

## Customer Installation Instructions

### TS7510 Fix Pack Update for 3954-CV5 Virtualization Engine

#### FIXES:

##### Library:

- **update-ve114301**-Fix issue with 3584 where only one medium transport was being returned. tlecore.o
- **update-ve114307**-Fix issue when assigning a physical library with large number of slots failed because the server could not allocate enough memory to hold all the slot information. tlecore.o

##### Qlogic:

- **update-ve114302**-Fix issue with AIX hosts showing link instability messages during IO. fsq1gt.2300.o fsq1gt.2300mid.o qla2300.o ql2300-fo.o qla2300mid.o qla2300mid-fo.o

##### License:

- **update-ve114303**-Fix issue with license checking message complaining about live trial period expiration. ipstorsm

##### Export:

- **update-ve114304**-Fix possible kernel stack when import/export jobs are deleted or cancelled. Avoid kernel stack when exporting a nearly empty tape. tlecore.o

##### Tape:

- **update-ve114305** -Fix the problem that Netvault could only configure first 4 drives in IBM 3584 library. Fix the problem that Netvault could get the free space in IBM3592 drive. Fix AS400 read element status issue with IBM 3584 library. tlecore.o
- **update-ve114306** -Fix issue with overlength processing by reporting CHECK CONDITION status for an incorrect length condition only if the overlength condition exists and the BLOCK LENGTH field in the mode parameter block description is nonzero. tlecore.o
- **update-ve114308/update-ve114309** -Improve rescan logic to ensure greater tolerance and prevent virtual tape segment overlap when one physical device is temporarily unavailable. libfxutil.so

Stops the server if running, copies binaries, restarts the server. A new initrd image is built with new drivers. The server needs to be rebooted with the new image.

TS7510 Software Version 1.1 (Build 1143)

Fix Pack update-ve11430809

## TS7510 Fix Pack Update for 3954-CV5 Virtualization Engine

### FIXES:

#### Library:

- **update-ve114301**-Fix issue with 3584 where only one medium transport was being returned. tlecore.o
- **update-ve114307**-Fix issue when assigning a physical library with large number of slots failed because the server could not allocate enough memory to hold all the slot information. tlecore.o

#### Qlogic:

- **update-ve114302**-Fix issue with AIX hosts showing link instability messages during IO. fsq1gt.2300.o fsq1gt.2300mid.o qla2300.o ql2300-fo.o qla2300mid.o qla2300mid-fo.o

#### License:

- **update-ve114303**-Fix issue with license checking message complaining about live trial period expiration. ipstorsm

#### Export:

- **update-ve114304**-Fix possible kernel stack when import/export jobs are deleted or cancelled. Avoid kernel stack when exporting a nearly empty tape. tlecore.o

#### Tape:

- **update-ve114305** -Fix the problem that Netvault could only configure first 4 drives in IBM 3584 library. Fix the problem that Netvault could get the free space in IBM3592 drive. Fix AS400 read element status issue with IBM 3584 library. tlecore.o
- **update-ve114306** -Fix issue with overlength processing by reporting CHECK CONDITION status for an incorrect length condition only if the overlength condition exists and the BLOCK LENGTH field in the mode parameter block description is nonzero. tlecore.o
- **update-ve114308/update-ve114309** -Improve rescan logic to ensure greater tolerance and prevent virtual tape segment overlap when one physical device is temporarily unavailable. libfxutil.so

Stops the server if running, copies binaries, restarts the server. A new initrd image is built with new drivers. The server needs to be rebooted with the new image.

### TS7510 Software Version 1.1 (Build 1143)

Fix Pack update-ve11430809

## Before Installation (Section 1 through 5)

### 1.0 Machines Affected

This is a fix pack installation instruction for the TS7510 3954-CV5 Virtualization Engine

This fix pack should be installed on all TS7510 systems, with software version 1.1 (Build 1143), that do not have the fix pack installed. This fix pack combines all available patches for the TS7510. **Note: because fix packs and patches are installed in the same manner, the fix pack will often be referred to as a patch.**

You can check the version of TS7510 software, and whether the fix pack is installed, using the VE Console *Version Info* tab (refer to Figure-1).

