



## APPENDIX **A**

# CLI Commands to Verify a Successful Installation

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## Introduction

When you have completed the installation of your Cisco SCE8000 GBE platform, we recommend that you run several CLI commands to verify that the proper components have been successfully installed and are operational.

# Basic Post-Installation Checklist

The following table provides a basic post-installation checklist with the related CLI commands. Further verification of the system configuration would depend on the specific topology and configuration of the installation, but this list verifies that the basic installation is operational.

See the descriptions of the individual commands for samples of the command output. Relevant information in the output is in **bold**.

To check this:	Use this command:	Comments
version	<a href="#">show version</a>	Check the following: <ul style="list-style-type: none"> <li>firmware version</li> <li>application version</li> <li>management agent status</li> <li>management agent version</li> </ul>
optics	<a href="#">show inventory</a>	In the physical inventory of the SCE platform, verify that the installed optics are supported by the interfaces.
port configuration	<a href="#">show interface</a>	Run this command for each port to get a listing of the status and configuration of all ports.
operational status	<a href="#">show system operational status</a>	Status should be <i>operational</i> . This command gives you an indication of problems such as a power problem or external bypass not configured properly.
linecard status	<a href="#">show interface linecard</a>	It should not be <i>shutdown</i> or <i>silent</i> .
connection mode	<a href="#">show interface linecard connection-mode</a>	Make sure that both the connection mode and the failure mode are configured correctly.
link mode	<a href="#">show interface linecard link mode</a>	When connection-mode is inline, link mode should be configured to <i>forwarding</i> .
external bypass configuration	<a href="#">show interface linecard external-bypass</a>	Only if external bypass modules are installed: Check the following: <ul style="list-style-type: none"> <li>Configuration should be <i>activated</i> on failure</li> <li>Number of devices should match the number of links</li> </ul>
RDR formatter	<a href="#">show RDR-formatter</a>	Verify the following: <ul style="list-style-type: none"> <li>RDR formatter has established a connection with the configured destinations</li> <li>Redundancy status is configured correctly in case of more than one destination.</li> </ul>
connection to Subscriber Manager	<a href="#">show interface linecard subscriber sm-connection-failure</a>	If using SM: Verify that the connection with the SM is established.
connection to Quota Manager	<a href="#">show ip rpc-adapter sessions</a>	If using QM: Verify that the connection with the QM is established.

**Complete command sequence for a fully-populated SCE8000 GBE platform using both the SM and the QM**

```
SCE> enable 5
Password:<cisco>
SCE> show version
SCE> show inventory
SCE> show interface GigabitEthernet 3/0/0
SCE> show interface GigabitEthernet 3/0/1
SCE> show interface GigabitEthernet 3/0/2
SCE> show interface GigabitEthernet 3/0/3
SCE> show interface GigabitEthernet 3/0/4
SCE> show interface GigabitEthernet 3/0/5
SCE> show interface GigabitEthernet 3/0/6
SCE> show interface GigabitEthernet 3/0/7
SCE> show interface GigabitEthernet 3/1/0
SCE> show interface GigabitEthernet 3/1/1
SCE> show interface GigabitEthernet 3/1/2
SCE> show interface GigabitEthernet 3/1/3
SCE> show interface GigabitEthernet 3/1/4
SCE> show interface GigabitEthernet 3/1/5
SCE> show interface GigabitEthernet 3/1/6
SCE> show interface GigabitEthernet 3/1/7
SCE> show system operation-status
SCE> show interface linecard 0
SCE> show interface linecard 0 connection-mode
SCE> show interface linecard 0 link mode
SCE> show interface linecard 0 external-bypass
SCE> show rdr-formatter
SCE> show interface linecard 0 subscriber sm-connection-failure
SCE> show ip rpc-adapter sessions
```

## CLI Command Output Samples

The text in **bold** in the following output samples indicates the lines you should check when doing a post-installation check. For some commands, the output is short and the entire output is relevant. In these cases, nothing is in bold.

