

3.4.4 Using Backup and Restore

Backup

The “/etc/backup” script looks at “/etc/fstab” to determine which file systems to dump.

Here is what “fstab” looks like on a SPU running SpuOS 2.0 and Diags 3.0.

```
/dev/sd0a / 4.2 rw 1 1
/dev/sd0f /diag 4.2 rw 1 3
/dev/sd0e /mnt 4.2 rw 1 4
/dev/sd0h /sst 4.2 rw 1 5
/dev/sd0g /usr 4.2 rw 1 2
```

“/etc/backup” will dump the file systems in the following order:

```
/
/diag
/mnt
/sst
/usr
```

Be sure to make note of the order the file systems are dumped, so you will have the proper info if you need to “restore” from the “backup” tape.

To backup the SPU do the following:

- 1) Insert a write enabled tape in the DAT drive.
- 2) Execute the following commands:
spu> su to become root.
spu> cd /
spu> /etc/backup

This will dump all of the SPU file systems onto one tape.

3.4 SPU Software Installation/Upgrade.

3.4.1 Software Installation on a Virgin Disk (No Backup)

- 1) Follow the instructions starting at Section 4.2.1 and continuing thru Section 4.2.3 of the "CONVEX Service Processor Unit Service Guide (C3800 Series)" Second Edition. Order No. DHW-304.
- 2) Install ConvexOS and SST according to the directions in their respective release notes.

NOTE: When Installing SpuOS 2.0 - The install procedures in appendix A of the Convex SpuOS v2.0 release notes needs some corrections.

Appendix A step 4 should read.

Step 4: tar cvf /dev/rst0 /ioconfig /etc/hosts /etc/passwd /mnt (and any other files you have modified)

Appendix A step 7 thru 9 should read:

Step 7: su (to become root)

Step 8: cd /

Step 9: tar xpf /dev/rst0

3.4.2 Software Installation on a Virgin Disk (With Backup)

- 1) Follow the instructions in Section 4.2.1 (Disk Partitioning) of the "CONVEX Service Processor Unit Service Guide (C3800 Series)" Second Edition. Order No. DHW-304.
- 2) Follow the instructions in Section 3.4.1 of this document.

3.4.3 Upgrading Software on the SPU Disk

- 1) Unless the SPU Disk needs to be re-partitioned, all SPU software upgrades will use the "/etc/installsw" format.
- 2) Insert the "upgrade" tape in the DAT drive.

su

cd /

/etc/installsw -i -d /dev/nrst0

Follow any additional instruction given by the "/etc/installsw" program.

Restore

Restoring “f”

At the “>” prompt, insert the “SpuOS” tape in the DAT drive. Then set boot to st and hit return.

```
>b st()
Probing Memory.....
Booting from: st(0,0,0)
```

What would you like to do?

- 1 - install mini-root
 - 2 - exit into single user shell
- Enter a 1 or 2: *1*

.

Do you want to format and/or label Disk “sd0”?

- 1 - yes, run format
 - 2 - no, continue loading miniroot
 - 3 - no, exit into single user shell
- Enter a 1, 2, or 3: *2*

.

Problem with tape: what do you want to do?

- 1 - retry the tape “st0”
 - 2 - use a different tape unit
 - 3 - abandon miniroot install and enter single user shell
- Enter a 1, 2, or 3: *1*

.

Mini-root installation complete.

What would you like to do?

- 1 - reboot using just-installed miniroot
 - 2 - exit into single user shell
- Enter a 1 or 2: *1*

.

You will see boot messages and then the miniroot prompt “#”.

Execute the following commands that have been italicized.

```
# newfs /dev/rsd0a  
# mount /dev/sd0a /a  
# cd /a
```

Insert the "backup" tape in the DAT drive.

```
# mt -f /dev/rst0 rew  
# restore xf /dev/rst0
```

Specify next volume#: *1*

Set directory mode, owner, and times.

set owner/mode for "."? [yn] *y*

```
# cd /
```

```
# umount /a
```

```
# /etc/fsck /dev/rsd0a
```

```
# mount /dev/sd0a /a
```

```
# cd /usr/kvm/mdec
```

```
# installboot /a/boot bootsd /dev/rsd0a
```

```
# /etc/reboot
```

Restoring "/usr"

At the ">" prompt, insert the "SpuOS" tape in the DAT drive.

```
>b st()
```

```
Probing Memory.....
```

```
Booting from: st(0,0,0)
```

What would you like to do?

1 - install mini-root"

2 - exit into single user shell

Enter a 1 or 2: *1*

.

.

Do you want to format and/or label Disk "sd0"?

1 - yes, run format

2 - no, continue loading miniroot

3 - no, exit into single user shell

Enter a 1, 2, or 3: *2*

Problem with tape: what do you want to do?

1 - retry the tape "st0"

2 - use a different tape unit

3 - abandon miniroot install and enter single user shell

Enter a 1, 2, or 3: *1*

Mini-root installation complete.

What would you like to do?

1 - reboot using just-installed miniroot

2 - exit into single user shell

Enter a 1 or 2: *1*

You will see boot messages and then the miniroot prompt "#".

```
# newfs /dev/rsd0g
```

```
# mount /dev/sd0a /a
```

```
# mount /dev/sd0g /a/usr
```

```
# cd /a/usr
```

Insert the "backup" tape in the DAT drive.

```
# mt -f /dev/rst0 rew
```

```
# restore xfs /dev/rst0 5
```

Specify next volume#: *1*

```
# Set directory mode, owner, and times.
```

```
set owner/mode for "."? [yn] y
```

```
# cd /
```

```
# umount /a/usr
```

```
# umount /a
```

```
# /etc/fsck /dev/rsd0g
```

```
# /etc/reboot
```

Restoring “/diag”**Boot the system to single user.**

```
>b -s
# /etc/newfs /dev/rsd0f
# mount /dev/sd0f /diag
# cd /diag
```

Insert the “backup” tape in the DAT drive.

```
# mt -f /dev/rst0 rew
# restore xfs /dev/rst0 2
```

```
.
Specify next volume#: 1
set owner/mode for “.”? [yn] y
```

```
# cd /
# umount /diag
# /etc/fsck /dev/rsd0f
# ^d (Go to multi-user)
```

Restoring “/mnt”**Boot the system to single user.**

```
>b -s
# /etc/newfs /dev/rsd0e
# mount /dev/sd0e /mnt
# cd /mnt
```

Insert the “backup” tape in the DAT drive.

```
# mt -f /dev/rst0 rew
# restore xfs /dev/rst0 3
```

```
.
Specify next volume#: 1
set owner/mode for “.”? [yn] y
```

```
# cd /
# umount /mnt
# /etc/fsck /dev/rsd0e
# ^d (Go to multi-user)
```

Restoring "/sst"

Boot the system to single user.

```
>b -s  
# /etc/newfs /dev/rsd0h  
# mount /dev/sd0h /sst  
# cd /sst
```

Insert the "backup" tape in the DAT drive.

```
# mt -f /dev/rst0 rew  
# restore xfs /dev/rst0 4
```

Specify next volume#: 1
set owner/mode for "."? [yn] y

```
# cd /  
# umount /sst  
# /etc/fsck /dev/rsd0h  
# ^d (Go to multi-user)
```