

**SnapCenter Software 4.2** 

# **Command Reference Guide**

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# About SnapCenter commands for SnapCenter Plug-ins Package for Linux

The command reference document is a compilation of all the manual (man) pages for SnapCenter Plug-ins Package for Linux.

The commands can be executed from /opt/NetApp/snapcenter/spl/bin/sccli to perform data protection operations. The logs are stored at /var/opt/snapcenter/logs.

The following are common tasks you might perform using the Linux commands:

- Backing up Oracle databases
- Restoring and recovering Oracle databases
- Cloning Oracle database backups

## **Backing up Oracle databases using Linux commands**

The backup workflow includes planning, identifying the resources for backup, creating backup policies, creating resource groups and attaching policies, creating backups, and monitoring the operations.

#### Before you begin

- You must have added the storage system connections and created the credential using the commands Add-SmStorageConnection and Add-SmCredential.
- You must have established the connection session with the SnapCenter Server using the command Open-SmConnection.

You can have only one SnapCenter account login session and the token is stored in the Linux user home directory.

**Note:** The connection session is valid only for 24 hours. However, you can create a token with the TokenNeverExpires option to create a token that never expires and the session will always be valid.

#### About this task

You must execute the following commands to establish the connection with the SnapCenter Server, discover the Oracle database instances, add policy and resource group, backup and verify the backup.

The information regarding the parameters that can be used with the command and their descriptions can be obtained by running help command\_name. Alternatively, you can also refer to the Command Reference Guide.

#### **Steps**

- Initiate a connection session with the SnapCenter Server for a specified user: Open-SmConnection
- 2. Perform host resources discovery operation: Get-SmResources
- **3.** Configure Oracle database credentials and preferred nodes for backup operation of a Real Application Cluster (RAC) database: Configure-SmOracleDatabase
- 4. Create a backup policy: Add-SmPolicy

**5.** Retrieve the information about the secondary (SnapVault or SnapMirror) storage location : Get-SmSecondaryDetails

This command retrieves the primary to secondary storage mapping details of a specified resource. You can use the mapping details to configure the secondary verification settings while creating a backup resource group.

- 6. Add a resource group to SnapCenter: Add-SmResourceGroup
- 7. Create a backup: New-SmBackup.

You can poll the job using the WaitForCompletion option. If this option is specified, then the command continues to poll the server until the completion of the backup job.

8. Retrieve the logs from SnapCenter: Get-SmLogs

# Restoring and recovering Oracle databases using Linux commands

The restore and recovery workflow includes planning, performing the restore and recovery operations, and monitoring the operations.

#### Before you begin

• You must have established the connection session with the SnapCenter Server.

#### About this task

You must execute the following commands to establish the connection with the SnapCenter Server, list the backups and retrieve its information, and restore the backup.

The information regarding the parameters that can be used with the command and their descriptions can be obtained by running help command\_name. Alternatively, you can also refer to the Command Reference Guide.

#### **Steps**

- Initiate a connection session with the SnapCenter Server for a specified user: Open-SmConnection
- 2. Retrieve the information about the backups that you want to restore: Get-SmBackup
- 3. Retrieve the detailed information about the specified backup: Get-SmBackupDetails

  This command retrieves the detailed information about the backup of a specified resource with a given backup ID. The information includes database name, version, home, start and end SCN, tablespaces, pluggable databases, and its tablespaces.
- 4. Restore data from the backup: Restore-SmBackup

# Cloning Oracle database backups using Linux commands

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

#### Before you begin

You must have established the connection session with the SnapCenter Server.

#### About this task

You must execute the following commands to create the Oracle database clone specification file and initiate the clone operation.

The information regarding the parameters that can be used with the command and their descriptions can be obtained by running help command\_name. Alternatively, you can also refer to the Command Reference Guide.

#### Steps

1. Create an Oracle database clone specification from a specified backup: New-SmOracleCloneSpecification

**Note:** If secondary data protection policy is unified mirror-vault, then specify only – IncludeSecondaryDetails. You do not have to specify –SecondaryStorageType.

This command automatically creates an Oracle database clone specification file for the specified source database and its backup. You must also provide a clone database SID so that the specification file created has the automatically generated values for the clone database which you will be creating.

**Note:** The clone specification file is created at /var/opt/snapcenter/sco/clone\_specs.

2. Initiate a clone operation from a clone resource group or an existing backup: New-Smclone

This command initiates a clone operation. You must also provide an Oracle clone specification file path for the clone operation. You can also specify the recovery options, host where the clone operation to be performed, prescripts, postscripts, and other details.

By default, the archive log destination file for the clone database is automatically populated at \$ORACLE\_HOME/CLONE\_SIDs.

# Add-SmCredential - Creates a new Credential account with specified credentials.

# **Description**

Creates a new Credential account with specified credentials. You can use a Credential account to perform application-specific operations within SnapCenter.

# **Usage**

sccli Add-SmCredential -Name <Credential name> -CredentialType <WINDOWS | LINUX |
ORACLEDATABASE | ORACLEASM | ORACLERMANCATALOG> [-Username <username>] [SetConsoleOutputWidth]

## **Parameters**

### -Name

Specifies the name of the Credential account.

## -CredentialType

Specifies the authentication mode.

Possible Values: [WINDOWS, LINUX, ORACLEDATABASE, ORACLEASM, ORACLERMANCATALOG]

#### -Username

Specifies the user name.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to create a new Credential account with the specified credentials.

```
[root@rhel-linux ~]# sccli Add-SmSmCredential -Name snap-server - CredentialType WINDOWS
Enter the Credential user name: NetApp\SnapAdmin
Enter the Credential password:

INFO: The command 'Add-SmCredential' executed successfully.
```

```
[root@rhel-linux ~]# sccli Add-SmCredential -Name rhel_root_cred -
CredentialType LINUX
Enter the Credential user name: root
Enter the Credential password:
INFO: The command 'Add-SmCredential' executed successfully.
```

```
[root@rhel-linux ~]# sccli Add-SmCredential -Name cdb_credential -
CredentialType ORACLEDATABASE
Enter the Credential user name: sys
Enter the Credential password:
INFO: The command 'Add-SmCredential' executed successfully.
```

```
[root@rhel-linux ~] # sccli Add-SmCredential -Name asm_cred2 - CredentialType ORACLEASM
Enter the Credential user name: asmuser
Enter the Credential password:

INFO: The command 'Add-SmCredential' executed successfully.
```

# Add-SmPolicy - Creates a new backup policy.

# **Description**

Creates a new backup policy. A policy is a set of rules governing backup jobs. A Policy includes backup type, schedules, retention, replication settings, verification schedules, and pre-script and post-script arguments.

# **Usage**

sccli Add-SmPolicy -PolicyName <policy name> -PolicyType <policy type> [-PluginPolicyType <plug-in policy type>] [-Description <description>] [-UpdateSnapMirrorAfterbackup] [-MirrorVaultUpdateRetryCount <retry count>] [-UpdateSnapVaultAfterbackup] [-SnapVaultLabel <label>] [-ScheduleType <HOURLY|DAILY|WEEKLY|MONTHLY>] [-VerificationScheduleType] <HOURLY|DAILY|WEEKLY|MONTHLY>] [-VerificationScriptoptions ScriptTimeout=timeout|PreScriptPath=verification-script-path|PostScriptPath=verification-scriptpath|PreScriptArguments=verification-script-arguments|PostScriptArguments=verification-scriptarguments] [-RetentionSettings <BackupScope=DATA|LOG,SCHEDULETYPE=HOURLY | DAILY | WEEKLY | MONTHLY, RetentionCount = number-of-snapshot-count-to-keep or RetentionDays=number-of-days-to-keep-snapshot>] [-PreScriptPath <script path>] [-PreScriptArguments <arg1 arg2 ... argN>] [-PostScriptPath <script path>] [-PostScriptArguments <arg1 arg2 ... argN>] [-ScriptTimeout <timeout>] -OracleBackupType <ONLINE | OFFLINEMOUNT | OFFLINESHUTDOWN> -OracleBackupScope <FULL | DATA | LOG> [-OracleSkipPDBSaveState] [-OracleDeleteArchiveLogBackup] [-OracleArchiveLogBackupRetentionType <DayBase | CountBase>] [-OracleDeleteArchiveLogBackupDays <number of days>] [-OracleDeleteArchiveLogBackupCounts <backup count>] [-OraclePruneArchiveLog] [-OraclePruneArchiveLogDestinationType <AllDestinations</pre> | OnlyBackupDestinations>] [-OraclePruneArchiveLogType <AllLogs | OlderLogs>] [-OraclePruneArchiveLogOlderThanDays < number of days>] [-CatalogBackupWithOracleRMAN] [-SetConsoleOutputWidth]

## **Parameters**

## -PolicyName

Specifies the name of the policy.

# -PolicyType

Specifies the policy type. Possible Values: [BACKUP]

# -PluginPolicyType

Specifies the plug-in type. You need to specify a plug-in type because policies are settings that are

specific to a type of plug-in. For example, if you want to create a policy for Oracle resources or Oracle resource groups, the plug-in type is SCO.

Possible Values: [SCO, SCU]

Default: SCO

## -Description

Provides a description of the policy.

## -UpdateSnapMirrorAfterbackup

Indicates that you want to update the SnapMirror relationship after the backup operation. SnapMirror is disabled by default.

## -MirrorVaultUpdateRetryCount

Specifies the retry count for SnapMirror or SnapVault update.

Default: 3

## -UpdateSnapVaultAfterbackup

Indicates that you want to update the SnapVault relationship after the backup operation. SnapVault is disabled by default.

## -SnapVaultLabel

Provides a SnapVault label.

# -ScheduleType

Specifies the scheduler type.

Possible Values: [HOURLY, DAILY, WEEKLY, MONTHLY]

# -VerificationScheduleType

Specifies the verification scheduler type.

Possible Values: [HOURLY, DAILY, WEEKLY, MONTHLY]

Only backup schedule type can be part of verification schedule type. If the schedule type is not part of backup schedule type then it cannot be added to verification schedule type.

# -VerificationScriptOptions

Specifies verification script options, which are run after verification of backup, arguments are optional you can specify only required once. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'. For example -VerificationScriptoptions ScriptTimeout=10,PreScriptPath=/var/opt/snapcenter/spl/scripts/name-of-the-script,PreScriptArguments=arg1

## -RetentionSettings

Specifies the retention period of the backup. Retention count specifies the number of backups that you want to keep. If the number of backups exceed the specified number, the backups are deleted with the oldest backup deleted first. Retention days specifies the number of days for which you want to keep the Snapshot copies before deleting them. If the retention period is not specified, the default retention period of RetentionCount=7 will be applied to schedule type of the backup scope. You can specify RetentionCount or RetentionDays but not both. If SCHEDULETYPE is not specified, then retention period is applied to on-demand backup policy. For example -RetentionSettings BackupScope=DATA,SCHEDULETYPE=HOURLY,RetentionCount=2, -RetentionSettings BackupScope=DATA,SCHEDULETYPE=DAILY,RetentionDays=10, -RetentionSettings BackupScope=LOG,RetentionDays=10.

## -PreScriptPath

Specifies the prescript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

## -PreScriptArguments

Specifies the prescript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

## -PostScriptPath

Specifies the postscript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

## -PostScriptArguments

Specifies the postscript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

## -ScriptTimeout

Specifies the script timeout value in seconds. If not specified, the default value is 60 seconds.

Default: 60

# -OracleBackupType

Specifies the type of Oracle Database backup.

Possible Values: [ONLINE, OFFLINEMOUNT, OFFLINESHUTDOWN]

# -OracleBackupScope

Specifies the scope of Oracle Database backup.

Possible Values: [FULL, DATA, LOG]

## -OracleSkipPDBSaveState

Indicates whether to skip saving the state of pluggable databases.

## -OracleDeleteArchiveLogBackup

Indicates whether to delete the older archive log backups based on ArchiveLogBackupRetentionType.

