NexaVM Hypervisor

External SAN Block LUN Installation Guide

Preparation of SAN storage, discovery of the block device, and selection of the LUN in the installer

For technical deployment use

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1. Overview and prerequisites

This procedure explains how to present an external SAN block volume to a physical server and make it available in the NexaVM hypervisor installer. The workflow has two parts: first, provision and authorize the block volume on the SAN; second, discover the target from the installer and select the discovered LUN as the installation disk.

Prerequisites

- A SAN block volume/LUN has been created and its capacity has been confirmed.
- The server's IP address and network connectivity are known for iSCSI, or the server's FC HBA WWPNs are known for Fibre Channel.
- For iSCSI, the SAN target IP, target IQN, initiator IQN and CHAP details (if enabled) are available.
- The SAN network or FC fabric is connected and permitted by the relevant VLAN, ACL, zoning and firewall configuration.
- The NexaVM hypervisor installation media has been booted and the Installation Destination screen is available.

Important: A LUN appearing in the installer does not, by itself, guarantee that booting the installed hypervisor from that SAN LUN is supported. Confirm SAN-boot support for the specific server, adapter/firmware and NexaVM release before production use.

2. Provision the block volume on the SAN

Perform these actions in the SAN management interface. The exact menu names vary by storage vendor.

2.1 Create a dedicated block volume

Create a new block volume/LUN for the hypervisor OS. Confirm its capacity and record the LUN name and ID. Use a dedicated LUN for this server; do not share an OS boot LUN across multiple hypervisor hosts.

2.2 Authorize the server

Add the server identity to the SAN access/host group so the LUN can be presented to that host. For iSCSI, this is normally the server initiator IQN. Depending on the SAN, the server's storage IP may also be used for host access controls. For Fibre Channel, map access using the server HBA WWPNs and appropriate FC zoning.

2.3 Map the volume to the host

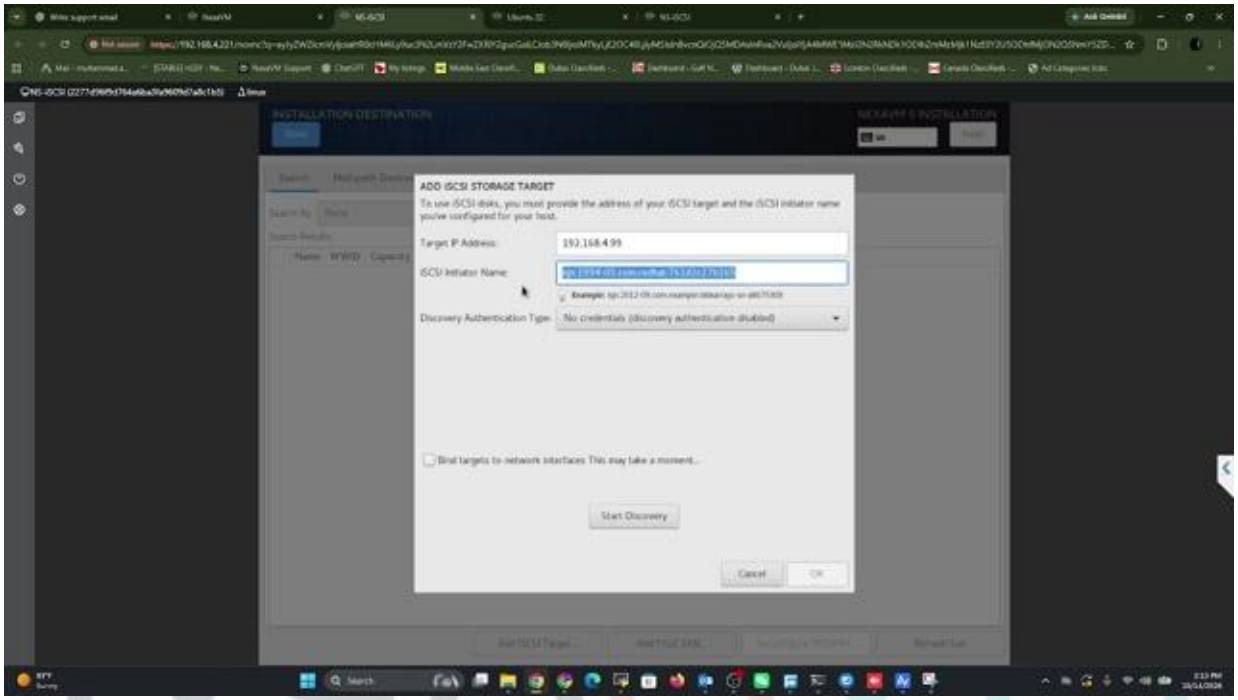
Map or assign the new block volume to the host/host group and verify that the LUN is in an online/ready state. Keep a record of the target address, initiator identity, target identity and LUN ID.

