

# Manage application consistency groups

ONTAP 9.14.1 REST API reference

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# Manage application consistency groups

# Application consistency-groups endpoint overview

## Overview

A consistency group is a group of volumes that supports capabilities such as creating a snapshot of all of its member volumes at the same point-in-time with a write-fence, thus ensuring a consistent image of the volumes at that time.

Applications with datasets scoped to a single volume can have its contents saved to a Snapshot copy, replicated, or cloned in a crash-consistent manner implicitly with corresponding native ONTAP volume-granular operations. Applications with datasets spanning a group of multiple volumes must have such operations performed on the group. Typically, by first fencing writes to all the volumes in the group, flushing any writes pending in queues, executing the intended operation, that is, take Snapshot copy of every volume in the group and when that is complete, unfence and resume writes. A consistency group is the conventional mechanism for providing such group semantics.

# **Consistency group APIs**

The following APIs are used to perform operations related to consistency groups:

– GET /api/application/consistency-groups

– POST /api/application/consistency-groups

– GET /api/application/consistency-groups/{uuid}

– PATCH /api/application/consistency-groups/{uuid}

– DELETE /api/application/consistency-groups/{uuid}

## **Examples**

#### Retrieving all consistency groups of an SVM

```
# The API:
/api/application/consistency-groups
# The call:
curl -X GET "https://<mgmt-ip>/api/application/consistency-
groups?svm.name=vs1" -H "accept: application/hal+json"
# The response:
{
    "records": [
    {
        "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
        "name": "vol1",
```

```
" links": {
      "self": {
        "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-
a449-005056bbcf9f"
     }
   }
  },
  {
    "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
    "name": "parent cg",
    " links": {
     "self": {
        "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
     }
   }
  },
  {
    "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",
    "name": "child 1",
    " links": {
      "self": {
        "href": "/api/application/consistency-groups/c1b270b1-0a82-11ec-
a449-005056bbcf9f"
      }
   }
  },
  {
    "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
    "name": "child 2",
    " links": {
      "self": {
       "href": "/api/application/consistency-groups/c1b270c3-0a82-11ec-
a449-005056bbcf9f"
    }
   }
}
],
"num records": 4,
" links": {
 "self": {
    "href": "/api/application/consistency-groups"
 }
}
}
```

#### Retrieving details of all consistency groups of an SVM

Retrieving details of the consistency groups for a specified SVM. These details are considered to be performant and will return within 1 second when 40 records or less are requested.

```
curl -X GET "https://<mgmt-ip>/api/application/consistency-
groups?svm.name=vs1&fields=*&max records=40"
#### Response:
{
"records": [
  {
    "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
    "name": "vol1",
    "svm": {
      "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
      "name": "vs1",
      " links": {
        "self": {
          "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
        }
      }
    },
    "space": {
      "size": 108003328,
      "available": 107704320,
      "used": 299008
    },
    "replicated": false,
    " links": {
      "self": {
        "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-
a449-005056bbcf9f"
     }
    }
  },
  {
    "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
    "name": "parent cg",
    "svm": {
      "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
      "name": "vs1",
      " links": {
        "self": {
          "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
        }
      }
```

```
},
    "snapshot policy": {
      "name": "default-1weekly",
      "uuid": "a30bd0fe-067d-11ec-a449-005056bbcf9f",
      " links": {
        "self": {
          "href": "/api/storage/snapshot-policies/a30bd0fe-067d-11ec-a449-
005056bbcf9f"
        }
      }
    },
    "consistency groups": [
      {
        "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",
        "name": "child 1",
        "space": {
          "size": 41943040,
          "available": 39346176,
          "used": 499712
        },
        " links": {
          "self": {
            "href": "/api/application/consistency-groups/c1b270b1-0a82-
11ec-a449-005056bbcf9f"
          }
        }
      },
      {
        "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
        "name": "child 2",
        "space": {
          "size": 41943040,
          "available": 39350272,
          "used": 495616
        },
        " links": {
          "self": {
            "href": "/api/application/consistency-groups/c1b270c3-0a82-
11ec-a449-005056bbcf9f"
          }
        }
      }
    ],
    "space": {
      "size": 83886080,
      "available": 78696448,
```

```
"used": 995328
    },
    "replicated": false,
    " links": {
      "self": {
        "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
      }
    }
  },
  {
    "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",
    "name": "child 1",
    "parent consistency group": {
      "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
      "name": "parent cg",
      " links": {
        "self": {
          "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
       }
      }
    },
    "svm": {
      "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
      "name": "vs1",
      " links": {
        "self": {
          "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
        }
      }
    },
    "snapshot policy": {
      "name": "default",
      "uuid": "a30b60a4-067d-11ec-a449-005056bbcf9f",
      " links": {
        "self": {
          "href": "/api/storage/snapshot-policies/a30b60a4-067d-11ec-a449-
005056bbcf9f"
        }
      }
    },
    "space": {
      "size": 41943040,
      "available": 39346176,
      "used": 499712
```

```
},
    " links": {
     "self": {
        "href": "/api/application/consistency-groups/c1b270b1-0a82-11ec-
a449-005056bbcf9f"
     }
   }
  },
  {
    "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
    "name": "child 2",
    "parent consistency group": {
      "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
      "name": "parent cg",
      " links": {
        "self": {
          "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
       }
      }
    },
    "svm": {
      "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
      "name": "vs1",
      " links": {
       "self": {
          "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
       }
     }
    },
    "snapshot policy": {
      "name": "default",
      "uuid": "a30b60a4-067d-11ec-a449-005056bbcf9f",
      " links": {
       "self": {
          "href": "/api/storage/snapshot-policies/a30b60a4-067d-11ec-a449-
005056bbcf9f"
       }
     }
    },
    "space": {
      "size": 41943040,
      "available": 39350272,
     "used": 495616
    },
    " links": {
```

```
"self": {
    "href": "/api/application/consistency-groups/clb270c3-0a82-11ec-
a449-005056bbcf9f"
    }
    }
    }
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```

#### Retrieving details of non-nested consistency groups

Retrieves details of the consistency groups without nested consistency groups, or only the parent consistency group for a number of consistency groups of a specified SVM.

```
curl -X GET "https://<mgmt-ip>/api/application/consistency-
groups?svm.name=vs1&parent consistency group.uuid=null"
#### Response:
{
"records": [
  {
    "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
    "name": "vol1",
    "svm": {
      "name": "vs1"
    },
    " links": {
      "self": {
        "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-
a449-005056bbcf9f"
     }
   }
  },
  {
    "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
    "name": "parent cg",
    "svm": {
      "name": "vs1"
    },
    " links": {
      "self": {
       "href": "/api/application/consistency-groups/c1b22c85-0a82-11ec-
a449-005056bbcf9f"
    }
    }
 }
],
"num records": 2,
" links": {
 "self": {
    "href": "/api/application/consistency-
groups?svm.name=vs1&parent consistency group.uuid=null"
 }
}
}
```

#### Creating a single consistency group with a new SAN volume

Provisions an application with one consistency group, each with one new SAN volumes, with one LUN, an

igroup and no explicit Snapshot copy policy, FabricPool tiering policy, storage service, and QoS policy specification. The igroup to map a LUN to is specified at LUN-granularity.

```
curl -X POST https://<mgmt-ip>/api/application/consistency-
groups?return records=true -d '{ "svm": { "name": "vs1" }, "luns": [ {
"name": "/vol/vol1/lun1", "space": { "size": "100mb" }, "os_type":
"linux", "lun maps": [ { "igroup": { "name": "igroup1", "initiators": [ {
"name": "iqn.2021-07.com.netapp.englab.gdl:scspr2429998001" } ] } ] } ]
} '
#### Response:
{
"num records": 1,
"records": [
  {
    "uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
    "name": "vol1",
    "svm": {
    "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
    "name": "vs1",
    " links": {
      "self": {
        "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
     }
    }
    },
    "luns": [
    {
      "lun maps": [
        {
          "igroup": {
            "name": "igroup1",
            "initiators": [
              {
                "name": "iqn.2021-
07.com.netapp.englab.gdl:scspr2429998001"
              }
            ]
          }
        }
      ],
      "name": "/vol/vol1/lun1",
      "os type": "linux",
      "space": {
        "size": 104857600
      }
```

```
}
]
}
],
"job": {
"uuid": "6f4907ae-0a7f-11ec-a449-005056bbcf9f",
"_links": {
    "self": {
    "href": "/api/cluster/jobs/6f4907ae-0a7f-11ec-a449-005056bbcf9f"
    }
}
```

#### Creating an Application with two consistency groups with existing SAN volumes

Provisions an application with two consistency groups, each with two existing SAN volumes, a Snapshot copy policy at application-granularity, and a distinct consistency group granular Snapshot copy policy.

```
curl -X POST https://<mgmt-ip>/api/application/consistency-
groups?return records=true -d '{ "svm": { "name": "vs1" }, "name":
"parent cg", "snapshot policy": { "name": "default-1weekly" },
"consistency groups": [ { "name": "child 1", "snapshot policy": { "name":
"default" }, "volumes": [ { "name": "existing vol1",
"provisioning options": { "action": "add" } }, { "name": "existing vol2",
"provisioning options": { "action": "add" } } ] }, { "name": "child 2",
"snapshot policy": { "name": "default" }, "volumes": [ { "name":
"existing vol3", "provisioning options": { "action": "add" } }, { "name":
"existing vol4", "provisioning options": { "action": "add" } } ] } ] }'
#### Response:
{
"num records": 1,
"records": [
  {
    "uuid": "c1b22c85-0a82-11ec-a449-005056bbcf9f",
    "name": "parent cg",
    "svm": {
      "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
      "name": "vs1",
      " links": {
        "self": {
          "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
        }
      }
    },
```

```
"snapshot policy": {
      "name": "default-1weekly"
    },
    "consistency groups": [
      {
        "uuid": "c1b270b1-0a82-11ec-a449-005056bbcf9f",
        "name": "child 1",
        "snapshot policy": {
          "name": "default"
        },
        "volumes": [
          {
            "name": "existing vol1"
          },
          {
            "name": "existing vol2"
          }
        1
      },
      {
        "uuid": "c1b270c3-0a82-11ec-a449-005056bbcf9f",
        "name": "child 2",
        "snapshot policy": {
         "name": "default"
        },
        "volumes": [
          {
            "name": "existing vol3"
          },
          {
            "name": "existing vol4"
          }
        ]
      }
    ]
 }
],
"job": {
  "uuid": "c1b272b9-0a82-11ec-a449-005056bbcf9f",
 " links": {
    "self": {
      "href": "/api/cluster/jobs/c1b272b9-0a82-11ec-a449-005056bbcf9f"
    }
 }
}
}
```

#### Retrieving specific details of an existing consistency group

Retrieves the details of an existing consistency group.

```
curl -X GET https://<mgmt-ip>/api/application/consistency-groups/6f48d798-
0a7f-11ec-a449-005056bbcf9f
#### Response:
{
"uuid": "6f48d798-0a7f-11ec-a449-005056bbcf9f",
"name": "vol1",
"svm": {
  "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
  "name": "vs1",
 " links": {
   "self": {
      "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
    }
  }
},
"space": {
  "size": 108003328,
  "available": 107724800,
 "used": 278528
},
"replicated": false,
" links": {
  "self": {
    "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-a449-
005056bbcf9f"
 }
}
}
```

#### Retrieving all details of an existing consistency group

Retrieves all details of an existing consistency group. These details are not considered to be performant and are not guaranteed to return within one second.

```
curl -X GET https://<mgmt-ip>/api/application/consistency-groups/6f48d798-
0a7f-1lec-a449-005056bbcf9f?fields=**
##### Response:
{
    "uuid": "6f48d798-0a7f-1lec-a449-005056bbcf9f",
    "name": "vol1",
```

```
"svm": {
  "uuid": "4853f97a-0a63-11ec-a449-005056bbcf9f",
 "name": "vs1",
 " links": {
    "self": {
      "href": "/api/svm/svms/4853f97a-0a63-11ec-a449-005056bbcf9f"
   }
 }
},
"qos": {
  "policy": {
    "uuid": "b7189398-e572-48ab-8f69-82cd46580812",
    "name": "extreme-fixed",
    " links": {
      "self": {
        "href": "/api/storage/gos/policies/b7189398-e572-48ab-8f69-
82cd46580812"
     }
   }
 }
},
"tiering": {
 "policy": "none"
},
"create time": "2021-08-31T13:18:24-04:00",
"volumes": [
  {
    "uuid": "6f516c6c-0a7f-11ec-a449-005056bbcf9f",
    "qos": {
      "policy": {
        "uuid": "b7189398-e572-48ab-8f69-82cd46580812",
        "name": "extreme-fixed",
        " links": {
          "self": {
            "href": "/api/storage/qos/policies/b7189398-e572-48ab-8f69-
82cd46580812"
          }
        }
      }
    },
    "tiering": {
     "policy": "none"
    },
    "comment": "",
    "create time": "2021-08-31T13:18:22-04:00",
    "name": "vol1",
```

```
"snapshot policy": {
      "name": "default",
      "uuid": "a30b60a4-067d-11ec-a449-005056bbcf9f"
    },
    "space": {
      "size": 108003328,
      "available": 107569152,
      "used": 434176,
      "snapshot": {
       "used": 151552,
        "reserve percent": 0,
        "autodelete enabled": false
     }
    },
    " links": {
      "self": {
        "href": "/api/storage/volumes/6f516c6c-0a7f-11ec-a449-
005056bbcf9f"
     }
  }
 }
],
"luns": [
  {
    "uuid": "6f51748a-0a7f-11ec-a449-005056bbcf9f",
    "location": {
      "logical unit": "lun1",
      "node": {
        "name": "johnhil-vsim1",
        "uuid": "6eb682f2-067d-11ec-a449-005056bbcf9f",
        " links": {
          "self": {
            "href": "/api/cluster/nodes/6eb682f2-067d-11ec-a449-
005056bbcf9f"
         }
        }
      },
      "volume": {
        "uuid": "6f516c6c-0a7f-11ec-a449-005056bbcf9f",
        "name": "vol1",
        " links": {
         "self": {
            "href": "/api/storage/volumes/6f516c6c-0a7f-11ec-a449-
005056bbcf9f"
         }
        }
```

```
}
    },
    "lun maps": [
      {
        "igroup": {
          "uuid": "6f4a4b86-0a7f-11ec-a449-005056bbcf9f",
          "name": "igroup1",
          "os type": "linux",
          "protocol": "mixed",
          "initiators": [
            {
              "name": "iqn.2021-07.com.netapp.englab.gdl:scspr2429998001"
            }
          ],
          " links": {
            "self": {
              "href": "/api/protocols/san/igroups/6f4a4b86-0a7f-11ec-a449-
005056bbcf9f"
           }
          }
        },
        "logical unit number": 0
      }
    ],
    "name": "/vol/vol1/lun1",
    "auto delete": false,
    "class": "regular",
    "create time": "2021-08-31T13:18:24-04:00",
    "os type": "linux",
    "serial number": "wIqM6]RfQK3t",
    "space": {
      "size": 104857600,
      "used": 0,
      "guarantee": {
       "requested": false,
        "reserved": false
      }
    },
    "status": {
      "container state": "online",
      "mapped": true,
      "read only": false,
      "state": "online"
    },
    " links": {
      "self": {
```

```
"href": "/api/storage/luns/6f51748a-0a7f-11ec-a449-005056bbcf9f"
      }
    }
 }
],
"space": {
  "size": 108003328,
  "available": 107569152,
  "used": 434176
},
"replicated": false,
" links": {
  "self": {
    "href": "/api/application/consistency-groups/6f48d798-0a7f-11ec-a449-
005056bbcf9f?fields=**"
  }
}
}
```

#### Adding LUNs to an existing volume in an existing consistency group

Adds two NVMe namespaces to an existing volume in an existing consistency group, creates a new subsystem, and binds the new namespaces to it.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f48d798-0a7f-11ec-a449-005056bbcf9f' -d '{ "luns": [ { "name":
"/vol/vol1/new luns", "provisioning options": { "count": 2, "action":
"create" }, "space": { "size": "100mb" }, "os type": "linux", "lun maps":
[ { "igroup": { "name": "igroup2", "initiators": [ { "name":
"01:02:03:04:05:06:07:01" } ] } ] } ] } ]
#### Response:
{
"job": {
  "uuid": "5306ea44-0a87-11ec-a449-005056bbcf9f",
  " links": {
    "self": {
      "href": "/api/cluster/jobs/5306ea44-0a87-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

#### Restoring a consistency group to the contents of an existing snapshot

Restores an existing consistency group to the contents of an existing snapshot of the consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-1lec-a449-005056bbcf9f' -d '{ "restore_to": {
"snapshot": { "uuid": "92c6c770-17a1-11eb-b141-005056acd498"} } }' -H
"Accept: Application/hal+json"
##### Response:
{
    "job": {
        "uuid": "8907bd9e-1463-11eb-a719-005056ac70af",
        "_links": {
            "self": {
            "href": "/api/cluster/jobs/8907bd9e-1463-11eb-a719-005056ac70af"
        }
    }
}
```

#### Deleting a consistency group

Deletes a consistency group, where all storage originally associated with that consistency group remains in place.

```
curl -X DELETE 'https://<mgmt-ip>/api/application/consistency-
groups/6f48d798-0a7f-11ec-a449-005056bbcf9f'
##### Response:
{
}
```

#### Cloning an existing consistency group

The following example clones an existing consistency group with the current contents:

```
curl -X POST 'https://<mgmt-ip>/api/application/consistency-groups' -d '{
"name": "clone01 of cg01","svm": { "name": "vs 0"},"clone": { "volume": {
"prefix": "my clone pfx", "suffix": "my clone sfx"}, "split initiated":
true,"parent_consistency_group": { "name": "cg01","uuid": "ca5e76fb-98c0-
11ec-855a-005056a7693b"}, "guarantee": { "type": "none"} } }' -H "accept:
application/hal+json"
#### Response:
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  " links": {
    "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

#### Cloning a consistency group from an existing Snapshot copy

The following example clones an existing consistency group with contents from an existing Snapshot copy:

```
curl -X POST 'https://<mgmt-ip>/api/application/consistency-groups' -d '{
"name": "clone01 of cg01","svm": { "name": "vs 0"},"clone": { "volume": {
"prefix": "my clone pfx", "suffix": "my clone sfx"}, "split initiated":
true, "parent snapshot": { "name":
"snap01 of cq01"}, "parent consistency group": { "name": "cq01", "uuid":
"ca5e76fb-98c0-11ec-855a-005056a7693b"},"guarantee": { "type": "none"} }
}' -H "accept: application/hal+json"
#### Response:
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  " links": {
    "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

#### Adding namespaces to an existing volume in an existing consistency group

To add two NVMe Namespaces to an existing volume in an existing consistency group, create a new subsystem and bind the new namespaces to it.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "namespaces": [ {
"name": "/vol/vol1/new namespace", "space": { "size": "10M" }, "os type":
"windows", "provisioning options": { "count": 2 }, "subsystem map": {
"subsystem": { "name": "mySubsystem", "hosts": [ { "nqn": "nqn.1992-
08.com.netapp:sn.d04594ef915b4c73b642169e72e4c0b1:subsystem.host1" }, {
"nqn": "nqn.1992-
08.com.netapp:sn.d04594ef915b4c73b642169e72e4c0b1:subsystem.host2" } ] } 
} ] }'
#### Response:
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  " links": {
    "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

#### Add a new volume in an existing consistency group

The following example adds two new volumes to an existing consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "volumes" : [ { "name":
"new_vol_", "provisioning_options": { "count" : "2"}, "space": { "size":
"1gb"} } ] }'
##### Response:
{
    "job": {
        "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
        "_links": {
            "self": {
             "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
        }
    }
}
```

#### Adding an existing volume to an existing consistency group

The following example adds an existing volume to an existing consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "volumes" : [ { "name":
"existing_vol", "provisioning_options": { "action" : "add"} } ] }'
##### Response:
{
    "job": {
        "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
        "_links": {
            "self": {
             "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
        }
    }
}
```

#### Promoting a single consistency group to a nested consistency group

The following example promotes a single consistency group to a nested consistency group with a new child consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "provisioning_options":
{ "action":"promote" }, "consistency_groups": [ { "name":"cg_child",
"provisioning_options": { "action":"create" } } ] }'
##### Response:
{
    "job": {
    "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
    "_links": {
        "self": {
            "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
        }
    }
}
```

#### Demoting a nested consistency group to a single consistency group

The following example demotes (flattens) a nested consistency group to a single consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-1lec-a449-005056bbcf9f' -d '{ "provisioning_options":
{ "action":"demote" } }'
##### Response:
{
    "job": {
    "uuid": "8c9cabf3-0a88-1lec-a449-005056bbcf9f",
    "_links": {
        "self": {
            "href": "/api/cluster/jobs/8c9cabf3-0a88-1lec-a449-005056bbcf9f"
        }
    }
}
```

#### Adding a new child consistency group to nested consistency group

The following example adds a new child consistency group to an existing nested consistency group, creating a new volume.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "consistency groups": [
{ "name": "cg child5", "provisioning options": { "action" : "create" },
"volumes": [ { "name": "child5 vol 1", "space": { "size": "100mb" } } ] }
] }'
#### Response:
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  " links": {
   "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

#### Removing a child consistency group from nested consistency group

The following example removes a child consistency group from a nested consistency, changing it to a single consistency group with a new consistency group name.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-1lec-a449-005056bbcf9f' -d '{ "consistency_groups": [
{ "name": "cg_child5", "provisioning_options": { "action" : "remove",
"name" : "new_single_cg" } ] }'
##### Response:
{
    "job": {
        "uuid": "8c9cabf3-0a88-1lec-a449-005056bbcf9f",
        "_links": {
            "self": {
             "href": "/api/cluster/jobs/8c9cabf3-0a88-1lec-a449-005056bbcf9f"
        }
    }
}
```

#### Create a new parent consistency group with an existing consistency group

The following example creates a new nested consistency group with an existing consistency group as child consistency group.

```
curl -X POST 'https://<mgmt-ip>/api/application/consistency-groups' -d '{
"svm": { "name": "vs1" }, "name": "cg parent2", "consistency groups": [ {
"name": "cg large", "provisioning options": { "action": "add" } }, {
"name": "cg standalone2", "provisioning_options":{ "action": "add" } } ]
}'
#### Response:
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  " links": {
   "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

#### Reassign a volume to another child consistency group.

The following example reassigns a volume from a child consistency group to another child consistency group with the same parent consistency group.

```
curl -X PATCH 'https://<mgmt-ip>/api/application/consistency-
groups/6f51748a-0a7f-11ec-a449-005056bbcf9f' -d '{ "consistency groups": [
{ "name": "cg child1", "volumes": [ { "name": "child2 vol 1",
"provisioning options": { "action":"reassign"} } ] }, { "name":
"cg child2" } ] }'
#### Response:
{
"job": {
  "uuid": "8c9cabf3-0a88-11ec-a449-005056bbcf9f",
  " links": {
    "self": {
      "href": "/api/cluster/jobs/8c9cabf3-0a88-11ec-a449-005056bbcf9f"
    }
  }
}
}
```

# Retrieve details of a collection or consistency group

**GET** /application/consistency-groups

#### Introduced In: 9.10

Retrieve details of a collection or a specific consistency group.

### Notes

When volume granular properties, such as, the storage SLC, Fabric Pool tiering are not the same for all the existing volumes of a consistency group, the corresponding property is not reported at consistency group granularity. It is only reported if all the volumes of the consistency group have the same value for that property.

If this consistency group instance has 1 or more replication relationships, the "replicated" parameter is true. If there are no associated replication relationships, it is false. This parameter is only included in the output for Single-CG and Parent-CG, not for Child-CG. If this consistency group instance has 1 or more replication relationships, the "replication\_relationships" parameter is included in the output for Single-CG and Parent-CG instances. If there are no associated replication relationships, this parameter is not included in the output. Note that this parameter is an array and as such it has as many elements as the number of replication relationships associated with this consistency group. Each element of the array describes properties of one replication relationship and the "href" parameter is a link to the corresponding SnapMirror relationship. The "is\_source" parameter is true if this consistency group is the source in that relationship, otherwise it is false.

### **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 DOC Requesting specific fields to learn more.

- volumes
- luns
- namespaces

## **Parameters**

Name	Туре	In	Required	Description
tiering.policy	string	query	False	Filter by tiering.policy
namespaces.enable d	boolean	query	False	Filter by namespaces.enable d • Introduced in: 9.12
namespaces.status. state	string	query	False	Filter by namespaces.status. state • Introduced in: 9.12

Name	Туре	In	Required	Description
namespaces.status. container_state	string	query	False	Filter by namespaces.status. container_state • Introduced in: 9.12
namespaces.status.r ead_only	boolean	query	False	Filter by namespaces.status.r ead_only • Introduced in: 9.12
namespaces.status. mapped	boolean	query	False	Filter by namespaces.status. mapped • Introduced in: 9.12
namespaces.os_typ e	string	query	False	Filter by namespaces.os_typ e • Introduced in: 9.12
namespaces.comme nt	string	query	False	Filter by namespaces.comme nt • Introduced in: 9.12 • maxLength: 254 • minLength: 0
namespaces.uuid	string	query	False	Filter by namespaces.uuid • Introduced in: 9.12
namespaces.space. block_size	integer	query	False	Filter by namespaces.space. block_size • Introduced in: 9.12

Name	Туре	In	Required	Description
namespaces.space. used	integer	query	False	Filter by namespaces.space. used • Introduced in: 9.12
namespaces.space. size	integer	query	False	Filter by namespaces.space. size • Introduced in: 9.12 • Max value: 1407374883553 28 • Min value: 4096
namespaces.space. guarantee.requested	boolean	query	False	Filter by namespaces.space. guarantee.requested • Introduced in: 9.12
namespaces.space. guarantee.reserved	boolean	query	False	Filter by namespaces.space. guarantee.reserved • Introduced in: 9.12
namespaces.subsyst em_map.nsid	string	query	False	Filter by namespaces.subsys tem_map.nsid • Introduced in: 9.12
namespaces.subsyst em_map.subsystem. os_type	string	query	False	Filter by namespaces.subsys tem_map.subsystem .os_type • Introduced in: 9.12

Name	Туре	In	Required	Description
namespaces.subsyst em_map.subsystem. uuid	string	query	False	Filter by namespaces.subsys tem_map.subsystem .uuid • Introduced in: 9.12
namespaces.subsyst em_map.subsystem. comment	string	query	False	Filter by namespaces.subsys tem_map.subsystem .comment • Introduced in: 9.12 • maxLength: 255 • minLength: 0
namespaces.subsyst em_map.subsystem. hosts.nqn	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.nqn • Introduced in: 9.12
namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.group_size	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.group_size • Introduced in: 9.14
namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.hash_function	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.hash_function • Introduced in: 9.14

Name	Туре	In	Required	Description
namespaces.subsyst em_map.subsystem. hosts.priority	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.priority • Introduced in: 9.14
namespaces.subsyst em_map.subsystem. name	string	query	False	Filter by namespaces.subsys tem_map.subsystem .name • Introduced in: 9.12 • maxLength: 64 • minLength: 1
namespaces.subsyst em_map.anagrpid	string	query	False	Filter by namespaces.subsys tem_map.anagrpid • Introduced in: 9.12
namespaces.name	string	query	False	Filter by namespaces.name • Introduced in: 9.12
namespaces.auto_d elete	boolean	query	False	Filter by namespaces.auto_d elete • Introduced in: 9.12
namespaces.create_ time	string	query	False	Filter by namespaces.create _time • Introduced in: 9.12
space.size	integer	query	False	Filter by space.size
space.used	integer	query	False	Filter by space.used

Name	Туре	In	Required	Description
space.available	integer	query	False	Filter by space.available
application.type	string	query	False	Filter by application.type • Introduced in: 9.12
application.compone nt_type	string	query	False	Filter by application.compone nt_type • Introduced in: 9.12
parent_consistency_ group.uuid	string	query	False	Filter by parent_consistency_ group.uuid
parent_consistency_ group.name	string	query	False	Filter by parent_consistency_ group.name
replication_source	boolean	query	False	Filter by replication_source
name	string	query	False	Filter by name
clone.guarantee.type	string	query	False	Filter by clone.guarantee.typ e • Introduced in: 9.12
clone.split_initiated	boolean	query	False	Filter by clone.split_initiated • Introduced in: 9.12
clone.volume.prefix	string	query	False	Filter by clone.volume.prefix • Introduced in: 9.12

Name	Туре	In	Required	Description
clone.volume.suffix	string	query	False	Filter by clone.volume.suffix • Introduced in: 9.12
clone.parent_snapsh ot.name	string	query	False	Filter by clone.parent_snaps hot.name • Introduced in: 9.12
clone.parent_consist ency_group.uuid	string	query	False	Filter by clone.parent_consist ency_group.uuid • Introduced in: 9.12
clone.parent_consist ency_group.name	string	query	False	Filter by clone.parent_consist ency_group.name • Introduced in: 9.12
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
luns.space.used	integer	query	False	Filter by luns.space.used
luns.space.guarante e.reserved	boolean	query	False	Filter by luns.space.guarante e.reserved • Introduced in: 9.11
luns.space.guarante e.requested	boolean	query	False	Filter by luns.space.guarante e.requested • Introduced in: 9.11

Name	Туре	In	Required	Description
luns.space.size	integer	query	False	Filter by luns.space.size • Max value: 1407374883553 28 • Min value: 4096
luns.create_time	string	query	False	Filter by luns.create_time
luns.name	string	query	False	Filter by luns.name
luns.comment	string	query	False	Filter by luns.comment • maxLength: 254 • minLength: 0
luns.qos.policy.uuid	string	query	False	Filter by luns.qos.policy.uuid
luns.qos.policy.max_ throughput_mbps	integer	query	False	Filter by luns.qos.policy.max _throughput_mbps • Max value: 4194303 • Min value: 0
luns.qos.policy.name	string	query	False	Filter by luns.qos.policy.nam e
luns.qos.policy.max_ throughput_iops	integer	query	False	Filter by luns.qos.policy.max _throughput_iops • Max value: 2147483647 • Min value: 0

