

SNAP AND CLONE TECHNOLOGY

To ensure continuity of business operations following a data loss, the Virginia Information Technologies Agency (VITA) is offering point-in-time data duplication, or snap and clone technology.

Snap and clone technology provides state agencies the ability to protect applications and server data through replication, or cloning.

HOW SNAP AND CLONE WORKS

Software provides complete replicas or clones of data for testing, backup and/or recovery operations. Point-in-time copies enable agencies to reduce the impact on production servers eliminating the following tasks:

- Backup/recovery
- Application testing
- Warehousing
- Data movement
- Multiple database copy consolidation

Clones can be created of a logical unit number (LUN) mounted on one server. Or, the clone can be mounted to the original host and/or used to restore the original LUN to the point-in-time state when the clone was created.

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

What is the difference in snap and clone?

Delta snapshots, or snaps, contain only changed data and pointers and generally require less space than that of a full snapshot, or clone. The main differentiator in snap and clone is that snaps are based on pointers and are dependent on availability of the original source of data. If the original data is lost or corrupted, the snap is not useable. Any read of unchanged data is from the original.

IMPLEMENTATION CONSIDERATIONS

- Application data must be stored on the Tier 1 or Tier 2 enterprise storage area network at the Commonwealth Enterprise Solutions Center (CESC) in Chester. The network is part of the information technology(IT) infrastructure, a shared-services cloud, operated by Northrop Grumman for the commonwealth under the direction of VITA.
- Implementation of snap and clone requires installation of a replication manager agent and may require firewall rule changes.
- Data to be cloned must reside on a discrete LUN attached to a server at the CESC.
- An agency requesting snap and clone must complete the work request form prior to implementation (one form is available for snap, another for clone).

ORDERING SNAP AND CLONE

If your agency is part of the infrastructure at CESC, please work with your customer account manager (CAM) to complete the work request forms available in VITA's IT service catalog at <http://shop.vita.virginia.gov/>.

NORTHROP GRUMMAN

Virginia Information Technologies Agency

