



Online Diagnostic Commands

This chapter describe all the online diagnostic commands.

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diagnostic monitor location

To disable health-monitoring (HM) diagnostic testing for a specified location, use **diagnostic monitor location** command in System Admin Config mode. To enable HM testing (default condition), use the **no** form of this command.

diagnostic monitor location *node-name* **test** *test-name* **disable**
no diagnostic monitor location *node-name* **test** *test-name* **disable**

Syntax Description

node-name Location where diagnostic monitoring has to disabled/enabled.

test-name Name of the diagnostic test. Currently, only filesystem_test is supported.

You can use **show diagnostic content** command in System Admin EXEC mode to see a list of test names and other associated attributes.

disable Disables diagnostic monitoring for a specified location.

Command Default

By default, the health-monitoring tests are enabled in the system.

Command Modes

System Admin Config

Command History

Release	Modification
Release 6.3.1	This command was introduced.

Examples

This example shows how to enable health-monitoring diagnostic testing for 0/7:

```
sysadmin-vm:0_RP0(config)# diagnostic monitor location 0/7 test filesystem_test disable
```

diagnostic monitor interval

To configure health-monitoring (HM) diagnostic testing for a specific interval at a specified location, use **diagnostic monitor interval** command in System Admin Config mode. To reverse the configuration and restore the system to its original state, use the **no** form of this command.

diagnostic monitor interval location *node-name* **test** *test-name* **days** *number-of-days* **time** *hours:minutes:seconds*

no diagnostic monitor interval location *node-name* **test** *test-name* **days** *number-of-days* **time** *hours:minutes:seconds*

Syntax Description	node-name	Location where diagnostic monitoring has to be configured.
	test-name	Name of the diagnostic test. Currently, only <code>filesystem_test</code> is supported. You can use show diagnostic content command in System Admin EXEC mode to see a list of test names and other associated attributes.
	number-of-days	Interval between each test run.
	hours:minutes:seconds	The <i>number-of-days</i> variable specifies the number of days between each test run. The range is from 0 through 20. The <i>hours:minutes:seconds</i> variable specifies the test interval. Hour is a number in the range from 0 through 23, minutes is a number in the range from 0 through 59, and seconds is a number in the range from 0 through 59.
Command Default	No default behavior or values.	
Command Modes	System Admin Config	
Command History	Release	Modification
	Release 6.3.1	This command was introduced.
Usage Guidelines	A diagnostic test internally defines a minimum interval time that is required for it to complete one round of testing. The configuration will be rejected if you configure the HM testing for an interval time less than the minimum interval time. For example, the <code>filesystem_test</code> has a minimum interval of 10 seconds and the configured interval time must be greater than or equal to 10 seconds.	
Examples	<p>This example shows how to set the health-monitoring diagnostic testing at an interval of 1 hour, 2 minutes, and 3 seconds at 0/7 location:</p> <pre>sysadmin-vm:0_RP0(config)# diagnostic monitor interval location 0/7 test filesystem_test days 0 time 1:2:3</pre>	

diagnostic monitor threshold

To configure the health-monitoring (HM) diagnostic test failure threshold, use **diagnostic monitor threshold** command in System Admin Config mode. To reverse the configuration and restore the system to its original state, use the **no** form of this command.

diagnostic monitor threshold location *node-name* **test** *test-name* **failure-count** *failures*
no diagnostic monitor threshold location *node-name* **test** *test-name* **failure-count** *failures*

Syntax Description	node-name	Location where diagnostic monitoring has to be configured.
	test-name	Name of the diagnostic test. Currently, only filesystem_test is supported. You can use show diagnostic content command in System Admin EXEC mode to see a list of test names and other associated attributes.
	failure count <i>failures</i>	Number of test failures allowed. The given range is 1 to 99.
Command Default	No default behavior or values.	
Command Modes	System Admin Config	
Command History	Release	Modification
	Release 6.3.1	This command was introduced.

Examples

This example shows how to set the failure threshold to 5 test failures at 0/7 location:

```
sysadmin-vm:0_RP0(config)# diagnostic monitor threshold location 0/7 test filesystem_test
failure-count 5
```

diagnostic schedule start

To configure a scheduled diagnostic test, use **diagnostic schedule start** command in System Admin Config mode. To disable the diagnostic schedule, use the **no** form of this command.

diagnostic schedule start location *node-name test test-name on month day-of-month year hour:minutes*
diagnostic schedule start location *node-name test test-name weekly day-of-week hour:minutes*
diagnostic schedule start location *node-name test test-name daily hour:minutes*
no diagnostic schedule start location *node-name test test-name on month day-of-month year hour:minutes*

Syntax Description	node-name	Location where diagnostic monitoring has to be configured.
	test-name	Name of the diagnostic test. Currently, only filesystem_test is supported. You can use show diagnostic content command in System Admin EXEC mode to see a list of test names and other associated attributes.
	on <i>month day-of-month year hour:minutes</i>	Schedules an exact date. <i>month</i> is from January to December.
	weekly <i>day-of-week hour:minutes</i> daily <i>hour:minutes</i>	<i>day-of-month</i> is from 1 to 31. <i>year</i> is from 2013 to 2099. <i>day-of-week</i> is from Monday to Sunday. <i>hour:minutes</i> is the interval time in the range from 0 through 23 and 0 through 59.
Command Default	No default behavior or values.	
Command Modes	System Admin Config	
Command History	Release	Modification
	Release 6.3.1	This command was introduced.

