



Backing Up and Restoring the Solaris OS With “ufsdump”

This Tech Tip describes a backup and restore procedure for the Solaris 8 or 9 Operating System using the `ufsdump` command.

Backing Up the OS

1. For this example, we are using `c0t0d0s0` as a root partition. Bring the system into single-user mode (recommended).

```
# init -s
```

2. Check the partition consistency.

```
# fsck -m /dev/rdisk/c0t0d0s0
```

3. Verify the tape device status:

```
# mt status
```

Or use this command when you want to specify the raw tape device, where `x` is the interface:

```
# mt -f /dev/rmt/x status
```

4. Back up the system:

a) When the tape drive is attached to your local system, use this:

```
# ufsdump 0uf /dev/rmt/0n /
```

b) When you want to back up from disk to disk, for example, if you want to back up `c0t0d0s0` to `c0t1d0s0`:

```
# mkdir /tmp/backup  
# mount /dev/dsk/c0t1d0s0 /tmp/backup  
# ufsdump 0f - / | (cd /tmp/backup;ufsrestore xvf -)
```

c) When you want to back up to a remote tape, use this. On a system that has a tape drive, add the following line to its `.rhosts` file:

`hostname root` where `hostname` is the name or IP of the system that will run `ufsdump` to perform the backup. Then run the following command:

```
# ufsdump 0uf remote_hostname:/dev/rmt/0n /
```

Restoring the OS

1. For this example, your OS disk is totally corrupted and replaced with a new disk. Go to the ok prompt and boot in single-user mode from the Solaris CD.

```
ok> boot cdrom -s
```

2. Partition your new disk in the same way as your original disk.
3. Format all slices using the newfs command. For example:

```
# newfs /dev/rdisk/c0t0d0s0
```

4. Make a new directory in /tmp:

```
# mkdir /tmp/slice0
```

5. Mount c0t0d0s0 into /tmp/slice0:

```
# mount /dev/dsk/c0t0d0s0 /tmp/slice0
```

6. Verify the status of the tape drive:

```
# mt status
```

If the tape drive is not detected, issue the following command:

```
# devfsadm -c tape
```

or

```
# drvconfig  
# tapes  
# devlinks
```

Verify the status of tape drive again and make sure the backup tape is in the first block or file number is zero. Use the following command to rewind the backup tape:

```
# mt rewind
```

7. Go into the /tmp/slice0 directory and you can start restoring the OS.

```
# cd /tmp/slice0
# ufsrestore rvf /dev/rmt/0n
```

If you want to restore from another disk (such as c0t1d0s0), use the following command:

```
# mkdir /tmp/backup
# mount /dev/dsk/c0t1d0s0 /tmp/backup
# ufsdump 0f - /tmp/backup | (cd /tmp/slice0;ufsrestore xvf -)
```

8. After restoring all the partitions successfully, install bootblock to make the disk bootable. This example assumes your /usr is located inside the "/" partition:

```
# cd /tmp/slice0/usr/platform/'uname -m'/lib/fs/ufs
# installboot bootblk /dev/rdisk/c0t0d0s0
```

9. To finish restoring your OS, reboot the system.