

EMC Unity - LUN Operations

This chapter contains the following sections:

- EMC Unity Create LUN, on page 2
- EMC Unity Delete LUN, on page 4
- EMC Unity Map LUN, on page 5
- EMC Unity Modify Host LUN ID, on page 7
- EMC Unity Modify LUN, on page 8
- EMC Unity Unmap LUN, on page 9

EMC Unity - Create LUN

Summary

Create a new LUN on an EMC Unity array.

Description

This task creates a new LUN on an EMC Unity storage array. It is also the rollback task for Delete EMC Unity LUN. Host and Snapshot schedule association are optional. LUN can be associated to Host with three possible options, LUN, Snapshot, and LUN & Snapshots. You can provide HLU number for the LUN while creation only when host mapping is selected. If given HLU is already used on any of the selected Host, LUN creation will fail. For Access Type option, LUN and Snapshot, two HLU are required in comma separated value(eg 0,1). HLU should be between 0 and 16381. If hlu is not given, System will allocate next available HLU for the LUN. Input Format:

- EMC Unity Account Name: podName@AccountName. For example: Vblock@Unity Hybrid
- EMC Unity Storage Pool: PodName@accountName@storagePoolName@storagePoolId. For example: Vblock@Unity_Hybrid@Pool1@pool_7
- Name: Valid LUN Name The following special characters are not allowed: " % & ' * + . / \:; < = >? ^ @ |,
- Size: Size of the LUN. For example: 2
- Capacity Units: The unit for the Size of the LUN. For example: 2GB,MB or TB
- Description: Valid Description
- Default Node: Select the Storage Processor
- Thin: Check box- Indicates whether to enable thin provisioning for LUN
- Snapshot Schedule: Select the schedule you to associate to LUN-Snapshot schedule settings for the LUN
- Snapshot Schedule Paused: Check box- Indicates whether the Snapshot Schedule is paused or not
- Access Hosts: podName@AccountName@hostName@hostID. For example: Vblock@Unity Hybrid@TestHost@Host 1
- Access Type: Possible values are LUN, Snapshot, LUN and Snapshot. Required only when Access Hosts input is selected
- HLU: HLU number of LUN. Required only when Access Hosts input is selected

Inputs

Input	Description	Mappable To Type	Mandatory
EMC Unity Account Name	Select Account name	EMCUnityAccountIdentity	Y
Storage Pool	Choose an EMC Unity storage pool for the LUN	EMCUnityStoragePool Identity	Y
Name	Enter a name for the LUN. The following 19 special characters are not allowed: ", $\%$, &, ', *, +, ., /, :, ;, <, =, >, ?, ^, @, and ,"	gen_text_input	
Size	Enter the size of the LUN	gen_text_input	Y
Capacity Units	Choose a system capacity unit	EMCUnitySizeUnit	Y
Description	Enter a description for the LUN	gen_text_input	

Input	Description	Mappable To Type	Mandatory
Default Node	Choose Storage Processor that owns the LUN	EMCUnityStorage ProcessorIdentity	
Thin	Check thin to enable thin provisioning for the LUN	Boolean	
Snapshot Schedule	Choose a snapshot schedule for the LUN. A snapshot schedule can be added or changed but cannot be removed from the LUN.	EMCUnitySnapshot ScheduleIdentity	
Snapshot Schedule Paused	Check to pause the snapshot schedule	Boolean	
Access Hosts	Choose one or more hosts to provide with access to the LUN	EMCUnityHostIdentity	
Access Type	Choose an access type	EMCUnityHostLunAccess Type	
HLU	Enter a unique host LUN ID	gen_text_input	

Output	Description	Туре
OUTPUT_EMC_UNITY_ACCOUNT_IDENTITY	EMC Unity Account Identity.	EMCUnityAccountIdentity
OUTPUT_EMC_UNITY_STORAGE_ POOL_IDENTITY	EMC Unity Storage Pool Identity	EMCUnityStoragePool Identity
OUTPUT_EMC_UNITY_LUN_ IDENTITY	EMC Unity LUN Identity	EMCUnityLunIdentity
OUTPUT_EMC_UNITY_HOST_ IDENTITY	EMC Unity Host Identity.	EMCUnityHostIdentity
OUTPUT_EMC_UNITY_HOST_LUN_ IDENTITY	EMC Unity Host LUN Identity	EMCUnityHostLunIdentity
OUTPUT_LUN_NAA_ID	LUN NAA ID	LunNaaId
OUTPUT_EMC_UNITY_HOST_ PRODUCTION_LUN_ID	EMC Unity Host Production LUN HLU	gen_text_input
OUTPUT_EMC_UNITY_HOST_ SNAPSHOT_LUN_ID	EMC Unity Host Snapshot LUN HLU	gen_text_input

EMC Unity - Delete LUN

Summary

Delete a LUN from an EMC Unity array.