## show version

Look for the following lines:

- System version
- Application file
- Management agent interface version

SCE> **show version**

**System version: Version 3.5.5 Build 252**

Build time: May 31 2009, 15:50:44 (Change-list 483168)

Software version is: Version 3.5.5 Build 252

Cryptography class: K9

Hardware information is:

```

-----
Firmware
-----
kernel      : [kernel] 2.3.0/1 (inactive: [kernel] 2.3.0/1)
u-boot      : [uboot] 2.1.0/1 (field: [uboot] 0.8.1/13)
select      : [ubs-cf0] 2.3.0/1 (secondary: [ubs-cf0] 2.3.0/1)

-----
Slot 1: SCE8000-SCM-E
-----
serial-num  : CAT1151G012
part-num    : 73-10598-01 36
cpld        : 0x816c
vtpld       : 0xc004
summit-0    : 0xf2c1001
summit-1    : 0xf2c1101
dpt/tx      : 0x4913
cls/ff      : 0x2112
cls cam     : 0x454120
cls flow cap: 33554432
ssa         : 0x90

-----
TVR
-----
#cpus       : 1
cpu SVR     : 0x80900121
cpu PVR     : 0x80040202
cpu freq    : 1000MHz
cpu (eeprom): 2.1, 1000MHz
cpld        : 0xa1bc
cpld-ufm    : 0xa803
summit      : 0xf2c1701
cf          : Model=SMART CF, S/N=20080213025D41EC41EC, FwRev=0x20060811, Size=4062240KB
phy-0      : 0xcc2
phy-1      : 0xcc2
phy-2      : 0xcc2

-----
CFC-0
-----
board type  : P2
#cpus       : 3
cpu-0 SVR   : 0x80900121
cpu-0 PVR   : 0x80040202
cpu-0 freq  : 1500MHz

```

```
cpu-1 SVR      : 0x80900121
cpu-1 PVR      : 0x80040202
cpu-1 freq     : 1500MHz
cpu-2 SVR      : 0x80900121
cpu-2 PVR      : 0x80040202
cpu-2 freq     : 1500MHz
cpu (eeprom)  : 2.1, 1500MHz
cpld-0        : 0xb219
cpld-1        : 0xb219
cpld-2        : 0xb219
cpld-0-ufm    : 0xb803
cpld-1-ufm    : 0xb803
cpld-2-ufm    : 0xb803
summit-0      : 0xf2c1301
summit-1      : 0xf2c1401
fc            : 0x1100

-----
CFC-1
-----
board type    : P2
#cpus         : 3
cpu-0 SVR     : 0x80900121
cpu-0 PVR     : 0x80040202
cpu-0 freq    : 1500MHz
cpu-1 SVR     : 0x80900121
cpu-1 PVR     : 0x80040202
cpu-1 freq    : 1500MHz
cpu-2 SVR     : 0x80900121
cpu-2 PVR     : 0x80040202
cpu-2 freq    : 1500MHz
cpu (eeprom)  : 2.1, 1500MHz
cpld-0        : 0xb219
cpld-1        : 0xb219
cpld-2        : 0xb219
cpld-0-ufm    : 0xb803
cpld-1-ufm    : 0xb803
cpld-2-ufm    : 0xb803
summit-0      : 0xf2c1301
summit-1      : 0xf2c1401
fc            : 0x1100

-----
Slot 3: SCE8000-SIP
-----
serial-num    : CAT1150G075
part-num      : 73-10947-01 22
cpld          : 0x916c
summit-0     : 0x10006
summit-1     : 0x10006
dpt-0        : 0x322f
dpt-1        : 0x322f
ssa-0        : 0x90
ssa-1        : 0x90
spa[0]       : SPA-8X1GE-V2
spa[1]       : SPA-8X1GE-V2
spa[2]       : SPA-1X10GE-L-V2
spa[3]       : SPA-1X10GE-L-V2

-----
SCE8000 Chassis
-----
product-num   : SCE8000
serial-num    : FOX1235GP98
```

## ■ CLI Command Output Samples

```
part-num      : 73-11293-01
part-rev      : A0
vid           : V01
```

```
Part number   : 73-10598-01 36
Revision      : 1
Software revision : 1
LineCard S/N   : CAT1151G012
Power Supply type : AC
```

SML Application information is:

**Application file: /apps/data/scos/app/en355262.sli**

Application name: Engage SML Version 3.5.5 build 74

Using Lib - PL\_3.5.5\_b74

Using Lib - Classifier\_3.5.5\_b74

Application help: Entry point of Engage

Original source file:

/auto/srbu-proj1/apps/users/atukh/autoBuild/App/SML/Engage/dev/src/com/pcube/AppTemplate/Main/template\_app\_main.san

Compilation date: Tue, May 19, 2009 at 19:51:58

Compiler version: SANC v3.20 Build 12 built on: Tue 02/01/2009 11:11:05.;SME plugin v1.1

Capacity option used: 'EngageDefaultSCE8000'.

