



**Exam** : **C9020-562**

**Title** : IBM Storwize Family  
Technical Solutions V4

**Version** : Demo

1.A customer is planning to implement a new IBM Storwize V5030 solution and is evaluating the requirements for implementing disaster recovery with HyperSwap.

Which HyperSwap configuration requirement needs to be part of installation?

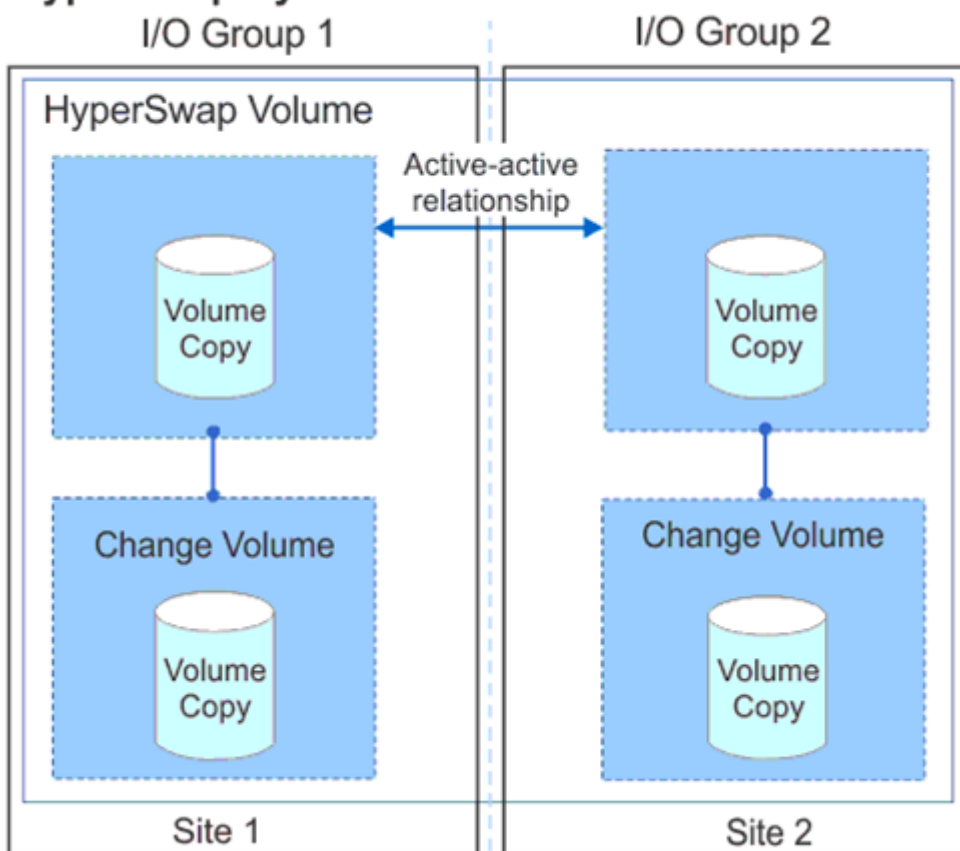
- A. Both 1/0 groups and managed disks are at the same site.
- B. Configuration with standard topology with all control enclosures are at the same site.
- C. Configure volume mirror relationship with a controller from each 1/0 group at different sites.
- D. Each 1/0 group and its managed disks are at different sites.

**Answer: D**

**Explanation:**

HyperSwap volumes, where copies of a single volume are in different storage pools that are on different sites. The volume is cached in two 1/0 groups that are on different sites. These volumes can only be created on Storwize V5030 systems when the system topology is HyperSwap.

### HyperSwap System



References:

[http://www.ibm.com/support/knowledgecenter/STHGJJ\\_7.7.0/com.ibm.storwize.tb5.770.doc/tbrd4tbrd4o\\_vr.html](http://www.ibm.com/support/knowledgecenter/STHGJJ_7.7.0/com.ibm.storwize.tb5.770.doc/tbrd4tbrd4o_vr.html)

2.A cloud solution is being planned using the IBM Storwize family to provide storage for multiple clients on IBM Power and Intel hosts.

Which solution provides the necessary storage for the primary site and a disaster recovery location at a data center 1500 kilometers away?