Examples

This example shows how to schedule a test:

- on daily basis:

```
sysadmin-vm:0_RP0(config)# diagnostic schedule start location 0/7 test filesystem_test daily 01:00
```

- on weekly basis:

```
sysadmin-vm:0_RP0(config)# diagnostic schedule start location 0/7 test filesystem_test weekly SUN 01:00
```

- on monthly basis:

```
sysadmin-vm:0_RP0(config)# diagnostic schedule start location 0/7 test filesystem_test on  
OCT 10 2017 01:00
```

diagnostic start

To start a specific diagnostic test, use **diagnostic start** command in System Admin EXEC mode.

diagnostic start location *node-name* **test** *test-name* | **all**

Syntax Description	node-name	Location where diagnostic monitoring has to be configured.
	test-name	Name of the diagnostic test. Currently, only filesystem_test is supported.
	all	Keyword all starts all the tests. You can use show diagnostic content command in System Admin EXEC mode to see a list of test names and other associated attributes.
Command Default	No default behavior or values.	
Command Modes	System Admin EXEC	
Command History	Release	Modification
	Release 6.3.1	This command was introduced.

Examples

This example shows how to start a test at location 0/7:

```
sysadmin-vm:0_RP0# diagnostic start location 0/7 test filesystem_test

Thu Oct 5 08:39:30.342 UTC
Test started successfully
```

diagnostic stop

To stop a diagnostic test that is already in progress, use **diagnostic stop** command in System Admin EXEC mode.

diagnostic stop location *node-name* **test** *test-name* | **all**

Syntax Description

node-name Location where diagnostic monitoring has to be configured.

test-name Name of the diagnostic test. Currently, only filesystem_test is supported.

all Keyword all starts all the tests.

You can use **show diagnostic content** command in System Admin EXEC mode to see a list of test names and other associated attributes.

Command Default

No default behavior or values.

Command Modes

System Admin EXEC

Command History

Release

Release 6.3.1

Modification

This command was introduced.

Usage Guidelines

This command is used for tests that take long time to run. Before running this stop command, check if the test is running, terminate the test using this command, and then clean-up the related data.

Examples

This example shows how to stop a test running at location 0/7:

```
sysadmin-vm:0_RP0# diagnostic stop location 0/7 test filesystem_test
```

```
Thu Oct 5 08:39:30.342 UTC
```


show diagnostic content

To display test information including test name, test attributes, HM interval, and threshold, use **show diagnostic content** command in System Admin EXEC mode.

show diagnostic content location *node-name*

Syntax Description	node-name Location where diagnostic monitoring has to be configured.				
Command Default	No default behavior or values.				
Command Modes	System Admin EXEC				
Command History	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>Release 6.3.1</td><td>This command was introduced.</td></tr> </table>	Release	Modification	Release 6.3.1	This command was introduced.
Release	Modification				
Release 6.3.1	This command was introduced.				

Examples

This example shows how to stop a test running at location 0/7:

```
sysadmin-vm:0_RP0# show diagnostic content location 0/7
```

```
Thu Oct 5 08:42:10.454 UTC
```

```
Diagnostics test suite attributes:
```

```
M/C/* - Minimal bootup level test / Complete bootup level test / NA
```

```
B/* - Basic ondemand test / NA
```

```
P/V/* - Per port test / Per device test / NA
```

```
D/N/* - Disruptive test / Non-disruptive test / NA
```

```
S/* - Only applicable to standby unit / NA
```

```
X/* - Not a health monitoring test / NA
```

```
F/* - Fixed monitoring interval test / NA
```

```
E/* - Always enabled monitoring test / NA
```

```
A/I - Monitoring is active / Monitoring is inactive
```

ID	Test Name	Attributes	Test Interval (day hh:mm:ss)	threshold
1	filesystem_test	*B*N**FEA	000 00:03:00	5

```
sysadmin-vm:0_RP0#
```

show diagnostic result

To display diagnostic test results, use **show diagnostic result** command in System Admin EXEC mode.

show diagnostic result location *node-name* **test** *test-name* | **all detail**

Syntax Description	node-name	Location where diagnostic monitoring has to disabled/enabled.
	test-name	Name of the diagnostic test. Currently, only filesystem_test is supported.
	all	Keyword all starts all the tests. You can use show diagnostic content command in System Admin EXEC mode to see a list of test names and other associated attributes.
	detail	Displays detailed results.
Command Default	No default behavior or values.	
Command Modes	System Admin EXEC	
Command History	Release	Modification
	Release 6.3.1	This command was introduced.