Name	Туре	In	Required	Description
luns.qos.policy.min_t hroughput_mbps	integer	query	False	Filter by luns.qos.policy.min_ throughput_mbps • Max value: 4194303 • Min value: 0
luns.qos.policy.min_t hroughput_iops	integer	query	False	Filter by luns.qos.policy.min_ throughput_iops • Max value: 2147483647 • Min value: 0
luns.uuid	string	query	False	Filter by luns.uuid
luns.serial_number	string	query	False	Filter by luns.serial_number • maxLength: 12 • minLength: 12
luns.enabled	boolean	query	False	Filter by luns.enabled
luns.os_type	string	query	False	Filter by luns.os_type
luns.lun_maps.igrou p.protocol	string	query	False	Filter by luns.lun_maps.igrou p.protocol
luns.lun_maps.igrou p.name	string	query	False	Filter by luns.lun_maps.igrou p.name • maxLength: 96 • minLength: 1

Name	Туре	In	Required	Description
luns.lun_maps.igrou p.comment	string	query	False	Filter by luns.lun_maps.igrou p.comment • Introduced in: 9.11 • maxLength: 254 • minLength: 0
luns.lun_maps.igrou p.initiators.name	string	query	False	Filter by luns.lun_maps.igrou p.initiators.name
luns.lun_maps.igrou p.initiators.comment	string	query	False	Filter by luns.lun_maps.igrou p.initiators.comment • maxLength: 254 • minLength: 0
luns.lun_maps.igrou p.os_type	string	query	False	Filter by luns.lun_maps.igrou p.os_type
luns.lun_maps.igrou p.igroups.uuid	string	query	False	Filter by luns.lun_maps.igrou p.igroups.uuid
luns.lun_maps.igrou p.igroups.name	string	query	False	Filter by luns.lun_maps.igrou p.igroups.name • maxLength: 96 • minLength: 1
luns.lun_maps.igrou p.uuid	string	query	False	Filter by luns.lun_maps.igrou p.uuid
luns.lun_maps.logica I_unit_number	integer	query	False	Filter by luns.lun_maps.logic al_unit_number

Name	Туре	In	Required	Description
metric.status	string	query	False	Filter by metric.status • Introduced in: 9.13
metric.available_spa ce	integer	query	False	Filter by metric.available_spa ce • Introduced in: 9.13
metric.timestamp	string	query	False	Filter by metric.timestamp • Introduced in: 9.13
metric.used_space	integer	query	False	Filter by metric.used_space • Introduced in: 9.13
metric.throughput.tot al	integer	query	False	Filter by metric.throughput.tot al • Introduced in: 9.13
metric.throughput.ot her	integer	query	False	Filter by metric.throughput.ot her • Introduced in: 9.13
metric.throughput.wri te	integer	query	False	Filter by metric.throughput.wr ite • Introduced in: 9.13
Name	Туре	In	Required	Description
----------------------------	---------	-------	----------	------------------------------------------------------------------------
metric.throughput.re ad	integer	query	False	Filter by metric.throughput.re ad • Introduced in: 9.13
metric.size	integer	query	False	Filter by metric.size <ul> <li>Introduced in:</li> <li>9.13</li> </ul>
metric.latency.total	integer	query	False	Filter by metric.latency.total • Introduced in: 9.13
metric.latency.other	integer	query	False	Filter by metric.latency.other • Introduced in: 9.13
metric.latency.write	integer	query	False	Filter by metric.latency.write • Introduced in: 9.13
metric.latency.read	integer	query	False	Filter by metric.latency.read • Introduced in: 9.13
metric.duration	string	query	False	Filter by metric.duration • Introduced in: 9.13
metric.iops.total	integer	query	False	Filter by metric.iops.total • Introduced in: 9.13

Name	Туре	In	Required	Description
metric.iops.other	integer	query	False	Filter by metric.iops.other • Introduced in: 9.13
metric.iops.write	integer	query	False	Filter by metric.iops.write • Introduced in: 9.13
metric.iops.read	integer	query	False	Filter by metric.iops.read • Introduced in: 9.13
replicated	boolean	query	False	Filter by replicated
replication_relations hips.is_source	boolean	query	False	Filter by replication_relations hips.is_source • Introduced in: 9.13
replication_relations hips.is_protected_by _svm_dr	boolean	query	False	Filter by replication_relations hips.is_protected_by _svm_dr • Introduced in: _9.14
replication_relations hips.uuid	string	query	False	Filter by replication_relations hips.uuid • Introduced in: 9.13
volumes.tiering.polic y	string	query	False	Filter by volumes.tiering.polic y
volumes.space.used	integer	query	False	Filter by volumes.space.used

Name	Туре	In	Required	Description
volumes.space.avail able	integer	query	False	Filter by volumes.space.avail able
volumes.space.size	integer	query	False	Filter by volumes.space.size
volumes.nas.cifs.sha res.continuously_av ailable	boolean	query	False	Filter by volumes.nas.cifs.sh ares.continuously_a vailable • Introduced in: 9.12
volumes.nas.cifs.sha res.vscan_profile	string	query	False	Filter by volumes.nas.cifs.sh ares.vscan_profile • Introduced in: 9.12
volumes.nas.cifs.sha res.dir_umask	integer	query	False	Filter by volumes.nas.cifs.sh ares.dir_umask • Introduced in: 9.12
volumes.nas.cifs.sha res.name	string	query	False	Filter by volumes.nas.cifs.sh ares.name • Introduced in: 9.12 • maxLength: 80 • minLength: 1
volumes.nas.cifs.sha res.file_umask	integer	query	False	Filter by volumes.nas.cifs.sh ares.file_umask • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.cifs.sha res.no_strict_securit y	boolean	query	False	Filter by volumes.nas.cifs.sh ares.no_strict_securi ty • Introduced in: 9.12
volumes.nas.cifs.sha res.show_snapshot	boolean	query	False	Filter by volumes.nas.cifs.sh ares.show_snapshot • Introduced in: 9.12
volumes.nas.cifs.sha res.access_based_e numeration	boolean	query	False	Filter by volumes.nas.cifs.sh ares.access_based_ enumeration • Introduced in: 9.12
volumes.nas.cifs.sha res.comment	string	query	False	Filter by volumes.nas.cifs.sh ares.comment • Introduced in: 9.12 • maxLength: 256 • minLength: 1
volumes.nas.cifs.sha res.home_directory	boolean	query	False	Filter by volumes.nas.cifs.sh ares.home_directory • Introduced in: 9.12
volumes.nas.cifs.sha res.change_notify	boolean	query	False	Filter by volumes.nas.cifs.sh ares.change_notify • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.cifs.sha res.namespace_cac hing	boolean	query	False	Filter by volumes.nas.cifs.sh ares.namespace_ca ching • Introduced in: 9.12
volumes.nas.cifs.sha res.allow_unencrypt ed_access	boolean	query	False	Filter by volumes.nas.cifs.sh ares.allow_unencryp ted_access • Introduced in: 9.12
volumes.nas.cifs.sha res.unix_symlink	string	query	False	Filter by volumes.nas.cifs.sh ares.unix_symlink • Introduced in: 9.12
volumes.nas.cifs.sha res.offline_files	string	query	False	Filter by volumes.nas.cifs.sh ares.offline_files • Introduced in: 9.12
volumes.nas.cifs.sha res.acls.type	string	query	False	Filter by volumes.nas.cifs.sh ares.acls.type • Introduced in: 9.12
volumes.nas.cifs.sha res.acls.user_or_gro up	string	query	False	Filter by volumes.nas.cifs.sh ares.acls.user_or_gr oup • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.cifs.sha res.acls.permission	string	query	False	Filter by volumes.nas.cifs.sh ares.acls.permission • Introduced in: 9.12
volumes.nas.cifs.sha res.encryption	boolean	query	False	Filter by volumes.nas.cifs.sh ares.encryption • Introduced in: 9.12
volumes.nas.cifs.sha res.oplocks	boolean	query	False	Filter by volumes.nas.cifs.sh ares.oplocks • Introduced in: 9.12
volumes.nas.gid	integer	query	False	Filter by volumes.nas.gid • Introduced in: 9.12
volumes.nas.uid	integer	query	False	Filter by volumes.nas.uid • Introduced in: 9.12
volumes.nas.security _style	string	query	False	Filter by volumes.nas.securit y_style • Introduced in: 9.12
volumes.nas.junction _parent.uuid	string	query	False	Filter by volumes.nas.junctio n_parent.uuid • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.junction _parent.name	string	query	False	Filter by volumes.nas.junctio n_parent.name • Introduced in: 9.12
volumes.nas.unix_p ermissions	integer	query	False	Filter by volumes.nas.unix_p ermissions • Introduced in: 9.12
volumes.nas.export_ policy.rules.index	integer	query	False	Filter by volumes.nas.export_ policy.rules.index • Introduced in: 9.12
volumes.nas.export_ policy.rules.superus er	string	query	False	Filter by volumes.nas.export_ policy.rules.superus er • Introduced in: 9.12
volumes.nas.export_ policy.rules.chown_ mode	string	query	False	Filter by volumes.nas.export_ policy.rules.chown_ mode • Introduced in: 9.12
volumes.nas.export_ policy.rules.allow_de vice_creation	boolean	query	False	Filter by volumes.nas.export_ policy.rules.allow_de vice_creation • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.export_ policy.rules.ntfs_unix _security	string	query	False	Filter by volumes.nas.export_ policy.rules.ntfs_uni x_security • Introduced in: 9.12
volumes.nas.export_ policy.rules.rw_rule	string	query	False	Filter by volumes.nas.export_ policy.rules.rw_rule • Introduced in: 9.12
volumes.nas.export_ policy.rules.ro_rule	string	query	False	Filter by volumes.nas.export_ policy.rules.ro_rule • Introduced in: 9.12
volumes.nas.export_ policy.rules.allow_su id	boolean	query	False	Filter by volumes.nas.export_ policy.rules.allow_su id • Introduced in: 9.12
volumes.nas.export_ policy.rules.clients.m atch	string	query	False	Filter by volumes.nas.export_ policy.rules.clients.m atch • Introduced in: 9.12
volumes.nas.export_ policy.rules.anonym ous_user	string	query	False	Filter by volumes.nas.export_ policy.rules.anonym ous_user • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.export_ policy.rules.protocols	string	query	False	Filter by volumes.nas.export_ policy.rules.protocol s • Introduced in: 9.12
volumes.nas.export_ policy.id	integer	query	False	Filter by volumes.nas.export_ policy.id • Introduced in: 9.14
volumes.nas.export_ policy.name	string	query	False	Filter by volumes.nas.export_ policy.name • Introduced in: 9.12
volumes.nas.path	string	query	False	Filter by volumes.nas.path • Introduced in: 9.12
volumes.snapshot_p olicy.name	string	query	False	Filter by volumes.snapshot_p olicy.name
volumes.snapshot_p olicy.uuid	string	query	False	Filter by volumes.snapshot_p olicy.uuid
volumes.name	string	query	False	Filter by volumes.name • maxLength: 203 • minLength: 1
volumes.qos.policy.u uid	string	query	False	Filter by volumes.qos.policy. uuid

Name	Туре	In	Required	Description
volumes.qos.policy.n ame	string	query	False	Filter by volumes.qos.policy. name
volumes.comment	string	query	False	Filter by volumes.comment • maxLength: 1023 • minLength: 0
volumes.uuid	string	query	False	Filter by volumes.uuid
statistics.status	string	query	False	Filter by statistics.status • Introduced in: 9.13
statistics.throughput _raw.total	integer	query	False	Filter by statistics.throughput _raw.total • Introduced in: 9.13
statistics.throughput _raw.other	integer	query	False	Filter by statistics.throughput _raw.other • Introduced in: 9.13
statistics.throughput _raw.write	integer	query	False	Filter by statistics.throughput _raw.write • Introduced in: 9.13
statistics.throughput _raw.read	integer	query	False	Filter by statistics.throughput _raw.read • Introduced in: 9.13

Name	Туре	In	Required	Description
statistics.available_s pace	integer	query	False	Filter by statistics.available_s pace • Introduced in: 9.13
statistics.used_spac e	integer	query	False	Filter by statistics.used_spac e • Introduced in: 9.13
statistics.timestamp	string	query	False	Filter by statistics.timestamp • Introduced in: 9.13
statistics.iops_raw.to tal	integer	query	False	Filter by statistics.iops_raw.to tal • Introduced in: 9.13
statistics.iops_raw.ot her	integer	query	False	Filter by statistics.iops_raw.ot her • Introduced in: 9.13
statistics.iops_raw.w rite	integer	query	False	Filter by statistics.iops_raw.w rite • Introduced in: 9.13
statistics.iops_raw.re ad	integer	query	False	Filter by statistics.iops_raw.r ead • Introduced in: 9.13

Name	Туре	In	Required	Description
statistics.latency_ra w.total	integer	query	False	Filter by statistics.latency_ra w.total • Introduced in: 9.13
statistics.latency_ra w.other	integer	query	False	Filter by statistics.latency_ra w.other • Introduced in: 9.13
statistics.latency_ra w.write	integer	query	False	Filter by statistics.latency_ra w.write • Introduced in: 9.13
statistics.latency_ra w.read	integer	query	False	Filter by statistics.latency_ra w.read • Introduced in: 9.13
statistics.size	integer	query	False	Filter by statistics.size • Introduced in: 9.13
snapshot_policy.na me	string	query	False	Filter by snapshot_policy.na me
snapshot_policy.uuid	string	query	False	Filter by snapshot_policy.uui d
qos.policy.uuid	string	query	False	Filter by qos.policy.uuid
qos.policy.name	string	query	False	Filter by qos.policy.name

Name	Туре	In	Required	Description
consistency_groups. snapshot_policy.na me	string	query	False	Filter by consistency_groups. snapshot_policy.na me
consistency_groups. snapshot_policy.uuid	string	query	False	Filter by consistency_groups. snapshot_policy.uui d
consistency_groups. name	string	query	False	Filter by consistency_groups. name
consistency_groups. space.size	integer	query	False	Filter by consistency_groups. space.size
consistency_groups. space.used	integer	query	False	Filter by consistency_groups. space.used
consistency_groups. space.available	integer	query	False	Filter by consistency_groups. space.available
consistency_groups. application.type	string	query	False	Filter by consistency_groups. application.type • Introduced in: 9.12
consistency_groups. application.compone nt_type	string	query	False	Filter by consistency_groups. application.compone nt_type • Introduced in: 9.12
consistency_groups. volumes.tiering.polic y	string	query	False	Filter by consistency_groups. volumes.tiering.polic y

Name	Туре	In	Required	Description
consistency_groups. volumes.space.used	integer	query	False	Filter by consistency_groups. volumes.space.used
consistency_groups. volumes.space.avail able	integer	query	False	Filter by consistency_groups. volumes.space.avail able
consistency_groups. volumes.space.size	integer	query	False	Filter by consistency_groups. volumes.space.size
consistency_groups. volumes.nas.cifs.sha res.continuously_av ailable	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.continuously_a vailable • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.vscan_profile	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.vscan_profile • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.dir_umask	integer	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.dir_umask • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.name	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.name • Introduced in: 9.12 • maxLength: 80 • minLength: 1

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.cifs.sha res.file_umask	integer	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.file_umask • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.no_strict_securit y	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.no_strict_securi ty • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.show_snapshot	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.show_snapshot • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.access_based_e numeration	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.access_based_ enumeration • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.comment	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.comment • Introduced in: 9.12 • maxLength: 256 • minLength: 1

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.cifs.sha res.home_directory	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.home_directory • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.change_notify	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.change_notify • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.namespace_cac hing	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.namespace_ca ching • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.allow_unencrypt ed_access	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.allow_unencryp ted_access • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.unix_symlink	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.unix_symlink • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.offline_files	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.offline_files • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.cifs.sha res.acls.type	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.acls.type • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.acls.user_or_gro up	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.acls.user_or_gr oup • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.acls.permission	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.acls.permission • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.encryption	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.encryption • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.oplocks	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.oplocks • Introduced in: 9.12
consistency_groups. volumes.nas.gid	integer	query	False	Filter by consistency_groups. volumes.nas.gid • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.uid	integer	query	False	Filter by consistency_groups. volumes.nas.uid • Introduced in: 9.12
consistency_groups. volumes.nas.security _style	string	query	False	Filter by consistency_groups. volumes.nas.securit y_style • Introduced in: 9.12
consistency_groups. volumes.nas.junction _parent.uuid	string	query	False	Filter by consistency_groups. volumes.nas.junctio n_parent.uuid • Introduced in: 9.12
consistency_groups. volumes.nas.junction _parent.name	string	query	False	Filter by consistency_groups. volumes.nas.junctio n_parent.name • Introduced in: 9.12
consistency_groups. volumes.nas.unix_p ermissions	integer	query	False	Filter by consistency_groups. volumes.nas.unix_p ermissions • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.index	integer	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.index • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.export_ policy.rules.superus er	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.superus er • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.chown_ mode	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.chown_ mode • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.allow_de vice_creation	boolean	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.allow_de vice_creation • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.ntfs_unix _security	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.ntfs_uni x_security • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.rw_rule	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.rw_rule • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.export_ policy.rules.ro_rule	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.ro_rule • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.allow_su id	boolean	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.allow_su id • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.clients.m atch	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.clients.m atch • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.anonym ous_user	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.anonym ous_user • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.protocols	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.protocol s • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.export_ policy.id	integer	query	False	Filter by consistency_groups. volumes.nas.export_ policy.id • Introduced in: 9.14
consistency_groups. volumes.nas.export_ policy.name	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.name • Introduced in: 9.12
consistency_groups. volumes.nas.path	string	query	False	Filter by consistency_groups. volumes.nas.path • Introduced in: 9.12
consistency_groups. volumes.snapshot_p olicy.name	string	query	False	Filter by consistency_groups. volumes.snapshot_p olicy.name
consistency_groups. volumes.snapshot_p olicy.uuid	string	query	False	Filter by consistency_groups. volumes.snapshot_p olicy.uuid
consistency_groups. volumes.name	string	query	False	Filter by consistency_groups. volumes.name • maxLength: 203 • minLength: 1
consistency_groups. volumes.qos.policy.u uid	string	query	False	Filter by consistency_groups. volumes.qos.policy. uuid

Name	Туре	In	Required	Description
consistency_groups. volumes.qos.policy.n ame	string	query	False	Filter by consistency_groups. volumes.qos.policy. name
consistency_groups. volumes.comment	string	query	False	Filter by consistency_groups. volumes.comment • maxLength: 1023 • minLength: 0
consistency_groups. volumes.uuid	string	query	False	Filter by consistency_groups. volumes.uuid
consistency_groups. parent_consistency_ group.uuid	string	query	False	Filter by consistency_groups. parent_consistency_ group.uuid
consistency_groups. parent_consistency_ group.name	string	query	False	Filter by consistency_groups. parent_consistency_ group.name
consistency_groups. uuid	string	query	False	Filter by consistency_groups. uuid
consistency_groups. qos.policy.uuid	string	query	False	Filter by consistency_groups. qos.policy.uuid
consistency_groups. qos.policy.name	string	query	False	Filter by consistency_groups. qos.policy.name
consistency_groups. svm.uuid	string	query	False	Filter by consistency_groups. svm.uuid
consistency_groups. svm.name	string	query	False	Filter by consistency_groups. svm.name

Name	Туре	In	Required	Description
consistency_groups.l uns.space.used	integer	query	False	Filter by consistency_groups. luns.space.used
consistency_groups.l uns.space.guarantee .reserved	boolean	query	False	Filter by consistency_groups. luns.space.guarante e.reserved • Introduced in: 9.11
consistency_groups.l uns.space.guarantee .requested	boolean	query	False	Filter by consistency_groups. luns.space.guarante e.requested • Introduced in: 9.11
consistency_groups.l uns.space.size	integer	query	False	Filter by consistency_groups. luns.space.size • Max value: 1407374883553 28 • Min value: 4096
consistency_groups.l uns.create_time	string	query	False	Filter by consistency_groups. luns.create_time
consistency_groups.l uns.name	string	query	False	Filter by consistency_groups. luns.name
consistency_groups.l uns.comment	string	query	False	Filter by consistency_groups. luns.comment • maxLength: 254 • minLength: 0
consistency_groups.l uns.qos.policy.uuid	string	query	False	Filter by consistency_groups. luns.qos.policy.uuid

Name	Туре	In	Required	Description
consistency_groups.l uns.qos.policy.max_t hroughput_mbps	integer	query	False	Filter by consistency_groups. luns.qos.policy.max _throughput_mbps • Max value: 4194303 • Min value: 0
consistency_groups.l uns.qos.policy.name	string	query	False	Filter by consistency_groups. luns.qos.policy.nam e
consistency_groups.l uns.qos.policy.max_t hroughput_iops	integer	query	False	Filter by consistency_groups. luns.qos.policy.max _throughput_iops • Max value: 2147483647 • Min value: 0
consistency_groups.l uns.qos.policy.min_t hroughput_mbps	integer	query	False	Filter by consistency_groups. luns.qos.policy.min_ throughput_mbps • Max value: 4194303 • Min value: 0
consistency_groups.l uns.qos.policy.min_t hroughput_iops	integer	query	False	Filter by consistency_groups. luns.qos.policy.min_ throughput_iops • Max value: 2147483647 • Min value: 0
consistency_groups.l uns.uuid	string	query	False	Filter by consistency_groups. luns.uuid

Name	Туре	In	Required	Description
consistency_groups.l uns.serial_number	string	query	False	Filter by consistency_groups. luns.serial_number • maxLength: 12 • minLength: 12
consistency_groups.l uns.enabled	boolean	query	False	Filter by consistency_groups. luns.enabled
consistency_groups.l uns.os_type	string	query	False	Filter by consistency_groups. luns.os_type
consistency_groups.l uns.lun_maps.igroup .protocol	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.protocol
consistency_groups.l uns.lun_maps.igroup .name	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.name • maxLength: 96 • minLength: 1
consistency_groups.l uns.lun_maps.igroup .comment	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.comment • Introduced in: 9.11 • maxLength: 254 • minLength: 0
consistency_groups.l uns.lun_maps.igroup .initiators.name	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.initiators.name

Name	Туре	In	Required	Description
consistency_groups.l uns.lun_maps.igroup .initiators.comment	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.initiators.comment • maxLength: 254 • minLength: 0
consistency_groups.l uns.lun_maps.igroup .os_type	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.os_type
consistency_groups.l uns.lun_maps.igroup .igroups.uuid	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.igroups.uuid
consistency_groups.l uns.lun_maps.igroup .igroups.name	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.igroups.name • maxLength: 96 • minLength: 1
consistency_groups.l uns.lun_maps.igroup .uuid	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.uuid
consistency_groups.l uns.lun_maps.logical _unit_number	integer	query	False	Filter by consistency_groups. luns.lun_maps.logic al_unit_number
consistency_groups. namespaces.enable d	boolean	query	False	Filter by consistency_groups. namespaces.enable d • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. namespaces.status. state	string	query	False	Filter by consistency_groups. namespaces.status. state • Introduced in: 9.12
consistency_groups. namespaces.status. container_state	string	query	False	Filter by consistency_groups. namespaces.status. container_state • Introduced in: 9.12
consistency_groups. namespaces.status.r ead_only	boolean	query	False	Filter by consistency_groups. namespaces.status.r ead_only • Introduced in: 9.12
consistency_groups. namespaces.status. mapped	boolean	query	False	Filter by consistency_groups. namespaces.status. mapped • Introduced in: 9.12
consistency_groups. namespaces.os_typ e	string	query	False	Filter by consistency_groups. namespaces.os_typ e • Introduced in: 9.12
consistency_groups. namespaces.comme nt	string	query	False	Filter by consistency_groups. namespaces.comme nt • Introduced in: 9.12 • maxLength: 254 • minLength: 0

Name	Туре	In	Required	Description
consistency_groups. namespaces.uuid	string	query	False	Filter by consistency_groups. namespaces.uuid • Introduced in: 9.12
consistency_groups. namespaces.space. block_size	integer	query	False	Filter by consistency_groups. namespaces.space. block_size • Introduced in: 9.12
consistency_groups. namespaces.space. used	integer	query	False	Filter by consistency_groups. namespaces.space. used • Introduced in: 9.12
consistency_groups. namespaces.space. size	integer	query	False	Filter by consistency_groups. namespaces.space. size • Introduced in: 9.12 • Max value: 1407374883553 28 • Min value: 4096
consistency_groups. namespaces.space. guarantee.requested	boolean	query	False	Filter by consistency_groups. namespaces.space. guarantee.requested • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. namespaces.space. guarantee.reserved	boolean	query	False	Filter by consistency_groups. namespaces.space. guarantee.reserved • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.nsid	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.nsid • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.subsystem. os_type	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .os_type • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.subsystem. uuid	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .uuid • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.subsystem. comment	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .comment • Introduced in: 9.12 • maxLength: 255 • minLength: 0

Name	Туре	In	Required	Description
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.nqn	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.nqn • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.group_size	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.group_size • Introduced in: 9.14
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.hash_function	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.hash_function • Introduced in: 9.14
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.priority	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.priority • Introduced in: 9.14
consistency_groups. namespaces.subsyst em_map.subsystem. name	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .name • Introduced in: 9.12 • maxLength: 64 • minLength: 1

Name	Туре	In	Required	Description
consistency_groups. namespaces.subsyst em_map.anagrpid	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.anagrpid • Introduced in: 9.12
consistency_groups. namespaces.name	string	query	False	Filter by consistency_groups. namespaces.name • Introduced in: 9.12
consistency_groups. namespaces.auto_d elete	boolean	query	False	Filter by consistency_groups. namespaces.auto_d elete • Introduced in: 9.12
consistency_groups. namespaces.create_ time	string	query	False	Filter by consistency_groups. namespaces.create _time • Introduced in: 9.12
consistency_groups. tiering.policy	string	query	False	Filter by consistency_groups. tiering.policy
uuid	string	query	False	Filter by uuid
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.

