



Manage network Ethernet ports

ONTAP 9.7 REST API reference

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Manage network Ethernet ports

Network Ethernet ports endpoint overview

Overview

A port is a physical or virtual Ethernet network device. Physical ports may be combined into Link Aggregation Groups (LAGs or ifgrps), or divided into Virtual LANs (VLANs).

GET (collection), GET (instance), and PATCH APIs are available for all port types. POST and DELETE APIs are available for "lag" (ifgrp) and "vlan" port types.

Retrieving network port information

The network ports GET API retrieves and displays relevant information pertaining to the ports configured in the cluster. The API retrieves the list of all ports configured in the cluster, or specifically requested ports. The fields returned in the response vary for different ports and configurations.

Examples

Retrieving all ports in the cluster

The following output displays the UUID, name, and port type for all ports configured in a 2-node cluster. The port types are physical, vlan, and lag (ifgrp).

```
# The API:
/api/network/ethernet/ports

# The call:
curl -X GET "https://<mgmt-
ip>/api/network/ethernet/ports?fields=uuid,name,type" -H "accept:
application/hal+json"

# The response:
{
  "records": [
    {
      "uuid": "2d2c90c0-f70d-11e8-b145-005056bb5b8e",
      "name": "e0a",
      "type": "physical",
      "_links": {
        "self": {
          "href": "/api/network/ethernet/ports/2d2c90c0-f70d-11e8-b145-
005056bb5b8e"
        }
      }
    }
  ]
}
```

```
},
{
  "uuid": "2d3004da-f70d-11e8-b145-005056bb5b8e",
  "name": "e0b",
  "type": "physical",
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports/2d3004da-f70d-11e8-b145-005056bb5b8e"
    }
  }
},
{
  "uuid": "2d34a2cb-f70d-11e8-b145-005056bb5b8e",
  "name": "e0c",
  "type": "physical",
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports/2d34a2cb-f70d-11e8-b145-005056bb5b8e"
    }
  }
},
{
  "uuid": "2d37189f-f70d-11e8-b145-005056bb5b8e",
  "name": "e0d",
  "type": "physical",
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports/2d37189f-f70d-11e8-b145-005056bb5b8e"
    }
  }
},
{
  "uuid": "35de5d8b-f70d-11e8-abdf-005056bb7fc8",
  "name": "e0a",
  "type": "physical",
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports/35de5d8b-f70d-11e8-abdf-005056bb7fc8"
    }
  }
},
{
```

```
"uuid": "35de78cc-f70d-11e8-abdf-005056bb7fc8",
"name": "e0b",
"type": "physical",
"_links": {
  "self": {
    "href": "/api/network/ethernet/ports/35de78cc-f70d-11e8-abdf-005056bb7fc8"
  }
},
{
  "uuid": "35dead3c-f70d-11e8-abdf-005056bb7fc8",
  "name": "e0c",
  "type": "physical",
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports/35dead3c-f70d-11e8-abdf-005056bb7fc8"
    }
  },
  {
    "uuid": "35deda90-f70d-11e8-abdf-005056bb7fc8",
    "name": "e0d",
    "type": "physical",
    "_links": {
      "self": {
        "href": "/api/network/ethernet/ports/35deda90-f70d-11e8-abdf-005056bb7fc8"
      }
    },
    {
      "uuid": "42e25145-f97d-11e8-ade9-005056bb7fc8",
      "name": "e0c-100",
      "type": "vlan",
      "_links": {
        "self": {
          "href": "/api/network/ethernet/ports/42e25145-f97d-11e8-ade9-005056bb7fc8"
        }
      },
      {
        "uuid": "569e0abd-f97d-11e8-ade9-005056bb7fc8",
        "name": "a0a",
```

```

    "type": "lag",
    "_links": {
      "self": {
        "href": "/api/network/ethernet/ports/569e0abd-f97d-11e8-ade9-005056bb7fc8"
      }
    }
  },
  "num_records": 10,
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports?fields=uuid,name,type"
    }
  }
}

