Related Commands

Command	Description
show critmon context	Displays information about the context for the critical monitor.
show critmon deadline	Displays information about the deadline for monitoring.
show critmon trace all	Displays information about all traces for a critical monitor.
show critmon trace error	Displays information about error traces for a critical monitor.
show critmon trace info	Displays trace data for an information type for the critical monitor.
show critmon trace lib-error	Displays information about the trace data for the library error for the critical monitor.
show critmon trace lib-info	Displays trace data for the library information for the critical monitor.

show critmon trace all

To display information about all traces for a critical monitor, use the **show critmon trace all** command in EXEC mode and in administration EXEC mode.

show critmon trace all [**file** *filename* {**original**}] [**hexdump**] [**last** *entries*] [**reverse**] [**stats**] [**tailf**] [**unique**] [**verbose**] [**wrapping**] [**location** {*node-id* | **all**}]

Syntax Description

file	(Optional) Displays a specific file.
filename	Name of a specific file.
original	Specifies the original location of the file.
hexdump	(Optional) Displays traces in hexadecimal format.
last	(Optional) Displays trace information for a specific number of entries
entries	Number of entries. Replace entries with the number of entries you want to display. For example, if you enter 5, the display shows the last 5 entries in the trace data. The range is from 1 to 4294967295.
reverse	(Optional) Displays the latest traces first.
stats	(Optional) Displays the statistics in the command output.
tailf	(Optional) Displays the new traces as they are added in the command output.
unique	(Optional) Displays the unique entries with counts in the command output.
verbose	(Optional) Displays the information for internal debugging in the command output.
wrapping	(Optional) Displays the wrapping entries in the command output.
location	(Optional) Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following sample output is from the **show critmon trace all** command:

```
RP/0/RP0/CPU0:router# show critmon trace all hexdump

1 wrapping entries (768 possible, 0 filtered, 1 total)
Oct 11 03:18:11.584 wd-critical-mon/lib/info 0/5/CPU0 t10 tp0x00000302000000a0

Oct 11 03:18:11.584 wd-critical-mon/lib/info 0/5/CPU0 t10 critmon_deadline_regin
```

Related Commands

Command	Description
show critmon context	Displays information about the context for the critical monitor.
show critmon deadline	Displays information about the deadline for monitoring.
show critmon statistics	Displays information about critical statistics.
show critmon trace error	Displays information about error traces for a critical monitor.
show critmon trace info	Displays trace data for an information type for the critical monitor.
show critmon trace lib-error	Displays information about the trace data for the library error for the critical monitor.
show critmon trace lib-info	Displays trace data for the library information for the critical monitor.

show critmon trace error

To display information about error traces for a critical monitor, use the **show critmon trace error** command in EXEC mode and in administration EXEC mode.

show critmon trace error [**file** *filename* {**original**}] [**hexdump**] [**last** *entries*] [**reverse**] [**stats**] [**tailf**] [**unique**] [**verbose**] [**wrapping**] [**location** {*node-id* | **all**}]

Syntax Description

file	(Optional) Displays a specific file.
filename	Name of a specific file.
original	Specifies the original location of the file.
hexdump	(Optional) Displays traces in hexadecimal format.
last	(Optional) Displays the last numbered entries.
entries	Number of entries. The range is from 1 to 4294967295.
reverse	(Optional) Displays the latest traces first.
stats	(Optional) Displays the statistics.
tailf	(Optional) Displays the new traces as they are added.
unique	(Optional) Displays the unique entries with counts.
verbose	(Optional) Displays the information for internal debugging.
wrapping	(Optional) Displays the wrapping entries in the command output.
location	(Optional) Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following example shows how to use the **show critmon trace error** command:

```
RP/0/RP0/CPU0:router# show critmon trace error
```

Related Commands

Command	Description
show critmon context	Displays information about the context for the critical monitor.
show critmon deadline	Displays information about the deadline for monitoring.
show critmon statistics	Displays information about critical statistics.
show critmon trace all	Displays information about all traces for a critical monitor.
show critmon trace info	Displays trace data for an information type for the critical monitor.
show critmon trace lib-error	Displays information about the trace data for the library error for the critical monitor.
show critmon trace lib-info	Displays trace data for the library information for the critical monitor.

show critmon trace info

To display trace data for an information type for the critical monitor, use the **show critmon trace info** command in EXEC mode and in administration EXEC mode.

