Exercise 2: Managing ONTAP Administrators

Objectives

This exercise focuses on enabling you to do the following:

- Create custom administrator accounts
- Verify administrator access privileges

Case Study

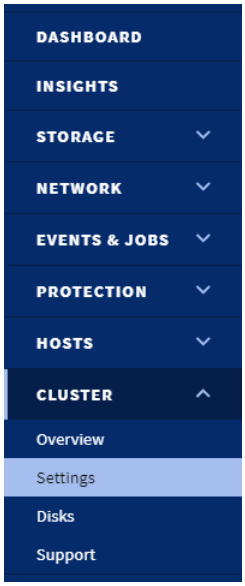
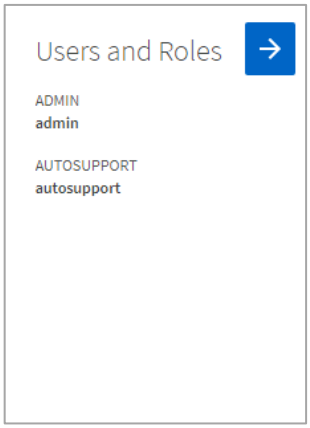
Mr. Zarrot insists the NetApp storage system be deployed in accordance with zero trust security principles. Users and administrators should be granted the least privileges needed to accomplish their responsibilities.

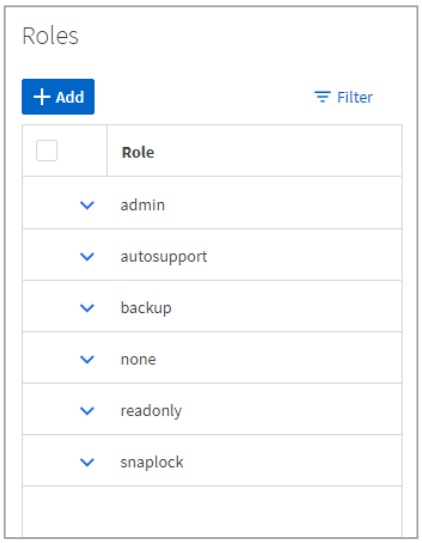
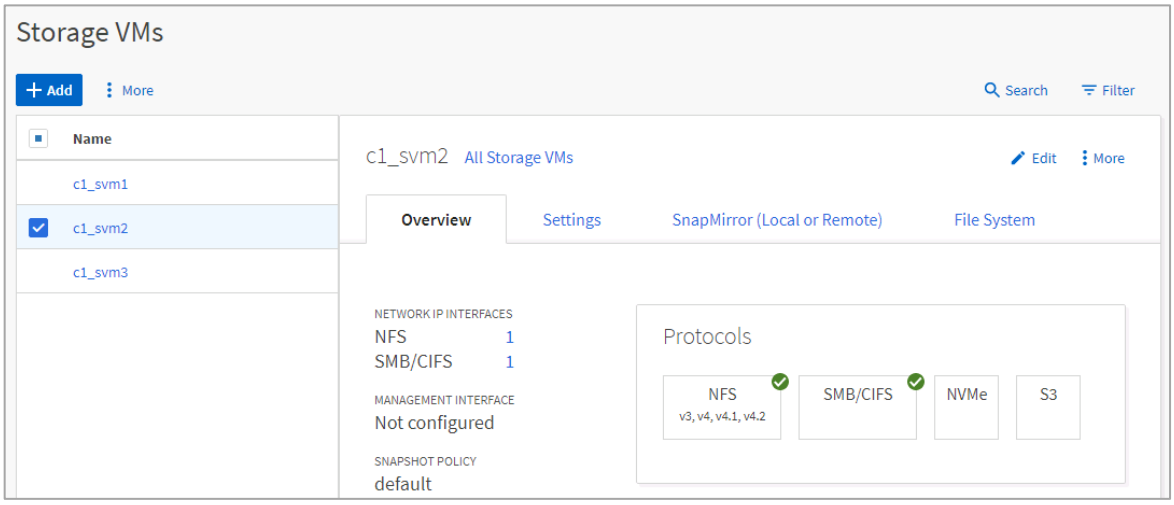
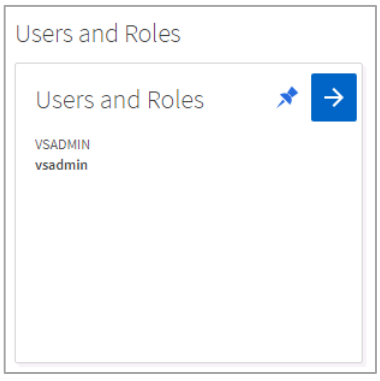
Lab Equipmentir responsiblilites.