```

Retrieving a specific physical port

The following output displays the response when a specific physical port is requested. The system returns an error when there is no port with the requested UUID. Also, the speed field is set only if the state of the port is up.

```

# The API:
/api/network/ethernet/ports/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ethernet/ports/2d37189f-f70d-11e8-b145-005056bb5b8e?fields=*" -H "accept: application/hal+json"

# The response:
{
  "uuid": "2d37189f-f70d-11e8-b145-005056bb5b8e",
  "name": "e0d",
  "mac_address": "00:50:56:bb:62:2d",
  "type": "physical",
  "node": {
    "uuid": "faa56898-f70c-11e8-b145-005056bb5b8e",
    "name": "user-cluster-01",
    "_links": {
      "self": {
        "href": "/api/cluster/nodes/faa56898-f70c-11e8-b145-005056bb5b8e"
      }
    }
  }
}

```

```

    }
  },
  "broadcast_domain": {
    "uuid": "36434bec-f70d-11e8-b145-005056bb5b8e",
    "name": "Default",
    "ipspace": {
      "name": "Default"
    },
    "_links": {
      "self": {
        "href": "/api/network/ethernet/broadcast-domains/36434bec-f70d-11e8-b145-005056bb5b8e"
      }
    }
  },
  "enabled": true,
  "state": "up",
  "mtu": 1500,
  "speed": "1000",
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports/2d37189f-f70d-11e8-b145-005056bb5b8e"
    }
  }
}

```

Retrieving a specific VLAN port

The following output displays the response when a specific VLAN port is requested. The system returns an error when there is no port with the requested UUID. Also, the speed field is set only if the state of the port is up.

```

# The API:
/api/network/ethernet/ports/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ethernet/ports/42e25145-f97d-11e8-ade9-005056bb7fc8?fields=*" -H "accept: application/hal+json"

# The response:
{
  "uuid": "42e25145-f97d-11e8-ade9-005056bb7fc8",

```

```

"name": "e0e-100",
"mac_address": "00:50:56:bb:52:2f",
"type": "vlan",
"node": {
  "uuid": "6042cf47-f70c-11e8-abdf-005056bb7fc8",
  "name": "user-cluster-02",
  "_links": {
    "self": {
      "href": "/api/cluster/nodes/6042cf47-f70c-11e8-abdf-005056bb7fc8"
    }
  }
},
"enabled": true,
"state": "up",
"mtu": 1500,
"speed": "1000",
"vlan": {
  "tag": 100,
  "base_port": {
    "uuid": "35deff03-f70d-11e8-abdf-005056bb7fc8",
    "name": "e0e",
    "node": {
      "name": "user-cluster-02"
    }
  },
  "_links": {
    "self": {
      "href": "/api/network/ethernet/ports/35deff03-f70d-11e8-abdf-005056bb7fc8"
    }
  }
},
"_links": {
  "self": {
    "href": "/api/network/ethernet/ports/42e25145-f97d-11e8-ade9-005056bb7fc8"
  }
}
}

```

Retrieving a specific LAG port

The following output displays the response when a specific LAG port is requested. The system returns an error when there is no port with the requested UUID. Also, the speed and lag.active_ports fields are set only if the state of the port is up.


```

# The API:
/api/network/ethernet/ports/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ethernet/ports/569e0abd-f97d-11e8-ade9-005056bb7fc8?fields=*" -H "accept: application/hal+json"

# The response:
{
  "uuid": "569e0abd-f97d-11e8-ade9-005056bb7fc8",
  "name": "a0a",
  "mac_address": "02:50:56:bb:7f:c8",
  "type": "lag",
  "node": {
    "uuid": "6042cf47-f70c-11e8-abdf-005056bb7fc8",
    "name": "user-cluster-02",
    "_links": {
      "self": {
        "href": "/api/cluster/nodes/6042cf47-f70c-11e8-abdf-005056bb7fc8"
      }
    }
  },
  "enabled": true,
  "state": "up",
  "mtu": 1500,
  "speed": "1000",
  "lag": {
    "mode": "singlemode",
    "distribution_policy": "mac",
    "member_ports": [
      {
        "uuid": "35df318d-f70d-11e8-abdf-005056bb7fc8",
        "name": "e0f",
        "node": {
          "name": "user-cluster-02"
        },
        "_links": {
          "self": {
            "href": "/api/network/ethernet/ports/35df318d-f70d-11e8-abdf-005056bb7fc8"
          }
        }
      },
      {
        "uuid": "35df5bad-f70d-11e8-abdf-005056bb7fc8",

