



Configure LIF service policies

ONTAP System Manager

NetApp

December 14, 2020

This PDF was generated from https://docs.netapp.com/us-en/ontap/networking-app/configure_lif_service_policies.html on December 14, 2020. Always check docs.netapp.com for the latest.



Table of Contents

Configure LIF service policies 1

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	<code>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></code>
Modifying a LIF	<code>network interface modify -vserver <svm_name> -lif <lif_name> -service-policy <service_policy_name></code>

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	<code>network interface service-policy create</code>
Add an additional service entry to an existing service policy	<code>network interface service-policy add- service</code>
Clone an existing service policy	<code>network interface service-policy clone</code>
Modify a service entry in an existing service policy	<code>network interface service-policy modify- service</code>

If you want to...	Use this command...
Remove a service entry from an existing service policy	<code>network interface service-policy remove- service</code>
Rename an existing service policy	<code>network interface service-policy rename</code>
Delete an existing service policy	<code>network interface service-policy delete</code>
Restore a built-in service-policy to its original state	<code>network interface service-policy restore-defaults</code>
Display existing service policies	<code>network interface service-policy show</code>

Related information

[ONTAP 9 commands](#)

Copyright Information

Copyright © 2020 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system-without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.