Logger status: Enabled

Platform: SCE8000

**Management agent interface version: SCE Agent 3.5.5 Build 121**

Software package file: ftp://ftpserver/D:\pcube\Os\3.5.5\252\simba\_03550252\_K9.pkg

SCE8000 uptime is 4 days, 21 hours, 40 minutes, 37 seconds

## show inventory

Look for the following lines:

- All lines containing the text 'NAME: "SCE8000 optic'. There should be one line for each installed optic.

```
SCE> show inventory
NAME: "SCE8000 Chassis", DESCR: "SCE8000"
PID: SCE8000          , VID: V01, SN: FOX1235GP98

NAME: "SCE8000 Service Control Module (SCM) in slot 1", DESCR: ""
PID: ""              , VID: "" , SN: CAT1151G012

NAME: "SCE8000 SPA Interface Processor (SIP) in slot 3", DESCR: ""
PID: ""              , VID: "" , SN: CAT1150G075

NAME: "SCE8000 SPA module 3/0", DESCR: "SPA-8X1GE-V2"
PID: SPA-8X1GE-V2    , VID: V02, SN: JAE13020GQ5

NAME: "SCE8000 SPA module 3/1", DESCR: "SPA-8X1GE-V2"
PID: SPA-8X1GE-V2    , VID: V02, SN: JAE13020GN3

NAME: "SCE8000 SPA module 3/2", DESCR: "SPA-1X10GE-L-V2"
PID: SPA-1X10GE-L-V2 , VID: V02, SN: JAE114967LE

NAME: "SCE8000 SPA module 3/3", DESCR: "SPA-1X10GE-L-V2"
PID: SPA-1X10GE-L-V2 , VID: V02, SN: JAE11485LCX

NAME: "SCE8000 FAN 1", DESCR: "SCE8000-FAN"
PID: SCE8000-FAN     , VID: V01, SN: DCH12130763

NAME: "SCE8000 AC power supply 1", DESCR: "PWR-2700-AC/4"
PID: PWR-2700-AC/4   , VID: V02, SN: APS1216006R

NAME: "SCE8000 AC power supply 2", DESCR: "PWR-2700-AC/4"
PID: PWR-2700-AC/4   , VID: V02, SN: APS12160070

NAME: "SCE8000 optic 3/0/0", DESCR: "N/A"
PID: N/A              , VID: "" , SN: FNS0853G1T5

NAME: "SCE8000 optic 3/0/1", DESCR: "SFP-GE-S"
PID: SFP-GE-S        , VID: V01, SN: FNS12320WHD

NAME: "SCE8000 optic 3/0/2", DESCR: "SFP-GE-S"
PID: SFP-GE-S        , VID: V01, SN: FNS12320WF5

NAME: "SCE8000 optic 3/0/3", DESCR: "SFP-GE-S"
PID: SFP-GE-S        , VID: V01, SN: FNS12320WF9
```

```

NAME: "SCE8000 optic 3/0/4", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12320WDT

NAME: "SCE8000 optic 3/0/5", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12320WE7

NAME: "SCE8000 optic 3/0/6", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12320WDY

NAME: "SCE8000 optic 3/0/7", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12320WF1

NAME: "SCE8000 optic 3/1/0", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12330A8J

NAME: "SCE8000 optic 3/1/1", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12330A80

NAME: "SCE8000 optic 3/1/2", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12330A7R

NAME: "SCE8000 optic 3/1/3", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS12330A92

NAME: "SCE8000 optic 3/1/4", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS124615JN

NAME: "SCE8000 optic 3/1/5", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS124615K9

NAME: "SCE8000 optic 3/1/6", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS124702V5

NAME: "SCE8000 optic 3/1/7", DESCR: "SFP-GE-S"      "
PID: SFP-GE-S          , VID: V01, SN: FNS1247026J

NAME: "SCE8000 optic 3/2/0", DESCR: "XFP-10GLR-OC192SR "
PID: XFP-10GLR-OC192SR , VID: V02, SN: ONT1102108E

NAME: "SCE8000 optic 3/3/0", DESCR: "XFP-10GLR-OC192SR "
PID: XFP-10GLR-OC192SR , VID: V02, SN: ECL11030105