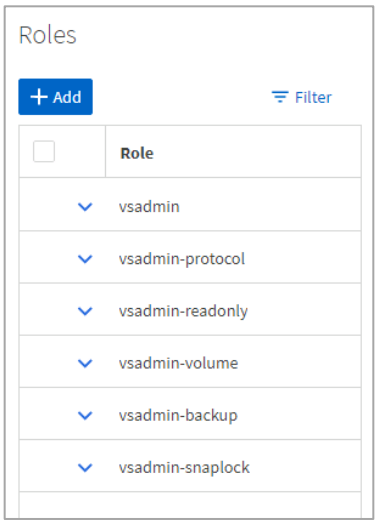
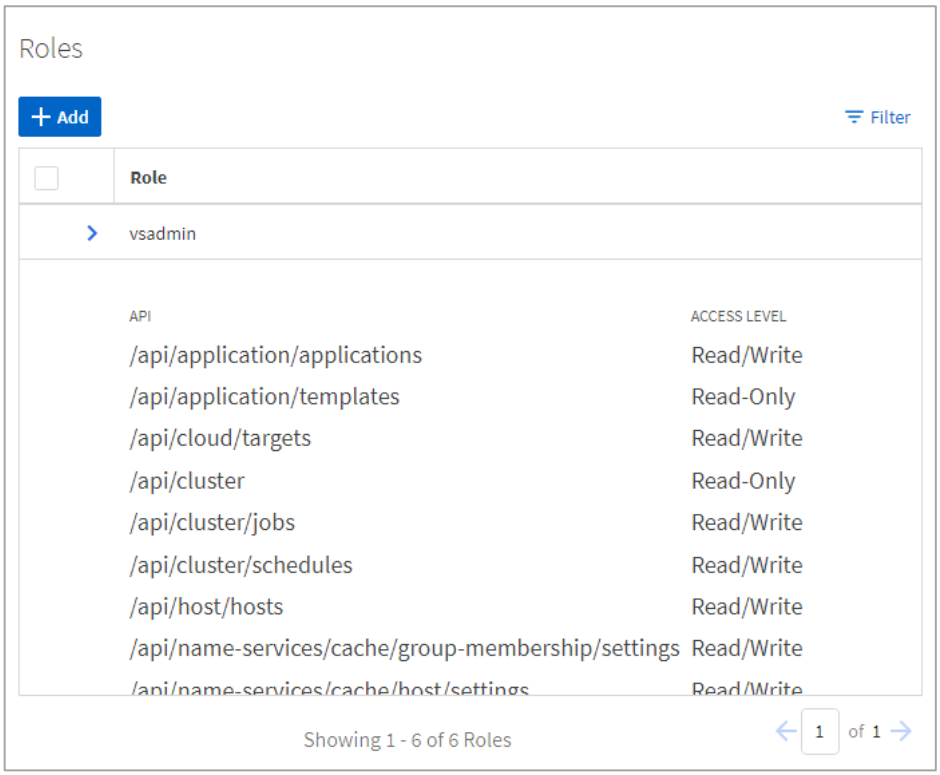
Use the following equipment to complete the exercise:

System	Host Name	IP Addresses	User Name	Password
Windows Server	jumphost	192.168.0.5	DEMO\Administrator	Netapp1!
ONTAP cluster-management LIF (cluster1)	cluster1	192.168.0.101	admin (case-sensitive)	Netapp1!
ONTAP cluster-management LIF (cluster2)	cluster2	192.168.0.102	admin (case-sensitive)	Netapp1!
Windows Domain Controller	DC1	192.168.0.253	DEMO\Administrator	Netapp1!
CentOS 8 Linux Server	centos8	192.168.0.21	root	Netapp1!

