



# Manage network IP routes

## ONTAP 9.14.1 REST API reference

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April 02, 2024

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# Manage network IP routes

## Network IP routes endpoint overview

### Overview

This endpoint supports the following operations: GET (collection and instance), POST, and DELETE.

### Retrieving network routes

You can use the IP routes GET API to retrieve and display relevant information pertaining to the routes configured in the cluster. The API retrieves the list of all routes configured in the cluster, or a specific route. The fields that are returned in the response will differ with the configuration.

### Examples

#### Retrieving all routes in the cluster

The following output shows the list of all routes configured in a cluster.

```
# The API:
/api/network/ip/routes

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ip/routes?fields=*" -H "accept:
application/hal+json"

# The response:
{
  "records": [
    {
      "uuid": "5fdffb0b-62f8-11e8-853d-005056b4c971",
      "ipospace": {
        "uuid": "84f4beb2-616c-11e8-a4df-005056b4c971",
        "name": "Default",
        "_links": {
          "self": {
            "href": "/api/network/ipspaces/84f4beb2-616c-11e8-a4df-
005056b4c971"
          }
        }
      },
      "svm": {
```

```
"uuid": "3243312c-62f8-11e8-853d-005056b4c971",
"name": "vs1",
"_links": {
  "self": {
    "href": "/api/svm/svms/3243312c-62f8-11e8-853d-005056b4c971"
  }
},
"scope": "svm",
"destination": {
  "address": "10.4.3.14",
  "netmask": "18",
  "family": "ipv4"
},
"gateway": "10.4.3.1",
"_links": {
  "self": {
    "href": "/api/network/ip/routes/5fdffb0b-62f8-11e8-853d-005056b4c971"
  }
},
{
  "uuid": "84c128d2-62f9-11e8-853d-005056b4c971",
  "ipspace": {
    "uuid": "cc71aadc-62f7-11e8-853d-005056b4c971",
    "name": "ips1",
    "_links": {
      "self": {
        "href": "/api/network/ipspaces/cc71aadc-62f7-11e8-853d-005056b4c971"
      }
    }
  },
  "scope": "cluster",
  "destination": {
    "address": "::",
    "netmask": "0",
    "family": "ipv6"
  },
  "gateway": "fd20:8b1e:b255:814e::1",
  "_links": {
    "self": {
      "href": "/api/network/ip/routes/84c128d2-62f9-11e8-853d-005056b4c971"
    }
  }
}
```

```

    }
  },
  {
    "uuid": "8cc72bcd-616c-11e8-a4df-005056b4c971",
    "ipospace": {
      "uuid": "84f4beb2-616c-11e8-a4df-005056b4c971",
      "name": "Default",
      "_links": {
        "self": {
          "href": "/api/network/ipspaces/84f4beb2-616c-11e8-a4df-
005056b4c971"
        }
      }
    },
    "scope": "cluster",
    "destination": {
      "address": "0.0.0.0",
      "netmask": "0",
      "family": "ipv4"
    },
    "gateway": "10.224.64.1",
    "_links": {
      "self": {
        "href": "/api/network/ip/routes/8cc72bcd-616c-11e8-a4df-
005056b4c971"
      }
    }
  },
  {
    "uuid": "d63b6eee-62f9-11e8-853d-005056b4c971",
    "ipospace": {
      "uuid": "84f4beb2-616c-11e8-a4df-005056b4c971",
      "name": "Default",
      "_links": {
        "self": {
          "href": "/api/network/ipspaces/84f4beb2-616c-11e8-a4df-
005056b4c971"
        }
      }
    },
    "svm": {
      "uuid": "3243312c-62f8-11e8-853d-005056b4c971",
      "name": "vs1",
      "_links": {
        "self": {
          "href": "/api/svm/svms/3243312c-62f8-11e8-853d-005056b4c971"
        }
      }
    }
  }
}

```

```
    }
  },
  "scope": "svm",
  "destination": {
    "address": "fd20:8b1e:b255:814e::",
    "netmask": "64",
    "family": "ipv6"
  },
  "gateway": "fd20:8b1e:b255:814e::1",
  "_links": {
    "self": {
      "href": "/api/network/ip/routes/d63b6eee-62f9-11e8-853d-005056b4c971"
    }
  }
},
"num_records": 4,
"_links": {
  "self": {
    "href": "/api/network/ip/routes?fields=*"
  }
}
}
```

---

### Retrieving a specific Cluster-scoped route

The following output shows the returned response when a specific Cluster-scoped route is requested. The system returns an error if there is no route with the requested UUID. SVM information is not returned for Cluster-scoped routes.

