



## **Manage storage pools**

### **ONTAP 9.12.1 REST API reference**

NetApp  
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# Manage storage pools

## Storage pools endpoint overview

### Retrieving storage pool information

The Storage Pools GET API retrieves all shared storage pools in the cluster.

The collection GET returns the storage pool identifiers, UUID and name. The instance GET, by default, returns all of the properties defined in the storage\_pool object. The "show\_spare" query returns a response outside of the records body, which includes the groups of usable spares in the cluster. The usable count for each class of spares does not include reserved spare capacity recommended by ONTAP best practices.

### Creating storage pools

Creating a shared storage pool is recommended when distributing flash capacity across the cache tiers of HDD aggregates across an HA pair. POST can be used with specific properties to create a storage pool as requested. At a minimum, the storage pool name, disk count, and the nodes where it should reside, are required to create a new instance.

When using POST with input properties, three properties are required. These are:

- name - Name of the storage pool.
- node.name or node.uuid - Node that can use capacity from the storage pool in their cache tiers.
- capacity.disk\_count - Number of disks to be used to create the storage pool.

## Examples

### Retrieving a list of storage pools from the cluster

The following example shows the response with a list of storage pools in the cluster:

```
{
"records": [
{
"uuid": "8255fef7-4737-11ec-bd1b-005056bbb879",
"nodes": [
{
"uuid": "caf95bec-f801-11e8-8af9-005056bbe5c1",
"name": "node-1",
},
{
"uuid": "cf9ab500-ff3e-4bce-bfd7-d679e6078f47",
"name": "node-2",
}
],
"_links": {
"self": {
"href": "/api/storage/pools/8255fef7-4737-11ec-bd1b-005056bbb879"
}
}
}
],
"num_records": 1,
"_links": {
"self": {
"href": "/api/storage/pools"
}
}
}
```

```
# The API:
/api/storage/pools

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

# The response:
{
"records": [
{
"uuid": "8255fef7-4737-11ec-bd1b-005056bbb879",
"name": "new_sp",
"nodes": [
{
```

```

    "uuid": "caf95bec-f801-11e8-8af9-005056bbe5c1",
    "name": "node-1",
  },
  {
    "uuid": "cf9ab500-ff3e-4bce-bfd7-d679e6078f47",
    "name": "node-2",
  }
],
"storage_type": "ssd",
"capacity": {
  "remaining": 1846542336,
  "total": 7386169344,
  "spare_allocation_units": [
    {
      "node": {
        "uuid": "caf95bec-f801-11e8-8af9-005056bbe5c1",
        "name": "node-1",
      },
      "count": 1,
      "syncmirror_pool": "pool0",
      "size": 1846542336,
      "available_size": 1846542336
    },
    {
      "node": {
        "uuid": "cf9ab500-ff3e-4bce-bfd7-d679e6078f47",
        "name": "node-2",
      },
      "count": 0,
      "syncmirror_pool": "pool0",
      "size": 1846542336,
      "available_size": 0
    }
  ],
  "used_allocation_units": [
    {
      "aggregate": {
        "uuid": "19425837-f2fa-4a9f-8f01-712f626c983c",
        "name": "test_a"
      },
      "allocated_unit_count": 2,
      "node": {
        "uuid": "caf95bec-f801-11e8-8af9-005056bbe5c1",
        "name": "node-1",
      },
      "capacity": 2769813504
    }
  ]
}