```

```
    "name": "e0g",
    "node": {
      "name": "user-cluster-02"
    },
    "_links": {
      "self": {
        "href": "/api/network/ethernet/ports/35df5bad-f70d-11e8-abdf-005056bb7fc8"
      }
    }
  },
  {
    "uuid": "35df9926-f70d-11e8-abdf-005056bb7fc8",
    "name": "e0h",
    "node": {
      "name": "user-cluster-02"
    },
    "_links": {
      "self": {
        "href": "/api/network/ethernet/ports/35df9926-f70d-11e8-abdf-005056bb7fc8"
      }
    }
  }
],
"active_ports": [
  {
    "uuid": "35df318d-f70d-11e8-abdf-005056bb7fc8",
    "name": "e0f",
    "_links": {
      "self": {
        "href": "/api/network/ethernet/ports/35df318d-f70d-11e8-abdf-005056bb7fc8"
      }
    }
  }
]
},
"_links": {
  "self": {
    "href": "/api/network/ethernet/ports/569e0abd-f97d-11e8-ade9-005056bb7fc8"
  }
}
}
```

Retrieving all LAG (ifgrp) ports in the cluster

This command retrieves all LAG ports in the cluster (that is, all ports with type=LAG). The example shows how to filter a GET collection based on type.

```
# The API:
/api/network/ethernet/ports

# The call:
curl -X GET "https://<mgmt-
ip>/api/network/ethernet/ports?type=lag&node.name=user-cluster-
01&fields=name,enabled,speed,mtu" -H "accept: application/hal+json"

# The response:
{
  "records": [
    {
      "uuid": "0c226db0-4b63-11e9-8113-005056bbe040",
      "name": "a0b",
      "type": "lag",
      "node": {
        "name": "user-cluster-01"
      },
      "enabled": true,
      "mtu": 1500,
      "speed": "1000",
      "_links": {
        "self": {
          "href": "/api/network/ethernet/ports/0c226db0-4b63-11e9-8113-
005056bbe040"
        }
      }
    },
    {
      "uuid": "d3a84153-4b3f-11e9-a00d-005056bbe040",
      "name": "a0a",
      "type": "lag",
      "node": {
        "name": "user-cluster-01"
      },
      "enabled": true,
      "mtu": 1500,
      "speed": "1000",
      "_links": {
        "self": {
```

```

        "href": "/api/network/ethernet/ports/d3a84153-4b3f-11e9-a00d-
005056bbe040"
      }
    }
  ],
  "num_records": 2,
  "_links": {
    "self": {
      "href":
"/api/network/ethernet/ports?fields=name,enabled,speed,mtu&type=lag&node.n
ame=user-cluster-01"
    }
  }
}

```

Creating VLAN and LAG ports

You can use the network ports POST API to create VLAN and LAG ports.

Examples

Creating a VLAN port

The following output displays the record returned after the creation of a VLAN port on "e0e" and VLAN tag "100". Also, the VLAN port is added to the "Default" broadcast domain in the "Default" IPspace.

```

# The API:
/api/network/ethernet/ports

# The call:
curl -X POST "https://<mgmt-
ip>/api/network/ethernet/ports?return_records=true" -H "accept:
application/hal+json" -H "Content-Type: application/json" -d "{
\"type\": \"vlan\", \"node\": { \"name\": \"user-cluster-01\" },
\"broadcast_domain\": { \"name\": \"Default\", \"ipspace\": { \"name\":
\"Default  \" } } }, \"enabled\": true, \"vlan\": { \"tag\": 100,
\"base_port\": { \"name\": \"e0e\", \"node\": { \"name\": \"user-cluster-
01\" } } } }"

# The response:

```

```

{
  "num_records": 1,
  "records": [
    {
      "uuid": "88b2f682-fa42-11e8-a6d7-005056bb5b8e",
      "type": "vlan",
      "node": {
        "uuid": "faa56898-f70c-11e8-b145-005056bb5b8e",
        "name": "user-cluster-01",
        "_links": {
          "self": {
            "href": "/api/cluster/nodes/faa56898-f70c-11e8-b145-005056bb5b8e"
          }
        }
      },
      "broadcast_domain": {
        "uuid": "36434bec-f70d-11e8-b145-005056bb5b8e",
        "name": "Default",
        "ipspace": {
          "name": "Default"
        },
        "_links": {
          "self": {
            "href": "/api/network/ethernet/broadcast-domains/36434bec-f70d-11e8-b145-005056bb5b8e"
          }
        }
      },
      "enabled": true,
      "vlan": {
        "tag": 100,
        "base_port": {
          "uuid": "2d39df72-f70d-11e8-b145-005056bb5b8e",
          "name": "e0e",
          "node": {
            "name": "user-cluster-01"
          },
          "_links": {
            "self": {
              "href": "/api/network/ethernet/ports/2d39df72-f70d-11e8-b145-005056bb5b8e"
            }
          }
        }
      }
    }
  ],