Description

This task deletes a LUN from an EMC Unity storage array. Delete EMC Unity LUN is also the rollback task for Create EMC Unity LUN. This task will fail, in case if selected LUN is mapped to Host or part of Consistency group. If any snapshots associated the LUN, select Force Snap Deletion option to delete Snapshot along with LUN. Input Format:

- EMC Unity LUN: PodName@accountName@storagePoolName@storagePoolId@lunName@lunID. For example: Vblock@Unity_Hybrid@Pool1@pool_7@TestLUN@lun_7
- Force Snap Deletion: Check box-Indicates whether to delete a LUN's snapshots along with LUN

Inputs

Input	Description	Mappable To Type	Mandatory
EMC Unity LUN	Choose an EMC Unity LUN to be deleted	EMCUnityLunIdentity	Y
Force Snap Deletion	Check to force snapshot deletion	Boolean	

No Outputs		

EMC Unity - Map LUN

Summary

Map a LUN or consistency group to EMC Unity Hosts.

Description

This task maps one or more hosts to selected LUN or Consistency group. Map EMC Unity LUN is the rollback task for Unmap EMC Unity LUN. HLU input is optional. If given HLU is already used on any of the selected Host, this task will fail. For Access Type option, LUN and Snapshot, two HLUs are required in comma separated value(for example: 0,1). HLU should be between 0 and 16381. If HLU is not given, System allocates the next available HLU for the LUN. In case Consistency Group is selected, the system allocates the next available HLU for all the LUNs available in the selected Consistency group. HLU can be modified for each LUN-Host mapping using the Modify Host LUN ID task Input Format:

- Storage Resource: Storage Resource can be either Consistency Group or LUN
- EMC Unity Host: podName@AccountName@hostName@hostID. For example: Vblock@Unity_Hybrid@TestHost@Host_1
- Consistency Group: podName@AccountName@consistencyGroupName@ConsistencyGroupID.
 For example: Vblock@Unity_Hybrid@TestCG@res_26
- LUN: PodName@accountName@storagePoolName@storagePoolId@lunName@lunID. For example: Vblock@Unity_Hybrid@Pool1@pool_7@TestLUN@lun_7
- Access Type: Possible values are LUN, Snapshot, LUN and Snapshot.
- HLU: HLU number of LUN. Required only when for LUN Mapping not with Consistency Group option

Inputs

Input	Description	Mappable To Type	Mandatory
Storage Resource	Choose a storage resource type	EMCUnityStorageResource Type	Y
EMC Unity LUN	Choose an EMC Unity LUN to map with the host	EMCUnityLunIdentity	Y
Consistency Group	Choose an EMC Unity consistency group to map with the host	EMCUnityConsistency GroupIdentiry	Y
EMC Unity Host	Choose an EMC Unity host to map with the LUN	EMCUnityHostIdentity	Y
Access Type	Choose an access type	EMCUnityHostLunAccess Type	
HLU	Enter a unique host LUN ID. If access type is LUN and Snapshot, provide two HLUs, comma-separated. The HLU must not be assigned to a LUN on the selected hosts.	gen_text_input	

Output	Description	Туре
OUTPUT_EMC_UNITY_LUN_IDENTITY	EMC Unity LUN Identity	EMCUnityLunIdentity
OUTPUT_EMC_UNITY_ CONSISTENCY_GROUP_IDENTITY	EMC Unity Consistency Group Identity	EMCUnityConsistency GroupIdentiry
OUTPUT_EMC_UNITY_HOST_ IDENTITY	EMC Unity Host Identity.	EMCUnityHostIdentity
OUTPUT_EMC_UNITY_ACCOUNT_IDENTITY	EMC Unity Account Identity.	EMCUnityAccountIdentity
OUTPUT_EMC_UNITY_HOST_LUN_ IDENTITY	EMC Unity Host LUN Identity	EMCUnityHostLunIdentity
OUTPUT_LUN_NAA_ID	LUN NAA ID	LunNaaId
OUTPUT_EMC_UNITY_HOST_ PRODUCTION_LUN_ID	EMC Unity Host Production LUN HLU	gen_text_input
OUTPUT_EMC_UNITY_HOST_ SNAPSHOT_LUN_ID	EMC Unity Host Snapshot LUN HLU	gen_text_input

EMC Unity - Modify Host LUN ID

Summary

Modify an HLU for existing LUN on an EMC Unity array.

Description

This task modifies selected LUN HLU on an EMC Unity storage array. Please make sure that, new HLU is not used in same Host. HLU should be between 0 and 16381. Input Format:

- EMC Unity Account Name: podName@AccountName. For example: Vblock@Unity Hybrid
- Host LUN:

 $Pod Name@account Name@storagePoolName@storagePoolId@lunName@lunID@HostName@HostID@HLU@HostLUNId.\\ For example:$

Vblock@Unity Hybrid@Pool1@pool 7@TestLUN@lun 7@EXSI H1@Host 6@10@Host 6 lun 7 prod

