

VERITAS NETBACKUP 5240 APPLIANCE CONFIGURATION WITH iSCSI

BACKUP VMWARE VMS THROUGH VADP

OVERVIEW

iSCSI technology can be used as an alternate to Fiber Channel (FC) to connect compute with storage over the internet. An iSCSI Fabric offers significant cost advantages on both Opex and Capex. Usage of iSCSI for connecting to storage arrays has significantly increased in the last few years.

Veritas NetBackup™ Appliances have used FC transport (using SAN transport option) to backup VMware® VMs for quite some time. However, FC infrastructure is more expensive. The diagram below shows how an iSCSI overlay network can be used in place of FC. The same backups can be done over the LAN / iSCSI network via the VMware API for Data Protection (VADP).

Backing up VmWare VMs using VADP over iSCSI connections can be done in parallel with other NBD (Network Block Device) transport as well as other VADP backups over FC links. For more information on NetBackup 5240 Appliance, please refer to the [5240 DataSheet](#).

PRODUCT HIGHLIGHTS

SUPPORTED SOFTWARE

- NetBackup Appliance software version 3.0.
- iSCSI functionality is exclusively qualified for VADP for VMware VM backup in the NetBackup Appliance Software v3.0 release.

HARDWARE SOLUTION

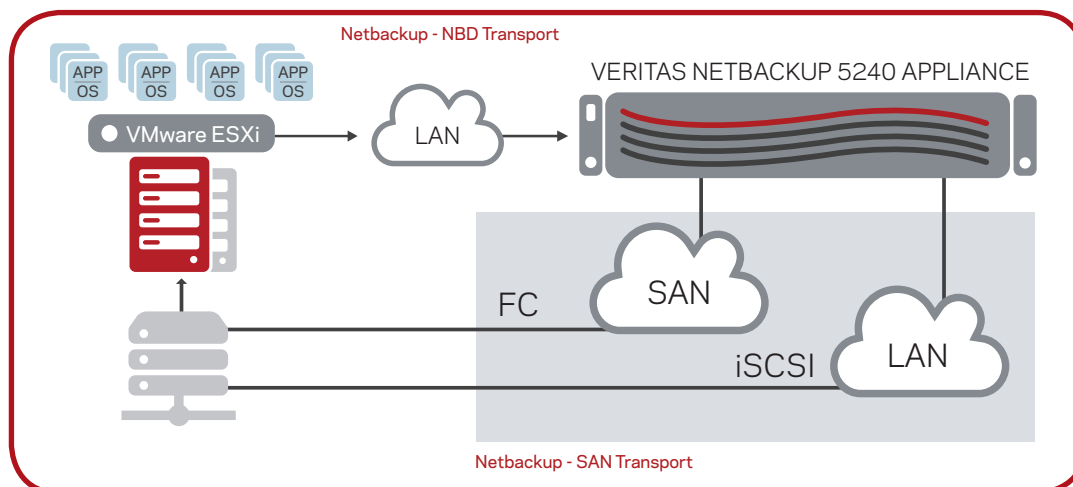
- Two 10GbE Fiber ports for iSCSI operations.
- iSCSI Performance/Throughput is enhanced with the use of a TCP Offload Engine (ToE) card to offload iSCSI related computation from the main CPU.

iSCSI SCALE

- Maximum number of concurrent iSCSI connections = 254 (127/port).
- Seamless integration with Veritas™ Dynamic Multipathing (VxDMP) to provide load balancing.

iSCSI SESSIONS SECURITY

- Supports Challenge Handshake Authentication Protocol (CHAP) to provide security for iSCSI sessions between initiator and Target.
- CHAP authentication for communication with iSNS server is also supported.



INTEGRATED WITH INTERNET STORAGE NAME SERVICE (iSNS)

- iSNS servers help to centrally manage IP based storage arrays. These iSNS servers help the initiators (NetBackup Appliance) as one single interface, rather than querying multiple storage arrays independently.

iSCSI SESSIONS PERSISTENCY

- All iSCSI connections are reestablished automatically when the appliance reboots.

STANDARDS COMPLIANCE

- In compliance with RFC 7143 for iSCSI and RFC 4939 for iSNS.
- Works based on RHEL (Red Hat® Enterprise Linux) 6.8 iSCSI software.

INTEROPERABILITY

- Netbackup Appliances can establish an iSCSI connection with any Storage Array as long as they adhere to RFC7143 iSCSI implementation.

ALERTS / SNMP TRAPS

- When an iSCSI connection becomes inactive, an alert email is sent to the operator. Similarly, an SNMP alert will also be sent.
- Support through My Veritas Portal for these alerts.

SIMPLE USER INTERFACE

- The solution is based on Command Line Interface only, available on Netbackup Appliance software release 3.0.

LIMITATIONS / RESTRICTIONS

- iSCSI connections can only be established over IPv4 networks. iSCSI connections over IPv6 networks is not yet supported.
- Network topology between initiator and target needs to be a pure L2 network.

ABOUT VERITAS TECHNOLOGIES LLC

Veritas Technologies LLC enables organizations to harness the power of their information, with solutions designed to serve the world's largest and most complex heterogeneous environments. Veritas works with 86 percent of Fortune 500 companies today, improving data availability and revealing insights to drive competitive advantage.

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The Veritas logo consists of the word "VERITAS" in a bold, red, sans-serif typeface. A small trademark symbol (TM) is located at the top right of the letter "S".

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