```

```

    "_links": {
      "self": {
        "href": "/api/network/ethernet/ports/88b2f682-fa42-11e8-a6d7-005056bb5b8e"
      }
    }
  }
]
}

```

Creating a LAG (ifgrp) port

The following output displays the record returned after the creation of a LAG port with "e0f", "e0g" and "e0h" as member ports.

```

# The API:
/api/network/ethernet/ports

# The call:
curl -X POST "https://<mgmt-
ip>/api/network/ethernet/ports?return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"type\":
\"lag\", \"node\": { \"name\": \"user-cluster-01\" },
\"broadcast_domain\": { \"name\": \"Default\", \"ipspace\": { \"name\":
\"Default\" } }, \"enabled\": true, \"lag\": { \"mode\": \"singlemode\",
\"distribution_policy\": \"mac\", \"member_ports\": [ { \"name\": \"e0f\",
\"node\": { \"name\": \"user-cluster-01\" } }, { \"name\": \"e0g\",
\"node\": { \"name\": \"user-cluster-01\" } }, { \"name\": \"e0h\",
\"node\": { \"name\": \"user-cluster-01\" } } ] } }" -u admin:netappl! -k

# The response:
{
  "num_records": 1,
  "records": [
    {
      "uuid": "1807772a-fa4d-11e8-a6d7-005056bb5b8e",
      "type": "lag",
      "node": {
        "uuid": "faa56898-f70c-11e8-b145-005056bb5b8e",
        "name": "user-cluster-01"
      },
      "broadcast_domain": {
        "uuid": "36434bec-f70d-11e8-b145-005056bb5b8e",

```

```

    "name": "Default",
    "ipspace": {
      "name": "Default"
    }
  },
  "enabled": true,
  "lag": {
    "mode": "singlemode",
    "distribution_policy": "mac",
    "member_ports": [
      {
        "uuid": "2d3c9adc-f70d-11e8-b145-005056bb5b8e",
        "name": "e0f",
        "node": {
          "name": "user-cluster-01"
        }
      },
      {
        "uuid": "2d40b097-f70d-11e8-b145-005056bb5b8e",
        "name": "e0g",
        "node": {
          "name": "user-cluster-01"
        }
      },
      {
        "uuid": "2d46d01e-f70d-11e8-b145-005056bb5b8e",
        "name": "e0h",
        "node": {
          "name": "user-cluster-01"
        }
      }
    ]
  }
}
]
}

```

Updating ports

You can use the network ports PATCH API to update the attributes of ports.

Examples

Updating the broadcast domain of a port

The following PATCH request removes the port from the current broadcast domain and adds it to the specified broadcast domain.

```
# The API:
/api/network/ethernet/ports/{uuid}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/network/ethernet/ports/6867efaf-d702-11e8-994f-005056bbc994" -H "accept: application/hal+json" -H "Content-Type: application/json" -d "{ \"broadcast_domain\": { \"name\": \"Default\", \"ipspace\": { \"name\": \"Default\" } } }"
```

Updating the admin status of a port

The following PATCH request brings the specified port down.

```
# The API:
/api/network/ethernet/ports/{uuid}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/network/ethernet/ports/51d3ab39-d86d-11e8-aca6-005056bbc994" -H "accept: application/hal+json" -H "Content-Type: application/json" -d "{ \"enabled\": \"false\" }"
```

Deleting ports

You can use the network ports DELETE API to delete VLAN and LAG ports in the cluster. Note that physical ports cannot be deleted. Deleting a port also removes the port from the broadcast domain.

Example

Deleting a VLAN port

The network ports DELETE API is used to delete a VLAN port.


```
# The API:
/api/network/ethernet/ports/{uuid}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/network/ethernet/ports/6867efaf-
d702-11e8-994f-005056bbc994" -H "accept: application/hal+json" -H
"Content-Type: application/json"
```

Retrieve ports

GET /network/ethernet/ports

Retrieves a collection of ports (physical, VLAN and LAG) for an entire cluster.

