



Set up your ASA r2 system

ASA r2

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Set up your ASA r2 system

Set up an ONTAP cluster on your ASA r2 storage system

ONTAP System Manager guides you through a quick and easy workflow to set up an ONTAP ASA r2 cluster.

During cluster setup, your default data storage virtual machine (VM) is created. Optionally, you can enable the Domain Name System (DNS) to resolve host names, set your cluster to use the Network Time Protocol (NTP) for time synchronization and enable encryption of data at rest.

Before you begin

Gather the following information:

- Cluster management IP address

The cluster management IP address is a unique IPv4 address for the cluster management interface used by the cluster administrator to access the admin storage VM and manage the cluster. You can obtain this IP address from the administrator responsible for assigning IP addresses in your organization.

- Network subnet mask

During cluster setup, ONTAP recommends a set of network interfaces appropriate for your configuration. You can adjust the recommendation if necessary.

- Network gateway IP address
- Partner node IP address
- DNS domain names
- DNS name server IP addresses
- NTP server IP addresses
- Data subnet mask

Steps

1. Discover you cluster network
 - a. Connect your laptop to the management switch and access the network computers and devices.
 - b. Open File Explorer.
 - c. Select **Network**; then right-click and select **Refresh**.
 - d. Select either ONTAP icon; then accept any certificates displayed on your screen.

System Manager opens.

2. Under **Password**, create a strong password for the admin account.

The password must be at least eight characters long and must contain at least one letter and one number.

3. Reenter the password to confirm and then select **Continue**.
4. Under **Network addresses**, enter a storage system name or accept the default name.

If you change the default storage system name, the new name must begin with a letter and must be fewer than 44 characters. You can use a period (.), hyphen (-) or underscore (_) in the name.

5. Enter the cluster management IP address, subnet mask, gateway IP address and the IP address of the partner node; then select **Continue**.
6. Under **Network services**, select the desired options to **Use the Domain Name System (DNS) for resolving host names** and to **Use the Network Time Protocol (NTP) to keep times synchronized**.

If you choose to use the DNS, enter the DNS domain and name servers. If you choose to use NTP, enter the NTP servers; then select **Continue**.

7. Under **Encryption**, enter a passphrase for the Onboard Key Manager (OKM).

Encryption of data at rest using an Onboard Key Manager (OKM) is selected by default. If you want to use an external key manager, update the selections.

Optionally, you can configure your cluster for encryption after cluster setup is complete.

8. Select **Initialize**.

When setup is complete, you are redirected to the cluster's management IP address.

9. Under **Network**, select **Configure protocols**.

| To configure IP (iSCSI and NVMe/TCP), do this... | To configure FC and NVMe/FC, do this... |
|--|---|
| <ol style="list-style-type: none">a. Select IP; then select Configure IP interfaces.b. Select Add a subnet.c. Enter a name for the subnet, then enter the subnet IP addresses.d. Enter the subnet mask, and optionally enter a gateway; then select Add.e. Select the subnet you just created; then select Save.f. Select Save. | <ol style="list-style-type: none">a. Select FC; then select Configure FC interfaces and/or Configure NVMe/FC interfaces.b. Select the FC and/or NVMe/FC ports; then select Save. |

10. Optionally, download and run [ActiveIQ Config Advisor](#) to confirm your configuration.

ActiveIQ Config Advisor is a tool for NetApp systems that checks for common configuration errors.

What's next?

You are ready to [set up data access](#) from your SAN clients to your ASA r2 system.

Enable data access from SAN hosts to your ASA r2 storage system

To set up data access, you should ensure that specific parameters and settings on your SAN client that are critical for proper operation with ONTAP are configured correctly. If you are using VMware, you should migrate your virtual machines.

Set up data access from SAN hosts

The configuration necessary to set up data access to your ASA r2 system from your SAN hosts varies depending on the host operating system and the protocol. Correct configuration is important for best performance and successful failover.

See the ONTAP SAN host documentation for [VMware vSphere SCSI clients](#), [VMware vSphere NVMe clients](#) and [other SAN clients](#) to properly configure your hosts to connect to your ASA r2 system.

Migrate VMware virtual machines

If you need to migrate your VM workload from an ASA storage system to an ASA r2 storage system, NetApp recommends that you use [VMware vSphere vMotion](#) to perform a live, non-disruptive migration of your data.

What's next?

You are ready to [provision storage](#) to enable your SAN hosts to read and write data to storage units.

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