



lun igroup commands

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lun igroup commands

lun igroup add

Add initiators to an initiator group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command adds initiators to an existing initiator group (igroup). You can add an initiator to an initiator group only if there are no LUN mapping conflicts. Mapping conflicts occur when an initiator is already paired with a LUN. If you attempt to run this command and there are LUN mapping conflicts, the command returns an error.

An initiator cannot be a member of two igroups of different OS types. For example, if you have an initiator that belongs to a Solaris igroup, the command does not allow you to add this initiator to an AIX igroup.

When you add FCP initiators, you can specify an alias instead of the initiator's World Wide Port Name (WWPN) or the iSCSI Qualified name (IQN).

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the initiator group to which you want to add a new initiator.

[-initiator <text>,...] - Initiators

Specifies the initiator that you want to add. You can specify the WWPN, IQN, or alias of the initiator.

[-child-igroups <text>,...] - Child Igroups

Specifies the child initiator groups you want to add. The initiator group inherits the initiators of any child igroups. An initiator group can have either initiators or child initiator groups, but not both simultaneously. Initiator groups can be nested to match host cluster hierarchies. If the host cluster then changes, initiators only need to be updated in the child igroups and the parent igroups inherit the changes.

Examples

```
cluster1::> lun igroup add -vserver vs1 -igroup ig1 -initiator iqn.1992-08.com.mv.mvinitiator
```

Adds the initiator `iqn.1992-08.com.mv.mvinitiator` to the initiator group `ig1` on Vserver `vs1`.

lun igroup bind

Bind an existing initiator group to a given portset

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command binds an initiator group to a portset so the host knows which LIFs or TPGs to access. When you bind a portset to an igroup, the host knows which iSCSI or FCP LIF to access. If you do not bind an igroup to a portset, and you map a LUN to the igroup, then the initiators in the igroup can access the LUN on any port on the Vserver.

The initiator group cannot be bound to another portset when you use this command. If you attempt to bind a portset to an initiator group that is already bound to an existing portset, the command returns an error. You can only bind an initiator group to one portset at a time.

If the initiator group is bound, use the [lun igroup unbind](#) command to unbind the initiator group from the portset. After the initiator group is unbound, you can bind it to another portset.

You can only bind an initiator group to a non-empty portset.

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the initiator group that you want to bind a portset to.

-portset <text> - Portset Binding Igroup

Specifies the portset name that you want to bind an initiator group to.

Examples

```
cluster1::> lun igroup bind -vserver vs1 -igroup ig1 -portset-name ps1
```

Binds igroup ig1 to portset ps1.

Related Links

- [lun igroup unbind](#)

lun igroup create

Create a new initiator group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command creates a new initiator group (igroup). Use igroups to control which hosts have access to specific LUNs. When you bind an igroup to a portset, a host in the igroup can access the LUNs only by connecting to the target ports in the portset.

When you create an igroup, you can add multiple existing initiators by specifying them in a list, separating them with commas. Later, you can add or remove initiators from the initiator group. Use the [lun igroup add](#) command to add initiators. Use the [lun igroup remove](#) command to remove an initiator. Unless the `-initiator` option is supplied, no initiators are added to a new igroup.

You can also bind a portset to an initiator when you create an initiator group. You can modify the portset binding of an initiator group by using the [lun igroup bind](#) command or the [lun igroup unbind](#) command.

The name you assign to an igroup is independent of the name of the host that is used by the host operating system, host files, or Domain Name Service (DNS). If you name an igroup `aix1`, for example, it is not mapped to the actual IP host name (DNS name) of the host.

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the name of the new initiator group. An initiator group name is a case-sensitive name that must contain one to 96 characters. Spaces are not allowed.



It might be useful to provide meaningful names for igroups, ones that describe the hosts that can access the LUNs mapped to them.

