



## オンライン診断

オンライン診断機能には、さまざまなハードウェアコンポーネントをチェックし、ソフトウェアプロセスとインターフェイスを検証するテストが含まれています。

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## オンライン診断のスケジューリング

ユーザーは、指定時刻、毎日、毎週、または毎月、特定のルータに対してオンライン診断をスケジューリングすることができます。スケジューリングを削除するには、コマンドの **no** 形式を入力します。

設定方法については、設定例のセクションを参照してください。

## ヘルス モニタリング診断の設定

ルータが稼働中のネットワークに接続している間に、指定したルータでヘルスマニタリング診断テストを設定できます。ユーザーは、ヘルスマニタリングテストの実行間隔、テストに失敗した場合にシステムメッセージが生成されるかどうか、または、個々のテストをイネーブルまたはディセーブルにするかを、設定できます。テストをディセーブルにするには、コマンドの **no** 形式を入力します。

ヘルスマニタリング診断の設定方法については、「ヘルスマニタリング診断の例」のセクションを参照してください。

## 汎用オンライン診断コマンド

```

diagnostic monitor slot slot num test test num
diagnostic monitor syslog
diagnostic monitor threshold slot slot num test test num failure count threshold value
diagnostic schedule slot slot num/all test test num
diagnostic event-log size size value
diagnostic monitor interval slot slot num test test num interval

```

## 汎用オンライン診断 EXEC コマンド

```

diagnostic start slot slot num test test num
diagnostic stop slot slot num test test num
clear diagnostic event-log slot slot num/all
test diagnostic simulation [failure | clear] slot slot num test test id

```

### サブスロットをサポートする EXEC コマンド

```

diagnostic start subslot slot num>/<bay num test test num
diagnostic stop subslot <slot num>/<bay num> test test num
test diagnostic simulation [failure | clear] subslot <slot num>/<bay num> test test id

```

## 汎用オンライン診断 Show コマンド

```

show diagnostic bootup level
show diagnostic slot slot num/all
show diagnostic schedule slot slot num/all
show diagnostic result slot slot num/all
show diagnostic result slot slot num/all detail
show diagnostic events slot slot num/all
show diagnostic content slot slot num/all
show diagnostic description slot slot num/all
show diagnostic status
show diagnostic ondemand test-parameter slot slot num test testid
show diagnostic simulation failure slot slot num

```

### サブスロットをサポートする show コマンド

```

show diagnostic subslot slot num/bay num
show diagnostic schedule subslot slot num/bay num
show diagnostic result subslot slot num/bay num
show diagnostic result subslot slot num/bay num detail
show diagnostic events subslot slot num/bay num
show diagnostic content subslot slot num/bay num
show diagnostic description subslot slot num/bay num
show diagnostic content subslot slot num/bay num
show diagnostic ondemand test-parameter subslot slot num/bay num test testid
show diagnostic simulation failure subslot slot num>/bay num

```

# 汎用オンライン診断の例

```

Router#show diagnostic slot 1

Current bootup diagnostic level: minimal

slot 1: ASR1000-MIP100          SerialNo : JAE210500MM

Overall Diagnostic Result for slot 1 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

1) Np5cHeartbeatTest -----> .
2) AstroIlkTest -----> .
3) LCFpgaScratchTest -----> .
4) CCEOBCLinkStateTest -----> .

slot 1: ASR1000-MIP100          SerialNo : JAE18160AM6

Overall Diagnostic Result for slot 1 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

1) EPAFpgaScratchTest -----> .
2) EPAStatusTest -----> .
3) EPAHostPrbsStausTest -----> .
4) EPAXcvrTest:

Port  0  1  2  3  4  5  6  7  8  9
-----
      U  U  U  U  U  U  U  U  U  U

Router#show diagnostic subslot 1/1

Current bootup diagnostic level: minimal

subslot 1/1: EPA-10X10GE          SerialNo : JAE18160AM6

Overall Diagnostic Result for subslot 1/1 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

1) EPAFpgaScratchTest -----> .
2) EPAStatusTest -----> .
3) EPAHostPrbsStausTest -----> .
4) EPAXcvrTest:

Port  0  1  2  3  4  5  6  7  8  9
-----
      U  U  U  U  U  U  U  U  U  U

Router#show diagnostic subslot 1/1 detail

Current bootup diagnostic level: minimal

subslot 1/1: EPA-10X10GE          SerialNo : JAE18160AM6