Related ONTAP commands

- `network port show`
- `network port ifgrp show`
- `network port vlan show`

Learn more

- [DOC /network/ethernet/ports](#)

Parameters

Name	Type	In	Required	Description
mac_address	string	query	False	Filter by mac_address
speed	integer	query	False	Filter by speed
state	string	query	False	Filter by state
mtu	integer	query	False	Filter by mtu
name	string	query	False	Filter by name
node.uuid	string	query	False	Filter by node.uuid
node.name	string	query	False	Filter by node.name

Name	Type	In	Required	Description
vlan.base_port.name	string	query	False	Filter by vlan.base_port.name
vlan.base_port.node.name	string	query	False	Filter by vlan.base_port.node.name
vlan.base_port.uuid	string	query	False	Filter by vlan.base_port.uuid
vlan.tag	integer	query	False	Filter by vlan.tag
enabled	boolean	query	False	Filter by enabled
uuid	string	query	False	Filter by uuid
broadcast_domain.ip space.name	string	query	False	Filter by broadcast_domain.ip space.name
broadcast_domain.uuid	string	query	False	Filter by broadcast_domain.uuid
broadcast_domain.name	string	query	False	Filter by broadcast_domain.name
type	string	query	False	Filter by type
lag.active_ports.name	string	query	False	Filter by lag.active_ports.name
lag.active_ports.node.name	string	query	False	Filter by lag.active_ports.node.name
lag.active_ports.uuid	string	query	False	Filter by lag.active_ports.uuid
lag.distribution_policy	string	query	False	Filter by lag.distribution_policy

Name	Type	In	Required	Description
lag.mode	string	query	False	Filter by lag.mode
lag.member_ports.name	string	query	False	Filter by lag.member_ports.name
lag.member_ports.node.name	string	query	False	Filter by lag.member_ports.node.name
lag.member_ports.uuid	string	query	False	Filter by lag.member_ports.uuid
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned.
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
num_records	integer	
records	array[port]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "broadcast_domain": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "ipspace": {
          "name": "ipspace1"
        },
        "name": "bd1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "lag": {
        "active_ports": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "e1b",
            "node": {
              "name": "node1"
            },
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          }
        ],
        "distribution_policy": "string",

```

```

    "member_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        },
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    ],
    "mode": "string",
  },
  "mac_address": "01:02:03:04:05:06",
  "mtu": 1500,
  "name": "elb",
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "speed": 1000,
  "state": "string",
  "type": "string",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
  "vlan": {
    "base_port": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "elb",
      "node": {
        "name": "node1"
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "tag": 100
  }
}

```