## -OracleArchiveLogBackupRetentionType

Specifies the retention type for archive log backup.

Possible Values: [DayBase, CountBase]

## -OracleDeleteArchiveLogBackupDays

Specifies the number of days for which the archive log backups must be retained before deleting.

## -OracleDeleteArchiveLogBackupCounts

Specifies the maximum number of archive log backups to be retained.

## -OraclePruneArchiveLog

Indicates whether to prune archive logs after log backup.

## -OraclePruneArchiveLogDestinationType

Specifies the type of destinations to prune archive logs.

Possible Values: [AllDestinations, OnlyBackupDestinations]

**Default: AllDestinations** 

## -OraclePruneArchiveLogType

Specifies the type of archive log pruning.

Possible Values: [AllLogs, OlderLogs]

## -OraclePruneArchiveLogOlderThanDays

Specifies the number of days for which the archive log backups must be retained before pruned.

## -CatalogBackupWithOracleRMAN

Indicates whether the backup should be cataloged using Oracle Recovery Manager (RMAN).

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

1. The following example displays how to add an Oracle database backup policy with schedule in SnapCenter.

```
[root@rhel-linux ~] # sccli Add-SmPolicy -
PolicyName 'offline_data_daily'

-PolicyType BACKUP

-Description 'Offline Shutdown Data policy
for an Oracle Database with schedule and retention'

-PluginPolicyType SCO -OracleBackupType

OFFLINESHUTDOWN

-OracleBackupScope DATA
-ScheduleType DAILY
-RetentionSettings

'BackupScope=DATA, RetentionCount=2, SCHEDULETYPE=DAILY'

INFO: The command 'Add-SmPolicy' executed successfully.
```

2. The following example displays how to add an Oracle database backup policy with log pruning

#### enabled.

```
[root@rhel-linux ~]# sccli Add-SmPolicy -
PolicyName 'oracle_logpruning'

-PolicyType BACKUP

-Description 'Online Data policy for an
Oracle Database with archive log pruning set'

-PluginPolicyType SCO -OracleBackupType
ONLINE -OracleBackupScope FULL

-OraclePruneArchiveLog -
OraclePruneArchiveLog -
OraclePruneArchiveLogOlderThanDays 0.2
```

```
INFO: The command 'Add-SmPolicy' executed successfully.
```

3. The following example displays how to add an Oracle database backup policy pre and post scripts.

```
[root@rhel-linux ~] # sccli Add-SmPolicy -
PolicyName 'backup to secondary storage'
                        -PolicyType BACKUP
                        -Description 'Online Data policy for an
Oracle Database with schedule and retention'
                        -PluginPolicyType SCO -OracleBackupType
OFFLINEMOUNT
                        -OracleBackupScope DATA
                        -ScheduleType DAILY
                        -UpdateSnapMirrorAfterbackup -
UpdateSnapVaultAfterbackup
                        -PreScriptPath
'/var/opt/snapcenter/spl/scripts/prescripts/pre1.sh'
                        -PreScriptArguments 'true secondary start'
                        -PostScriptPath
'/var/opt/snapcenter/spl/scripts/postscripts/post1.sh'
                        -PostScriptArguments 'true secondary stop'
                        INFO: The command 'Add-SmPolicy' executed
successfully.
```

4. The following example displays how to add policy with verification schedule type and retention

```
settings.
```

```
[root@rhel-linux ~] # sccli Add-SmPolicy -
PolicyName 'policy_with_verification_schedule'
-PolicyType BACKUP
-Description 'Policy with verification
schedule type and retention settings'
-PluginPolicyType SCO -OracleBackupType
```

```
ONLINE -OracleBackupScope FULL

-ScheduleType WEEKLY -

VerificationScheduleType WEEKLY -

-VerificationScriptoptions

scripttimeout=10,preScriptPath=/var/opt/snapcenter/spl/scripts/p1.
sh,postScriptPath=/var/opt/snapcenter/spl/scripts/p2.sh

-RetentionSettings

'BackupScope=DATA, RetentionCount=2, SCHEDULETYPE=WEEKLY'

-RetentionSettings

'BackupScope=LOG, RetentionDays=2, SCHEDULETYPE=WEEKLY'

INFO: The command 'Add-SmPolicy' executed successfully.
```

# Add-SmProtectResource - Protect the resource by associating policies and schedules.

# **Description**

Protects the resource by associating policies and schedules.

# **Usage**

sccli Add-SmProtectResource [-Description <description>] [-PluginCode <SCO | SCU>] -Policies <policy1, policy2, ..., policyN> -Resource host=localhost.domain,type=Oracle Database,names=[db1] -Schedules PolicyName=name-of-the-policy,ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY],StartTime=YYYY-MM-DD hh:mm:ss,EndTime=YYYY-MM-DD hh:mm:ss,Repeat\_Every\_Hour=hh::mm,DaysInterval=number-of-days,DaysOfTheWeek= [SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear=

[January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth= [1,2,3 ... 30,31] -VerificationSchedules BackupPolicyName=name-of-the-backup-policy,BackupScheduleType=scheduletype-of-the-backup-policy,DeferredBackupCount=number-of-backup-count-to-be-deferred,VerifyOnSecondary=[true | false],VerificationType=[VERIFY\_AFTER\_BACKUP | VERIFY\_SCHEDULED],ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY],StartTime=YYYY-MM-DD hh:mm:ss,EndTime=YYYY-MM-DD hh:mm:ss,Repeat Every Hour=hh::mm,DaysInterval=number-of-

days,DaysOfTheWeek=
[SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear=
[January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth=
[1,2,3 ... 30,31] [-ExcludeArchiveLogDestinationsFromBackup 'location1,location2,..., locationN'] [BackupArchiveLogsAfterRecentMissingOne] [-CustomSnapshot] [-CustomSnapShotFormat
'\$ResourceGroup\$Policy\$HostName\$ScheduleType\$CustomText'] [-CustomText <custom text for snapshot
name>] [-SecondaryLocator 'Primary=<SVM>:<volume>,Secondary=<SVM>:<volume>'] [-EnableEmail] [-EmailTo
<email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS |
ON\_ERROR | ON\_ERROR\_OR\_WARNING | NEVER>] [-EnableEmailAttachment] [-SetConsoleOutputWidth]

## **Parameters**

## -Description

Provides an optional description of the resource to be protected.

#### -PluginCode

Specifies the plug-in code for the resource to be protected.

Possible Values: [SCO, SCU]

Default: SCO

#### -Policies

Specifies one or more polices you want to attach to the resource. Multiple policies can be specified in a comma separated values.

#### -Resource

Specifies the resource you want to protect. You must provide the resource information in a key value format, and it must contain the resource name, type, and the host on which it is located. Valid type values are: Oracle Database. For example, -Resource 'host=host1,type=Oracle Database,names=[db1]'

#### -Schedules

Specifies the schedules you want to add to the resource. You must provide the schedule information in a key value format, and it must contain the policy name, schedule type, required schedule arguments depending on the schedule type and the start time. Schedule type can be HOURLY|DAILY|WEEKLY|MONTHLY. It is necessary to specify the required arguments depending on the schedule type. HOURLY: Repeat\_Every\_Hour -Specifies that you want backups to be created with an interval of a designated hour::minute. The default value is 1. DAILY: DaysInterval - Specifies that you want backups to be created with an interval of a designated number of days. The default value is 1. WEEKLY: DaysOfTheWeek – Specifies that you want backups to be created on designated days of the week. The values are specified in a comma separated list. MONTHLY: MonthsOfTheYear - Specifies that you want backups to be created on designated months. The values are specified in a comma separated list. DaysOfTheMonth - Specifies that you want backups to be created on the designated days of the month. The values are specified in a comma separated list. If EndTime is not specified, schedules will run indefinitely.

#### -VerificationSchedules

Specifies the verification schedules you want to add to the resource. Verification must be enabled for the schedule types specified in the policy to verify the backup. You must provide the verification schedules information in a key value format, and it must contain the backup policy name, backup schedule type, verification type. Depending on the verification type you need to specify other required schedule arguments. If verification type is VERIFY\_AFTER\_BACKUP then it is not required to specify the schedule details. However, if it is VERIFY\_SCHEDULED, then it is necessary specify schedule type and its related schedule arguments. These arguments are the same as you had specified for the -Schedules option. The verification schedule type cannot be lower than the backup schedule type. For example, if backup schedule type is WEEKLY then verification schedule type cannot be DAILY, it should be greater than or equal to WEEKLY.

#### -ExcludeArchiveLogDestinationsFromBackup

Specifies the archive log destinations to be excluded from backup. Archive log files present in the specified destinations will be excluded during log backup. Multiple entries can be specified using comma separated list. For example: -ExcludeArchiveLogDestinationsFromBackup '/arch/logs/on/local/disk1, /arch/logs/on/local/disk2'.

## -BackupArchiveLogsAfterRecentMissingOne

Specifies that you want to backup archive log files, which are created after the most recent missing archive log files and ignore the files created prior to it. If this option is not specified then all archive log files except the missing archive log files are be backed up.

## -CustomSnapshot

Specifies the custom naming format that you want to use for the Snapshot copy name.

#### -CustomSnapShotFormat

Specifies the custom naming format to be used. Specify the format using keywords like \$ResourceGroup, \$Policy, \$ScheduleType, \$HostName and \$CustomText.

#### -CustomText

Specifies custom text for the Snapshot copy name.

## -SecondaryLocator

Specifies the secondary (SnapVault or SnapMirror) storage location details (destination volume) for each unique primary storage (source volume) of resource on which you want to perform secondary verification. Specify this option more than once to provide secondary storage location details for multiple unique primary storage. Primary (source volume) and secondary (destination volume) storage location details should be specified as name-value pairs in a comma separated list. For example: -SecondaryLocator

'Primary=oracle\_vs1:db1\_data\_vol,Secondary=oracle\_vs1\_mirror:db1\_data\_vol\_mirror' -SecondaryLocator 'Primary=oracle\_vs2:db1\_log\_vol,Secondary=oracle\_vs2\_mirror:db1\_data\_log\_mirror'.

#### -EnableEmail

Indicates whether to enable email notification.

#### -EmailTo

Specifies to whom the email has to be sent.

#### -EmailFrom

Specifies from whom the email has to be sent.

### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON ERROR, ON ERROR OR WARNING, NEVER]

#### -EnableEmailAttachment

Specifies that you are adding an email attachment.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example shows how to protect a resource.

```
[root@rhel-linux ~]# sccli Add-SmProtectResource
-Description 'STDDB resource with scheduled

custom snapshot'
-Resource 'host=rhel-linux.netapp.com,type=Oracle
Database,names=[STDDB]'
```

```
-Policies 'oracle_logpruning_oldlog_2hrs,
backup_secondary_with_verificattion,

offline_data_daily'

-CustomSnapshot
-CustomSnapShotFormat
'$ResourceGroup$Policy$HostName$ScheduleType$CustomText'
-CustomText 'stddb_backup'

INFO: The command 'Add-SmResourceGroup' executed successfully.
```

```
[root@rhel-linux ~]# sccli Add-SmProtectResource
                         -Description
                         'Attaching policy to Resource' -PluginCode 'SCO'
                         -Resource
                         'host=rhel-linux.netapp.com, type=Oracle
Database, names = [ORACLE DB1] '
                         -Policies
'policy with schedule, offline data monthly'
                         -Schedules
PolicyName=policy with schedule, ScheduleType=MONTHLY, StartTime='2016-08-18
                         13:19:59',
                         EndTime= 12016-09-03
                         13:27:59', DaysOfTheMonth=[1,2,3], MonthsOfTheYear=
[February]
                         -Schedules
PolicyName=offline data monthly, ScheduleType=MONTHLY, StartTime='2016-08-18
                         13:19:59',
                         EndTime='2016-09-03
                         13:27:59', DaysOfTheMonth=[1,4,23], MonthsOfTheYear=
[January]
                         -VerificationSchedules
BackupPolicyName='policy with schedule', BackupScheduleType='MONTHLY', Defer
redBackupCount='1',
VerificationType='VERIFY SCHEDULED', VerifyOnSecondary='true', ScheduleType=
'MONTHLY', DaysOfTheMonth = [2,8,19],
```

```
MonthsOfTheYear=[March], StartTime='2016-08-03
13:19:59', EndTime='2016-09-03 13:27:59'

INFO: The command 'Add-SmProtectResource' executed successfully.
```

# Add-SmResourceGroup - Adds a resource group to SnapCenter.

# **Description**

Creates a new resource group. You can specify policies, schedules, verification schedules, and resources to be associated with the resource group.

