

Virtual Network and IPAM Microservice

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1. Overview

API for the Virtual Network and IPAM Microservice.

1.1. Version information

Version : 1.0

1.2. URI scheme

Host : 10.62.59.155:46016

BasePath : /

1.3. Tags

- network-controller-impl : /api/1.0/networks

2. Resources

2.1. Network-controller-impl

/api/1.0/networks

2.1.1. Create Network

POST /api/1.0/networks

Description

Creates a network

Parameters

Type	Name	Description	Schema
Body	network <i>required</i>	network	Network

Responses

HTTP Code	Description	Schema
201	Created	CreatedResponse
401	Unauthorized	No Content

HTTP Code	Description	Schema
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks
```

Request body

```
{
  "static" : true,
  "name" : "Network1",
  "description" : "Private Network 1",
  "type" : "PRIVATE_LAN",
  "vlanId" : 1,
  "staticIpv4NetworkConfiguration" : {
    "gateway" : "172.31.143.254",
    "subnet" : "255.255.240.0",
    "primaryDns" : "172.31.143.250",
    "secondaryDns" : "172.31.143.251",
    "dnsSuffix" : "customer.local",
    "ipRange" : [ {
      "startingIp" : "172.31.142.1",
      "endingIp" : "172.31.142.254"
    } ]
  }
}
```

Example HTTP response

Response 201

```
{
  "id" : 0
}
```

2.1.2. Get Networks

GET /api/1.0/networks

Description

Gets a paged result of networks using the optional pagination offset and limit provided. The default limit is 10 records. An optional querystring parameter of 'name' is available to find a network by name.

Parameters

Type	Name	Description	Schema	Default
Query	limit <i>optional</i>	limit	integer (int32)	10
Query	name <i>optional</i>	name	string	
Query	offset <i>optional</i>	offset	integer (int32)	0

Responses

HTTP Code	Description	Schema
200	OK	PagedResult
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

/api/1.0/networks

Request query

```
{
  "limit" : 0,
  "name" : "string",
  "offset" : 0
}
```

Example HTTP response

Response 200

```
{
  "data" : [ "object" ],
  "pages" : {
    "current" : 0,
    "next" : 0,
    "previous" : 0,
    "total" : 0
  },
  "pagination" : {
    "limit" : 0,
    "offset" : 0,
    "total" : 0
  }
}
```

2.1.3. Get Network (by ID)

```
GET /api/1.0/networks/{networkId}
```

Description

Returns the network information for the given networkId path variable

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)

Responses

HTTP Code	Description	Schema
200	OK	Network
401	Unauthorized	No Content

HTTP Code	Description	Schema
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks/0
```

Example HTTP response

Response 200

```
{
  "static" : true,
  "name" : "Network1",
  "description" : "Private Network 1",
  "type" : "PRIVATE_LAN",
  "vlanId" : 1,
  "staticIpv4NetworkConfiguration" : {
    "gateway" : "172.31.143.254",
    "subnet" : "255.255.240.0",
    "primaryDns" : "172.31.143.250",
    "secondaryDns" : "172.31.143.251",
    "dnsSuffix" : "customer.local",
    "ipRange" : [ {
      "startingIp" : "172.31.142.1",
      "endingIp" : "172.31.142.254"
    } ]
  }
}
```

2.1.4. Update Network

```
PUT /api/1.0/networks/{networkId}
```

Description

Updates the network for the given networkId path variable

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)
Body	network <i>required</i>	network	Network

Responses

HTTP Code	Description	Schema
201	Created	No Content
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks/0
```

Request body


```
{
  "static" : true,
  "name" : "Network1",
  "description" : "Private Network 1",
  "type" : "PRIVATE_LAN",
  "vlanId" : 1,
  "staticIpv4NetworkConfiguration" : {
    "gateway" : "172.31.143.254",
    "subnet" : "255.255.240.0",
    "primaryDns" : "172.31.143.250",
    "secondaryDns" : "172.31.143.251",
    "dnsSuffix" : "customer.local",
    "ipRange" : [ {
      "startingIp" : "172.31.142.1",
      "endingIp" : "172.31.142.254"
    } ]
  }
}
```

2.1.5. Delete Network

```
DELETE /api/1.0/networks/{networkId}
```

Description

Deletes the network for the given networkId path variable

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)

Responses

HTTP Code	Description	Schema
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

Consumes

- `application/json`

Produces

- /

Example HTTP request

Request path