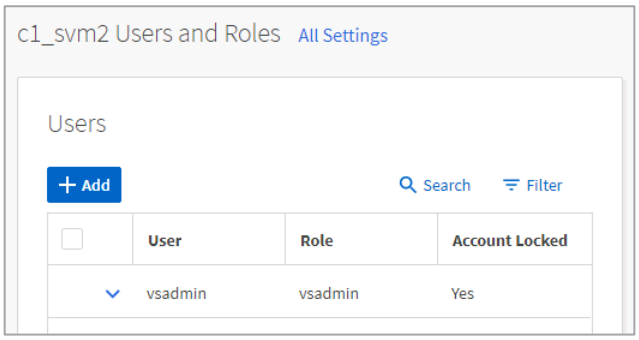
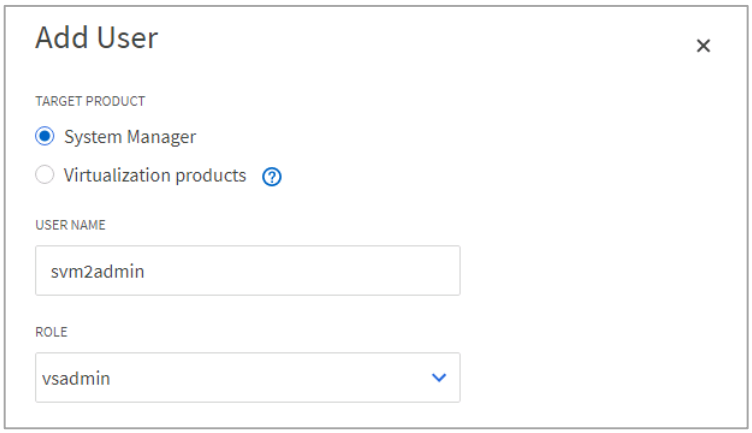
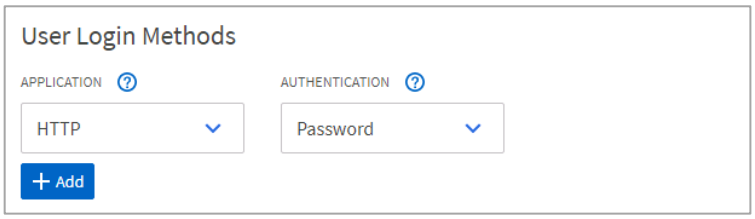
Task 1: Explore Administrators and Roles

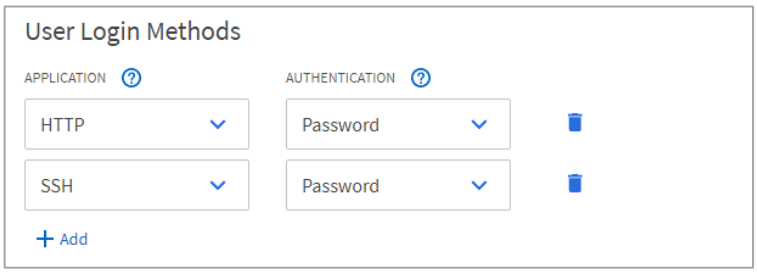
Step	Action
1-1	From the System Manager menu for cluster1, in the navigation pane, select **Cluster > Settings.** 
1-2	Scroll down in the Cluster Settings page to the Security section and click the arrow in the **Users and Roles** pane. 

Step	Action
1-3	Explore the cluster-scoped predefined roles. 
1-4	Use the System Manager menu to navigate to the **Storage > Storage VMs** page.
1-5	Click **c1_svm2**, and then click the **Settings** tab. 
1-6	Scroll down in the c1_svm2 Settings page and click the arrow in the Users and Roles pane. 