show critmon trace info [**file** *filename* {**original**}] [**hexdump**] [**last** *entries*] [**reverse**] [**stats**] [**tailf**] [**unique**] [**verbose**] [**wrapping**] [**location** {*node-id* | **all**}]

Syntax Description

file	(Optional) Displays a specific file.
filename	Name of a specific file.
original	Specifies the original location of the file.
hexdump	(Optional) Displays traces in hexadecimal format.
last	(Optional) Displays the last numbered entries.
entries	Number of entries. The range is from 1 to 4294967295.
reverse	(Optional) Displays the latest traces first.
stats	(Optional) Displays the statistics.
tailf	(Optional) Displays the new traces as they are added.
unique	(Optional) Displays the unique entries with counts.
verbose	(Optional) Displays the information for internal debugging.
wrapping	(Optional) Displays the wrapping entries in the command output.
location	(Optional) Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following shows how to use the **show critmon trace info** command:

```
RP/0/RP0/CPU0:router# show critmon trace info
```

Related Commands

Command	Description
show critmon context	Displays information about the context for the critical monitor.
show critmon deadline	Displays information about the deadline for monitoring.
show critmon statistics	Displays information about critical statistics.
show critmon trace all	Displays information about all traces for a critical monitor.
show critmon trace error	Displays information about error traces for a critical monitor.
show critmon trace lib-error	Displays information about the trace data for the library error for the critical monitor.
show critmon trace lib-info	Displays trace data for the library information for the critical monitor.

show critmon trace lib-error

To display information about the trace data for the library error for the critical monitor, use the **show critmon trace lib-error** command in EXEC mode and in administration EXEC mode.

show critmon trace lib-error [**file** *filename* {**original**}] [**hexdump**] [**last** *entries*] [**reverse**] [**stats**] [**tailf**] [**unique**] [**verbose**] [**wrapping**] [**location** {*node-id* | **all**}]

Syntax Description

file	(Optional) Displays a specific file.
filename	Name of a specific file.
original	Specifies the original location of the file.
hexdump	(Optional) Displays traces in hexadecimal format.
last	(Optional) Displays the last numbered entries.
entries	Number of entries. The range is from 1 to 4294967295.
reverse	(Optional) Displays the latest traces first.
stats	(Optional) Displays the statistics.
tailf	(Optional) Displays the new traces as they are added.
unique	(Optional) Displays the unique entries with counts.
verbose	(Optional) Displays the information for internal debugging.
wrapping	(Optional) Displays the wrapping entries in the command output.
location	(Optional) Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following shows how to use the **show critmon trace lib-error** command:

```
RP/0/RP0/CPU0:router# show critmon trace lib-error
```

Related Commands

Command	Description
show critmon context	Displays information about the context for the critical monitor.
show critmon deadline	Displays information about the deadline for monitoring.
show critmon statistics	Displays information about critical statistics.
show critmon trace all	Displays information about all traces for a critical monitor.
show critmon trace error	Displays information about error traces for a critical monitor.
show critmon trace info	Displays trace data for an information type for the critical monitor.
show critmon trace lib-info	Displays trace data for the library information for the critical monitor.

show critmon trace lib-info

To display trace data for the library information for the critical monitor, use the **show critmon trace lib-info** command in EXEC mode and in administration EXEC mode.

show critmon trace lib-info [**file** *filename* {**original**}] [**hexdump**] [**last** *entries*] [**reverse**] [**stats**] [**tailf**] [**unique**] [**verbose**] [**wrapping**] [**location** {*node-id* | **all**}]

Syntax Description

file	(Optional) Displays a specific file.
filename	Name of a specific file.
original	Specifies the original location of the file.
hexdump	(Optional) Displays traces in hexadecimal format.
last	(Optional) Displays the last numbered entries.
entries	Number of entries. The range is from 1 to 4294967295.
reverse	(Optional) Displays the latest traces first.
stats	(Optional) Displays the statistics.
tailf	(Optional) Displays the new traces as they are added.
unique	(Optional) Displays the unique entries with counts.
verbose	(Optional) Displays the information for internal debugging.
wrapping	(Optional) Displays the wrapping entries in the command output.
location	(Optional) Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.
all	Specifies all locations.