Name	Туре	In	Required	Description
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
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. • Max value: 120 • Min value: 0 • Default value: 1
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Туре	Description
_links	collection_links	
num_records	integer	Number of records.
records	array[records]	

Example response

{

```
" links": {
  "next": {
   "href": "/api/resourcelink"
  },
  "self": {
   "href": "/api/resourcelink"
  }
},
"num records": 1,
"records": [
  {
    " links": {
      "self": {
       "href": "/api/resourcelink"
      }
    },
    "application": {
     "component type": "string",
      "type": "string"
    },
    "clone": {
      "guarantee": {
       "type": "string"
      },
      "parent consistency group": {
        " links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "my consistency group",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "parent snapshot": {
        "name": "string"
      },
      "volume": {
        "prefix": "string",
       "suffix": "string"
      }
    },
    "consistency groups": [
      {
```

```
" links": {
 "self": {
   "href": "/api/resourcelink"
 }
},
"application": {
 "component type": "string",
 "type": "string"
},
"luns": [
 {
   "clone": {
     "source": {
        "name": "/vol/volume1/lun1",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
     }
   },
   "comment": "string",
   "create time": "2018-06-04 15:00:00 -0400",
   "lun maps": [
     {
        "igroup": {
          "comment": "string",
          "igroups": [
            {
              " links": {
                "self": {
                 "href": "/api/resourcelink"
               }
              },
              "name": "igroup1",
              "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
            }
          ],
          "initiators": [
           {
              "comment": "my comment",
              "name": "iqn.1998-01.com.corp.iscsi:name1"
           }
          ],
          "name": "igroup1",
          "os type": "string",
          "protocol": "string",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      }
```

```
],
    "name": "/vol/volume1/lun1",
    "os type": "string",
    "provisioning options": {
     "action": "string"
    },
    "qos": {
      "policy": {
        " links": {
         "self": {
            "href": "/api/resourcelink"
         }
        },
        "max throughput iops": 10000,
        "max throughput mbps": 500,
        "min throughput iops": 2000,
        "min throughput mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
     }
    },
    "serial number": "string",
    "space": {
      "size": 1073741824,
     "used": 0
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
],
"name": "string",
"namespaces": [
 {
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "name": "/vol/volume1/qtree1/namespace1",
    "os type": "string",
    "provisioning options": {
      "action": "string"
    },
    "space": {
      "block size": 512,
     "size": 1073741824,
      "used": 0
    },
    "status": {
      "container state": "string",
```

```
"state": "online"
              },
              "subsystem map": {
                " links": {
                  "self": {
                    "href": "/api/resourcelink"
                  }
                },
                "anagrpid": "00103050h",
                "nsid": "00000001h",
                "subsystem": {
                  "comment": "string",
                  "hosts": [
                    {
                      "dh hmac chap": {
                        "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                        "group size": "string",
                        "hash function": "string",
                        "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
                      },
                      "ngn": "ngn.1992-01.example.com:string",
                      "priority": "string"
                    }
                  ],
                  "name": "subsystem1",
                  "os type": "string",
                  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
                }
              },
              "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
            }
          ],
          "parent consistency group": {
            " links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "my consistency group",
            "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
          },
          "provisioning options": {
            "action": "string",
            "name": "string",
```
```
"storage service": {
   "name": "string"
 }
},
"qos": {
  "policy": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
   "name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"restore to": {
 "snapshot": {
   "name": "string",
  "uuid": "string"
 }
},
"snapshot policy": {
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "name": "default",
 "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"svm": {
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
 "name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
 "control": "string",
```

```
"object stores": [
   {
     "name": "string"
  }
 ],
 "policy": "string"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
 {
   "comment": "string",
   "name": "vol cs dept",
   "nas": {
     "cifs": {
        "shares": [
          {
            " links": {
             "self": {
               "href": "/api/resourcelink"
             }
            },
            "acls": [
             {
                " links": {
                 "self": {
                   "href": "/api/resourcelink"
                 }
                },
                "permission": "string",
                "type": "string",
                "user_or_group": "ENGDOMAIN\\ad_user"
              }
            ],
            "comment": "HR Department Share",
            "dir umask": 18,
            "file umask": 18,
            "name": "HR SHARE",
            "offline files": "string",
            "unix symlink": "string",
            "vscan profile": "string"
          }
       ]
      },
      "export policy": {
        " links": {
         "self": {
```

```
"href": "/api/resourcelink"
  }
 },
 "id": 0,
 "name": "string",
 "rules": [
   {
     " links": {
       "self": {
        "href": "/api/resourcelink"
       }
     },
     "anonymous user": "string",
     "chown mode": "string",
     "clients": [
       {
         "match": "0.0.0.0/0"
       }
     ],
     "ntfs unix security": "string",
     "protocols": [
       "string"
     ],
     "ro rule": [
      "string"
     ],
     "rw rule": [
      "string"
     ],
     "superuser": [
       "string"
     ]
   }
 ]
},
"junction parent": {
 " links": {
   "self": {
    "href": "/api/resourcelink"
   }
 },
 "name": "vs1_root",
 "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
},
"path": "/user/my volume",
"security style": "string",
```

```
"unix permissions": 493
        },
        "provisioning options": {
         "action": "string",
          "storage service": {
           "name": "string"
         }
        },
        "qos": {
          "policy": {
            " links": {
              "self": {
               "href": "/api/resourcelink"
             }
            },
            "name": "performance",
           "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
         }
        },
        "snapshot policy": {
          " links": {
           "self": {
             "href": "/api/resourcelink"
           }
          },
          "name": "default",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "space": {
         "available": 0,
         "used": 0
        },
        "tiering": {
          "control": "string",
          "object stores": [
            {
             "name": "string"
           }
          ],
         "policy": "string"
        },
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
      }
   1
 }
],
```

```
"luns": [
 {
   "clone": {
     "source": {
        "name": "/vol/volume1/lun1",
       "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
     }
   },
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "lun maps": [
      {
        "igroup": {
          "comment": "string",
          "igroups": [
            {
              " links": {
               "self": {
                  "href": "/api/resourcelink"
                }
              },
              "name": "igroup1",
              "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
           }
          ],
          "initiators": [
            {
              "comment": "my comment",
              "name": "iqn.1998-01.com.corp.iscsi:name1"
            }
          ],
          "name": "igroup1",
          "os type": "string",
          "protocol": "string",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
       }
     }
   ],
   "name": "/vol/volume1/lun1",
   "os type": "string",
   "provisioning options": {
     "action": "string"
    },
    "qos": {
     "policy": {
       " links": {
```

```
"self": {
            "href": "/api/resourcelink"
         }
        },
        "max throughput iops": 10000,
        "max throughput mbps": 500,
        "min throughput iops": 2000,
        "min throughput mbps": 500,
        "name": "performance",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
     }
    },
   "serial number": "string",
   "space": {
     "size": 1073741824,
     "used": 0
   },
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
],
"metric": {
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "available space": 4096,
 "duration": "PT15S",
 "iops": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency": {
   "read": 200,
   "total": 1000,
   "write": 100
 },
  "size": 4096,
 "status": "ok",
  "throughput": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500",
```

```
"used space": 4096
      },
      "name": "string",
      "namespaces": [
        {
          "comment": "string",
          "create time": "2018-06-04 15:00:00 -0400",
          "name": "/vol/volume1/qtree1/namespace1",
          "os type": "string",
          "provisioning options": {
           "action": "string"
          },
          "space": {
           "block size": 512,
           "size": 1073741824,
            "used": 0
          },
          "status": {
           "container state": "string",
           "state": "online"
          },
          "subsystem map": {
            " links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "anagrpid": "00103050h",
            "nsid": "00000001h",
            "subsystem": {
              "comment": "string",
              "hosts": [
                {
                  "dh hmac chap": {
                    "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                    "group size": "string",
                    "hash function": "string",
                    "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
                  },
                  "nqn": "nqn.1992-01.example.com:string",
                  "priority": "string"
                }
              ],
              "name": "subsystem1",
```

```
"os type": "string",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
     }
    },
   "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
 }
],
"parent consistency group": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
  "name": "my consistency group",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"provisioning options": {
 "action": "string",
 "name": "string",
 "storage service": {
   "name": "string"
 }
},
"qos": {
 "policy": {
   " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
   "name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"replication relationships": [
 {
   " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
   "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
],
"restore to": {
 "snapshot": {
```

```
"name": "string",
   "uuid": "string"
 }
},
"snapshot policy": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "name": "default",
 "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"statistics": {
  "available space": 4096,
 "iops raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency raw": {
   "read": 200,
   "total": 1000,
   "write": 100
 },
 "size": 4096,
 "status": "ok",
 "throughput raw": {
   "read": 200,
   "total": 1000,
   "write": 100
 },
 "timestamp": "2017-01-25 06:20:13 -0500",
 "used space": 4096
},
"svm": {
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
```

```
"name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
 "control": "string",
 "object stores": [
   {
     "name": "string"
   }
 ],
 "policy": "string"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
 {
    "comment": "string",
   "name": "vol cs dept",
   "nas": {
     "cifs": {
        "shares": [
         {
            " links": {
              "self": {
               "href": "/api/resourcelink"
              }
            },
            "acls": [
             {
               " links": {
                  "self": {
                    "href": "/api/resourcelink"
                 }
                },
                "permission": "string",
                "type": "string",
               "user or group": "ENGDOMAIN\\ad user"
             }
            ],
            "comment": "HR Department Share",
            "dir umask": 18,
            "file umask": 18,
            "name": "HR SHARE",
            "offline files": "string",
            "unix symlink": "string",
            "vscan profile": "string"
          }
```

```
]
},
"export policy": {
 " links": {
   "self": {
    "href": "/api/resourcelink"
   }
 },
 "id": 0,
 "name": "string",
 "rules": [
   {
     " links": {
       "self": {
        "href": "/api/resourcelink"
       }
     },
     "anonymous user": "string",
     "chown_mode": "string",
      "clients": [
      {
        "match": "0.0.0.0/0"
       }
     ],
     "ntfs unix security": "string",
     "protocols": [
      "string"
     ],
     "ro rule": [
      "string"
     ],
      "rw rule": [
      "string"
     ],
     "superuser": [
      "string"
     ]
   }
 ]
},
"junction parent": {
 " links": {
  "self": {
     "href": "/api/resourcelink"
   }
 },
```

```
"name": "vs1 root",
    "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
  },
  "path": "/user/my volume",
  "security style": "string",
 "unix permissions": 493
},
"provisioning options": {
 "action": "string",
 "storage service": {
   "name": "string"
 }
},
"qos": {
 "policy": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"snapshot policy": {
 " links": {
   "self": {
    "href": "/api/resourcelink"
   }
  },
 "name": "default",
 "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 0,
"used": 0
},
"tiering": {
  "control": "string",
 "object stores": [
   {
     "name": "string"
   }
 ],
  "policy": "string"
},
```

## Error

```
Status: Default, Error
```

Name	Туре	Description
error	returned_error	

Example error

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

# Definitions

#### See Definitions

href

Name	Туре	Description
href	string	

collection\_links

Name	Туре	Description
next	href	
self	href	

## self\_link

Name	Туре	Description
self	href	

#### application

Name	Туре	Description
component_type	string	Nested consistency group tag.
type	string	Top level consistency group tag.

#### guarantee

Name	Туре	Description
type	string	The type of space guarantee of this volume in the aggregate.

parent\_consistency\_group

Consistency group that is to be cloned.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

#### parent\_snapshot

Name	Туре	Description
name	string	Name of an existing Snapshot copy of a parent consistency group.

volume

Volume name suffix/prefix for the cloned volumes.

Name	Туре	Description
prefix	string	Volume name prefix for cloned volumes.
suffix	string	Volume name suffix for cloned volumes.

#### clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

Name	Туре	Description
guarantee	guarantee	
parent_consistency_group	parent_consistency_group	Consistency group that is to be cloned.
parent_snapshot	parent_snapshot	
split_initiated	boolean	Splits volumes after cloning. Default is false.
volume	volume	Volume name suffix/prefix for the cloned volumes.

#### source

The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid or clone.source.name. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

Name	Туре	Description
name	string	The fully qualified path name of the clone source LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and base name of the LUN. Valid in POST and PATCH.
uuid	string	The unique identifier of the clone source LUN. Valid in POST and PATCH.

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto\_delete,
gos\_policy, space.guarantee.requested and
space.scsi\_thin\_provisioning\_support\_enabled.

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto\_delete, lun\_maps, serial\_number, status.state, and uuid.

Persistent reservations for the patched LUN are also preserved.

Name	Туре	Description
source	source	The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid Or clone.source.name. If both properties are supplied, they must refer to the same LUN. Valid in POST to create a new LUN as a clone of the source. Valid in PATCH to overwrite an existing LUN's data as a clone of another.

#### igroups

Name	Туре	Description
_links	self_link	
name	string	The name of the initiator group.

Name	Туре	Description
uuid	string	The unique identifier of the initiator group.

#### initiators

The initiators that are members of the initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator.
name	string	Name of initiator that is a member of the initiator group.

#### igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator. Valid in POST and PATCH.
igroups	array[igroups]	Separate igroup definitions to include in this igroup.
initiators	array[initiators]	The initiators that are members of the group.
name	string	The name of the initiator group. Required in POST; optional in PATCH.
os_type	string	The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH.

Name	Туре	Description
protocol	string	The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group. Optional in POST; if not supplied, this defaults to <i>mixed</i> . The protocol of an initiator group cannot be changed after creation of the group.
uuid	string	The unique identifier of the initiator group.

#### lun\_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

Name	Туре	Description
igroup	igroup	The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.
logical_unit_number	integer	The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through the Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value. • Introduced in: 9.6 • readCreate: 1 • x-nullable: true

#### provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

policy

The QoS policy

Name	Туре	Description
_links	self_link	
max_throughput_iops	integer	Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
max_throughput_mbps	integer	Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_iops	integer	Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_mbps	integer	Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.

Name	Туре	Description
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

qos

Name	Туре	Description
policy	policy	The QoS policy

## guarantee

Properties that request and report the space guarantee for the LUN.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH.
reserved	boolean	Reports if the LUN is space guaranteed. If <i>true</i> , a space guarantee is requested and the containing volume and aggregate support the request. If <i>false</i> , a space guarantee is not requested or a space guarantee is requested and either the containing volume or aggregate do not support the request.

#### space

The storage space related properties of the LUN.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the LUN.
size	integer	The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maxiumum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation. • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6 • x-nullable: true

Name	Туре	Description
used	integer	DescriptionThe amount of space consumed by the main data stream of the LUN.This value is the total space consumed in the volume by the LUN, including filesystem overhead, but excluding prefix and suffix streams. Due to internal filesystem overhead and the many ways SAN filesystems and applications utilize blocks within a LUN, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the LUN blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.For more information, see Size properties in the docs section of the ONTAP REST API documentation.• format: int64 • readOnly: 1 • Introduced in: 9.6 • x-nullable: true

#### luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

Name	Туре	Description
clone	clone	This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto_delete, qos_policy, space.guarantee.requested and space.scsi_thin_provision ing_support_enabled. When used in a PATCH, the patched LUN's data is over- written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto_delete, lun_maps, serial_number, status.state, and uuid. Persistent reservations for the patched LUN are also preserved.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the LUN was created.

enabledbooleanThe enabled state of the LUN. LUNs can be disabled to prevent access to the LUN Certain error conditions also cause the LUN certain error conditions also cause the LUN is disabled, you can consuit the state property to determine if the LUN is disabled a property to determine if the state study disabled (offline) or has become disabled (offline) or has become disabled (offline) or has become disabled approperty to true or enabled property to true or brought administratively disabled approperty to true or brought administratively disabled approperty to true or brought administratively disabled approperty to true or brought administratively of the LUN is enabled by default. Valid in PATCH.Lun_mapsAn array of LUN maps. A narray of LUN maps. A LUN map is an association between a LUN and an initiator group, the initiator group, the initiator group, the initiator group is many LUNs to many initiator group is many LUNs to many linitiator group is many LUN and an initiator group is many LUNs to many linitiator group is many LUNs to many l	Name	Туре	Description
lun_mapsarray[lun_maps]An array of LUN maps.LUN_mapsA LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group is initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.	enabled	boolean	The enabled state of the LUN. LUNs can be disabled to prevent access to the LUN. Certain error conditions also cause the LUN to become disabled. If the LUN is disabled, you can consult the state property to determine if the LUN is administratively disabled (offline) or has become disabled as a result of an error. A LUN in an error condition can be brought online by setting the enabled property to <i>true</i> or brought administratively offline by setting the enabled property to <i>false</i> . Upon creation, a LUN is enabled by default. Valid in PATCH.
namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqosprovisioning_optionsOptions that are applied to the operation.	lun_maps	array[lun_maps]	An array of LUN maps. A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.
os_typestringThe operating system type of the LUN.Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqos	name	string	The fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.
provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqos	os_type	string	The operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.
qos qos	provisioning_options	provisioning_options	Options that are applied to the operation.
	qos	qos	

Name	Туре	Description
serial_number	string	The LUN serial number. The serial number is generated by ONTAP when the LUN is created. • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 • x-nullable: true
space	space	The storage space related properties of the LUN.
uuid	string	<ul> <li>The unique identifier of the LUN.</li> <li>The UUID is generated by ONTAP when the LUN is created.</li> <li>example: 1cd8a442-86d1- 11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>

## guarantee

Properties that request and report the space guarantee for the NVMe namespace.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the NVMe namespace. If <i>true</i> , a space reservation is requested for the namespace; if <i>false</i> , the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%. The space reservation policy for an NVMe namespace is determined by ONTAP. • Introduced in: 9.6 • x-nullable: true
reserved	boolean	Reports if the NVMe namespace is space guaranteed. This property is <i>true</i> if a space guarantee is requested and the containing volume and aggregate support the request. This property is <i>false</i> if a space guarantee is not requested or if a space guarantee is requested and either the containing volume and aggregate do not support the request.

#### space

The storage space related properties of the NVMe namespace.

Name	Туре	Description
block_size	integer	The size of blocks in the namespace, in bytes. Valid in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone. Valid in POST.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the NVMe namespace.
size	integer	The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.
		The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.
		For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.
		• example: 1073741824
		• format: int64
		<ul> <li>Max value: 140737488355328</li> </ul>
		• Min value: 4096
		Introduced in: 9.6
		• x-nullable: true

#### status

Status information about the NVMe namespace.

Name	Туре	Description
container_state	string	The state of the volume and aggregate that contain the NVMe namespace. Namespaces are only available when their containers are available.

Name	Туре	Description
mapped	boolean	Reports if the NVMe namespace is mapped to an NVMe subsystem.
		There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
read_only	boolean	Reports if the NVMe namespace allows only read access.
state	string	The state of the NVMe namespace. Normal states for a namespace are <i>online</i> and <i>offline</i> . Other states indicate errors.

consistency\_group\_nvme\_host\_dh\_hmac\_chap

A container for properties of NVMe in-band authentication with the DH-HMAC-CHAP protocol.

Name	Туре	Description
controller_secret_key	string	The controller secret for NVMe in- band authentication. The value of this property is used by the NVMe host to authenticate the NVMe controller while establishing a connection. If unset, the controller is not authenticated. When supplied, the property host_secret_key must also be supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a controller secret has been set for the host, but the controller secret value cannot be read. To change the value, the host must be deleted from the subsystem and re-added.

Name	Туре	Description
group_size	string	The Diffie-Hellman group size for NVMe in-band authentication. When property host_secret_key is provided, this property defaults to 2048_bit. When supplied, the property host_secret_key must also be supplied. Optional in POST.
hash_function	string	The hash function for NVMe in- band authentication. When property host_secret_key is provided, this property defaults to sha_256. When supplied, the property host_secret_key must also be supplied. Optional in POST.
host_secret_key	string	The host secret for NVMe in-band authentication. The value of this property is used by the NVMe controller to authenticate the NVMe host while establishing a connection. If unset, no authentication is performed by the host or controller. This property must be supplied if any other NVMe in-band authentication properties are supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a host secret has been set for the host, but the host secret value cannot be read. To change the value, the host must be deleted from the subsystem and re-added.

## consistency\_group\_nvme\_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

Name	Туре	Description
dh_hmac_chap	consistency_group_nvme_host_d h_hmac_chap	A container for properties of NVMe in-band authentication with the DH-HMAC-CHAP protocol.

Name	Туре	Description
nqn	string	The NVMe qualified name (NQN) used to identify the NVMe storage target. Not allowed in POST when the records property is used.
priority	string	The host priority setting allocates appropriate NVMe I/O queues (count and depth) for the host to submit I/O commands. Absence of this property in GET implies io_queue count and I/O queue depth are being used.

consistency\_group\_nvme\_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMeconnected hosts.

Name	Туре	Description
comment	string	A configurable comment for the NVMe subsystem. Optional in POST and PATCH.
hosts	array[consistency_group_nvme_h ost]	The NVMe hosts configured for access to the NVMe subsystem. Optional in POST.
name	string	The name of the NVMe subsystem. Once created, an NVMe subsystem cannot be renamed. Required in POST.
os_type	string	The host operating system of the NVMe subsystem's hosts. Required in POST.
uuid	string	The unique identifier of the NVMe subsystem.

subsystem\_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for subsystem\_map. They are not
populated for either a collection GET or an instance GET unless explicitly requested using the fields
query parameter.

Name	Туре	Description
_links	self_link	
anagrpid	string	The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace. The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h". There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
nsid	string	The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace. The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".
subsystem	consistency_group_nvme_subsys tem	An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

#### namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

Name	Туре	Description
auto_delete	boolean	This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones. When set to <i>true</i> , the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold. This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i> . There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the NVMe namespace was created.
enabled	boolean	The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the state property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created.

Name	Туре	Description
name	string	The fully qualified path name of the NVMe namespace composed of a "/vol" prefix, the volume name, the (optional) qtree name and base name of the namespace. Valid in POST. NVMe namespaces do not support rename, or movement between volumes.
os_type	string	The operating system type of the NVMe namespace. Required in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone.
provisioning_options	provisioning_options	Options that are applied to the operation.
space	space	The storage space related properties of the NVMe namespace.
status	status	Status information about the NVMe namespace.
subsystem_map	subsystem_map	The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems. There is an added computational cost to retrieving property values for subsystem_map. They are not populated for either a collection GET or an instance GET unless explicitly requested using the fields query parameter.
uuid	string	The unique identifier of the NVMe namespace.

parent\_consistency\_group

The parent consistency group.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

## storage\_service

Determines the placement of any storage object created during this operation.

Name	Туре	Description
name	string	Storage service name. If not specified, the default value is the most performant for the platform.

## provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
name	string	New name for consistency group. Required to resolve naming collisions.
storage_service	storage_service	Determines the placement of any storage object created during this operation.

## policy

The QoS policy

Name	Туре	Description
_links	self_link	
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.

Name	Туре	Description
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

snapshot

A consistency group's Snapshot copy

Name	Туре	Description
name	string	The name of the consistency group's Snapshot copy to restore to.
uuid	string	The UUID of the consistency group's Snapshot copy to restore to.

#### restore\_to

Use to restore a consistency group to a previous Snapshot copy

Name	Туре	Description
snapshot	snapshot	A consistency group's Snapshot copy

#### \_links

Name	Туре	Description
self	href	

snapshot\_policy\_reference

This is a reference to the Snapshot copy policy.

Name	Туре	Description
_links	_links	
name	string	
uuid	string	

## space

Space information for the consistency group.
Name	Туре	Description
available	integer	The amount of space available in the consistency group, in bytes.
size	integer	The total provisioned size of the consistency group, in bytes.
used	integer	The amount of space consumed in the consistency group, in bytes.

#### svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

Name	Туре	Description
_links	_links	
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.

# object\_stores

Name	Туре	Description
name	string	The name of the object store to use. Used for placement.

# tiering

The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Name	Туре	Description
policy	string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
		FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
		all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
		auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
		none ‐ Volume blocks are not be tiered to the cloud store.
		snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
		The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.

### acls

The permissions that users and groups have on a CIFS share.

Name	Туре	Description
_links	_links	

Name	Туре	Description
permission	string	<ul> <li>Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed:</li> <li>no_access - User does not have CIFS share access</li> <li>read - User has only read access</li> <li>change - User has change access</li> <li>full_control - User has full_control access</li> </ul>
type	string	Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group
user_or_group	string	Specifies the user or group name to add to the access control list of a CIFS share.

consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	

Name	Туре	Description
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.

Name	Туре	Description
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively. • Default value: • Introduced in: 9.12 • readCreate: 1 • x-nullable: true
name	string	Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.

Name	Туре	Description
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	Offline Files The supported values are:
		<ul> <li>none - Clients are not permitted to cache files for offline access.</li> </ul>
		<ul> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> </ul>
		<ul> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> </ul>
		<ul> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	Controls the access of UNIX symbolic links to CIFS clients. The supported values are: • local - Enables only local symbolic links which is within
		<ul><li>the same CIFS share.</li><li>widelink - Enables both local symlinks and widelinks.</li></ul>
		<ul> <li>disable - Disables local symlinks and widelinks.</li> </ul>

Name	Туре	Description
vscan_profile	string	Vscan File-Operations Profile The supported values are:
		<ul> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> </ul>
		<ul> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> </ul>
		<ul> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> </ul>
		• writes_only - Virus scans can be triggered only when a file that has been modified is closed.

### cifs

Name	Туре	Description
shares	array[consistency_group_cifs_sha re]	

export\_clients

Name	Туре	Description
match	string	Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:
		<ul> <li>As a hostname; for instance, host1</li> </ul>
		• As an IPv4 address; for instance, 10.1.12.24
		<ul> <li>As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> </ul>
		<ul> <li>As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> </ul>
		<ul> <li>As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> </ul>
		<ul> <li>As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> </ul>
		<ul> <li>As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> </ul>
		<ul> <li>As a domain name preceded by the . character; for instance, .example.com</li> </ul>

# export\_rules

Name	Туре	Description
_links	_links	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.

Name	Туре	Description
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[export_clients]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

# export\_policy

The policy associated with volumes to export them for protocol access.

Name	Туре	Description
_links	self_link	
id	integer	Identifier for the export policy.
name	string	Name of the export policy.
rules	array[export_rules]	The set of rules that govern the export policy.

# junction\_parent

Name	Туре	Description
_links	self_link	

Name	Туре	Description
name	string	The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume.
uuid	string	Unique identifier for the parent volume.

nas

The CIFS share policy and/or export policies for this volume.

Name	Туре	Description
cifs	cifs	
export_policy	export_policy	The policy associated with volumes to export them for protocol access.
gid	integer	The UNIX group ID of the volume. Valid in POST or PATCH.
junction_parent	junction_parent	
path	string	The fully-qualified path in the owning SVM's namespace at which the volume is mounted. The path is case insensitive and must be unique within an SVM's namespace. Path must begin with '/' and must not end with '/'. Only one volume can be mounted at any given junction path. An empty path in POST creates an unmounted volume. An empty path in PATCH deactivates and unmounts the volume. Taking a volume offline or restricted state removes its junction path. This attribute is reported in GET only when the volume is mounted.

Name	Туре	Description
security_style	string	Security style associated with the volume. Valid in POST or PATCH. mixed ‐ Mixed-style security ntfs ‐ NTFS/WIndows-style security unified ‐ Unified-style security, unified UNIX, NFS and CIFS permissions unix ‐ UNIX-style security.
uid	integer	The UNIX user ID of the volume. Valid in POST or PATCH.
unix_permissions	integer	UNIX permissions to be viewed as an octal number, consisting of 4 digits derived by adding up bits 4 (read), 2 (write), and 1 (execute). First digit selects the set user ID (4), set group ID (2), and sticky (1) attributes. Second digit selects permission for the owner of the file. Third selects permissions for other users in the same group while the fourth selects permissions for other users not in the group. Valid in POST or PATCH. For security style "mixed" or "unix", the default setting is 0755 in octal (493 in decimal) and for security style "ntfs", the default setting is 0000. In cases where only owner, group, and other permissions are given (as in 755, representing the second, third and fourth digit), the first digit is assumed to be zero.

# provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

Name	Туре	Description
storage_service	storage_service	Determines the placement of any storage object created during this operation.

qos

The QoS policy for this volume.

Name	Туре	Description
policy	policy	The QoS policy

# space

Name	Туре	Description
available	integer	The available space, in bytes.
size	integer	Total provisioned size, in bytes.
used	integer	The virtual space used (includes volume reserves) before storage efficiency, in bytes.

# tiering

The tiering placement and policy definitions for this volume.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Туре	Description
string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
	FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
	all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
	auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
	none ‐ Volume blocks are not be tiered to the cloud store.
	snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
	The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.
	Type         string

#### volumes

Name	Туре	Description
comment	string	A comment for the volume. Valid in POST or PATCH.

Name	Туре	Description
name	string	Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST.
nas	nas	The CIFS share policy and/or export policies for this volume.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	The QoS policy for this volume.
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	
tiering	tiering	The tiering placement and policy definitions for this volume.
uuid	string	Unique identifier for the volume. This corresponds to the instance- uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd- 11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 • x-nullable: true

### consistency\_groups

Name	Туре	Description
_links	self_link	
application	application	

Name	Туре	Description
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.
		An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.
uuid	string	The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created. • example: 1cd8a442-86d1- 11e0-ae1c-123478563412
		<ul> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>

Name	Туре	Description
Name           volumes	Type array[volumes]	DescriptionA consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated 
		The total number of volumes across all child consistency groups contained in a consistency group is constrained
		by the same limit.

# iops

The rate of I/O operations observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

# latency

The round trip latency observed at the storage object, in microseconds.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

# throughput

The rate of throughput bytes per second observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### metric

Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.

Name	Туре	Description
_links	_links	
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
duration	string	The duration over which this sample is calculated. The time durations are represented in the ISO-8601 standard format. Samples can be calculated over the following durations:
iops	iops	The rate of I/O operations observed at the storage object.
latency	latency	The round trip latency observed at the storage object, in microseconds.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput	throughput	The rate of throughput bytes per second observed at the storage object.
timestamp	string	The timestamp of the performance and capacity data.

Name	Туре	Description
used_space	integer	The total space used in the consistency group, in bytes.

#### replication\_relationships

Name	Туре	Description
_links	self_link	
is_protected_by_svm_dr	boolean	Indicates whether or not this consistency group is protected by SVM DR.
is_source	boolean	Indicates whether or not this consistency group is the source for replication.
uuid	string	The unique identifier of the SnapMirror relationship.

### iops\_raw

The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### latency\_raw

The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### throughput\_raw

Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### statistics

These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

Name	Туре	Description
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
iops_raw	iops_raw	The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.
latency_raw	latency_raw	The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput_raw	throughput_raw	Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.
timestamp	string	The timestamp of the performance data.

Name	Туре	Description
used_space	integer	The total used space in the consistency group, in bytes.

consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.

Name	Туре	Description
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively. • Default value: 1 • Introduced in: 9.12 • readCreate: 1 • x-nullable: true

Name	Туре	Description
name	string	Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	<ul> <li>Offline Files The supported values are:</li> <li>none - Clients are not permitted to cache files for offline access.</li> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> <li>programs - Clients may automatically cache files that are used by the user for offline access.</li> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.

Name	Туре	Description
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	<ul> <li>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</li> <li>local - Enables only local symbolic links which is within the same CIFS share.</li> <li>widelink - Enables both local symlinks and widelinks.</li> <li>disable - Disables local symlinks and widelinks.</li> </ul>
vscan_profile	string	<ul> <li>Vscan File-Operations Profile The supported values are:</li> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> <li>writes_only - Virus scans can be triggered only when a file that has been modified is closed.</li> </ul>

export\_clients

Name	Туре	Description
match	string	Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:
		<ul> <li>As a hostname; for instance, host1</li> </ul>
		• As an IPv4 address; for instance, 10.1.12.24
		<ul> <li>As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> </ul>
		<ul> <li>As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> </ul>
		<ul> <li>As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> </ul>
		<ul> <li>As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> </ul>
		<ul> <li>As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> </ul>
		• As a domain name preceded by the . character; for instance, .example.com

#### records

Name	Туре	Description
_links	self_link	
application	application	
clone	clone	Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

Name	Туре	Description
consistency_groups	array[consistency_groups]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group.
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
metric	metric	Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.
		An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
replicated	boolean	Indicates whether or not replication has been enabled on this consistency group.
replication_relationships	array[replication_relationships]	Indicates the SnapMirror relationship of this consistency group.
replication_source	boolean	Since support for this field is to be removed in the next release, use replication_relationships.is_sourc e instead.
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
statistics	statistics	These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
uuid	string	<ul> <li>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</li> <li>example: 1cd8a442-86d1-11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.6</li> <li>x-nullable: true</li> </ul>
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group. The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group. The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.

# error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

#### returned\_error

Name	Туре	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code

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

# Create a consistency group

**POST** /application/consistency-groups

#### Introduced In: 9.10

Creates a consistency group with one or more consistency groups having:

- new SAN volumes,
- existing SAN, NVMe or NAS FlexVol volumes in a new or existing consistency group

# **Required properties**

- svm.uuid or svm.name Existing SVM in which to create the group.
- volumes, luns or namespaces

# **Naming Conventions**

# **Consistency groups**

- name or consistency\_groups[].name, if specified
- · derived from volumes[0].name, if only one volume is specified, same as volume name

# Volume

- volumes[].name, if specified
- derived from volume prefix in luns[].name
- derived from cg[].name, suffixed by "\_#" where "#" is a system generated unique number
- suffixed by "\_#" where "#" is a system generated unique number, if provisioning\_options.count is provided

# LUN

- luns[].name, if specified
- derived from volumes[].name, suffixed by "\_#" where "#" is a system generated unique number
- suffixed by "\_#" where "#" is a system generated unique number, if provisioning\_options.count is provided

# **NVMe Namespace**

• namespaces[].name, if specified

- derived from volumes[].name, suffixed by "\_#" where "#" is a system generated unique number
- suffixed by "\_#" where "#" is a system generated unique number, if provisioning\_options.count is provided

# **Related ONTAP commands**

There are no ONTAP commands for managing consistency group.