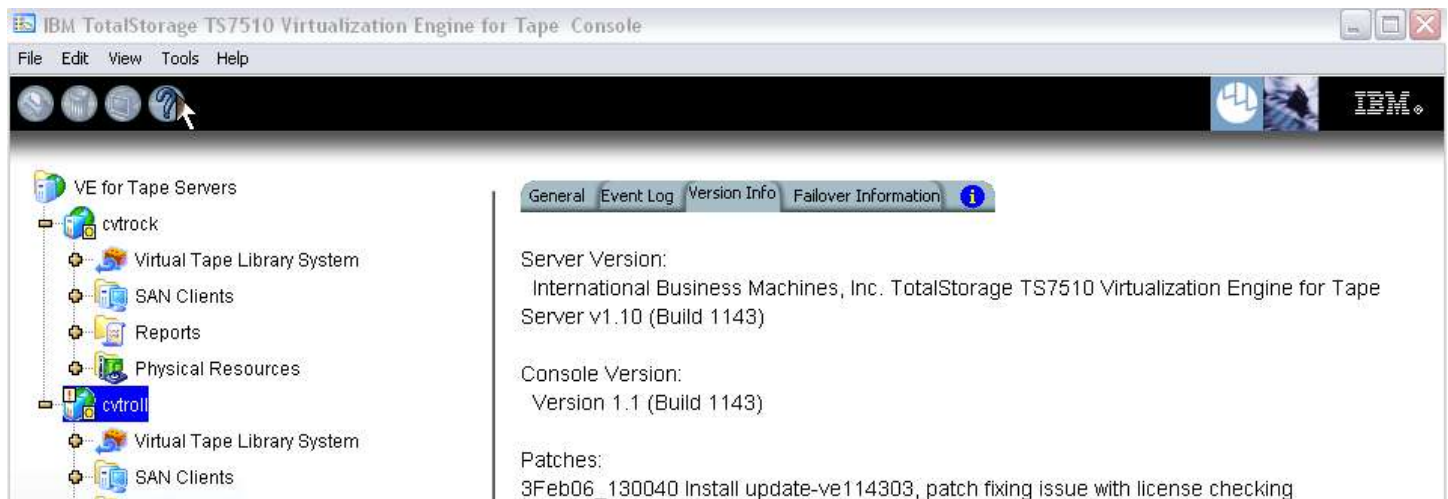


Figure-1

### 2.0 Prerequisites

Obtain the latest Installation Instruction and the fix pack file

Fix pack filename: update-ve11430809

Installation of this fix pack is disruptive to normal TS7510 operation. Application of the fix pack will cause the 3954-CV5 server software to shutdown and restart, and rebooting of the CV5 is required after fix pack installation. Schedule time when the TS7510 system can be taken out of normal operation.

### 3.0 Preparation

Installation of this fix pack is disruptive to normal TS7510 operation. Application of the fix pack will cause the 3954-CV5 server software to shutdown and restart, and rebooting of the CV5 is required after fix pack installation. Schedule time when the TS7510 system can be taken out of normal operation.

**Ensure that all host jobs to the TS7510 are quiesced, and complete all pending TS7510 operations.**

Transfer the fix pack file (update-ve11430809) into a directory on the VE Console.

For HA configurations (FC-7420 Failover/Failback Enable), use the VE Console to Suspend Failover on both 3954-CV5 servers. Refer to Figure-2 and Figure-3, and use the following procedure to Suspend Failover on each server (both the upper and lower server if in an HA environment).

1. Login to the VE for Tape server, or highlight the VE for Tape server if already connected. The login userid is “VETAPEUSER” and the password is “VEUSERPASSWORD”
2. With your mouse Right-click on the VE Console, a context menu will appear, select *Failover*, then select *Suspend Failover*.