- A. Create a four node IBM Storwize V7000 cluster with one 1/0 Group at the primary data center and the other at the disaster recovery location. Use FlashCopy to copy the volumes from the primary 1/0Group to the disaster recovery 1/0 Group.
- B. Create volumes on IBM Storwize V7000 storage at the primary data center and use Global Mirror to create copies on an IBM Storwize V7000 at the disaster recovery location.
- C. Create volume mirrors on IBM Storwize V7000 storage at the primary data center with virtualized external IBM Storwize V3700 storage at the disaster recovery location.
- D. Create volumes on IBM Storwize V7000 Storage at the primary data center and use Metro to create asynchronous copies on an IBM Storwize V5030 at the disaster recovery location.

**Answer: B**

**Explanation:**

Metro Mirror and Global Mirror are technologies that enable you to keep a real-time copy of a disk at a remote site that contains another SVC Cluster or Storwize V7000 system.

Incorrect Answers

A: FlashCopy is a function that allows you to create a point-in-time copy of one of your SVC disks. This might be helpful when performing backups or application testing. These copies may be cascaded upon one another, read from, written to, and even reversed. These copies are able to conserve storage, if needed, by being space-efficient copies that only record items that have changed from the originals instead of full copies.

C: Volume Mirroring is a function designed to increase high availability of the storage infrastructure. It provides the ability to create up to two local copies of a volume.

References:

IBM System Storage SAN Volume Controller and Storwize V7000 Replication Family Services, page 22  
<http://www.redbooks.ibm.com/redbooks/pdfs/sg247574.pdf>

3.A customer has several large disk systems serving up block data over Fibre Channel that are of varying degree of utilization and needs to constrain growth and manage performance. The disk systems are made by EMC, Huawei, Bull, and IBM.

Which IBM software solution should be discussed?

- A. IBM Spectrum Control Base Edition
- B. IBM Virtual Storage Center for Storwize
- C. IBM Cloud Object Storage
- D. IBM Spectrum Scale

**Answer: B**

**Explanation:**

IBM Virtual Storage Center for Storwize provides a lower-cost alternative to Fibre Channel-based replication that is easily configurable in existing IP infrastructures, eliminating the need for FCIP routers and dark fibre.

SAN Volume Controller can virtualize IBM and non-IBM storage (over 170 systems from IBM, EMC, HP, HDS, Sun, Dell, NetApp, Fujitsu, NEC, Bull)

References: IBM Storwize Family Software, (SVC & Storwize), Product Roadmap, page 4

<https://www.ibm.com/developerworks/community/files/form/anonymous/api/library/c18c45e6-e212-4b38a28e-6c74534ba5e2/document/4555d51c-465b-4093-bb06-ca70861e2e3e/media>

4.Which authentication protocol for remote authentication of users is supported by the IBM Storwize V7000 model524?

- A. Lightweight Extensible Authentication Protocol (LEAP)
- B. Secure Socket Layer (SSL)
- C. Lightweight Directory Access Protocol (LDAP)
- D. Challenge Handshake Authentication Protocol (CHAP)

**Answer: C**

**Explanation:**

You can use the command-line interface (CLI) to configure the Storwize V7000 to authenticate users against servers implementing the Lightweight Directory Access Protocol (LDAP), including IBM Tivoli Directory Server (ITDS) and Active Directory (AD).

References: [http://www.ibm.com/support/knowledgecenter/ST3FR7\\_6.4.1/com.ibm.storwize.v7000.641.doc/svc\\_remoteauthntcliLDAP\\_08070948.html](http://www.ibm.com/support/knowledgecenter/ST3FR7_6.4.1/com.ibm.storwize.v7000.641.doc/svc_remoteauthntcliLDAP_08070948.html)

5.Which IBM Storwize product allows for scalability up to a maximum of 20 expansion enclosures with a single control enclosure?

- A. IBM Storwize V5030
- B. IBM Storwize V3700
- C. IBM Storwize V5020
- D. IBM Storwize V5010

**Answer: A**

**Explanation:**

V5030: Standard expansion enclosures: up to 20 standard expansion enclosures per controller.

High-density expansion enclosures: up to 8 high-density expansion enclosures per controller.