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If the SAN uses iSCSI and the host initiator IQN is not already known, obtain it from the hypervisor installer as described in Section 3 before completing the host mapping. You may need to return to the SAN management interface after obtaining the IQN.

3. Find the initiator IQN in the installer (iSCSI)

Boot the NexaVM installation media and navigate to Installation Destination. Open the Add iSCSI Target workflow. The installer may display the host initiator IQN in the iSCSI configuration dialog or example text. Copy the complete IQN exactly as displayed and use it when authorizing the host on the SAN.



Screenshot from the supplied video: Add iSCSI Storage Target dialog. The target IP and iSCSI initiator name are entered here.

Enter the SAN target IP address and the initiator IQN. Choose the correct discovery authentication setting. If CHAP is enabled on the SAN, provide the required credentials; if discovery authentication is disabled, use that setting only when it matches the SAN configuration.

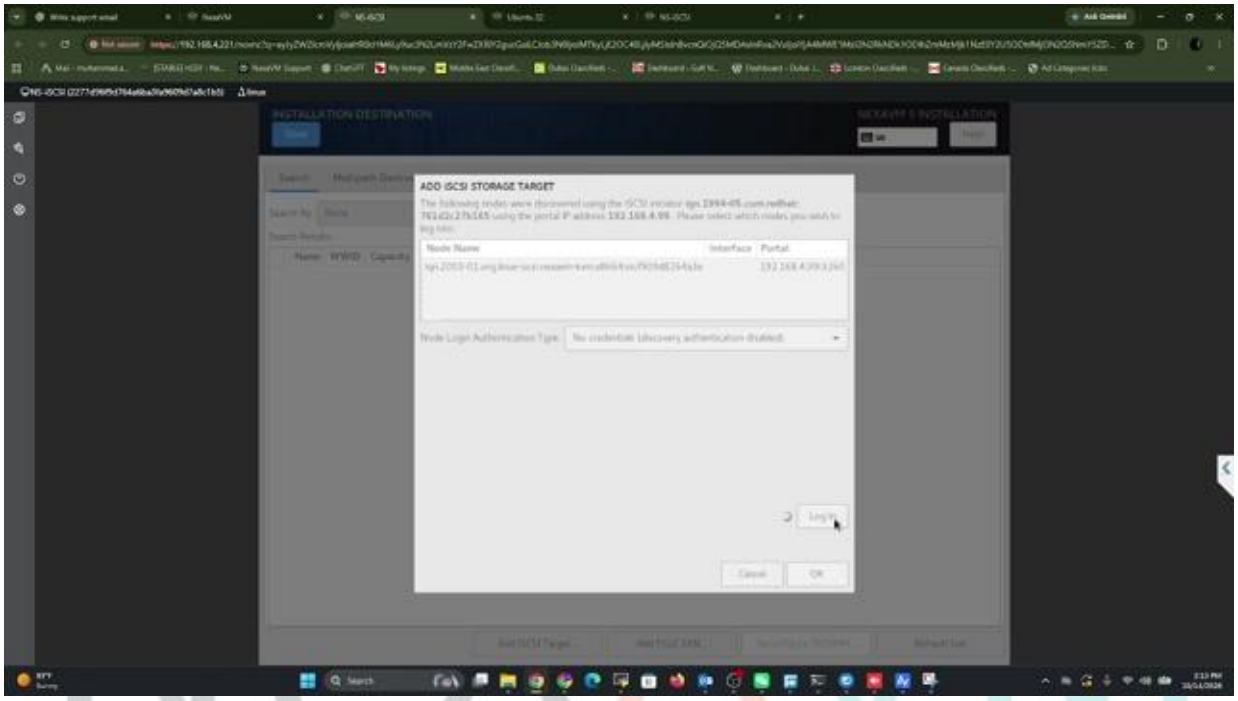
Do not copy the IP address or IQN visible in the example video into your deployment. Enter the values assigned to your own SAN and server.