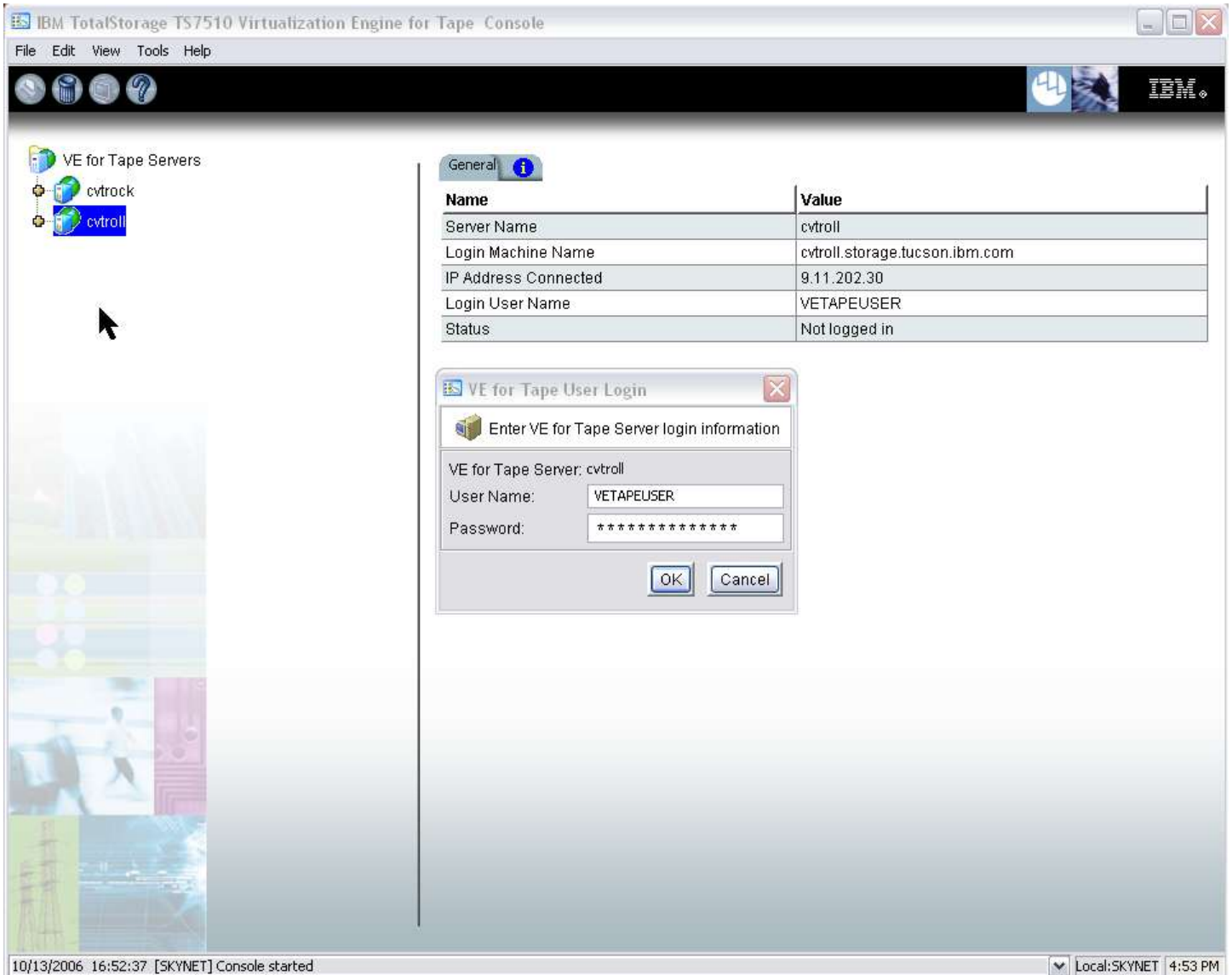


Figure-2

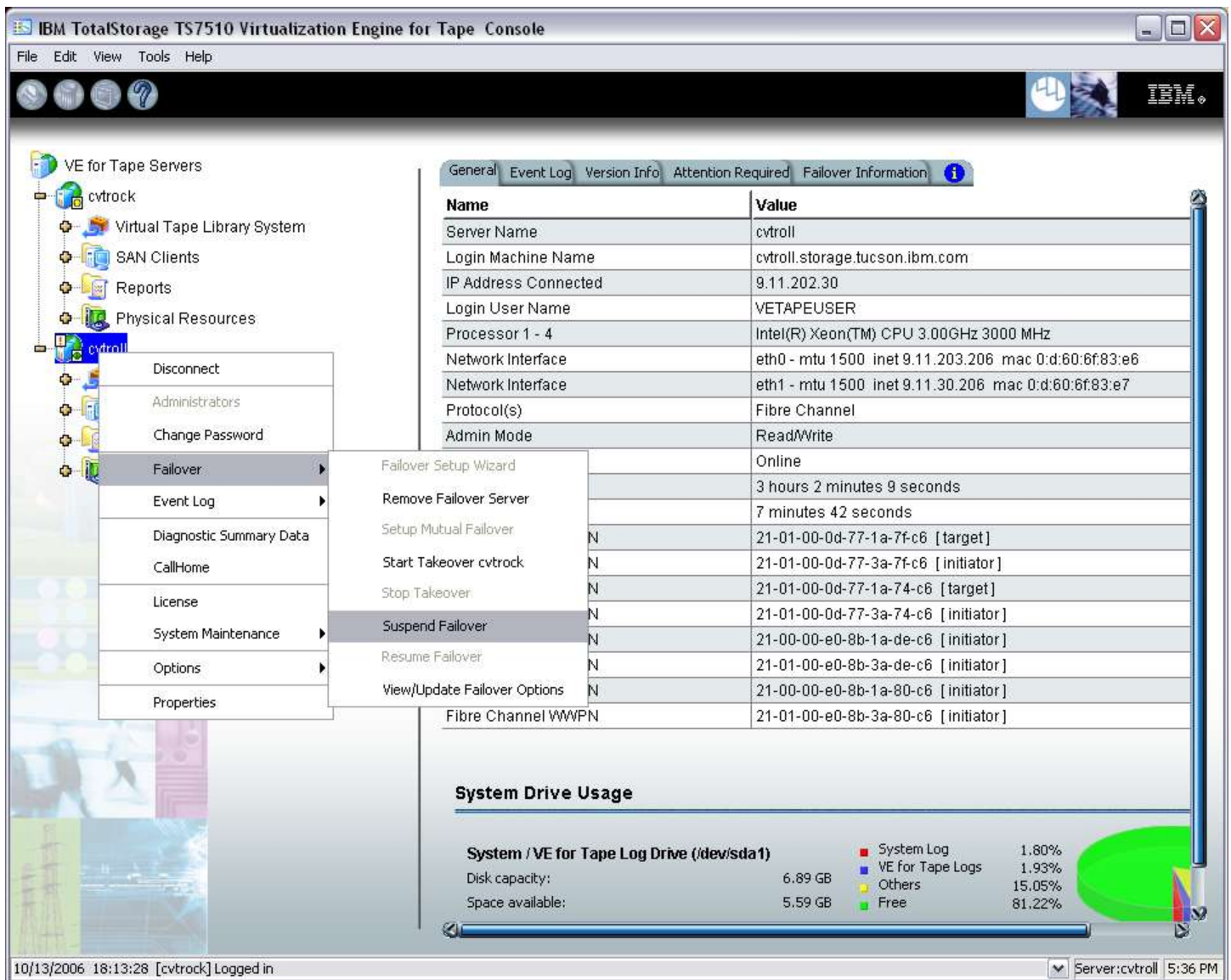


Figure-3

**Note:** After suspending failover, the CVT server's IP address assigned to eth0 will now be the secondary IP address. Therefore, it is recommended that when you connect via the console to the server you use the hostname (for example Fred.IBM.com) versus the IP address (for example 9.xxx.xxx.xxx), or you may have to re-execute the setipandhostname.pl script.