```

```

    },
    {
      "aggregate": {
        "uuid": "f4cc30d5-b052-493a-a49f-19781425f987",
        "name": "test_b"
      },
      "allocated_unit_count": 1,
      "node": {
        "uuid": "cf9ab500-ff3e-4bce-bfd7-d679e6078f47",
        "name": "node-2",
      },
      "capacity": 1384906752
    }
  ],
  "disk_count": 4,
  "disks": [
    {
      "disk": {
        "name": "VMw-1.11"
      },
      "usable_size": 1902379008,
      "total_size": 1908871168,
    },
    {
      "disk": {
        "name": "VMw-1.12"
      },
      "usable_size": 1902379008,
      "total_size": 1908871168,
    },
    {
      "disk": {
        "name": "VMw-1.23"
      },
      "usable_size": 1902379008,
      "total_size": 1908871168,
    },
    {
      "disk": {
        "name": "VMw-1.24"
      },
      "usable_size": 1902379008,
      "total_size": 1908871168,
    }
  ]
},

```

```

    "health": {
      "state": "normal",
      "is_healthy": true
    },
  ],
  "num_records": 1,
}

```

## Retrieving the usable spare information for the cluster

The following example shows the response from retrieving usable spare information according to ONTAP best practices.

```

# The API:
/api/storage/pools?show_spares=true

# The call:
curl -X GET "https://<mgmt-ip>/api/storage/pools?show_spares=true" -H
"accept: application/json"

# The response:
{
  "records": [],
  "num_records": 0,
  "spares": [
    {
      "disk_class": "solid_state",
      "disk_type": "ssd",
      "size": 3720609792,
      "checksum_style": "block",
      "syncmirror_pool": "pool0",
      "usable": 12,
      "nodes": [
        {
          "uuid": "54af4069-c1f7-11ec-884e-005056bb6e0b",
          "name": "node-1",
          "_links": {
            "self": {
              "href": "/api/cluster/nodes/54af4069-c1f7-11ec-884e-
005056bb6e0b"
            }
          }
        },
        {
          "uuid": "d50f1acb-c1f6-11ec-9dfd-005056bb8d04",

```

```

        "name": "node-2",
        "_links": {
            "self": {
                "href": "/api/cluster/nodes/d50f1acb-c1f6-11ec-9dfd-
005056bb8d04"
            }
        }
    }
]
},
"_link": {
    "self": {
        "href": "/api/storage/aggregates?show_spares=true"
    }
}
}

```

### Simulating the creation of a storage pool

The following example shows the response containing the simulated layout details of a new storage pool in the cluster.



Each storage pool UUID provided in this response is not guaranteed to be the same UUID for the storage pool if it is created.

```

# The API:
/api/storage/pools

# The call:
curl -X POST "https://<mgmt-ip>/api/storage/pools?simulate=true&fields=*"
-d "{\"nodes\": [{\"name\": \"node1\"}, {\"name\": \"node2\"}], \"name\":
\"storage_pool_1\", \"capacity\": {\"disk_count\": \"4\"}}" -H "accept:
application/json"

# The response:
{
  "records": [
    {
      "uuid": "cae60cfe-deae-42bd-babb-ef437d118314",
      "name": "new_sp",
      "nodes": [
        {
          "uuid": "caf95bec-f801-11e8-8af9-005056bbe5c1",
          "name": "node-1",

```



```

    {
      "uuid": "cf9ab500-ff3e-4bce-bfd7-d679e6078f47",
      "name": "node-2",
    }
  ],
  "capacity": {
    "total": 7386169344,
    "disk_count": 4,
    "disks": [
      {
        "disk": {
          "name": "VMw-1.11"
        },
      },
      {
        "disk": {
          "name": "VMw-1.12"
        },
      },
      {
        "disk": {
          "name": "VMw-1.23"
        },
      },
      {
        "disk": {
          "name": "VMw-1.24"
        },
      }
    ]
  }
}
]
}

```

## Retrieve storage pools for the entire cluster

GET /storage/pools

**Introduced In:** 9.11

Retrieves the collection of storage pools for the entire cluster.

