

Customer Installation Instructions

TS7520 Patch Update for 3954-CV6 Virtualization Engine

update-ve138202 - Fixes issue with TS3100 and TS3200 library configuration on clients such as Windows, AIX, and Linux using the IBM device driver.

TS7520 Software Version 2.1 (Build 1382) Patch update-ve138202 TS7520 Patch Update for 3954-CV6 Virtualization Engine

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Before Installation (Section 1 through 5)

1.0 Machines Affected

This is a field patch installation instruction for the TS7520 3954-CV6 Virtualization Engine.

This patch should be installed on all TS7520 systems, with software version 2.1 (Build 1382 with patch update-ve138201b) that do not have patch update-ve138202 installed. TS7520 systems without this patch may experience problems with TS3100 and TS3200 library configuration on clients such as Windows, AIX, and Linux using the IBM device driver.

You can check the version of TS7520 software and determine whether or not the patch is already installed, using the VE Console *Version Info* tab (refer to Figure-1).

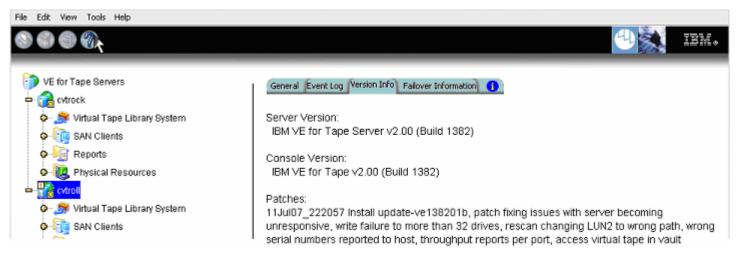


Figure-1

2.0 Prerequisites

Ensure that patch update-ve138201b is already installed on the system.

Obtain the latest Installation Instruction and the patch file Patch filename: update-ve138202

Installation of this patch is disruptive to normal TS7520 operation. Application of the patch will cause the 3954-CV6 server software to shutdown and restart. Schedule time when the TS7520 system can be taken out of normal operation.

3.0 Preparation

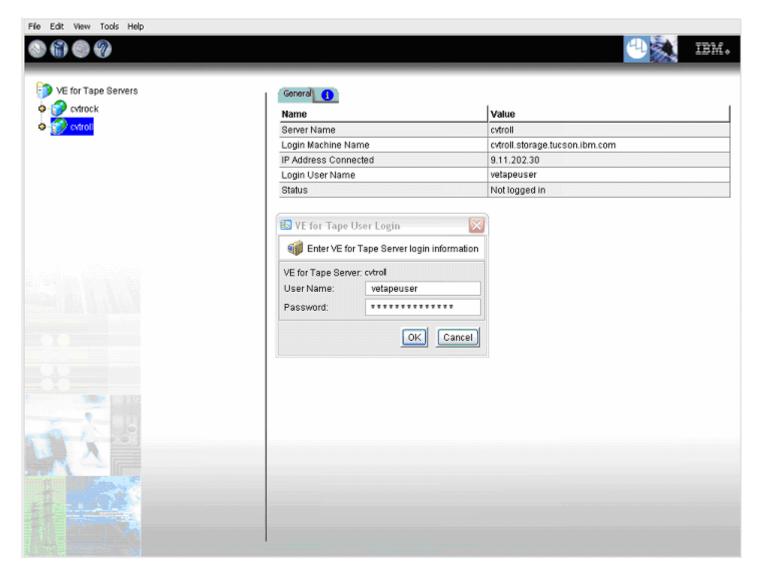
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Ensure that all host jobs to the TS7520 are quiesced, and complete all pending TS7520 operations.

Transfer the patch file (update-ve138202) 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-CV6 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*.