```

Overall Diagnostic Result for subslot 1/1 : PASS  
 Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

---

1) EPAFpgaScratchTest -----> .

Error code -----> 0 (DIAG\_SUCCESS)  
 Total run count -----> 1  
 Last test testing type -----> OnDemand  
 Last test execution time ----> Mar 05 2019 14:17:05  
 First test failure time -----> n/a  
 Last test failure time -----> n/a  
 Last test pass time -----> Mar 05 2019 14:17:05  
 Total failure count -----> 0  
 Consecutive failure count ---> 0

---

2) EPAStatusTest -----> .

Error code -----> 0 (DIAG\_SUCCESS)  
 Total run count -----> 1  
 Last test testing type -----> OnDemand  
 Last test execution time ----> Mar 05 2019 14:17:05  
 First test failure time -----> n/a  
 Last test failure time -----> n/a  
 Last test pass time -----> Mar 05 2019 14:17:05  
 Total failure count -----> 0  
 Consecutive failure count ---> 0

---

3) EPAHostPrbsStausTest -----> .

Error code -----> 0 (DIAG\_SUCCESS)  
 Total run count -----> 1  
 Last test testing type -----> OnDemand  
 Last test execution time ----> Mar 05 2019 14:17:05  
 First test failure time -----> n/a  
 Last test failure time -----> n/a  
 Last test pass time -----> Mar 05 2019 14:17:05  
 Total failure count -----> 0  
 Consecutive failure count ---> 0

---

4) EPAXcvrTest:

Port	0	1	2	3	4	5	6	7	8	9
	U	U	U	U	U	U	U	U	U	U

Error code -----> 1 (DIAG\_FAILURE)  
 Total run count -----> 1  
 Last test testing type -----> OnDemand  
 Last test execution time ----> Mar 05 2019 14:17:05  
 First test failure time -----> Mar 05 2019 14:17:05  
 Last test failure time -----> Mar 05 2019 14:17:05  
 Last test pass time -----> n/a  
 Total failure count -----> 1  
 Consecutive failure count ---> 1

---

# ヘルスマモニタリング診断の設定例

Slot command example :

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#diagnostic monitor slot 2 test ?
```

```
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.ms	Three- day shold
1)	Np5cHeartbeatTest	*B*N***I	000 00:00:05.00	n/a
2)	AstroIlkTest	*B*N***I	000 00:01:00.00	n/a
3)	LCFpgaScratchTest	*B*N***I	000 00:02:00.00	n/a
4)	CCEOBCLinkStateTest	*B*N***I	000 00:01:00.00	n/a

```
WORD Test ID list (e.g. 1,3-6) or Test Name
all Select all test ID
```

```
Router(config)#
Router(config)#diagnostic monitor slot 2 test all
Router(config)#end
Router#show ru
*Aug 2 06:12:19.254: %SYS-5-CONFIG_I: Configured from console by consolen
Router#show run | sec diagnostic monitor
diagnostic monitor slot 2 test Np5cHeartbeatTest cardindex 4
diagnostic monitor slot 2 test AstroIlkTest cardindex 4
diagnostic monitor slot 2 test LCFpgaScratchTest cardindex 4
diagnostic monitor slot 2 test CCEOBCLinkStateTest cardindex 4
Router#
Router#show diagnostic content slot 2
```

slot 2: ASR1000-MIP100

```
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.ms	Three- day shold
1)	Np5cHeartbeatTest	*B*N***A	000 00:00:05.00	n/a