#### 4.0 Purpose and Description

This fix pack should be installed on all TS7510 systems, with software version 1.1 (Build 1143), that do not have the fix pack installed. This fix pack combines all available patches for the TS7510.

#### 5.0 Installation Time

The average time to install this fix pack on a HA configuration is 1.0 hour. The number of persons required to install the patch is 1.

# Installation (Section 6 through 7)

## 6.0 Details of Installation

### 6.1 Fix Pack Installation

Use the VE Console *Add Patch* option to install the patch. Refer to Figure-4 through Figure-7 and **use the following procedure to install the fix pack on each 3954-CV5 VE for Tape server (both the upper and lower server if in an HA environment).**

1. Highlight the VE for Tape server, select the *Tools* button on the Menu bar, and select *Add Patch* (Figure-4)

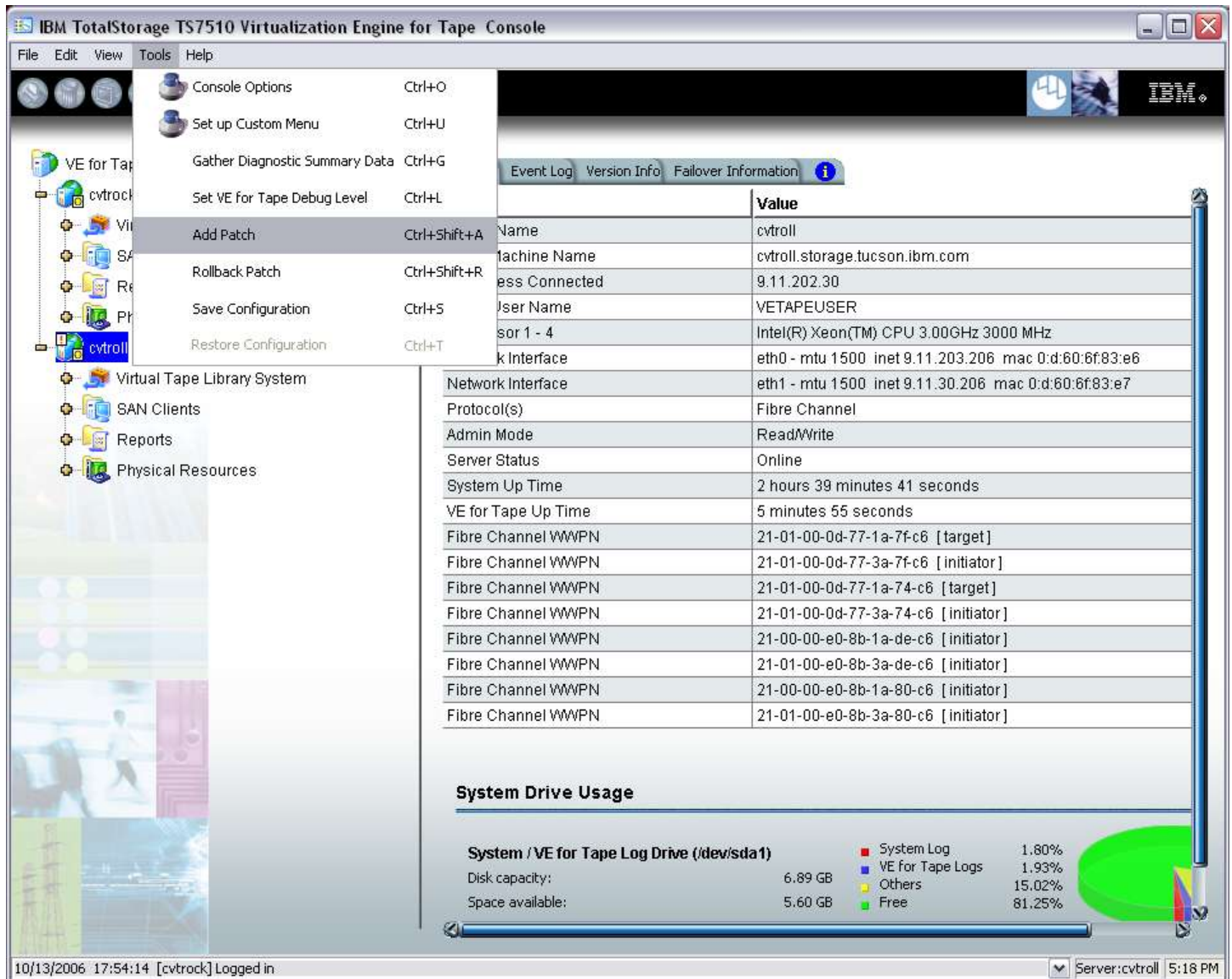


Figure-4



2. Select “OK” when presented with the following Warning Message (Figure-5)



Figure-5

3. When presented with the Select Patch File window (Figure-6), index to the VE Console directory where the *update-ve11430809* patch file resides and select the file.