```
/api/1.0/networks/0
```

2.1.6. Reserve IPv4 Address Pool Entries

```
POST /api/1.0/networks/{networkId}/ipAddressPools
```

Description

Reserves IPv4 address pool entries for the given `networkId` path variable. The body is required to contain the number of IP's requested, and a `UsageId` (string identifier) for the process or entity reserving them.

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)
Body	reserveIpPoolAddressesRequest <i>required</i>	reserveIpPoolAddressesRequest	ReserveIpPoolAddressesRequest

Responses

HTTP Code	Description	Schema
201	Created	< object > array
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- /

Example HTTP request

Request path

```
/api/1.0/networks/0/ipAddressPools
```

Request body

```
{
  "usageId" : "A1B2C3D",
  "quantityRequested" : 3
}
```

Example HTTP response

Response 201

```
[ "object" ]
```

2.1.7. Get IPv4 Address Pool Entries

```
GET /api/1.0/networks/{networkId}/ipAddressPools
```

Description

Gets IPv4 Address Pool entries for the given `networkId` path variable. Optionally the data can be filtered by the 'state'. Pagination is provided via the offset and limit query parameters. The default limit is 10 records

Parameters

Type	Name	Description	Schema	Default
Path	networkId <i>required</i>	networkId	integer (int64)	
Query	limit <i>optional</i>	limit	integer (int32)	10
Query	offset <i>optional</i>	offset	integer (int32)	0
Query	state <i>optional</i>	ALL	enum (ALL, AVAILABLE, RESERVED, ASSIGNED)	
Query	usageId <i>optional</i>	usageId	string	

Responses

HTTP Code	Description	Schema
200	OK	PagedResult
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
/api/1.0/networks/0/ipAddressPools
```

Request query

```
{
  "limit" : 0,
  "offset" : 0,
  "state" : "string",
  "usageId" : "string"
}
```

Example HTTP response

Response 200

```
{
  "data" : [ "object" ],
  "pages" : {
    "current" : 0,
    "next" : 0,
    "previous" : 0,
    "total" : 0
  },
  "pagination" : {
    "limit" : 0,
    "offset" : 0,
    "total" : 0
  }
}
```

2.1.8. Assign IPv4 Address Pool Entries

PUT /api/1.0/networks/{networkId}/ipAddressPools

Description

Assigns IPv4 address pool entries for the given `networkId` path variable. The body is required to contain an array with the specific IP addresses to assign, and a `UsageId` (string identifier) for the process or entity reserving them.

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)
Body	assignIpPoolAddresses <i>required</i>	assignIpPoolAddresses	AssignIpPoolAddresses

Responses

HTTP Code	Description	Schema
201	Created	No Content
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks/0/ipAddressPools
```

Request body

```
{
  "ipAddresses" : [ "string" ],
  "usageId" : "A1B2C3D"
}
```

2.1.9. Release All IPv4 Address Pool Entries (for a Usage ID on a given network)

```
DELETE /api/1.0/networks/{networkId}/ipAddressPools
```

Description

Releases all IPv4 address pool entries for the given `networkId` path variable. The body is required to contain a `UsageId` (string identifier).

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)
Query	usageId <i>required</i>	usageId	string

Responses

HTTP Code	Description	Schema
204	No Content	No Content
401	Unauthorized	No Content

HTTP Code	Description	Schema
403	Forbidden	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks/0/ipAddressPools
```

Request query

```
{
  "usageId" : "string"
}
```

2.1.10. Export IP Address Pool Data as Stream

```
GET /api/1.0/networks/{networkId}/ipAddressPools/export
```

Description

Export IP Address Pool Data for the given `networkId` path variable

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)

Responses

HTTP Code	Description	Schema
200	OK	InputStreamResource
401	Unauthorized	No Content

HTTP Code	Description	Schema
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `application/octet-stream`

Example HTTP request

Request path

```
/api/1.0/networks/0/ipAddressPools/export
```

Example HTTP response

Response 200


```

{
  "description" : "string",
  "file" : "file",
  "filename" : "string",
  "inputStream" : { },
  "open" : true,
  "readable" : true,
  "uri" : {
    "absolute" : true,
    "authority" : "string",
    "fragment" : "string",
    "host" : "string",
    "opaque" : true,
    "path" : "string",
    "port" : 0,
    "query" : "string",
    "rawAuthority" : "string",
    "rawFragment" : "string",
    "rawPath" : "string",
    "rawQuery" : "string",
    "rawSchemeSpecificPart" : "string",
    "rawUserInfo" : "string",
    "scheme" : "string",
    "schemeSpecificPart" : "string",
    "userInfo" : "string"
  },
  "url" : {
    "authority" : "string",
    "content" : "object",
    "defaultPort" : 0,
    "file" : "string",
    "host" : "string",
    "path" : "string",
    "port" : 0,
    "protocol" : "string",
    "query" : "string",
    "ref" : "string",
    "userInfo" : "string"
  }
}