/irtual Tape Library System			Value		
interent report chartery of orenin	Server Name		cvtroll cvtroll.storage.tucson.ibm.com 9.11.202.30 vetapeuser		
SAN Clients	Login Machine N	lame			
Reports	IP Address Conn	nected			
	Login User Nam	e			
Physical Resources	Processor 1 - 4		Intel(R) Xeon(TM) CPU 3.00GHz 3000 MHz		
Disconnect	Network Interface	9	eth0 - mtu 1500 inet 9.11.203.206 mac 0:d:60:6f:83:ei		
	Network Interface		eth1 - mtu 1500 inet 9.11.30.206 mac 0:d:60:6f:83:e7		
Administrators	Protocol(s)		Fibre Channel Read/Write		
Change Password	Admin Mode				
Fallover •	Failover Setup Wizard		Online		
	Remove Failover Server		3 hours 2 minutes 9 seconds		
Event Log Diagnostic Summary Data CalHome License System Maintenance			7 minutes 42 seconds		
	Setup Mutual Failover	N	21-01-00-0d-77-1a-7f-c6 [target]		
	Start Takeover cvtrock	N	21-01-00-0d-77-3a-7f-c6 [initiator]		
	Stop Takeover	N	21-01-00-0d-77-1a-74-c6 [target]		
	Suspend Failover	N	21-01-00-0d-77-3a-74-c6 [initiator]		
		N	21-00-00-e0-8b-1a-de-c6 [initiator]		
Options •	Resume Failover	N	21-01-00-e0-8b-3a-de-c6 [initiator]		
Properties	View/Update Failover Options	F N	21-00-00-e0-8b-1a-80-c6 [initiator]		
	Fibre Channel W	WPN	21-01-00-e0-8b-3a-80-c6 [initiator]		

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), or you may have to re-execute the setipandhostname.pl script.

4.0 Purpose and Description

This patch should be installed on all TS7520 systems, with software version 2.1 (Build 1382), that do not have the patch installed. TS7520 systems without this patch may experience problems with TS3100 and TS3200 library configuration on clients such as Windows, AIX, and Linux using the IBM device driver.

5.0 Installation Time

The average time to install this patch 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 Patch 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 patch on each 3954-CV6 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)

	Console Options	Ctrl+O		The second se		
	🏐 Set up Custom Menu	Ctrl+U				
for Tag	Gather Diagnostic Summary Data	Ctrl+G	Event Log Version Info Falover Information			
evtrock	Set VE for Tape Debug Level	Ctrl+L		Value		
😚 Vii	Add Patch	Ctrl+Shift+A	Name	cvtroll		
📋 SA	S4		1achine Name	cvtroll.storage.tucson.ibm.com		
Re Re	Rolback Patch	Ctrl+Shift+R	ess Connected	9.11.202.30		
Pt	Save Configuration	Ctrl+S	Jser Name	vetapeuser		
~	Restance Conference Man	-01 L-12	sor 1 - 4	Intel(R) Xeon(TM) CPU 3.00GHz 3000 MHz		
ovtroll	Restore Configuration	Ctrl+T	k Interface	eth0 - mtu 1500 inet 9.11.203.206 mac 0:d:60:6f:83:e6		
对 Virtual 🕅	Tape Library System	Netwo	ork Interface	eth1 - mtu 1500 inet 9.11.30.206 mac 0:d:60:6f:83:e7		
I SAN Clients		Protoc	:ol(s)	Fibre Channel		
Report	e	Admin	Mode	Read/Write		
		Server	r Status	Online		
Physical Resources		System	m Up Time	2 hours 39 minutes 41 seconds		
			Tape Up Time	5 minutes 55 seconds		
		Fibre	Channel WWPN	21-01-00-0d-77-1a-7f-c6 [target]		
		Fibre	Channel WWPN	21-01-00-0d-77-3a-71-c6 [initiator]		
		Fibre	Channel WWPN	21-01-00-0d-77-1a-74-c6 [target]		
		Fibre	Channel WWVPN	21-01-00-0d-77-3a-74-c6 [initiator]		
		Fibre	Channel WWPN	21-00-00-e0-8b-1a-de-c6 [initiator]		
		Fibre	Channel WWPN	21-01-00-e0-8b-3a-de-c6 [initiator]		
		Fibre Channel WWPN		21-00-00-e0-8b-1a-80-c6 [initiator]		
		Fibre Channel WWPN		21-01-00-e0-8b-3a-80-c6 [initiator]		
$\mathbf{\dot{\lambda}}$		Syst	tem Drive Usage			
		Dis	stem / VE for Tape Log Dri < capacity: ce available:	ve (/dev/sda1) = System Log 1.80% VE for Tape Logs 1.93% 6.89 GB Others 15.02% 5.60 GB Free 81.25%		