### Related ONTAP commands

- storage pool show

## Parameters

Name	Type	In	Required	Description
uuid	string	query	False	Filter by uuid
name	string	query	False	Filter by name
capacity.spare_allocation_units.available_size	integer	query	False	Filter by capacity.spare_allocation_units.available_size
capacity.spare_allocation_units.node.uuid	string	query	False	Filter by capacity.spare_allocation_units.node.uuid
capacity.spare_allocation_units.node.name	string	query	False	Filter by capacity.spare_allocation_units.node.name
capacity.spare_allocation_units.size	integer	query	False	Filter by capacity.spare_allocation_units.size
capacity.spare_allocation_units.syncmirror_pool	string	query	False	Filter by capacity.spare_allocation_units.syncmirror_pool
capacity.spare_allocation_units.count	integer	query	False	Filter by capacity.spare_allocation_units.count
capacity.used_allocation_units.node.uuid	string	query	False	Filter by capacity.used_allocation_units.node.uuid
capacity.used_allocation_units.node.name	string	query	False	Filter by capacity.used_allocation_units.node.name

Name	Type	In	Required	Description
capacity.used_allocation_units.aggregate.name	string	query	False	Filter by capacity.used_allocation_units.aggregate.name
capacity.used_allocation_units.aggregate.uuid	string	query	False	Filter by capacity.used_allocation_units.aggregate.uuid
capacity.used_allocation_units.current_usage	integer	query	False	Filter by capacity.used_allocation_units.current_usage
capacity.used_allocation_units.count	integer	query	False	Filter by capacity.used_allocation_units.count
capacity.disks.total_size	integer	query	False	Filter by capacity.disks.total_size
capacity.disks.disk.name	string	query	False	Filter by capacity.disks.disk.name
capacity.disks.usable_size	integer	query	False	Filter by capacity.disks.usable_size
capacity.disk_count	integer	query	False	Filter by capacity.disk_count
capacity.total	integer	query	False	Filter by capacity.total
capacity.remaining	integer	query	False	Filter by capacity.remaining
health.is_healthy	boolean	query	False	Filter by health.is_healthy
health.state	string	query	False	Filter by health.state

Name	Type	In	Required	Description
health.unhealthy_reason.target	string	query	False	Filter by health.unhealthy_reason.target
health.unhealthy_reason.arguments.message	string	query	False	Filter by health.unhealthy_reason.arguments.message
health.unhealthy_reason.arguments.code	string	query	False	Filter by health.unhealthy_reason.arguments.code
health.unhealthy_reason.code	string	query	False	Filter by health.unhealthy_reason.code
health.unhealthy_reason.message	string	query	False	Filter by health.unhealthy_reason.message
nodes.uuid	string	query	False	Filter by nodes.uuid
nodes.name	string	query	False	Filter by nodes.name
storage_type	string	query	False	Filter by storage_type
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	<p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> </ul>

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
_links	<a href="#">_links</a>	
error	<a href="#">error</a>	
num_records	integer	Number of shared storage pools in the cluster.
records	array[ <a href="#">storage_pool</a> ]	
spares	array[ <a href="#">storage_pool_show_spares</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",
    "target": "uuid"
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "capacity": {
      "disks": {
        "disk": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "1.0.1"
        },
        "total_size": 0,
        "usable_size": 0
      },
      "remaining": 0,
      "spare_allocation_units": {
        "available_size": 0,
        "node": {
          "_links": {
            "self": {
```

```

        "href": "/api/resourcelink"
    },
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"size": 0,
"syncmirror_pool": "pool0"
},
"total": 0,
"used_allocation_units": {
    "aggregate": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "aggr1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "current_usage": 0,
    "node": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
},
"health": {
    "state": "normal",
    "unhealthy_reason": {
        "arguments": {
            "code": "string",
            "message": "string"
        },
        "code": "4",
        "message": "entry doesn't exist",
        "target": "uuid"
    }
},
"nodes": {
    "_links": {

```