# **Parameters**

Name	Туре	In	Required	Description
return_timeout	integer	query	False	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. • Default value: 1 • Max value: 120 • Min value: 0
return_records	boolean	query	False	The default is false. If set to true, the records are returned. • Default value:

# **Request Body**

Name	Туре	Description
_links	self_link	
application	application	
clone	clone	Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.
consistency_groups	array[consistency_groups]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group.
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
metric	metric	Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	Type array[namespaces]	Description An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume. An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.
		• minItems: 0
		• uniqueltems: 1
		Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	
Name	Туре	Description
---------------------------	----------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
replicated	boolean	Indicates whether or not replication has been enabled on this consistency group.
replication_relationships	array[replication_relationships]	Indicates the SnapMirror relationship of this consistency group.
replication_source	boolean	Since support for this field is to be removed in the next release, use replication_relationships.is_source instead.
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
statistics	statistics	These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
uuid	string	<ul> <li>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</li> <li>example: 1cd8a442-86d1-11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.
		The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.
		The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.

Example request

```
{
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "application": {
   "component_type": "string",
   "type": "string"
 },
 "clone": {
   "guarantee": {
     "type": "string"
   },
   "parent consistency group": {
     " links": {
      "self": {
         "href": "/api/resourcelink"
       }
     },
     "name": "my consistency group",
     "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
   },
   "parent snapshot": {
    "name": "string"
   },
   "volume": {
     "prefix": "string",
     "suffix": "string"
   }
 },
 "consistency groups": [
   {
     " links": {
       "self": {
         "href": "/api/resourcelink"
       }
     },
     "application": {
       "component_type": "string",
       "type": "string"
     },
     "luns": [
        {
```

```
"clone": {
  "source": {
    "name": "/vol/volume1/lun1",
    "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"comment": "string",
"create time": "2018-06-04 15:00:00 -0400",
"lun maps": [
  {
    "igroup": {
      "comment": "string",
      "igroups": [
        {
          " links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "initiators": [
        {
          "comment": "my comment",
          "name": "iqn.1998-01.com.corp.iscsi:name1"
       }
      ],
      "name": "igroup1",
      "os type": "string",
      "protocol": "string",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
  }
],
"name": "/vol/volume1/lun1",
"os type": "string",
"provisioning options": {
 "action": "string"
},
"qos": {
 "policy": {
   " links": {
      "self": {
        "href": "/api/resourcelink"
```

```
}
        },
        "max throughput iops": 10000,
        "max throughput mbps": 500,
        "min throughput iops": 2000,
        "min throughput mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "serial number": "string",
    "space": {
     "size": 1073741824,
     "used": 0
    },
    "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
 }
1,
"name": "string",
"namespaces": [
 {
   "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "name": "/vol/volume1/qtree1/namespace1",
    "os type": "string",
    "provisioning options": {
     "action": "string"
    },
    "space": {
     "block size": 512,
     "size": 1073741824,
     "used": 0
    },
    "status": {
     "container state": "string",
     "state": "online"
    },
    "subsystem map": {
      " links": {
        "self": {
          "href": "/api/resourcelink"
       }
      },
      "anagrpid": "00103050h",
      "nsid": "00000001h",
      "subsystem": {
```

```
"comment": "string",
              "hosts": [
                {
                  "dh hmac chap": {
                    "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                    "group size": "string",
                    "hash function": "string",
                    "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
                  },
                  "nqn": "nqn.1992-01.example.com:string",
                  "priority": "string"
                }
              ],
              "name": "subsystem1",
              "os type": "string",
              "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
           }
          },
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "parent consistency group": {
        " links": {
          "self": {
           "href": "/api/resourcelink"
         }
        },
        "name": "my consistency group",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "provisioning options": {
        "action": "string",
       "name": "string",
        "storage service": {
         "name": "string"
       }
      },
      "qos": {
        "policy": {
          " links": {
           "self": {
              "href": "/api/resourcelink"
            }
          },
```

```
"name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"restore to": {
 "snapshot": {
   "name": "string",
   "uuid": "string"
 }
},
"snapshot policy": {
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "name": "default",
 "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"svm": {
 " links": {
   "self": {
    "href": "/api/resourcelink"
   }
 },
 "name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
 "control": "string",
  "object stores": [
   {
    "name": "string"
   }
 ],
 "policy": "string"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
  {
   "comment": "string",
```

```
"name": "vol cs dept",
"nas": {
  "cifs": {
    "shares": [
     {
        " links": {
          "self": {
           "href": "/api/resourcelink"
          }
        },
        "acls": [
         {
            " links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "permission": "string",
            "type": "string",
           "user or group": "ENGDOMAIN\\ad user"
         }
        ],
        "comment": "HR Department Share",
        "dir umask": 18,
        "file umask": 18,
        "name": "HR SHARE",
        "offline files": "string",
        "unix symlink": "string",
        "vscan profile": "string"
      }
   ]
  },
  "export policy": {
   " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "id": 0,
    "name": "string",
    "rules": [
     {
        " links": {
         "self": {
           "href": "/api/resourcelink"
          }
```

```
},
       "anonymous user": "string",
        "chown mode": "string",
        "clients": [
         {
           "match": "0.0.0.0/0"
         }
       ],
        "ntfs unix security": "string",
        "protocols": [
        "string"
       ],
        "ro rule": [
        "string"
       ],
        "rw rule": [
        "string"
       ],
       "superuser": [
        "string"
       ]
      }
   ]
 },
 "junction parent": {
   " links": {
    "self": {
       "href": "/api/resourcelink"
     }
   },
   "name": "vs1 root",
   "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
 },
 "path": "/user/my_volume",
 "security style": "string",
 "unix permissions": 493
},
"provisioning_options": {
 "action": "string",
 "storage service": {
  "name": "string"
 }
},
"qos": {
 "policy": {
   " links": {
```

```
"self": {
                "href": "/api/resourcelink"
             }
            },
            "name": "performance",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          }
        },
        "snapshot policy": {
          " links": {
           "self": {
             "href": "/api/resourcelink"
           }
          },
          "name": "default",
          "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
        },
        "space": {
         "available": 0,
         "used": 0
        },
        "tiering": {
          "control": "string",
          "object stores": [
           {
             "name": "string"
           }
         ],
         "policy": "string"
        },
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
     }
   ]
  }
],
"luns": [
 {
   "clone": {
     "source": {
       "name": "/vol/volume1/lun1",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
     }
    },
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "lun maps": [
```

```
{
    "igroup": {
      "comment": "string",
      "igroups": [
        {
          " links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      1,
      "initiators": [
        {
          "comment": "my comment",
          "name": "ign.1998-01.com.corp.iscsi:name1"
        }
      ],
      "name": "igroup1",
      "os type": "string",
      "protocol": "string",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
 }
],
"name": "/vol/volume1/lun1",
"os type": "string",
"provisioning options": {
 "action": "string"
},
"qos": {
  "policy": {
    " links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "max throughput iops": 10000,
    "max throughput mbps": 500,
    "min throughput iops": 2000,
    "min throughput mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
```

```
},
    "serial number": "string",
    "space": {
     "size": 1073741824,
     "used": 0
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
],
"metric": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "available space": 4096,
  "duration": "PT15S",
  "iops": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "size": 4096,
  "status": "ok",
  "throughput": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500",
 "used space": 4096
},
"name": "string",
"namespaces": [
 {
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "name": "/vol/volume1/qtree1/namespace1",
    "os type": "string",
    "provisioning options": {
     "action": "string"
```

```
},
      "space": {
        "block size": 512,
       "size": 1073741824,
       "used": 0
      },
      "status": {
        "container state": "string",
        "state": "online"
      },
      "subsystem map": {
        " links": {
         "self": {
           "href": "/api/resourcelink"
         }
        },
        "anagrpid": "00103050h",
        "nsid": "00000001h",
        "subsystem": {
          "comment": "string",
          "hosts": [
            {
              "dh hmac chap": {
                "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                "group size": "string",
                "hash function": "string",
                "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
              },
              "ngn": "ngn.1992-01.example.com:string",
              "priority": "string"
            }
          ],
          "name": "subsystem1",
          "os type": "string",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
       }
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  ],
  "parent consistency group": {
   " links": {
     "self": {
        "href": "/api/resourcelink"
```

```
}
  },
  "name": "my consistency group",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"provisioning options": {
  "action": "string",
 "name": "string",
  "storage service": {
  "name": "string"
 }
},
"qos": {
 "policy": {
    " links": {
      "self": {
       "href": "/api/resourcelink"
      }
    },
   "name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"replication relationships": [
 {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
],
"restore to": {
 "snapshot": {
   "name": "string",
   "uuid": "string"
 }
},
"snapshot policy": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "name": "default",
```

```
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"statistics": {
  "available space": 4096,
 "iops raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "size": 4096,
  "status": "ok",
  "throughput raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500",
 "used space": 4096
},
"svm": {
  " links": {
    "self": {
     "href": "/api/resourcelink"
   }
  },
  "name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
  "control": "string",
  "object stores": [
   {
   "name": "string"
   }
  ],
  "policy": "string"
```

```
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
 {
   "comment": "string",
   "name": "vol cs dept",
   "nas": {
     "cifs": {
        "shares": [
          {
            " links": {
             "self": {
               "href": "/api/resourcelink"
             }
            },
            "acls": [
             {
                " links": {
                 "self": {
                   "href": "/api/resourcelink"
                 }
                },
                "permission": "string",
                "type": "string",
                "user or group": "ENGDOMAIN\\ad user"
             }
            ],
            "comment": "HR Department Share",
            "dir umask": 18,
            "file umask": 18,
            "name": "HR SHARE",
            "offline files": "string",
            "unix symlink": "string",
            "vscan profile": "string"
         }
        1
      },
      "export policy": {
        " links": {
         "self": {
           "href": "/api/resourcelink"
          }
        },
        "id": 0,
        "name": "string",
        "rules": [
```

```
{
        " links": {
         "self": {
           "href": "/api/resourcelink"
         }
        },
        "anonymous user": "string",
        "chown mode": "string",
        "clients": [
         {
          "match": "0.0.0.0/0"
         }
        ],
        "ntfs unix security": "string",
        "protocols": [
        "string"
        ],
        "ro rule": [
        "string"
        ],
        "rw rule": [
        "string"
        ],
        "superuser": [
        "string"
        ]
      }
   1
  },
  "junction_parent": {
    " links": {
      "self": {
       "href": "/api/resourcelink"
     }
    },
    "name": "vsl root",
   "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
 },
  "path": "/user/my volume",
 "security style": "string",
  "unix permissions": 493
},
"provisioning options": {
 "action": "string",
  "storage service": {
   "name": "string"
```

```
}
      },
      "qos": {
        "policy": {
          " links": {
           "self": {
             "href": "/api/resourcelink"
           }
          },
          "name": "performance",
         "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
       }
      },
      "snapshot policy": {
        " links": {
          "self": {
           "href": "/api/resourcelink"
         }
        },
        "name": "default",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "space": {
       "available": 0,
       "used": 0
      },
      "tiering": {
       "control": "string",
        "object stores": [
         {
           "name": "string"
         }
       ],
        "policy": "string"
      },
     "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
   }
 ]
}
```

# Response

Status: 202, Accepted

Name	Туре	Description
job	job_link	

## Example response

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

### Headers

Name	Description	Туре
Location	Useful for tracking the resource location	string

# Response

```
Status: 201, Created
```

# Error

```
Status: Default
```

### ONTAP Error Response Codes

Error Code	Description
5440509	No suitable storage can be found for the specified requirements.
53411842	Consistency group does not exist.
53411843	A consistency group with specified UUID was not found.
53411844	Specified consistency group was not found in the specified SVM.

Error Code	Description
53411845	The specified UUID and name refer to different consistency groups.
53411846	Either name or UUID must be provided.
53411853	Fields provided in the request conflict with each other.
53411856	Field provided is only supported when provisioning new objects.
53411857	LUNs that are not members of the application are not supported by this API. LUNs can be added to an application by adding the volume containing the LUNs to the application.
53411860	An object with the same identifier in the same scope exists.
53411861	Volume specified does not exist in provided volume array.
53411862	Modifying existing igroups is not supported using this API.
53411864	Request content insufficient to add an existing volume to an application.
53411865	Volumes contained in one consistency group can not be added to a different consistency group.
53411866	LUNs are not supported on FlexGroups volumes.
53411867	LUN name is too long after appending a unique suffix.
53411869	Volume name is too long after appending a unique suffix.
53411870	When using the "round_robin" layout, the volume count must not be greater than the LUN count.
53411959	Volumes with Snapshot copy locking enabled cannot be added to a consistency group.

Also see the table of common errors in the Response body overview section of this documentation.

Name	Туре	Description
error	returned_error	

### Example error

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

# Definitions

# See Definitions

href

Name	Туре	Description
href	string	

self\_link

Name	Туре	Description
self	href	

## application

Name	Туре	Description
component_type	string	Nested consistency group tag.
type	string	Top level consistency group tag.

## guarantee

Name	Туре	Description
type	string	The type of space guarantee of this volume in the aggregate.

parent\_consistency\_group

Consistency group that is to be cloned.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

## parent\_snapshot

Name	Туре	Description
name	string	Name of an existing Snapshot copy of a parent consistency group.

#### volume

Volume name suffix/prefix for the cloned volumes.

Name	Туре	Description
prefix	string	Volume name prefix for cloned volumes.
suffix	string	Volume name suffix for cloned volumes.

clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

Name	Туре	Description
guarantee	guarantee	
parent_consistency_group	parent_consistency_group	Consistency group that is to be cloned.
parent_snapshot	parent_snapshot	
split_initiated	boolean	Splits volumes after cloning. Default is false.
volume	volume	Volume name suffix/prefix for the cloned volumes.

#### source

The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid or clone.source.name. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

Name	Туре	Description
name	string	The fully qualified path name of the clone source LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and base name of the LUN. Valid in POST and PATCH.

Name	Туре	Description
uuid	string	The unique identifier of the clone source LUN. Valid in POST and PATCH.

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto\_delete,
gos\_policy, space.guarantee.requested and

 $space.scsi\_thin\_provisioning\_support\_enabled.$ 

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto\_delete, lun\_maps, serial\_number, status.state, and uuid.

Persistent reservations for the patched LUN are also preserved.

Name	Туре	Description
source	source	The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid Or clone.source.name. If both properties are supplied, they must refer to the same LUN. Valid in POST to create a new LUN as a clone of the source. Valid in PATCH to overwrite an existing LUN's data as a clone of another.

### igroups

Name	Туре	Description
_links	self_link	
name	string	The name of the initiator group.
uuid	string	The unique identifier of the initiator group.

### initiators

The initiators that are members of the initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator.
name	string	Name of initiator that is a member of the initiator group.

igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator. Valid in POST and PATCH.
igroups	array[igroups]	Separate igroup definitions to include in this igroup.
initiators	array[initiators]	The initiators that are members of the group.
name	string	The name of the initiator group. Required in POST; optional in PATCH.
os_type	string	The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH.
protocol	string	The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group. Optional in POST; if not supplied, this defaults to <i>mixed</i> . The protocol of an initiator group cannot be changed after creation of the group.
uuid	string	The unique identifier of the initiator group.

lun\_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

Name	Туре	Description
igroup	igroup	The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.
logical_unit_number	integer	The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through the Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value. • Introduced in: 9.6 • readCreate: 1 • x-nullable: true

#### provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

#### policy

## The QoS policy

Name	Туре	Description
_links	self_link	

Name	Туре	Description
max_throughput_iops	integer	Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
max_throughput_mbps	integer	Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_iops	integer	Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_mbps	integer	Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

### qos

Name	Туре	Description
policy	policy	The QoS policy

## guarantee

Properties that request and report the space guarantee for the LUN.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH.
reserved	boolean	Reports if the LUN is space guaranteed. If <i>true</i> , a space guarantee is requested and the containing volume and aggregate support the request. If <i>false</i> , a space guarantee is not requested or a space guarantee is requested and either the containing volume or aggregate do not support the request.

## space

The storage space related properties of the LUN.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the LUN.

Name	Туре	Description
size	integer	The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maxiumum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation. • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6
		x-nullable: true

Name	Туре	Description
used	integer	DescriptionThe amount of space consumed by the main data stream of the LUN.This value is the total space consumed in the volume by the LUN, including filesystem overhead, but excluding prefix and suffix streams. Due to internal filesystem overhead and the many ways SAN filesystems and applications utilize blocks within a LUN, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the LUN blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.For more information, see Size properties in the docs section of the ONTAP REST API documentation.• format: int64 • readOnly: 1 • Introduced in: 9.6 • x-nullable: true

#### luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

Name	Туре	Description
clone	clone	This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto_delete, qos_policy, space.guarantee.requested and space.scsi_thin_provision ing_support_enabled. When used in a PATCH, the patched LUN's data is over- written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto_delete, lun_maps, serial_number, status.state, and uuid. Persistent reservations for the patched LUN are also preserved.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the LUN was created.

enabledbooleanThe enabled state of the LUN. LUNs can be disabled to prevent access to the LUN Certain error conditions also cause the LUN certain error conditions also cause the LUN is disabled, you can consuit the state property to determine if the LUN is disabled a property to determine if the state study disabled (offline) or has become disabled (offline) or has become disabled (offline) or has become disabled approperty to true or enabled property to true or brought administratively disabled approperty to true or brought administratively disabled approperty to true or brought administratively disabled approperty to true or brought administratively of the LUN is enabled by default. Valid in PATCH.Lun_mapsAn array of LUN maps. A narray of LUN maps. A LUN map is an association between a LUN and an initiator group, the initiator group, the initiator group, the initiator group is many LUNs to many initiator group is many LUNs to many linitiator group is many LUN and an initiator group is many LUNs to many linitiator group is many LUNs to many l	Name	Туре	Description
lun_mapsarray[lun_maps]An array of LUN maps.LUN_mapsA LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group is initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.	enabled	boolean	The enabled state of the LUN. LUNs can be disabled to prevent access to the LUN. Certain error conditions also cause the LUN to become disabled. If the LUN is disabled, you can consult the state property to determine if the LUN is administratively disabled (offline) or has become disabled as a result of an error. A LUN in an error condition can be brought online by setting the enabled property to <i>true</i> or brought administratively offline by setting the enabled property to <i>false</i> . Upon creation, a LUN is enabled by default. Valid in PATCH.
namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqosprovisioning_optionsOptions that are applied to the operation.	lun_maps	array[lun_maps]	An array of LUN maps. A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.
os_typestringThe operating system type of the LUN.Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqos	name	string	The fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.
provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqos	os_type	string	The operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.
qos qos	provisioning_options	provisioning_options	Options that are applied to the operation.
	qos	qos	

Name	Туре	Description
serial_number	string	The LUN serial number. The serial number is generated by ONTAP when the LUN is created. • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 • x-nullable: true
space	space	The storage space related properties of the LUN.
uuid	string	<ul> <li>The unique identifier of the LUN.</li> <li>The UUID is generated by ONTAP when the LUN is created.</li> <li>example: 1cd8a442-86d1- 11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>

# guarantee

Properties that request and report the space guarantee for the NVMe namespace.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the NVMe namespace. If <i>true</i> , a space reservation is requested for the namespace; if <i>false</i> , the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%. The space reservation policy for an NVMe namespace is determined by ONTAP. • Introduced in: 9.6 • x-nullable: true
reserved	boolean	Reports if the NVMe namespace is space guaranteed. This property is <i>true</i> if a space guarantee is requested and the containing volume and aggregate support the request. This property is <i>false</i> if a space guarantee is not requested or if a space guarantee is requested and either the containing volume and aggregate do not support the request.

### space

The storage space related properties of the NVMe namespace.

Name	Туре	Description
block_size	integer	The size of blocks in the namespace, in bytes. Valid in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone. Valid in POST.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the NVMe namespace.
size	integer	The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.
		The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.
		For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.
		• example: 1073741824
		• format: int64
		<ul> <li>Max value: 140737488355328</li> </ul>
		• Min value: 4096
		Introduced in: 9.6
		• x-nullable: true

#### status

Status information about the NVMe namespace.

Name	Туре	Description
container_state	string	The state of the volume and aggregate that contain the NVMe namespace. Namespaces are only available when their containers are available.
Name	Туре	Description
-----------	---------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
mapped	boolean	Reports if the NVMe namespace is mapped to an NVMe subsystem.
		There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
read_only	boolean	Reports if the NVMe namespace allows only read access.
state	string	The state of the NVMe namespace. Normal states for a namespace are <i>online</i> and <i>offline</i> . Other states indicate errors.

consistency\_group\_nvme\_host\_dh\_hmac\_chap

A container for properties of NVMe in-band authentication with the DH-HMAC-CHAP protocol.

Name	Туре	Description
controller_secret_key	string	The controller secret for NVMe in- band authentication. The value of this property is used by the NVMe host to authenticate the NVMe controller while establishing a connection. If unset, the controller is not authenticated. When supplied, the property host_secret_key must also be supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a controller secret has been set for the host, but the controller secret value cannot be
		read. To change the value, the host must be deleted from the subsystem and re-added.

Name	Туре	Description
group_size	string	The Diffie-Hellman group size for NVMe in-band authentication. When property host_secret_key is provided, this property defaults to 2048_bit. When supplied, the property host_secret_key must also be supplied. Optional in POST.
hash_function	string	The hash function for NVMe in- band authentication. When property host_secret_key is provided, this property defaults to sha_256. When supplied, the property host_secret_key must also be supplied. Optional in POST.
host_secret_key	string	The host secret for NVMe in-band authentication. The value of this property is used by the NVMe controller to authenticate the NVMe host while establishing a connection. If unset, no authentication is performed by the host or controller. This property must be supplied if any other NVMe in-band authentication properties are supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a host secret has been set for the host, but the host secret value cannot be read. To change the value, the host must be deleted from the subsystem and re-added.

# consistency\_group\_nvme\_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

Name	Туре	Description
dh_hmac_chap	consistency_group_nvme_host_d h_hmac_chap	A container for properties of NVMe in-band authentication with the DH-HMAC-CHAP protocol.

Name	Туре	Description
nqn	string	The NVMe qualified name (NQN) used to identify the NVMe storage target. Not allowed in POST when the records property is used.
priority	string	The host priority setting allocates appropriate NVMe I/O queues (count and depth) for the host to submit I/O commands. Absence of this property in GET implies io_queue count and I/O queue depth are being used.

consistency\_group\_nvme\_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMeconnected hosts.

Name	Туре	Description
comment	string	A configurable comment for the NVMe subsystem. Optional in POST and PATCH.
hosts	array[consistency_group_nvme_h ost]	The NVMe hosts configured for access to the NVMe subsystem. Optional in POST.
name	string	The name of the NVMe subsystem. Once created, an NVMe subsystem cannot be renamed. Required in POST.
os_type	string	The host operating system of the NVMe subsystem's hosts. Required in POST.
uuid	string	The unique identifier of the NVMe subsystem.

subsystem\_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for subsystem\_map. They are not
populated for either a collection GET or an instance GET unless explicitly requested using the fields
query parameter.

Name	Туре	Description
_links	self_link	
anagrpid	string	The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace. The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h". There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
nsid	string	The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace. The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".
subsystem	consistency_group_nvme_subsys tem	An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

#### namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

Name	Туре	Description
auto_delete	boolean	This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones. When set to <i>true</i> , the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold. This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i> . There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the NVMe namespace was created.
enabled	boolean	The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the state property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created.

Name	Туре	Description
name	string	The fully qualified path name of the NVMe namespace composed of a "/vol" prefix, the volume name, the (optional) qtree name and base name of the namespace. Valid in POST. NVMe namespaces do not support rename, or movement between volumes.
os_type	string	The operating system type of the NVMe namespace. Required in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone.
provisioning_options	provisioning_options	Options that are applied to the operation.
space	space	The storage space related properties of the NVMe namespace.
status	status	Status information about the NVMe namespace.
subsystem_map	subsystem_map	The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems. There is an added computational cost to retrieving property values for subsystem_map. They are not populated for either a collection GET or an instance GET unless explicitly requested using the fields query parameter.
uuid	string	The unique identifier of the NVMe namespace.

parent\_consistency\_group

The parent consistency group.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

# storage\_service

Determines the placement of any storage object created during this operation.

Name	Туре	Description
name	string	Storage service name. If not specified, the default value is the most performant for the platform.

## provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
name	string	New name for consistency group. Required to resolve naming collisions.
storage_service	storage_service	Determines the placement of any storage object created during this operation.

# policy

The QoS policy

Name	Туре	Description
_links	self_link	
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.

Name	Туре	Description
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

snapshot

A consistency group's Snapshot copy

Name	Туре	Description
name	string	The name of the consistency group's Snapshot copy to restore to.
uuid	string	The UUID of the consistency group's Snapshot copy to restore to.

## restore\_to

Use to restore a consistency group to a previous Snapshot copy

Name	Туре	Description
snapshot	snapshot	A consistency group's Snapshot copy

## \_links

Name	Туре	Description
self	href	

snapshot\_policy\_reference

This is a reference to the Snapshot copy policy.

Name	Туре	Description
_links	_links	
name	string	
uuid	string	

# space

Space information for the consistency group.

Name	Туре	Description
available	integer	The amount of space available in the consistency group, in bytes.
size	integer	The total provisioned size of the consistency group, in bytes.
used	integer	The amount of space consumed in the consistency group, in bytes.

#### svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

Name	Туре	Description
_links	_links	
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.

# object\_stores

Name	Туре	Description
name	string	The name of the object store to use. Used for placement.

# tiering

The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Name	Туре	Description
policy	string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
		FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
		all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
		auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
		none ‐ Volume blocks are not be tiered to the cloud store.
		snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
		The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.

## acls

The permissions that users and groups have on a CIFS share.

Name	Туре	Description
_links	_links	

Name	Туре	Description
permission	string	<ul> <li>Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed:</li> <li>no_access - User does not have CIFS share access</li> <li>read - User has only read access</li> <li>change - User has change access</li> <li>full_control - User has full_control access</li> </ul>
type	string	Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group
user_or_group	string	Specifies the user or group name to add to the access control list of a CIFS share.

consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	

Name	Туре	Description
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.

Name	Туре	Description
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively. • Default value: 1 • Introduced in: 9.12 • readCreate: 1 • x-nullable: true
name	string	Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.

Name	Туре	Description
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	Offline Files The supported values are:
		<ul> <li>none - Clients are not permitted to cache files for offline access.</li> </ul>
		<ul> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> </ul>
		<ul> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> </ul>
		<ul> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	Controls the access of UNIX symbolic links to CIFS clients. The supported values are: • local - Enables only local symbolic links which is within
		<ul><li>the same CIFS share.</li><li>widelink - Enables both local symlinks and widelinks.</li></ul>
		<ul> <li>disable - Disables local symlinks and widelinks.</li> </ul>

Name	Туре	Description
vscan_profile	string	Vscan File-Operations Profile The supported values are:
		<ul> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> </ul>
		<ul> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> </ul>
		<ul> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> </ul>
		• writes_only - Virus scans can be triggered only when a file that has been modified is closed.

## cifs

Name	Туре	Description
shares	array[consistency_group_cifs_sha re]	

export\_clients

Name	Туре	Description
match	string	Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:
		<ul> <li>As a hostname; for instance, host1</li> </ul>
		<ul> <li>As an IPv4 address; for instance, 10.1.12.24</li> </ul>
		<ul> <li>As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> </ul>
		<ul> <li>As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> </ul>
		<ul> <li>As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> </ul>
		<ul> <li>As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> </ul>
		<ul> <li>As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> </ul>
		<ul> <li>As a domain name preceded by the . character; for instance, .example.com</li> </ul>

# export\_rules

Name	Туре	Description
_links	_links	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.

Name	Туре	Description
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[export_clients]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

# export\_policy

The policy associated with volumes to export them for protocol access.

Name	Туре	Description
_links	self_link	
id	integer	Identifier for the export policy.
name	string	Name of the export policy.
rules	array[export_rules]	The set of rules that govern the export policy.

# junction\_parent

Name	Туре	Description
_links	self_link	

Name	Туре	Description
name	string	The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume.
uuid	string	Unique identifier for the parent volume.

nas

The CIFS share policy and/or export policies for this volume.

Name	Туре	Description
cifs	cifs	
export_policy	export_policy	The policy associated with volumes to export them for protocol access.
gid	integer	The UNIX group ID of the volume. Valid in POST or PATCH.
junction_parent	junction_parent	
path	string	The fully-qualified path in the owning SVM's namespace at which the volume is mounted. The path is case insensitive and must be unique within an SVM's namespace. Path must begin with '/' and must not end with '/'. Only one volume can be mounted at any given junction path. An empty path in POST creates an unmounted volume. An empty path in PATCH deactivates and unmounts the volume. Taking a volume offline or restricted state removes its junction path. This attribute is reported in GET only when the volume is mounted.

Name	Туре	Description
security_style	string	Security style associated with the volume. Valid in POST or PATCH. mixed ‐ Mixed-style security ntfs ‐ NTFS/WIndows-style security unified ‐ Unified-style security, unified UNIX, NFS and CIFS permissions unix ‐ UNIX-style security.
uid	integer	The UNIX user ID of the volume. Valid in POST or PATCH.
unix_permissions	integer	UNIX permissions to be viewed as an octal number, consisting of 4 digits derived by adding up bits 4 (read), 2 (write), and 1 (execute). First digit selects the set user ID (4), set group ID (2), and sticky (1) attributes. Second digit selects permission for the owner of the file. Third selects permissions for other users in the same group while the fourth selects permissions for other users not in the group. Valid in POST or PATCH. For security style "mixed" or "unix", the default setting is 0755 in octal (493 in decimal) and for security style "ntfs", the default setting is 0000. In cases where only owner, group, and other permissions are given (as in 755, representing the second, third and fourth digit), the first digit is assumed to be zero.

# provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

Name	Туре	Description
storage_service	storage_service	Determines the placement of any storage object created during this operation.

qos

The QoS policy for this volume.

Name	Туре	Description
policy	policy	The QoS policy

# space

Name	Туре	Description
available	integer	The available space, in bytes.
size	integer	Total provisioned size, in bytes.
used	integer	The virtual space used (includes volume reserves) before storage efficiency, in bytes.

# tiering

The tiering placement and policy definitions for this volume.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Туре	Description
string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
	FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
	all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
	auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
	none ‐ Volume blocks are not be tiered to the cloud store.
	snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
	The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.
	Type         string

#### volumes

Name	Туре	Description
comment	string	A comment for the volume. Valid in POST or PATCH.