```

2) AstroIlkTest -----> *B*N***A      000 00:01:00.00 n/a
3) LCFpgaScratchTest -----> *B*N***A      000 00:02:00.00 n/a
4) CCEOBCLinkStateTest -----> *B*N***A      000 00:01:00.00 n/a

```

Router#show diagnostic result slot 2

Current bootup diagnostic level: minimal

slot 2: ASR1000-MIP100 SerialNo : JAE210500MM

Overall Diagnostic Result for slot 2 : PASS

Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

```

1) Np5cHeartbeatTest -----> .
2) AstroIlkTest -----> .
3) LCFpgaScratchTest -----> .
4) CCEOBCLinkStateTest -----> .

```

Router#

Subslot :

Router#show diagnostic content subslot 1/0

subslot 1/0: EPA-2X40GE

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	Thre- day hh:mm:ss.ms	shold
1)	EPAFpgaScratchTest ----->	*B*N***I	000 00:01:00.00		n/a
2)	EPAStatusTest ----->	*B*N***I	000 00:01:00.00		n/a
3)	EPAHostPrbsStausTest ----->	*B*N***I	not configured		n/a
4)	EPAXcvrTest ----->	*BPN*X*I	not configured		n/a

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#diagno

Router(config)#diagnostic mon

Router(config)#diagnostic monitor sub

Router(config)#diagnostic monitor subslot 1/0 ?

test Diagnostic test selection

Router(config)#diagnostic monitor subslot 1/0 te

Router(config)#diagnostic monitor subslot 1/0 test ?

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.ms	Thre- day shold
1)	EPAFpgaScratchTest	*B*N***I	000 00:01:00.00	n/a
2)	EPAStatusTest	*B*N***I	000 00:01:00.00	n/a
3)	EPAHostPrbsStausTest	*B*N***I	not configured	n/a
4)	EPAXcvrTest	*BPN*X**I	not configured	n/a

```

WORD Test ID list (e.g. 1,3-6) or Test Name
all Select all test ID
    
```

```

Router(config)#diagnostic monitor subslot 1/0 test 1
Router(config)#end
Router#sho
*Aug 2 06:29:41.321: %SYS-5-CONFIG_I: Configured from console by consolew ru
Router#show running-config | sec diagnostic monitor subslot
diagnostic monitor subslot 1/0 test EPAFpgaScratchTest cardindex 5
Router#
Router#
*Aug 2 06:30:07.735: %LINK-3-UPDOWN: Interface FortyGigabitEthernet1/0/1, changed state
to up
*Aug 2 06:30:07.734: %LINK-3-UPDOWN: SIP1/0: Interface FortyGigabitEthernet1/0/1, changed
state to up
*Aug 2 06:30:08.735: %LINEPROTO-5-UPDOWN: Line protocol on Interface
FortyGigabitEthernet1/0/1, changed state to up
Router#
Router#
Router#show diagnostic content subslot 1/0
    
```

```
subslot 1/0: EPA-2X40GE
```

```

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.ms	Thre- day shold
1)	EPAFpgaScratchTest	*B*N***A	000 00:01:00.00	n/a
2)	EPAStatusTest	*B*N***I	000 00:01:00.00	n/a
3)	EPAHostPrbsStausTest	*B*N***I	not configured	n/a
4)	EPAXcvrTest	*BPN*X**I	not configured	n/a

```
Router#
```