```

        "self": {
            "href": "/api/resourcelink"
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "storage_type": "SSD",
    "uuid": "string"
},
"spares": {
    "checksum_style": "block",
    "disk_class": "solid_state",
    "disk_type": "fc",
    "nodes": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "size": 10156769280,
    "syncmirror_pool": "pool0",
    "usable": 9
}
}

```

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
10944513	Unable to retrieve shared disk capability information.
10944514	Unable to enable shared disk capability.
10944527	Storage pools are not supported in MetroCluster configurations.
10944528	Unable to retrieve MetroCluster configuration information.



Error Code	Description
11206662	There is no storage pool matching the specified UUID or name.
11206667	Storage pool feature is not enabled.

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	<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
target	string	The target parameter that caused the error.

\_links

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

disk

Reference to the constituent disk object.

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

#### storage\_pool\_disk

Name	Type	Description
disk	<a href="#">disk</a>	Reference to the constituent disk object.
total_size	integer	Raw capacity of the disk, in bytes.
usable_size	integer	Usable capacity of this disk, in bytes.

#### node

Specifies what node can use this set of allocation units.

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

#### storage\_pool\_spare\_allocation\_unit

Name	Type	Description
available_size	integer	The usable capacity of this set of allocation units.
count	integer	The number of spare allocation units on this node.
node	<a href="#">node</a>	Specifies what node can use this set of allocation units.
size	integer	Size of each allocation unit.
syncmirror_pool	string	The RAID SyncMirror Pool to which this allocation unit is assigned.

#### aggregate

The aggregate that is using this cache capacity.

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

Name	Type	Description
name	string	
uuid	string	

node

The node hosting the aggregate using this set of allocation units.

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

storage\_pool\_used\_allocation\_unit

Name	Type	Description
aggregate	<a href="#">aggregate</a>	The aggregate that is using this cache capacity.
count	integer	The number of allocation units used by this aggregate.
current_usage	integer	The amount of cache space used by this aggregate.
node	<a href="#">node</a>	The node hosting the aggregate using this set of allocation units.

capacity

Name	Type	Description
disk_count	integer	The number of disks in the storage pool.
disks	array[ <a href="#">storage_pool_disk</a> ]	Properties of each disk used in the shared storage pool.
remaining	integer	Remaining usable capacity in the flash pool, in bytes.
spare_allocation_units	array[ <a href="#">storage_pool_spare_allocation_unit</a> ]	Properties of spare allocation units.

Name	Type	Description
total	integer	Total size of the flash pool, in bytes.
used_allocation_units	array[ <a href="#">storage_pool_used_allocation_unit</a> ]	Information about the storage pool allocation units participating in the cache tier of an aggregate.

#### error

Indicates why the storage pool is unhealthy. This property is not returned for healthy storage pools.

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.

#### health

Properties that outline shared storage pool health.

Name	Type	Description
is_healthy	boolean	Indicates whether the storage pool is able to participate in provisioning operations.
state	string	The state of the shared storage pool.
unhealthy_reason	<a href="#">error</a>	Indicates why the storage pool is unhealthy. This property is not returned for healthy storage pools.

#### node\_reference

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

Name	Type	Description
uuid	string	

storage\_pool

Name	Type	Description
_links	<a href="#">_links</a>	
capacity	<a href="#">capacity</a>	
health	<a href="#">health</a>	Properties that outline shared storage pool health.
name	string	Storage pool name.
nodes	array[ <a href="#">node_reference</a> ]	Nodes that can use this storage pool for their aggregates.
storage_type	string	Storage type for the disks used to create the storage pool.
uuid	string	Storage pool UUID.

storage\_pool\_show\_spares

Available spares for storage pool.

Name	Type	Description
checksum_style	string	The checksum type that has been assigned to the spares.
disk_class	string	Disk class of spares.
disk_type	string	Type of disk.
nodes	array[ <a href="#">node_reference</a> ]	Nodes that can use the usable spares for storage pool.
size	integer	Usable size of each spare, in bytes.
syncmirror_pool	string	SyncMirror spare pool.

Name	Type	Description
usable	integer	<p>Total number of usable spares in the bucket. The usable count for each class of spares does not include reserved spare capacity recommended by ONTAP best practices.</p> <ul style="list-style-type: none"> <li>• example: 9</li> <li>• readOnly: 1</li> <li>• Introduced in: 9.12</li> </ul>

## Create a new storage pool

POST /storage/pools

**Introduced In:** 9.11

Creates a new storage pool using available solid state capacity attached to the nodes specified.

### Required properties

The following properties are required in the POST body:

- `name` - Name of the new storage pool.
- `nodes[].name` or `nodes[].uuid` - Nodes that can use cache capacity from the new storage pool. Only nodes in the same HA pair can be specified for a given storage pool. Spare cache capacity will be distributed evenly among the specified nodes.
- `capacity.disk_count` - Number of SSDs to be used to create the storage pool.

### Related ONTAP commands

- `storage pool create`

### Example:

