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PROFESSIONAL SERVICES TECH NOTE #007

Reallocate

The Concept

The **reallocate** command rearranges blocks in a LUN, file, volume or aggregate to optimize them for sequential reads and writes. The tradeoff is snapshots created before reallocation are less useful because they contain the filesystem when it was not optimized. A general recommendation is to delete all snapshots the first time **reallocate** is run to allow optimal reallocation and to conserve disk space.

Examples

```
fas> reallocate on
```

turn reallocation function on system-wide

```
fas> reallocate start /vol/vol1/db_lun
```

runs reallocate on a LUN and then runs every 24 hours at midnight

```
fas> reallocate start -p
```

performs physical but not logical reallocation of data blocks (i.e., allows you to retain old Snapshots in return for some performance degradation).

```
fas > reallocate start -A aggr2
```

reallocate an aggregate after adding disks.

Note: aggregate must have been created by Data ONTAP 7.2 or later

```
fas> reallocate schedule -s "0 23 * 6" /vol/vol03
```

schedule reallocate to run on vol03 every Saturday at 11 PM.

What It Means To You

Reallocate is a house keeping task which you may want to run anywhere from once a day to once a year. Reallocate only moves blocks when performance can be improved so it can be scheduled to run frequently. When should you use **reallocate**? To improve read and write performance on LUNs, files or volumes which experience a high rate of change and are used by transactional applications such as email and databases. Secondly, to evenly distribute data blocks across all disks in a volume or aggregate after growing them by adding new disks.

More Information

See the system performance chapter of the Data ONTAP System Administration Guide:

http://now.netapp.com/NOW/knowledge/docs/ontap/rel7261/html/ontap/sysadmin/tuning/concept/c_oc_tun_reallocate-general.html

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