# **Usage**

sccli Add-SmResourceGroup -ResourceGroupName <resource group name> [-Description <description>] [-Tags <tag1,tag2,...,tagn>] [-PluginCode <SCO | SCU>] [-Policies <policy1, policy2, ..., policyN>] -Resources host=localhost.domain,type=Oracle Database,names=[db1,db2,db3] -Schedules PolicyName=name-of-the-policy,ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY],StartTime=YYYY-MM-DD hh:mm:ss,EndTime=YYYY-MM-DD hh:mm:ss,Repeat\_Every\_Hour=hh::mm,DaysInterval=number-of-days,DaysOfTheWeek=

[SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear= [January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth= [1,2,3 ... 30,31] -VerificationSchedules BackupPolicyName=name-of-the-backup-policy,BackupScheduleType=scheduletype-of-the-backup-policy,DeferredBackupCount=number-of-backup-count-

to-be-deferred, VerifyOnSecondary=[true | false], VerificationType=[VERIFY\_AFTER\_BACKUP | VERIFY\_SCHEDULED], ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY], StartTime=YYYY-MM-DD hh:mm:ss, EndTime=YYYY-MM-DD hh:mm:ss, Repeat\_Every\_Hour=hh::mm, DaysInterval=number-of-days, DaysOfTheWeek=

[SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear= [January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth= [1,2,3 ... 30,31] [-ExcludeArchiveLogDestinationsFromBackup 'location1,location2, ..., locationN'] [-BackupArchiveLogsAfterRecentMissingOne] [-CustomSnapshot] [-CustomSnapShotFormat '\$ResourceGroup\$Policy\$HostName\$ScheduleType\$CustomText'] [-CustomText <custom text for snapshot name>] [-SecondaryLocator 'Primary=<SVM>:<volume>,Secondary=<SVM>:<volume>'] [-EnableEmail] [-EmailTo <email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS | ON\_ERROR | ON\_ERROR\_OR\_WARNING | NEVER>] [-EnableEmailAttachment] [-SetConsoleOutputWidth]

# **Parameters**

#### -ResourceGroupName

Specifies the new resource group name.

### -Description

Provides an optional description of the resource group.

## -Tags

Provides optional tags for the resource group.

### -PluginCode

Specifies the plug-in code for which the resource group is created.

Possible Values: [SCO, SCU]

Default: SCO

#### -Policies

Specifies one or more polices you want to attach to the resource group. Multiple policies can be specified in a comma separated values.

#### -Resources

Specifies the resources you want to add to the resource group. You must provide the resource information in a key value format, and it must contain the resource name, type, and the host on which it is located. Valid type values are: Oracle Database. You can include comma-separated values for names. To specify resources from multiple host you can use -Resources option multiple times. For example, -Resources 'host=host1,type=Oracle Database,names=[db1,db2,db3]' -Resources 'host=host2,type=Oracle Database,names=[db3,db4]'

#### -Schedules

Specifies the schedules you want to add to the resource group. You must provide the schedule information in a key value format, and it must contain the policy name, schedule type, required schedule arguments depending on the schedule type and the start time. Schedule type can be HOURLY | DAILY | WEEKLY | MONTHLY. It is necessary to specify the required arguments depending on the schedule type. HOURLY: Repeat\_Every\_Hour - Specifies that you want backups to be created with an interval of a designated hour::minute. The default value is 1. DAILY: DaysInterval - Specifies that you want backups to be created with an interval of a designated number of days. The default value is 1. WEEKLY: DaysOfTheWeek - Specifies that you want backups to be created on designated days of the week. The values are specified in a comma separated list. MONTHLY: MonthsOfTheYear - Specifies that you want backups to be created on designated months. The values are specified in a comma separated list. DaysOfTheMonth - Specifies that you want backups to be created on the designated days of the month. The values are specified in a comma separated list. If EndTime is not specified, schedules will run indefinitely.

#### -VerificationSchedules

Specifies the verification schedules you want to add to the resource group. Verification must be enabled for the schedule types specified in the policy to verify the backup. You must provide the verification schedules information in a key value format, and it must contain the backup policy name, backup schedule type, verification type. Depending on the verification type you need to specify other required schedule arguments. If verification type is VERIFY\_AFTER\_BACKUP then it is not required to specify the schedule details. However, if it is VERIFY\_SCHEDULED, then it is necessary specify schedule type and its related schedule arguments. These arguments are the same as you had specified for the -Schedules option. The verification schedule type cannot be lower than the backup schedule type. For example, if backup schedule type is WEEKLY then verification schedule type cannot be DAILY, it should be greater than or equal to WEEKLY.

### -ExcludeArchiveLogDestinationsFromBackup

Specifies the archive log destinations to be excluded from backup. Archive log files present in the specified destinations will be excluded during log backup. Multiple entries can be specified using comma separated list. For example: -ExcludeArchiveLogDestinationsFromBackup '/arch/logs/on/local/disk1, /arch/logs/on/local/disk2'.

### -BackupArchiveLogsAfterRecentMissingOne

Specifies that you want to backup archive log files, which are created after the most recent missing archive log files and ignore the files created prior to it. If this option is not specified, then all archive log files except the missing archive log files are be backed up.

### -CustomSnapshot

Specifies the custom naming format that you want to use for the Snapshot copy name.

## -CustomSnapShotFormat

Specifies the custom naming format to be used for the Snapshot copy name. Specify the format using keywords like \$ResourceGroup, \$Policy, \$HostName, \$ScheduleType and \$CustomText.

#### -CustomText

Specifies the custom naming format.

## -SecondaryLocator

Specifies the secondary (SnapVault or SnapMirror) storage location details (destination volume) for each unique primary storage (source volume) of all resources in resource group on which you want to perform secondary verification. Specify this option more than once to provide secondary storage location details for multiple unique primary storage. Primary (source volume) and secondary (destination volume) storage location details should be specified as name-value pairs in a comma separated list. For example: -SecondaryLocator 'Primary=oracle\_vs1:db1\_data\_vol,Secondary=oracle\_vs1\_mirror:db1\_data\_vol\_mirror' -SecondaryLocator 'Primary=oracle vs2:db1 log vol,Secondary=oracle vs2 mirror:db1 data log mirror'.

#### -EnableEmail

Indicates whether to enable email notification.

#### -EmailTo

Specifies to whom the email has to be sent.

#### -EmailFrom

Specifies from whom the email has to be sent.

#### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON\_ERROR, ON\_ERROR\_OR\_WARNING, NEVER]

#### -EnableEmailAttachment

Specifies that you are adding an email attachment.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to add a resource group to the SnapCenter.

```
[root@rhel-linux ~] # sccli Add-
SmResourceGroup -ResourceGroupName resource group 1
                 -Tags 'tag3,tag4'
                 -Description 'Creating Resource Group' -PluginCode 'SCO'
                                  -Resources 'host=rhel-
linux.netapp.com,type=Oracle Database,names=[ORACLE DB1,ORACLE DB2]'
                                  -Policies
'policy with schedule, offline data daily, hourly'
                                  -Schedules
PolicyName=policy with schedule, ScheduleType=WEEKLY, StartTime='2016-08-18
13:19:59',
                                  EndTime='2016-09-03
13:27:59', DaysOfTheWeek=[wednesday, sunday]
                                  -Schedules
PolicyName=offline data daily, ScheduleType=DAILY, StartTime='2016-08-18 13:19:59', EndTime="2016-09-03 13:27:59',
                                  DaysInterval=10
                 -Schedules
PolicyName=hourly,ScheduleType=hourly,StartTime='2016-08-18
13:19:59', EndTime='2016-09-03 13:27:59',
                 repeat every hour=22:01
                                  -VerificationSchedules
BackupPolicyName='policy with schedule',BackupScheduleType='WEEKLY',Deferr
edBackupCount='1',
VerificationType='VERIFY SCHEDULED', VerifyOnSecondary='true', ScheduleType=
'MONTHLY', DaysOfTheMonth = [2,8,19],
                                  MonthsOfTheYear=[March], StartTime='2016-
08-03 13:19:59', EndTime='2016-09-03 13:27:59'
                                  -VerificationSchedules
BackupPolicyName='offline data daily', BackupScheduleType='DAILY', DeferredB
ackupCount='1',
VerificationType='VERIFY AFTER BACKUP', VerifyOnSecondary='false'
                                  -ExcludeArchiveLogDestinationsFromBackup
'/mnt/local logs 1,/mnt/local logs 2'
                                  INFO: The command 'Add-SmResourceGroup'
executed successfully.
```

# Add-SmStorageConnection - Adds your Storage Virtual Machine (SVM) connection.

# **Description**

Creates a new Storage Virtual Machine (SVM) connection. You must create your SVM connection in advance before performing any provisioning or data protection jobs.

# **Usage**

## **Parameters**

### -SVM

Specifies name or IP address of the Storage Virtual Machine.

## -Protocol

Specifies the communication protocol you want to use to connect to the SVM. Possible Values: [HTTP, HTTPS]

#### -Port

Specifies the port for the SVM connection.

## -PreferredlpAddress

Specifies the preferred IP address for the SVM management or data LIF IP address.

#### -Timeout

Specifies the SVM connection timeout in seconds.

Default: 60 seconds

## -Username

Specifies the user name for Storage Virtual Machine.

# -DisableAsupOnFailure

Disables Auto Support in case of any failure.

## -DisableSysLog

Disables system log feature.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## -IsSecondary

If the SVM is the secondary storage system in a backup relationship, then specify this option.

# **Examples**

The following example displays how to add a Storage Virtual Machine (SVM) connection.

```
[root@rhel-linux ~] # sccli Add-SmStorageConnection -SVM 'my-vsim2.eng.btc.netapp.in' -Protocol HTTPS -enablesyslog - enableasuponfailure
Enter the SVM user name: vsadmin
Enter the SVM password:
INFO: Using '443' as default port.

INFO: The command 'Add-SmStorageConnection' executed successfully.
```

# Add-SvmPreferredDataPath - Adds the SVM preferred data path.

# **Description**

Adds the SVM preferred data path entry to the storage preference configuration file. This is required to override the NFS data path for a given SVM for Mount/Clone operations. You can set a single preferred data path for a SVM.By default the data path used for mounting the source NFS file system shall be used for mount/clone operations from primary. In the case of secondary, SnapCenter shall auto determine the data path of secondary SVM.

# **Usage**

sccli Add-SvmPreferredDataPath -SVM <SVM Name> -DataPath <IP address or FQDN> [-SetConsoleOutputWidth]

# **Parameters**

#### -SVM

Specifies the name of the Storage Virtual Machine for which you want to add the preferred data path.

#### -DataPath

Specifies the preferred data path for the SVM. The data path can be IP address or FQDN.

# -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to add a SVM preferred data path.

```
[root@rhel-linux ~] # sccli Add-SvmPreferredDataPath -SVM 'tonic' -DataPath 10.228.9.123
INFO: Preferred data path entry for SVM 'tonic' added successfully.
INFO: The command 'Add-SvmPreferredDataPath' executed successfully.
```

# Cancel-SmJob - Cancels a queued job.

# **Description**

Cancels a job. The job is canceled only if the job is queued.