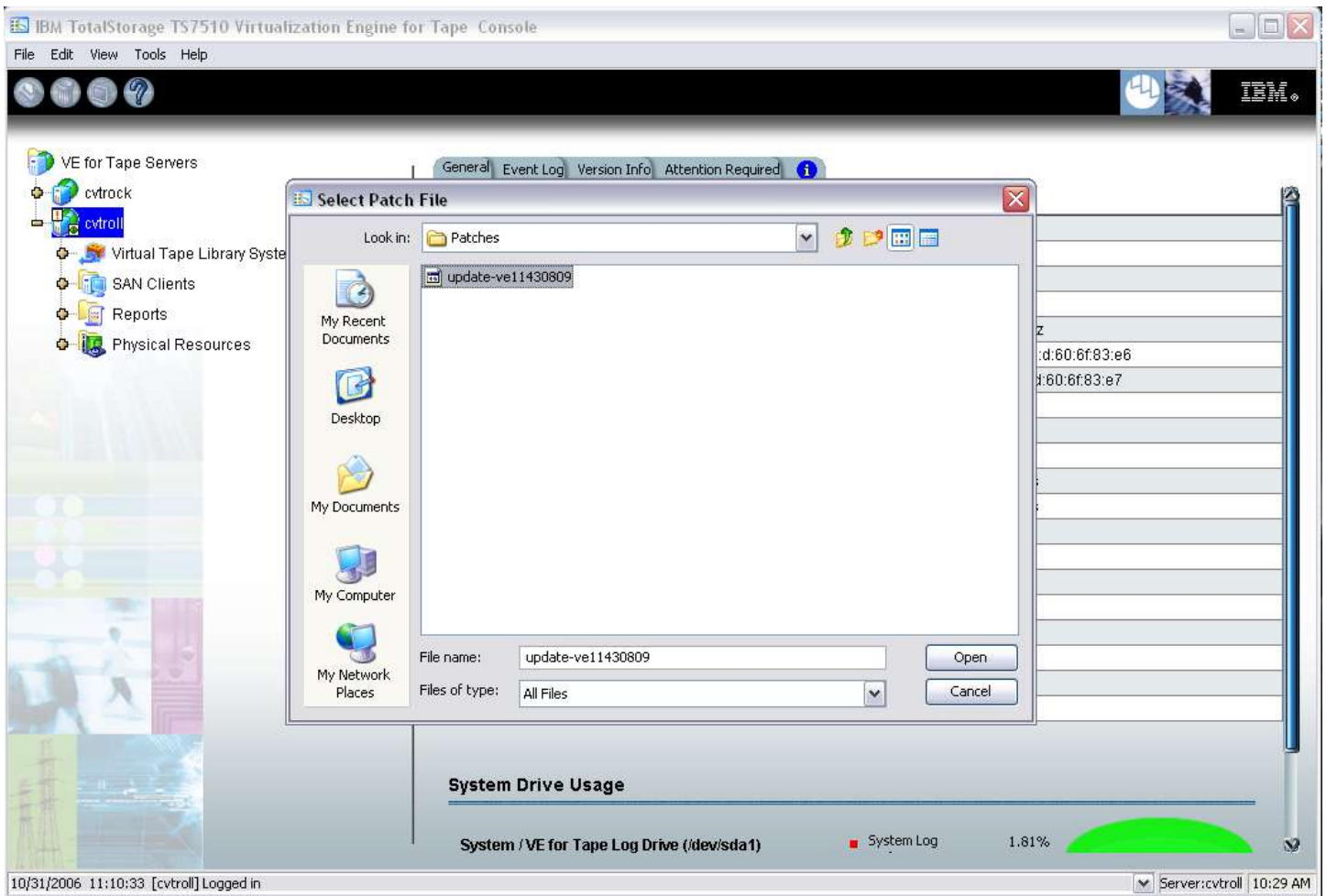


Figure-6

4. When presented with the confirmation window, type “YES” to confirm (Figure-7)

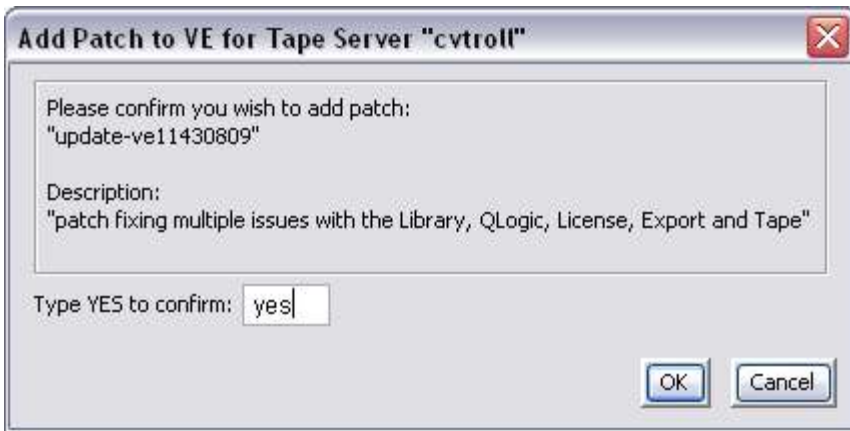


Figure-7

5. The server software will shutdown and restart (Figure-8). The VE Console will be disconnected from the VE for Tape server (Figure-9). Once the server software has completed the restart (approximately 30 seconds) you will be able connect to the VE for Tape server from the VE Console (Figure-10).



