

SSL VPN Reinstallation

This software reinstallation procedure describes how to reinstall the software onto a previously formatted and programmed hard disk drive (HDD) on the Contivity SSL VPN 1000 card. You can also use this procedure when the CLI cannot be started during an admin login session.

You must already have a software image on the HDD that it is capable of booting successfully. You will know it has booted successfully if you can login as root.



Note: You cannot use this procedure to load a software image onto a blank HDD.

Equipment requirements

You need the following to reinstall an SSL software image onto the Contivity SSL VPN 1000 card:

- Contivity 1740, 2700 or 5000 system with Contivity Secure IP Services Gateway Version 5.00 or later
- Contivity gateway console cable Nortel P/N 301507-A or equivalent
- Terminal or PC with a serial port and terminal emulation software
- FTP server with an SSL boot image on it
- Network cables and equipment to connect the 10/100M Private LAN interface of the Contivity gateway to the FTP server

Configuration procedure

- 1 If not already installed, install the SSL VPN card in Slot 1 of the Contivity gateway.
- 2 Connect the Contivity console cable to the console port and to the terminal or serial port of the PC.
- 3 Configure the terminal for 9600 Baud, 8-N-1, VT100 mode.
- 4 Connect the 10/100M private LAN interface of the Contivity gateway to the same network as the FTP server.
- 5 Power on the Contivity gateway and configure the Private LAN interface, if necessary.
- 6 Use the SSL VPN software CD to load the SSL boot image onto the FTP server. The boot image will have a .img filename extension.

Reinstallation process

Allow the Contivity switch and SSL VPN card to complete their boot processes. (The boot process for the switch is typically longer.)

1 From the switch console, login as username=admin, default password=setup.

2 Then type the following:

L - Enter Command Line Interface display mode. You see the CES> prompt.

Enable - Enable privileged command mode

Setup - Default password for privileged command mode. The prompt changes to CES#.

Show ssl-vpn - Display status of SSL-VPN card. Verify that the card is in the uninitialized state.

Ssl-vpn-cli reinstall <Management_IP_addr> - Begin reinstallation process, where <Management_IP_addr> is the IP address of the management interface of the SSL VPN card.

3 Login as username=boot, password=ForgetMe (case-sensitive).

You are prompted for the same IP address that you used in Step 2, a subnet mask, a gateway IP address (Management IP address of the Contivity gateway), FTP server IP address, service type (FTP or TFTP) and filename of the software image on the server. The SSL VPN card will download the image and install it. Then it will reboot. After it has finished rebooting, you can login to verify that the new image is active.

SSL VPN Reinstallation

Sample procedure

Here is a sample screen capture from a card that was unable to start the CLI from the admin logon. The reinstallation was needed to restore normal operation to the card. In this example, an anonymous FTP server hosted the new software image. All typed commands are shown in bold. After the reinstallation and verification, the entire system was properly shutdown.

```
Welcome to the Contivity Secure IP Services Gateway
Copyright (c) 1999-2004 Nortel Networks, Inc.
Version:                V05_00.045
Creation date:          Mar 24 2004, 21:06:20
Date:                  05/13/2004
Unit Serial Number:    15786
Please enter the administrator's user name: admin
Please enter the administrator's password: setup
Main Menu: System is currently in NORMAL mode.
1) Interfaces
   2) Administrator
   3) Default Private Route Menu
   4) Default Public Route Menu
   5) Create A User Control Tunnel(IPsec) Profile
   6) Restricted Management Mode           FALSE
   7) Allow HTTP Management               TRUE
   8) Firewall Options
   9) Shutdown
   B) System Boot Options
   P) Configure Serial Port
   C) Controlled Crash
   L) Command Line Interface
   R) Reset System to Factory Defaults
   E) Exit, Save and Invoke Changes
Please select a menu choice (1 - 9,B,P,C,L,R,E): L
CES>enable
Password: setup
CES#show ssl-vpn
Nortel Networks SSL-VPN Accelerator in slot 1
  Administrative State: Enabled
  Status                : Uninitialized : SSL-VPN requires initialization.  Note: Card is
Uninitialized.
  CSFW Implied Rules   : Enabled
  One Time Password    : Enabled
  Management Address   : 0.0.0.0
  Interface Address    : 0.0.0.0
  SSL-VPN VIP Ports    :
Attempt to login to the SSL VPN card:
CES#ssl-vpn-cli login
Exit character is '^j'.
login: admin
Password: admin
```

Unable to start CLI - reinstall required. *Note: Card requires software reinstallation.*
Closed connection.