• HLU: Enter unique HLU on the host. For example: 0

Inputs

Input	Description	Mappable To Type	Mandatory
EMC Unity Account Name	Select Account name	EMCUnityAccountIdentity	Y
Host LUN	Choose one or more host LUNs to set the new HLU to. Selected LUNs should belong to same host.	EMCUnityHostLunIdentity	Y
HLU	Enter a unique HLU for the selected host LUN	gen_text_input	

Output	Description	Туре
OUTPUT_EMC_UNITY_ACCOUNT_IDENTITY	EMC Unity Account Identity.	EMCUnityAccountIdentity
OUTPUT_EMC_UNITY_HOST_IDENTITY	EMC Unity Host Identity.	EMCUnityHostIdentity
OUTPUT_EMC_UNITY_HOST_LUN_IDENTITY	EMC Unity Host LUN Identity	EMCUnityHostLunIdentity
OUTPUT_EMC_UNITY_LUN_IDENTITY	EMC Unity LUN Identity	EMCUnityLunIdentity
OUTPUT_EMC_UNITY_HOST_LUN_ID	EMC Unity Host LUN Id	gen_text_input

EMC Unity - Modify LUN

Summary

Modify a LUN on an EMC Unity Array.

Description

This task modifies an existing LUN on an EMC Unity array. Size, description and Snapshot schedule inputs can be modified. You can not reduce the LUN size using this task. Limitation: Snapshot Schedule can be added or changed but cannot be removed from the LUN Input Format:

- EMC Unity Account Name: podName@AccountName. For example: Vblock@Unity Hybrid
- $\hbox{-} LUN: PodName@accountName@storagePoolName@storagePoolId@lunName@lunID. For example: } Vblock@Unity_Hybrid@Pool1@pool_7@TestLUN@lun_7$
- Name: Valid LUN Name The following special characters are not allowed: " % & ' * + . / \:; < => ? ^ @, |,
- Size: Size of the LUN. For example: 2
- Capacity Units: The unit for the Size of the LUN. For example: 2GB,MB or TB
- Description: Valid Description
- Snapshot Schedule: Select the schedule to associate to LUN-Snapshot schedule settings for the LUN

Inputs

Input	Description	Mappable To Type	Mandatory
EMC Unity Account Name	Select Account name	EMCUnityAccount Identity	Y
LUN	Select LUN to modify	EMCUnityLunIdentity	Y
Name	Enter the name for the LUN. The following special characters are not allowed: ", %, &, ', *, +, ., /, :, ;, <, =, >, ?, ^, @, and ,"	gen_text_input	
Size	Enter a size for the LUN	gen_text_input	
Capacity Units	Choose a system capacity unit	EMCUnitySizeUnit	Y
Description	Enter a description of the LUN	gen_text_input	
Snapshot Schedule. Snapshot Schedule can be added or changed but cannot be removed from the LUN	Choose a snapshot schedule for the LUN. A snapshot schedule can be added or changed but cannot be removed from the LUN.	EMCUnitySnapshot ScheduleIdentity	

Output	Description	Туре
OUTPUT_EMC_UNITY_ACCOUNT_IDENTITY	EMC Unity Account Identity.	EMCUnityAccountIdentity
OUTPUT_EMC_UNITY_LUN_ IDENTITY	EMC Unity LUN Identity	EMCUnityLunIdentity

EMC Unity - Unmap LUN

Summary

Unmap EMC Unity hosts from the selected LUN or consistency group.

Description

This task unmaps one or more hosts from the selected LUN or consistency group. Input Format:

- Storage Resource: Storage Resource can be either Consistency Group or LUN
- EMC Unity Host: podName@AccountName@hostName@hostID. For example: Vblock@Unity_Hybrid@TestHost@Host_1
- Consistency Group: podName@AccountName@consistencyGroupName@ConsistencyGroupID. For example: Vblock@Unity_Hybrid@TestCG@res_26
- LUN: PodName@accountName@storagePoolName@storagePoolId@lunName@lunID. For example: Vblock@Unity Hybrid@Pool1@pool 7@TestLUN@lun 7

Inputs

Input	Description	Mappable To Type	Mandatory
Storage Resource	Choose a storage resource type	EMCUnityStorageResource Type	Y
Consistency Group	Select EMC Unity Consistency Group to modify	EMCUnityConsistencyGroup Identiry	Y
EMC Unity LUN	Choose an EMC Unity LUN to map with the host	EMCUnityLunIdentity	Y
EMC Unity Host	Select EMC Unity Host to Unmap	EMCUnityHostIdentity	Y

Output	Description	Туре
OUTPUT_EMC_UNITY_LUN_ IDENTITY	EMC Unity LUN Identity	EMCUnityLunIdentity
OUTPUT_EMC_UNITY_ CONSISTENCY_GROUP_IDENTITY	EMC Unity Consistency Group Identity	EMCUnityConsistencyGroup Identity
OUTPUT_EMC_UNITY_HOST_ IDENTITY	EMC Unity Host Identity.	EMCUnityHostIdentity
OUTPUT_EMC_UNITY_ACCOUNT_IDENTITY	EMC Unity Account Identity.	EMCUnityAccountIdentity

EMC Unity - Unmap LUN