Figure-8

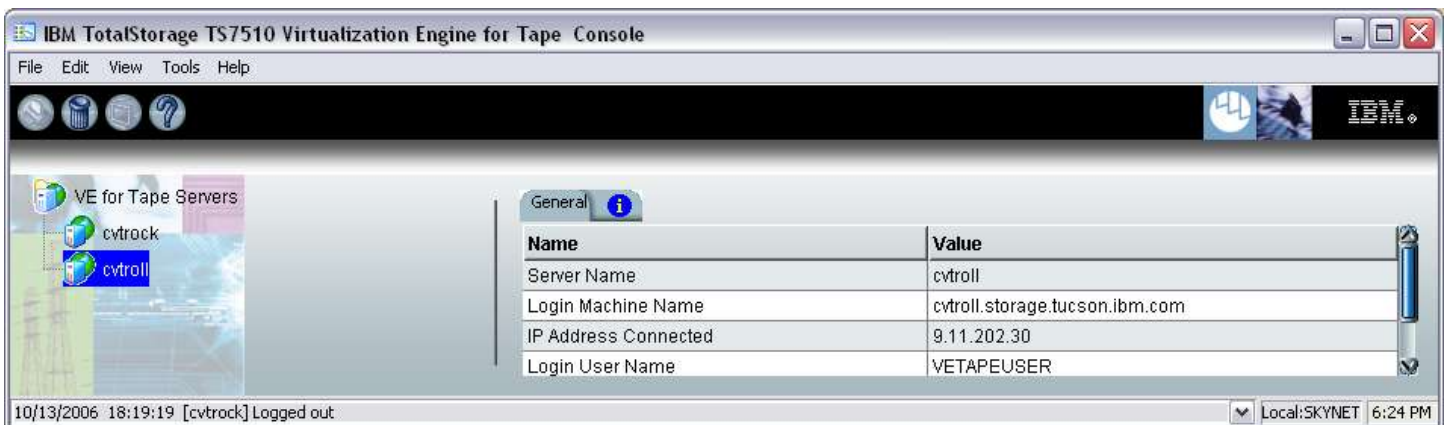


Figure-9



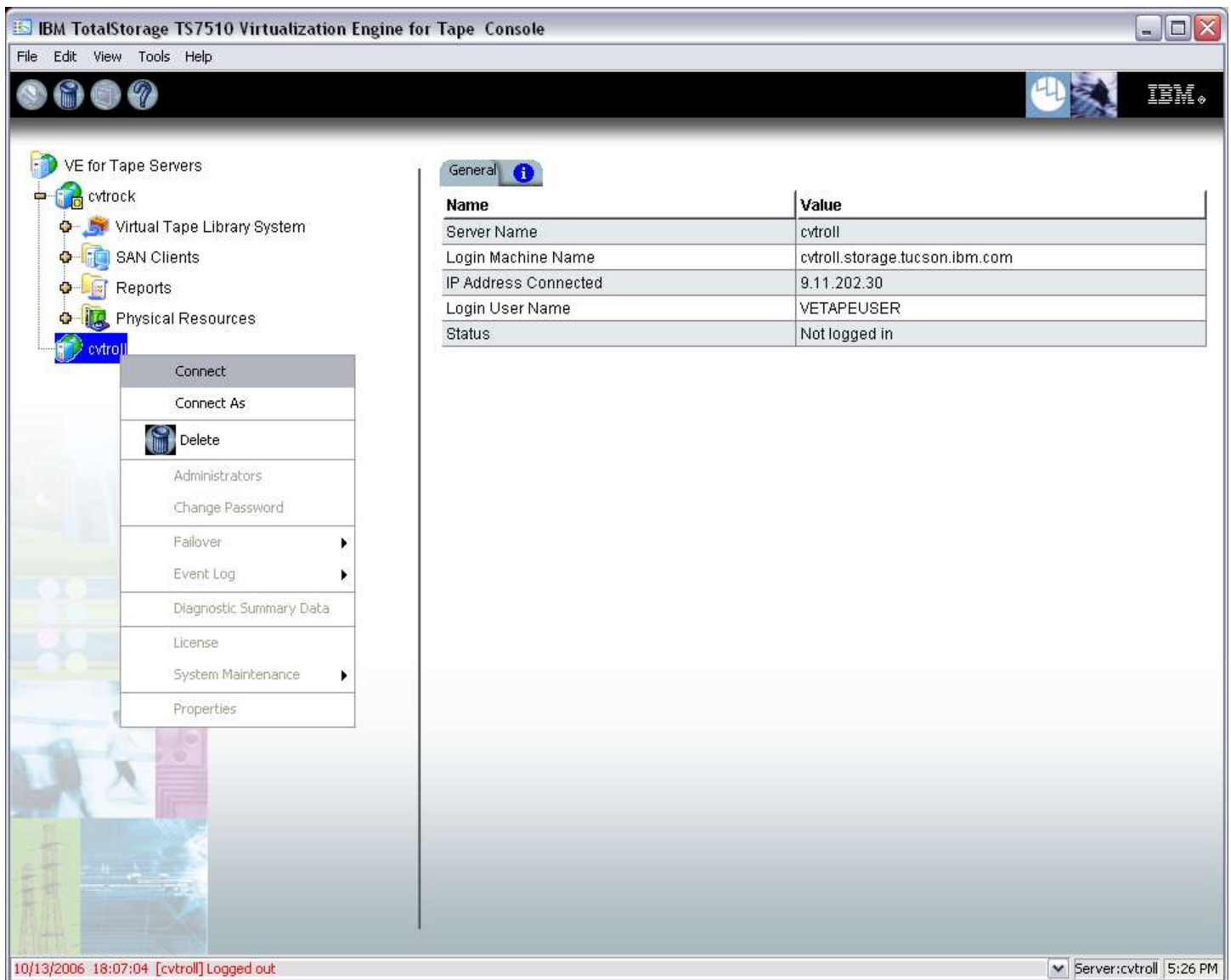


Figure-10

Check the TS7510 Event Log of each server, using the VE Console *Event Log* tab, to confirm the successful installation of the patch (refer to Figure-11). There should be an Event Log entry stating the “Patch update-ve11430809 installation completed successfully”. **Note:** you may have to scroll through the