

# Sequential Scrub and Resilver Adjustments

Beginning with the release of FreeNAS 11.1, the algorithm used for scrubs and resilvers received many performance improvements, most noticeably on fragmented pools.

Issue: Legacy Behavior

Some users might wish to revert to the old algorithm for scrub and resilver.

## Fix: Revert to Old Behavior

The legacy scrub algorithm can be enabled by setting this **sysctl** tunable in the *Shell* console:

```
sysctl -w vfs.zfs.zfs_scan_legacy=1
```

If a scrub is already in progress, it can be paused, the tunable set, and the scrub resumed with these commands: `zpool scrub -p poolname`, `sysctl -w vfs.zfs.zfs_scan_legacy=1`, and `zpool scrub poolname`

Issue: System Load During Scrubs or Resilvers

In FreeNAS 11.1 and 11.1-U1, resilver and scrub delays were both set to *0*. This can keep the system too busy to do other work when a scrub or resilver is active.

## Fix: Adjust Scrub and Silver Delay Settings

Two *sysctl* tunables (**System > Tunables**) affect scrub and resilver speed and system availability:

```
vfs.zfs.resilver_delay
```

```
vfs.zfs.scrub_delay
```

Setting the resilver delay to 2 and the scrub delay to 4 limits the IOPS used for these functions, providing some reserve for normal operations:

```
sysctl vfs.zfs.resilver_delay=2
```

```
sysctl vfs.zfs.scrub_delay=4
```

Setting	Value	Description
Enabled	checkbox	Set to run resilver tasks between the configured times.

<b>Setting</b>	<b>Value</b>	<b>Description</b>
Begin Time	drop-down	Choose the hour and minute when resilver tasks can be started.
End Time	drop-down	Choose the hour and minute when new resilver tasks can no longer be started. This does not affect active resilver tasks.
Days of the Week	checkboxes	Select the days to run resilver tasks.