{ [-protocol {mixed|fcp|iscsi}] - Protocol

Specifies if the initiator group protocol is *fcp*, *iscsi*, or *mixed*.

| [-f, -fcp <>true>] - FCP

Specifies FCP as the protocol type of the new initiator group.

| [-i, -iscsi <>true>] - iSCSI }

Specifies iSCSI as the protocol type of the new initiator group.

-t, -ostype <Initiator Group OS Type> - OS Type

Specifies the operating system type for the new initiator group. The operating system type indicates the type of host operating system used by all of the initiators in the igroup. All initiators in an igroup must be of the same operating system type. The operating system types of initiators are:

- solaris
- windows
- hpux
- aix
- linux
- netware
- vmware
- openvms
- xen

- `hyper_v`

`[-a, -portset <text>]` - Portset Binding Igroup

Specifies that a portset is bound to the initiator.

`{ -initiator <text>, ... }` - Initiators

Specifies the initiators that are attached to the new initiator group. By default, no initiators are added to the new igroup.

`[-child-igroups <text>, ...]` - Child Igroups }

Specifies the child initiator groups that are attached to the new initiator group. The initiator group inherits the initiators of any child igroups. An initiator group can have either initiators or child initiator groups, but not both. Initiator groups can be nested to match host cluster hierarchies. If the host cluster then changes, initiators only need to be updated in the child igroups and the parent igroups inherit the changes.

`[-delete-on-unmap {true|false}]` - Delete on Last Unmap

Specifies if this initiator group will be deleted automatically when no longer a member of a LUN mapping relationship.

`[-comment <text>]` - Igroup Comment

A description for the igroup to create. If the comment string contains white space, it must be enclosed in double quotes. The limit is 254 characters.

`[-replication-peer <text>]` - Replication Peer

Specifies the local name of a peer Vserver to which the initiator group should be replicated. By default, the initiator group is not replicated.

Examples

```
cluster1::> lun igroup create -vserver vs1 -igroup ig1 -protocol mixed
-ostype linux -initiator iqn.2001-04.com.example:abc123
```

Creates initiator group `ig1` on Vserver `vs1` with a *mixed* protocol type on a Linux operating system with the initiator `iqn.2001-04.com.example:abc123`.

Related Links

- [lun igroup add](#)
- [lun igroup remove](#)
- [lun igroup bind](#)
- [lun igroup unbind](#)

lun igroup delete

Delete an initiator group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command deletes an existing initiator group. By default, you cannot delete an initiator group if LUN maps for that initiator group exist. You need to unmap all the LUNs that are associated with that initiator group before you can delete the initiator group. Use the [lun unmap](#) command to remove LUNS from an initiator group.

You can specify the `force` option to delete an initiator group and remove existing LUN maps defined for that initiator group.

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the initiator group that you want to delete.

[-f, -force <>true>] - Force

Deletes an initiator group and all associated LUN maps.

Examples

```
cluster1::> lun igroup delete -vserver vs1 -igroup ig1
```

Deletes the initiator group `ig1` on Vserver `vs1`.

Related Links

- [lun unmap](#)

lun igroup disable-aix-support

Disables SAN AIX support on the cluster

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

This command disables the SAN AIX support across the cluster (all Vservers and all AIX initiator groups). However, before you can disable SAN AIX support, you must remove all SAN AIX related objects from the cluster. You need to unmap all the LUNs that are associated with the AIX initiator groups. Then you need to delete all of the AIX initiator groups. Use the [lun unmap](#) command to remove LUNS from an initiator group. Use the `igroup delete` command to delete an initiator group.



This command is not intended to be used in normal operation. Use only when you are downgrading to a release that does not support SAN AIX operation.

Examples

```
cluster1::> lun igroup disable-aix-support
```

Disables the SAN AIX support for cluster1.

Related Links

- [lun unmap](#)

lun igroup modify

Modify an existing initiator group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command modifies an attribute for an initiator group. Currently, the only settable attribute is the operating system.

