Enable NAS storage

ONTAP 9

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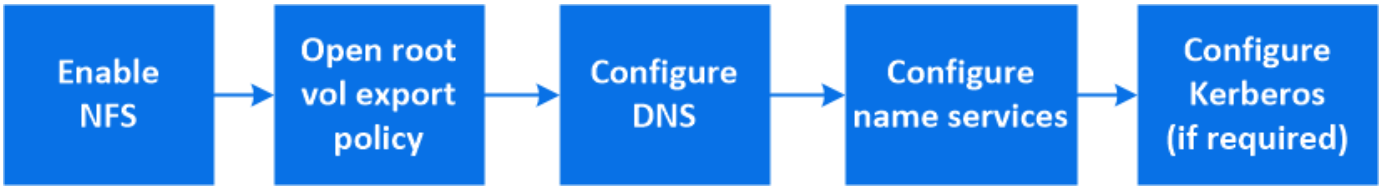
Enable NAS storage

Enable NAS storage for Linux servers using NFS

Modify storage VMs to enable NFS servers for serving data to Linux 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.



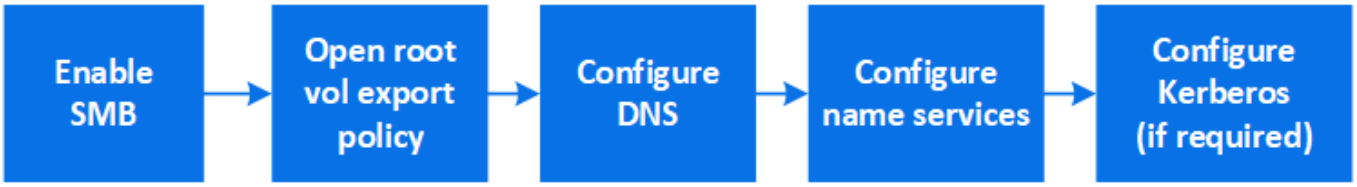
Steps

1. Enable NFS on an existing VM: click **Storage > Storage VMs**, select a storage VM, click **Settings**, and then click ⚙ under **NFS**.
2. 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 = UNIX Read-Only
3. Configure DNS for host-name resolution: click **Storage > Storage VMs**, select the storage VM, click **Settings**, and then click ⚙ under **DNS**.
4. Configure name services as required.
   a. Click **Storage > Storage VMs**, select the storage VM, click **Settings**, and then click for ⚙ LDAP or NIS.
   b. Include any changes in the name services switch file: click ✎ in the Name Services Switch tile.
5. Configure Kerberos if required:
   a. Click **Storage > Storage VMs**, select the storage VM, and then click **Settings**.
   b. Click → in the Kerberos tile and then click **Add**.

Enable NAS storage for Windows servers using SMB

Modify storage VMs to enable SMB servers for serving data to 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.



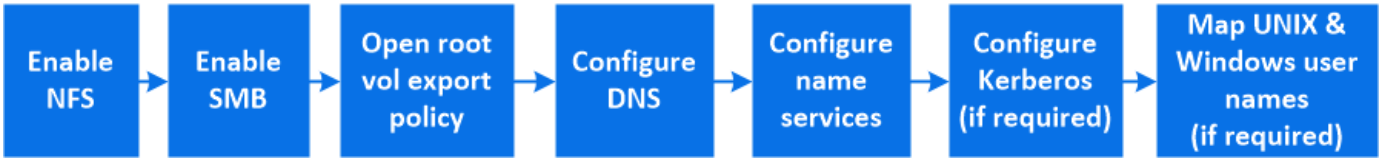
Steps

1. Enable SMB on an existing VM: click **Storage > Storage VMs**, select a storage VM, click **Settings**, and then click ⚙ under **SMB**.
2. 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 = SMB
      - Access details = NTFS Read-Only
3. Configure DNS for host-name resolution:
   a. Click **Storage > Storage VMs**, select the storage VM, click **Settings**, and then click ⚙ under **DNS**.
   b. 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.
4. Configure name services as required
   a. Click **Storage > Storage VMs**, select the storage VM, click **Settings**, and then click ⚙ under **LDAP** or **NIS**.
   b. Include any changes in the name services switch file: click ✎ under **Name Services Switch**.
5. Configure Kerberos if required:
   a. Click **Storage > Storage VMs**, select the storage VM, and then click **Settings**.
   b. Click → under **Kerberos** and then click **Add**.

Enable NAS storage for both Windows and Linux using both NFS and SMB

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 ⚙ under **NFS**.
2. Enable SMB on an existing VM: click ⚙ under **SMB**.
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 ⚙ 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 ⚙ 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 → in the Kerberos tile and then click **Add**.
7. Map UNIX and Windows user names if required: click → 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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