# **Usage**

sccli Cancel-SmJob [-JobId <job Id>] [-SetConsoleOutputWidth]

## **Parameters**

## -Jobld

Specifies the id of the job to be canceled.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to initiate a cancel job that cancels a queued job.

```
Cancel-smJob -JobId 184

Are you sure you want to cancel the specified job from SnapCenter?

Enter either [Y] Yes or [N] No (default is 'N'): y

INFO: The command 'Cancel-SmJob' executed successfully.
```

# Catalog-SmBackupWithOracleRMAN - Catalogs the Oracle Database backup in SnapCenter with Oracle Recovery Manager (RMAN).

# **Description**

Catalogs the Oracle Database backup in SnapCenter with Oracle Recovery Manager (RMAN).

# **Usage**

sccli Catalog-SmBackupWithOracleRMAN [-BackupId <backupId> | -BackupName <backupName> ] [-WaitForCompletion] [-SetConsoleOutputWidth]

## **Parameters**

## -Backupld

Specifies the id of backup that needs to be cataloged.

## -BackupName

Specifies the name of backup that needs to be cataloged.

## -WaitForCompletion

Indicates whether to wait till the catalog backup job is completed.

# -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to catalog a backup.

```
[root@rhel-linux ~] # sccli Catalog-SmBackupWithOracleRMAN - BackupId 15
INFO: Job 'Cataloging Backup(s) stddb-ds rhel-linux_11-23-
2015_21.14.26.7065_0' QUEUED with jobId '258'
INFO: The command 'Catalog-SmBackupWithOracleRMAN' executed successfully.
```

```
[root@rhel-linux ~]# sccli Catalog-SmBackupWithOracleRMAN - BackupName 'stddb-ds rhel-linux 11-23-2015 21.14.26.7065 1' INFO: Job 'Cataloging Backup(s) stddb-ds rhel-linux 11-23-2015_21.14.26.7065_1' QUEUED with jobId '267'

INFO: The command 'Catalog-SmBackupWithOracleRMAN' executed
```

INFO: The command 'Catalog-SmBackupWithOracleRMAN' executed successfully.

# Close-SmConnection - Closes connection session with the SnapCenter.

# **Description**

Closes connection session with the SnapCenter.

# **Usage**

sccli Close-SmConnection [-SetConsoleOutputWidth]

## **Parameters**

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to close a connection session with the SnapCenter.

```
[root@rhel-linux ~] # sccli Close-SmConnection INFO: A connection session with the SnapCenter was closed.
```

# See Also

**Open-SmConnection** 

# Configure-SmOracleDatabase - Configures Oracle Database in SnapCenter.

# **Description**

Configures Oracle Database in SnapCenter. This includes configuring database authentication with port and ASM authentication with port. For Oracle RAC database, preferred nodes for backup operation can be configured.

# **Usage**

sccli Configure-SmOracleDatabase -AppObjectId <appObject Id> -DatabaseCredentialName <Credential name | None> -DatabasePort <port number> -ASMCredentialName <Credential name | None> -ASMPort <port number> -OracleRmanCatalogCredentialName <Credential name | None> -OracleRmanCatalogTnsName <TNS name> [-OracleRACPreferredNodes <RACnode1, RACnode2, ..., RACnodeN>] [-SetConsoleOutputWidth]

## **Parameters**

## -AppObjectId

Specifies the application object identifier of an Oracle Database that needs to be configured. You need to specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

#### -DatabaseCredentialName

Specifies the name of the Oracle Database Credential account which contains the credentials for the database. Provide 'None' if you want to use OS authentication.

### -DatabasePort

Specifies the port where the Oracle Database listener is running.

Default: 1521

#### ASMCredentialName

Specifies the name of the Oracle ASM Credential account which contains the credentials for the ASM instance. Provide 'None' if you want to use OS authentication.

## -ASMPort

Specifies the port where the Oracle ASM listener is running.

Default: 1521

## -OracleRmanCatalogCredentialName

Specifies the name of the Oracle Recovery Manager (RMAN) catalog database Credential account which contains the credentials for the catalog database. Provide 'None' if you want to use only controlfile for cataloging.

## -OracleRmanCatalogTnsName

Specifies the TNS name of Oracle Recovery Manager (RMAN) catalog database.

#### -OracleRACPreferredNodes

Specifies one or more Oracle RAC database preferred nodes you want to configure for backup operation. Oracle RAC Nodes must be specified in a comma separated values in the order of their preference.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to configure an Oracle Database.

```
[root@rhel-linux ~]# sccli Configure-SmOracleDatabase -
AppObjectId 'rhel-linux.gdl.englab.netapp.com\STDDB'
-DatabaseCredentialName 'stddb_cred' -DatabasePort 1521
INFO: The command 'Configure-SmOracleDatabase' executed successfully.
```

```
[root@rhel-linux ~]# sccli Configure-SmOracleDatabase -
AppObjectId 'rhel-linux.gdl.englab.netapp.com\STDDB'
-DatabaseCredentialName None

INFO: The command 'Configure-SmOracleDatabase' executed successfully.
```

```
[root@rac-node1 ~]# sccli Configure-SmOracleDatabase -AppObjectId
'oracle-rac-cluster\RACDB'
  -OracleRACPreferredNodes 'rac-node1.netapp.com, rac-node3.netapp.com, rac-node2.netapp.com'

INFO: The command 'Configure-SmOracleDatabase' executed successfully.
```

```
'smo234-ipv6.gdl.englab.netapp.com\newdb'
-OracleRmanCatalogCredentialName 'rman' -OracleRmanCatalogTnsName
'catcdb'

INFO: The command 'Configure-SmOracleDatabase' executed successfully.
```

# Copy-SmPolicy - Copy policy on SnapCenter.

# **Description**

Copy an existing policy on SnapCenter. You can specify the existing policy and the new policy name.

# **Usage**

sccli Copy-SmPolicy -PolicyName <policy> -NewPolicyName <policy> [-SetConsoleOutputWidth]

## **Parameters**

## -PolicyName

Specifies the policy you want to copy. You can provide an individual policy name.

## -NewPolicyName

Specifies the name of the new policy.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays the copy of the policy on SnapCenter.

```
[root@rhel-linux ~] # sccli Copy-SmPolicy -PolicyName
'existing_policy'
  -NewPolicyName 'New_policy_name'
INFO: The command 'Copy-SmPolicy' executed successfully.
```

# Get-PreferredHostIPsInStorageExportPolicy - Gets the preferred IP addresses of the host for storage export policy

# **Description**

Gets the preferred IP addresses of the host for storage export policy

# **Usage**

sccli Get-PreferredHostIPsInStorageExportPolicy [-SetConsoleOutputWidth]

## **Parameters**

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get preferred IP addresses of the host for storage export policy.

# Get-SmBackup - Gets information about one or more backups.

# **Description**

Gets information about one or more backups.

# **Usage**

sccli Get-SmBackup [-AppObjectId <appObject Id>] [-AppObjectName <appObject name>] [-BackupId <backup Id>] [-BackupName <backup Name>] [-BackupType <backup Type>] [-JobId <job Id>] [-ListMountInfo] [-PluginCode <plug-in code>] [-Secondary] [-SetConsoleOutputWidth]

## **Parameters**

## -AppObjectId

Specifies the application object identifier about which you want to get information. Specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

## -AppObjectName

Specifies the name of the application object. For SnapCenter Plug-in for Oracle Database application object name is database name.

## -Backupld

Specifies the ID of the backup about which you want to get information.

## -BackupName

Specifies the name of the backup about which you want to retrieve information.

# -BackupType

Specifies a filter based on the type of backup. For SnapCenter Plug-in for Oracle Database backup can be of type 'Oracle Database Data Backup' or 'Oracle Database Log Backup'.

#### -Jobld

Specifies a filter based on the job ID.

#### -ListMountInfo

Indicates that you want mount information of the backup.

#### -PluginCode

Specifies the filter based on the plug-in code. For SnapCenter Plug-in for Oracle Database plug-in code is SCO.

Possible Values: [SCO, SCU]

Default: SCO.

#### -Secondary

Indicates whether to retrieve secondary backups.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get information about all backups.

```
[root@rhel-linux ~]# sccli Get-SmBackup
|Backup Id| Backup Name
                                        | Start
    | End Time | Backup Type
| Verification Status | Oracle RMAN Cataloging Status |
| Not Applicable | Not Cataloged
11-24 05:45:41 | 2015-11-24 05:48:31 | Oracle Database Log Backup
Not Applicable | Not Cataloged | 9 | stddb-ds rhel-linux 11-24-2015 00.45.57.9226 0 | 2015-
11-24 05:45:41 | 2015-11-24 05:48:31 | Oracle Database Data Backup
         | Not Cataloged
      | stddb-ds rhel-linux 11-23-2015 21.14.26.7065 1 | 2015-
11-24 02:14:10 | 2015-11-24 02:T6:46 | Oracle Database Log Backup
Not Applicable | Not Cataloged | 5 | stddb-ds_rhel-linux_11-23-2015_21.14.26.7065_0 | 2015-
11-24 02:14:10 | 2015-11-24 02:T6:46 | Oracle Database Data Backup
| Unverified
              | Not Cataloged
11-24 02:03:41 | 2015-11-24 02:06:52 | Oracle Database Data Backup
| Unverified | Not Cataloged
_____
```

```
INFO: The command 'Get-SmBackup' executed successfully.
```

The following example displays how to get mount related information of a backup.

# Get-SmBackupDetails - Gets detailed information about the specified backup.

# **Description**

Gets detailed information about the specified backup.

## **Usage**

sccli Get-SmBackupDetails -AppObjectId <appObject Id> -BackupId <backup Id> [-Secondary] [-PluginCode <plug-in code>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -AppObjectId

Specifies the application object identifier about which you want to get information. Specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

#### -Backupld

Specifies the ID of the backup about which you want to get detailed information.

#### -Secondary

Indicates whether the specified backup is a secondary backup.

#### -PluginCode

Specifies the plug-in code for fetching backup details.

Possible Values: [SCO, SCU]

Default: SCO.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get the detailed information about the specified backup.

#### ORACLE DATABASE BACKUP DETAILS Backup name: CDB rhel-linux 01-14-2016 20.07.57.9759 0 Backup type: Oracle Database Data Backup Database name/SID: CDB Database unique name: DB12C Database type: Oracle Single Instance (Multitenant) Database id: 1343801015 Database home: /u01/app/oracle/product/12.1.0.2/db 1 Database version: 12.1.0.2.0 Archive log mode: true Check point SCN: 8501827 End backup SCN: 8502061 TABLESPACES 1. TEMP 2. SYSAUX 3. SYSTEM 4. UNDOTBS1 5. USERS PLUGGABLE DATABASES 1. PDB Name: HRDB PDB tablespaces: 1. SYSAUX 2. SYSTEM 3. USERS 4. TEMP 2. PDB Name: SALESDB PDB tablespaces: 1. SYSAUX 2. SYSTEM 3. USERS 4. CLIENTS 5. REPORT 6. CREDIT 7. TEMP 3. PDB Name: FINANCE PDB tablespaces: 1. SYSAUX 2. SYSTEM 3. USERS 4. TEMP 4. PDB Name: PDB\$SEED PDB tablespaces: 1. SYSAUX 2. SYSTEM 3. TEMP

INFO: The command 'Get-SmBackupDetails' executed successfully.

# Get-SmBackupReport - Gets reports about the backup operations based on the options you specify.

# **Description**

Gets reports about the backup operations based on the options you specify. You can specify whether you want to get the details about a specific backup or a summary of all backups performed using a SnapCenter instance.

# **Usage**

sccli Get-SmBackupReport [-PluginCode <plug-in code>] [-BackupId <backup Id>] [-BackupName <backup Name>] [-ResourceGroup <ResourceGroup Name>] [-FromDateTime 'yyyy-MM-dd HH:mm:ss'] [-JobId <job Id>] [-Policy <policy name>] [-Resource < resource name>] [-Status < status>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -PluginCode

Specifies the filter based on the plug-in code. For SnapCenter Plug-in for Oracle Database plug-in code is SCO.