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the initiator group whose attribute you want to modify.

[-t, -ostype <Initiator Group OS Type>] - OS Type

Specifies the operating system that you want to modify. The operating system types of initiators are:

- solaris
- windows
- hpux
- aix
- linux
- netware
- vmware
- openvms
- xen
- hyper_v

[-delete-on-unmap {true|false}] - Delete on Last Unmap

Specifies if this initiator group will be deleted automatically when no longer a member of a LUN mapping relationship.

[-comment <text>] - Igroup Comment

Specifies the comment for the igroup you want to modify. If the comment string contains white space, it must be enclosed in double quotes. The limit is 254 characters. To clear the comment, specify the empty string enclosed in double quotes.

[-replication-peer <text>] - Replication Peer

Specifies the local name of a peer Vserver to which the initiator group should be replicated. To terminate replication of the initiator group, set this to "-".

Examples

```
cluster1::> lun igroup modify -vserver vs1 -igroup ig1 -ostype windows
```

Changes the operating system to *windows* for initiator group *ig1* on Vserver *vs1* .

lun igroup remove

Remove initiators from an initiator group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command removes an initiator from an initiator group. You can only remove an initiator if no existing LUN maps are defined for that initiator group. You must unmap the LUNs from the initiator group with the [lun unmap](#) command before you can remove initiators from the initiator group.

You can use the `force` option to remove an initiator and associated LUN maps.

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the initiator group from which to remove an initiator.

[-initiator <text>,...] - Initiators

Specifies the initiator name to remove. Use the WWPN, IQN or the alias of the initiator.

[-f, -force <>true>] - Force

Forcibly removes an initiator and any associated LUN maps.

[-child-igroups <text>,...] - Child Igroups

Specifies the child initiator groups to remove.

Examples

```
cluster1::> lun igroup remove -vserver vs1 -igroup ig1 -initiator
iqn.1992-08.com.mv.mvinitiator
```

Removes the initiator `iqn.1992-08.com.mv.mvinitiator` from Vserver `vs1` and initiator group `ig1`.

Related Links

- [lun unmap](#)

lun igroup rename

Rename an existing initiator group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command renames an existing initiator group. When you rename an initiator group, this action does not affect access to the LUNs mapped to the initiator group you want to rename.

An initiator group name is a case-sensitive name and must meet the following requirements:

- Must contain one to 96 characters. Spaces are not allowed.
- Can contain the letters A through Z, a through z, numbers 0 through 9, hyphen (-), underscore (_), colon (:), and period (.).
- Must start with a letter or number.

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the initiator group you want to rename.

-new-name <text> - New Igroup Name

Specifies the new name of the initiator group.

Examples

```
cluster1::> lun igroup rename -vserver vs1 -igroup ig1 -new-name ignew1
```

Renames an initiator group from `ig1` to `ignew1` on Vserver `vs1`.

lun igroup show

Display a list of initiator groups

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command displays status information for initiator groups (igroup). By default, the command displays status for all initiator groups.

Parameters

{ [-fields <fieldname>,...]

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <Vserver Name>] - Vserver Name

Specifies the Vserver.

[-igroup <text>] - Igroup Name

Selects the initiator groups that match this parameter value.

[-protocol {mixed|fcp|iscsi}] - Protocol

Selects the initiator groups that match this parameter value (FCP , iSCSI , or mixed).

[-t, -ostype <Initiator Group OS Type>] - OS Type

Selects the initiator groups that match this parameter value. The operating system types are

- solaris
- windows
- hpux
- aix
- linux
- netware
- vmware
- openvms
- xen
- hyper_v

[-a, -portset <text>] - Portset Binding Igroup

Selects the initiator groups that match this parameter value.

[-initiator <text>,...] - Initiators

Selects the initiator groups that match this parameter value.

[-child-igroups <text>,...] - Child Igroups

Selects the initiator groups that match this parameter value.