```
}
}
]
}
```

Error

Status: Default, Error

Name	Type	Description
error	error	

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

Name	Type	Description
next	href	
self	href	

_links

Name	Type	Description
self	href	

ipospace

Name	Type	Description
name	string	Name of the broadcast domain's IPspace

broadcast_domain

Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.

Name	Type	Description
_links	_links	
ipospace	ipospace	
name	string	Name of the broadcast domain, scoped to its IPspace
uuid	string	Broadcast domain UUID

node

Name	Type	Description
name	string	Name of node on which the port is located.

active_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

member_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

lag

Name	Type	Description
active_ports	array[active_ports]	Active ports of a LAG (ifgrp). (Some member ports may be inactive.)
distribution_policy	string	Policy for mapping flows to ports for outbound packets through a LAG (ifgrp).
member_ports	array[member_ports]	
mode	string	Determines how the ports interact with the switch.

node

Name	Type	Description
_links	_links	
name	string	
uuid	string	

base_port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

vlan

Name	Type	Description
base_port	base_port	Port UUID along with readable names. Either the UUID or both names may be supplied on input.
tag	integer	VLAN ID

port

Name	Type	Description
_links	_links	
broadcast_domain	broadcast_domain	Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.
enabled	boolean	
lag	lag	
mac_address	string	
mtu	integer	MTU of the port in bytes. Set by broadcast domain.
name	string	Portname, such as e0a, e1b-100 (VLAN on ethernet), a0c (LAG/ifgrp), a0d-200 (vlan on LAG/ifgrp)
node	node	
speed	integer	Link speed in Mbps
state	string	Operational state of the port.
type	string	Type of physical or virtual port

Name	Type	Description
uuid	string	Port UUID
vlan	vlan	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Create a new VLAN or LAG

POST /network/ethernet/ports

Creates a new VLAN (such as node1:e0a-100) or LAG (ifgrp, such as node2:a0a).

Required properties

- `node` - Node the port will be created on.
- `broadcast_domain` - Broadcast domain the port is associated with.
- `type` - Defines if a VLAN or LAG will be created:
 - VLAN
 - `vlan.base_port` - Physical port or LAG the VLAN will be created on.
 - `vlan.tag` - Tag used to identify VLAN on the base port.
 - LAG
 - `lag.mode` - Policy for the LAG that will be created.
 - `lag.distribution_policy` - Indicates how the packets are distributed between ports.

- `lag.member_ports` - Set of ports the LAG consists of.

Related ONTAP commands

- `network port ifgrp create`
- `network port vlan create`

Learn more

- [DOC /network/ethernet/ports](#)

Parameters

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is false. If set to true, the records are returned.

Request Body

Name	Type	Description
<code>_links</code>	_links	
broadcast_domain	broadcast_domain	Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.
enabled	boolean	
lag	lag	
mac_address	string	
mtu	integer	MTU of the port in bytes. Set by broadcast domain.
name	string	Portname, such as e0a, e1b-100 (VLAN on ethernet), a0c (LAG/ifgrp), a0d-200 (vlan on LAG/ifgrp)
node	node	
speed	integer	Link speed in Mbps
state	string	Operational state of the port.

Name	Type	Description
type	string	Type of physical or virtual port
uuid	string	Port UUID
vlan	vlan	

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "broadcast_domain": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ipspace": {
      "name": "ipspace1"
    },
    "name": "bd1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "lag": {
    "active_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        },
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    ],
    "distribution_policy": "string",
    "member_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        }
      }
    ]
  }
}
```

```

    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
],
"mode": "string"
},
"mac_address": "01:02:03:04:05:06",
"mtu": 1500,
"name": "e1b",
"node": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "node1",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"speed": 1000,
"state": "string",
"type": "string",
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"vlan": {
  "base_port": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "name": "e1b",
  "node": {
    "name": "node1"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tag": 100
}
}

```

Response

Status: 201, Created

Name	Type	Description
_links	_links	
num_records	integer	
records	array[port]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "broadcast_domain": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "ipspace": {
          "name": "ipspace1"
        },
        "name": "bd1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "lag": {
        "active_ports": [
          {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "e1b",
            "node": {
              "name": "node1"
            },
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          }
        ],
        "distribution_policy": "string",

```

```

    "member_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        },
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    ],
    "mode": "string",
  },
  "mac_address": "01:02:03:04:05:06",
  "mtu": 1500,
  "name": "elb",
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "speed": 1000,
  "state": "string",
  "type": "string",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
  "vlan": {
    "base_port": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "elb",
      "node": {
        "name": "node1"
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "tag": 100
  }
}

```

```

    }
  }
]
}

```

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
1376361	Port is already a member of a LAG.
1966189	Port is the home port or current port of an interface.
1967083	The specified type is not valid.
1967084	The specified node UUID is not valid.
1967085	The specified node name is not valid.
1967086	Node name and UUID must match if both are provided.
1967087	The specified broadcast domain UUID is not valid.
1967088	The specified broadcast domain name does not exist in the specified IPspace.
1967089	The specified broadcast domain UUID, name, and IPspace name do not match.
1967090	The specified VLAN base port UUID is not valid.
1967091	The specified VLAN base port name and node name are not valid.
1967092	The specified node does not match the node specified for the VLAN base port.
1967093	The specified VLAN base port UUID, name, and VLAN base port node name do not match.
1967094	The specified LAG member port UUID is not valid.
1967095	The specified LAG member port name and node name combination is not valid.
1967096	The specified node does not match the specified LAG member port node.
1967097	The specified LAG member ports UUID, name, and node name do not match.

Error Code	Description
1967098	VLAN POST operation has failed because admin status could not be set for the specified port.
1967099	Partial success of the VLAN POST operation. Verify the state of the created VLAN for more information.
1967100	LAG POST operation failed because admin status could not be set.
1967101	Partial success of the LAG POST operation. Verify the state of the created LAG for more information.
1967102	POST operation might have left the configuration in an inconsistent state. Check the configuration.
1967148	Failure to remove port from broadcast domain.
1967149	Failure to add port to broadcast domain.
1967175	VLANs cannot be created on ports in the Cluster IPspace.

Name	Type	Description
error	error	

Example error

```

{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

Name	Type	Description
self	href	

ipospace

Name	Type	Description
name	string	Name of the broadcast domain's IPspace

broadcast_domain

Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.