Possible Values: [SCO, SCU]

Default: SCO.

#### -Backupld

Specifies the backupld for which backup report need to be fetched.

#### -BackupName

Specifies that you want to get a detailed backup report for the given backup.

#### -ResourceGroup

Specifies the resource group for which you want backup reports.

#### -FromDateTime

Specifies that you want to get backup operations reports for backups run from a specified day and time. You must specify the date and time in the 'yyyy-MM-dd HH:mm:ss' format. For example: '2015-01-26 20:30:00'.

#### -ToDateTime

# Get-SmClone - Gets information about existing clones.

# **Description**

Gets information about existing clones. You can also search existing clones based on clone name, clone ID, application object, and backup ID.

# **Usage**

sccli Get-SmClone [-AppObjectName <appObject name>] [-BackupId <backup Id>] [-BackupName <backup Name>] [-CloneId <clone Id>] [-CloneName <clone Name>] [-PluginCode <SCO | SCU>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -AppObjectName

Retrieves information based on database name.

#### -Backupld

Retrieves information based on a specified backup ID. Get the backup ID by running Get-SmBackup without parameters.

#### -BackupName

Retrieves information based on backup name.

#### -Cloneld

Provides a clone ID for the clone about which you want information. You can get the clone ID by running Get-SmClone without any input, and then use the clone ID to retrieve more detailed information about the specified clone.

#### -CloneName

Specifies that you want information about a single clone.

#### -PluginCode

Retrieves information based on the plug-in code.

Possible Values: [SCO, SCU]

Default: SCO

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get information about existing clones.

# Get-SmConfigSettings - Displays the configuration settings.

# **Description**

Displays the configuration settings for Plugin and Server.

# **Usage**

sccli Get-SmConfigSettings [-PluginCode <SCO | SCU>] [-HostName <hostname>] -Key <keyName | all> -ConfigSettingsType <Plugin | Server> [-ShowDescription] [-SetConsoleOutputWidth]

#### **Parameters**

#### -PluginCode

Specifies the plugin code for which the configuration settings have to be retrieved.

#### -HostName

Specifies the host for which the configuration settings have to be retrieved.

#### -Key

Specifies the key for which the configuration value has to be retrieved. If all keys have to be retrieved, specify "all".

#### -ConfigSettingsType

Specifies the type of configuration settings which needs to be retrieved. If config settings type is of plugin, then plugin code must be specified.

#### -ShowDescription

Indicates that you want the description for requested keys to be displayed.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get configuration settings for SCO plugin.

INFO: Using localhost 'scspr0128265002.gdl.englab.netapp.com' as default host for retrieving configuration settings.

	Parameter	===   	Value	
	ORACLE_SQL_QUERY_TIMEOUT ORACLE_PLUGIN_SQL_QUERY_TIMEOUT ORACLE_PLUGIN_RMAN_CATALOG_TIMEOUT ORACLE_PLUGIN_RMAN_TIMEOUT PARALLEL_BACKUPS_COUNT ENABLE_CROSSCHECK CANCEL_JOB_GRACEFUL_TIMEOUT PORT		10800 10800 14400 72 10 false 900 8145	

INFO: The command 'Get-SmConfigSettings' executed successfully.

The following example displays how to get configuration settings for SCU plugin.

==:	Parameter		Value	==   
	COMMAND EXECUTION TIMEOUT NAS RESTORE SLEEP CANCEL JOB GRACEFUL TIMEOUT ENABLE LUNPATH MONITORING LUNPATH MONITORING INTERVAL PORT		3600 30 900 true 24 8145	

INFO: The command 'Get-SmConfigSettings' executed successfully.

# Get-SmCredential - Gets information about all the Credential accounts created in SnapCenter.

# **Description**

Gets all the Credential accounts created in SnapCenter. If you specify a Credential name, you receive information about the specified Run As account. Without a specified name, you receive information about all existing accounts.

## **Usage**

sccli Get-SmCredential [-Name < Credential name>] -CredentialType <WINDOWS | LINUX | ORACLEDATABASE | ORACLEASM | ORACLERMANCATALOG> [-SetConsoleOutputWidth]

#### **Parameters**

#### -Name

Specifies and individual Credential account for which you want to get information. If you omit this parameter, you retrieve information about all Credential accounts associated with SnapCenter.

#### -CredentialType

Specifies the authentication mode.

Possible Values: [WINDOWS, LINUX, ORACLEDATABASE, ORACLEASM, ORACLERMANCATALOG]

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get the Credential accounts.

```
INFO: The command 'Get-SmCredential' executed successfully.
```

The following example displays get the specific Credential account by name.

```
[root@rhel-linux ~] # sccli Get-SmCredential -Name 'snap-server'

| Id | Credential Name | Credential Type | User Name |
| 4 | snap-server | WINDOWS | NetApp\SnapAdmin |
| Info: The command 'Get-SmCredential' executed successfully.
```

#### Get-SmHost - Gets information about one or more hosts.

# **Description**

Gets information about one or more hosts. The information includes host status and plug-ins on hosts.

# **Usage**

sccli Get-SmHost [-HostNames <host1, host2, .., hostN>] [-ListPluginInfo] [-SetConsoleOutputWidth]

#### **Parameters**

#### -HostNames

Specifies the names of the hosts about which you want information. You can provide the name of one host, or a comma-separated list of host names.

#### -ListPluginInfo

Indicates that you want to retrieve information about the plug-ins installed on the hosts.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get information about one or more hosts.

```
[root@rhel-linux ~]# sccli Get-SmHost -HostNames 'rhel-
linux.netapp.com' -ListPluginInfo
```

# Get-SmJobSummaryReport - Initiates a job summary report.

## **Description**

Initiates a job summary report. A job summary report provides information on every job initiated by SnapCenter on a specified day, along with a breakdown of the job status. The job summary report provides similar data to the information displayed in the Monitor page of the SnapCenter GUI, however here the job information is limited to one day.

# **Usage**

sccli Get-SmJobSummaryReport [-Date 'yyyy-MM-dd HH:mm:ss'] [-JobId <job Id>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -Date

Specifies the day for which you want to initiate the job summary report. You must specify the date and time in the 'yyyy-MM-dd HH:mm:ss' format. For example: '2015-01-26 20:30:00'. If not specified, the value defaults to current date.

#### -Jobld

Specifies the job id whose report need to be retrieved.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to initiate a job summary report that provides information on every job initiated by SnapCenter

# **Get-SmLogs - Fetches logs from SnapCenter.**

# **Description**

Fetches SnapCenter log files. Log files are returned in a .zip file format. You can fetch all SnapCenter logs, or logs for a individual plug-in or SnapCenter server. You can also get logs for an specified job.

# **Usage**

sccli Get-SmLogs [-Path <log path>] [-ServerLogs | -AllLogs | -JobId <job id> | -PluginCode <SCO | SCU> -HostName <hostname> ] [-SetConsoleOutputWidth]

#### **Parameters**

#### -Path

Specifies the absolute path including filename and extension to which you want the log .zip file to be written.

#### -ServerLogs

Indicates that you want to fetch logs for the SnapCenter server only.

#### -AllLogs

Indicates that you want to fetch all SnapCenter logs, which include SnapCenter server, managed host, and plug-in logs.

#### -Jobld

Specifies the job ID for which you want to fetch logs.

#### -PluginCode

Specifies that you want to fetch logs pertaining to a specified plug-in instance. For example, if you want to fetch the SnapCenter Plug-in for Oracle Database logs, the plug-in code is SCO Possible Values: [SCO, SCU]

#### -HostName

Specifies the host for the plug-in instance for which you want to fetch logs.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to fetch logs from SnapCenter.

```
[root@rhel-linux ~] # sccli Get-SmLogs -ServerLogs INFO: You have chosen to fetch server logs from SnapCenter. INFO: The requested logs got fetched successfully at location '/tmp/snapcenter server logs 2016-01-08 02.05.32.244.zip'. INFO: The command 'Get-SmLogs' executed successfully.
```

```
[root@rhel-linux ~] # sccli Get-SmLogs -AllLogs
INFO: You have chosen to fetch all logs from SnapCenter.
INFO: The requested logs got fetched successfully at location
'/tmp/snapcenter all logs 2016-01-08 02.09.31.731.zip'.
INFO: The command 'Get-SmLogs' executed successfully.
```

```
[root@rhel-linux ~] # sccli Get-SmLogs -JobId 50
INFO: You have chosen to fetch logs for job id '50' from
SnapCenter.
INFO: The requested logs got fetched successfully at location
'/tmp/snapcenter job 50 logs 2016-01-08 02.07.25.069.zip'.
INFO: The command 'Get-SmLogs' executed successfully.
```

```
[root@rhel-linux ~]# sccli Get-SmLogs -PluginCode SCO INFO: Using localhost 'rhel-linux.netapp.com' as default host for getting 'SCO' plug-in logs from SnapCenter. INFO: The requested logs got fetched successfully at location '/tmp/snapcenter SCO_plugin_scomaddev_logs_2016-01-08 02.07.48.121.zīp'.

INFO: The command 'Get-SmLogs' executed successfully.
```

# Get-SmOracleDatabaseConfiguration - Retrieves Oracle Database configuration details.

# **Description**

Retrieves Oracle Database configuration details. The configuration details includes database authentication with port and ASM authentication with port. For Oracle RAC database, it also includes preferred nodes configured for backup operation

# **Usage**

sccli Get-SmOracleDatabaseConfiguration -AppObjectId <appObject Id> [-SetConsoleOutputWidth]

#### **Parameters**

#### -AppObjectId

Specifies the application object identifier whose configuration details needs to be retrieved. Specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to retrieve oracle database configuration.

```
[root@rhel-linux ~] # sccli Get-SmOracleDatabaseConfiguration -
AppObjectId 'rhel-linux.netapp.com\STDDB'

Credentials for Oracle Database : STDDB
Database Credential: stddb_cred
Database Port: 1521
ASM Instance Credential: NONE
ASM Port: 1521
RMAN catalog Credential: cred_catdb
RMAN catalog TNS name: CATDB
INFO: The command 'Get-SmOracleDatabaseConfiguration' executed successfully.
```

# Get-SmPolicy - Retrieves details about one or more policy.

# **Description**

Retrieves details about one or more policies.

# **Usage**

sccli Get-SmPolicy [-ResourceGroupName <resource group name>] [-PolicyName <policy name>] [-PuginCode <SCO | SCU>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -ResourceGroupName

Specifies a resource group. This parameter retrieves details of each policy associated with the resource group.

#### -PolicyName

Specifies the name of the policy for which you want details.

#### -PluginCode

Specifies the SnapCenter Plug-in for which you want to retrieve policies. For example, if you want to get policies information about SnapCenter Plug-in for Oracle Database, your plug-in code is SCO.

Possible Values: [SCO, SCU]

Default: SCO

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to retrieve details about one ore more policies.

<pre>[root@rhel-linux ~]# sccli Get-SmPol: 'offline_data_daily'</pre>	icy -PolicyName	
		=
Name Schedule Type   Description	Type	
		= =
<pre>  offline_data_daily   Offline Data policy for an Oracle retention  </pre>	BACKUP   DAILY Database with schedule and	
		=
INFO: The command 'Get-SmPolicy' exec	cuted successfully.	

# Get-SmResourceGroup - Gets information about one or more resource groups.

# **Description**

Gets information about one or more resource groups. You can also retrieve information about host resource map for the resource group and the polices attached to the resource group.

# **Usage**

sccli Get-SmResourceGroup [-ResourceGroupName <resource group name>] [-ListPolicies] [-ListResources] [-SetConsoleOutputWidth]

#### **Parameters**

#### -ResourceGroupName

Specifies the name of the resource group for which you want information.