```

2.1.11. Release IPv4 Address Pool Entry

```
DELETE /api/1.0/networks/{networkId}/ipAddressPools/{ipAddress}
```

Description

Releases a specific IP address pool entry for the given `networkId` path variable. The body is required

to contain a IP address to release.

Parameters

Type	Name	Description	Schema
Path	ipAddress <i>required</i>	ipAddress	string
Path	networkId <i>required</i>	networkId	integer (int64)

Responses

HTTP Code	Description	Schema
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks/0/ipAddressPools/string
```

2.1.12. Add IPv4 Range

```
POST /api/1.0/networks/{networkId}/ipv4Ranges
```

Description

Adds an IPv4 Range to an existing network that is specified by the networkId path variable

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)

Type	Name	Description	Schema
Body	ipRange <i>required</i>	ipRange	IpRange

Responses

HTTP Code	Description	Schema
201	Created	CreatedResponse
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- [application/json](#)

Produces

- [/](#)

Example HTTP request

Request path

```
/api/1.0/networks/0/ipv4Ranges
```

Request body

```
{
  "startingIp" : "172.31.142.1",
  "endingIp" : "172.31.142.254"
}
```

Example HTTP response

Response 201

```
{
  "id" : 0
}
```

2.1.13. Update IPv4 Range

```
PUT /api/1.0/networks/{networkId}/ipv4Ranges/{rangeId}
```

Description

Updates an IPv4 Range for the given networkId and rangeId path variables

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)
Path	rangeId <i>required</i>	rangeId	integer (int64)
Body	ipRange <i>required</i>	ipRange	IpRange

Responses

HTTP Code	Description	Schema
201	Created	No Content
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks/0/ipv4Ranges/0
```

Request body

```
{
  "startingIp" : "172.31.142.1",
  "endingIp" : "172.31.142.254"
}
```

2.1.14. Delete IPv4 Range

```
DELETE /api/1.0/networks/{networkId}/ipv4Ranges/{rangeId}
```

Description

Deletes an IPv4 Range for the given networkId and rangeId path variables

Parameters

Type	Name	Description	Schema
Path	networkId <i>required</i>	networkId	integer (int64)
Path	rangeId <i>required</i>	rangeId	integer (int64)