Name	Type	Description
_links	_links	
ipospace	ipospace	
name	string	Name of the broadcast domain, scoped to its IPspace
uuid	string	Broadcast domain UUID

node

Name	Type	Description
name	string	Name of node on which the port is located.

active_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	
node	node	
uuid	string	

member_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

lag

Name	Type	Description
active_ports	array[active_ports]	Active ports of a LAG (ifgrp). (Some member ports may be inactive.)
distribution_policy	string	Policy for mapping flows to ports for outbound packets through a LAG (ifgrp).
member_ports	array[member_ports]	
mode	string	Determines how the ports interact with the switch.

node

Name	Type	Description
_links	_links	
name	string	
uuid	string	

base_port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	
node	node	
uuid	string	

vlan

Name	Type	Description
base_port	base_port	Port UUID along with readable names. Either the UUID or both names may be supplied on input.
tag	integer	VLAN ID

port

Name	Type	Description
_links	_links	
broadcast_domain	broadcast_domain	Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.
enabled	boolean	
lag	lag	
mac_address	string	
mtu	integer	MTU of the port in bytes. Set by broadcast domain.
name	string	Portname, such as e0a, e1b-100 (VLAN on ethernet), a0c (LAG/ifgrp), a0d-200 (vlan on LAG/ifgrp)
node	node	
speed	integer	Link speed in Mbps
state	string	Operational state of the port.
type	string	Type of physical or virtual port
uuid	string	Port UUID

Name	Type	Description
vlan	vlan	

_links

Name	Type	Description
next	href	
self	href	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Delete a VLAN or LAG

DELETE /network/ethernet/ports/{uuid}

Deletes a VLAN or LAG.

Related ONTAP commands

- `network port ifgrp delete`
- `network port vlan delete`

Learn more

- [DOC /network/ethernet/ports](#)

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	

Response

Status: 200, Ok

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
1376858	Port already has an interface bound.
1966189	Port is the home port or current port of an interface.

Name	Type	Description
error	error	

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Retrieve a physical port, VLAN, or LAG details

GET /network/ethernet/ports/{uuid}

Retrieves the details of a physical port, VLAN, or LAG.

Related ONTAP commands

- `network port show`
- `network port ifgrp show`
- `network port vlan show`

Learn more

- [DOC /network/ethernet/ports](#)

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Port UUID

Name	Type	In	Required	Description
fields	array[string]	query	False	Specify the fields to return.

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
broadcast_domain	broadcast_domain	Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.
enabled	boolean	
lag	lag	
mac_address	string	
mtu	integer	MTU of the port in bytes. Set by broadcast domain.
name	string	Portname, such as e0a, e1b-100 (VLAN on ethernet), a0c (LAG/ifgrp), a0d-200 (vlan on LAG/ifgrp)
node	node	
speed	integer	Link speed in Mbps
state	string	Operational state of the port.
type	string	Type of physical or virtual port
uuid	string	Port UUID
vlan	vlan	

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "broadcast_domain": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ipspace": {
      "name": "ipspace1"
    },
    "name": "bd1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "lag": {
    "active_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        },
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    ],
    "distribution_policy": "string",
    "member_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        }
      }
    ]
  }
}
```