#### -ListPolicies

Lists the policies that are associated with the resource group.

#### -ListResources

Lists the resources that are part of the resource group.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get information about one or more resource groups.

# Get-SmResources - Discovers plug-in resources.

## **Description**

Discovers plug-in resources. For SnapCenter Plug-in for Oracle Database, resources include Oracle standalone and RAC databases. You can query one host at a time and return information about plug-in resources on that host. You can use this cli command to get the detailed information about resources location on the specified host.

# **Usage**

sccli Get-SmResources -HostName <host name> [-PluginCode <SCO | SCU>] [-UseKnownResources] [-SetConsoleOutputWidth]

#### **Parameters**

#### -HostName

Specifies the host name. You can query one host at a time.

#### -PluginCode

Specifies the SnapCenter Plug-in for which you want to discover resources. For example, if you want to get information about SnapCenter Plug-in for Oracle Database, your plug-in code is SCO.

Possible Values: [SCO, SCU]

Default: SCO

#### -UseKnownResources

Indicates that you want to return the cached resources. You can use this parameter when you have already queried resources from the SnapCenter GUI. In this case, you receive information only about the already discovered resources. You can use this parameter for resource verification.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to discover plug-in resources

```
[root@rhel-linux ~]# sccli Get-SmResources
INFO: Using localhost 'rhel-linux.netapp.com' as default host for
discovering resources.
```

# Get-SmSecondaryDetails - Gets information about secondary storage location details.

# **Description**

Gets information about secondary (SnapVault or SnapMirror) storage location details.

# **Usage**

sccli Get-SmSecondaryDetails -AppObjectId <appObject Id> [-BackupId <backup Id>] [-PluginCode <SCO | SCU>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -AppObjectId

Specifies the application object identifier about which you want to get information. Specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

#### -Backupld

Specifies the ID of the backup for which you want to get information.

#### -PluginCode

Specifies the type of plug-in. You need to specify a plug-in type because fetching the secondary storage location details is specific to one type of plug-in. For example, if you want to fetch the secondary storage location details of a resource or its backup contained in a SnapCenter Plug-in for Oracle Database, the plug-in type is SCO.

Possible Values: [SCO, SCU]

Default: SCO

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get information about the secondary details

# Get-SmSMTPServer - Retrieves information about the SMTP server currently configured to send data protection job reports.

# **Description**

Retrieves information about the SMTP server currently configured to send data protection job reports. The command displays the name of the SMTP server, the name of the recipient to whom email messages are sent, and the name of the sender. There are no parameters for this command.

# **Usage**

sccli Get-SmSMTPServer [-SetConsoleOutputWidth]

#### **Parameters**

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to get information about one or more hosts.

# Get-SmStorageConnection - Retrieves all Storage Virtual Machine (SVM) connections information.

# **Description**

Retrieves information about available SVM connections. You can get information about a specified SVM, or information on all SVM's.

# **Usage**

sccli Get-SmStorageConnection [-SVM <SVM name or IP>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -SVM

Specifies the name or IP address of the Storage Virtual Machine whose information needs to be retrieved.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to retrieve the information about the available SVM connections.

60 false			fa	alse	
======	===== ===== =====	  			
INFO:	The	command	'Get-SmStorageConnection	m' executed	successfully.

# Get-SvmPreferredDataPath - Gets the SVM preferred data path.

# **Description**

Gets the SVM preferred data path.

# **Usage**

sccli Get-SvmPreferredDataPath -SVM <SVM Name> [-SetConsoleOutputWidth]

#### **Parameters**

#### -SVM

Specifies the name of the Storage Virtual Machine for which you want to retrieve the preferred data path.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to get the SVM preferred data path.

# Invoke-SmResourceSplit - Initiates clone split operation.

# **Description**

Initiates clone split operation. To initiate clone split you need to specify either a clone name or application object identifier.

# **Usage**

sccli Invoke-SmResourceSplit -CloneName <clone name> -AppObjectId <appObject Id> [-Estimate] [-Start] [-Stop] [-Status] [-DoNotEstimate] [-EnableEmail] [-EmailTo <email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS | ON\_ERROR | ON\_ERROR\_OR\_WARNING | NEVER>] [-SetConsoleOutputWidth]

#### **Parameters**

#### -CloneName

Specifies the clone id whose clone you want to split.

#### -AppObjectId

Specifies the application object identifier whose clone you want to split. You need to specify the application object identifier format as 'host\cloned\_sid' for Oracle standalone database or 'clustername\cloned\_sid' for Oracle RAC database.

#### -Estimate

Displays the required space estimate details for clone split operation.

#### -Start

Starts the clone split operation.

#### -Stop

Stops the clone split operation.

#### -Status

Displays the details of the clone split operation.

#### -DoNotEstimate

Indicates not to estimate the required space while performing the clone split operation.

#### -EnableEmail

Indicates whether to enable email notification. Email support is only to '-Start' option for others it will be neglected.

#### -EmailTo

Specifies to whom email need to be sent.

#### -EmailFrom

Specifies from whom email has to be sent.

#### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON\_ERROR, ON\_ERROR\_OR\_WARNING, NEVER]

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

1. The following example shows how to get clone split required space estimate details for a clone by providing appObject Id.

======================================
volume_nas108261723484820713   aggr_database   1475 GB   4321 MB   False   databaseVserver
INFO: The command 'Invoke-SmResourceSplit' executed successfully.

following example shows how to get clone split required space estimate details for a clone by providing clone name.

following example shows how to start clone split operation for a clone by providing appObject Id.

following example shows how to start clone split operation for a clone by providing clone name with email notification enabled.

```
INFO: The command 'Invoke-SmResourceSplit' executed successfully.
```

following example shows how to stop clone split operation by providing clone name.

executed successfully.

6.The

following example shows how to get the status of the clone split operation by providing clone name.

INFO: The command 'Invoke-SmResourceSplit'

# New-SmBackup - Initiates a new Snapshot copy job.

# **Description**

Initiates a new Snapshot copy job. To initiate backup you need to specify either a resource group name or a protected resource.

# **Usage**

sccli New-SmBackup -ResourceGroupName <ResourceGroup Name> -Resource host=localhost.domain,type=Oracle Database,names=[db1] -Policy <Policy Name > [-EnableVerification] [-VerifyOnSecondary] [-WaitForCompletion] [-SetConsoleOutputWidth]

# **Parameters**

#### -ResourceGroupName

Names the resource group name you want to back up.

#### -Resource

Specifies the resource you want to take backup. You must provide the resource information in a key value format, and it must contain the resource name, type, and the host on which it is located. Valid type values are: Oracle Database. For example, -Resource 'host=host1,type=Oracle Database,names=[db1]'

#### -Policy

Specifies the policy you want to use for the backup operation.

#### -EnableVerification

Indicates that you want to verify the backup.

## -VerifyOnSecondary

Indicates that you want to verify the backup on secondary storage.

## -WaitForCompletion

Indicates to wait till the backup job is completed.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

1. The following example displays how a new backup operation is initiated by specifying the resource group name.

```
[root@rhel-linux ~] # sccli New-SmBackup -
policy p9 -EnableVerification -ResourceGroupname rg_9

INFO: Job 'Backup of resource group 'rg_9'
with policy 'p9' QUEUED with jobId '147'

INFO: The command 'New-SmBackup' executed successfully.
```

2. The following example displays how a new backup operation is initiated by specifying resource details.

# New-SmClone - Initiates a new clone job.

# **Description**

Initiates a new clone operation. You can initiate a clone job from an existing backup.

# **Usage**

sccli New-SmClone -CloneToHost <host name> -OracleCloneSpecificationFile <clone spec file path> [-BackupName <backup name>] [-CloneDatabaseSID <database SID>] [-OracleSkipRecovery] [-OracleUntilCancel] [-OracleUntilScn <SCN number>] [-OracleUntilTime 'yyyy-MM-dd HH:mm:ss'] [-AlternateArchiveLogPaths 'location1, location2, ..., locationN'] [-PreScriptPath <script path>] [-PreScriptArguments <arg1 arg2 ... argN>] [-PostScriptPath <script path>] [-PostScriptArguments <arg1 arg2 ... argN>] [-ScriptTimeout <timeout>] [-AppPluginCode <plug-in code>] [-EnableEmail] [-EmailTo <email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS | ON\_ERROR | ON\_ERROR\_OR\_WARNING | NEVER>] [-EnableEmailAttachment] [-WaitForCompletion] [-SkipNIDCreation] [-SetConsoleOutputWidth]

# **Parameters**

#### -CloneToHost

Specifies the hostname where you want to perform clone operation.

## -OracleCloneSpecificationFile

Specifies the Oracle Database clone specification file path.

## -BackupName

Specifies the data backup name of the Oracle Database which will be cloned.

#### -CloneDatabaseSID

Specifies the SID for clone database.

## -OracleSkipRecovery

Indicates that you want to skip the recovery of the cloned Oracle Database.

#### -OracleUntilCancel

Indicates that you want to recover of the cloned Oracle Database until Cancel.

#### -OracleUntilScn

Specifies the SCN of logs till which you want to recover the cloned Oracle Database.

#### -OracleUntilTime

Specifies the date and time till which you want to recover the cloned Oracle Database. You must specify the date and time in the 'yyyy-MM-dd HH:mm:ss' format. For example: '2015-01-26 20:30:00'.

#### -AlternateArchiveLogPaths

Specifies the alternate paths for archive logs to be used for recovery. Multiple alternate archive log paths can be specified in a comma separated list.

#### -PreScriptPath

Specifies the prescript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

#### -PreScriptArguments

Specifies the prescript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

#### -PostScriptPath

Specifies the postscript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

## -PostScriptArguments

Specifies the postscript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

## -ScriptTimeout

Specifies the script timeout in seconds. If not specified, the value defaults to 60 seconds.

Default: 60

## -AppPluginCode

Specifies the type of plug-in. You need to specify a plug-in type because clone operation is specific to one type of plug-in. For example, if you want to create a clone of resource contained in a SnapCenter Plug-in for Oracle, the plug-in code is SCO.

Possible Values: [SCO, SCU]

Default: SCO

#### -EnableEmail

Indicates whether to enable email notification.

#### -EmailTo

Specifies to whom email need to be sent.

#### -EmailFrom

Specifies from whom email has to be sent.

#### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON\_ERROR, ON\_ERROR\_OR\_WARNING, NEVER]

#### -EnableEmailAttachment

Specifies that you are adding an email attachment.

#### -WaitForCompletion

Indicates to wait until the clone job is completed.

### -SkipNIDCreation

Indicates that you want to skip new DBID creation for the cloned Oracle Database.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how a new clone operation is initiated

# New-SmMountBackup - Mounts an existing backup.

# **Description**

Initiates a mount operation.

# **Usage**

sccli New-SmMountBackup -BackupName <backup name> -HostName <host name> -AppObjectId <appObject Id> [-SecondaryLocator 'Primary=<SVM>:<volume>,Secondary=<SVM>:<volume>'] [-AppPluginCode <SCO | SCU>] [-AsmCredentialName <ASM Credential name>] [-AsmPort <ASM port>] [-WaitForCompletion] [-SetConsoleOutputWidth]

## **Parameters**

#### -BackupName

Specifies the name of the backup which you want to mount.

#### -HostName

Specifies the host where you want to perform backup mount operation.

## -AppObjectId

Specifies the application object identifier whose backup you want to mount. You need to specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

## -SecondaryLocator

Specifies the secondary (SnapVault or SnapMirror) storage location details (destination volume) for each unique primary storage (source volume). Specify this option more than once to provide secondary storage location details for multiple unique primary storage. Primary (source volume) and secondary (destination volume) storage location details should be specified as name-value pairs in a comma separated list. For example: -SecondaryLocator

'Primary=oracle\_vs1:db1\_data\_vol,Secondary=oracle\_vs1\_mirror:db1\_data\_vol\_mirror' - SecondaryLocator

'Primary=oracle\_vs2:db1\_log\_vol,Secondary=oracle\_vs2\_mirror:db1\_data\_log\_mirror'.

