

Recovering from a Boot Disk Failure with Solstice DiskSuite

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This document describes the procedure for recovering from a boot disk failure for a Solaris system whose boot disk has been mirrored using Solstice DiskSuite. To learn about how to create a mirrored boot disk, refer to the document titled [Mirroring a Boot Disk Using Solstice DiskSuite](#).

For illustration we will consider a system with a mirrored boot disk, where the primary disk has failed. To recover we must first boot the system from the backup mirror disk. A step by step recovery procedure is detailed below:

1. Boot from the backup mirror disk.

At the *ok* prompt type

```
ok boot backup
```

2. Since the state databases on the failed disk will not be accessible, this will only allow you to boot into single user mode.

After logging into single user mode you must delete references to the DiskSuite database replicas on the failed disk. Use the **metadb** command without arguments to list the replicas and identify the ones that have failed.

```
# metadb
```

Next delete the failed ones using the **metadb -d** command.

For example if the failed disk is `/dev/dsk/c0t10d0` and the replicas are stored in slices 3 and 4, delete these replicas using the following command:

```
# metadb -d /dev/dsk/c0t10d0s3  
# metadb -d /dev/dsk/c0t10d0s4
```

3. The system can now be shutdown and a new disk installed. You must still boot the system using the backup mirror disk.

```
# halt
```

```
ok boot backup
```

4. Partition the Replacement Disk

```
# prtvtoc /dev/rdisk/c0t11d0s2 | fmthard -s /dev/rdisk/c0t10d0s2
```

5. Recreate Database Replicas

```
# metadb -a /dev/dsk/c0t10d0s3  
# metadb -a /dev/dsk/c0t10d0s4
```

6. Detach and clear Failed Submirrors

```
# metadetach -f d30 d10  
# metadetach -f d31 d11  
# metadetach -f d32 d12  
# metadetach -f d33 d13  
# metadetach -f d34 d14
```

Once the failed submirrors have been detached, the actual metadevices need to be cleared.

```
# metaclear d30  
# metaclear d31  
# metaclear d32  
# metaclear d33  
# metaclear d34
```

7. Initialize the new submirrors

These steps are similar to when the mirror was first created.

```
# metainit d10 1 1 c0t10d0s0  
# metainit d11 1 1 c0t10d0s1  
# metainit d12 1 1 c0t10d0s5  
# metainit d13 1 1 c0t10d0s6  
# metainit d14 1 1 c0t10d0s7
```

Next attach the submirrors to the mirror

```
# metattach d30 d10  
# metattach d31 d11  
# metattach d32 d12  
# metattach d33 d13  
# metattach d34 d14
```

Resyncing of the submirrors may take a long time. Monitor the progress of resynchronization using the **metastat** command.

8. After resynchronization is complete, reboot the system. Make sure this time you boot from the primary boot disk and not from the backup mirror disk.

```
# init 0
```

```
ok boot
```