Name	Туре	Description
name	string	Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST.
nas	nas	The CIFS share policy and/or export policies for this volume.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	The QoS policy for this volume.
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	
tiering	tiering	The tiering placement and policy definitions for this volume.
uuid	string	Unique identifier for the volume. This corresponds to the instance- uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd- 11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 • x-nullable: true

## consistency\_groups

Name	Туре	Description
_links	self_link	
application	application	

Name	Туре	Description
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.
		An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.
uuid	string	The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created. • example: 1cd8a442-86d1- 11e0-ae1c-123478563412 • readOnly: 1 • Introduced in: 9.10 • x-nullable: true

Name	Туре	Description
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.The total number of volumes across all child consistency group is constrained
		by the same limit.

# iops

The rate of I/O operations observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

# latency

The round trip latency observed at the storage object, in microseconds.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

# throughput

The rate of throughput bytes per second observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

### metric

Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.

Name	Туре	Description
_links	_links	
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
duration	string	The duration over which this sample is calculated. The time durations are represented in the ISO-8601 standard format. Samples can be calculated over the following durations:
iops	iops	The rate of I/O operations observed at the storage object.
latency	latency	The round trip latency observed at the storage object, in microseconds.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput	throughput	The rate of throughput bytes per second observed at the storage object.
timestamp	string	The timestamp of the performance and capacity data.

Name	Туре	Description
used_space	integer	The total space used in the consistency group, in bytes.

### replication\_relationships

Name	Туре	Description
_links	self_link	
is_protected_by_svm_dr	boolean	Indicates whether or not this consistency group is protected by SVM DR.
is_source	boolean	Indicates whether or not this consistency group is the source for replication.
uuid	string	The unique identifier of the SnapMirror relationship.

## iops\_raw

The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### latency\_raw

The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

### throughput\_raw

Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

### statistics

These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

Name	Туре	Description
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
iops_raw	iops_raw	The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.
latency_raw	latency_raw	The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput_raw	throughput_raw	Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.
timestamp	string	The timestamp of the performance data.

Name	Туре	Description
used_space	integer	The total used space in the consistency group, in bytes.

consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.

Name	Туре	Description
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively. • Default value: 1 • Introduced in: 9.12 • readCreate: 1 • x-nullable: true

Name	Туре	Description
name	string	Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	<ul> <li>Offline Files The supported values are:</li> <li>none - Clients are not permitted to cache files for offline access.</li> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> <li>programs - Clients may automatically cache files that are used by the user for offline access.</li> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.

Name	Туре	Description
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	<ul> <li>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</li> <li>local - Enables only local symbolic links which is within the same CIFS share.</li> <li>widelink - Enables both local symlinks and widelinks.</li> <li>disable - Disables local symlinks and widelinks.</li> </ul>
vscan_profile	string	<ul> <li>Vscan File-Operations Profile The supported values are:</li> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> <li>writes_only - Virus scans can be triggered only when a file that has been modified is closed.</li> </ul>

export\_clients

Name	Туре	Description
match	string	Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:
		<ul> <li>As a hostname; for instance, host1</li> </ul>
		• As an IPv4 address; for instance, 10.1.12.24
		<ul> <li>As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> </ul>
		<ul> <li>As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> </ul>
		<ul> <li>As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> </ul>
		<ul> <li>As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> </ul>
		<ul> <li>As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> </ul>
		<ul> <li>As a domain name preceded by the . character; for instance, .example.com</li> </ul>

# consistency\_group

Name	Туре	Description
_links	self_link	
application	application	
clone	clone	Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.
Name	Туре	Description
--------------------	---------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
consistency_groups	array[consistency_groups]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group.
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
metric	metric	Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.
		An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
replicated	boolean	Indicates whether or not replication has been enabled on this consistency group.
replication_relationships	array[replication_relationships]	Indicates the SnapMirror relationship of this consistency group.
replication_source	boolean	Since support for this field is to be removed in the next release, use replication_relationships.is_sourc e instead.
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
statistics	statistics	These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
uuid	string	<ul> <li>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</li> <li>example: 1cd8a442-86d1-11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group. The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group. The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.

### consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	

Name	Туре	Description
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.

Name	Туре	Description
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.
name	string	specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.

Name	Туре	Description
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	Offline Files The supported values are:
		<ul> <li>none - Clients are not permitted to cache files for offline access.</li> </ul>
		<ul> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> </ul>
		<ul> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> </ul>
		<ul> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	Controls the access of UNIX symbolic links to CIFS clients. The supported values are:
		<ul> <li>local - Enables only local symbolic links which is within the same CIFS share.</li> </ul>
		<ul> <li>widelink - Enables both local symlinks and widelinks.</li> </ul>
		<ul> <li>disable - Disables local symlinks and widelinks.</li> </ul>

Name	Туре	Description
vscan_profile	string	Vscan File-Operations Profile The supported values are:
		<ul> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> </ul>
		<ul> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> </ul>
		<ul> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> </ul>
		<ul> <li>writes_only - Virus scans can be triggered only when a file that has been modified is closed.</li> </ul>

export\_clients

Name	Туре	Description
match	string	Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:
		<ul> <li>As a hostname; for instance, host1</li> </ul>
		As an IPv4 address; for instance, 10.1.12.24
		<ul> <li>As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> </ul>
		<ul> <li>As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> </ul>
		<ul> <li>As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> </ul>
		<ul> <li>As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> </ul>
		<ul> <li>As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> </ul>
		<ul> <li>As a domain name preceded by the . character; for instance, .example.com</li> </ul>

consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	

Name	Туре	Description
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.

Name	Туре	Description
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively. • Default value: 1 • Introduced in: 9.12 • readCreate: 1 • x-nullable: true
name	string	specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.

Name	Туре	Description
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	Offline Files The supported values are:
		• none - Clients are not permitted to cache files for offline access.
		<ul> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> </ul>
		<ul> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> </ul>
		<ul> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	Controls the access of UNIX symbolic links to CIFS clients. The supported values are: • local - Enables only local symbolic links which is within the same CIFS share.
		<ul> <li>widelink - Enables both local symlinks and widelinks.</li> <li>disable - Disables local symlinks and widelinks.</li> </ul>

Name	Туре	Description
vscan_profile	string	Vscan File-Operations Profile The supported values are:
		<ul> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> </ul>
		<ul> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> </ul>
		<ul> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> </ul>
		• writes_only - Virus scans can be triggered only when a file that has been modified is closed.

### job\_link

Name	Туре	Description
_links	_links	
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

### error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

### returned\_error

Name	Туре	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message

Name	Туре	Description
target	string	The target parameter that caused the error.

# Delete a consistency group

DELETE /application/consistency-groups/{uuid}

#### Introduced In: 9.10

Deletes a consistency group.



this will not delete any associated volumes or LUNs. To delete those elements, use the appropriate object endpoint.

## **Related ONTAP commands**

There are no ONTAP commands for managing consistency groups.

### **Parameters**

Name	Туре	In	Required	Description
uuid	string	path	True	The unique identifier of the consistency group to delete.
delete_data	boolean	query	False	Delete the underlying storage as well as the consistency group association. This parameter should be used with caution. • Default value:

Name	Туре	In	Required	Description
return_timeout	integer	query	False	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. • Default value: 1 • Max value: 120 • Min value: 0

# Response

Status: 200, Ok

# Response

Status: 202, Accepted

# Error

Status: Default

#### **ONTAP Error Response Codes**

Error Code	Description
53411842	Consistency group does not exist.
53411843	A consistency group with specified UUID was not found.
53411844	Specified consistency group was not found in the specified SVM.
53411845	The specified UUID and name refer to different consistency groups.
53411846	Either name or UUID must be provided.

Also see the table of common errors in the Response body overview section of this documentation.

Name	Туре	Description
error	returned_error	

#### Example error

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

# Definitions

#### **See Definitions**

error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

returned\_error

Name	Туре	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 consistency group

**GET** /application/consistency-groups/{uuid}

#### Introduced In: 9.10

Retrieves a single consistency group.

### **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 DOC Requesting specific fields to learn more.

- volumes
- luns
- namespaces

## **Related ONTAP commands**

There are no ONTAP commands for managing consistency groups.

# **Parameters**

Name	Туре	In	Required	Description
uuid	string	path	True	The unique identifier of the group to retrieve.
tiering.policy	string	query	False	Filter by tiering.policy
namespaces.enable d	boolean	query	False	Filter by namespaces.enable d • Introduced in: 9.12
namespaces.status. state	string	query	False	Filter by namespaces.status. state • Introduced in: 9.12
namespaces.status. container_state	string	query	False	Filter by namespaces.status. container_state • Introduced in: 9.12
namespaces.status.r ead_only	boolean	query	False	Filter by namespaces.status.r ead_only • Introduced in: 9.12
namespaces.status. mapped	boolean	query	False	Filter by namespaces.status. mapped • Introduced in: 9.12

Name	Туре	In	Required	Description
namespaces.os_typ e	string	query	False	Filter by namespaces.os_typ e • Introduced in: 9.12
namespaces.comme nt	string	query	False	Filter by namespaces.comme nt • Introduced in: 9.12 • maxLength: 254 • minLength: 0
namespaces.uuid	string	query	False	Filter by namespaces.uuid • Introduced in: 9.12
namespaces.space. block_size	integer	query	False	Filter by namespaces.space. block_size • Introduced in: 9.12
namespaces.space. used	integer	query	False	Filter by namespaces.space. used • Introduced in: 9.12
namespaces.space. size	integer	query	False	Filter by namespaces.space. size • Introduced in: 9.12 • Max value: 1407374883553 28 • Min value: 4096

Name	Туре	In	Required	Description
namespaces.space. guarantee.requested	boolean	query	False	Filter by namespaces.space. guarantee.requested • Introduced in: 9.12
namespaces.space. guarantee.reserved	boolean	query	False	Filter by namespaces.space. guarantee.reserved • Introduced in: 9.12
namespaces.subsyst em_map.nsid	string	query	False	Filter by namespaces.subsys tem_map.nsid • Introduced in: 9.12
namespaces.subsyst em_map.subsystem. os_type	string	query	False	Filter by namespaces.subsys tem_map.subsystem .os_type • Introduced in: 9.12
namespaces.subsyst em_map.subsystem. uuid	string	query	False	Filter by namespaces.subsys tem_map.subsystem .uuid • Introduced in: 9.12
namespaces.subsyst em_map.subsystem. comment	string	query	False	Filter by namespaces.subsys tem_map.subsystem .comment • Introduced in: 9.12 • maxLength: 255 • minLength: 0

Name	Туре	In	Required	Description
namespaces.subsyst em_map.subsystem. hosts.nqn	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.nqn • Introduced in: 9.12
namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.group_size	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.group_size • Introduced in: 9.14
namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.hash_function	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.hash_function • Introduced in: 9.14
namespaces.subsyst em_map.subsystem. hosts.priority	string	query	False	Filter by namespaces.subsys tem_map.subsystem .hosts.priority • Introduced in: 9.14
namespaces.subsyst em_map.subsystem. name	string	query	False	Filter by namespaces.subsys tem_map.subsystem .name • Introduced in: 9.12 • maxLength: 64 • minLength: 1

Name	Туре	In	Required	Description
namespaces.subsyst em_map.anagrpid	string	query	False	Filter by namespaces.subsys tem_map.anagrpid • Introduced in: 9.12
namespaces.name	string	query	False	Filter by namespaces.name • Introduced in: 9.12
namespaces.auto_d elete	boolean	query	False	Filter by namespaces.auto_d elete • Introduced in: 9.12
namespaces.create_ time	string	query	False	Filter by namespaces.create _time • Introduced in: 9.12
space.size	integer	query	False	Filter by space.size
space.used	integer	query	False	Filter by space.used
space.available	integer	query	False	Filter by space.available
application.type	string	query	False	Filter by application.type • Introduced in: 9.12
application.compone nt_type	string	query	False	Filter by application.compone nt_type • Introduced in: 9.12

Name	Туре	In	Required	Description
parent_consistency_ group.uuid	string	query	False	Filter by parent_consistency_ group.uuid
parent_consistency_ group.name	string	query	False	Filter by parent_consistency_ group.name
replication_source	boolean	query	False	Filter by replication_source
name	string	query	False	Filter by name
clone.guarantee.type	string	query	False	Filter by clone.guarantee.typ e • Introduced in: 9.12
clone.split_initiated	boolean	query	False	Filter by clone.split_initiated • Introduced in: 9.12
clone.volume.prefix	string	query	False	Filter by clone.volume.prefix • Introduced in: 9.12
clone.volume.suffix	string	query	False	Filter by clone.volume.suffix • Introduced in: 9.12
clone.parent_snapsh ot.name	string	query	False	Filter by clone.parent_snaps hot.name • Introduced in: 9.12

Name	Туре	In	Required	Description
clone.parent_consist ency_group.uuid	string	query	False	Filter by clone.parent_consist ency_group.uuid • Introduced in: 9.12
clone.parent_consist ency_group.name	string	query	False	Filter by clone.parent_consist ency_group.name • Introduced in: 9.12
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
luns.space.used	integer	query	False	Filter by luns.space.used
luns.space.guarante e.reserved	boolean	query	False	Filter by luns.space.guarante e.reserved • Introduced in: 9.11
luns.space.guarante e.requested	boolean	query	False	Filter by luns.space.guarante e.requested • Introduced in: 9.11
luns.space.size	integer	query	False	Filter by luns.space.size <ul> <li>Max value: 1407374883553 28</li> <li>Min value: 4096</li> </ul>
luns.create_time	string	query	False	Filter by luns.create_time
luns.name	string	query	False	Filter by luns.name

Name	Туре	In	Required	Description
luns.comment	string	query	False	Filter by luns.comment • maxLength: 254 • minLength: 0
luns.qos.policy.uuid	string	query	False	Filter by luns.qos.policy.uuid
luns.qos.policy.max_ throughput_mbps	integer	query	False	Filter by luns.qos.policy.max _throughput_mbps • Max value: 4194303 • Min value: 0
luns.qos.policy.name	string	query	False	Filter by luns.qos.policy.nam e
luns.qos.policy.max_ throughput_iops	integer	query	False	Filter by luns.qos.policy.max _throughput_iops • Max value: 2147483647 • Min value: 0
luns.qos.policy.min_t hroughput_mbps	integer	query	False	Filter by luns.qos.policy.min_ throughput_mbps • Max value: 4194303 • Min value: 0
luns.qos.policy.min_t hroughput_iops	integer	query	False	Filter by luns.qos.policy.min_ throughput_iops • Max value: 2147483647 • Min value: 0
luns.uuid	string	query	False	Filter by luns.uuid

Name	Туре	In	Required	Description
luns.serial_number	string	query	False	Filter by luns.serial_number • maxLength: 12 • minLength: 12
luns.enabled	boolean	query	False	Filter by luns.enabled
luns.os_type	string	query	False	Filter by luns.os_type
luns.lun_maps.igrou p.protocol	string	query	False	Filter by luns.lun_maps.igrou p.protocol
luns.lun_maps.igrou p.name	string	query	False	Filter by luns.lun_maps.igrou p.name • maxLength: 96 • minLength: 1
luns.lun_maps.igrou p.comment	string	query	False	Filter by luns.lun_maps.igrou p.comment • Introduced in: 9.11 • maxLength: 254 • minLength: 0
luns.lun_maps.igrou p.initiators.name	string	query	False	Filter by luns.lun_maps.igrou p.initiators.name
luns.lun_maps.igrou p.initiators.comment	string	query	False	Filter by luns.lun_maps.igrou p.initiators.comment • maxLength: 254 • minLength: 0
luns.lun_maps.igrou p.os_type	string	query	False	Filter by luns.lun_maps.igrou p.os_type

Name	Туре	In	Required	Description
luns.lun_maps.igrou p.igroups.uuid	string	query	False	Filter by luns.lun_maps.igrou p.igroups.uuid
luns.lun_maps.igrou p.igroups.name	string	query	False	Filter by luns.lun_maps.igrou p.igroups.name • maxLength: 96 • minLength: 1
luns.lun_maps.igrou p.uuid	string	query	False	Filter by luns.lun_maps.igrou p.uuid
luns.lun_maps.logica I_unit_number	integer	query	False	Filter by luns.lun_maps.logic al_unit_number
metric.status	string	query	False	Filter by metric.status • Introduced in: 9.13
metric.available_spa ce	integer	query	False	Filter by metric.available_spa ce • Introduced in: 9.13
metric.timestamp	string	query	False	Filter by metric.timestamp • Introduced in: 9.13
metric.used_space	integer	query	False	Filter by metric.used_space • Introduced in: 9.13

Name	Туре	In	Required	Description
metric.throughput.tot al	integer	query	False	Filter by metric.throughput.tot al • Introduced in: 9.13
metric.throughput.ot her	integer	query	False	Filter by metric.throughput.ot her • Introduced in: 9.13
metric.throughput.wri te	integer	query	False	Filter by metric.throughput.wr ite • Introduced in: 9.13
metric.throughput.re ad	integer	query	False	Filter by metric.throughput.re ad • Introduced in: 9.13
metric.size	integer	query	False	Filter by metric.size <ul> <li>Introduced in:</li> <li>9.13</li> </ul>
metric.latency.total	integer	query	False	Filter by metric.latency.total • Introduced in: 9.13
metric.latency.other	integer	query	False	Filter by metric.latency.other • Introduced in: 9.13

Name	Туре	In	Required	Description
metric.latency.write	integer	query	False	Filter by metric.latency.write • Introduced in: 9.13
metric.latency.read	integer	query	False	Filter by metric.latency.read • Introduced in: 9.13
metric.duration	string	query	False	Filter by metric.duration • Introduced in: 9.13
metric.iops.total	integer	query	False	Filter by metric.iops.total • Introduced in: 9.13
metric.iops.other	integer	query	False	Filter by metric.iops.other • Introduced in: 9.13
metric.iops.write	integer	query	False	Filter by metric.iops.write • Introduced in: 9.13
metric.iops.read	integer	query	False	Filter by metric.iops.read • Introduced in: 9.13
replicated	boolean	query	False	Filter by replicated

Name	Туре	In	Required	Description
replication_relations hips.is_source	boolean	query	False	Filter by replication_relations hips.is_source • Introduced in: 9.13
replication_relations hips.is_protected_by _svm_dr	boolean	query	False	Filter by replication_relations hips.is_protected_by _svm_dr • Introduced in: _9.14
replication_relations hips.uuid	string	query	False	Filter by replication_relations hips.uuid • Introduced in: 9.13
volumes.tiering.polic y	string	query	False	Filter by volumes.tiering.polic y
volumes.space.used	integer	query	False	Filter by volumes.space.used
volumes.space.avail able	integer	query	False	Filter by volumes.space.avail able
volumes.space.size	integer	query	False	Filter by volumes.space.size
volumes.nas.cifs.sha res.continuously_av ailable	boolean	query	False	Filter by volumes.nas.cifs.sh ares.continuously_a vailable • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.cifs.sha res.vscan_profile	string	query	False	Filter by volumes.nas.cifs.sh ares.vscan_profile • Introduced in: 9.12
volumes.nas.cifs.sha res.dir_umask	integer	query	False	Filter by volumes.nas.cifs.sh ares.dir_umask • Introduced in: 9.12
volumes.nas.cifs.sha res.name	string	query	False	Filter by volumes.nas.cifs.sh ares.name • Introduced in: 9.12 • maxLength: 80 • minLength: 1
volumes.nas.cifs.sha res.file_umask	integer	query	False	Filter by volumes.nas.cifs.sh ares.file_umask • Introduced in: 9.12
volumes.nas.cifs.sha res.no_strict_securit y	boolean	query	False	Filter by volumes.nas.cifs.sh ares.no_strict_securi ty • Introduced in: 9.12
volumes.nas.cifs.sha res.show_snapshot	boolean	query	False	Filter by volumes.nas.cifs.sh ares.show_snapshot • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.cifs.sha res.access_based_e numeration	boolean	query	False	Filter by volumes.nas.cifs.sh ares.access_based_ enumeration • Introduced in: 9.12
volumes.nas.cifs.sha res.comment	string	query	False	Filter by volumes.nas.cifs.sh ares.comment • Introduced in: 9.12 • maxLength: 256 • minLength: 1
volumes.nas.cifs.sha res.home_directory	boolean	query	False	Filter by volumes.nas.cifs.sh ares.home_directory • Introduced in: 9.12
volumes.nas.cifs.sha res.change_notify	boolean	query	False	Filter by volumes.nas.cifs.sh ares.change_notify • Introduced in: 9.12
volumes.nas.cifs.sha res.namespace_cac hing	boolean	query	False	Filter by volumes.nas.cifs.sh ares.namespace_ca ching • Introduced in: 9.12
volumes.nas.cifs.sha res.allow_unencrypt ed_access	boolean	query	False	Filter by volumes.nas.cifs.sh ares.allow_unencryp ted_access • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.cifs.sha res.unix_symlink	string	query	False	Filter by volumes.nas.cifs.sh ares.unix_symlink • Introduced in: 9.12
volumes.nas.cifs.sha res.offline_files	string	query	False	Filter by volumes.nas.cifs.sh ares.offline_files • Introduced in: 9.12
volumes.nas.cifs.sha res.acls.type	string	query	False	Filter by volumes.nas.cifs.sh ares.acls.type • Introduced in: 9.12
volumes.nas.cifs.sha res.acls.user_or_gro up	string	query	False	Filter by volumes.nas.cifs.sh ares.acls.user_or_gr oup • Introduced in: 9.12
volumes.nas.cifs.sha res.acls.permission	string	query	False	Filter by volumes.nas.cifs.sh ares.acls.permission • Introduced in: 9.12
volumes.nas.cifs.sha res.encryption	boolean	query	False	Filter by volumes.nas.cifs.sh ares.encryption • Introduced in: 9.12
volumes.nas.cifs.sha res.oplocks	boolean	query	False	Filter by volumes.nas.cifs.sh ares.oplocks • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.gid	integer	query	False	Filter by volumes.nas.gid • Introduced in: 9.12
volumes.nas.uid	integer	query	False	Filter by volumes.nas.uid • Introduced in: 9.12
volumes.nas.security _style	string	query	False	Filter by volumes.nas.securit y_style • Introduced in: 9.12
volumes.nas.junction _parent.uuid	string	query	False	Filter by volumes.nas.junctio n_parent.uuid • Introduced in: 9.12
volumes.nas.junction _parent.name	string	query	False	Filter by volumes.nas.junctio n_parent.name • Introduced in: 9.12
volumes.nas.unix_p ermissions	integer	query	False	Filter by volumes.nas.unix_p ermissions • Introduced in: 9.12
volumes.nas.export_ policy.rules.index	integer	query	False	Filter by volumes.nas.export_ policy.rules.index • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.export_ policy.rules.superus er	string	query	False	Filter by volumes.nas.export_ policy.rules.superus er • Introduced in: 9.12
volumes.nas.export_ policy.rules.chown_ mode	string	query	False	Filter by volumes.nas.export_ policy.rules.chown_ mode • Introduced in: 9.12
volumes.nas.export_ policy.rules.allow_de vice_creation	boolean	query	False	Filter by volumes.nas.export_ policy.rules.allow_de vice_creation • Introduced in: 9.12
volumes.nas.export_ policy.rules.ntfs_unix _security	string	query	False	Filter by volumes.nas.export_ policy.rules.ntfs_uni x_security • Introduced in: 9.12
volumes.nas.export_ policy.rules.rw_rule	string	query	False	Filter by volumes.nas.export_ policy.rules.rw_rule • Introduced in: 9.12
volumes.nas.export_ policy.rules.ro_rule	string	query	False	Filter by volumes.nas.export_ policy.rules.ro_rule • Introduced in: 9.12

Name	Туре	In	Required	Description
volumes.nas.export_ policy.rules.allow_su id	boolean	query	False	Filter by volumes.nas.export_ policy.rules.allow_su id • Introduced in: 9.12
volumes.nas.export_ policy.rules.clients.m atch	string	query	False	Filter by volumes.nas.export_ policy.rules.clients.m atch • Introduced in: 9.12
volumes.nas.export_ policy.rules.anonym ous_user	string	query	False	Filter by volumes.nas.export_ policy.rules.anonym ous_user • Introduced in: 9.12
volumes.nas.export_ policy.rules.protocols	string	query	False	Filter by volumes.nas.export_ policy.rules.protocol s • Introduced in: 9.12
volumes.nas.export_ policy.id	integer	query	False	Filter by volumes.nas.export_ policy.id • Introduced in: 9.14
volumes.nas.export_ policy.name	string	query	False	Filter by volumes.nas.export_ policy.name • Introduced in: 9.12
Name	Туре	In	Required	Description
----------------------------------	--------	-------	----------	------------------------------------------------------------------------
volumes.nas.path	string	query	False	Filter by volumes.nas.path • Introduced in: 9.12
volumes.snapshot_p olicy.name	string	query	False	Filter by volumes.snapshot_p olicy.name
volumes.snapshot_p olicy.uuid	string	query	False	Filter by volumes.snapshot_p olicy.uuid
volumes.name	string	query	False	Filter by volumes.name • maxLength: 203 • minLength: 1
volumes.qos.policy.u uid	string	query	False	Filter by volumes.qos.policy. uuid
volumes.qos.policy.n ame	string	query	False	Filter by volumes.qos.policy. name
volumes.comment	string	query	False	Filter by volumes.comment • maxLength: 1023 • minLength: 0
volumes.uuid	string	query	False	Filter by volumes.uuid
statistics.status	string	query	False	Filter by statistics.status • Introduced in: 9.13

Name	Туре	In	Required	Description
statistics.throughput _raw.total	integer	query	False	Filter by statistics.throughput _raw.total • Introduced in: 9.13
statistics.throughput _raw.other	integer	query	False	Filter by statistics.throughput _raw.other • Introduced in: 9.13
statistics.throughput _raw.write	integer	query	False	Filter by statistics.throughput _raw.write • Introduced in: 9.13
statistics.throughput _raw.read	integer	query	False	Filter by statistics.throughput _raw.read • Introduced in: 9.13
statistics.available_s pace	integer	query	False	Filter by statistics.available_s pace • Introduced in: 9.13
statistics.used_spac e	integer	query	False	Filter by statistics.used_spac e • Introduced in: 9.13
statistics.timestamp	string	query	False	Filter by statistics.timestamp • Introduced in: 9.13

Name	Туре	In	Required	Description
statistics.iops_raw.to tal	integer	query	False	Filter by statistics.iops_raw.to tal • Introduced in: 9.13
statistics.iops_raw.ot her	integer	query	False	Filter by statistics.iops_raw.ot her • Introduced in: 9.13
statistics.iops_raw.w rite	integer	query	False	Filter by statistics.iops_raw.w rite • Introduced in: 9.13
statistics.iops_raw.re ad	integer	query	False	Filter by statistics.iops_raw.r ead • Introduced in: 9.13
statistics.latency_ra w.total	integer	query	False	Filter by statistics.latency_ra w.total • Introduced in: 9.13
statistics.latency_ra w.other	integer	query	False	Filter by statistics.latency_ra w.other • Introduced in: 9.13
statistics.latency_ra w.write	integer	query	False	Filter by statistics.latency_ra w.write • Introduced in: 9.13

Name	Туре	In	Required	Description
statistics.latency_ra w.read	integer	query	False	Filter by statistics.latency_ra w.read • Introduced in: 9.13
statistics.size	integer	query	False	Filter by statistics.size • Introduced in: 9.13
snapshot_policy.na me	string	query	False	Filter by snapshot_policy.na me
snapshot_policy.uuid	string	query	False	Filter by snapshot_policy.uui d
qos.policy.uuid	string	query	False	Filter by qos.policy.uuid
qos.policy.name	string	query	False	Filter by qos.policy.name
consistency_groups. snapshot_policy.na me	string	query	False	Filter by consistency_groups. snapshot_policy.na me
consistency_groups. snapshot_policy.uuid	string	query	False	Filter by consistency_groups. snapshot_policy.uui d
consistency_groups. name	string	query	False	Filter by consistency_groups. name
consistency_groups. space.size	integer	query	False	Filter by consistency_groups. space.size
consistency_groups. space.used	integer	query	False	Filter by consistency_groups. space.used