---

```
# The API:
/api/network/ip/routes/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ip/routes/84c128d2-62f9-11e8-853d-005056b4c971?fields=*" -H "accept: application/hal+json"

# The response:
{
  "uuid": "84c128d2-62f9-11e8-853d-005056b4c971",
  "ipspace": {
    "uuid": "cc71aadc-62f7-11e8-853d-005056b4c971",
    "name": "ips1",
    "_links": {
      "self": {
        "href": "/api/network/ipspaces/cc71aadc-62f7-11e8-853d-005056b4c971"
      }
    }
  },
  "scope": "cluster",
  "destination": {
    "address": "::",
    "netmask": "0",
    "family": "ipv6"
  },
  "gateway": "fd20:8b1e:b255:814e::1",
  "_links": {
    "self": {
      "href": "/api/network/ip/routes/84c128d2-62f9-11e8-853d-005056b4c971"
    }
  }
}
```

---

### Retrieving a specific SVM-scoped route

The following output shows the returned response when a specific SVM-scoped route is requested. The system returns an error if there is no route with the requested UUID. The SVM object is only included for SVM-scoped routes.

---

```
# The API:
/api/network/ip/routes/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ip/routes/d63b6eee-62f9-11e8-853d-005056b4c971?fields=*" -H "accept: application/hal+json"

# The response:
{
  "uuid": "d63b6eee-62f9-11e8-853d-005056b4c971",
  "ipspace": {
    "uuid": "84f4beb2-616c-11e8-a4df-005056b4c971",
    "name": "Default",
    "_links": {
      "self": {
        "href": "/api/network/ipspaces/84f4beb2-616c-11e8-a4df-005056b4c971"
      }
    }
  },
  "svm": {
    "uuid": "3243312c-62f8-11e8-853d-005056b4c971",
    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/3243312c-62f8-11e8-853d-005056b4c971"
      }
    }
  },
  "scope": "svm",
  "destination": {
    "address": "fd20:8b1e:b255:814e::",
    "netmask": "64",
    "family": "ipv6"
  },
  "gateway": "fd20:8b1e:b255:814e::1",
  "_links": {
    "self": {
      "href": "/api/network/ip/routes/d63b6eee-62f9-11e8-853d-005056b4c971"
    }
  }
}
```



## Creating network routes

You can use the POST API to create an SVM-scoped route by specifying the associated SVM, or a Cluster-scoped route by specifying the associated IPspace.

## Examples

### Creating a Cluster-scoped route

IPspace is required to create a Cluster-scoped route. If the IPspace is not specified, the route will be created in the Default IPspace. The default destination will be set to "0.0.0.0/0" for IPv4 gateway addresses or ":::0" for IPv6 gateway addresses.

```
# The API:
/api/network/ip/routes

# The call:
curl -X POST "https://<mgmt-ip>/api/network/ip/routes?return_records=true"
-H "accept: application/json" -d '{ "ipSpace": { "name": "ips1" },
"gateway": "10.10.10.1"}'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "uuid": "ae583c9e-9ac7-11e8-8bc9-005056bbd531",
      "ipSpace": {
        "name": "ips1"
      },
      "gateway": "10.10.10.1"
    }
  ]
}
```

### Creating an SVM-scoped route

To create an SVM-scoped route, the associated SVM can be identified by either its UUID or name.

```
# The API:
/api/network/ip/routes

# The call:
curl -X POST "https://<mgmt-ip>/api/network/ip/routes?return_records=true"
-H "accept: application/json" -d '{ "svm": { "name": "vs0" }, "gateway":
"10.10.10.1"}'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "uuid": "38805a91-9ac9-11e8-8bc9-005056bbd531",
      "svm": {
        "name": "vs0"
      },
      "gateway": "10.10.10.1"
    }
  ]
}
```

---

## Deleting network routes

You can use the DELETE API to delete a specific route identified by its UUID.

### Example

#### Deleting a specific route

```
# The API:
/api/network/ip/routes/{uuid}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/network/ip/routes/38805a91-9ac9-
11e8-8bc9-005056bbd531"
```

# Retrieve IP routes

GET /network/ip/routes

**Introduced In:** 9.6

Retrieves the collection of IP routes.

## Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [Requesting specific fields](#) to learn more.