log in order to find this entry depending on the configuration of your CVT.

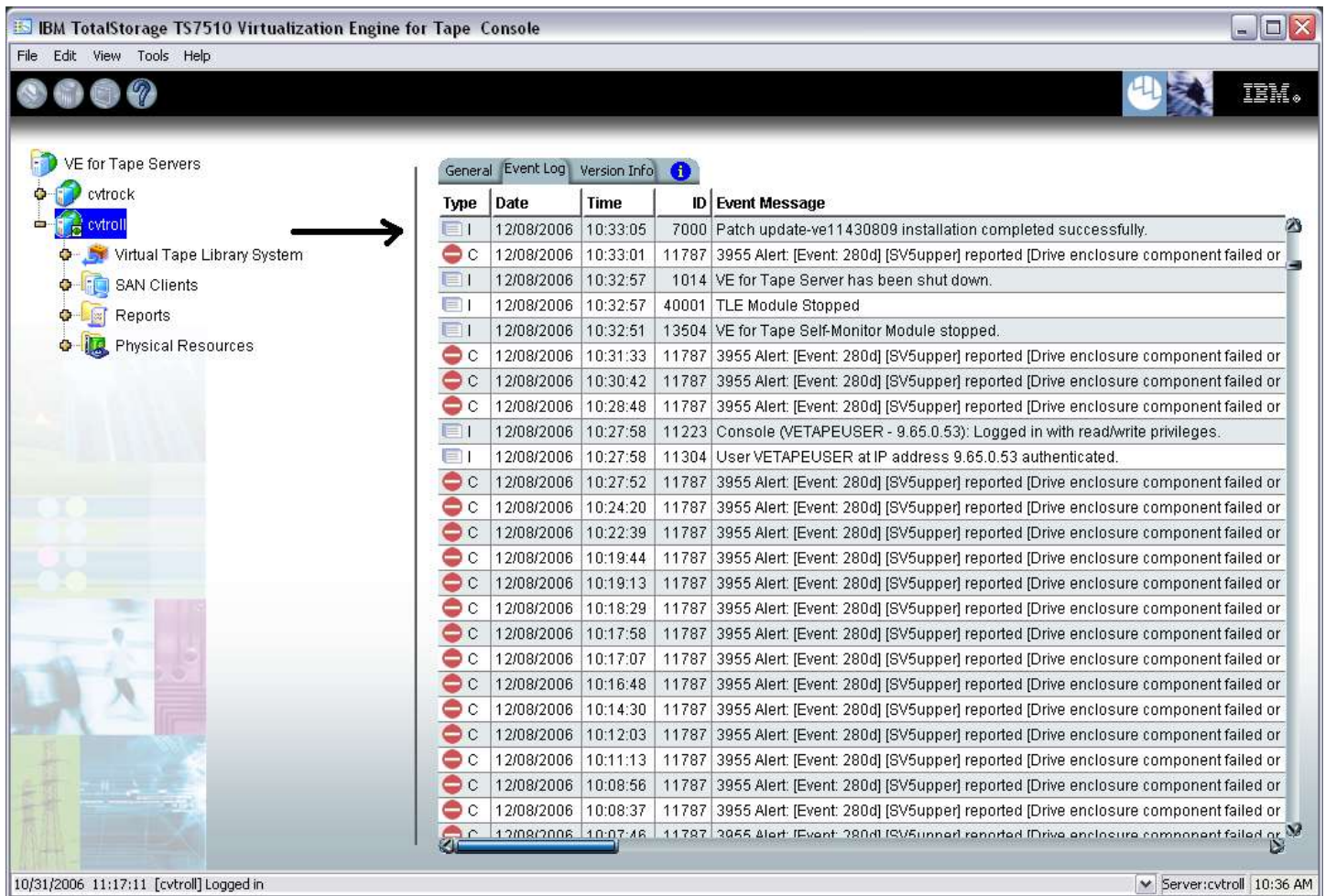


Figure-11

## 6.2 Reboot the VE Tape Server (3954-CV5)

From the VE Console, select the VE Tape Server to be rebooted. Right-click the mouse for the System Maintenance list box. Select *Reboot* and left-click the mouse (refer to Figure 12). **Perform this step for both VE Tape Servers in a HA configuration.**