Defaults

No default behavior or values

Command Modes

EXEC

Administration EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
cisco-support	read

Examples

The following example shows how to use the **show critmon trace lib-info** command:

```
RP/0/RP0/CPU0:router# show critmon trace lib-info
```

Related Commands

Command	Description
show critmon context	Displays information about the context for the critical monitor.
show critmon deadline	Displays information about the deadline for monitoring.
show critmon statistics	Displays information about critical statistics.
show critmon trace all	Displays information about all traces for a critical monitor.
show critmon trace error	Displays information about error traces for a critical monitor.
show critmon trace info	Displays trace data for an information type for the critical monitor.
show critmon trace lib-error	Displays information about the trace data for the library error for the critical monitor.

show reboot first

To display reboot information for a node first, use the **show reboot first** command in EXEC mode.

show reboot first {**crashinfo** | **syslog** | *trace*} {**location** *node-id*}

Syntax Description

crashinfo	Displays crash information.
syslog	Displays information for the system logs.
trace	Displays the log for the reboot trace.
location	Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.

Command Modes

EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
system	read

Examples

The following sample output is from the **show reboot first** command:

```
RP/0/RP0/CPU0:router# show reboot first
```

Related Commands

Command	Description
show reboot graceful	Displays reboot information for the last graceful reboot for a node.
show reboot history	Displays reboot information for the last graceful reboot.
show reboot last	Displays the latest crash information.
show reboot pcds	Displays Persistent Critical Data Store (PCDS) critical information for the last ungraceful reboot.

show reboot graceful

To display reboot information for the last graceful reboot for a node, use the **show reboot graceful** command in EXEC mode.

show reboot graceful {**location** *node-id*}

Syntax Description

location	Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.

Command Modes

EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
system	read

Examples

The following sample output is from the **show reboot graceful** command:

```
RP/0/RP0/CPU0:router# show reboot graceful location 0/1/CPU0

Reboot Time  : Thu Oct 11 19:15:55 2007
Reboot Cause : 0x4f
Reboot Reason: Cause: HBAgent reloading node on receiving reload notification  0
Trace log    :

[0x46ad85b7b5] Map ingressq PCI base address.ingressq_phy_base = 0xa0000000, in0
[0x46ad8af9ba] Perform Node isolation from Fabric. ingressq_phy_base = 0xa000008
[0x46ad8afe88] Complete Kernel dumper platform task without dumping. rc: 0
```

Related Commands

Command	Description
show reboot first	Displays reboot information for a node first.
show reboot history	Displays reboot information for the last graceful reboot.
show reboot last	Displays the latest crash information.
show reboot pcds	Displays Persistent Critical Data Store (PCDS) critical information for the last ungraceful reboot.

show reboot history

To display reboot information for the last graceful reboot, use the show reboot history command in EXEC mode.

show reboot history [**reverse**] {**location** *node-id*}

Syntax Description

reverse	(Optional) Displays the reverse in chronological order.
location	Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.

Command Modes

EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

The reboot history shows all reboot causes that is stored for the previous node resets.

