

TECHNICAL BULLETIN CS-06-05

NETLINK SVP SERVER FAILS WITH KERNEL PANIC ERROR

Notification Date: 12/30/05

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Systems Affected: ALL

Hardware Affected:

NetLink SVP Servers

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Status: Approved

Access Level: General

Revision: C

Problem:

Intermittently an SVP server will fail after configuration and rebooting and not recover

Description:

When the SVP server fails and does not recover it appears as if the SVP server continues to reboot. By monitoring the output from the serial port, you can see that the SVP server starts to boot up and then has an error. That error is a Kernel Panic error. When the problem occurs you will see something like the following:

*Kernel panic: "the text here varies"
Rebooting in 180 seconds.*

The specific Kernel Panic error message may vary. Once the SVP server has gotten into this rolling reboot state, it will not recover and needs to be replaced.

Resolution: Perform Recovery Process:

SVP servers available from SpectraLink after March 1st, 2006 have been programmed with a new mechanism to recover from this error. If your SVP server was acquired prior to this date then you will need to contact your service provider to RMA the SVP Server. If your SVP server was acquired after this date then follow the instructions below:

1. Make sure you have copies of the release software for the SVP server. This is available from www.spectralink.com. The release software consists of 3 files; svp100.toc, zvmlinux, and flashfs.
2. Software is downloaded from 2 different places on a TFTP server. The first place is the root directory. Place a copy of all 3 files into this root directory.



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3. The second place software is downloaded from is a subdirectory of the root directory. Create a subdirectory with the name of the OEM manufacturer under the root directory. Possible OEM manufacturers are SpectraLink, Alcatel, Avaya, NEC, or Nortel. Once the subdirectory has been created, copy the 3 files into that directory as well.
4. Direct connect your PC to the RS232 port on the SVP server using a communications package such as HyperTerminal. Verify that the SVP server is connected to the Ethernet.
5. Force the SVP server to reboot by unplugging the power and plugging it back in after a few seconds.
6. The following multi line prompt should appear within a few seconds on your PC.

```
Erase and force a clean reboot[yn]?  
This is an emergency recovery procedure only.  
Answering y will result in erasing the operational  
software and configuration. Ensure a software image  
is available on your TFTP server for download.
```

7. Answer Y and press Enter within a few seconds. Lines similar to the following should then appear

```
ALARM: Flash configuration is corrupted  
Init  
Starting Network  
Ethernet Address: 0:90:7a:4:94:4f  
Booting  
Network is Up  
Continuing normal boot test flash append ...  
flash append Ok
```

8. You should then see messages similar to the following:

```
Starting DHCP.  
DHCP timeout. No server?  
Retry DHCP.  
no TOC in flash.  
enter IP address and TFTP server IP address:
```

9. At that time enter in the SVP server IP address and the TFTP server IP address. After doing that, the following lines should appear (where the 173.xxx is the version of SVP software that you have copied into the TFTP server, for example 173.024)

```
Process TOC  
TOC version: @(#) 173.024
```

10. Within a minute a login prompt will appear. Login as admin and do any additional administration as needed. You will need to reset the SVP server after you have completed those changes
11. If the SVP server continues to have problems or does not go through the following process, please contact your service provider for a replacement SVP server.