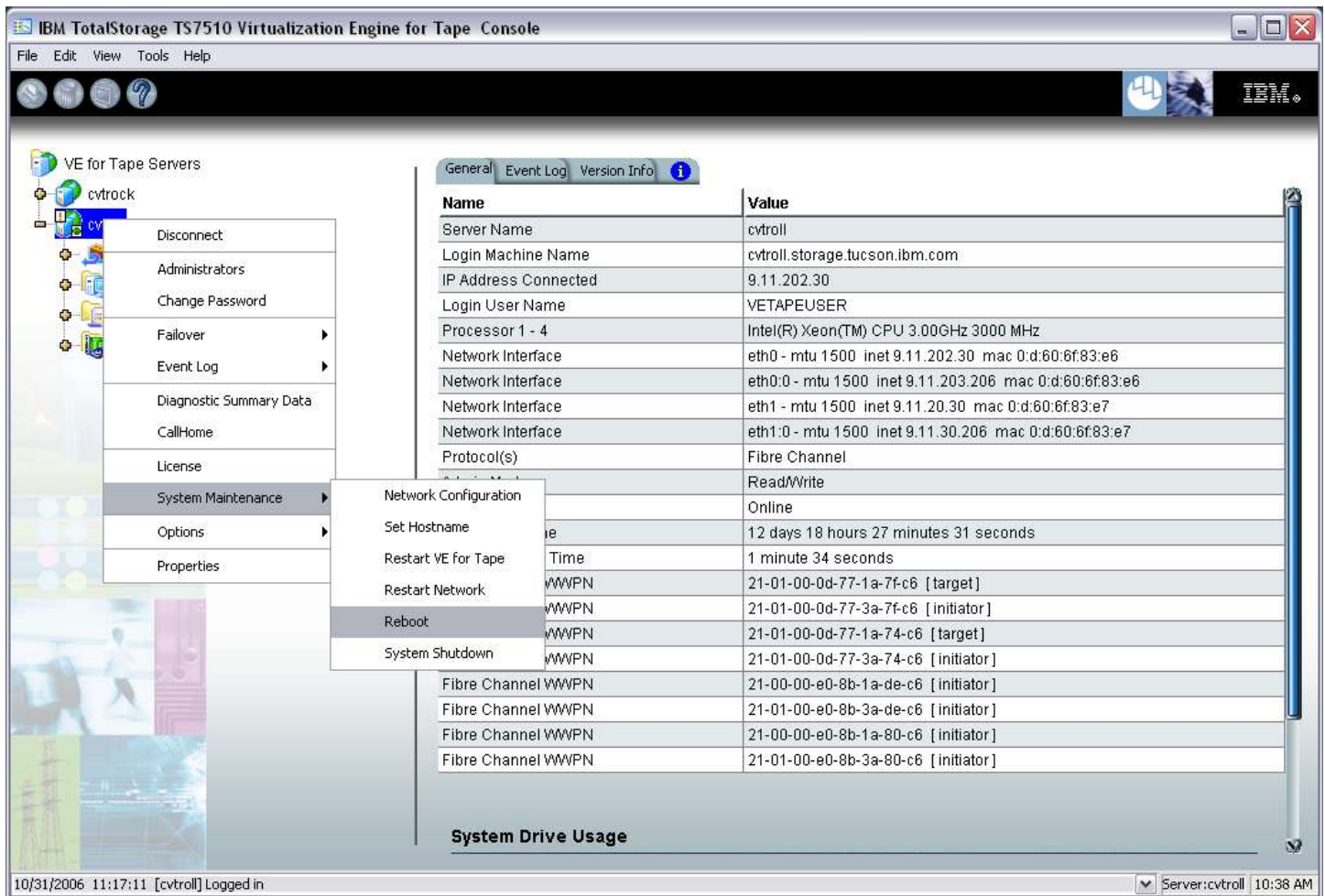


Figure-12

### 6.3 Resume Failover

For HA configurations (FC-7420 Failover/Failback Enable), use the VE Console to Resume Failover on both 3954-CV5 servers. Refer to Figure-3 and the following procedure to Resume Failover **on each server (both the upper and lower server if in an HA environment)**.

1. Highlight the VE for Tape server
2. With your mouse Right-click on the VE Console, a context menu will appear, select *Failover*, then select *Resume Failover*.

## 7.0 Test Procedure

### 7.1 Check Fix Pack Installation

**Check the TS7510 Event Log of each server**, using the VE Console *Event Log* tab, to confirm the successful installation of the fix pack (refer to Figure-11, top entry in log). There should be an Event Log entry stating the “Patch update-ve11430809 installation completed successfully”. **Note:** you may have to scroll through the log in order to find this entry depending on the configuration of your CVT.

If the fix pack installed successfully the customer can resume normal operations.  
Contact the IBM Support Center if the patch installation did not complete successfully.