Name	Туре	In	Required	Description
consistency_groups. space.available	integer	query	False	Filter by consistency_groups. space.available
consistency_groups. application.type	string	query	False	Filter by consistency_groups. application.type • Introduced in: 9.12
consistency_groups. application.compone nt_type	string	query	False	Filter by consistency_groups. application.compone nt_type • Introduced in: 9.12
consistency_groups. volumes.tiering.polic y	string	query	False	Filter by consistency_groups. volumes.tiering.polic y
consistency_groups. volumes.space.used	integer	query	False	Filter by consistency_groups. volumes.space.used
consistency_groups. volumes.space.avail able	integer	query	False	Filter by consistency_groups. volumes.space.avail able
consistency_groups. volumes.space.size	integer	query	False	Filter by consistency_groups. volumes.space.size
consistency_groups. volumes.nas.cifs.sha res.continuously_av ailable	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.continuously_a vailable • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.cifs.sha res.vscan_profile	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.vscan_profile • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.dir_umask	integer	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.dir_umask • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.name	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.name • Introduced in: 9.12 • maxLength: 80 • minLength: 1
consistency_groups. volumes.nas.cifs.sha res.file_umask	integer	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.file_umask • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.no_strict_securit y	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.no_strict_securi ty • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.cifs.sha res.show_snapshot	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.show_snapshot • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.access_based_e numeration	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.access_based_ enumeration • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.comment	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.comment • Introduced in: 9.12 • maxLength: 256 • minLength: 1
consistency_groups. volumes.nas.cifs.sha res.home_directory	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.home_directory • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.change_notify	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.change_notify • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.cifs.sha res.namespace_cac hing	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.namespace_ca ching • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.allow_unencrypt ed_access	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.allow_unencryp ted_access • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.unix_symlink	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.unix_symlink • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.offline_files	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.offline_files • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.acls.type	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.acls.type • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.acls.user_or_gro up	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.acls.user_or_gr oup • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.cifs.sha res.acls.permission	string	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.acls.permission • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.encryption	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.encryption • Introduced in: 9.12
consistency_groups. volumes.nas.cifs.sha res.oplocks	boolean	query	False	Filter by consistency_groups. volumes.nas.cifs.sh ares.oplocks • Introduced in: 9.12
consistency_groups. volumes.nas.gid	integer	query	False	Filter by consistency_groups. volumes.nas.gid • Introduced in: 9.12
consistency_groups. volumes.nas.uid	integer	query	False	Filter by consistency_groups. volumes.nas.uid • Introduced in: 9.12
consistency_groups. volumes.nas.security _style	string	query	False	Filter by consistency_groups. volumes.nas.securit y_style • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.junction _parent.uuid	string	query	False	Filter by consistency_groups. volumes.nas.junctio n_parent.uuid • Introduced in: 9.12
consistency_groups. volumes.nas.junction _parent.name	string	query	False	Filter by consistency_groups. volumes.nas.junctio n_parent.name • Introduced in: 9.12
consistency_groups. volumes.nas.unix_p ermissions	integer	query	False	Filter by consistency_groups. volumes.nas.unix_p ermissions • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.index	integer	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.index • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.superus er	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.superus er • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.chown_ mode	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.chown_ mode • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.export_ policy.rules.allow_de vice_creation	boolean	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.allow_de vice_creation • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.ntfs_unix _security	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.ntfs_uni x_security • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.rw_rule	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.rw_rule • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.ro_rule	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.ro_rule • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.allow_su id	boolean	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.allow_su id • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.nas.export_ policy.rules.clients.m atch	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.clients.m atch • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.anonym ous_user	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.anonym ous_user • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.rules.protocols	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.rules.protocol s • Introduced in: 9.12
consistency_groups. volumes.nas.export_ policy.id	integer	query	False	Filter by consistency_groups. volumes.nas.export_ policy.id • Introduced in: 9.14
consistency_groups. volumes.nas.export_ policy.name	string	query	False	Filter by consistency_groups. volumes.nas.export_ policy.name • Introduced in: 9.12
consistency_groups. volumes.nas.path	string	query	False	Filter by consistency_groups. volumes.nas.path • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. volumes.snapshot_p olicy.name	string	query	False	Filter by consistency_groups. volumes.snapshot_p olicy.name
consistency_groups. volumes.snapshot_p olicy.uuid	string	query	False	Filter by consistency_groups. volumes.snapshot_p olicy.uuid
consistency_groups. volumes.name	string	query	False	Filter by consistency_groups. volumes.name • maxLength: 203 • minLength: 1
consistency_groups. volumes.qos.policy.u uid	string	query	False	Filter by consistency_groups. volumes.qos.policy. uuid
consistency_groups. volumes.qos.policy.n ame	string	query	False	Filter by consistency_groups. volumes.qos.policy. name
consistency_groups. volumes.comment	string	query	False	Filter by consistency_groups. volumes.comment • maxLength: 1023 • minLength: 0
consistency_groups. volumes.uuid	string	query	False	Filter by consistency_groups. volumes.uuid
consistency_groups. parent_consistency_ group.uuid	string	query	False	Filter by consistency_groups. parent_consistency_ group.uuid

Name	Туре	In	Required	Description
consistency_groups. parent_consistency_ group.name	string	query	False	Filter by consistency_groups. parent_consistency_ group.name
consistency_groups. uuid	string	query	False	Filter by consistency_groups. uuid
consistency_groups. qos.policy.uuid	string	query	False	Filter by consistency_groups. qos.policy.uuid
consistency_groups. qos.policy.name	string	query	False	Filter by consistency_groups. qos.policy.name
consistency_groups. svm.uuid	string	query	False	Filter by consistency_groups. svm.uuid
consistency_groups. svm.name	string	query	False	Filter by consistency_groups. svm.name
consistency_groups.l uns.space.used	integer	query	False	Filter by consistency_groups. luns.space.used
consistency_groups.l uns.space.guarantee .reserved	boolean	query	False	Filter by consistency_groups. luns.space.guarante e.reserved • Introduced in: 9.11
consistency_groups.l uns.space.guarantee .requested	boolean	query	False	Filter by consistency_groups. luns.space.guarante e.requested • Introduced in: 9.11

Name	Туре	In	Required	Description
consistency_groups.l uns.space.size	integer	query	False	Filter by consistency_groups. luns.space.size • Max value: 1407374883553 28 • Min value: 4096
consistency_groups.l uns.create_time	string	query	False	Filter by consistency_groups. luns.create_time
consistency_groups.l uns.name	string	query	False	Filter by consistency_groups. luns.name
consistency_groups.l uns.comment	string	query	False	Filter by consistency_groups. luns.comment • maxLength: 254 • minLength: 0
consistency_groups.l uns.qos.policy.uuid	string	query	False	Filter by consistency_groups. luns.qos.policy.uuid
consistency_groups.l uns.qos.policy.max_t hroughput_mbps	integer	query	False	Filter by consistency_groups. luns.qos.policy.max _throughput_mbps • Max value: 4194303 • Min value: 0
consistency_groups.l uns.qos.policy.name	string	query	False	Filter by consistency_groups. luns.qos.policy.nam e

Name	Туре	In	Required	Description
consistency_groups.l uns.qos.policy.max_t hroughput_iops	integer	query	False	Filter by consistency_groups. luns.qos.policy.max _throughput_iops • Max value: 2147483647 • Min value: 0
consistency_groups.l uns.qos.policy.min_t hroughput_mbps	integer	query	False	Filter by consistency_groups. luns.qos.policy.min_ throughput_mbps • Max value: 4194303 • Min value: 0
consistency_groups.l uns.qos.policy.min_t hroughput_iops	integer	query	False	Filter by consistency_groups. luns.qos.policy.min_ throughput_iops • Max value: 2147483647 • Min value: 0
consistency_groups.l uns.uuid	string	query	False	Filter by consistency_groups. luns.uuid
consistency_groups.l uns.serial_number	string	query	False	Filter by consistency_groups. luns.serial_number • maxLength: 12 • minLength: 12
consistency_groups.l uns.enabled	boolean	query	False	Filter by consistency_groups. luns.enabled
consistency_groups.l uns.os_type	string	query	False	Filter by consistency_groups. luns.os_type

Name	Туре	In	Required	Description
consistency_groups.l uns.lun_maps.igroup .protocol	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.protocol
consistency_groups.l uns.lun_maps.igroup .name	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.name • maxLength: 96 • minLength: 1
consistency_groups.l uns.lun_maps.igroup .comment	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.comment • Introduced in: 9.11 • maxLength: 254 • minLength: 0
consistency_groups.l uns.lun_maps.igroup .initiators.name	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.initiators.name
consistency_groups.l uns.lun_maps.igroup .initiators.comment	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.initiators.comment • maxLength: 254 • minLength: 0
consistency_groups.l uns.lun_maps.igroup .os_type	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.os_type
consistency_groups.l uns.lun_maps.igroup .igroups.uuid	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.igroups.uuid

Name	Туре	In	Required	Description
consistency_groups.l uns.lun_maps.igroup .igroups.name	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.igroups.name • maxLength: 96 • minLength: 1
consistency_groups.l uns.lun_maps.igroup .uuid	string	query	False	Filter by consistency_groups. luns.lun_maps.igrou p.uuid
consistency_groups.l uns.lun_maps.logical _unit_number	integer	query	False	Filter by consistency_groups. luns.lun_maps.logic al_unit_number
consistency_groups. namespaces.enable d	boolean	query	False	Filter by consistency_groups. namespaces.enable d • Introduced in: 9.12
consistency_groups. namespaces.status. state	string	query	False	Filter by consistency_groups. namespaces.status. state • Introduced in: 9.12
consistency_groups. namespaces.status. container_state	string	query	False	Filter by consistency_groups. namespaces.status. container_state • Introduced in: 9.12
consistency_groups. namespaces.status.r ead_only	boolean	query	False	Filter by consistency_groups. namespaces.status.r ead_only • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. namespaces.status. mapped	boolean	query	False	Filter by consistency_groups. namespaces.status. mapped • Introduced in: 9.12
consistency_groups. namespaces.os_typ e	string	query	False	Filter by consistency_groups. namespaces.os_typ e • Introduced in: 9.12
consistency_groups. namespaces.comme nt	string	query	False	Filter by consistency_groups. namespaces.comme nt • Introduced in: 9.12 • maxLength: 254 • minLength: 0
consistency_groups. namespaces.uuid	string	query	False	Filter by consistency_groups. namespaces.uuid • Introduced in: 9.12
consistency_groups. namespaces.space. block_size	integer	query	False	Filter by consistency_groups. namespaces.space. block_size • Introduced in: 9.12
consistency_groups. namespaces.space. used	integer	query	False	Filter by consistency_groups. namespaces.space. used • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. namespaces.space. size	integer	query	False	Filter by consistency_groups. namespaces.space. size • Introduced in: 9.12 • Max value: 1407374883553 28 • Min value: 4096
consistency_groups. namespaces.space. guarantee.requested	boolean	query	False	Filter by consistency_groups. namespaces.space. guarantee.requested • Introduced in: 9.12
consistency_groups. namespaces.space. guarantee.reserved	boolean	query	False	Filter by consistency_groups. namespaces.space. guarantee.reserved • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.nsid	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.nsid • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.subsystem. os_type	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .os_type • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. namespaces.subsyst em_map.subsystem. uuid	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .uuid • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.subsystem. comment	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .comment • Introduced in: 9.12 • maxLength: 255 • minLength: 0
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.nqn	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.nqn • Introduced in: 9.12
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.group_size	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.group_size • Introduced in: 9.14
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.dh_hmac_cha p.hash_function	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.dh_hmac_cha p.hash_function • Introduced in: 9.14

Name	Туре	In	Required	Description
consistency_groups. namespaces.subsyst em_map.subsystem. hosts.priority	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .hosts.priority • Introduced in: 9.14
consistency_groups. namespaces.subsyst em_map.subsystem. name	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.subsystem .name • Introduced in: 9.12 • maxLength: 64 • minLength: 1
consistency_groups. namespaces.subsyst em_map.anagrpid	string	query	False	Filter by consistency_groups. namespaces.subsys tem_map.anagrpid • Introduced in: 9.12
consistency_groups. namespaces.name	string	query	False	Filter by consistency_groups. namespaces.name • Introduced in: 9.12
consistency_groups. namespaces.auto_d elete	boolean	query	False	Filter by consistency_groups. namespaces.auto_d elete • Introduced in: 9.12

Name	Туре	In	Required	Description
consistency_groups. namespaces.create_ time	string	query	False	Filter by consistency_groups. namespaces.create _time • Introduced in: 9.12
consistency_groups. tiering.policy	string	query	False	Filter by consistency_groups. tiering.policy
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
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. • Max value: 120 • Min value: 0 • Default value: 1
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Туре	Description
_links	self_link	
application	application	
clone	clone	Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.
consistency_groups	array[consistency_groups]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group.
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
metric	metric	Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume. An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
replicated	boolean	Indicates whether or not replication has been enabled on this consistency group.
replication_relationships	array[replication_relationships]	Indicates the SnapMirror relationship of this consistency group.
replication_source	boolean	Since support for this field is to be removed in the next release, use replication_relationships.is_source instead.
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
statistics	statistics	These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
uuid	string	<ul> <li>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</li> <li>example: 1cd8a442-86d1-11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.
		The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.
		The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.

Example response

```
{
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "application": {
   "component_type": "string",
   "type": "string"
 },
 "clone": {
   "guarantee": {
     "type": "string"
   },
   "parent consistency group": {
     " links": {
      "self": {
         "href": "/api/resourcelink"
       }
     },
     "name": "my consistency group",
     "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
   },
   "parent snapshot": {
    "name": "string"
   },
   "volume": {
     "prefix": "string",
    "suffix": "string"
   }
 },
 "consistency groups": [
   {
     " links": {
       "self": {
         "href": "/api/resourcelink"
       }
     },
     "application": {
       "component_type": "string",
       "type": "string"
     },
     "luns": [
        ł
```

```
"clone": {
  "source": {
    "name": "/vol/volume1/lun1",
    "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"comment": "string",
"create time": "2018-06-04 15:00:00 -0400",
"lun maps": [
  {
    "igroup": {
      "comment": "string",
      "igroups": [
        {
          " links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "initiators": [
        {
          "comment": "my comment",
          "name": "iqn.1998-01.com.corp.iscsi:name1"
       }
      ],
      "name": "igroup1",
      "os type": "string",
      "protocol": "string",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
  }
],
"name": "/vol/volume1/lun1",
"os type": "string",
"provisioning options": {
 "action": "string"
},
"qos": {
 "policy": {
   " links": {
      "self": {
        "href": "/api/resourcelink"
```

```
}
        },
        "max throughput iops": 10000,
        "max throughput mbps": 500,
        "min throughput iops": 2000,
        "min throughput mbps": 500,
        "name": "performance",
        "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "serial number": "string",
    "space": {
     "size": 1073741824,
     "used": 0
    },
    "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
 }
1,
"name": "string",
"namespaces": [
 {
   "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "name": "/vol/volume1/qtree1/namespace1",
    "os type": "string",
    "provisioning options": {
     "action": "string"
    },
    "space": {
     "block size": 512,
     "size": 1073741824,
     "used": 0
    },
    "status": {
     "container state": "string",
     "state": "online"
    },
    "subsystem map": {
      " links": {
        "self": {
          "href": "/api/resourcelink"
       }
      },
      "anagrpid": "00103050h",
      "nsid": "00000001h",
      "subsystem": {
```

```
"comment": "string",
              "hosts": [
                {
                  "dh hmac chap": {
                    "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                    "group size": "string",
                    "hash function": "string",
                    "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
                  },
                  "nqn": "nqn.1992-01.example.com:string",
                  "priority": "string"
                }
              ],
              "name": "subsystem1",
              "os type": "string",
              "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
           }
          },
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "parent consistency group": {
        " links": {
          "self": {
            "href": "/api/resourcelink"
         }
        },
        "name": "my consistency group",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "provisioning options": {
        "action": "string",
       "name": "string",
        "storage service": {
         "name": "string"
       }
      },
      "qos": {
        "policy": {
          " links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
```

```
"name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"restore to": {
 "snapshot": {
   "name": "string",
   "uuid": "string"
 }
},
"snapshot policy": {
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "name": "default",
 "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"svm": {
 " links": {
   "self": {
    "href": "/api/resourcelink"
   }
 },
 "name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
 "control": "string",
 "object stores": [
   {
    "name": "string"
   }
 ],
 "policy": "string"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
  {
   "comment": "string",
```

```
"name": "vol cs dept",
"nas": {
  "cifs": {
    "shares": [
      {
        " links": {
          "self": {
           "href": "/api/resourcelink"
          }
        },
        "acls": [
         {
            " links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "permission": "string",
            "type": "string",
            "user or group": "ENGDOMAIN\\ad user"
          }
        ],
        "comment": "HR Department Share",
        "dir umask": 18,
        "file umask": 18,
        "name": "HR SHARE",
        "offline files": "string",
        "unix symlink": "string",
        "vscan profile": "string"
      }
   ]
  },
  "export policy": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "id": 0,
    "name": "string",
    "rules": [
     {
        " links": {
         "self": {
           "href": "/api/resourcelink"
          }
```

```
},
        "anonymous user": "string",
        "chown mode": "string",
        "clients": [
         {
           "match": "0.0.0.0/0"
         }
        ],
        "ntfs unix security": "string",
        "protocols": [
        "string"
        ],
        "ro rule": [
        "string"
       ],
        "rw rule": [
        "string"
        ],
       "superuser": [
        "string"
       1
      }
    ]
  },
  "junction parent": {
   " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "name": "vsl_root",
   "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
  },
  "path": "/user/my_volume",
 "security style": "string",
 "unix permissions": 493
},
"provisioning_options": {
 "action": "string",
 "storage service": {
  "name": "string"
 }
},
"qos": {
 "policy": {
   " links": {
```

```
"self": {
                "href": "/api/resourcelink"
             }
            },
            "name": "performance",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          }
        },
        "snapshot policy": {
          " links": {
           "self": {
             "href": "/api/resourcelink"
           }
          },
          "name": "default",
          "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
        },
        "space": {
         "available": 0,
         "used": 0
        },
        "tiering": {
          "control": "string",
          "object stores": [
           {
             "name": "string"
           }
         ],
         "policy": "string"
        },
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
      }
   ]
  }
],
"luns": [
 {
   "clone": {
     "source": {
       "name": "/vol/volume1/lun1",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
     }
    },
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "lun maps": [
```

```
{
    "igroup": {
      "comment": "string",
      "igroups": [
        {
          " links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
       }
      1,
      "initiators": [
        {
          "comment": "my comment",
          "name": "ign.1998-01.com.corp.iscsi:name1"
        }
      ],
      "name": "igroup1",
      "os type": "string",
      "protocol": "string",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
 }
],
"name": "/vol/volume1/lun1",
"os type": "string",
"provisioning options": {
 "action": "string"
},
"qos": {
  "policy": {
    " links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "max throughput iops": 10000,
    "max throughput mbps": 500,
    "min throughput iops": 2000,
    "min throughput mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
```
```
},
    "serial number": "string",
    "space": {
     "size": 1073741824,
     "used": 0
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
],
"metric": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "available space": 4096,
  "duration": "PT15S",
  "iops": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "size": 4096,
  "status": "ok",
  "throughput": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500",
 "used space": 4096
},
"name": "string",
"namespaces": [
 {
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "name": "/vol/volume1/qtree1/namespace1",
    "os type": "string",
    "provisioning options": {
     "action": "string"
```

```
},
      "space": {
        "block size": 512,
       "size": 1073741824,
       "used": 0
      },
      "status": {
        "container state": "string",
        "state": "online"
      },
      "subsystem map": {
        " links": {
         "self": {
           "href": "/api/resourcelink"
         }
        },
        "anagrpid": "00103050h",
        "nsid": "00000001h",
        "subsystem": {
          "comment": "string",
          "hosts": [
            {
              "dh hmac chap": {
                "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                "group size": "string",
                "hash function": "string",
                "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
              },
              "ngn": "ngn.1992-01.example.com:string",
              "priority": "string"
            }
          ],
          "name": "subsystem1",
          "os type": "string",
         "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
       }
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  ],
  "parent consistency group": {
   " links": {
      "self": {
        "href": "/api/resourcelink"
```

```
}
  },
  "name": "my consistency group",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"provisioning options": {
  "action": "string",
 "name": "string",
  "storage service": {
  "name": "string"
 }
},
"qos": {
 "policy": {
    " links": {
      "self": {
       "href": "/api/resourcelink"
      }
    },
   "name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"replication relationships": [
 {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
],
"restore to": {
 "snapshot": {
   "name": "string",
   "uuid": "string"
 }
},
"snapshot policy": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "name": "default",
```

```
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"statistics": {
  "available space": 4096,
 "iops raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "size": 4096,
  "status": "ok",
  "throughput raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500",
 "used space": 4096
},
"svm": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
  "control": "string",
  "object stores": [
   {
    "name": "string"
   }
  ],
  "policy": "string"
```

```
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
 {
   "comment": "string",
   "name": "vol cs dept",
    "nas": {
      "cifs": {
        "shares": [
          {
            " links": {
             "self": {
               "href": "/api/resourcelink"
             }
            },
            "acls": [
             {
                " links": {
                 "self": {
                   "href": "/api/resourcelink"
                 }
                },
                "permission": "string",
                "type": "string",
                "user or group": "ENGDOMAIN\\ad user"
             }
            ],
            "comment": "HR Department Share",
            "dir umask": 18,
            "file umask": 18,
            "name": "HR SHARE",
            "offline files": "string",
            "unix symlink": "string",
            "vscan profile": "string"
         }
        1
      },
      "export policy": {
        " links": {
         "self": {
           "href": "/api/resourcelink"
          }
        },
        "id": 0,
        "name": "string",
        "rules": [
```

```
{
        " links": {
         "self": {
           "href": "/api/resourcelink"
         }
        },
        "anonymous user": "string",
        "chown mode": "string",
        "clients": [
         {
          "match": "0.0.0.0/0"
         }
        ],
        "ntfs unix security": "string",
        "protocols": [
        "string"
        ],
        "ro rule": [
        "string"
        ],
        "rw rule": [
        "string"
        ],
        "superuser": [
        "string"
       ]
      }
   1
  },
  "junction_parent": {
   " links": {
      "self": {
       "href": "/api/resourcelink"
     }
    },
    "name": "vsl root",
   "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
 },
  "path": "/user/my volume",
 "security style": "string",
 "unix permissions": 493
},
"provisioning options": {
 "action": "string",
  "storage service": {
   "name": "string"
```

```
}
      },
      "qos": {
       "policy": {
         " links": {
           "self": {
             "href": "/api/resourcelink"
           }
          },
         "name": "performance",
         "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
       }
      },
      "snapshot policy": {
       " links": {
         "self": {
           "href": "/api/resourcelink"
         }
       },
       "name": "default",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "space": {
       "available": 0,
       "used": 0
      },
      "tiering": {
       "control": "string",
       "object stores": [
         {
           "name": "string"
         }
       ],
       "policy": "string"
      },
     "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
   }
 ]
}
```

## Error

Status: Default

Error Code	Description
53411842	Consistency group does not exist.
53411843	A consistency group with specified UUID was not found.
53411844	Specified consistency group was not found in the specified SVM.
53411845	The specified UUID and name refer to different consistency groups.
53411846	Either name or UUID must be provided.

Also see the table of common errors in the Response body overview section of this documentation.

Name	Туре	Description
error	returned_error	

### Example error

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

# Definitions

## See Definitions

href

Name	Туре	Description
href	string	

self\_link

Name	Туре	Description
self	href	

## application

Name	Туре	Description
component_type	string	Nested consistency group tag.
type	string	Top level consistency group tag.

# guarantee

Name	Туре	Description
type	string	The type of space guarantee of this volume in the aggregate.

parent\_consistency\_group

Consistency group that is to be cloned.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

## parent\_snapshot

Name	Туре	Description
name	string	Name of an existing Snapshot copy of a parent consistency group.

### volume

Volume name suffix/prefix for the cloned volumes.

Name	Туре	Description
prefix	string	Volume name prefix for cloned volumes.
suffix	string	Volume name suffix for cloned volumes.

clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

Name	Туре	Description
guarantee	guarantee	
parent_consistency_group	parent_consistency_group	Consistency group that is to be cloned.
parent_snapshot	parent_snapshot	
split_initiated	boolean	Splits volumes after cloning. Default is false.
volume	volume	Volume name suffix/prefix for the cloned volumes.

### source

The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid or clone.source.name. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

Name	Туре	Description
name	string	The fully qualified path name of the clone source LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and base name of the LUN. Valid in POST and PATCH.

Name	Туре	Description
uuid	string	The unique identifier of the clone source LUN. Valid in POST and PATCH.

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto\_delete,
gos\_policy, space.guarantee.requested and

 $space.scsi\_thin\_provisioning\_support\_enabled.$ 

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto\_delete, lun\_maps, serial\_number, status.state, and uuid.

Persistent reservations for the patched LUN are also preserved.

Name	Туре	Description
source	source	The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid Or clone.source.name. If both properties are supplied, they must refer to the same LUN. Valid in POST to create a new LUN as a clone of the source. Valid in PATCH to overwrite an existing LUN's data as a clone of another.

### igroups

Name	Туре	Description
_links	self_link	
name	string	The name of the initiator group.
uuid	string	The unique identifier of the initiator group.

### initiators

The initiators that are members of the initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator.
name	string	Name of initiator that is a member of the initiator group.

igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator. Valid in POST and PATCH.
igroups	array[igroups]	Separate igroup definitions to include in this igroup.
initiators	array[initiators]	The initiators that are members of the group.
name	string	The name of the initiator group. Required in POST; optional in PATCH.
os_type	string	The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH.
protocol	string	The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group. Optional in POST; if not supplied, this defaults to <i>mixed</i> . The protocol of an initiator group cannot be changed after creation of the group.
uuid	string	The unique identifier of the initiator group.

lun\_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

Name	Туре	Description
igroup	igroup	The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.
logical_unit_number	integer	The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through the Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value. • Introduced in: 9.6 • readCreate: 1 • x-nullable: true

### provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

### policy

## The QoS policy

Name	Туре	Description
_links	self_link	

Name	Туре	Description
max_throughput_iops	integer	Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
max_throughput_mbps	integer	Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_iops	integer	Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_mbps	integer	Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

## qos

Name	Туре	Description
policy	policy	The QoS policy

## guarantee

Properties that request and report the space guarantee for the LUN.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH.
reserved	boolean	Reports if the LUN is space guaranteed. If <i>true</i> , a space guarantee is requested and the containing volume and aggregate support the request. If <i>false</i> , a space guarantee is not requested or a space guarantee is requested and either the containing volume or aggregate do not support the request.

## space

The storage space related properties of the LUN.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the LUN.

Name	Туре	Description
size	integer	The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maxiumum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation. • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096
		Introduced in: 9.6
		• x-nullable: true

Name	Туре	Description
Name used	<b>Type</b> integer	DescriptionThe amount of space consumed by the main data stream of the LUN.This value is the total space consumed in the volume by the LUN, including filesystem overhead, but excluding prefix and suffix streams. Due to 
		and applications utilize blocks within a LUN, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the LUN blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.
		For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.
		<ul><li>format: int64</li><li>readOnly: 1</li></ul>
		Introduced in: 9.6
		• x-nullable: true

### luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

Name	Туре	Description
clone	clone	This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto_delete, qos_policy, space.guarantee.requested and space.scsi_thin_provision ing_support_enabled. When used in a PATCH, the patched LUN's data is over- written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto_delete, lun_maps, serial_number, status.state, and uuid. Persistent reservations for the patched LUN are also preserved.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the LUN was created.

enabledbooleanThe enabled state of the LUN. LUNs can be disabled to prevent access to the LUN. Certain error conditions also cause the LUN to disabled, you can consult the state property to determine if the LUN is administratively disabled ( <i>dfiller</i> ) or thas become disabled as a result of an error. A LUN in an error condition can be brought of instratively offline by setting the enabled property to determine if enabled property to determine if enabled property to determine if enabled property to determine if setting the enabled property to faile up of the LUN is an error condition can be brought online by setting the enabled property to failes Upon creation, a LUN is enabled property to faile up of the initiator group. When a LUN is mapped to a initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group. Setting the ename (of the LUN and is named). A composed of the "voi" property, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN hat is not a clone of another. Disalloved in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.	Name	Туре	Description
lun_mapsarray[lun_maps]An array of LUN maps.LUN mapsALUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group is initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.	enabled	boolean	The enabled state of the LUN. LUNs can be disabled to prevent access to the LUN. Certain error conditions also cause the LUN to become disabled. If the LUN is disabled, you can consult the state property to determine if the LUN is administratively disabled (offline) or has become disabled as a result of an error. A LUN in an error condition can be brought online by setting the enabled property to <i>true</i> or brought administratively offline by setting the enabled property to <i>false</i> . Upon creation, a LUN is enabled by default. Valid in PATCH.
namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqosprovisioning_optionsprovisioning_options	lun_maps	array[lun_maps]	An array of LUN maps. A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.
os_typestringThe operating system type of the LUN.Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqos	name	string	The fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.
provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqos	os_type	string	The operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.
qos qos	provisioning_options	provisioning_options	Options that are applied to the operation.
	qos	qos	

Name	Туре	Description
serial_number	string	The LUN serial number. The serial number is generated by ONTAP when the LUN is created. • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 • x-nullable: true
space	space	The storage space related properties of the LUN.
uuid	string	<ul> <li>The unique identifier of the LUN.</li> <li>The UUID is generated by ONTAP when the LUN is created.</li> <li>example: 1cd8a442-86d1- 11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>

## guarantee

Properties that request and report the space guarantee for the NVMe namespace.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the NVMe namespace. If <i>true</i> , a space reservation is requested for the namespace; if <i>false</i> , the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%. The space reservation policy for an NVMe namespace is determined by ONTAP. • Introduced in: 9.6 • x-nullable: true
reserved	boolean	Reports if the NVMe namespace is space guaranteed. This property is <i>true</i> if a space guarantee is requested and the containing volume and aggregate support the request. This property is <i>false</i> if a space guarantee is not requested or if a space guarantee is requested and either the containing volume and aggregate do not support the request.

### space

The storage space related properties of the NVMe namespace.

Name	Туре	Description
block_size	integer	The size of blocks in the namespace, in bytes. Valid in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone. Valid in POST.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the NVMe namespace.
size	integer	The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.
		The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.
		For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.
		• example: 1073741824
		• format: int64
		• Max value: 140737488355328
		• Min value: 4096
		Introduced in: 9.6
		• x-nullable: true

Name	Туре	Description
Name used	Type         integer	DescriptionThe amount of space consumed by the main data stream of the NVMe namespace.This value is the total space consumed in the volume by the 
		namespace blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space
		condition.
		For more information, see <i>Size</i> <i>properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.
		• format: int64
		• readOnly: 1
		Introduced in: 9.6
		<ul> <li>x-nullable: true</li> </ul>

### status

Status information about the NVMe namespace.

Name	Туре	Description
container_state	string	The state of the volume and aggregate that contain the NVMe namespace. Namespaces are only available when their containers are available.

Name	Туре	Description
mapped	boolean	Reports if the NVMe namespace is mapped to an NVMe subsystem. There is an added computational
		cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
read_only	boolean	Reports if the NVMe namespace allows only read access.
state	string	The state of the NVMe namespace. Normal states for a namespace are <i>online</i> and <i>offline</i> . Other states indicate errors.

consistency\_group\_nvme\_host\_dh\_hmac\_chap

A container for properties of NVMe in-band authentication with the DH-HMAC-CHAP protocol.

Name	Туре	Description
controller_secret_key	string	The controller secret for NVMe in- band authentication. The value of this property is used by the NVMe host to authenticate the NVMe controller while establishing a connection. If unset, the controller is not authenticated. When supplied, the property host_secret_key must also be supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a controller secret has been set for the host, but the controller secret value cannot be read. To change the value, the host must be deleted from the subsystem and re-added.