```



## show interface

Run this command for each interface. The command syntax is:

```
show interface GigabitEthernet 3/bay-number/port-number
```

```
sce> show interface GigabitEthernet 3/0/0  
Auto negotiation configured: Disabled  
Actual status:  
    Link is: ON  
    Auto negotiation: Disabled  
Bandwidth (L1): 10000000 Kbps, Burst-size: 50000 bytes  
Pseudo IP Address: Not Configured
```

## show system operational status

```
sce> show system operation-status  
System Operation status is Operational
```

## show interface linecard

```
sce> show interface LineCard 0  
The application assigned to slot 0 is /apps/data/scos/app/en355262.sli  
Silent is off  
Configured shutdown is off  
Shutdown due to sm-connection-failure is off  
Resulting current shutdown state is off  
WAP handling is disabled
```

## show interface linecard connection-mode

```
sce> show interface linecard 0 connection-mode  
slot 0 connection mode  
Connection mode is inline  
slot failure mode is external-bypass  
Redundancy status is standalone
```

## show interface linecard link mode

```
sce> show interface linecard 0 link mode  
Link mode on all links  
Current link mode is           : crosspath-bypass  
Actual link mode on active is : forwarding  
Actual link mode on failure is: crosspath-bypass
```

## show interface linecard external-bypass

```
sce1> show interface linecard 0 external-bypass  
External bypass current state is 'not activated'.  
External bypass failure state is 'activated'.  
Amount of expected external bypass devices: 4 (automatically configured).  
Amount of detected external bypass devices: 4
```

## show RDR-formatter

Look for:

- Forwarding mode
- Status (in Status column in the Connection Table)

```
sce> show RDR-formatter
Status: enabled
Connection is: up
Forwarding mode: redundancy
Connection Table:
-----
```

Collector	Port	Status	Priority per Category:			
IP-Address /			Category1	Category2	Category3	Category4
Host-Name						
10.240.59.39	33000	up	100 primary	---	---	---
10.240.59.44	33000	up	---	100 primary	---	---

```
-----
RDR:   queued:    0 ,sent:60108106, thrown:    0, format-mismatch:    0
UM:    queued:    0 ,sent:    0, thrown:    0
Logger: queued:    0 ,sent:    0, thrown:    0
Errors: thrown:    0
Last time these counters were cleared: 07:36:52 EDT TUE April 28 2009
```

## show interface linecard subscriber sm-connection-failure

If working with the Subscriber Manager, use this command to make sure the connection with the SM is established:

```
SCE> show interface linecard 0 subscriber sm-connection-failure
Current SM link state: up.
Configured action to take when SM link is down: No action.
Changing of system operational-status to 'warning' when SM link is down: enabled.
```

## show ip rpc-adapter sessions

If working with the Quota Manager, use this command to make sure the connection with the QM is established

```
sce> show ip rpc-adapter sessions
client-name=usr.SM
client-address=/10.240.59.36
started=Mon Apr 06 12:43:01 GMT-04:00 2009
received-message-num=408790
sent-message-num=237292
sent-notifications-num=0
dropped-notifications-num=0
client-username=null

client-name=mcn.SM
client-address=/10.240.59.36
started=Mon Apr 06 12:43:02 GMT-04:00 2009
received-message-num=5715112
sent-message-num=6101181
sent-notifications-num=386768
dropped-notifications-num=0
client-username=null

client-name=mcn.QuotaManager-10.248.64.119_10.240.59.36_SCE.J.API.PRPC
client-address=/10.240.59.36
started=Mon Apr 06 12:43:03 GMT-04:00 2009
received-message-num=404194
sent-message-num=232248
sent-notifications-num=0
dropped-notifications-num=0
client-username=null
```

