



# **network subnet commands**

ONTAP 9.11.1 commands

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# network subnet commands

## network subnet add-ranges

Add new address ranges to a subnet

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

Add new address ranges to a subnet.



All addresses in a range must be the same address family (IPv4 or IPv6) and must have the same subnet mask. Ranges that overlap or are next to existing ranges will be merged with the existing ranges.

### Parameters

**-ip-space <IPspace> - IPspace Name**

The IPspace in which the range resides.

**-subnet-name <subnet name> - Subnet Name**

The name of the subnet.

**-ip-ranges {<ipaddr>|<ipaddr>-<ipaddr>} - IP Ranges**

The list of ranges to add to the subnet.

**[-force-update-lif-associations <true>] - Force Update LIF Associations**

This command will fail if any service processor interfaces or network interfaces are using the IP addresses in the ranges provided. Using this parameter will associate any manually addressed interfaces with the subnet and will allow the command to succeed.

### Examples

The following example allocates addresses for subnet *s1* in IPspace *Default*.

```
cluster1::> network subnet add-ranges -ip-space Default -subnet-name s1
-ip-ranges "10.98.1.20-10.98.1.30, 10.98.1.35, 10.98.1.40-10.98.1.49"
```

## network subnet create

Create a new layer 3 subnet

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

Create a new subnet.

## Parameters

### **[-ip-space <IPspace>] - IPspace Name**

The IPspace to which the new subnet belongs.

### **-subnet-name <subnet name> - Subnet Name**

The name of the subnet to be created. The name of the subnet needs to be unique within the IPspace.

### **-broadcast-domain <Broadcast Domain> - Broadcast Domain**

The broadcast domain to which the new subnet belongs.

### **-subnet <IP Address/Mask> - Layer 3 Subnet**

The address and mask of the subnet.

### **[-gateway <IP Address>] - Gateway**

The gateway of the subnet.

### **[-ip-ranges {<ipaddr>|<ipaddr>-<ipaddr>}] - IP Addresses or IP Address Ranges**

The IP ranges associated with this subnet.

### **[-force-update-lif-associations <true>] - Change the subnet association**

This command will fail if any service processor interfaces or network interfaces are using the IP addresses in the ranges provided. Using this parameter will associate any manually addressed interfaces with the subnet and will allow the command to succeed.

## Examples

The following examples create subnets named *s1* and *s6* in IPspace *Default*.

```
cluster1::> network subnet create -ip-space Default -broadcast-domain bd1
-subnet-name s1
      -subnet 192.168.1.0/24 -gateway 192.168.1.1 -ip-ranges "192.168.1.1-
192.168.1.100, 192.168.1.112, 192.168.1.145"
```

```
cluster1::> network subnet create -ip-space Default -broadcast-domain bd1
-subnet-name s6
      -subnet 3FFE::/64 -gateway 3FFE::1 -ip-ranges "3FFE::10-3FFE::20"
```

## network subnet delete

Delete an existing subnet object

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

Delete a subnet that contains no ports.

## Parameters

**-ipSPACE <IPspace> - IPspace Name**

The IPspace to which the subnet belongs.

**-subnet-name <subnet name> - Subnet Name**

The name of the subnet to be deleted.

**[-force-update-lif-associations <true>] - Change the subnet association**

This command will fail if the subnet has ranges containing any existing service processor interface or network interface IP addresses. Setting this value to true will remove the network interface associations with the subnet and allow the command to succeed. However, it will not affect service processor interfaces.

## Examples

The following example deletes subnet *s1* in IPspace *Default*.

```
cluster1::> network subnet delete -ipSPACE Default -subnet-name s1
```

# network subnet modify

Modify a layer 3 subnet

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

Modify a subnet.

## Parameters

**-ipSPACE <IPspace> - IPspace Name**

The IPspace to which the subnet belongs.

**-subnet-name <subnet name> - Subnet Name**

The name of the subnet to modify.

**[-subnet <IP Address/Mask>] - Layer 3 Subnet**

The new address and mask of the subnet.

**[-gateway <IP Address>] - Gateway**

The new gateway address.

### **[-ip-ranges {<ipaddr>|<ipaddr>-<ipaddr>}] - IP Addresses or IP Address Ranges**

The new IP ranges for this subnet.