Name	Туре	Description
group_size	string	The Diffie-Hellman group size for NVMe in-band authentication. When property host_secret_key is provided, this property defaults to 2048_bit. When supplied, the property host_secret_key must also be supplied. Optional in POST.
hash_function	string	The hash function for NVMe in- band authentication. When property host_secret_key is provided, this property defaults to sha_256. When supplied, the property host_secret_key must also be supplied. Optional in POST.
host_secret_key	string	The host secret for NVMe in-band authentication. The value of this property is used by the NVMe controller to authenticate the NVMe host while establishing a connection. If unset, no authentication is performed by the host or controller. This property must be supplied if any other NVMe in-band authentication properties are supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a host secret has been set for the host, but the host secret value cannot be read. To change the value, the host must be deleted from the subsystem and re-added.

## consistency\_group\_nvme\_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

dh hmac chap consistency group nyme host d A container for	iption
h_hmac_chap NVMe in-band the DH-HMAC	ainer for properties of in-band authentication with I-HMAC-CHAP protocol.

Name	Туре	Description
nqn	string	The NVMe qualified name (NQN) used to identify the NVMe storage target. Not allowed in POST when the records property is used.
priority	string	The host priority setting allocates appropriate NVMe I/O queues (count and depth) for the host to submit I/O commands. Absence of this property in GET implies io_queue count and I/O queue depth are being used.

consistency\_group\_nvme\_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMeconnected hosts.

Name	Туре	Description
comment	string	A configurable comment for the NVMe subsystem. Optional in POST and PATCH.
hosts	array[consistency_group_nvme_h ost]	The NVMe hosts configured for access to the NVMe subsystem. Optional in POST.
name	string	The name of the NVMe subsystem. Once created, an NVMe subsystem cannot be renamed. Required in POST.
os_type	string	The host operating system of the NVMe subsystem's hosts. Required in POST.
uuid	string	The unique identifier of the NVMe subsystem.

subsystem\_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for <code>subsystem\_map</code>. They are not populated for either a collection GET or an instance GET unless explicitly requested using the <code>fields</code> query parameter.

Name	Туре	Description
_links	self_link	
anagrpid	string	The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace. The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h". There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
nsid	string	The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace. The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".
subsystem	consistency_group_nvme_subsys tem	An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

### namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

Name	Туре	Description
auto_delete	boolean	This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones. When set to <i>true</i> , the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold. This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i> . There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the NVMe namespace was created.
enabled	boolean	The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the state property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created.

Name	Туре	Description
name	string	The fully qualified path name of the NVMe namespace composed of a "/vol" prefix, the volume name, the (optional) qtree name and base name of the namespace. Valid in POST. NVMe namespaces do not support rename, or movement between volumes.
os_type	string	The operating system type of the NVMe namespace. Required in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone.
provisioning_options	provisioning_options	Options that are applied to the operation.
space	space	The storage space related properties of the NVMe namespace.
status	status	Status information about the NVMe namespace.
subsystem_map	subsystem_map	The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems. There is an added computational cost to retrieving property values for subsystem_map. They are not populated for either a collection GET or an instance GET unless explicitly requested using the fields query parameter.
uuid	string	The unique identifier of the NVMe namespace.

parent\_consistency\_group

The parent consistency group.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

## storage\_service

Determines the placement of any storage object created during this operation.

Name	Туре	Description
name	string	Storage service name. If not specified, the default value is the most performant for the platform.

## provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
name	string	New name for consistency group. Required to resolve naming collisions.
storage_service	storage_service	Determines the placement of any storage object created during this operation.

## policy

The QoS policy

Name	Туре	Description
_links	self_link	
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.

Name	Туре	Description
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

snapshot

A consistency group's Snapshot copy

Name	Туре	Description
name	string	The name of the consistency group's Snapshot copy to restore to.
uuid	string	The UUID of the consistency group's Snapshot copy to restore to.

## restore\_to

Use to restore a consistency group to a previous Snapshot copy

Name	Туре	Description
snapshot	snapshot	A consistency group's Snapshot copy

### \_links

Name	Туре	Description
self	href	

snapshot\_policy\_reference

This is a reference to the Snapshot copy policy.

Name	Туре	Description
_links	_links	
name	string	
uuid	string	

## space

Space information for the consistency group.

Name	Туре	Description
available	integer	The amount of space available in the consistency group, in bytes.
size	integer	The total provisioned size of the consistency group, in bytes.
used	integer	The amount of space consumed in the consistency group, in bytes.

### svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

Name	Туре	Description
_links	_links	
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.

## object\_stores

Name	Туре	Description
name	string	The name of the object store to use. Used for placement.

## tiering

The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Туре	Description
string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
	FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
	all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
	auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
	none ‐ Volume blocks are not be tiered to the cloud store.
	snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
	The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.
	Type         string

## acls

The permissions that users and groups have on a CIFS share.

Name	Туре	Description
_links	_links	

Name	Туре	Description
permission	string	<ul> <li>Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed:</li> <li>no_access - User does not have CIFS share access</li> <li>read - User has only read access</li> <li>change - User has change access</li> <li>full_control - User has full_control access</li> </ul>
type	string	Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group
user_or_group	string	Specifies the user or group name to add to the access control list of a CIFS share.

consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	

Name	Туре	Description
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.

Name	Туре	Description
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively. • Default value: 1 • Introduced in: 9.12 • readCreate: 1 • x-nullable: true
name	string	specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.
Name	Туре	Description
--------------------	---------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	Offline Files The supported values are:
		<ul> <li>none - Clients are not permitted to cache files for offline access.</li> </ul>
		<ul> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> </ul>
		<ul> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> </ul>
		<ul> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	Controls the access of UNIX symbolic links to CIFS clients. The supported values are:
		<ul> <li>local - Enables only local symbolic links which is within the same CIFS share.</li> </ul>
		<ul> <li>widelink - Enables both local symlinks and widelinks.</li> </ul>
		<ul> <li>disable - Disables local symlinks and widelinks.</li> </ul>

Name	Туре	Description
vscan_profile	string	Vscan File-Operations Profile The supported values are:
		<ul> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> </ul>
		<ul> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> </ul>
		<ul> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> </ul>
		• writes_only - Virus scans can be triggered only when a file that has been modified is closed.

## cifs

Name	Туре	Description
shares	array[consistency_group_cifs_sha re]	

export\_clients

Name	Туре	Description
match	string	Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:
		<ul> <li>As a hostname; for instance, host1</li> </ul>
		• As an IPv4 address; for instance, 10.1.12.24
		<ul> <li>As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> </ul>
		<ul> <li>As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> </ul>
		<ul> <li>As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> </ul>
		<ul> <li>As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> </ul>
		<ul> <li>As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> </ul>
		<ul> <li>As a domain name preceded by the . character; for instance, .example.com</li> </ul>

## export\_rules

Name	Туре	Description
_links	_links	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.

Name	Туре	Description
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[export_clients]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

## export\_policy

The policy associated with volumes to export them for protocol access.

Name	Туре	Description
_links	self_link	
id	integer	Identifier for the export policy.
name	string	Name of the export policy.
rules	array[export_rules]	The set of rules that govern the export policy.

## junction\_parent

Name	Туре	Description
_links	self_link	

Name	Туре	Description
name	string	The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume.
uuid	string	Unique identifier for the parent volume.

nas

The CIFS share policy and/or export policies for this volume.

Name	Туре	Description
cifs	cifs	
export_policy	export_policy	The policy associated with volumes to export them for protocol access.
gid	integer	The UNIX group ID of the volume. Valid in POST or PATCH.
junction_parent	junction_parent	
path	string	The fully-qualified path in the owning SVM's namespace at which the volume is mounted. The path is case insensitive and must be unique within an SVM's namespace. Path must begin with '/' and must not end with '/'. Only one volume can be mounted at any given junction path. An empty path in POST creates an unmounted volume. An empty path in PATCH deactivates and unmounts the volume. Taking a volume offline or restricted state removes its junction path. This attribute is reported in GET only when the volume is mounted.

Name	Туре	Description
security_style	string	Security style associated with the volume. Valid in POST or PATCH. mixed ‐ Mixed-style security ntfs ‐ NTFS/WIndows-style security unified ‐ Unified-style security, unified UNIX, NFS and CIFS permissions unix ‐ UNIX-style security.
uid	integer	The UNIX user ID of the volume. Valid in POST or PATCH.
unix_permissions	integer	UNIX permissions to be viewed as an octal number, consisting of 4 digits derived by adding up bits 4 (read), 2 (write), and 1 (execute). First digit selects the set user ID (4), set group ID (2), and sticky (1) attributes. Second digit selects permission for the owner of the file. Third selects permissions for other users in the same group while the fourth selects permissions for other users not in the group. Valid in POST or PATCH. For security style "mixed" or "unix", the default setting is 0755 in octal (493 in decimal) and for security style "ntfs", the default setting is 0000. In cases where only owner, group, and other permissions are given (as in 755, representing the second, third and fourth digit), the first digit is assumed to be zero.

# provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

Name	Туре	Description
storage_service	storage_service	Determines the placement of any storage object created during this operation.

qos

The QoS policy for this volume.

Name	Туре	Description
policy	policy	The QoS policy

## space

Name	Туре	Description
available	integer	The available space, in bytes.
size	integer	Total provisioned size, in bytes.
used	integer	The virtual space used (includes volume reserves) before storage efficiency, in bytes.

## tiering

The tiering placement and policy definitions for this volume.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Туре	Description
string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
	FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
	all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
	auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
	none ‐ Volume blocks are not be tiered to the cloud store.
	snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
	The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.
	Type         string

#### volumes

Name	Туре	Description
comment	string	A comment for the volume. Valid in POST or PATCH.

Name	Туре	Description
name	string	Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST.
nas	nas	The CIFS share policy and/or export policies for this volume.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	The QoS policy for this volume.
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	
tiering	tiering	The tiering placement and policy definitions for this volume.
uuid	string	Unique identifier for the volume. This corresponds to the instance- uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd- 11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 • x-nullable: true

### consistency\_groups

Name	Туре	Description
_links	self_link	
application	application	

Name	Туре	Description
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.
		An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.
uuid	string	The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created. • example: 1cd8a442-86d1- 11e0-ae1c-123478563412 • readOnly: 1 • Introduced in: 9.10 • x-nullable: true

Name	Туре	Description
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.The total number of volumes across all child consistency group is constrained
		by the same limit.

## iops

The rate of I/O operations observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

## latency

The round trip latency observed at the storage object, in microseconds.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

## throughput

The rate of throughput bytes per second observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### metric

Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.

Name	Туре	Description
_links	_links	
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
duration	string	The duration over which this sample is calculated. The time durations are represented in the ISO-8601 standard format. Samples can be calculated over the following durations:
iops	iops	The rate of I/O operations observed at the storage object.
latency	latency	The round trip latency observed at the storage object, in microseconds.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput	throughput	The rate of throughput bytes per second observed at the storage object.
timestamp	string	The timestamp of the performance and capacity data.

Name	Туре	Description
used_space	integer	The total space used in the consistency group, in bytes.

#### replication\_relationships

Name	Туре	Description
_links	self_link	
is_protected_by_svm_dr	boolean	Indicates whether or not this consistency group is protected by SVM DR.
is_source	boolean	Indicates whether or not this consistency group is the source for replication.
uuid	string	The unique identifier of the SnapMirror relationship.

### iops\_raw

The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### latency\_raw

The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### throughput\_raw

Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### statistics

These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

Name	Туре	Description
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
iops_raw	iops_raw	The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.
latency_raw	latency_raw	The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput_raw	throughput_raw	Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.
timestamp	string	The timestamp of the performance data.

Name	Туре	Description
used_space	integer	The total used space in the consistency group, in bytes.

#### error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

#### returned\_error

Name	Туре	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 consistency group

PATCH /application/consistency-groups/{uuid}

#### Introduced In: 9.10

Updates a consistency group.



that this operation will never delete storage elements. You can specify only elements that should be added to the consistency group regardless of existing storage objects.

# **Related ONTAP commands**

N/A. There are no ONTAP commands for managing consistency groups.

# **Parameters**

Name	Туре	In	Required	Description
uuid	string	path	True	The unique identifier of the consistency group to modify.
return_timeout	integer	query	False	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. • Default value: 1 • Max value: 120 • Min value: 0

# **Request Body**

Name	Туре	Description
_links	self_link	
application	application	
clone	clone	Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

Name	Туре	Description
consistency_groups	array[consistency_groups]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group.
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
metric	metric	Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume. An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
	200	
qos	qos	

Name	Туре	Description
replicated	boolean	Indicates whether or not replication has been enabled on this consistency group.
replication_relationships	array[replication_relationships]	Indicates the SnapMirror relationship of this consistency group.
replication_source	boolean	Since support for this field is to be removed in the next release, use replication_relationships.is_source instead.
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
statistics	statistics	These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
uuid	string	<ul> <li>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</li> <li>example: 1cd8a442-86d1-11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.
		The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.
		The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.

Example request

```
{
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "application": {
   "component_type": "string",
   "type": "string"
 },
 "clone": {
   "guarantee": {
     "type": "string"
   },
   "parent consistency group": {
     " links": {
      "self": {
         "href": "/api/resourcelink"
       }
     },
     "name": "my consistency group",
     "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
   },
   "parent snapshot": {
    "name": "string"
   },
   "volume": {
     "prefix": "string",
     "suffix": "string"
   }
 },
 "consistency groups": [
   {
     " links": {
       "self": {
         "href": "/api/resourcelink"
       }
     },
     "application": {
       "component_type": "string",
       "type": "string"
     },
     "luns": [
        {
```

```
"clone": {
  "source": {
    "name": "/vol/volume1/lun1",
    "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"comment": "string",
"create time": "2018-06-04 15:00:00 -0400",
"lun maps": [
  {
    "igroup": {
      "comment": "string",
      "igroups": [
        {
          " links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "initiators": [
        {
          "comment": "my comment",
          "name": "iqn.1998-01.com.corp.iscsi:name1"
       }
      ],
      "name": "igroup1",
      "os type": "string",
      "protocol": "string",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
  }
],
"name": "/vol/volume1/lun1",
"os type": "string",
"provisioning options": {
 "action": "string"
},
"qos": {
 "policy": {
   " links": {
      "self": {
        "href": "/api/resourcelink"
```

```
}
        },
        "max throughput iops": 10000,
        "max throughput mbps": 500,
        "min throughput iops": 2000,
        "min throughput mbps": 500,
        "name": "performance",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "serial number": "string",
    "space": {
     "size": 1073741824,
     "used": 0
    },
    "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
 }
1,
"name": "string",
"namespaces": [
 {
   "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "name": "/vol/volume1/qtree1/namespace1",
    "os type": "string",
    "provisioning options": {
     "action": "string"
    },
    "space": {
     "block size": 512,
     "size": 1073741824,
     "used": 0
    },
    "status": {
     "container state": "string",
     "state": "online"
    },
    "subsystem map": {
      " links": {
        "self": {
          "href": "/api/resourcelink"
       }
      },
      "anagrpid": "00103050h",
      "nsid": "00000001h",
      "subsystem": {
```

```
"comment": "string",
              "hosts": [
                {
                  "dh hmac chap": {
                    "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                    "group size": "string",
                    "hash function": "string",
                    "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
                  },
                  "nqn": "nqn.1992-01.example.com:string",
                  "priority": "string"
                }
              ],
              "name": "subsystem1",
              "os type": "string",
              "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
           }
          },
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "parent consistency group": {
        " links": {
          "self": {
           "href": "/api/resourcelink"
         }
        },
        "name": "my consistency group",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "provisioning options": {
        "action": "string",
       "name": "string",
        "storage service": {
         "name": "string"
       }
      },
      "qos": {
        "policy": {
          " links": {
           "self": {
              "href": "/api/resourcelink"
            }
          },
```

```
"name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"restore to": {
 "snapshot": {
   "name": "string",
   "uuid": "string"
 }
},
"snapshot policy": {
 " links": {
   "self": {
     "href": "/api/resourcelink"
   }
 },
 "name": "default",
 "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"svm": {
 " links": {
   "self": {
    "href": "/api/resourcelink"
   }
 },
 "name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
 "control": "string",
 "object stores": [
   {
    "name": "string"
   }
 ],
 "policy": "string"
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
  {
   "comment": "string",
```

```
"name": "vol cs dept",
"nas": {
  "cifs": {
    "shares": [
     {
        " links": {
          "self": {
           "href": "/api/resourcelink"
          }
        },
        "acls": [
         {
            " links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "permission": "string",
            "type": "string",
           "user or group": "ENGDOMAIN\\ad user"
         }
        ],
        "comment": "HR Department Share",
        "dir umask": 18,
        "file umask": 18,
        "name": "HR SHARE",
        "offline files": "string",
        "unix symlink": "string",
        "vscan profile": "string"
      }
   ]
  },
  "export policy": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "id": 0,
    "name": "string",
    "rules": [
     {
        " links": {
         "self": {
           "href": "/api/resourcelink"
          }
```

```
},
       "anonymous user": "string",
        "chown mode": "string",
        "clients": [
         {
           "match": "0.0.0.0/0"
         }
       ],
        "ntfs unix security": "string",
        "protocols": [
        "string"
       ],
        "ro rule": [
        "string"
       ],
        "rw rule": [
        "string"
       ],
       "superuser": [
        "string"
       ]
      }
   ]
 },
 "junction parent": {
   " links": {
    "self": {
       "href": "/api/resourcelink"
     }
   },
   "name": "vsl_root",
   "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
 },
 "path": "/user/my_volume",
 "security style": "string",
 "unix permissions": 493
},
"provisioning_options": {
 "action": "string",
 "storage service": {
  "name": "string"
 }
},
"qos": {
 "policy": {
   " links": {
```

```
"self": {
                "href": "/api/resourcelink"
             }
            },
            "name": "performance",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
         }
        },
        "snapshot policy": {
          " links": {
           "self": {
             "href": "/api/resourcelink"
           }
          },
          "name": "default",
          "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
        },
        "space": {
         "available": 0,
         "used": 0
        },
        "tiering": {
          "control": "string",
          "object stores": [
           {
             "name": "string"
           }
         ],
         "policy": "string"
        },
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
     }
   ]
  }
],
"luns": [
 {
   "clone": {
     "source": {
       "name": "/vol/volume1/lun1",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
     }
    },
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "lun maps": [
```

```
{
    "igroup": {
      "comment": "string",
      "igroups": [
        {
          " links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "igroup1",
          "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
        }
      1,
      "initiators": [
        {
          "comment": "my comment",
          "name": "ign.1998-01.com.corp.iscsi:name1"
        }
      ],
      "name": "igroup1",
      "os type": "string",
      "protocol": "string",
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
  }
],
"name": "/vol/volume1/lun1",
"os type": "string",
"provisioning options": {
 "action": "string"
},
"qos": {
  "policy": {
    " links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "max throughput iops": 10000,
    "max throughput mbps": 500,
    "min throughput iops": 2000,
    "min throughput mbps": 500,
    "name": "performance",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
```

```
},
    "serial number": "string",
    "space": {
     "size": 1073741824,
     "used": 0
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
],
"metric": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "available space": 4096,
  "duration": "PT15S",
  "iops": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "size": 4096,
  "status": "ok",
  "throughput": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500",
 "used space": 4096
},
"name": "string",
"namespaces": [
 {
    "comment": "string",
    "create time": "2018-06-04 15:00:00 -0400",
    "name": "/vol/volume1/qtree1/namespace1",
    "os type": "string",
    "provisioning options": {
     "action": "string"
```

```
},
      "space": {
        "block size": 512,
       "size": 1073741824,
       "used": 0
      },
      "status": {
        "container state": "string",
        "state": "online"
      },
      "subsystem map": {
        " links": {
         "self": {
           "href": "/api/resourcelink"
         }
        },
        "anagrpid": "00103050h",
        "nsid": "00000001h",
        "subsystem": {
          "comment": "string",
          "hosts": [
            {
              "dh hmac chap": {
                "controller secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:",
                "group size": "string",
                "hash function": "string",
                "host secret key": "DHHC-
1:00:ia6zGodOr4SEG0Zzaw398rpY0wqipUWj4jWjUh4HWUz6aQ2n:"
              },
              "ngn": "ngn.1992-01.example.com:string",
              "priority": "string"
            }
          ],
          "name": "subsystem1",
          "os type": "string",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
       }
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  ],
  "parent consistency group": {
   " links": {
     "self": {
        "href": "/api/resourcelink"
```

```
}
  },
  "name": "my consistency group",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"provisioning options": {
  "action": "string",
 "name": "string",
  "storage service": {
  "name": "string"
 }
},
"qos": {
 "policy": {
    " links": {
      "self": {
       "href": "/api/resourcelink"
      }
    },
   "name": "performance",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
 }
},
"replication relationships": [
 {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
],
"restore to": {
 "snapshot": {
   "name": "string",
   "uuid": "string"
 }
},
"snapshot policy": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "name": "default",
```
```
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"space": {
 "available": 5737418,
 "size": 1073741824,
 "used": 5737418
},
"statistics": {
  "available space": 4096,
 "iops raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "latency raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "size": 4096,
  "status": "ok",
  "throughput raw": {
   "read": 200,
   "total": 1000,
   "write": 100
  },
  "timestamp": "2017-01-25 06:20:13 -0500",
 "used space": 4096
},
"svm": {
  " links": {
    "self": {
     "href": "/api/resourcelink"
   }
  },
  "name": "svm1",
 "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"tiering": {
  "control": "string",
  "object stores": [
   {
   "name": "string"
   }
  ],
  "policy": "string"
```

```
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412",
"volumes": [
 {
   "comment": "string",
   "name": "vol cs dept",
   "nas": {
     "cifs": {
        "shares": [
          {
            " links": {
             "self": {
               "href": "/api/resourcelink"
             }
            },
            "acls": [
             {
                " links": {
                 "self": {
                   "href": "/api/resourcelink"
                 }
                },
                "permission": "string",
                "type": "string",
                "user or group": "ENGDOMAIN\\ad user"
             }
            ],
            "comment": "HR Department Share",
            "dir umask": 18,
            "file umask": 18,
            "name": "HR SHARE",
            "offline files": "string",
            "unix symlink": "string",
            "vscan profile": "string"
         }
        1
      },
      "export policy": {
        " links": {
         "self": {
           "href": "/api/resourcelink"
          }
        },
        "id": 0,
        "name": "string",
        "rules": [
```

```
{
        " links": {
         "self": {
           "href": "/api/resourcelink"
         }
        },
        "anonymous user": "string",
        "chown mode": "string",
        "clients": [
         {
          "match": "0.0.0.0/0"
         }
        ],
        "ntfs unix security": "string",
        "protocols": [
        "string"
        ],
        "ro rule": [
        "string"
        ],
        "rw rule": [
        "string"
        ],
        "superuser": [
        "string"
        ]
      }
   1
  },
  "junction_parent": {
    " links": {
      "self": {
       "href": "/api/resourcelink"
     }
    },
    "name": "vsl root",
   "uuid": "75c9cfb0-3eb4-11eb-9fb4-005056bb088a"
 },
  "path": "/user/my volume",
 "security style": "string",
  "unix permissions": 493
},
"provisioning options": {
 "action": "string",
  "storage service": {
   "name": "string"
```

```
}
      },
      "qos": {
        "policy": {
         " links": {
           "self": {
             "href": "/api/resourcelink"
           }
          },
         "name": "performance",
         "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
       }
      },
      "snapshot policy": {
       " links": {
         "self": {
           "href": "/api/resourcelink"
         }
        },
        "name": "default",
       "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "space": {
       "available": 0,
       "used": 0
      },
      "tiering": {
       "control": "string",
        "object stores": [
         {
           "name": "string"
         }
       ],
        "policy": "string"
      },
     "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
   }
 ]
}
```

# Response

Status: 200, Ok

# Response

Status: 202, Accepted

# Error

Status: Default

# ONTAP Error Response Codes

Error Code	Description
262285	Consistency group does not support removing elements using a PATCH request.
53411842	Consistency group does not exist.
53411843	A consistency group with specified UUID was not found.
53411844	Specified consistency group was not found in the specified SVM.
53411845	The specified UUID and name refer to different consistency groups.
53411846	Either name or UUID must be provided.
53411852	A consistency group with the same identifier in the same scope exists.
53411853	Fields provided in the request conflict with each other.
53411856	Field provided is only supported when provisioning new objects.
53411857	LUNs that are not members of the application are not supported by this API. LUNs can be added to an application by adding the volume containing the LUNs to the application.
53411860	An object with the same identifier in the same scope exists.
53411861	Volume specified does not exist in provided volume array.
53411862	Modifying existing igroups is not supported using this API.
53411864	Request content insufficient to add an existing volume to an application.
53411865	Volumes contained in one consistency group cannot be added to a different consistency group.
53411866	LUNs are not supported on FlexGroup volumes.

Error Code	Description
53411867	LUN name is too long after appending a unique suffix.
53411869	Volume name is too long after appending a unique suffix.
53411870	When using the "round_robin" layout, the volume count must not be greater than the LUN count.
53411942	The application or component type of a consistency group that has an associated SnapMirror relationship cannot be changed.
53411959	Volumes with Snapshot copy locking enabled cannot be added to a consistency group.

Also see the table of common errors in the Response body overview section of this documentation.

Name	Туре	Description
error	returned_error	

### Example error

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

# Definitions

# See Definitions

href

Name	Туре	Description
href	string	

self\_link

Name	Туре	Description
self	href	

# application

Name	Туре	Description
component_type	string	Nested consistency group tag.
type	string	Top level consistency group tag.

# guarantee

Name	Туре	Description
type	string	The type of space guarantee of this volume in the aggregate.

parent\_consistency\_group

Consistency group that is to be cloned.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

### parent\_snapshot

Name	Туре	Description
name	string	Name of an existing Snapshot copy of a parent consistency group.

#### volume

Volume name suffix/prefix for the cloned volumes.

Name	Туре	Description
prefix	string	Volume name prefix for cloned volumes.
suffix	string	Volume name suffix for cloned volumes.

clone

Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.

Name	Туре	Description
guarantee	guarantee	
parent_consistency_group	parent_consistency_group	Consistency group that is to be cloned.
parent_snapshot	parent_snapshot	
split_initiated	boolean	Splits volumes after cloning. Default is false.
volume	volume	Volume name suffix/prefix for the cloned volumes.

#### source

The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid or clone.source.name. If both properties are supplied, they must refer to the same LUN.

Valid in POST to create a new LUN as a clone of the source.

Valid in PATCH to overwrite an existing LUN's data as a clone of another.

Name	Туре	Description
name	string	The fully qualified path name of the clone source LUN composed of a "/vol" prefix, the volume name, the (optional) qtree name, and base name of the LUN. Valid in POST and PATCH.

Name	Туре	Description
uuid	string	The unique identifier of the clone source LUN. Valid in POST and PATCH.

clone

This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto\_delete,
gos\_policy, space.guarantee.requested and

 $space.scsi\_thin\_provisioning\_support\_enabled.$ 

When used in a PATCH, the patched LUN's data is over-written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto\_delete, lun\_maps, serial\_number, status.state, and uuid.

Persistent reservations for the patched LUN are also preserved.

Name	Туре	Description
source	source	The source LUN for a LUN clone operation. This can be specified using property clone.source.uuid or clone.source.name. If both properties are supplied, they must refer to the same LUN. Valid in POST to create a new LUN as a clone of the source. Valid in PATCH to overwrite an existing LUN's data as a clone of another.

### igroups

Name	Туре	Description
_links	self_link	
name	string	The name of the initiator group.
uuid	string	The unique identifier of the initiator group.

### initiators

The initiators that are members of the initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator.
name	string	Name of initiator that is a member of the initiator group.

igroup

The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.

Name	Туре	Description
comment	string	A comment available for use by the administrator. Valid in POST and PATCH.
igroups	array[igroups]	Separate igroup definitions to include in this igroup.
initiators	array[initiators]	The initiators that are members of the group.
name	string	The name of the initiator group. Required in POST; optional in PATCH.
os_type	string	The host operating system of the initiator group. All initiators in the group should be hosts of the same operating system. Required in POST; optional in PATCH.
protocol	string	The protocols supported by the initiator group. This restricts the type of initiators that can be added to the initiator group. Optional in POST; if not supplied, this defaults to <i>mixed</i> . The protocol of an initiator group cannot be changed after creation of the group.
uuid	string	The unique identifier of the initiator group.

lun\_maps

A LUN map is an association between a LUN and an initiator group.

When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.

Name	Туре	Description
igroup	igroup	The initiator group that directly owns the initiator, which is where modification of the initiator is supported. This property will only be populated when the initiator is a member of a nested initiator group.
logical_unit_number	integer	The logical unit number assigned to the LUN when mapped to the specified initiator group. The number is used to identify the LUN to initiators in the initiator group when communicating through the Fibre Channel Protocol or iSCSI. Optional in POST; if no value is provided, ONTAP assigns the lowest available value. • Introduced in: 9.6 • readCreate: 1 • x-nullable: true

#### provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

#### policy

### The QoS policy

Name	Туре	Description
_links	self_link	

Name	Туре	Description
max_throughput_iops	integer	Specifies the maximum throughput in IOPS, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
max_throughput_mbps	integer	Specifies the maximum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_iops	integer	Specifies the minimum throughput in IOPS, 0 means none. Setting "min_throughput" is supported on AFF platforms only, unless FabricPool tiering policies are set. This is mutually exclusive with name and UUID during POST and PATCH.
min_throughput_mbps	integer	Specifies the minimum throughput in Megabytes per sec, 0 means none. This is mutually exclusive with name and UUID during POST and PATCH.
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

## qos

Name	Туре	Description
policy	policy	The QoS policy

# guarantee

Properties that request and report the space guarantee for the LUN.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the LUN. If <i>true</i> , a space reservation is requested for the LUN; if <i>false</i> , the LUN is thin provisioned. Guaranteeing a space reservation request for a LUN requires that the volume in which the LUN resides is also space reserved and that the fractional reserve for the volume is 100%. Valid in POST and PATCH.
reserved	boolean	Reports if the LUN is space guaranteed. If <i>true</i> , a space guarantee is requested and the containing volume and aggregate support the request. If <i>false</i> , a space guarantee is not requested or a space guarantee is requested and either the containing volume or aggregate do not support the request.