Task ID

Task ID	Operations
system	read

Examples

The following sample output is from the **show reboot history** command:

```
RP/0/RP0/CPU0:router# show reboot history location 0/1/CPU0

No  Time                        Cause Code  Reason
--------------------------------------------------------------------------------
01  Mon Jul 30 19:27:05 2007  0x2000004f  Cause: MBI-HELLO reloading node on rec
                                          eiving reload notification
                                            Process: mbi-hello

                                                 Traceback: fc15b1a0 fc15b290 482
                                          0020c fc1d5fb0 0 0
02  Thu Aug 16 16:32:35 2007  0x21000106  Cause: All fabric links down on Fabric
                                          q
                                            Process: fabricq_mgr
```

```
                                                Traceback: fc15b1a0 fc15b290 fc9
                                              9ded4 fc99ae00 fc99affc fc99affc
03  Thu Aug 16 17:05:20 2007  0x2000004f  Cause: MBI-HELLO reloading node on rec
                                              eiving reload notification
                                                Process: mbi-hello

                                                Traceback: fc15b1a0 fc15b290 482
                                              0020c fc1d5fb0 0 0
04  Mon Sep 10 21:01:34 2007  0x21000106  Cause: All fabric links down on Fabric
                                              q
                                                Process: fabricq_mgr

                                                Traceback: fc15b1a0 fc15b290 fc9
                                              a3f00 fc9a0e10 fc9a100c fc9a100c
05  Mon Sep 10 21:36:10 2007  0x2000004f  Cause: MBI-HELLO reloading node on rec
                                              eiving reload notification
                                                Process: mbi-hello

                                                Traceback: fc1601a0 fc160290 482
                                              0020c fc1dcfb0 0 0
06  Wed Oct 10 18:28:53 2007  0x21000106  Cause: All fabric links down on Fabric
                                              q
                                                Process: fabricq_mgr

                                                Traceback: fc1601a0 fc160290 fc9
                                              d9f48 fc9d6e58 fc9d7054 fc9d7054
07  Wed Oct 10 19:04:02 2007  0x2000004f  Cause: MBI-HELLO reloading node on rec
                                              eiving reload notification
                                                Process: mbi-hello

                                                Traceback: fc160c38 fc160d34 482
                                              0020c fc1ddfb0 0 0
08  Wed Oct 10 20:19:39 2007  0x0000004f  Cause: HBAgent reloading node on recei
                                              ving reload notification
                                                Process: hbagent

                                                Traceback: fc160c38 fc160d34 482
                                              00228 fc1ddfb0 0 0
09  Wed Oct 10 20:45:53 2007  0x0000004f  Cause: HBAgent reloading node on recei
                                              ving reload notification
                                                Process: hbagent

                                                Traceback: fc160c38 fc160d34 482
                                              00228 fc1ddfb0 0 0
10  Thu Oct 11 19:15:55 2007  0x0000004f  Cause: HBAgent reloading node on recei
                                              ving reload notification
                                                Process: hbagent

                                                Traceback: fc160c38 fc160d34 482
                                              00228 fc1ddfb0 0 0
```

Related Commands

Command	Description
show reboot first	Displays reboot information for a node first.
show reboot graceful	Displays reboot information for the last graceful reboot for a node.
show reboot last	Displays the latest crash information.
show reboot pcds	Displays Persistent Critical Data Store (PCDS) critical information for the last ungraceful reboot.

show reboot last

To display the latest crash information, use the **show reboot last** command in EXEC mode.

show reboot last {**crashinfo** | **syslog** | **trace**} {**location** *node-id*}

Syntax Description

crashinfo	Displays crash information.
syslog	Displays information for the system logs.
trace	Displays the log for the reboot trace.
location	Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.

Command Modes

EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
system	read

Examples

The following sample output is from the **show reboot last** command:

```
RP/0/RP0/CPU0:router# show reboot last crashinfo location 0/1/CPU0

Crashinfo Timestamp: Wed Oct 10 19:04:02 2007


20071010 10:04:03

Crash Reason: Cause code 0x2000004f Cause: MBI-HELLO reloading node on receivin0

Exception at 0xfc160f60 signal 5 c=1 f=3

Active process(s):
```

```
      pkg/bin/mbi-hello Thread ID 2 on cpu 0

     REGISTER INFO
      r0        r1        r2        r3
R0   2000004f  4815da60  4820ea44  00000138
      r4        r5        r6        r7
R4   4815da38  00000002  4815da48  00000001
      r8        r9       r10       r11
R8   80000000  60277440  4815da28  00000600
     r12       r13       r14       r15
R12  24000094  4820ea00  00000000  00000000
     r16       r17       r18       r19
R16  00000000  00000000  00000000  00000000
     r20       r21       r22       r23
R20  00000000  00000000  00000000  00000000
     r24       r25       r26       r27
R24  00000000  00000000  00000000  482053cc
     r28       r29       r30       r31
R28  4815df7c  4815db68  0000004f  00000009
     cnt        lr       msr        pc
R32  fc1e800c  fc160f38  0002d932  fc160f60
     cnd       xer
R36  48000094  2000000f

             SUPERVISOR REGISTERS


           Memory Management Registers

           Instruction BAT Registers
            Index #                Value
           IBAT0U #              0x1ffe
           IBAT0L #                0x12
           IBAT1U #                   0
           IBAT1L #                   0
           IBAT2U #          0x30000ffe
           IBAT2L #          0xf0000032
           IBAT3U #                   0
           IBAT3L #                   0

           Data BAT Registers
            Index #                Value
           DBAT0U #              0x1ffe
           DBAT0L #                0x12
           DBAT1U #                   0
           DBAT1L #          0x10000012
           DBAT2U #          0x30000ffe
           DBAT2L #          0xf000006a
           DBAT3U #                   0
           DBAT3L #          0xf0000022

           Segment Registers
            Index #              SR-Value
                0 #                    0
                1 #                    0
                2 #                    0
                3 #                    0
                4 #                    0
                5 #                    0
                6 #                    0
                7 #                    0
                8 #                    0
                9 #                    0
```

```
                  10 #                  0
                  11 #                  0
                  12 #                  0
                  13 #                  0
                  14 #                  0
                  15 #                  0


             Exception Handling Registers
       Data Addr Reg #                DSISR
        0x60277440 #          0x42000000
     SPRG0 #       SPRG1 #       SPRG2 #       SPRG3
0x4815db68 #      0x4f #       0x9 #         0
   SaveNRestore SRR0 #    SaveNRestore SRR1
        0xfc160f5c #             0x2d932


             Miscellaneous Registers
    Processor Id Reg #                  0
                HID0 #          0x8410c0bc
                HID1 #          0x90018c80

             MSSCR0 #             0x88000
             MSSSR0 #                   0

 STACK TRACE
#0 0xfc160f38
             0

 STACK TRACE
#0 0xfc160290
#1 0xfc99ded4
#2 0xfc99ae00
#3 0xfc99affc
#4 0xfc99affc
#5 0xfc99bccc
#6 0xfc646548
#7 0xfc63f074
#8 0xfc16a404
#9 0xfc1688d8
#10 0xfc63f3bc
#11 0xfc1d5fb0
```

