

Snap Technology

As part of the information technology infrastructure program, VITA and Northrop Grumman are providing logical point-in-time data snapshot technology.

In addition to the full snapshot capability that provides operational recovery, the technology used at the Commonwealth Enterprise Solutions Center (CESC) supports delta snapshots, commonly referred to as snaps.

Because snaps contain only changed data and pointers, they generally use less space than that of a full snapshot. The major difference between full snapshots (clones) and delta snaps is that the snap is based on pointers and is dependent on availability of the original source data. If the original data is lost or corrupted the snap is not useable. Any read of unchanged data is from the original.

How a snapshot works and when to use it

Snap software provides logical point-in time views to enable agencies to reduce the impact on production servers from tasks such as:

- Backup
- Reporting
- Application testing

Snapshots can be created to capture point-in-time views of a logical unit number (LUN) mounted on one server. The snap can be mounted to the original host or a different host and/or used to reverse all changes made to the original since the snap was created.

Multiple snaps of an original volume can be created either at the same point in time or at successive points in time. Up to eight snaps can exist at one time.

Implementation considerations

- Application data must be stored on a discrete LUN on the Tier 1 or Tier 2 enterprise storage area network (SAN) attached to a server at CESC.
- Snaps are always on the same SAN array as the source LUN.
- Implementation of snap copies requires installation of a replication manager agent and may require firewall rule changes.
- Completion of a custom work request form is required prior to implementing snaps.

Contact your VITA customer account manager (CAM) or agency operations manager (AOM) if you are interested in this service.