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4. Discover the SAN target

In the Add iSCSI Target dialog:

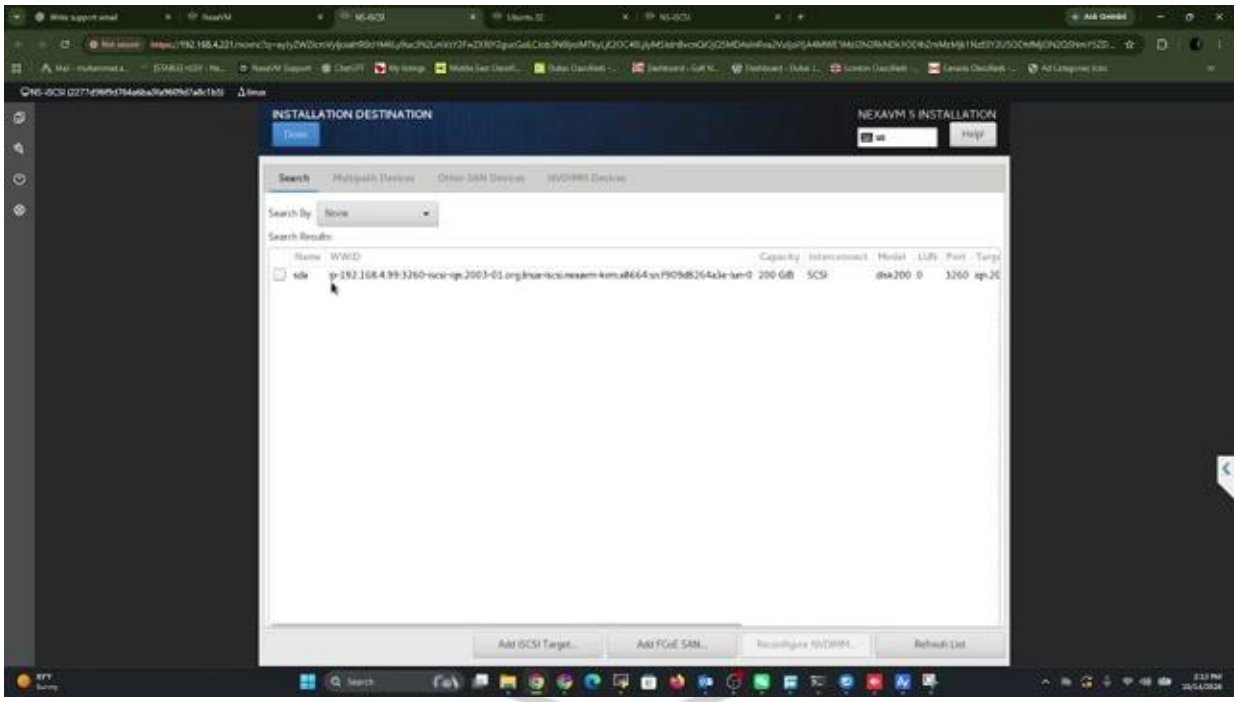
1. Enter the SAN iSCSI target IP address.
2. Confirm the initiator IQN is correct.
3. Select the matching discovery authentication option and provide credentials if required.
4. Click Start Discovery and wait for the discovery results.



Screenshot from the supplied video: the discovered iSCSI target is presented for login/confirmation.

Select the discovered target/node and complete the login or confirmation step. When the target session is established, confirm the operation. The LUN should then appear in the Installation Destination device list.

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Screenshot from the supplied video: the discovered iSCSI LUN appears in the installer disk list, including its capacity and target information.

5. Fibre Channel (FC) alternative

For FC-connected SAN storage, the discovery workflow differs from iSCSI:

5. Create the block volume on the SAN.
6. Authorize the server using its FC HBA WWPNs and map the LUN to the host or host group.
7. Ensure FC zoning and fabric connectivity are correct.
8. In the installer, open Installation Destination and use the device refresh/rescan or relevant storage discovery view.
9. If the HBA driver is loaded and the LUN is mapped correctly, the FC LUN should appear in the available disk list without entering an iSCSI target IP or initiator IQN.