Related Commands

Command	Description
show reboot first	Displays reboot information for a node first.
show reboot graceful	Displays reboot information for the last graceful reboot for a node.
show reboot history	Displays reboot information for the last graceful reboot.
show reboot pcds	Displays Persistent Critical Data Store (PCDS) critical information for the last ungraceful reboot.

show reboot pcds

To display Persistent Critical Data Store (PCDS) critical information for the last ungraceful reboot, use the **show reboot pcds** command in EXEC mode.

show reboot pcds {**location** *node-id*}

Syntax Description

location	Specifies a node.
node-id	Node ID. The *node-id* argument is entered in the *rack/slot/module* notation.

Command Modes

EXEC

Command History

Release	Modification
Release 3.6.0	This command was introduced on the Cisco CRS-1 and Cisco XR 12000 Series Router.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Task ID

Task ID	Operations
system	read

Examples

The following example shows some sample output from the **show reboot pcds** command:

```
RP/0/RP0/CPU0:router# show reboot pcds location 0/1/CPU0

PCDS Timestamp: Wed Oct 10 19:04:02 2007
PCDS size: 131072 (bytes)
PCDS Data:

000000  03014352 49544d4f 4e000000 00000000 ..CRITMON.......
000010  02000000 00000008 00000000 30d00000 ............0...
000020  00001a90 00000000 00000000 00000000 ................
000030  0b0f0b0f 13911300 b8000013 b8000017 ................
000040  470ca354 11000300 00001c41 00000000 G..T.......A....
000050  00000974 00000000 30464fe4 ffffff00 ...t....0FO.....
000060  b8000003 b8000007 b8000003 b8000007 ................
000070  0b0f0b0f 13911300 b8000013 b8000017 ................
000080  470ca354 01000300 00001c44 00000000 G..T.......D....
000090  00000975 00000000 30464fe4 ffffff00 ...u....0FO.....
```

```
0000a0  b8000003 b8000007 b8000003 b8000007 ................
0000b0  0b0f0b0f 13911300 b8000013 b8000017 ................
0000c0  470ca355 11000300 00001c47 00000000 G..U.......G....
0000d0  00000976 00000000 30464fe4 ffffff00 ...v....0FO.....
0000e0  b8000003 b8000007 b8000003 b8000007 ................
0000f0  0b0f0b0f 13911300 b8000013 b8000017 ................
000100  470ca355 01000300 00001c4a 00000000 G..U.......J....
000110  00000977 00000000 30464fe4 ffffff00 ...w....0FO.....
000120  b8000003 b8000007 b8000003 b8000007 ................
000130  0b0f0b0f 13911300 b8000013 b8000017 ................
000140  470ca356 11000300 00001c4d 00000000 G..V.......M....
000150  00000978 00000000 30464fe4 ffffff00 ...x....0FO.....
000160  b8000003 b8000007 b8000003 b80000ff ................
000170  0bff0bff 13911300 b8000013 b8000017 ................
000180  470ca357 01000300 00001c50 00000000 G..W.......P....
000190  00000979 00000000 30464fe4 ffffff00 ...y....0FO.....
0001a0  b8000003 b8000007 b80000ff b8000007 ................
0001b0  ff0fff0f ff911300 b8000013 b8000017 ................
0001c0  470ca357 11000300 00001c53 00000000 G..W.......S....
0001d0  0000097a 00000000 30464fe4 ffffff00 ...z....0FO.....
0001e0  b8000003 b8000007 b80000ff b8000007 ................
0001f0  ff0fff0f ff911300 b8000013 b80000ff ................
000200  470ca358 01000300 00001c56 00000000 G..X.......V....
000210  0000097b 00000000 30464fe4 ffffff00 ...{....0FO.....
000220  b8000003 b8000007 b80000ff b8000007 ................
000230  ff0fff0f ff911300 b8000013 b80000ff ................
000240  470ca358 11000300 00001c59 00000000 G..X.......Y....
000250  0000097c 00000000 30464fe4 ffffff00 ...|....0FO.....
000260  b8000003 b8000007 b80000ff b8000007 ................
000270  ff0fff0f ff911300 b8000013 b80000ff ................
000280  470ca359 01000300 00001c5c 00000000 G..Y.......\....
000290  0000097d 00000000 30464fe4 ffffff00 ...}....0FO.....
0002a0  b8000003 b8000007 b8000003 b8000007 ................
0002b0  0b0f0b0f 13911300 b8000013 b8000017 ................
0002c0  470ca35a 11000300 00001c5f 00000000 G..Z......._....