# スロットおよびサブスロットレベルの Show コマンドの出力例

```
Slot related show commands:
=====

Router#show diagnostic slot 0

Current bootup diagnostic level: minimal

slot 0: ASR1000-MIP100          SerialNo : JAE20400315

Overall Diagnostic Result for slot 0 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

1) Np5cHeartbeatTest -----> .
2) AstroIlkTest -----> .
3) LCFpgaScratchTest -----> .
4) CCEOBCLinkStateTest -----> .

slot 0: ASR1000-MIP100          SerialNo : JAE214006W6

Overall Diagnostic Result for slot 0 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

1) EPAFpgaScratchTest -----> .
2) EPAStatusTest -----> .
3) EPAHostPrbsStausTest -----> .
4) EPAXcvrTest:

Port 0
-----
U

slot 0: ASR1000-MIP100          SerialNo : JAE214006VX

Overall Diagnostic Result for slot 0 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

1) EPAFpgaScratchTest -----> .
2) EPAStatusTest -----> .
3) EPAHostPrbsStausTest -----> .
4) EPAXcvrTest:

Port 0
-----
.
```



```
Router#show diagnostic result slot 0

Current bootup diagnostic level: minimal

slot 0: ASR1000-MIP100      SerialNo : JAE20400315

Overall Diagnostic Result for slot 0 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

1) Np5cHeartbeatTest -----> .
2) AstroIlkTest -----> .
3) LCFpgaScratchTest -----> .
4) CCEOBCLinkStateTest -----> .
```

```
Router#show diagnostic result slot 0 detail

Current bootup diagnostic level: minimal

slot 0: ASR1000-MIP100      SerialNo : JAE20400315

Overall Diagnostic Result for slot 0 : PASS
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)
```

---

```
1) Np5cHeartbeatTest -----> .

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:49:25
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ---> 0
```

---

```
2) AstroIlkTest -----> .

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:49:25
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ---> 0
```

---

```
3) LCFpgaScratchTest -----> .

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:49:25
```

```

First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

4) CCEOBCLinkStateTest -----> .

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:49:25
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

```

Router#
Router#show diagnostic slot 0 detail

```

Current bootup diagnostic level: minimal

```
slot 0: ASR1000-MIP100          SerialNo : JAE20400315
```

```

Overall Diagnostic Result for slot 0 : PASS
Diagnostic level at card bootup: minimal

```

Test results: (. = Pass, F = Fail, U = Untested)

---

1) Np5cHeartbeatTest -----> .

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:49:25
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

2) AstroIlkTest -----> .

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:49:25
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

3) LCFpgaScratchTest -----> .

```
Error code -----> 0 (DIAG_SUCCESS)
```

```
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time -----> Jul 22 2019 04:49:25
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ----> 0
```

---

4) CCEOBCLinkStateTest -----> .

```
Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 2
Last test testing type -----> OnDemand
Last test execution time -----> Jul 22 2019 04:49:25
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:25
Total failure count -----> 0
Consecutive failure count ----> 0
```

---

slot 0: ASR1000-MIP100                    SerialNo : JAE214006W6

Overall Diagnostic Result for slot 0 : PASS  
 Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

---

1) EPAFpgaScratchTest -----> .

```
Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time -----> Jul 22 2019 04:49:45
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:45
Total failure count -----> 0
Consecutive failure count ----> 0
```

---

2) EPAStatusTest -----> .

```
Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time -----> Jul 22 2019 04:49:45
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:45
Total failure count -----> 0
Consecutive failure count ----> 0
```

---

3) EPAHostPrbsStausTest -----> .

```
Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
```

```

Last test execution time ----> Jul 22 2019 04:49:45
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:49:45
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

4) EPAXcvrTest:

```

Port 0
-----
      U

```

```

Error code -----> 1 (DIAG_FAILURE)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:49:45
First test failure time -----> Jul 22 2019 04:49:45
Last test failure time -----> Jul 22 2019 04:49:45
Last test pass time -----> n/a
Total failure count -----> 1
Consecutive failure count ---> 1

```

---

slot 0: ASR1000-MIP100            SerialNo : JAE214006VX

Overall Diagnostic Result for slot 0 : PASS  
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

---

1) EPAFpgaScratchTest -----> .

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:50:03
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:50:03
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

2) EPAStatusTest -----> .

