Configure LIF service policies

ONTAP 9

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Table of Contents

Configure LIF service policies

You can configure LIF service policies to identify a single service or a list of services that will use a LIF.

Create a service policy for LIFs

You can create a service policy for LIFs. You can assign a service policy to one or more LIFs; thereby allowing the LIF to carry traffic for a single service or a list of services.

About this task

Built-in services and service policies are available for managing data and management traffic on both data and system SVMs. Most use cases are satisfied using a built-in service policy rather than creating a custom service policy.

You can modify these built-in service policies, if required.

Steps

1. View the services that are available in the cluster:

   ```
   network interface service show
   ```

   Services represent the applications accessed by a LIF as well as the applications served by the cluster. Each service includes zero or more TCP and UDP ports on which the application is listening.

   The following additional data and management services are available:

   ```
   network interface service show
   Service                     Protocol:Ports
   -------                     --------------
   cluster-core                -
   data-cifs                   -
   data-core                   -
   data-flexcache              -
   data-iscsi                  -
   data-nfs                    -
   intercluster-core           tcp:11104-11105
   management-autosupport      -
   management-bgp              tcp:179
   management-core             -
   management-https            tcp:443
   management-ssh              tcp:22
   12 entries were displayed.
   ```

2. Create a service policy:

```
network interface service-policy create -vserver <svm_name> -policy
<service_policy_name> -services <service_name> -allowed-addresses
<IP_address/mask,...>
```

- "service_name" specifies a list of services that should be included in the policy.
- "IP_address/mask" specifies the list of subnet masks for addresses that are allowed to access the services in the service policy. By default, all specified services are added with a default allowed address list of 0.0.0.0/0, which allows traffic from all subnets. When a non-default allowed address list is provided, LIFs using the policy are configured to block all requests with a source address that does not match any of the specified masks.

  The following example shows how to create a data service policy, svm1_data_policy, for an SVM that includes NFS and SMB services:

  ```
  network interface service-policy create -vserver svm1 -policy
  svm1_data_policy - services data-nfs,data-cifs,data-core -allowed
  -addresses 10.1.0.0/16
  ```

  The following example shows how to create an intercluster service policy:

  ```
  network interface service-policy create -vserver cluster1 -policy
  intercluster1 - services intercluster-core -allowed-addresses
  10.1.0.0/16
  ```

3. Verify that the service policy is created.

```
network interface service-policy show
```

The following output shows the service policies that are available:

```
network interface service-policy show
Vserver   Policy                     Service: Allowed Addresses
--------- -------------------------
--------------------------------------
cluster1
          default-intercluster       intercluster-core: 0.0.0.0/0
                                     management-https: 0.0.0.0/0

          default-management         management-core: 0.0.0.0/0
                                     management-autosupport: 0.0.0.0/0
                                     management-ssh: 0.0.0.0/0
                                     management-https: 0.0.0.0/0

          default-route-announce     management-bgp: 0.0.0.0/0

Cluster
          default-cluster            cluster-core: 0.0.0.0/0

vs0
          default-data-blocks        data-core: 0.0.0.0/0
                                     data-iscsi: 0.0.0.0/0

          default-data-files         data-core: 0.0.0.0/0
                                     data-nfs: 0.0.0.0/0
                                     data-cifs: 0.0.0.0/0
                                     data-flexcache: 0.0.0.0/0

          default-management         data-core: 0.0.0.0/0
                                     management-ssh: 0.0.0.0/0
                                     management-https: 0.0.0.0/0

7 entries were displayed.
```

After you finish

Assign the service policy to a LIF either at the time of creation or by modifying an existing LIF.

Assign a service policy to a LIF

You can assign a service policy to a LIF either at the time of creating the LIF or by modifying the LIF. A service policy defines the list of services that can be used with the LIF.

About this task

You can assign service policies for LIFs in the admin and data SVMs.

Step

Depending on when you want to assign the service policy to a LIF, perform one of the following actions:

If you are…	Assign the service policy by entering the following command…
Creating a LIF	network interface create -vserver svm_name -lif <lif_name> -home-node <node_name> -home-port <port_name> {(-address <IP_address> -netmask <IP_address>) -subnet-name <subnet_name>} -service-policy <service_policy_name>
Modifying a LIF	network interface modify -vserver <svm_name> -lif <lif_name> -service-policy <service_policy_name>

When you specify a service policy for a LIF, you need not specify the data protocol and role for the LIF. Creating LIFs by specifying the role and data protocols is also supported.

A service policy can only be used by LIFs in the same SVM that you specified when creating the service policy.

Examples

The following example shows how to modify the service policy of a LIF to use the default- management service policy:

```
network interface modify -vserver cluster1 -lif lif1 -service-policy
default-management
```

Commands for managing LIF service policies

Use the `network interface service-policy` commands to manage LIF service policies.

If you want to…	Use this command…
Create a service policy	`network interface service-policy create`
Add an additional service entry to an existing service policy	`network interface service-policy add-service`
Clone an existing service policy	`network interface service-policy clone`
Modify a service entry in an existing service policy	`network interface service-policy modify- service`
Remove a service entry from an existing service policy	`network interface service-policy remove- service`
Rename an existing service policy	`network interface service-policy rename`
Delete an existing service policy	`network interface service-policy delete`

If you want to…	Use this command…
Restore a built-in service-policy to its original state	`network interface service-policy restore- defaults`
Display existing service policies	`network interface service-policy show`

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