- `interfaces.*`

## Related ONTAP commands

- `network route show`
- `network route show-lifs`

## Parameters

Name	Type	In	Required	Description
scope	string	query	False	Filter by scope
ipspace.uuid	string	query	False	Filter by ipspace.uuid
ipspace.name	string	query	False	Filter by ipspace.name
gateway	string	query	False	Filter by gateway
uuid	string	query	False	Filter by uuid
interfaces.uuid	string	query	False	Filter by interfaces.uuid <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>
interfaces.ip.address	string	query	False	Filter by interfaces.ip.address <ul style="list-style-type: none"><li>• Introduced in: 9.9</li></ul>

Name	Type	In	Required	Description
interfaces.name	string	query	False	Filter by interfaces.name  • Introduced in: 9.9
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
destination.address	string	query	False	Filter by destination.address
destination.family	string	query	False	Filter by destination.family
destination.netmask	string	query	False	Filter by destination.netmask
metric	integer	query	False	Filter by metric  • Introduced in: 9.11
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.  • Default value: 1

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>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.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
<a href="#">error</a>	<a href="#">error</a>	
num_records	integer	Number of records
records	array[ <a href="#">network_route</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist"
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "destination": {
    "address": "10.10.10.7",
    "family": "ipv4",
    "netmask": "24"
  },
  "gateway": "10.1.1.1",
  "interfaces": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "ip": {
    "address": "10.10.10.7"
  },
  "name": "lif1",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
  "ipspace": {
    "_links": {
```

```

    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "exchange",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"scope": "svm",
"svm": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
}

```

## Error

Status: Default, Error

Name	Type	Description
error	<a href="#">returned_error</a>	

### 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	<a href="#">href</a>	
self	<a href="#">href</a>	

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message

\_links

Name	Type	Description
self	<a href="#">href</a>	

ip\_info

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address
family	string	IPv4 or IPv6

Name	Type	Description
netmask	string	Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, the default value is 64 with a valid range of 1 to 127. Output is always netmask length.

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interfaces

A network interface. Either UUID or name may be supplied on input.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
ip	<a href="#">ip</a>	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

ipspace

Applies to both SVM and cluster-scoped objects. Either the UUID or name may be supplied on input.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	IPspace name
uuid	string	IPspace UUID

svm

Applies only to SVM-scoped objects. Either the UUID or name must be supplied.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

#### network\_route

Name	Type	Description
_links	<a href="#">_links</a>	
destination	<a href="#">ip_info</a>	IP information
gateway	string	The IP address of the gateway router leading to the destination.
interfaces	array[ <a href="#">interfaces</a> ]	IP interfaces on the same subnet as the gateway.
ipspace	<a href="#">ipspace</a>	Applies to both SVM and cluster-scoped objects. Either the UUID or name may be supplied on input.
metric	integer	Indicates a preference order between several routes to the same destination. With typical usage, the default metrics provided are adequate, there is no need to specify a metric in the route creation.
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
svm	<a href="#">svm</a>	Applies only to SVM-scoped objects. Either the UUID or name must be supplied.
uuid	string	The UUID that uniquely identifies the route.

returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Create a cluster-scoped or SVM-scoped static route

POST /network/ip/routes

**Introduced In:** 9.6

Creates a Cluster-scoped or SVM-scoped static route.

### Required properties

- gateway - IP address to route packets to.
- SVM-scoped routes
  - svm.name or svm.uuid - SVM that route is applied to.
- cluster-scoped routes
  - There are no additional required fields for Cluster-scoped routes.

### Default property values

If not specified in POST, the following default property values are assigned:

- destination - 0.0.0.0/0 for IPv4 or ::/0 for IPv6.
- ipspace.name
  - *Default* for Cluster-scoped routes.
  - Name of the SVM's IPspace for SVM-scoped routes.
- metric - 20.

### Related ONTAP commands

- network route create

## Parameters

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

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
destination	<a href="#">ip_info</a>	IP information
gateway	string	The IP address of the gateway router leading to the destination.
interfaces	array[ <a href="#">interfaces</a> ]	IP interfaces on the same subnet as the gateway.
ipspace	<a href="#">ipspace</a>	Applies to both SVM and cluster-scoped objects. Either the UUID or name may be supplied on input.
metric	integer	Indicates a preference order between several routes to the same destination. With typical usage, the default metrics provided are adequate, there is no need to specify a metric in the route creation.
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
svm	<a href="#">svm</a>	Applies only to SVM-scoped objects. Either the UUID or name must be supplied.
uuid	string	The UUID that uniquely identifies the route.

**Example request**



```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "destination": {
    "address": "10.10.10.7",
    "family": "ipv4",
    "netmask": "24"
  },
  "gateway": "10.1.1.1",
  "interfaces": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ip": {
      "address": "10.10.10.7"
    },
    "name": "lif1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "scope": "svm",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

## Response

Status: 201, Created

Name	Type	Description
_links	<a href="#">_links</a>	
error	<a href="#">error</a>	
num_records	integer	Number of records
records	array[ <a href="#">network_route</a> ]	



## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist"
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "destination": {
      "address": "10.10.10.7",
      "family": "ipv4",
      "netmask": "24"
    },
    "gateway": "10.1.1.1",
    "interfaces": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ip": {
        "address": "10.10.10.7"
      },
      "name": "lif1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "ipspace": {
      "_links": {
```

