



LIF roles in ONTAP 9.5 and earlier

ONTAP 9

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LIF roles in ONTAP 9.5 and earlier

LIFs with different roles have different characteristics. A LIF role determines the kind of traffic that is supported over the interface, along with the failover rules that apply, the firewall restrictions that are in place, the security, the load balancing, and the routing behavior for each LIF. A LIF can have any one of the following roles: cluster, cluster management, data, intercluster, node management, and undef (undefined). The undef role is used for BGP LIFs.

Starting with ONTAP 9.6, LIF roles are deprecated. You should specify service policies for LIFs instead of a role. It is not necessary to specify a LIF role when creating a LIF with a service policy.

LIF security

| | Data LIF | Cluster LIF | Node management LIF | Cluster management LIF | Intercluster LIF |
|----------------------------|------------------|-----------------|---------------------|------------------------|------------------|
| Require private IP subnet? | No | Yes | No | No | No |
| Require secure network? | No | Yes | No | No | Yes |
| Default firewall policy | Very restrictive | Completely open | Medium | Medium | Very restrictive |
| Is firewall customizable? | Yes | No | Yes | Yes | Yes |

LIF failover

| | Data LIF | Cluster LIF | Node management LIF | Cluster management LIF | Intercluster LIF |
|------------------|---|---|---|-------------------------------------|---|
| Default behavior | Only those ports in the same failover group that are on the LIF's home node and on a non-SFO partner node | Only those ports in the same failover group that are on the LIF's home node | Only those ports in the same failover group that are on the LIF's home node | Any port in the same failover group | Only those ports in the same failover group that are on the LIF's home node |
| Is customizable? | Yes | No | Yes | Yes | Yes |

LIF routing

| | Data LIF | Cluster LIF | Node management LIF | Cluster management LIF | Intercluster LIF |
|--|--|--------------------|---|---|--|
| When is a default route needed? | When clients or domain controller are on different IP subnet | Never | When any of the primary traffic types require access to a different IP subnet | When administrator is connecting from another IP subnet | When other intercluster LIFs are on a different IP subnet |
| When is a static route to a specific IP subnet needed? | Rare | Never | Rare | Rare | When nodes of another cluster have their intercluster LIFs in different IP subnets |
| When is a static host route to a specific server needed? | To have one of the traffic types listed under node management LIF, go through a data LIF rather than a node management LIF. This requires a corresponding firewall change. | Never | Rare | Rare | Rare |

LIF rebalancing

| | Data LIF | Cluster LIF | Node management LIF | Cluster management LIF | Intercluster LIF |
|-------------------------|-----------------|--------------------|----------------------------|-------------------------------|-------------------------|
| DNS: use as DNS server? | Yes | No | No | No | No |
| DNS: export as zone? | Yes | No | No | No | No |

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