[-uuid <UUID>] - Igroup UUID

Selects the initiator groups that match this parameter value.

[-delete-on-unmap {true|false}] - Delete on Last Unmap

Selects the initiator groups that match this parameter value. A value of `true` displays all the initiator groups that will be deleted automatically when they are no longer used in a LUN mapping relationship.

[-comment <text>] - Igroup Comment

Selects the igroups that match this parameter value.

[-replication-peer <text>] - Replication Peer

Selects the initiator groups that match this parameter value. The replication-peer is the local name of the peer Vserver, as reported by the `vserver peer show -fields peer-vserver` command. When set, the igroup and any lun maps to LUNs in SMBC relationships are replicated to the peer cluster.

[-replication-error <text>] - Replication Error

Selects the initiator groups that match this parameter value. This field provides information about asynchronous errors encountered while replicating this igroup. Igroups within a peering relationship are replicated in the same stream, so the error reported here might be related to this igroup or a prior replicated igroup that is now blocking the replication of this igroup. Both the error information and the igroup encountering the error are reported. If the error is configuration related, it can be corrected on the referenced igroup. The replication is retried using exponential backoff up to a maximum of one retry every 5 minutes. Every operation on the same stream triggers an immediate retry and restarts the exponential backoff starting with a 1 second delay. If the error is system related, the retries should correct the error when the system enters a healthy state.

[-replication-error-igroup <text>] - Replication Error Igroup

Selects the initiator groups that match this parameter value. The name of the igroup encountering the error reported by the 'replication-error' field.

[-replicated-igroup-unreplicated-luns {true|false}] - Replicated Igroup Contains Unreplicated LUNs

Selects the initiator groups that match this parameter value. This field indicates that the initiator group is replicated but contains one or more unreplicated LUNs.

Examples

```

cluster1::> igroup show -instance
    Vserver Name: vs0
      Igroup Name: ig1
        Protocol: mixed
        OS Type: linux
Portset Binding Igroup: -
    Igroup UUID: 358338ba-cfd6-11df-a9ab-123478563412
    Initiators: iqn.1992-08.com.mv:abc (not logged in)
Vserver Name: vs0
    Igroup Name: ig2
      Protocol: mixed
      OS Type: linux
Portset Binding Igroup: -
    Igroup UUID: 3fb136c7-cfd6-11df-a9ab-123478563412
    Initiators: -
Vserver Name: vs1
    Igroup Name: ig1
      Protocol: mixed
      OS Type: windows
Portset Binding Igroup: p1
    Igroup UUID: 03accf6b-d08c-11df-a9ab-123478563412
    Initiators: -
3 entries were displayed.

```

The example above displays information about all initiator groups.

Related Links

- [vserver peer show](#)

lun igroup unbind

Unbind an existing initiator group from a portset

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command unbinds an initiator group from a portset. When you unbind an initiator group from a portset, all of the initiators in the initiator group have access to all target LUNs on all network interfaces.

Parameters

-vserver <Vserver Name> - Vserver Name

Specifies the Vserver.

-igroup <text> - Igroup Name

Specifies the initiator group that you want to unbind from the portset.

Examples

```
cluster1::> lun igroup unbind -vserver vs1 -igroup ig1
```

Unbinds the initiator group ig1 from the portset on Vserver vs1.

lun igroup initiator add-proximal-vserver

Add a Vserver to the initiator's proximal list

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

This command is used to configure which site in a SnapMirror Active Synchronous (SM-AS) relationship is proximal with the provided FCP or iSCSI initiator.

Parameters

-vserver <Vserver Name> - Vserver (privilege: advanced)

Specifies the name of the Vserver the initiator will access.

-initiator <text> - Initiator (privilege: advanced)

Specifies the FCP WWPN or iSCSI IQN of the initiator.

-proximal-vservers <text>, ... - Proximal Vserver Name (privilege: advanced)

Specifies the name of the Vserver to configure as proximal. The specified Vserver must either be the same as the `-vserver` parameter or a Vserver in a peer relationship with `snapmirror` as an allowed application.

