



PROFESSIONAL SERVICES TECH NOTE #019

RAID-level Scrubs

The Concept

Data ONTAP is continuously running a media scrub in the background looking for media errors which protects against data loss. To protect against data corruption, RAID-level scrubbing runs every Sunday at 1 AM for six hours to check the disk blocks of all aggregate disks for media errors and parity and checksum errors. If Data ONTAP finds media errors or inconsistencies, it reconstructs the data from parity. This scheduled run can be changed or added to so RAID scrubs occur more frequently or last longer.

Examples

The following command schedules two weekly RAID scrubs. The first run is for 240 minutes (four hours) every Tuesday at 2 a.m. The second scrub runs for 8 hours every Saturday at 10 p.m.

```
fas1> options raid.scrub.schedule 240m@tue@2,8h@sat@22
```

What It Means To You

If you have I/O intensive processes running on Sunday mornings (e.g., full backups) you can modify the schedule to run the scrubs at a different time. You can see the output of the RAID scrubs in the system log and notice many stop before completion. The schedule can be modified to run for longer durations to ensure completion.

More Information

You can find more information in the Data ONTAP Storage Management Guide:

http://now.netapp.com/NOW/knowledge/docs/ontap/rel7261/html/ontap/smg/provisioning/concept/c_oc_prov_disk-scrub-cont.html

http://now.netapp.com/NOW/knowledge/docs/ontap/rel7261/html/ontap/smg/provisioning/concept/c_oc_prov RAID-scrub-sched.html

Brought to you by NetApp Americas Professional Services

Send comments, corrections & suggestion to Michael Cope at mcope@netapp.com
Tech Note archive: http://communities.netapp.com/community/products_and_solutions?view=documents