0002d0  0000097e 00000000 30464fe4 ffffff00 ...~....0FO.....
0002e0  b8000003 b8000007 b8000003 b8000007 ................
0002f0  0b0f0b0f 13911300 b8000013 b8000017 ................
000300  470ca35a 01000300 00001c62 00000000 G..Z.......b....
000310  0000097f 00000000 30464fe4 ffffff00 ........0FO.....
000320  b8000003 b8000007 b8000003 b8000007 ................
000330  0b0f0b0f 13911300 b8000013 b8000017 ................
000340  470ca35b 11000300 00001c65 00000000 G..[.......e....
000350  00000980 00000000 30464fe4 ffffff00 ........0FO.....
000360  b8000003 b8000007 b8000003 b8000007 ................
000370  0b0fff0f 13911300 b8000013 b8000017 ................
000380  470ca35b 01000300 00001c68 00000000 G..[.......h....
000390  00000981 00000000 30464fe4 ffffff00 ........0FO.....
0003a0  b80000ff b80000ff b8000003 b80000ff ................
0003b0  0bff0bff 13911300 b80000ff b8000017 ................
0003c0  470ca35c 11000300 00001c6b 00000000 G..\.......k....
0003d0  00000982 00000000 30464fe4 ffffff00 ........0FO.....
0003e0  b8000003 b8000007 b8000003 b8000007 ................
0003f0  0b0f0b0f 13911300 b8000013 b8000017 ................
000400  470ca35d 01000300 00001c6e 00000000 G..].......n....
000410  00000983 00000000 30464fe4 ffffff00 ........0FO.....
000420  b8000003 b8000007 b8000003 b8000007 ................
000430  0b0f0b0f 13911300 b8000013 b8000017 ................
000440  470ca35d 11000300 00001c71 00000000 G..].......q....
000450  00000984 00000000 30464fe4 ffffff00 ........0FO.....
000460  b8000003 b8000007 b8000003 b8000007 ................
000470  0b0f0b0f 13911300 b8000013 b8000017 ................
000480  470ca35e 01000300 00001c74 00000000 G..^.......t....
000490  00000985 00000000 30464fe4 ffffff00 ........0FO.....
```

```
0004a0  b8000003 b8000007 b8000003 b8000007 ................
0004b0  0b0f0b0f 13911300 b8000013 b8000017 ................
0004c0  470ca35e 11000300 00001c77 00000000 G..^.......w....
0004d0  00000986 00000000 30464fe4 ffffff00 ........0FO.....
0004e0  b8000003 b8000007 b8000003 b8000007 ................
0004f0  0b0f0b0f 13911300 b8000013 b8000017 ................
000500  470ca35f 01000300 00001c7a 00000000 G.._.......z....
000510  00000987 00000000 30464fe4 ffffff00 ........0FO.....
000520  b8000003 b8000007 b8000003 b8000007 ................
000530  0b0f0b0f 13911300 b8000013 b8000017 ................
000540  470ca360 11000300 00001c7d 00000000 G..`.......}....
000550  00000988 00000000 30464fe4 ffffff00 ........0FO.....
000560  b8000003 b8000007 b8000003 b8000007 ................
000570  0b0f0b0f 13911300 b8000013 b8000017 ................
000580  470ca360 01000300 00001c80 00000000 G..`............
000590  00000989 00000000 30464fe4 ffffff00 ........0FO.....
0005a0  b8000003 b8000007 b8000003 b8000007 ................
0005b0  0b0f0b0f 13911300 b8000013 b8000017 ................
0005c0  470ca361 11000300 00001c83 00000000 G..a............
0005d0  0000098a 00000000 30464fe4 ffffff00 ........0FO.....
0005e0  b8000003 b8000007 b8000003 b8000007 ................
0005f0  0b0f0b0f 13911300 b8000013 b8000017 ................
000600  470ca361 01000300 00001c86 00000000 G..a............
000610  0000098b 00000000 30464fe4 ffffff00 ........0FO.....
000620  b8000003 b8000007 b8000003 b8000007 ................
000630  0b0f0b0f 13911300 b8000013 b8000017 ................
000640  470ca362 11000300 00001c89 00000000 G..b............
000650  0000098c 00000000 30464fe4 ffffff00 ........0FO.....
000660  b8000003 b8000007 b8000003 b8000007 ................
000670  0b0f0b0f 13911300 b8000013 b8000017 ................
000680  470ca363 01000300 00001c8c 00000000 G..c............
000690  0000098d 00000000 30464fe4 ffffff00 ........0FO.....
0006a0  b8000003 b8000007 b8000003 b8000007 ................
0006b0  0b0f0b0f 13911300 b8000013 b8000017 ................
0006c0  470ca363 11000300 00001c8f 00000000 G..c............
0006d0  0000098e 00000000 30464fe4 ffffff00 ........0FO.....
```