```
POST /api/storage/pools {"nodes": [{"name": "node1"}, {"name": "node2"}],
"name": "storage_pool_1", "capacity": {"disk_count": "4"}}
```

### Parameters

Name	Type	In	Required	Description
disk_size	integer	query	False	If set, POST only selects SSDs within five percent of the specified size.
simulate	boolean	query	False	<p>When set to "true", the end point returns a simulated layout of the proposed new storage pool, without changing system state.</p> <ul style="list-style-type: none"> <li>Introduced in: 9.12</li> </ul>
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> <li>Default value: 1</li> <li>Max value: 120</li> <li>Min value: 0</li> </ul>



Name	Type	In	Required	Description
return_records	boolean	query	False	<p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> <li>• Default value:</li> </ul>

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
capacity	<a href="#">capacity</a>	
health	<a href="#">health</a>	Properties that outline shared storage pool health.
name	string	Storage pool name.
nodes	array[ <a href="#">node_reference</a> ]	Nodes that can use this storage pool for their aggregates.
storage_type	string	Storage type for the disks used to create the storage pool.
uuid	string	Storage pool UUID.

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "capacity": {
    "disks": {
      "disk": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "1.0.1"
      },
      "total_size": 0,
      "usable_size": 0
    },
    "remaining": 0,
    "spare_allocation_units": {
      "available_size": 0,
      "node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "size": 0,
      "syncmirror_pool": "pool0"
    },
    "total": 0,
    "used_allocation_units": {
      "aggregate": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "aggr1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    }
  }
}
```

```

    },
    "current_usage": 0,
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  },
  "health": {
    "state": "normal",
    "unhealthy_reason": {
      "arguments": {
        "code": "string",
        "message": "string"
      },
      "code": "4",
      "message": "entry doesn't exist",
      "target": "uuid"
    }
  },
  "nodes": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "storage_type": "SSD",
  "uuid": "string"
}

```

## Response

Status: 202, Accepted

Name	Type	Description
job	<a href="#">job_link</a>	

### Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

### Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

### Response

Status: 201, Created

### Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
11206666	Storage pool is unhealthy.
11208658	A storage pool already uses the specified name.
11208660	Disk does not exist.
11208661	Disk is not a spare disk.
11208662	Disk is not an SSD.
11208663	Disk is reserved for core dump.

