



Create a broadcast domain

ONTAP 9

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April 27, 2021

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In ONTAP 9.7 and earlier, you create a broadcast domain to group network ports in the cluster that belong to the same layer 2 network. The ports can then be used by SVMs.

Before you begin

Starting with ONTAP 9.8, broadcast domains are automatically created during the cluster create or join operation. If you are running ONTAP 9.8 or later, these steps are not needed.

In ONTAP 9.7 and earlier, the ports you plan to add to the broadcast domain must not belong to another broadcast domain.

About this task

- All broadcast domain names must be unique within an IPspace.
- The ports added to a broadcast domain can be physical network ports, VLANs, or interface groups (ifgrps).
- If the ports you want to use belong to another broadcast domain, but are unused, you use the `network port broadcast-domain remove-ports` command to remove the ports from the existing broadcast domain.
- The MTU of the ports added to a broadcast domain are updated to the MTU value set in the broadcast domain.
- The MTU value must match all of the devices connected to that layer 2 network except for the e0M port handling management traffic.
- If you do not specify an IPspace name, the broadcast domain is created in the "Default" IPspace.

To make system configuration easier, a failover group of the same name is created automatically that contains the same ports.

Steps

1. View the ports that are not currently assigned to a broadcast domain:

```
network port show
```

If the display is large, use the `network port show -broadcast-domain` command to view only unassigned ports.

2. Create a broadcast domain:

```
network port broadcast-domain create -broadcast-domain broadcast_domain_name  
-mtu mtu_value [-ipspace ipspace_name] [-ports ports_list]
```

- `broadcast_domain_name` is the name of the broadcast domain you want to create.
- `mtu_value` is the MTU size for IP packets; 1500 and 9000 are typical values.

This value is applied to all ports that are added to this broadcast domain.

- `ipspace_name` is the name of the IPspace to which this broadcast domain will be added.

The "Default" IPspace is used unless you specify a value for this parameter.

- *ports_list* is the list of ports that will be added to the broadcast domain.

The ports are added in the format *node_name:port_number*, for example, *node1:e0c*.

3. Verify that the broadcast domain was created as desired:

```
network port show -instance -broadcast-domain new_domain
```

Example

The following command creates broadcast domain *bcast1* in the Default IPspace, sets the MTU to 1500, and adds four ports:

```
network port broadcast-domain create -broadcast-domain bcast1 -mtu 1500 -ports  
cluster1-01:e0e,cluster1-01:e0f,cluster1-02:e0e,cluster1-02:e0f
```

After you finish

You can define the pool of IP addresses that will be available in the broadcast domain by creating a subnet, or you can assign SVMs and interfaces to the IPspace at this time. For more information, see the [Cluster and SVM Peering Express Guide](#).

If you need to change the name of an existing broadcast domain, you use the `network port broadcast-domain rename` command.

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