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### Clone backups using PowerShell cmdlets

SnapCenter Software

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### Clone backups using PowerShell cmdlets

The clone workflow includes planning, performing the clone operation, and monitoring the operation.

You must have prepared the PowerShell environment to execute the PowerShell cmdlets.

### **Steps**

1. Initiate a connection session with the SnapCenter Server for a specified user by using the Open-SmConnection cmdlet.

```
Open-SmConnection -SMSbaseurl https://snapctr.demo.netapp.com:8146
```

2. List the backups that can be cloned by using the Get-SmBackup or Get-SmResourceGroup cmdlet.

This example displays information about all available backups:

```
C:\PS>PS C:\> Get-SmBackup

BackupId BackupName BackupTime BackupType

------

1 Payroll Dataset_vise-f6_08... 8/4/2015 Full Backup

11:02:32 AM

Payroll Dataset_vise-f6_08... 8/4/2015

11:23:17 AM
```

This example displays information about a specified resource group, its resources, and associated policies:

```
PS C:\> Get-SmResourceGroup -ListResources -ListPolicies

Description:
CreationTime: 8/4/2015 3:44:05 PM
ModificationTime: 8/4/2015 3:44:05 PM
EnableEmail: False
EmailSMTPServer:
EmailFrom:
EmailTo:
EmailSubject:
EnableSysLog: False
ProtectionGroupType: Backup
EnableAsupOnFailure: False
Policies: {FinancePolicy}
HostResourceMaping: {}
Configuration: SMCoreContracts.SmCloneConfiguration
```

```
LastBackupStatus :
VerificationServer :
EmailBody :
EmailNotificationPreference : Never
VerificationServerInfo: SMCoreContracts.SmVerificationServerInfo
SchedulerSQLInstance :
CustomText :
CustomSnapshotFormat :
SearchResources : False
ByPassCredential : False
IsCustomSnapshot :
MaintenanceStatus : Production
PluginProtectionGroupTypes : {SMSQL}
Name : Payrolldataset
Type : Group
Id : 1
Host:
UserName :
Passphrase:
Deleted : False
Auth: SMCoreContracts.SmAuth
IsClone : False
CloneLevel : 0
ApplySnapvaultUpdate : False
ApplyRetention : False
RetentionCount: 0
RetentionDays : 0
ApplySnapMirrorUpdate : False
SnapVaultLabel :
MirrorVaultUpdateRetryCount : 7
AppPolicies : {}
Description : FinancePolicy
PreScriptPath :
PreScriptArguments :
PostScriptPath:
PostScriptArguments:
ScriptTimeOut : 60000
DateModified: 8/4/2015 3:43:30 PM
DateCreated: 8/4/2015 3:43:30 PM
Schedule : SMCoreContracts.SmSchedule
PolicyType : Backup
PluginPolicyType : SMSQL
Name : FinancePolicy
Type :
Id : 1
Host :
```

```
UserName :
Passphrase :
Deleted : False
Auth : SMCoreContracts.SmAuth
IsClone : False
CloneLevel : 0
clab-a13-13.sddev.lab.netapp.com
DatabaseGUID :
SQLInstance : clab-a13-13
DbStatus : AutoClosed
DbAccess : eUndefined
IsSystemDb : False
IsSimpleRecoveryMode : False
IsSelectable : True
SqlDbFileGroups : {}
SqlDbLogFiles : {}
AppFileStorageGroups : {}
LogDirectory :
AqName :
Version :
VolumeGroupIndex : -1
IsSecondary : False
Name : TEST
Type : SQL Database
Id : clab-a13-13\TEST
Host : clab-a13-13.sddev.mycompany.com
UserName :
Passphrase :
Deleted : False
Auth : SMCoreContracts.SmAuth
IsClone : False
```

3. Initiate a clone operation from an existing backup by using the New-SmClone cmdlet.

This example creates a clone from a specified backup with all logs:

```
PS C:\> New-SmClone
-BackupName payroll_dataset_vise-f3_08-05-2015_15.28.28.9774
-Resources @{"Host"="vise-f3.sddev.mycompany.com";
"Type"="SQL Database";"Names"="vise-f3\SQLExpress\payroll"}
-CloneToInstance vise-f3\sqlexpress -AutoAssignMountPoint
-Suffix _clonefrombackup
-LogRestoreType All -Policy clonefromprimary_ondemand

PS C:> New-SmBackup -ResourceGroupName PayrollDataset -Policy
FinancePolicy
```

This example creates a clone to a specified Microsoft SQL Server instance:

```
PS C:\> New-SmClone
-BackupName "BackupDS1_NY-VM-SC-SQL_12-08-2015_09.00.24.8367"
-Resources @{"host"="ny-vm-sc-sql";"Type"="SQL Database";
"Names"="ny-vm-sc-sql\AdventureWorks2012_data"}
-AppPluginCode SMSQL -CloneToInstance "ny-vm-sc-sql"
-Suffix _CLPOSH -AutoAssignMountPoint
-AssignMountPointUnderPath "C:\SCMounts"
```

4. View the status of the clone job by using the Get-SmCloneReport cmdlet.

This example displays a clone report for the specified job ID:

```
PS C:\> Get-SmCloneReport -JobId 186
SmCloneId : 1
SmJobId : 186
StartDateTime : 8/3/2015 2:43:02 PM
EndDateTime : 8/3/2015 2:44:08 PM
Duration: 00:01:06.6760000
Status : Completed
ProtectionGroupName : Draper
SmProtectionGroupId : 4
PolicyName : OnDemand Clone
SmPolicyId : 4
BackupPolicyName : OnDemand Full Log
SmBackupPolicyId : 1
CloneHostName : SCSPR0054212005.mycompany.com
CloneHostId : 4
CloneName : Draper clone 08-03-2015 14.43.53
SourceResources : {Don, Betty, Bobby, Sally}
ClonedResources: {Don DRAPER, Betty DRAPER, Bobby DRAPER,
                   Sally_DRAPER}
```

The information regarding the parameters that can be used with the cmdlet and their descriptions can be obtained by running *Get-Help command\_name*. Alternatively, you can also refer to the SnapCenter Software Cmdlet Reference Guide.

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