Error Code	Description
11208664	Could not determine checksum type of disk.
11208666	Could not determine usable size of disk.
11208668	Could not determine connectivity between controller and disk.
11208670	Could not determine original owner of disk.
11208671	Could not determine SyncMirror pool of disk.
11208673	Could not determine HA mode of node.
11208674	Could not determine HA partner of node.
11208675	Disks specified in the disk list are not visible to node.
11208678	The disk list contains disks from nodes which are not in HA pair.
11208679	Storage pools are not supported on nodes.
11208680	Internal error. Cannot determine configuration for node.
11208681	Node is not online.
11208682	Internal error. Sharing configuration mismatch.
11208684	Unable to share disk.
11208686	Disk cannot be shared.
11208687	Unable to retrieve expected sharing configuration.
11208688	Storage pool create job failed.
11208690	Not all nodes sharing the storage pool view disk as a shared disk.
11208691	Not enough matching spares available.
11208692	A disk list or count is a required parameter for storage pool creation.
11208693	Invalid number of disks specified.
11208698	Internal error. Missing node name.
11208699	Internal error. Missing partner name for node configured for HA.
11208701	Node is a standalone node. Do not specify other nodes with a standalone node.
11208703	Incorrect number of nodes specified. Specify one node or both nodes in an HA pair.
11208704	Specified nodes are not part of HA relationship. Specify one node or both nodes in an HA pair.
11208705	Disk is a data center SSD, which cannot be used in storage pools.

Error Code	Description
11208706	Disk is a SSD-ZNS, which cannot be used in storage pools.
11215756	Missing a required field for POST request.

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

disk

Reference to the constituent disk object.

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

storage\_pool\_disk

Name	Type	Description
disk	<a href="#">disk</a>	Reference to the constituent disk object.
total_size	integer	Raw capacity of the disk, in bytes.
usable_size	integer	Usable capacity of this disk, in bytes.

node

Specifies what node can use this set of allocation units.

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

storage\_pool\_spare\_allocation\_unit

Name	Type	Description
available_size	integer	The usable capacity of this set of allocation units.
count	integer	The number of spare allocation units on this node.
node	<a href="#">node</a>	Specifies what node can use this set of allocation units.
size	integer	Size of each allocation unit.
syncmirror_pool	string	The RAID SyncMirror Pool to which this allocation unit is assigned.

#### aggregate

The aggregate that is using this cache capacity.

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

#### node

The node hosting the aggregate using this set of allocation units.

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

#### storage\_pool\_used\_allocation\_unit

Name	Type	Description
aggregate	<a href="#">aggregate</a>	The aggregate that is using this cache capacity.
count	integer	The number of allocation units used by this aggregate.



Name	Type	Description
current_usage	integer	The amount of cache space used by this aggregate.
node	<a href="#">node</a>	The node hosting the aggregate using this set of allocation units.

#### capacity

Name	Type	Description
disk_count	integer	The number of disks in the storage pool.
disks	array[ <a href="#">storage_pool_disk</a> ]	Properties of each disk used in the shared storage pool.
remaining	integer	Remaining usable capacity in the flash pool, in bytes.
spare_allocation_units	array[ <a href="#">storage_pool_spare_allocation_unit</a> ]	Properties of spare allocation units.
total	integer	Total size of the flash pool, in bytes.
used_allocation_units	array[ <a href="#">storage_pool_used_allocation_unit</a> ]	Information about the storage pool allocation units participating in the cache tier of an aggregate.

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Indicates why the storage pool is unhealthy. This property is not returned for healthy storage pools.

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

Name	Type	Description
message	string	Error message
target	string	The target parameter that caused the error.

## health

Properties that outline shared storage pool health.

Name	Type	Description
is_healthy	boolean	Indicates whether the storage pool is able to participate in provisioning operations.
state	string	The state of the shared storage pool.
unhealthy_reason	<a href="#">error</a>	Indicates why the storage pool is unhealthy. This property is not returned for healthy storage pools.

## node\_reference

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

## storage\_pool

Name	Type	Description
_links	<a href="#">_links</a>	
capacity	<a href="#">capacity</a>	
health	<a href="#">health</a>	Properties that outline shared storage pool health.
name	string	Storage pool name.
nodes	array[ <a href="#">node_reference</a> ]	Nodes that can use this storage pool for their aggregates.

Name	Type	Description
storage_type	string	Storage type for the disks used to create the storage pool.
uuid	string	Storage pool UUID.

job\_link

Name	Type	Description
_links	<a href="#">_links</a>	
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

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.

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