# space

The storage space related properties of the LUN.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the LUN.

Name	Туре	Description
size	integer	The total provisioned size of the LUN. The LUN size can be increased but not reduced using the REST interface. The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The actual minimum and maxiumum sizes vary depending on the ONTAP version, ONTAP platform, and the available space in the containing volume and aggregate. For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation. • example: 1073741824 • format: int64 • Max value: 140737488355328 • Min value: 4096 • Introduced in: 9.6
		x-nullable: true

Name	Туре	Description
Name used	<b>Type</b> integer	DescriptionThe amount of space consumed by the main data stream of the LUN.This value is the total space consumed in the volume by the LUN, including filesystem overhead, but excluding prefix and suffix streams. Due to 
		and applications utilize blocks within a LUN, this value does not necessarily reflect actual consumption/availability from the perspective of the filesystem or application. Without specific knowledge of how the LUN blocks are utilized outside of ONTAP, this property should not be used as an indicator for an out-of-space condition.
		For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.
		<ul><li>format: int64</li><li>readOnly: 1</li></ul>
		Introduced in: 9.6
		• x-nullable: true

#### luns

A LUN is the logical representation of storage in a storage area network (SAN).

In ONTAP, a LUN is located within a volume. Optionally, it can be located within a qtree in a volume.

A LUN can be created to a specified size using thin or thick provisioning. A LUN can then be renamed, resized, cloned, and moved to a different volume. LUNs support the assignment of a quality of service (QoS) policy for performance management or a QoS policy can be assigned to the volume containing the LUN. See the LUN object model to learn more about each of the properties supported by the LUN REST API.

A LUN must be mapped to an initiator group to grant access to the initiator group's initiators (client hosts). Initiators can then access the LUN and perform I/O over a Fibre Channel (FC) fabric using the Fibre Channel Protocol or a TCP/IP network using iSCSI.

Name	Туре	Description
clone	clone	This sub-object is used in POST to create a new LUN as a clone of an existing LUN, or PATCH to overwrite an existing LUN as a clone of another. Setting a property in this sub-object indicates that a LUN clone is desired. Consider the following other properties when cloning a LUN: auto_delete, qos_policy, space.guarantee.requested and space.scsi_thin_provision ing_support_enabled. When used in a PATCH, the patched LUN's data is over- written as a clone of the source and the following properties are preserved from the patched LUN unless otherwise specified as part of the PATCH: class, auto_delete, lun_maps, serial_number, status.state, and uuid. Persistent reservations for the patched LUN are also preserved.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the LUN was created.

enabledbooleanThe enabled state of the LUN. LUNs can be disabled to prevent access to the LUN Certain ere conditions also cause the LUN certain ere to determine if the LUN is disabled, you can consult the state property to determine if the LUN is disabled, you can consult the state property to determine if the LUN is disabled a competition can be brought administratively disabled (offline) or has become disabled (offline) or has become disabled approperty to determine if the competition can be brought administratively disabled (offline) or has become disabled approperty to the or brought administratively disabled approperty to the or able of property to the or brought administratively disabled approperty to the or brought administratively disabled approperty to the tells administratively disabled appro	Name	Туре	Description
lun_mapsarray[lun_maps]An array of LUN maps.LUN mapsA LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.	enabled	boolean	The enabled state of the LUN. LUNs can be disabled to prevent access to the LUN. Certain error conditions also cause the LUN to become disabled. If the LUN is disabled, you can consult the state property to determine if the LUN is administratively disabled ( <i>offline</i> ) or has become disabled as a result of an error. A LUN in an error condition can be brought online by setting the enabled property to <i>true</i> or brought administratively offline by setting the enabled property to <i>false</i> . Upon creation, a LUN is enabled by default. Valid in PATCH.
namestringThe fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.os_typestringThe operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqosprovisioning_optionsprovisioning_options	lun_maps	array[lun_maps]	An array of LUN maps. A LUN map is an association between a LUN and an initiator group. When a LUN is mapped to an initiator group, the initiator group's initiators are granted access to the LUN. The relationship between a LUN and an initiator group is many LUNs to many initiator groups.
os_typestringThe operating system type of the LUN.Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.provisioning_optionsprovisioning_optionsOptions that are applied to the operation.qosqos	name	string	The fully qualified path name of the LUN composed of the "/vol" prefix, the volume name, the qtree name (optional), and the base name of the LUN. Valid in POST and PATCH.
provisioning_optionsProvisioning_optionsOptions that are applied to the operation.qosqos	os_type	string	The operating system type of the LUN. Required in POST when creating a LUN that is not a clone of another. Disallowed in POST when creating a LUN clone.
qos qos	provisioning_options	provisioning_options	Options that are applied to the operation.
	qos	qos	

Name	Туре	Description
serial_number	string	The LUN serial number. The serial number is generated by ONTAP when the LUN is created. • maxLength: 12 • minLength: 12 • readOnly: 1 • Introduced in: 9.10 • x-nullable: true
space	space	The storage space related properties of the LUN.
uuid	string	<ul> <li>The unique identifier of the LUN.</li> <li>The UUID is generated by ONTAP when the LUN is created.</li> <li>example: 1cd8a442-86d1- 11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>

# guarantee

Properties that request and report the space guarantee for the NVMe namespace.

Name	Туре	Description
requested	boolean	The requested space reservation policy for the NVMe namespace. If <i>true</i> , a space reservation is requested for the namespace; if <i>false</i> , the namespace is thin provisioned. Guaranteeing a space reservation request for a namespace requires that the volume in which the namespace resides also be space reserved and that the fractional reserve for the volume be 100%. The space reservation policy for an NVMe namespace is determined by ONTAP. • Introduced in: 9.6 • x-nullable: true
reserved	boolean	Reports if the NVMe namespace is space guaranteed. This property is <i>true</i> if a space guarantee is requested and the containing volume and aggregate support the request. This property is <i>false</i> if a space guarantee is not requested or if a space guarantee is requested and either the containing volume and aggregate do not support the request.

### space

The storage space related properties of the NVMe namespace.

Name	Туре	Description
block_size	integer	The size of blocks in the namespace, in bytes. Valid in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone. Valid in POST.

Name	Туре	Description
guarantee	guarantee	Properties that request and report the space guarantee for the NVMe namespace.
size	integer	The total provisioned size of the NVMe namespace. Valid in POST and PATCH. The NVMe namespace size can be increased but not reduced using the REST interface.
		The maximum and minimum sizes listed here are the absolute maximum and absolute minimum sizes, in bytes. The maximum size is variable with respect to large NVMe namespace support in ONTAP. If large namespaces are supported, the maximum size is 128 TB (140737488355328 bytes) and if not supported, the maximum size is just under 16 TB (17557557870592 bytes). The minimum size supported is always 4096 bytes.
		For more information, see <i>Size properties</i> in the <i>docs</i> section of the ONTAP REST API documentation.
		• example: 1073741824
		• format: int64
		<ul> <li>Max value: 140737488355328</li> </ul>
		• Min value: 4096
		Introduced in: 9.6
		• x-nullable: true

#### status

Status information about the NVMe namespace.

Name	Туре	Description
container_state	string	The state of the volume and aggregate that contain the NVMe namespace. Namespaces are only available when their containers are available.

Name	Туре	Description
mapped	boolean	Reports if the NVMe namespace is mapped to an NVMe subsystem. There is an added computational
		cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
read_only	boolean	Reports if the NVMe namespace allows only read access.
state	string	The state of the NVMe namespace. Normal states for a namespace are <i>online</i> and <i>offline</i> . Other states indicate errors.

consistency\_group\_nvme\_host\_dh\_hmac\_chap

A container for properties of NVMe in-band authentication with the DH-HMAC-CHAP protocol.

Name	Туре	Description
controller_secret_key	string	The controller secret for NVMe in- band authentication. The value of this property is used by the NVMe host to authenticate the NVMe controller while establishing a connection. If unset, the controller is not authenticated. When supplied, the property host_secret_key must also be supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a controller secret has been set for the host, but the controller secret value cannot be read. To change the value, the host must be deleted from the subsystem and re-added.

Name	Туре	Description
group_size	string	The Diffie-Hellman group size for NVMe in-band authentication. When property host_secret_key is provided, this property defaults to 2048_bit. When supplied, the property host_secret_key must also be supplied. Optional in POST.
hash_function	string	The hash function for NVMe in- band authentication. When property host_secret_key is provided, this property defaults to sha_256. When supplied, the property host_secret_key must also be supplied. Optional in POST.
host_secret_key	string	The host secret for NVMe in-band authentication. The value of this property is used by the NVMe controller to authenticate the NVMe host while establishing a connection. If unset, no authentication is performed by the host or controller. This property must be supplied if any other NVMe in-band authentication properties are supplied. Optional in POST. This property is write-only. The mode property can be used to identify if a host secret has been set for the host, but the host secret value cannot be read. To change the value, the host must be deleted from the subsystem and re-added.

# consistency\_group\_nvme\_host

The NVMe host provisioned to access NVMe namespaces mapped to a subsystem.

Name	Туре	Description
dh_hmac_chap	consistency_group_nvme_host_d h_hmac_chap	A container for properties of NVMe in-band authentication with the DH-HMAC-CHAP protocol.

Name	Туре	Description
nqn	string	The NVMe qualified name (NQN) used to identify the NVMe storage target. Not allowed in POST when the records property is used.
priority	string	The host priority setting allocates appropriate NVMe I/O queues (count and depth) for the host to submit I/O commands. Absence of this property in GET implies io_queue count and I/O queue depth are being used.

consistency\_group\_nvme\_subsystem

An NVMe subsystem maintains configuration state and namespace access control for a set of NVMeconnected hosts.

Name	Туре	Description
comment	string	A configurable comment for the NVMe subsystem. Optional in POST and PATCH.
hosts	array[consistency_group_nvme_h ost]	The NVMe hosts configured for access to the NVMe subsystem. Optional in POST.
name	string	The name of the NVMe subsystem. Once created, an NVMe subsystem cannot be renamed. Required in POST.
os_type	string	The host operating system of the NVMe subsystem's hosts. Required in POST.
uuid	string	The unique identifier of the NVMe subsystem.

subsystem\_map

The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems.

There is an added computational cost to retrieving property values for <code>subsystem\_map</code>. They are not populated for either a collection GET or an instance GET unless explicitly requested using the <code>fields</code> query parameter.

Name	Туре	Description
_links	self_link	
anagrpid	string	The Asymmetric Namespace Access Group ID (ANAGRPID) of the NVMe namespace. The format for an ANAGRPID is 8 hexadecimal digits (zero-filled) followed by a lower case "h". There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
nsid	string	The NVMe namespace identifier. This is an identifier used by an NVMe controller to provide access to the NVMe namespace. The format for an NVMe namespace identifier is 8 hexadecimal digits (zero-filled) followed by a lower case "h".
subsystem	consistency_group_nvme_subsys tem	An NVMe subsystem maintains configuration state and namespace access control for a set of NVMe-connected hosts.

#### namespaces

An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the storage virtual machine using the NVMe over Fabrics protocol.

In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.

An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API.

An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol.

Name	Туре	Description
auto_delete	boolean	This property marks the NVMe namespace for auto deletion when the volume containing the namespace runs out of space. This is most commonly set on namespace clones. When set to <i>true</i> , the NVMe namespace becomes eligible for automatic deletion when the volume runs out of space. Auto deletion only occurs when the volume containing the namespace is also configured for auto deletion and free space in the volume decreases below a particular threshold. This property is optional in POST and PATCH. The default value for a new NVMe namespace is <i>false</i> . There is an added computational cost to retrieving this property's value. It is not populated for either a collection GET or an instance GET unless it is explicitly requested using the fields query parameter. See Requesting specific fields to learn more.
comment	string	A configurable comment available for use by the administrator. Valid in POST and PATCH.
create_time	string	The time the NVMe namespace was created.
enabled	boolean	The enabled state of the NVMe namespace. Certain error conditions cause the namespace to become disabled. If the namespace is disabled, you can check the state property to determine what error disabled the namespace. An NVMe namespace is enabled automatically when it is created.

Name	Туре	Description
name	string	The fully qualified path name of the NVMe namespace composed of a "/vol" prefix, the volume name, the (optional) qtree name and base name of the namespace. Valid in POST. NVMe namespaces do not support rename, or movement between volumes.
os_type	string	The operating system type of the NVMe namespace. Required in POST when creating an NVMe namespace that is not a clone of another. Disallowed in POST when creating a namespace clone.
provisioning_options	provisioning_options	Options that are applied to the operation.
space	space	The storage space related properties of the NVMe namespace.
status	status	Status information about the NVMe namespace.
subsystem_map	subsystem_map	The NVMe subsystem with which the NVMe namespace is associated. A namespace can be mapped to zero (0) or one (1) subsystems. There is an added computational cost to retrieving property values for subsystem_map. They are not populated for either a collection GET or an instance GET unless explicitly requested using the fields query parameter.
uuid	string	The unique identifier of the NVMe namespace.

parent\_consistency\_group

The parent consistency group.

Name	Туре	Description
_links	self_link	
name	string	The name of the consistency group.
uuid	string	The unique identifier of the consistency group.

# storage\_service

Determines the placement of any storage object created during this operation.

Name	Туре	Description
name	string	Storage service name. If not specified, the default value is the most performant for the platform.

### provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
name	string	New name for consistency group. Required to resolve naming collisions.
storage_service	storage_service	Determines the placement of any storage object created during this operation.

# policy

The QoS policy

Name	Туре	Description
_links	self_link	
name	string	The QoS policy group name. This is mutually exclusive with UUID and other QoS attributes during POST and PATCH.

Name	Туре	Description
uuid	string	The QoS policy group UUID. This is mutually exclusive with name and other QoS attributes during POST and PATCH.

snapshot

A consistency group's Snapshot copy

Name	Туре	Description
name	string	The name of the consistency group's Snapshot copy to restore to.
uuid	string	The UUID of the consistency group's Snapshot copy to restore to.

### restore\_to

Use to restore a consistency group to a previous Snapshot copy

Name	Туре	Description
snapshot	snapshot	A consistency group's Snapshot copy

### \_links

Name	Туре	Description
self	href	

snapshot\_policy\_reference

This is a reference to the Snapshot copy policy.

Name	Туре	Description
_links	_links	
name	string	
uuid	string	

# space

Space information for the consistency group.

Name	Туре	Description
available	integer	The amount of space available in the consistency group, in bytes.
size	integer	The total provisioned size of the consistency group, in bytes.
used	integer	The amount of space consumed in the consistency group, in bytes.

#### svm

The Storage Virtual Machine (SVM) in which the consistency group is located.

Name	Туре	Description
_links	_links	
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.

### object\_stores

Name	Туре	Description
name	string	The name of the object store to use. Used for placement.

# tiering

The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Туре	Description
string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
	FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
	all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
	auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
	none ‐ Volume blocks are not be tiered to the cloud store.
	snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
	The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.
	Type         string

### acls

The permissions that users and groups have on a CIFS share.

Name	Туре	Description
_links	_links	

Name	Туре	Description
permission	string	<ul> <li>Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed:</li> <li>no_access - User does not have CIFS share access</li> <li>read - User has only read access</li> <li>change - User has change access</li> <li>full_control - User has full_control access</li> </ul>
type	string	Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group
user_or_group	string	Specifies the user or group name to add to the access control list of a CIFS share.

consistency\_group\_cifs\_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

Name	Туре	Description
_links	_links	
access_based_enumeration	boolean	Specifies whether all folders inside this share are visible to a user based on that individual user's access right; prevents the display of folders or other shared resources that the user does not have access to.
acls	array[acls]	

Name	Туре	Description
allow_unencrypted_access	boolean	Specifies whether or not the SMB2 clients are allowed to access the encrypted share.
change_notify	boolean	Specifies whether CIFS clients can request for change notifications for directories on this share.
comment	string	Specify the CIFS share descriptions.
continuously_available	boolean	Specifies whether or not the clients connecting to this share can open files in a persistent manner. Files opened in this way are protected from disruptive events, such as, failover and giveback.
dir_umask	integer	Directory mode creation mask to be viewed as an octal number.
encryption	boolean	Specifies whether SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share.
file_umask	integer	File mode creation mask to be viewed as an octal number.

Name	Туре	Description
home_directory	boolean	Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively. • Default value: 1 • Introduced in: 9.12 • readCreate: 1 • x-nullable: true
name	string	Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.
namespace_caching	boolean	Specifies whether or not the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.

Name	Туре	Description
no_strict_security	boolean	Specifies whether or not CIFS clients can follow Unix symlinks outside the share boundaries.
offline_files	string	Offline Files The supported values are:
		<ul> <li>none - Clients are not permitted to cache files for offline access.</li> </ul>
		<ul> <li>manual - Clients may cache files that are explicitly selected by the user for offline access.</li> </ul>
		<ul> <li>documents - Clients may automatically cache files that are used by the user for offline access.</li> </ul>
		<ul> <li>programs - Clients may automatically cache files that are used by the user for offline access and may use those files in an offline mode even if the share is available.</li> </ul>
oplocks	boolean	Specifies whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.
show_snapshot	boolean	Specifies whether or not the Snapshot copies can be viewed and traversed by clients.
unix_symlink	string	Controls the access of UNIX symbolic links to CIFS clients. The supported values are: • local - Enables only local
		symbolic links which is within the same CIFS share.
		<ul> <li>widelink - Enables both local symlinks and widelinks.</li> </ul>
		<ul> <li>disable - Disables local symlinks and widelinks.</li> </ul>

Name	Туре	Description
vscan_profile	string	Vscan File-Operations Profile The supported values are:
		<ul> <li>no_scan - Virus scans are never triggered for accesses to this share.</li> </ul>
		<ul> <li>standard - Virus scans can be triggered by open, close, and rename operations.</li> </ul>
		<ul> <li>strict - Virus scans can be triggered by open, read, close, and rename operations.</li> </ul>
		• writes_only - Virus scans can be triggered only when a file that has been modified is closed.

### cifs

Name	Туре	Description
shares	array[consistency_group_cifs_sha re]	

export\_clients
Name	Туре	Description
match	string	Client Match Hostname, IP Address, Netgroup, or Domain. You can specify the match as a string value in any of the following formats:
		<ul> <li>As a hostname; for instance, host1</li> </ul>
		• As an IPv4 address; for instance, 10.1.12.24
		<ul> <li>As an IPv6 address; for instance, fd20:8b1e:b255:4071::100:1</li> </ul>
		<ul> <li>As an IPv4 address with a subnet mask expressed as a number of bits; for instance, 10.1.12.0/24</li> </ul>
		<ul> <li>As an IPv6 address with a subnet mask expressed as a number of bits; for instance, fd20:8b1e:b255:4071::/64</li> </ul>
		<ul> <li>As an IPv4 address with a network mask; for instance, 10.1.16.0/255.255.255.0</li> </ul>
		<ul> <li>As a netgroup, with the netgroup name preceded by the @ character; for instance, @eng</li> </ul>
		<ul> <li>As a domain name preceded by the . character; for instance, .example.com</li> </ul>

### export\_rules

Name	Туре	Description
_links	_links	
allow_device_creation	boolean	Specifies whether or not device creation is allowed.
allow_suid	boolean	Specifies whether or not SetUID bits in SETATTR Op is to be honored.
anonymous_user	string	User ID To Which Anonymous Users Are Mapped.

Name	Туре	Description
chown_mode	string	Specifies who is authorized to change the ownership mode of a file.
clients	array[export_clients]	Array of client matches
index	integer	Index of the rule within the export policy.
ntfs_unix_security	string	NTFS export UNIX security options.
protocols	array[string]	
ro_rule	array[string]	Authentication flavors that the read-only access rule governs
rw_rule	array[string]	Authentication flavors that the read/write access rule governs
superuser	array[string]	Authentication flavors that the superuser security type governs

# export\_policy

The policy associated with volumes to export them for protocol access.

Name	Туре	Description
_links	self_link	
id	integer	Identifier for the export policy.
name	string	Name of the export policy.
rules	array[export_rules]	The set of rules that govern the export policy.

### junction\_parent

Name	Туре	Description
_links	self_link	

Name	Туре	Description
name	string	The name of the parent volume that contains the junction inode of this volume. The junction parent volume must belong to the same SVM that owns this volume.
uuid	string	Unique identifier for the parent volume.

nas

The CIFS share policy and/or export policies for this volume.

Name	Туре	Description
cifs	cifs	
export_policy	export_policy	The policy associated with volumes to export them for protocol access.
gid	integer	The UNIX group ID of the volume. Valid in POST or PATCH.
junction_parent	junction_parent	
path	string	The fully-qualified path in the owning SVM's namespace at which the volume is mounted. The path is case insensitive and must be unique within an SVM's namespace. Path must begin with '/' and must not end with '/'. Only one volume can be mounted at any given junction path. An empty path in POST creates an unmounted volume. An empty path in PATCH deactivates and unmounts the volume. Taking a volume offline or restricted state removes its junction path. This attribute is reported in GET only when the volume is mounted.

Name	Туре	Description
security_style	string	Security style associated with the volume. Valid in POST or PATCH. mixed ‐ Mixed-style security ntfs ‐ NTFS/WIndows-style security unified ‐ Unified-style security, unified UNIX, NFS and CIFS permissions unix ‐ UNIX-style security.
uid	integer	The UNIX user ID of the volume. Valid in POST or PATCH.
unix_permissions	integer	UNIX permissions to be viewed as an octal number, consisting of 4 digits derived by adding up bits 4 (read), 2 (write), and 1 (execute). First digit selects the set user ID (4), set group ID (2), and sticky (1) attributes. Second digit selects permission for the owner of the file. Third selects permissions for other users in the same group while the fourth selects permissions for other users not in the group. Valid in POST or PATCH. For security style "mixed" or "unix", the default setting is 0755 in octal (493 in decimal) and for security style "ntfs", the default setting is 0000. In cases where only owner, group, and other permissions are given (as in 755, representing the second, third and fourth digit), the first digit is assumed to be zero.

# provisioning\_options

Options that are applied to the operation.

Name	Туре	Description
action	string	Operation to perform
count	integer	Number of elements to perform the operation on.

Name	Туре	Description
storage_service	storage_service	Determines the placement of any storage object created during this operation.

qos

The QoS policy for this volume.

Name	Туре	Description
policy	policy	The QoS policy

### space

Name	Туре	Description
available	integer	The available space, in bytes.
size	integer	Total provisioned size, in bytes.
used	integer	The virtual space used (includes volume reserves) before storage efficiency, in bytes.

# tiering

The tiering placement and policy definitions for this volume.

Name	Туре	Description
control	string	Storage tiering placement rules for the object.
object_stores	array[object_stores]	Object stores to use. Used for placement.

Туре	Description
string	Policy that determines whether the user data blocks of a volume in a FabricPool will be tiered to the cloud store when they become cold.
	FabricPool combines flash (performance tier) with a cloud store into a single aggregate. Temperature of a volume block increases if it is accessed frequently and decreases when it is not. Valid in POST or PATCH.
	all ‐ Allows tiering of both Snapshot copies and active file system user data to the cloud store as soon as possible by ignoring the temperature on the volume blocks.
	auto ‐ Allows tiering of both snapshot and active file system user data to the cloud store
	none ‐ Volume blocks are not be tiered to the cloud store.
	snapshot_only ‐ Allows tiering of only the volume Snapshot copies not associated with the active file system.
	The default tiering policy is "snapshot-only" for a FlexVol volume and "none" for a FlexGroup volume. The default minimum cooling period for the "snapshot-only" tiering policy is 2 days and for the "auto" tiering policy it is 31 days.
	Type           string

#### volumes

Name	Туре	Description
comment	string	A comment for the volume. Valid in POST or PATCH.

Name	Туре	Description
name	string	Volume name. The name of volume must start with an alphabetic character (a to z or A to Z) or an underscore (_). The name must be 197 or fewer characters in length for FlexGroups, and 203 or fewer characters in length for all other types of volumes. Volume names must be unique within an SVM. Required on POST.
nas	nas	The CIFS share policy and/or export policies for this volume.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	The QoS policy for this volume.
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	
tiering	tiering	The tiering placement and policy definitions for this volume.
uuid	string	Unique identifier for the volume. This corresponds to the instance- uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd- 11e9-81d5-00a0986138f7 • readOnly: 1 • Introduced in: 9.8 • x-nullable: true

### consistency\_groups

Name	Туре	Description
_links	self_link	
application	application	

Name	Туре	Description
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.
		An NVMe namespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1
		Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.
uuid	string	The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created. • example: 1cd8a442-86d1- 11e0-ae1c-123478563412 • readOnly: 1 • Introduced in: 9.10 • x-nullable: true

Name	Туре	Description
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group.The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group.The total number of volumes across all child consistency group is constrained
		by the same limit.

## iops

The rate of I/O operations observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

### latency

The round trip latency observed at the storage object, in microseconds.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

### throughput

The rate of throughput bytes per second observed at the storage object.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

### metric

Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.

Name	Туре	Description
_links	_links	
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
duration	string	The duration over which this sample is calculated. The time durations are represented in the ISO-8601 standard format. Samples can be calculated over the following durations:
iops	iops	The rate of I/O operations observed at the storage object.
latency	latency	The round trip latency observed at the storage object, in microseconds.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput	throughput	The rate of throughput bytes per second observed at the storage object.
timestamp	string	The timestamp of the performance and capacity data.

Name	Туре	Description
used_space	integer	The total space used in the consistency group, in bytes.

#### replication\_relationships

Name	Туре	Description
_links	self_link	
is_protected_by_svm_dr	boolean	Indicates whether or not this consistency group is protected by SVM DR.
is_source	boolean	Indicates whether or not this consistency group is the source for replication.
uuid	string	The unique identifier of the SnapMirror relationship.

### iops\_raw

The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### latency\_raw

The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### throughput\_raw

Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.

Name	Туре	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Peformance metric for write I/O operations.

#### statistics

These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.

Name	Туре	Description
available_space	integer	The total space available in the consistency group, in bytes.

Name	Туре	Description
iops_raw	iops_raw	The number of I/O operations observed at the storage object. This can be used along with delta time to calculate the rate of I/O operations per unit of time.
latency_raw	latency_raw	The raw latency observed at the storage object, in microseconds. This can be divided by the raw IOPS value to calculate the average latency per I/O operation.
size	integer	The total size of the consistency group, in bytes.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_ delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput_raw	throughput_raw	Throughput bytes observed at the storage object. This can be used along with delta time to calculate the rate of throughput bytes per unit of time.
timestamp	string	The timestamp of the performance data.

Name	Туре	Description
used_space	integer	The total used space in the consistency group, in bytes.

consistency\_group

Name	Туре	Description
_links	self_link	
application	application	
clone	clone	Creates a clone of an existing consistency group from the current contents or an existing Snapshot copy.
consistency_groups	array[consistency_groups]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A consistency group can only be associated with one direct parent consistency group.
luns	array[luns]	The LUNs array can be used to create or modify LUNs in a consistency group on a new or existing volume that is a member of the consistency group. LUNs are considered members of a consistency group if they are located on a volume that is a member of the consistency group.
metric	metric	Performance and capacity numbers, such as, IOPS, latency, throughput, used space, and available space.
name	string	Name of the consistency group. The consistency group name must be unique within an SVM. If not provided and the consistency group contains only one volume, the name will be generated based on the volume name. If the consistency group contains more than one volume, the name is required.

Name	Туре	Description
namespaces	array[namespaces]	An NVMe namespace is a collection of addressable logical blocks presented to hosts connected to the SVM using the NVMe over Fabrics protocol. In ONTAP, an NVMe namespace is located within a volume. Optionally, it can be located within a qtree in a volume.
		An NVMe hamespace is created to a specified size using thin or thick provisioning as determined by the volume on which it is created. NVMe namespaces support being cloned. An NVMe namespace cannot be renamed, resized, or moved to a different volume. NVMe namespaces do not support the assignment of a QoS policy for performance management, but a QoS policy can be assigned to the volume containing the namespace. See the NVMe namespace object model to learn more about each of the properties supported by the NVMe namespace REST API. An NVMe namespace must be mapped to an NVMe subsystem to grant access to the subsystem's hosts. Hosts can then access the NVMe namespace and perform I/O using the NVMe over Fabrics protocol. • maxItems: 16 • minItems: 0 • uniqueItems: 1 • Introduced in: 9.10
parent_consistency_group	parent_consistency_group	The parent consistency group.
provisioning_options	provisioning_options	Options that are applied to the operation.
qos	qos	

Name	Туре	Description
replicated	boolean	Indicates whether or not replication has been enabled on this consistency group.
replication_relationships	array[replication_relationships]	Indicates the SnapMirror relationship of this consistency group.
replication_source	boolean	Since support for this field is to be removed in the next release, use replication_relationships.is_sourc e instead.
restore_to	restore_to	Use to restore a consistency group to a previous Snapshot copy
snapshot_policy	snapshot_policy_reference	This is a reference to the Snapshot copy policy.
space	space	Space information for the consistency group.
statistics	statistics	These are raw performance and space numbers, such as, IOPS, latency, throughput, used space, and available space. These numbers are aggregated across all nodes in the cluster and increase with the uptime of the cluster.
svm	svm	The Storage Virtual Machine (SVM) in which the consistency group is located.
tiering	tiering	The tiering placement and policy definitions for volumes in this consistency group.

Name	Туре	Description
uuid	string	<ul> <li>The unique identifier of the consistency group. The UUID is generated by ONTAP when the consistency group is created.</li> <li>example: 1cd8a442-86d1-11e0-ae1c-123478563412</li> <li>readOnly: 1</li> <li>Introduced in: 9.10</li> <li>x-nullable: true</li> </ul>
volumes	array[volumes]	A consistency group is a mutually exclusive aggregation of volumes or other consistency groups. A volume can only be associated with one direct parent consistency group. The volumes array can be used to create new volumes in the consistency group, add existing volumes to the consistency group, or modify existing volumes that are already members of the consistency group. The total number of volumes across all child consistency groups contained in a consistency group is constrained by the same limit.

### error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

### returned\_error

Name	Туре	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code

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

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