

IBM announces FlashSystem Safeguarded Copy, STaaS, & enhancements to DS8900F and TS7770

Silverton Consulting, Inc. StorInt™ Briefing

IBM® recently announced FlashSystem Safeguarded Copy, a new Storage-as-a-Service offering, and enhancements to DS8900F storage and TS7770 virtual tape library.

IBM FlashSystem Safeguarded copy

Safeguarded copy has been available on DS8900F series systems for a while now and with this release, IBM adds this capability to all FlashSystem storage systems and the IBM SAN Volume Controller (SVC). The Safeguarded Copy feature is free for any FlashSystem array and the SVC, as it is part of IBM's Spectrum Virtualize that ships on all FlashSystem and SVC solutions.

The world of Cybercrime has exploded over the past few years. It's gotten to the point that our president has asked his Russian counterpart to intercede to rein in suspected Russian hacker activities.

Safeguarded Copy offers a local, logically air-gapped copy of stored data. This takes advantage of FlashSystem snapshot services but adds a number of features to make it even more secure and less susceptible to corruption. For instance, Safeguarded copies:

- Are immutable or WORM, i.e., once created they cannot be modified or overwritten.
- Are only accessible outside the normal volume space which means they cannot be mapped to any host and must be restored to host volumes to be accessed.
- Can only be deleted by a "security administrator", by "system superusers", by the system when expired or optionally, when copied offline.
- Can be scheduled for any host volume on a periodic basis or on demand.
- Can be taken up to 256 times per FlashSystem/SVC storage volume and up to 15,000 across systems.

The other advantage of Safeguarded Copy is that it's local. This means restores can be done rapidly and efficiently without burdening networks or other infrastructure.

IBM Copy Data Services is used to schedule Safeguarded Copies and restores. Copy Data Services is available bundled in a number of IBM Storage software offerings, as well as a standalone solution. IBM Copy Data Services can manage and administer Safeguarded Copy activity across on any number of IBM FlashSystems in your data center.

IBM Storage-as-a-Service

IBM also introduced a new data storage consumption model called Storage-as-a-Service or STaaS. Recall that IBM already offers multiple purchase options, lease options, as well as a Storage Utility model. IBM STaaS joins these other options to add a pay as you go, OPEX-based storage consumption model for customers.

With STaaS, IBM will own, install, operate and maintain storage in your data center or CoLo locations. Customers get to select from one of three performance tiers, initial capacity, connection type (iSCSI, FC), encryption option, contract term (1-5yrs),

location of storage and 6-9s (99.9999%) or 100% availability with IBM's HyperSwap option. IBM will install appropriate storage with a 50% capacity margin and operate/maintain it for the life of the contract. Contracts can be extended or default to quarter-to-quarter without penalty.

Customers only pay for useable thin or thick provisioned capacity and they gain the benefit of any data reduction provided.

The performance tier represents a minimum guarantee of IOPS/TB. So, customers can readily exceed this, when available. Each performance tier comes with a minimum storage capacity requirement.

Once installed customers can increase capacity deployed in under 10 minutes. When customers exceed 75% of initial capacity, IBM will increase the capacity back to the 50% margin and customer can ask IBM to increase the capacity as needed.

IBM STaaS comes with IBM Concierge Service. This includes a technical account manager who will provide monthly reports on their STaaS, manage problem cases, help in complex (infrastructure level) issue resolution, case escalation and provide proactive problem avoidance with the use of IBM storage best practices.

STaaS capacity is billed on a quarterly basis for the variably capacity used and yearly for the base capacity. IBM STaaS can be purchased through IBM business partners or IBM worldwide.

IBM DS8900F and TS7700 enhancements

The new IBM DS8980F Analytics Class storage system includes a (2.15X) larger cache and other performance enhancements. This includes 25% mainframe and 16% non-mainframe better response times, 2X more bandwidth, improves availability to 7-9s (99.99999%, up from 6-9s), weighs less, and reduces power consumption.

IBM TS7770 Virtual Tape Library now comes with an all flash (SSD) data cache that delivers the performance of 10 hard drive-based shelves using only a single flash shelf. The TS7770 also adds support for up to 256 S3 compatible object storage, better cyber protection, and flexible rack configurations.

Significance

Ransomware is costing millions to resolve and is taking out essential services for many companies and organizations. Safeguarded Copy services can be a life saver for enterprises in these situations. With its logical airgap, enhanced security, and rapid restores, it should be relatively quick work to recover from ransomware attacks.

STaaS is becoming table stakes across the storage industry. IBM's version has many advantages over the competition, not the least of which is that the customer retains all data reduction benefits.

Tape still seems to be being used in many places. Just about anyone that needs cheap, deep, air gapped storage could use tape. IBM TS7770 makes tape easier to use. The DS8980F is great addition, increasing cache, improving performance and improving availability.

Silverton Consulting, Inc., is a U.S.-based Storage, Strategy & Systems consulting firm offering products and services to the data storage community.
