

Upgrade Instructions for Xorcom TwinStar Plus Servers

Document version: 1.0

Overview

This document describes the upgrade procedure for upgrading TwinStar Plus CTS2000/CTS3000/CXTS3000/CXTS4000 and VM servers software version.

Step 1 - Preparation

1. On both servers, disconnect DRBD communication:

```
drbdadm disconnect r0
```

2. On the srv-a (Server A), disable the servers switching and the TwinStar watchdog process:

```
twinstar-ctl freeze  
twinstar disable-wd
```

Step 2 - Server A Upgrade

3. On srv-a, update the software:

```
yum update
```

Note: The amount of time required to complete the upgrade process depends on the available Internet bandwidth and the size of the update. It may take a while.

4. Restart the twinstar service

```
systemctl restart twinstar
```

5. Reboot srv-a.

6. On srv-a, disconnect DRBD communication and disable the TwinStar watch dog process, as follows:

```
drbdadm disconnect r0  
twinstar disable-wd
```

7. If there are some Astribank units connected then reset the Astribank devices.

On srv-a:

* stop Asterisk

```
systemctl stop asterisk
```

* reset the Astribanks

```
/usr/share/dahdi/xpp_fxloader reset
```

* wait until the Astribank units will appear in the lsusb output as e4e4:1162 devices:

```
#lsusb
```

```
Bus 002 Device 001: ID 0000:0000
```

```
Bus 001 Device 005: ID e4e4:1162
```

```
Bus 001 Device 001: ID e4e4:1162
```

```
Bus 003 Device 001: ID 0000:0000
```

```
Bus 004 Device 001: ID 0000:0000
```

* start Asterisk

```
systemctl start asterisk
```

Step 3 - Server B Upgrade

8. In order to upgrade the srv-b (backup server) Asterisk needs to run on it. Note that Asterisk is already running on srv-a. If the PBX is configured to register on a SIP server then both primary and backup servers will try to register on it. If this is the case, stop Asterisk on srv-a using the following command:

```
systemctl stop asterisk
```

9. On both servers, disconnect DRBD communication, as follows:

```
drbdadm disconnect r0
```

Note: It is possible that DRBD communication is already disconnected on srv-b. In this case you will get an error message from drbdadm which you can ignore.

10. On the srv-b, mount the DRBD partition (/replica), start the mysql, asterisk and Web server services:

```
cd /usr/share/twinstar/services.d
```

```
./10-drbd.run start
./15-filesystem.run start
./20-mysql.run start
./25-asterisk.run start
./30-apache.run start
```

If this was done properly, the communication status (cs) will be 'StandAlone' and state (ro) will be 'Primary' in output of the 'cat /proc/drbd' command. For example:

```
cat /proc/drbd
version: 8.4.6 (api:1/proto:86-101)
GIT-hash: 91b4c048c1a0e06777b5f65d312b38d47abaea80 build by ...
0: cs:StandAlone ro:Primary/Unknown ds:UpToDate/DUnknown r----
ns:535648 nr:4368 dw:96868716 dr:577970 al:23 bm:5996 lo:0 pe:0 ua:0 ap:0 ep:1 wo:b
oos:888
```

11. On the srv-b server, upgrade the software, as follows:

```
yum update
```

12. Restart the twinstar service:

```
systemctl restart twinstar
```

13. Reboot srv-b.

Step 4 - Reconnect TwinStar

14. On the primary server (srv-a), connect DRBD as follows:

```
drbdadm connect r0
```

15. Check the DRBD status on both servers. On the active server something like the following will be displayed:

```
# cat /proc/drbd
version: 8.4.7-1 (api:1/proto:86-101)
GIT-hash: 3a6a769340ef93b1ba2792c6461250790795db49 build by mockbuild@Build64R6,
2016-01-12 13:27:11
0: cs:SyncSource ro:Primary/Secondary ds:UpToDate/Inconsistent A r-----
ns:144916 nr:0 dw:10424 dr:167973 al:11 bm:0 lo:0 pe:0 ua:0 ap:0 ep:1 wo:f oos:276976
[=====>.....] sync'ed: 35.6% (276976/421892)K
```

finish: 0:00:11 speed: 24,152 (24,152) K/sec

On the backup server the following will display:

```
# cat /proc/drbd
version: 8.4.6 (api:1/proto:86-100)
GIT-hash: 91b4c048c1a0e06777b5f65d312b38d47abaea80 build by ...
0: cs:SyncTarget ro:Secondary/Primary ds:Inconsistent/UpToDate A r----
ns:0 nr:27652 dw:27652 dr:0 al:0 bm:2 lo:0 pe:32 ua:0 ap:0 ep:1 wo:b oos:734040
[=====>.....] sync'ed: 36.8% (734040/761692)K
finish: 0:00:52 speed: 13,824 (13,824) K/sec
```

16. Start Asterisk on the primary server if it was stopped:

```
systemctl start asterisk
```

17. Enable the servers switching. On the primary server:

```
twinstar-ctl unfreeze
```