### -AppPluginCode

Specifies the type of plug-in. You need to specify a plug-in type because mount operation is specific to one type of plug-in. For example, if you want to mount a backup of resource contained in a SnapCenter Plug-in for Oracle Database, the plug-in type is SCO.

Possible Values: [SCO, SCU]

Default: SCO

#### -AsmCredentialName

Specifies the ASM Credential. You need to specify ASM credential for the ASM configured database to connect to the ASM instance.

#### -AsmPort

Specifies port number for ASM instance. You need to specify port number for the ASM configured database to connect to the ASM instance.

Default: 1521

#### -WaitForCompletion

Indicates whether to wait till the mount backup job is completed.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how a new mount operation is initiated.

```
[root@rhel-linux ~]# sccli New-SmMountBackup -AppObjectId 'rhellinux.netapp.com\STDDB'
-BackupName stddb_ds_rhel-linux_11-30-2015_22.26.29.4957_0
INFO: The specified backup will be mounted under the path
'/var/opt/snapcenter/sco/backup_mount/stddb_ds_rhel-linux_11-30-
2015_22.26.29.4957_0/STDDB'.
INFO: Using localhost 'rhel-linux.netapp.com' as default host for mount operation.

INFO: Job 'Mount Backup stddb_ds_scomaddev_11-30-
2015_22.26.29.4957_0' QUEUED with jobId 65'
INFO: The command 'New-SmMountBackup' executed successfully.
```

# New-SmOracleCloneSpecification - Initiates a new Oracle Database clone.

# **Description**

Creates a Oracle Database clone specification from a specified backup.

# **Usage**

sccli New-SmOracleCloneSpecification -AppObjectId <appObject Id> [-BackupName <backup Name> | -CloneLastBackup <number>] -CloneDatabaseSID <database SID> [-IncludeSecondaryDetails] [-SecondaryStorageType <MIRROR | VAULT>] [-SetConsoleOutputWidth] [ Set/modify the db parameters of the clone by editing the generated clone spec file.]

## **Parameters**

#### -AppObjectId

Specifies the application object identifier about which you want to get information. Specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

### -BackupName

Specifies the name of the Oracle Database data backup for which clone specification file need to be generated.

## -CloneLastBackup

Specifies the last backup to be used for generating clone specification. Value 0 indicates the latest backup.

#### -CloneDatabaseSID

Specifies the SID for clone database.

### -IncludeSecondaryDetails

Indicates that you want to create clone specification with secondary(Snap Vault or Snap Mirror) storage location details.

## -SecondaryStorageType

Specifies secondary location type.

Possible Values: [MIRROR, VAULT]

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

#### -CloneSpecParameters

<!-- The backupname, appobjectid and clone-database-sid information are must for cloning --> <br/>
<backupname>federated-ds\_rhel-linux\_11-25-2015\_00.55.10.2377\_0</br>
<appobjectid>rhel-linux.netapp.com\CDB</appobjectid> <clone-database-sid>CLONE12C</clone-database-sid>

# **Examples**

The following example generates the template for clone specification file using 3rd recent backup.

```
[root@rhel-linux ~] # sccli New-SmOracleCloneSpecification -
AppObjectId 'rhel-linux.netapp.com\STDDB'
-CloneLastBackup 2 -CloneDatabaseSID 'CDBCLONE'
INFO: You have chosen to generate clone specification using last backup number '2'
having backup name 'federated-ds_rhel-linux_10-25-
2015_22.30.30.4523_0'.

INFO: Oracle clone specification file
'/var/opt/snapcenter/sco/clone_specs/oracle_clonespec_CDB_CDBCLON
E_2015-10-25_23.59.12.317.xml'
got created successfully.
INFO: The command 'New-SmOracleCloneSpecification' executed successfully.
```

The following example generates the template for clone specification file using specified secondary backup.

```
[root@rhel-linux ~] # sccli New-SmOracleCloneSpecification - AppObjectId 'rhel-linux.netapp.com\STDDB' -BackupName 'federated-ds rhel-linux 11-25-2015_00.55.10.2377_0' -CloneDatabaseSID 'CLONE1ZC' -IncludeSecondaryDetails

INFO: Oracle clone specification file '/var/opt/snapcenter/sco/clone_specs/oracle_clonespec_CDB_CLONE12 C_2015-11-26_00.20.29.237.xml' got created successfully.

INFO: The command 'New-SmOracleCloneSpecification' executed successfully.
```

The below is the sample of clone specification template which will get generated. The actual generated file can be edited to suite your requirements below sample can be used as a reference.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<oracle-clone-specification>
<!-- The backupname, appobjectid and clone-database-sid</pre>
```

```
<!-- Name of the Oracle Database data backup for which
clone specification file need to be generated. -->
        <backupname>federated-ds rhel-linux 11-25-
2015 00.55.10.2377 0</backupname>
        <!-- The application object identifier about which you
want to get information. -->
        <appobjectid>rhel-linux.netapp.com\CDB</appobjectid>
        <!-- SID for clone database. -->
        <clone-database-sid>CLONE12C</clone-database-sid>
        <storage-specification>
                <storage-mapping>
                        <data-files-configuration>
                                 <data-files-locations>
                                         <!-- Specify mappings for
all the datafiles location by using the below data-files-location
structure. -->
                                         <data-files-location>
                                                 <source-
location>/mnt/CDB data</source-location>
                                                 <clone-
location>/mnt/CDB data CLONE12C</clone-location>
                                                 <location-</pre>
type>MountPoint</location-type>
                                         </data-files-location>
                                 </data-files-locations>
                        </data-files-configuration>
                        <secondary-configuration-datafiles>
                                 <secondary-locators>
                                    <!--
                                    Specify mappings for data files
secondary (SnapVault or SnapMirror) storage locations if exists
                                    by using the below secondary-
locator structure
                                    -->
                                         <secondary-locator>
                                                 primary>
                                                         <svm>my-
vsim1.eng.btc.netapp.in</svm>
```

information are must for cloning. -->

```
<volume>cdb data vol</volume>
                                                </primary>
                                                <secondary>
                                                        <svm>my-
vsim4.eng.btc.netapp.in
<volume>cdb data vol mirror</volume>
                                                </secondary>
                                        </secondary-locator>
                                </secondary-locators>
                        </secondary-configuration-datafiles>
                        <secondary-configuration-archivelogs>
                                <secondary-locators>
                                        Specify mappings for
archive logs secondary (SnapVault or SnapMirror) storage locations
if exists
                                        by using the below
secondary-locator structure
                                        <secondary-locator>
                                                cprimary>
                                                        <svm>my-
vsim2.eng.btc.netapp.in
<volume>cdb log vol</volume>
                                                </primary>
                                                <secondary>
                                                        <svm>my-
vsim3.eng.btc.netapp.in
<volume>cdb log vol mirror</volume>
                                                </secondary>
                                        </secondary-locator>
                                </secondary-locators>
                        </secondary-configuration-archivelogs>
                </storage-mapping>
        </storage-specification>
```

```
<database-specification>
                <control-files-configuration>
                         <control-files>
<!-- Specify the file path for the control file need to be created for clone database -->
                                 <control-file>
<path>/mnt/CDB data CLONE12C/CLONE12C/control/control01.ctl</path>
                                 </control-file>
                                 <control-file>
<path>/mnt/CDB data CLONE12C/CLONE12C/control/control02.ctl</path>
                                 </control-file>
                         </control-files>
                </control-files-configuration>
                <redologs-configuration>
                         <redologs>
                                 <!--
                                 Specify the redo groups that need
to be created for clone database.
                                 Minimum 3 redo groups need to be
specified.
                                 -->
                                 <redogroup>
                                          <redolog-files>
                                                  <!-- Multiple redo
log files can be specified for a redo group -->
                                                  <redolog-file>
<path>/mnt/CDB data CLONE12C/CLONE12C/redolog/redo01 01.log</path>
                                                  </redolog-file>
                                          </redolog-files>
                                          <total-size
unit="M">50</total-size>
                                          <number>1</number>
                                 </redogroup>
                                 <redogroup>
```

```
<redolog-files>
                                                 <redolog-file>
<path>/mnt/CDB data CLONE12C/CLONE12C/redolog/redo02 01.log</path>
                                                 </redolog-file>
                                         </redolog-files>
                                         <total-size
unit="M">50</total-size>
                                         <number>2</number>
                                </redogroup>
                                 <redogroup>
                                         <redolog-files>
                                                 <redolog-file>
<path>/mnt/CDB data CLONE12C/CLONE12C/redolog/redo03 01.log</path>
                                                 </redolog-file>
                                         </redolog-files>
                                         <total-size
unit="M">50</total-size>
                                         <number>3</number>
                                 </redogroup>
                        </redologs>
                </redologs-configuration>
                 Specify sys user Credential name for database
authentication of the clone database. You can change the listener
port using the tag
                <port>, by default it is set to 1521 and you
should also define the LOCAL LISTENER parameter appropriately in
the section
                database-parameters. Leave this blank if you do
not want db authentication.
                -->
                <database-authentication>
                        <Credential-name/>
                        <port>1521</port>
                </database-authentication>
                <!-- Specify the oracle version for the clone
database -->
```

```
<!-- Specify the oracle home for the clone
database. Need to be implemented in mapping -->
                <oracle-
home>/u01/app/oracle/product/12.1.0.2/db 1</oracle-home>
                <!-- Specify the oracle os account details for the
clone database -->
                <oracle-os-account>
                        <username>oracle</username>
                        <group>oinstall
                </oracle-os-account>
                Specify Credential name for ASM authetication of
the clone database. You can change the ASM listener port using the
tag <port>,
                by default it is set to 1521. Leave this blank if
you do not want ASM authentication
                <asm-authentication>
                        <Credential-name/>
                        <port>1521</port>
                </asm-authentication>
                <!-- Specify whether to enable archive log mode
for the clone database -->
                <enable-archivelog-mode>true</enable-archivelog-</pre>
mode>
                <!--
                Specify the custom database parameteres for the
clone database.
                If those parameters already exists then value will
be overridden.
                -->
                <database-parameters>
                        <database-parameter>
                                <name>processes</name>
                                <value>150</value>
                        </database-parameter>
                        <database-parameter>
                                <name>sqa target</name>
                                <value>805306368
```

<oracle-version>12.1.0.2.0/oracle-version>

```
</database-parameter>
                        <database-parameter>
                                <name>log archive dest 1</name>
<value>LOCATION=/mnt/CDB archive CLONE12C</value>
                        </database-parameter>
                        <database-parameter>
                                <name>log archive format</name>
                                <value>%t %s %r.dbf</value>
                        </database-parameter>
                        <database-parameter>
                                <name>undo tablespace</name>
                                <value>UNDOTBS1</value>
                        </database-parameter>
                        <database-parameter>
<name>remote login passwordfile</name>
                                <value>EXCLUSIVE</value>
                        </database-parameter>
                        <database-parameter>
                                <name>audit file dest</name>
<value>/u01/app/oracle/admin/CDB/adump CLONE12C</value>
                        </database-parameter>
                        <database-parameter>
                                <name>audit trail</name>
                                <value>DB</value>
                        </database-parameter>
                        <database-parameter>
                                <name>open cursors</name>
                                <value>300</value>
                        </database-parameter>
                        <database-parameter>
                                <name>pga aggregate target</name>
```

```
<value>268435456
                         </database-parameter>
                </database-parameters>
                <!-- Specify sql statements that need to be
executed once the clone database is created. -->
                <sql-statements>
                         <!-- sql statements should containg
semicolon(;) -->
                         <sql-statement>SELECT STATUS FROM
V$INSTANCE; </sql-statement>
                </sql-statements>
                <!--
                Specify the new name for existing pdbs using the
below configuration.
                This is applicable only for Oracle 12c CDB.
                <pdbs-configuration>
                         <pdd><pdb-configuration>
                                 <current-name>SALESDB</current-</pre>
name>
                                 <new-name/>
                         </pdb-configuration>
                         <pdb-configuration>
                                 <current-name>HRDB</current-name>
                                 <new-name/>
                         </pdb-configuration>
                         <pdb-configuration>
                                 <current-name>PRODDB</current-</pre>
name>
                                 <new-name/>
                         </pdb-configuration>
                </pdbs-configuration>
        </database-specification>
</oracle-clone-specification>
```

# New-SmUnmountBackup - Unmounts an existing mounted backup.

# **Description**

Initiates an unmount operation.

# **Usage**

sccli New-SmUnmountBackup -BackupName <backup name> [-AppPluginCode <SCO | SCU>] [-WaitForCompletion] [-SetConsoleOutputWidth]

## **Parameters**

#### -BackupName

Specifies the name of the backup that you want to unmount.

#### -AppPluginCode

Specifies the type of plug-in. You need to specify a plug-in type because unmount of backup is specific to one type of plug-in. For example, if you want to unmount a backup of a resource contained in a SnapCenter Plug-in for Oracle Database, the plug-in type is SCO.

Possible Values: [SCO, SCU]

Default: SCO

# -WaitForCompletion

Indicates whether to wait till the unmount backup job is completed.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how a new unmount backup operation is initiated.