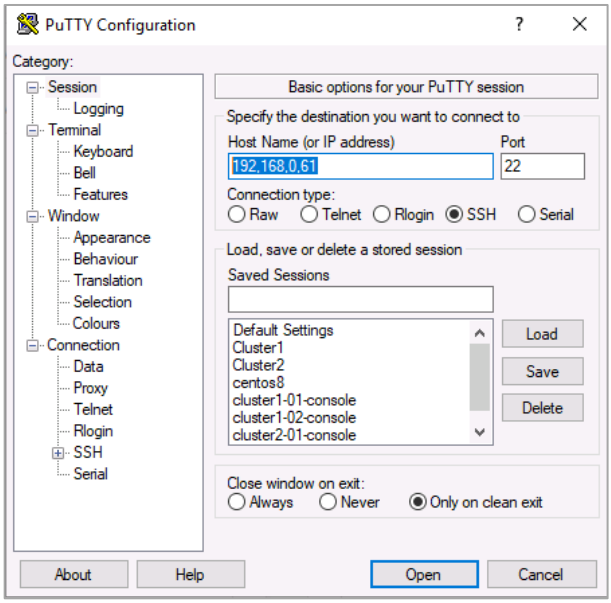
Step	Action
1-7	Examine the predefined roles for the storage VM . 
1-8	Expand a storage VM scoped administrative role, and then scroll through the API list to see the ONTAP API calls that are available to a user who has the role. 

Task 2: Create Custom Administrators and Verify Access Levels

Step	Action
2-1	In the Users pane of the c1_svm2 Users and Roles page, create a user by clicking **Add**. 
2-2	In the Add User dialog box, specify the following settings: User Name: **svm2admin** Role: **vsadmin** 
2-3	In the User Login Methods pane, use the pull-down lists to confirm or specify the following settings: Application: **HTTP** Authentication: **Password** 

Step	Action
2-4	Click **Add** to enable a second login method and use the pull-down lists to specify the following settings: Application: **SSH** Authentication: **Password** 
2-5	Assign a password to the new user account. Password: **ChangeMe2** Confirm Password: **ChangeMe2** 
2-6	At the bottom of the window, click **Save**.
2-7	Repeat Step 2-1 through Step 2-6 for the user name **svm2intern**, the password **ChangeMe2**, the application **SSH**, and the role **vsadmin-readonly**.

Task 3: Verify Administrator Access Levels

Step	Action
3-1	Use PuTTY to start an SSH session to the c1_svm2 data LIF that is management-enabled (IP address **192.168.0.61**), and log in as **svm2admin**. 
3-2	If the PuTTY Security Alert dialog box appears, click **Yes**.
3-3	Examine the command prompt, and then answer the following question: What is different about the command prompt? _____
3-4	Try to display the status of the cluster: `cluster show` Answer the following question: Why does the command fail? _____
3-5	Examine the available commands: `?`
3-6	Display all the available volumes, and observe the storage VMs that are represented in the output: `volume show`
3-7	Modify a volume: `volume modify -volume c1_svm2_vol1 -comment "modified by svm2admin"`
3-8	Verify the change: `volume show -volume c1_svm2_vol1 -fields comment`
3-9	Use PuTTY to start another SSH session to the same data LIF, and then log in as `svm2intern`.

Step	Action
3-10	Try to display the network ports: `network port show` **Note:** The command fails.
3-11	Complete the following steps: 1. Display the network interfaces. 2. Examine the displayed LIFs. 3. Compare the list to the list of displayed LIFs for the cluster admin user. `network interface show`
3-12	Display all the available volumes that are visible to the svm2intern user: `volume show`
3-13	Try to modify a volume, and then answer the following question: `volume modify -volume c1_svm2_vol1 -comment "modified by svm2intern"` Why did the command fail? _____
3-14	Close the PuTTY session for the svm2intern user.

End of exercise