### **[-force-update-lif-associations <true>] - Change the subnet association**

This command will fail if any existing service processor interfaces or network interfaces are using IP addresses in the IP ranges being added. It will also fail if any existing service processor interfaces or network interfaces are using IP addresses in the IP ranges being removed. Using this parameter will associate the interfaces with the IP addresses in the ranges being added to the subnet. It will also remove the subnet's association with the interfaces with IP addresses in the IP ranges being removed and will allow the command to succeed.

## **Examples**

The following example modifies the subnet address and gateway.

```
cluster1::> network subnet modify -ip-space Default -subnet-name s1 -subnet
192.168.2.0/24 -gateway 192.168.2.1
```

## **network subnet remove-ranges**

Remove address ranges from a subnet

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### **Description**

Remove address ranges from a subnet.

### **Parameters**

#### **-ip-space <IPspace> - IPspace Name**

The IPspace in which the range resides.

#### **-subnet-name <subnet name> - Subnet Name**

The name of the subnet.

#### **-ip-ranges {<ipaddr>|<ipaddr>-<ipaddr>} - IP Ranges**

IP ranges to remove.

### **[-force-update-lif-associations <true>] - Force Update LIF Associations**

This command will fail if any existing service processor interfaces or network interfaces are using IP addresses in the ranges provided. Using this parameter will remove the subnet's association with those interfaces and allow the command to succeed.

## **Examples**

The following example removes an address range with starting address of *10.98.1.1* from subnet *s1* in IPspace *Default*.

```
cluster1::> network subnet remove-ranges -ip-space Default -subnet-name s1
-ip-ranges "10.98.1.1-10.98.1.30"
```

## network subnet rename

Rename a layer 3 subnet

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

Rename a Subnet.

### Parameters

**-ip-space <IPspace> - IPspace Name**

The IPspace to which the subnet belongs.

**-subnet-name <subnet name> - Subnet Name**

The name of the subnet to rename.

**-new-name <text> - New Name**

The new name for the subnet.

### Examples

The following example renames subnet *s1* to *s3*.

```
cluster1::> network subnet rename -ip-space Default -subnet s1 -new-name s3
```

## network subnet show

Display subnet information

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

Display subnet information.

### Parameters

{ [-fields <fieldname>,...]

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

**[ `-instance` ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[ `-ip-space <IPspace>` ] - IPspace Name**

Selects the subnets that match the given IPspace name.

**[ `-subnet-name <subnet name>` ] - Subnet Name**

Selects the subnets that match the given subnet name.

**[ `-broadcast-domain <Broadcast Domain>` ] - Broadcast Domain**

Selects the subnets that match the given broadcast domain name.

**[ `-subnet <IP Address/Mask>` ] - Layer 3 Subnet**

Selects the subnets that match the given address and mask.

**[ `-gateway <IP Address>` ] - Gateway**

Selects the subnets that match the given gateway address.

**[ `-ip-ranges {<ipaddr>|<ipaddr>-<ipaddr>}` ] - IP Addresses or IP Address Ranges**

Selects the subnets that match the given IP range.

**[ `-total-count <integer>` ] - Total Address Count**

Selects the subnets that match the given total address count.

**[ `-used-count <integer>` ] - Used Address Count**

Selects the subnets that match the given number of addresses allocated.

**[ `-available-count <integer>` ] - Available Address Count**

Selects the subnets that match the given number of addresses available.

## Examples

The following example displays general information about the subnets.



```
cluster1::> network subnet show
```

```
IPspace: Default
```

Subnet Name	Subnet	Broadcast Domain	Gateway	Avail/ Total	Ranges
s4	192.168.4.0/24	bd4	192.168.4.1	5/5	
	192.168.5.6-192.168.5.10				
s6	192.168.6.0/24	bd4	192.168.6.1	5/5	
	192.168.6.6-192.168.6.10				

```
IPspace: ips1
```

Subnet Name	Subnet	Broadcast Domain	Gateway	Avail/ Total	Ranges
s10	192.168.6.0/24	bd10	192.168.6.1	0/0	-

```
3 entries were displayed.
```

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