Begin software reinstallation procedure:

CES#**ssl-vpn-cli reinstall 47.17.153.55** <-- *SSL VPN Management Address*

Exit character is '^']'.

login: **boot**

Password: **ForgetMe**

*** Reinstall Upgrade Procedure ***

If you proceed beyond this point, all traffic processing will be shut down,
and the active network configuration will be reset, requiring a reboot to
restore any current setup. However, no permanent changes will be made until
the boot image has been downloaded.

Continue (y/n)? [y]: <Enter>

Enter VLAN tag id (or zero for no VLAN tag) [0]: <Enter>

Enter IP address for this iSD: **47.17.153.55** <-- *SSL VPN Management Address*

Enter network mask [255.255.255.0]: **255.255.255.0** <-- *Contivity Private LAN Subnet Mask*

Enter gateway IP address [none]: **47.17.153.53** <-- *Contivity Management Address*

Select TFTP (t) or FTP (f) [t]: **f**

Enter FTP server address: **47.17.152.204**

Enter file name of boot image: **SSL-4.2.1.7-boot.img**

Enter FTP Username [anonymous]: <Enter>

Password [boot@localhost.isd]: <Enter>

Checking for connectivity...

Downloading boot image...

Installing new boot image...

Done

Restarting...

Closed connection.

*You will need to wait approximately one minute for the SSL VPN card to reboot. During this
time, the status of the card will be shown as "Unreachable" from the Contivity console.
Eventually, the status will change to "Uninitialized":*

CES#**show ssl-vpn**

Nortel Networks SSL-VPN Accelerator in slot 1

Administrative State: Enabled

Status : Uninitialized : SSL-VPN requires initialization. *Note: Card has
rebooted.*

CSFW Implied Rules : Enabled

One Time Password : Enabled

Management Address : 0.0.0.0

Interface Address : 0.0.0.0

SSL-VPN VIP Ports :

Verify that you can login to the SSL VPN card:

CES#**ssl-vpn-cli login**

Exit character is '^']'.

login: **admin**

Password: **admin**

Alteon iSD SSL

Hardware platform: Contivity

Software version: 4.2.1.7

[Setup Menu]

join - Join an existing iSD cluster

new - Initialize iSD as a new installation

SSL VPN Reinstallation

```
boot      - Boot menu
info      - Information menu
exit      - Exit [global command, always available]
```

```
SSL >> Setup# exit   Note: Exit the SSL VPN session to return to the Contivity console.
Session terminated.
```

Closed connection.

Properly shutdown the Contivity switch:

```
CES#exit
```

```
CES>exit
```

Main Menu: System is currently in NORMAL mode.

- 1) Interfaces
- 2) Administrator
- 3) Default Private Route Menu
- 4) Default Public Route Menu
- 5) Create A User Control Tunnel (IPsec) Profile
- 6) Restricted Management Mode FALSE
- 7) Allow HTTP Management TRUE
- 8) Firewall Options
- 9) Shutdown
- B) System Boot Options
- P) Configure Serial Port
- C) Controlled Crash
- L) Command Line Interface
- R) Reset System to Factory Defaults
- E) Exit, Save and Invoke Changes

Please select a menu choice (1 - 9,B,P,C,L,R,E): 9

- Shutdown Menu

- 1) Shutdown
- 2) Shutdown and Restart
- R) Return to the Main Menu

Please select a menu choice (1, 2, R): 1

-- Confirm: Shutdown system in 10 seconds? (Y or N): **y**

System shutting down ...

Serial Menu Task Terminating...

[End of procedure]