Related Commands

Command	Description
show reboot first	Displays reboot information for a node first.
show reboot graceful	Displays reboot information for the last graceful reboot for a node.
show reboot history	Displays reboot information for the last graceful reboot.
show reboot last	Displays the latest crash information.

show watchdog

To display information about the memory state or threshold memory, use the **show watchdog** command in EXEC mode.

show watchdog [**memory-state** | **threshold memory** {**configured** | **defaults**}] [**location** *node-id*]

Syntax Description

memory-state	(Optional) Displays the memory state.
threshold memory	(Optional) Displays the memory thresholds.
configured	Displays the configured memory thresholds.
defaults	Displays the default memory thresholds.
location *node-id*	(Optional) Specifies a node. The *node-id* argument is entered in the *rack/slot/module* notation. The **location** *node-id* keyword and argument must be specified if the **threshold memory** keywords are selected.

Defaults

The command output is not compressed.

Command Modes

EXEC

Command History

Release	Modification
Release 2.0	This command was introduced on the Cisco CRS-1.
Release 3.0	No modification.
Release 3.2	This command was supported on the Cisco XR 12000 Series Router.
Release 3.3.0	No modification.
Release 3.4.0	No modification.
Release 3.5.0	No modification.
Release 3.6.0	No modification.
Release 3.7.0	No modification.
Release 3.8.0	No modification.

Usage Guidelines

To use this command, your Cisco IOS XR software system administrator must assign you to a user group associated with a task group that includes the corresponding command task IDs. If you need assistance with your task group assignment, contact your system administrator. For detailed information about user groups and task IDs, see the *Configuring AAA Services on Cisco IOS XR Software* module of *Cisco IOS XR System Security Configuration Guide*.

Use the **show watchdog** command to display information about the memory states or thresholds for a specified location. You can display the default or configured memory thresholds.

Task ID

Task ID	Operations
basic-services	read

Examples

The following sample output is from the **show watchdog** command:

```
RP/0/RP0/CPU0:router# show watchdog memory-state

Memory information:
    Physical Memory: 4096     MB
    Free Memory:     3170.429 MB
    Memory State:         Normal
```

Related Commands

Command	Description
watchdog threshold memory	Configures the value of memory available for each alarm threshold.