



# **Relationship between broadcast domains, failover groups, and failover policies**

**ONTAP 9**

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April 28, 2021

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# Relationship between broadcast domains, failover groups, and failover policies

Broadcast domains, failover groups, and failover policies work together to determine which port will take over when the node or port on which a LIF is configured fails.

A broadcast domain lists all the ports reachable in the same layer 2 Ethernet network. An Ethernet broadcast packet sent from one of the ports is seen by all other ports in the broadcast domain. This common-reachability characteristic of a broadcast domain is important to LIFs because if a LIF were to fail over to any other port in the broadcast domain, it could still reach every local and remote host that was reachable from the original port.

Failover groups define the ports within a broadcast domain that provide LIF failover coverage for each other. Each broadcast domain has one failover group that includes all its ports. This failover group containing all ports in the broadcast domain is the default and recommended failover group for the LIF. You can create failover groups with smaller subsets that you define, such as a failover group of ports that have the same link speed within a broadcast domain.

A failover policy dictates how a LIF uses the ports of a failover group when a node or port goes down. Consider the failover policy as a type of filter that is applied to a failover group. The failover targets for a LIF (the set of ports to which a LIF can failover) is determined by applying the LIF's failover policy to the LIF's failover group in the broadcast domain.

You can view the failover targets for a LIF using the following CLI command:

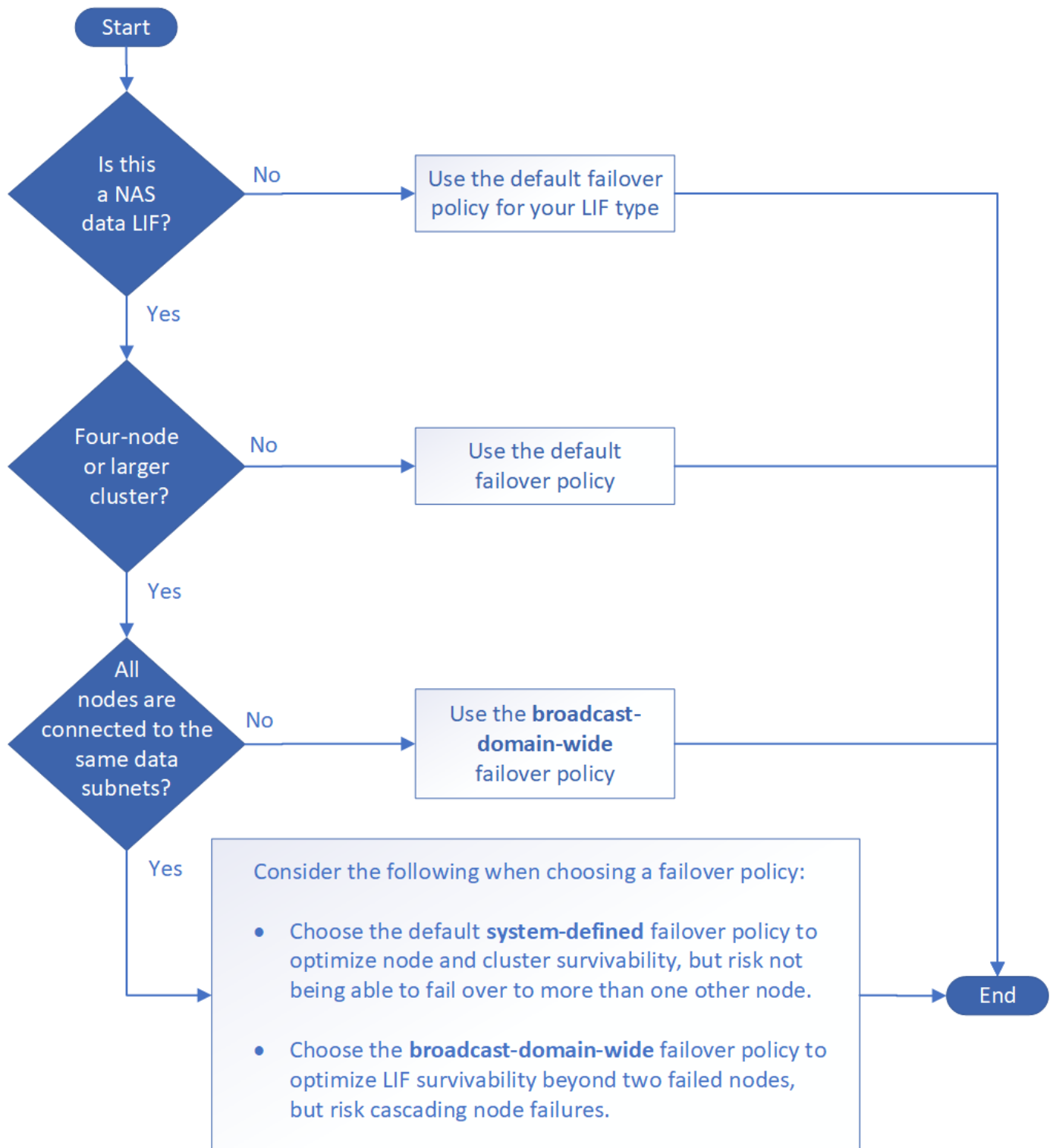
```
network interface show -failover
```

NetApp strongly recommends using the default failover policy for your LIF type.

## Decide which LIF failover policy to use

Decide whether to use the recommended, default failover policy or whether to change it based on your LIF type and environment.

### Failover policy decision tree



## Default failover policies by LIF type

LIF type	Default failover policy	Description
BGP LIFs	disabled	LIF does not fail over to another port.
Cluster LIFs	local-only	LIF fails over to ports on the same node only.

LIF type	Default failover policy	Description
Cluster-mgmt LIF	broadcast-domain-wide	LIF fails over to ports in the same broadcast domain, on any and every node in the cluster.
Intercluster LIFs	local-only	LIF fails over to ports on the same node only.
NAS data LIFs	system-defined	LIF fails over to one other node that is not the HA partner.
Node management LIFs	local-only	LIF fails over to ports on the same node only.
SAN data LIFs	disabled	LIF does not fail over to another port.



The `sfo- partner-only` failover policy is deprecated. Do not use the `sfo-partner-only` failover policy.

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