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-ve138202* patch file resides and select the file.

a cytrock				alover Information	And a state of the		
- 🍠 Virtual Tape Library Sy	notom	Name	-	Value			
A-	stern		er Name	cvtroll			
- i SAN Clients			Machine Name	cvtroll.storage.tucson.ibm.com			
- 🔤 Reports			dress Connected	9.11.2			
- 🔃 Physical Resources			User Name	vetape			
6	Select Patch Fi		0000F1_4	Lietal/E	NAME (THE OTHER DESIGNATION OF THE OTHER DESIG		
- 🔊 Virtual Tape Library	Select Patch Fi	ne					ac 0:d:60:6f:83:e6
SAN Clients	Look in: 🧯	🛅 Patches		~	🤌 📁 🖽 🔚	1	c 0:d:60:6f:83:e7
	Desitop My Documents						
	My Computer	le name:	update-ve138202		Open		
	My Network		aposto reserve				

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

Please confirm you wish to add patch: "update-ve138202"	
Description: "patch fixing issue with TS3100 and TS3200 library configuration on clients such as Windows, AIX, and Linux usir	ng IBM device driver"
Type YES to confirm: YES	
	OK Cancel

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).

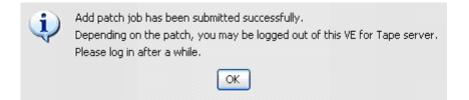
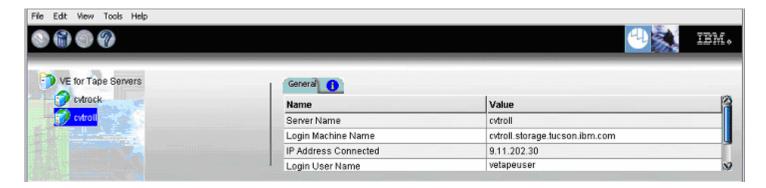
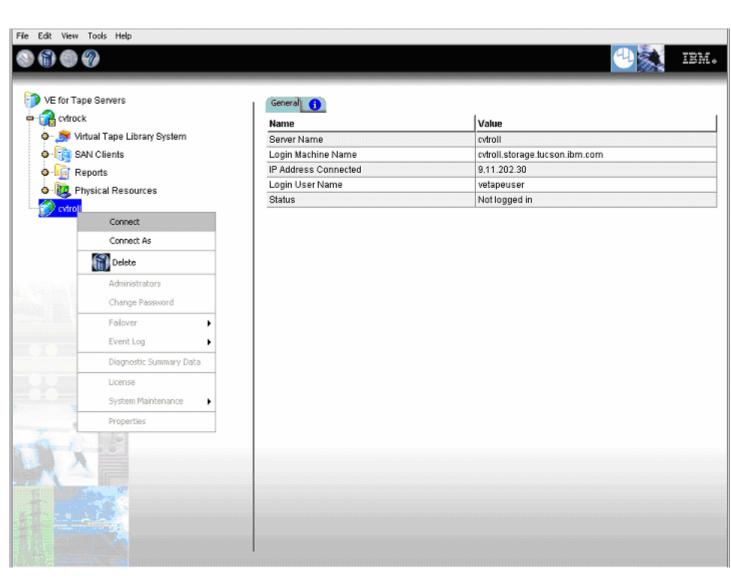


Figure-8





Check the TS7520 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-ve138202 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.