```

    "self": {
      "href": "/api/resourcelink"
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "scope": "svm",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}

```

## Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

## Error

Status: Default

## ONTAP Error Response Codes

Error Code	Description
1966265	The destination and gateway must belong to the same IP address family.
1966345	Duplicate route exists.
1966505	The gateway address cannot be the same as a LIF address. A LIF is already configured with that IP address.
1967080	The destination.address is missing.

Error Code	Description
1967081	The specified SVM must exist in the specified IPspace.
1967082	The specified ipspace.uuid and ipspace.name refer to different IPspaces.
1967146	The specified svm.name is not valid.
2621462	The specified SVM does not exist.
2621574	This operation is not permitted on an SVM that is configured as the destination of a MetroCluster SVM relationship.
2621706	The specified UUID and name refer to different SVMs.

Also see the table of common errors in the [Response body](#) overview section of this documentation.

Name	Type	Description
error	<a href="#">returned_error</a>	

### 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	<a href="#">href</a>	

ip\_info

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address
family	string	IPv4 or IPv6
netmask	string	Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, the default value is 64 with a valid range of 1 to 127. Output is always netmask length.

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interfaces

A network interface. Either UUID or name may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
ip	<a href="#">ip</a>	IP information

Name	Type	Description
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

#### ipspace

Applies to both SVM and cluster-scoped objects. Either the UUID or name may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	IPspace name
uuid	string	IPspace UUID

#### svm

Applies only to SVM-scoped objects. Either the UUID or name must be supplied.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

#### network\_route

Name	Type	Description
_links	<a href="#">_links</a>	
destination	<a href="#">ip_info</a>	IP information
gateway	string	The IP address of the gateway router leading to the destination.

Name	Type	Description
interfaces	array[ <a href="#">interfaces</a> ]	IP interfaces on the same subnet as the gateway.
ipspace	<a href="#">ipspace</a>	Applies to both SVM and cluster-scoped objects. Either the UUID or name may be supplied on input.
metric	integer	Indicates a preference order between several routes to the same destination. With typical usage, the default metrics provided are adequate, there is no need to specify a metric in the route creation.
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
svm	<a href="#">svm</a>	Applies only to SVM-scoped objects. Either the UUID or name must be supplied.
uuid	string	The UUID that uniquely identifies the route.

#### \_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments

Name	Type	Description
code	string	Error code
message	string	Error message

returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Delete an IP route

DELETE /network/ip/routes/{uuid}

Introduced In: 9.6

Deletes a specific IP route.

### Related ONTAP commands

- `network route delete`

### Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Route UUID

### Response

Status: 200, Ok

### Error

Status: Default, Error

Name	Type	Description
error	<a href="#">returned_error</a>	

### 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

returned\_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 details for an IP route

GET /network/ip/routes/{uuid}

**Introduced In:** 9.6

Retrieves the details of a specific IP route.

### Related ONTAP commands

- `network route show`
- `network route show-lifs`

### Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Route UUID
fields	array[string]	query	False	Specify the fields to return.

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
destination	<a href="#">ip_info</a>	IP information
gateway	string	The IP address of the gateway router leading to the destination.
interfaces	array[ <a href="#">interfaces</a> ]	IP interfaces on the same subnet as the gateway.
ipspace	<a href="#">ipspace</a>	Applies to both SVM and cluster-scoped objects. Either the UUID or name may be supplied on input.
metric	integer	Indicates a preference order between several routes to the same destination. With typical usage, the default metrics provided are adequate, there is no need to specify a metric in the route creation.
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
svm	<a href="#">svm</a>	Applies only to SVM-scoped objects. Either the UUID or name must be supplied.
uuid	string	The UUID that uniquely identifies the route.

**Example response**

A large, empty rectangular box with a thin, dashed border, occupying most of the page. It is intended for an example response.

```

{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "destination": {
    "address": "10.10.10.7",
    "family": "ipv4",
    "netmask": "24"
  },
  "gateway": "10.1.1.1",
  "interfaces": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ip": {
      "address": "10.10.10.7"
    },
    "name": "lif1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "scope": "svm",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}

```

## Error

Status: Default, Error

Name	Type	Description
error	<a href="#">returned_error</a>	

### 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	<a href="#">href</a>	

ip\_info

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address
family	string	IPv4 or IPv6
netmask	string	Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, the default value is 64 with a valid range of 1 to 127. Output is always netmask length.

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interfaces

A network interface. Either UUID or name may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
ip	<a href="#">ip</a>	IP information

Name	Type	Description
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

#### ipspace

Applies to both SVM and cluster-scoped objects. Either the UUID or name may be supplied on input.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	IPspace name
uuid	string	IPspace UUID

#### svm

Applies only to SVM-scoped objects. Either the UUID or name must be supplied.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### returned\_error

<b>Name</b>	<b>Type</b>	<b>Description</b>
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.



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