A New Approach to Solving Your Mainframe Tape Processing Challenges

WebTech Q&A Session - April 29, 2009

1. Can a single Hitachi Universal Storage Platform™ be used for both DASD and tape?
   Certainly. The Universal Storage Platform V Provides the ability to host multiple applications on a single storage system without allowing the actions of one set of users to affect the Quality of Service of others.

2. Do you have an option to do synchronous replication of virtual tape volumes?
   Multiple replication options are available, including synchronous.

3. Does the Virtual Tape Library (VTL) support a third VTL for metro mirror as well as regional Disaster Recovery solutions?
   The Hitachi Data Systems Mainframe VTL can replicate to multiple locations.

4. Can it have an EMC backend as well?
   The Hitachi Data Systems Mainframe VTL supports the Hitachi Universal Storage Platform V, Universal Storage Platform VM, or Hitachi Adaptable Modular Storage. The Universal Storage Platform V and Universal Storage Platform VM provide virtualization, which presents the ability to connect to and manage a heterogeneous set of storage arrays.

5. If we had a peer to peer or grid configuration could one VTL stand in for another at another site this would be for an active-active solution?
   If a Hitachi Data Systems Mainframe VTL is down at one site, the other can take over.

6. What operating systems are supported?
   The Hitachi Data Systems Mainframe VTL is compatible with all currently supported levels of z/OS®, MVS (version 2.4 and above) VM, VSE and TPF.

7. How many tape drives are supported?
   A fully configured Hitachi Data Systems Mainframe VTL emulates 1,536 IBM 3480/3490/3590 tape drives.

8. Does the Hitachi Data Systems Mainframe VTL work with Fast Dump Restore and Tiered Storage Manager?
   Yes. The Hitachi Data Systems Mainframe VTL is a hardware solution that is independent of any application software. The VTL, to the operating system, operates just like tape drives. The Mainframe thinks it is writing to tape.

9. What about RMM - with that work as well?
   Yes. All popular Tape Management systems are supported.
10. Can the Hitachi Data Systems Mainframe VTL co-exist with physical tape drives?
   This is a tape-on-disk solution, which will co-exist with all other IBM Mainframe tape solutions. By using System Managed Storage, tape can be directed to the appropriate target. Therefore it is possible for this VTL to be the primary tape device and for physical tape subsystems to be the secondary tape device.

11. We have mixed requirements for many tape applications and need total flexibility. How can you help here?
   Hitachi Data Systems Mainframe VTL is just another tape device. The customer can decide how they target the VTL devices for their particular usage, which is generally Manual Tape Library (MTL). Hitachi Data Systems Mainframe VTL allows the tape volume size to be defined, anything from 4 MB to 2 TB. The customer could have smaller volume sizes for Database Logging (DB2 Forward Recovery) and maybe a larger size for a data retrieval application. Because Hitachi Data Systems Mainframe VTL only stores the data actually written, the volume size is arbitrary from a disk capacity viewpoint, so the customer has the flexibility to design a tape environment for their business requirements. The Hitachi Data Systems Mainframe VTL only uses as much space on the virtual cartridge as the data occupies eliminating any wasted media.

12. How do we measure tape drive performance?
   Again, this is just another tape device and so does not create any application based SMF records specific to the Hitachi Data Systems Mainframe VTL. The IBM standard for tape drive performance management is the Volume Mount Analyzer (VMA) tool, which is integrated as part of the DFSMS product set and uses SMF type 14, 15, 21 and 30 records. If VMA or SAS/MXG, MICS, etc. are in use today to measure tape drive performance, continue to do so with Hitachi Data Systems Mainframe VTL.

13. In a metro VTL tape environment with the Hitachi Data Systems VTL, can we actively use both VTLs at both sites? And if one is down the other would pick up the workload? Like today’s IBM Peer to Peer VTS.
   Both sites can actively use the Hitachi Data Systems Mainframe VTL. If one site is down, the other can pick up the workload and accomplish the same result as IBM’s Peer to Peer.

14. Can the 2nd VTL in a metro config be split and used for DR type testing, then re-synced with the local site VTL later?
   The second VTL can be used in D/R testing without the need to break the replication. Simply create a snapshot for testing. There is no need to re-sync since the replication was never stopped.

15. Can the VTL be partitioned?
   Absolutely. For example, the Hitachi Data Systems Mainframe VTL could be partitioned towards tiers of storage such as Fiber Channel or SATA or even Archive and Compliance.

16. Is there an OFFLOAD feature? Or how do we get tape data out of the VTL? Host based copy?
   The Hitachi Data Systems Mainframe VTL supports a direct Fiber Channel attached physical 3592 tape drive to create or read physical tapes if necessary. A host based copy can be created.