[-replace <>true>] - Replace Existing (privilege: advanced)

If true, replace all existing `-proximal-vservers` for the initiator with the ones specified. By default, the specified `-proximal-vservers` are added to any existing values.

Examples

The following example configures `iqn.2001-04.com.example:uefi-0232314` in Vserver `local-vserver` as proximal to the `peer-vserver` Vserver:

```
cluster1::*> lun igroup initiator add-proximal-vserver -vserver local-  
vserver -initiator iqn.2001-04.com.example:uefi-0232314 -proximal-vservers  
peer-vserver
```

lun igroup initiator modify

Modify an initiator

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command modifies an attribute for an initiator.

Parameters

-vserver <Vserver Name> - Vserver

Specifies the vserver of the initiator you want to modify.

-initiator <text> - Initiator

Specifies the initiator whose attribute you want to modify.

[-comment <text>] - Comment

The initiator's new comment. The comment has a maximum length of 255 characters. To clear the current comment, provide an empty string.

Examples

```
cluster1::> lun igroup initiator modify -vserver vs1 -initiator iqn.1991-05.com.example:name -comment "My application host"
```

Changes the comment to "My application host" for initiator *iqn.1991-05.com.example:name* in Vserver *vs1*.

```
cluster1::> lun igroup initiator modify -vserver vs1 -initiator iqn.1991-05.com.example:name -comment ""
```

Clears the comment for initiator *iqn.1991-05.com.example:name* in Vserver *vs1*.

lun igroup initiator remove-proximal-vserver

Remove a Vserver from the initiator's proximal list

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

This command is used to remove the proximal Vserver configuration from an FCP or iSCSI initiator.

Parameters

-vserver <Vserver Name> - Vserver (privilege: advanced)

Specifies the name of the Vserver the initiator will access.

-initiator <text> - Initiator (privilege: advanced)

Specifies the FCP WWPN or iSCSI IQN of the initiator.

{ -proximal-vservers <text>, ... - Proximal Vserver Name (privilege: advanced)

Specifies the name of the Vserver to remove as proximal. The specified Vserver must either be the same as the `-vserver` parameter or a Vserver in a peer relationship with `snapmirror` as an allowed application.

| -all <true> - Remove All (privilege: advanced) }

If true, remove all existing proximal Vservers from the specified initiator.

Examples

The following example configures `iqn.2001-04.com.example:uefi-0232314` in Vserver `local-vserver` as not proximal to the `peer-vserver` Vserver:

```
cluster1::*> lun igroup initiator remove-proximal-vserver -vserver local-
vserver -initiator iqn.2001-04.com.example:uefi-0232314 -proximal-vservers
peer-vserver
```

lun igroup initiator show

Display initiators

Availability: This command is available to `cluster` and `Vserver` administrators at the `admin` privilege level.

Description

This command displays information for initiators that are members of initiator groups (igroups).

Parameters

{ [-fields <fieldname>, ...]

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <Vserver Name>] - Vserver

Selects the initiators of igroups whose Vserver matches the specified value.

[-initiator <text>] - Initiator

Selects initiators whose name matches the specified value.

[-comment <text>] - Comment

Selects initiators whose comment matches the specified value.

[-igroups <text>,...] - Igroups

Selects initiators belonging to the specified igroups.

[-proximal-vservers <text>,...] - Proximal Vservers (privilege: advanced)

Selects initiators configured as proximal to the specified Vservers.

Examples

```
cluster1::> lun igroup initiator show -instance
  Vserver: vs0
Initiator: init1
  Comment: Initiator Comment
  Igroups: ig1,ig2
Vserver: vs0
Initiator: init2
  Comment: Initiator Comment2
  Igroups: ig3
2 entries were displayed.
```

This example displays detailed information for all initiators in igroups.

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