# Enable NAS storage for both Windows and Linux using both NFS and SMB/CIFS

ONTAP System Manager

Thom Illingworth, Amanda Stroman, Barb Einarsen, Mark Forry October 09, 2020

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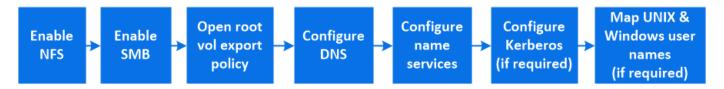
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# Enable NAS storage for both Windows and Linux using both NFS and SMB/CIFS

Modify storage VMs to enable NFS and SMB servers to serve data to Linux and Windows clients.

This procedure enables an existing storage VM. It is assumed that configuration details are available for any authentication or security services required in your environment.



#### Steps

- 1. Enable NFS on an existing VM: click **Storage** > **Storage VMs**, select a storage VM, click **Settings**, and then click **\$\frac{1}{2}\$** under **NFS**.
- 2. Enable SMB/CIFS on an existing VM: click 💠 under SMB/CIFS.
- 3. Open the export policy of the storage VM root volume:
  - a. Click **Storage** > **Volumes**, select the root volume of the storage VM (which by default is *volume-name\_root*), and then click on the policy that is displayed under **Export Policy**.
  - b. Click Add to add a rule.
    - Client specification = 0.0.0.0/0
    - Access protocols = NFS
    - Access details = NFS Read-Only
- 4. Configure DNS for host-name resolution:
  - a. Click **Storage** > **Storage VMs**, select the storage VM, click **Settings**, and then click **\$\frac{1}{2}\$** under **DNS**.
  - b. When DNS configuration is complete, switch to the DNS server and map the SMB server.
    - Create forward (A Address record) and reverse (PTR Pointer record) lookup entries to map the SMB server name to the IP address of the data network interface.
    - If you use NetBIOS aliases, create an alias canonical name (CNAME resource record) lookup entry to map each alias to the IP address of the SMB server's data network interface.
- 5. Configure name services as required:
  - a. Click **Storage** > **Storage VMs**, select the storage VM, click **Settings**, and then click **t** for LDAP or NIS.
  - b. Include any changes in the name services switch file: click / under Name Services Switch.

- 6. Configure Kerberos if required: click  $\rightarrow$  in the Kerberos tile and then click **Add**.
- 7. Map UNIX and Windows user names if required: click  $\rightarrow$  under **Name Mapping** and then click **Add**.

You should use this procedure only if your site has Windows and UNIX user accounts that do not map implicitly, which is when the lowercase version of each Windows user name matches the UNIX user name. This procedure can be done using LDAP, NIS, or local users. If you have two sets of users that do not match, you should configure name mapping.

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