Responses

HTTP Code	Description	Schema
204	No Content	No Content
401	Unauthorized	No Content
403	Forbidden	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
/api/1.0/networks/0/ipv4Ranges/0
```

3. Definitions

3.1. AssignIpPoolAddresses

A data transfer object for containing the usageId and a list of ip addresses to be assigned

Name	Description	Schema
ipAddresses <i>optional</i>	Example : ["string"]	< string > array
usageId <i>optional</i>	Example : "A1B2C3D"	string

3.2. CreatedResponse

Name	Description	Schema
id <i>optional</i>	Example : 0	integer (int64)

3.3. File

Name	Description	Schema
absolute <i>optional</i>	Example : true	boolean
absoluteFile <i>optional</i>	Example : "file"	file
absolutePath <i>optional</i>	Example : "string"	string
canonicalFile <i>optional</i>	Example : "file"	file
canonicalPath <i>optional</i>	Example : "string"	string
directory <i>optional</i>	Example : true	boolean
file <i>optional</i>	Example : true	boolean
freeSpace <i>optional</i>	Example : 0	integer (int64)
hidden <i>optional</i>	Example : true	boolean
name <i>optional</i>	Example : "string"	string
parent <i>optional</i>	Example : "string"	string

Name	Description	Schema
parentFile <i>optional</i>	Example : "file"	file
path <i>optional</i>	Example : "string"	string
totalSpace <i>optional</i>	Example : 0	integer (int64)
usableSpace <i>optional</i>	Example : 0	integer (int64)

3.4. InputStream

Type : object

3.5. InputStreamResource

Name	Description	Schema
description <i>optional</i>	Example : "string"	string
file <i>optional</i>	Example : "file"	file
filename <i>optional</i>	Example : "string"	string
inputStream <i>optional</i>	Example : "InputStream"	InputStream
open <i>optional</i>	Example : true	boolean
readable <i>optional</i>	Example : true	boolean
uri <i>optional</i>	Example : "URI"	URI
url <i>optional</i>	Example : "URL "	URL

3.6. IpRange

Name	Description	Schema
endingIp <i>optional</i>	Example : "172.31.142.254"	string
startingIp <i>optional</i>	Example : "172.31.142.1"	string

3.7. Network

Name	Description	Schema
description <i>optional</i>	Example : "Private Network 1"	string
name <i>optional</i>	Example : "Network1"	string
static <i>optional</i>	Example : true	boolean
staticIpv4NetworkConfiguration <i>optional</i>	Example : "StaticIpv4NetworkConfiguration"	StaticIpv4NetworkConfiguration
type <i>optional</i>	Example : "PRIVATE_LAN"	enum (PUBLIC_LAN, PRIVATE_LAN, STORAGE_ISCSI_SAN, STORAGE_FCOE_SAN, OOB_OR_INFRASTRUCTURE_MANAGEMENT, HYPERVISOR_MANAGEMENT, HYPERVISOR_MIGRATION, HYPERVISOR_CLUSTER_PRIVATE, PXE, FILESHARE, FIP_SNOOPING, HARDWARE_MANAGEMENT)
vlanId <i>optional</i>	Example : 1	integer (int32)

3.8. PagedResult

Name	Description	Schema
data <i>optional</i>	Example : ["object"]	< object > array
pages <i>optional</i>	Example : "Pages"	Pages
pagination <i>optional</i>	Example : "Pagination"	Pagination

3.9. Pages

Name	Description	Schema
current <i>optional</i>	Example : 0	integer (int64)
next <i>optional</i>	Example : 0	integer (int64)
previous <i>optional</i>	Example : 0	integer (int64)
total <i>optional</i>	Example : 0	integer (int64)

3.10. Pagination

Name	Description	Schema
limit <i>optional</i>	Example : 0	integer (int64)
offset <i>optional</i>	Example : 0	integer (int64)
total <i>optional</i>	Example : 0	integer (int64)

3.11. ReserveIpPoolAddressesRequest

Name	Description	Schema
quantityRequested <i>optional</i>	Example : 3	integer (int64)
usageId <i>optional</i>	Example : "A1B2C3D"	string

3.12. StaticIpv4NetworkConfiguration

Name	Description	Schema
dnsSuffix <i>optional</i>	Example : "customer.local"	string
gateway <i>optional</i>	Example : "172.31.143.254"	string
ipRange <i>optional</i>	Example : ["IpRange"]	< IpRange > array
primaryDns <i>optional</i>	Example : "172.31.143.250"	string

Name	Description	Schema
secondaryDns <i>optional</i>	Example : "172.31.143.251"	string
subnet <i>optional</i>	Example : "255.255.240.0"	string

3.13. URI

Name	Description	Schema
absolute <i>optional</i>	Example : true	boolean
authority <i>optional</i>	Example : "string"	string
fragment <i>optional</i>	Example : "string"	string
host <i>optional</i>	Example : "string"	string
opaque <i>optional</i>	Example : true	boolean
path <i>optional</i>	Example : "string"	string
port <i>optional</i>	Example : 0	integer (int32)
query <i>optional</i>	Example : "string"	string
rawAuthority <i>optional</i>	Example : "string"	string
rawFragment <i>optional</i>	Example : "string"	string
rawPath <i>optional</i>	Example : "string"	string
rawQuery <i>optional</i>	Example : "string"	string
rawSchemeSpecificPart <i>optional</i>	Example : "string"	string
rawUserInfo <i>optional</i>	Example : "string"	string
scheme <i>optional</i>	Example : "string"	string
schemeSpecificPart <i>optional</i>	Example : "string"	string

Name	Description	Schema
userInfo <i>optional</i>	Example : "string"	string

3.14. URL

Name	Description	Schema
authority <i>optional</i>	Example : "string"	string
content <i>optional</i>	Example : "object"	object
defaultPort <i>optional</i>	Example : 0	integer (int32)
file <i>optional</i>	Example : "string"	string
host <i>optional</i>	Example : "string"	string
path <i>optional</i>	Example : "string"	string
port <i>optional</i>	Example : 0	integer (int32)
protocol <i>optional</i>	Example : "string"	string
query <i>optional</i>	Example : "string"	string
ref <i>optional</i>	Example : "string"	string
userInfo <i>optional</i>	Example : "string"	string