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:50:03
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:50:03
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

3) EPAHostPrbsStausTest -----> .

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time -----> Jul 22 2019 04:50:03
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:50:03
Total failure count -----> 0
Consecutive failure count ----> 0

```

4) EPAXcvrTest:

```

Port 0
-----
.

```

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time -----> Jul 22 2019 04:50:03
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:50:03
Total failure count -----> 0
Consecutive failure count ----> 0

```

```

Router#
Router#show diagnostic content slot 0

```

slot 0: ASR1000-MIP100

```

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	Three-day	shold
=====					
1)	Np5cHeartbeatTest	-----> *B*N***I	000 00:00:05.00		n/a
2)	AstroIlkTest	-----> *B*N***I	000 00:01:00.00		n/a
3)	LCFpgaScratchTest	-----> *B*N***I	000 00:02:00.00		n/a
4)	CCEOBCLinkStateTest	-----> *B*N***I	000 00:01:00.00		n/a

```

Router#
Router#show diagnostic description slot 0 test all

```

```

Np5cHeartbeatTest :
It Checks the ezman process heartbeat miss.

```

```

AstroIlkTest :
It tests astro interlaken status and reports failures if not ok

```

```

LCFpgaScratchTest :
    It checks Read and Write operation of ELC's FPGA

CCEOBCLinkStateTest :
    It Checks EOBC link status of LC card.

Router#
Router#show diagnostic events slot 0
Diagnostic events (storage for 500 events, 26 events recorded)
Number of events matching above criteria = 8
Event Type (ET): I - Info, W - Warning, E - Error

Time Stamp          ET [Card] Event Message
-----
07/22 04:48:23.878 I [0] Np5cHeartbeatTest Passed
07/22 04:48:23.880 I [0] AstroIlkTest Passed
07/22 04:48:23.882 I [0] LCFpgaScratchTest Passed
07/22 04:48:23.886 I [0] CCEOBCLinkStateTest Passed
07/22 04:49:25.297 I [0] Np5cHeartbeatTest Passed
07/22 04:49:25.298 I [0] AstroIlkTest Passed
07/22 04:49:25.300 I [0] LCFpgaScratchTest Passed
07/22 04:49:25.302 I [0] CCEOBCLinkStateTest Passed

Router#
Router#show diagnostic simulation failure slot 0
slot 0:
    There is no test failure simulation installed.

Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#do show clock
*05:43:47.385 UTC Mon Jul 22 2019
Router(config)#diagnostic schedule slot 0 test all on jul 22 2019 05:45
Router(config)#end
Router#
Router#show run | sec diagnostic
diagnostic schedule slot 0 test all on July 22 2019 5:45 cardindex 4 jobindex 1
diagnostic bootup level minimal
Router#
Router#
Router#show diagnostic schedule slot 0
Current Time = 05:44:35 UTC Mon Jul 22 2019

Diagnostic for slot 0:

Schedule #1:
    To be run on July 22 2019 5:45
    Test ID(s) to be executed: all.

Router#
*Jul 22 05:44:59.720: %DIAG-6-SCHED_RUNNING: slot 0: Performing Scheduled Online
Diagnostic...
*Jul 22 05:44:59.720: %DIAG-6-TEST_RUNNING: slot 0: Running Np5cHeartbeatTest{ID=1} ...
*Jul 22 05:44:59.721: %DIAG-6-TEST_OK: slot 0: Np5cHeartbeatTest{ID=1} has completed
successfully
*Jul 22 05:44:59.721: %DIAG-6-TEST_RUNNING: slot 0: Running AstroIlkTest{ID=2} ...
*Jul 22 05:44:59.722: %DIAG-6-TEST_OK: slot 0: AstroIlkTest{ID=2} has completed
successfully
*Jul 22 05:44:59.722: %DIAG-6-TEST_RUNNING: slot 0: Running LCFpgaScratchTest{ID=3} ...

```