VE for Tape Servers	Genera	Event Log	Version Info	Fallove	r Information 🕦
📸 evtrock	Туре	Date	Time	ID	Event Message
>- 🏂 Virtual Tape Library System 🛥	→ 📼	07/26/2007	17:28:23	7000	Patch update-ve138202 installation completed successfully.
- 👸 SAN Clients	E1	07/26/2007	17:28:19	1014	VE for Tape Server has been shut down.
Reports		07/26/2007	17:28:19	40001	TLE Module Stopped
Physical Resources	E 1	07/26/2007	17:28:17	13809	Failover completed successfully.
	E 1	07/26/2007	17:28:17	13808	IP address released successfully.
Cvtroll	🔺 vv	07/26/2007	17:28:17	13600	IP address 9.11.20.30 9.11.202.30 released.
🕨 🎯 Virtual Tape Library System	E 1	07/26/2007	17:28:17	13805	Virtual device released successfully.
- 🛅 SAN Clients		07/26/2007	17:27:59	13803	Quorum disk released to secondary.
Reports		07/26/2007	17:27:59	13801	Secondary server will take over operation.
Physical Resources		07/26/2007	17:27:57	13816	Primary server restored.
		07/26/2007	17:27:54	13812	Server IP address add successfully.
		07/26/2007	17:27:54	13502	Re-claiming server IP address 9.11.20.30 9.11.202.30 .
		07/26/2007	17:27:54	13815	Virtual device added successfully.
	🗢 c	07/26/2007	17:27:49	11787	3955 Alert: [Event: 280d] [SV5upper] reported [Drive enclosure con
		07/26/2007	17:27:32	11223	Console (VETAPEUSER - 9.76.204.23): Logged in with read/write
		07/26/2007	17:27:31	11304	User VETAPEUSER at IP address 9.76.204.23 authenticated.
	🗢 c	07/26/2007	17:27:22	11787	3955 Alert: [Event: 280d] [SV5upper] reported [Drive enclosure con
		07/26/2007	17:26:23	13811	Primary server failback initiated.
	(E) I	07/26/2007	17:26:23	13832	Primary server did not receive Secondary server's heartbeat reque
9	()	07/26/2007	17:26:16	13504	VE for Tape Self-Monitor Module stopped.
		07/26/2007	17:24:10	11223	Console (VETAPEUSER - 9.76.204.23): Logged in with read/write
and a second sec	E 1	07/26/2007	17:24:10	11304	User VETAPEUSER at IP address 9.76.204.23 authenticated.
	0 C	07/26/2007	17:23:18	11787	3955 Alert: [Event: 280d] [SV5upper] reported [Drive enclosure con
And the second s	0 C	07/26/2007	17:22:36	11787	3955 Alert: [Event: 280d] (SV5upper) reported [Drive enclosure con
	0 C	07/26/2007	17:19:49	11787	3955 Alert: [Event: 280d] (SV5upper) reported [Drive enclosure con
	0 C	07/26/2007	17:19:21	11787	3955 Alert: [Event: 280d] (SV5upper) reported [Drive enclosure con
Conception of the local division of the loca	0 C	07/26/2007	17:19:03	11787	3955 Alert: [Event: 280d] [SV5upper] reported [Drive enclosure con

Figure-11

6.2 Resume Failover

For HA configurations (FC-7420 Failover/Failback Enable), use the VE Console to Resume Failover on both 3954-CV6 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 Patch Installation

Check the TS7520 Event Log of each server, using the VE Console *Event Log* tab, to confirm the successful installation of the patch (refer to Figure-11, top entry in log). There should be an Event Log entry stating the "Patch update-ve138202 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 patch installed successfully the customer can resume normal operations. Contact the IBM Support Center if the patch installation did not complete successfully.