```

    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
],
"mode": "string"
},
"mac_address": "01:02:03:04:05:06",
"mtu": 1500,
"name": "e1b",
"node": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "node1",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"speed": 1000,
"state": "string",
"type": "string",
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"vlan": {
  "base_port": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "name": "e1b",
  "node": {
    "name": "node1"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tag": 100
}
}

```

Error

Status: Default, Error

Name	Type	Description
error	error	

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

Name	Type	Description
self	href	

ipospace

Name	Type	Description
name	string	Name of the broadcast domain's IPspace

broadcast_domain

Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.

Name	Type	Description
_links	_links	
ipospace	ipospace	
name	string	Name of the broadcast domain, scoped to its IPspace
uuid	string	Broadcast domain UUID

node

Name	Type	Description
name	string	Name of node on which the port is located.

active_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	
node	node	
uuid	string	

member_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

lag

Name	Type	Description
active_ports	array[active_ports]	Active ports of a LAG (ifgrp). (Some member ports may be inactive.)
distribution_policy	string	Policy for mapping flows to ports for outbound packets through a LAG (ifgrp).
member_ports	array[member_ports]	
mode	string	Determines how the ports interact with the switch.

node

Name	Type	Description
_links	_links	
name	string	
uuid	string	

base_port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	
node	node	
uuid	string	

vlan

Name	Type	Description
base_port	base_port	Port UUID along with readable names. Either the UUID or both names may be supplied on input.
tag	integer	VLAN ID

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Update a port

PATCH /network/ethernet/ports/{uuid}

Updates a port.

Related ONTAP commands

- `network port broadcast-domain add-ports`

- network port broadcast-domain remove-ports
- network port ifgrp modify
- network port modify
- network port vlan modify

Learn more

- [DOC /network/ethernet/ports](#)

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Port UUID

Request Body

Name	Type	Description
_links	_links	
broadcast_domain	broadcast_domain	Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.
enabled	boolean	
lag	lag	
mac_address	string	
mtu	integer	MTU of the port in bytes. Set by broadcast domain.
name	string	Portname, such as e0a, e1b-100 (VLAN on ethernet), a0c (LAG/ifgrp), a0d-200 (vlan on LAG/ifgrp)
node	node	
speed	integer	Link speed in Mbps
state	string	Operational state of the port.
type	string	Type of physical or virtual port
uuid	string	Port UUID

Name	Type	Description
vlan	vlan	

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "broadcast_domain": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ipspace": {
      "name": "ipspace1"
    },
    "name": "bd1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "lag": {
    "active_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        },
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    ],
    "distribution_policy": "string",
    "member_ports": [
      {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "elb",
        "node": {
          "name": "node1"
        }
      }
    ]
  }
}
```

```

    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
],
"mode": "string"
},
"mac_address": "01:02:03:04:05:06",
"mtu": 1500,
"name": "e1b",
"node": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "node1",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"speed": 1000,
"state": "string",
"type": "string",
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"vlan": {
  "base_port": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "name": "e1b",
  "node": {
    "name": "node1"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"tag": 100
}
}

```

Response

Status: 200, Ok

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
1376361	Port is already a member of a LAG.
1377562	Port cannot be used because it is currently the home port or current port of an interface.
1377563	Port is already a member of a LAG.
1967087	The specified broadcast domain UUID is not valid.
1967088	The specified broadcast domain name does not exist in the specified IPspace.
1967089	The specified broadcast domain UUID, name and IPspace name do not match.
1967094	The specified LAG member port UUID is not valid.
1967095	The specified LAG member port name and node name combination is not valid.
1967096	The specified node does not match the specified LAG member port node.
1967097	The specified LAG member ports UUID, name, and node name do not match.
1967148	Failure to remove port from broadcast domain.
1967149	Failure to add port to broadcast domain.

Name	Type	Description
error	error	

Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

Name	Type	Description
self	href	

ipspace

Name	Type	Description
name	string	Name of the broadcast domain's IPspace

broadcast_domain

Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.

Name	Type	Description
_links	_links	
ipspace	ipspace	
name	string	Name of the broadcast domain, scoped to its IPspace
uuid	string	Broadcast domain UUID

node

Name	Type	Description
name	string	Name of node on which the port is located.

active_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	
node	node	
uuid	string	

member_ports

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

lag

Name	Type	Description
active_ports	array[active_ports]	Active ports of a LAG (ifgrp). (Some member ports may be inactive.)
distribution_policy	string	Policy for mapping flows to ports for outbound packets through a LAG (ifgrp).
member_ports	array[member_ports]	
mode	string	Determines how the ports interact with the switch.

node

Name	Type	Description
_links	_links	
name	string	
uuid	string	

base_port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	
node	node	
uuid	string	

vlan

Name	Type	Description
base_port	base_port	Port UUID along with readable names. Either the UUID or both names may be supplied on input.
tag	integer	VLAN ID

port

Name	Type	Description
_links	_links	
broadcast_domain	broadcast_domain	Broadcast domain UUID along with a readable name. Either the UUID or both names may be provided on input.
enabled	boolean	
lag	lag	
mac_address	string	
mtu	integer	MTU of the port in bytes. Set by broadcast domain.
name	string	Portname, such as e0a, e1b-100 (VLAN on ethernet), a0c (LAG/ifgrp), a0d-200 (vlan on LAG/ifgrp)
node	node	
speed	integer	Link speed in Mbps
state	string	Operational state of the port.
type	string	Type of physical or virtual port
uuid	string	Port UUID

Name	Type	Description
vlan	vlan	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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