```
*Jul 22 05:44:59.724: %DIAG-6-TEST_OK: slot 0: LCFpgaScratchTest{ID=3} has completed
successfully
*Jul 22 05:44:59.724: %DIAG-6-TEST_RUNNING: slot 0: Running CCEOBCLinkStateTest{ID=4}
...
*Jul 22 05:44:59.726: %DIAG-6-TEST_OK: slot 0: CCEOBCLinkStateTest{ID=4} has completed
successfully
*Jul 22 05:44:59.726: %DIAG-6-SCHED_COMPLETE: slot 0: Scheduled Online Diagnostic is
completed
Router#
Router#show diagnostic schedule slot 0
Current Time = 05:45:07 UTC Mon Jul 22 2019
```

Diagnostic for slot 0 is not scheduled.

Router#

```
subslot level commands
=====
```

Router#show diagnostic result subslot 0/1

Current bootup diagnostic level: minimal

subslot 0/1: EPA-QSFP-1X100GE SerialNo : JAE214006VX

Overall Diagnostic Result for subslot 0/1 : PASS  
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

- 1) EPAFpgaScratchTest -----> .
- 2) EPAStatusTest -----> .
- 3) EPAHostPrbsStausTest -----> .
- 4) EPAXcvrTest:

```
Port 0
-----
.
```

Router#show diagnostic result subslot 0/1 detail

Current bootup diagnostic level: minimal

subslot 0/1: EPA-QSFP-1X100GE SerialNo : JAE214006VX

Overall Diagnostic Result for subslot 0/1 : PASS  
Diagnostic level at card bootup: minimal

Test results: (. = Pass, F = Fail, U = Untested)

- 
- 1) EPAFpgaScratchTest -----> .
    - Error code -----> 0 (DIAG\_SUCCESS)
    - Total run count -----> 1
    - Last test testing type -----> OnDemand
    - Last test execution time ----> Jul 22 2019 04:50:03
    - First test failure time -----> n/a
    - Last test failure time -----> n/a

```

Last test pass time -----> Jul 22 2019 04:50:03
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

```

2) EPAStatusTest -----> .

```

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:50:03
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:50:03
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

```

3) EPAHostPrbsStausTest -----> .

```

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 1
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:50:03
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:50:03
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

```

4) EPAXcvrTest:

```

```

Port 0
-----
.

```

```

Error code -----> 0 (DIAG_SUCCESS)
Total run count -----> 3
Last test testing type -----> OnDemand
Last test execution time ----> Jul 22 2019 04:57:24
First test failure time -----> n/a
Last test failure time -----> n/a
Last test pass time -----> Jul 22 2019 04:57:24
Total failure count -----> 0
Consecutive failure count ---> 0