Examples

This example shows output sample of a test running at location 0/7:

```
sysadmin-vm:0_RP0# show diagnostic result location 0/7
```

```
Thu Oct 5 08:43:50.845 UTC
```

```
Test results: (P = Pass, F = Fail, U = Untested, T = Timedout, A = Aborted, S = Stopped)
```

```
1) filesystem_test -----> P
```

```
sysadmin-vm:0_RP0#
```

```
sysadmin-vm:0_RP0# show diagnostic result details location 0/7
```

```
Thu Oct 5 08:43:57.776 UTC
```

```
Test results: (P = Pass, F = Fail, U = Untested, T = Timedout, A = Aborted, S = Stopped)
```

```
1) filesystem_test -----> P
Error code -----> 0 (DIAG_SUCCESS)
Test type -----> HEALTH MONITOR
HM test count -----> 7
ONDEMAND test count -----> 1
SCHED test count -----> 0
Total run count -----> 8
Last test execution time ----> Thu Oct 5 08:42:30 2017
First test failure time ----> n/a
Last test failure time ----> n/a
Last test pass time -----> Thu Oct 5 08:42:30 2017
```

```
Total failure count -----> 0
Consecutive failure count ---> 0
Additional information -----> test completed and passed
```

```
sysadmin-vm:0_RP0#
```

show diagnostic status

To display running tests, use **show diagnostic status** command in System Admin EXEC mode.

show diagnostic status

Syntax Description This command has no keywords or arguments.

Command Default No default behavior or values.

Command Modes System Admin EXEC

Command History	Release	Modification
	Release 6.3.1	This command was introduced.

Usage Guidelines This command is not applicable to health-monitoring tests.

Examples This example shows output sample of a running test status:

```
sysadmin-vm:0_RP0# show diagnostic status location_index

Thu Oct  5  08:44:51.182 UTC

<BU> - Bootup Diagnostics,  <HM>  - Health Monitoring Diagnostics,
<OD> - OnDemand Diagnostics, <SCHD> - Scheduled Diagnostics
=====
Location      Current Running Test  Status                               Run by
-----
0/RP0         N/A                    N/A
-----

0/RP1         N/A                    N/A
-----

0/7           N/A                    N/A
-----

0/RP0/CPU0    N/A                    N/A
-----

0/RP1/CPU0    N/A                    N/A
-----

0/7/CPU0      N/A                    N/A
-----
sysadmin-vm:0_RP0#
```

show logging onboard

To display the onboard diagnostic logs stored in the persistent memory, use **show logging onboard** command in System Admin EXEC mode.

show logging onboard diag_result location *node-name*

Syntax Description	node-name Location for which diagnostic logs have to be displayed. The available locations can be obtained by using '?' in the command prompt.				
Command Default	No default behavior or values.				
Command Modes	System Admin EXEC				
Command History	<table> <tr> <th>Release</th><th>Modification</th></tr> <tr> <td>Release 6.3.1</td><td>This command was introduced.</td></tr> </table>	Release	Modification	Release 6.3.1	This command was introduced.
Release	Modification				
Release 6.3.1	This command was introduced.				

Examples

This example shows output sample of the show logging onboard command:

```
sysadmin-vm:0_RP0# show logging onboard diag_result location 0/7
```

```
Thu Oct 5 08:45:43.340 UTC
```

```
OBFL Diag Test Result Information For : 0/7
```

```
NOTE: Read Operation in progress; Incomplete Data Displayed
```

```
-----
DIAG RESULTS INFORMATION
-----
```

```
Time Stamp (UTC)      |      Logging info
mm/dd/yyyy hh:mm:ss |
```

```
-----
Logging Time: 10/05/2017 07:39:12
0) filesystem_test ----> .
Error code -----> 0 (DIAG_SUCCESS_CAL)
Total run count -----> 11
Last test execution time ----> 10/05/2017 07:39:12
First test failure time ----> n/a
Last test failure time ----> n/a
Last test pass time -----> 10/05/2017 07:39:12
Consecutive failure count ----> 0
-----
```

```
Logging Time: 10/05/2017 14:07:28
```

show run diagnostic

To display all diagnostic related configurations, use **show run diagnostic** command in System Admin EXEC mode.

show run diagnostic

Syntax Description	This command has no keywords or arguments.
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Command Default	No default behavior or values.
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Command Modes	System Admin EXEC
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Command History	Release	Modification
	Release 6.3.1	This command was introduced.

Examples

This example shows output sample of the show run diagnostic command:

```
sysadmin-vm:0_RP0# show run diagnostic
Thu Oct  5 08:46:19.371 UTC
diagnostic monitor interval location 0/7
!
diagnostic monitor threshold location 0/7
  test filesystem_test
    failure-count 5
!
!
diagnostic schedule start location 0/7
  test filesystem_test
    daily 01:00
    !
    on JAN 7 2017 01:00
    !
    weekly SUN 01:00
    !
!
!
```