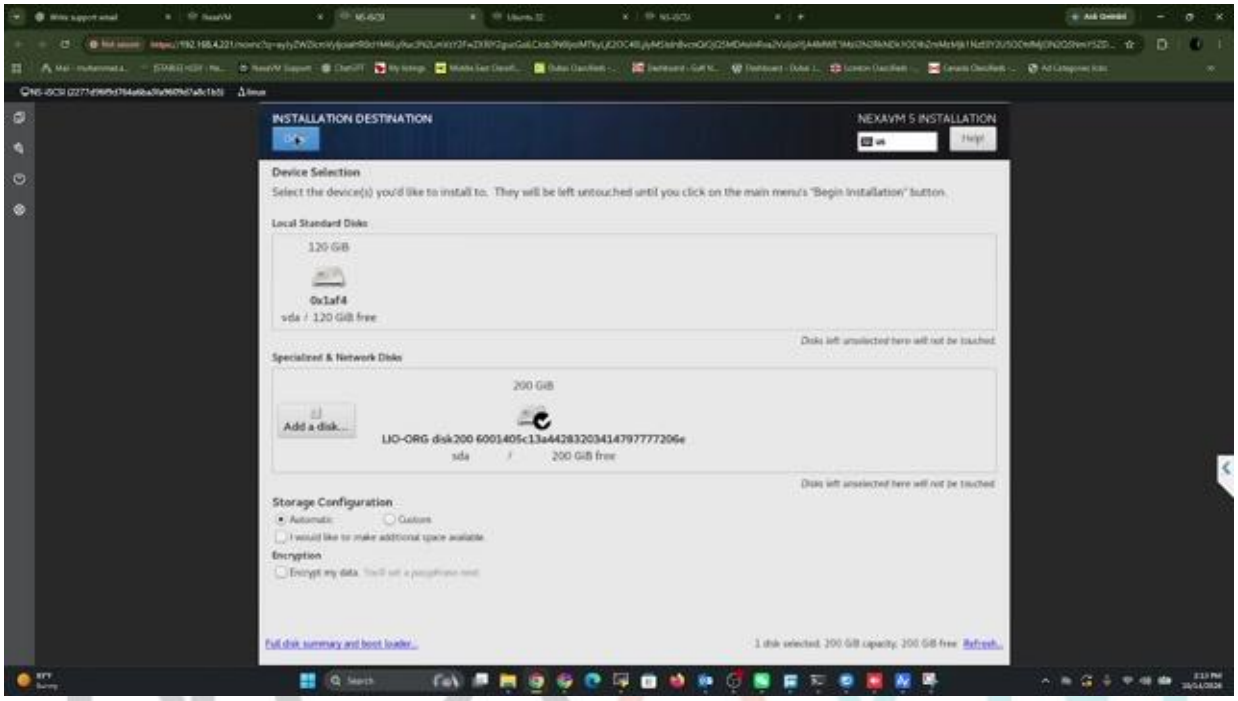
If an FC LUN does not appear, verify WWPN mapping, zoning, HBA link status, driver support and LUN masking. Do not follow the iSCSI discovery workflow for a pure FC connection.

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6. Confirm the LUN is available for installation

On the Installation Destination screen, verify the external SAN disk before selecting it.

10. Confirm the device row corresponds to the expected SAN target/LUN.
11. Check the capacity and storage identifiers against the SAN-side record.
12. Select only the intended external LUN as the installation target.
13. Review the disk selection before continuing. Do not select unrelated local disks or existing production LUNs.



Screenshot from the supplied video: the installation destination/device selection screen shows the SAN disk selected.

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7. TROUBLESHOOTING CHECKLIST

Symptom	Checks
iSCSI target discovery returns no result	Check target IP, VLAN/subnet reachability, TCP 3260, target service status, initiator IQN and discovery authentication.
Target is discovered but LUN is absent	Check LUN mapping, host/host-group authorization, LUN masking and whether the volume is online.
Installer does not show iSCSI option or adapter	Confirm the installer supports the NIC/HBA and required driver; check firmware and network-interface status.
FC LUN is not visible	Check HBA link, WWPN zoning, SAN host mapping, LUN masking, multipath setup and driver support.
LUN is visible but server cannot boot after installation	Check UEFI/BIOS boot order, adapter firmware boot settings, bootloader placement, persistent iSCSI configuration and vendor support for SAN boot.

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