```

---

```

Router#
Router#show diagnostic content subslot 0/1

```

```

subslot 0/1: EPA-QSFP-1X100GE

```

```

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.ms	Three- day shold
1)	EPAFpgaScratchTest	*B*N***I	000 00:01:00.00	n/a
2)	EPAStatusTest	*B*N***I	000 00:01:00.00	n/a
3)	EPAHostPrbsStausTest	*B*N***I	not configured	n/a
4)	EPAXcvrTest	*BPN*X**I	not configured	n/a

Router#  
Router#show diagnostic description subslot 0/1 test all

EPAFpgaScratchTest :  
it tests read and write operation of EPAs FPGA scratpad resigter

EPAStatusTest :  
It tests EPA boot staus.

EPAHostPrbsStausTest :  
It tests mac and EPA phy serdes line auto tune status

EPAXcvrTest :  
It tests EPA xcvr staus

Router#

Router#show diagnostic events subslot 0/1 all  
Diagnostic events (storage for 500 events, 26 events recorded)  
Number of events matching above criteria = 9  
Event Type (ET): I - Info, W - Warning, E - Error

Time Stamp	ET	[Card]	Event Message
07/22 04:50:03.787	I	[0/1]	EPAFpgaScratchTest Passed
07/22 04:50:03.788	I	[0/1]	EPAStatusTest Passed
07/22 04:50:03.789	I	[0/1]	EPAHostPrbsStausTest Passed
07/22 04:50:03.811	I	[0/1]	EPAXcvrTest Passed
07/22 04:57:19.719	I	[0/1]	EPAXcvrTest Passed
07/22 04:57:24.616	I	[0/1]	EPAXcvrTest Passed
07/22 05:00:01.333	I	[0/1]	EPAXcvrTest Passed
07/22 05:00:06.980	I	[0/1]	EPAXcvrTest Passed
07/22 05:00:31.421	I	[0/1]	EPAXcvrTest Passed

Router#

Router#show diagnostic simulation failure subslot 0/1  
subslot 0/1:  
There is no test failure simulation installed.

Router#

Router#show run | sec diagnostic  
diagnostic bootup level minimal  
Router#conf t  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)#  
Router(config)#  
Router(config)#do show clock

```
*05:48:15.905 UTC Mon Jul 22 2019
Router(config)#diagnostic schedule subslot 0/1 test all on jul 22 2019 05:50
Router(config)#end
Router#
*Jul 22 05:48:44.378: %SYS-5-CONFIG_I: Configured from console by consoleconf t

Router#show run | sec diagnostic
diagnostic schedule subslot 0/1 test all on July 22 2019 5:50 cardindex 5 jobindex 1
diagnostic bootup level minimal
Router#show diagnostic schedule sub
Router#show diagnostic schedule subslot 0/1
Current Time = 05:49:02 UTC Mon Jul 22 2019

Diagnostic for subslot 0/1:

Schedule #1:
  To be run on July 22 2019 5:50
  Test ID(s) to be executed: all.

Router#show diagnostic schedule subslot 0/1
Current Time = 05:49:14 UTC Mon Jul 22 2019

Diagnostic for subslot 0/1:

Schedule #1:
  To be run on July 22 2019 5:50
  Test ID(s) to be executed: all.

Router#
*Jul 22 05:49:59.832: %DIAG-6-SCHED_RUNNING: subslot 0/1: Performing Scheduled Online
Diagnostic...
*Jul 22 05:49:59.832: %DIAG-6-TEST_RUNNING: subslot 0/1: Running EPAPpgaScratchTest{ID=1}
...
*Jul 22 05:49:59.833: %DIAG-6-TEST_OK: subslot 0/1: EPAPpgaScratchTest{ID=1} has completed
successfully
*Jul 22 05:49:59.833: %DIAG-6-TEST_RUNNING: subslot 0/1: Running EPAStatusTest{ID=2} ...
*Jul 22 05:49:59.834: %DIAG-6-TEST_OK: subslot 0/1: EPAStatusTest{ID=2} has completed
successfully
*Jul 22 05:49:59.834: %DIAG-6-TEST_RUNNING: subslot 0/1: Running EPAHostPrbsStausTest{ID=3}
...
*Jul 22 05:49:59.835: %DIAG-6-TEST_OK: subslot 0/1: EPAHostPrbsStausTest{ID=3} has
completed successfully
*Jul 22 05:49:59.835: %DIAG-6-TEST_RUNNING: subslot 0/1: Running EPAXcvrTest{ID=4} ...
*Jul 22 05:49:59.857: %DIAG-6-TEST_OK: subslot 0/1: EPAXcvrTest{ID=4} has completed
successfully
*Jul 22 05:49:59.857: %DIAG-6-SCHED_COMPLETE: subslot 0/1: Scheduled Online Diagnostic
is completed
Router#
Router#show diagnostic schedule subslot 0/1
Current Time = 05:50:33 UTC Mon Jul 22 2019

Diagnostic for subslot 0/1 is not scheduled.

Router#
```

## 翻訳について

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