```
[root@rhel-linux ~] # sccli New-SmUnmountBackup -BackupName stddb_ds_rhel-linux_11-30-2015_22.26.29.4957_0
Are you sure you want to unmount the specified backup from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): y

INFO: Job 'Unmount Backup stddb_ds_scomaddev_11-30-
```

# Open-SmConnection - Initiates a connection session with the SnapCenter, for a specified user.

# **Description**

Initiates a connection session with the SnapCenter, for a specified user. The session token is valid for 24 hours.

# **Usage**

sccli Open-SmConnection [-Username <username>] [-RoleName <rolename>] [-TokenNeverExpires] [-SetConsoleOutputWidth]

## **Parameters**

#### -Username

Specifies the domain and user name for the SnapCenter user for whom you wish to establish a session. Specify the SnapCenter user in the format 'domain\username'.

#### -RoleName

If SnapCenter user belongs to multiple roles, specifies the role with which you want to log in.

### -TokenNeverExpires

Indicates that you want to establish a session whose token never expires.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how a new connection session with the SnapCenter is initiated.

```
[root@rhel-linux ~]# sccli Open-SmConnection
Enter the SnapCenter user name: NetApp\Snapadmin
Enter the SnapCenter password:
INFO: A connection session with the SnapCenter was established
successfully.
```

# See Also

Close-SmConnection

# Refresh-SmClone - Initiates an on-demand clone life cycle job

# **Description**

As part of clone life cycle, following operations will be performed:

- 1) Creates an on-demand backup using specified policy.
- 2) Deletes an existing clone (if any) having Database SID specified in clone specification file.
- 3) Creates a new clone with the Database SID specified in clone specification file, using on-demand backup created in step 1.

Before running this command you should generate a clone specification file using 'New-SmOracleCloneSpecification' command.

# **Usage**

sccli Refresh-SmClone -PolicyName <policy name> -OracleCloneSpecificationFile <clone specification file path> [-CloneToHost <host name>] [-ResourceGroupName <resourcegroup name>] [-BackupName <backup name>] [-CloneDatabaseSID <database SID>] [-SecondaryUpdateWaitTimeout <timeout>] [-WaitToTriggerClone <wait time>] [-OracleSkipRecovery] [-OracleUntilCancel] [-OracleUntilScn <SCN number>] [-OracleUntilTime 'yyyy-MM-dd HH:mm:ss'] [-AlternateArchiveLogPaths 'location1, location2, ..., locationN'] [-PreScriptPath <script path>] [-PreScriptArguments <arg1 arg2 ... argN>] [-PostScriptPath <script path>] [-PostScriptArguments <arg1 arg2 ... argN>] [-EnableEmail] [-EmailTo <email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS | ON\_ERROR | ON\_ERROR\_OR\_WARNING | NEVER>] [-EnableEmailAttachment] [-WaitForCompletion] [-SkipNIDCreation] [-SetConsoleOutputWidth]

# **Parameters**

## -PolicyName

Specifies the policy which will be used for the backup operation from which clone will be created. Specified policy should be associated with the resource group.

## -OracleCloneSpecificationFile

Specifies the path of the clone specification file. If you want to create clone from secondary storage specify '-IncludeSecondaryDetails' while creating the clone specification file.

#### -CloneToHost

Specifies the host name where you want to perform clone operation. If this parameter is not specified 'localhost' will be used.

## -ResourceGroupName

Specifies the resource group name which will be used for the backup operation from which clone will be created. This resource group should have been used to protect the database.

#### -BackupName

Specifies the name of data backup of the Oracle Database from which clone will to be created. If this option is specified, on-demand backup creation will be skipped.

#### -CloneDatabaseSID

Specifies the SID for clone database.

#### -SecondaryUpdateWaitTimeout

Specifies the timeout (minutes) for the secondary update.

Default: 15 minutes

### -WaitToTriggerClone

Specifies the wait time (minutes) between clone deletion and creation.

Default: 1 minute

#### -OracleSkipRecovery

Indicates that you want to skip the recovery of the cloned Oracle Database.

#### -OracleUntilCancel

Indicates that you want to recover the cloned Oracle database using Until Cancel option.

#### -OracleUntilScn

Specifies the SCN of logs till which you want to recover the cloned Oracle Database.

#### -OracleUntilTime

Specifies the date and time till which you want to recover the cloned Oracle Database. You must specify the date and time in the 'yyyy-MM-dd HH:mm:ss' format. For example: '2015-01-26 20:30:00'.

## -AlternateArchiveLogPaths

Specifies the alternate paths for archive logs to be used for recovery. Multiple alternate archive log paths can be specified in a comma separated list.

## -PreScriptPath

Specifies the prescript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

#### -PreScriptArguments

Specifies the prescript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

#### -PostScriptPath

Specifies the postscript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

#### -PostScriptArguments

Specifies the postscript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

#### -ScriptTimeout

Specifies the script timeout in seconds. If not specified, the value defaults to 60 seconds.

Default: 60

#### -EnableEmail

Indicates whether to enable email notification.

#### -EmailTo

Specifies to whom email has to be sent.

#### -EmailFrom

Specifies from whom email has to be sent.

#### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON\_ERROR, ON\_ERROR\_OR\_WARNING, NEVER]

#### -EnableEmailAttachment

Specifies that you are adding an email attachment.

### -WaitForCompletion

Indicates to wait until the clone life cycle job is completed.

#### -SkipNIDCreation

Indicates that you want to skip new DBID creation for the cloned Oracle Database.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

1. The following example displays how a refresh clone operation is initiated

```
[root@rhel-linux ~] #sccli Refresh-SmClone -
OracleCloneSpecificationFile
'/var/opt/snapcenter/sco/clone specs/oracle clonespec dgp CLSID1 2
018-06-04 02.35.05.605.xml'
-PolicyName polSecondary INFO: Recovery of the cloned Oracle Database will be performed
using all the available logs in the immediate log backup after the
data backup chosen for clone
because neither SCN nor time is specified.
INFO: Specified backup on the secondary storage will be used for
clone operation.
INFO: Using localhost 'scspr0473539001.gdl.englab.netapp.com' as
default host for clone operation.
INFO: Backing up the resource
scspr0473539001.gdl.englab.netapp.com\dgp
INFO: Job Completed
Fetching backup details .......INFO: Attempt[1]: Data backup not transferred to secondary. Sleeping for '60' seconds. Fetching backup details ......INFO: Backup 'scspr0473539001 gdl englab netapp_com_dgp_scspr0473539001_06-15-
2018 01.45.02.7306 0 reached secondary.
                             .....INFO: Backup
'scspr0473539001 gdl_englab_netapp_com_dgp_scspr0473539001 06-15-
2018 01.45.02.7306 1 reached secondary.
INFO: Using backup
'scspr0473539001_gdl_englab_netapp_com_dgp_scspr0473539001_06-15-
2018^{\circ}01.45.02.73\overline{06} 0 to create clone.
INFO: Deleting clone
scspr0473539001 gdl englab netapp com dgp clone 06-15-
2018 01.32.29
INFO: Job Completed
INFO: Job 'Clone from backup
'scspr0473539001 gdl englab netapp com dgp scspr0473539001 06-15-
2018 01.45.02.7306 0"' QUEUED with jobId '376'
INFO: The command 'Refresh-SmClone' executed successfully.
```

2. The following example displays how a refresh clone operation is initiated by specifying Clone Database SID

```
[root@rhel-linux ~]#sccli Refresh-SmClone -
OracleCloneSpecificationFile
```

```
'/var/opt/snapcenter/sco/clone specs/oracle clonespec dgp CLSID1 2
018-06-04 02.35.05.605.xml'
                 -PolicyName polSecondary -CloneDatabaseSID sid2
INFO: Recovery of the cloned Oracle Database will be performed
using all the available logs in the immediate log backup after the
data backup chosen for clone because neither SCN nor time is specified.
INFO: Setting sid2 as the SID for clone database.
INFO: Specified backup on the secondary storage will be used for
clone operation.
INFO: Using localhost 'scspr0473539001.gdl.englab.netapp.com' as
default host for clone operation.
INFO: Backing up the resource
scspr0473539001.gdl.englab.netapp.com\dgp
INFO: Job Completed
Fetching backup details ......INFO: Attempt[1] : Data backup
not transferred to secondary. Sleeping for '60' seconds.
Fetching backup details .....INFO: Backup
'scspr0473539001_gdl_englab_netapp_com_dgp_scspr0473539001_06-15-2018_01.45.02.7306_0 reached secondary.
2018 01.45.02.7306 1 reached secondary.
INFO: Using backup
'scspr0473539001 gdl englab netapp com dgp scspr0473539001 06-15-
2018 01.45.02.7306 0 to create clone.
INFO: Deleting clone
scspr0473539001 gdl englab netapp com dgp clone 06-15-
2018 01.32.29
INFO: Job Completed
INFO: Job 'Clone from backup
'scspr0473539001 gdl englab netapp_com_dgp_scspr0473539001_06-15-2018_01.45.02.7306 0' QUEUED with jobId '376' INFO: The command 'Refresh-SmClone' executed successfully.
```

3. The following example displays how a refresh clone operation is initiated by specifying an existing Backup, Secondary update wait timeout and Trigger clone wait time

```
[root@rhel-linux ~] #sccli Refresh-SmClone -
OracleCloneSpecificationFile
'/var/opt/snapcenter/sco/clone specs/oracle clonespec dgp CLSID1 2
018-06-04 02.35.05.605.xml'
               -PolicyName polSecondary -CloneDatabaseSID sid2 -
BackupName
scspr0473539001 gdl englab netapp com dgp scspr0473539001 06-15-
2018 01.45.02.7306 T -ResourceGroupName rg1
               -SecondaryUpdateWaitTimeout 20
INFO: Recovery of the cloned Oracle Database will be performed
using all the available logs in the immediate log backup after the
data backup chosen for clone because
neither SCN nor time is specified.
INFO: Setting sid2 as the SID for clone database.
INFO: Specified backup on the secondary storage will be used for
clone operation.
INFO: Using localhost 'scspr0473539001.gdl.englab.netapp.com' as
default host for clone operation.
INFO: Using backup
```

```
INFO: Deleting clone scspr0473539001_gdl_englab_netapp_com_dgp__clone__06-15-2018_01.32.29

INFO: Job Completed INFO: Waiting for '5' minute(s) before triggering clone operation ...

INFO: Job 'Clone from backup 'scspr0473539001_gdl englab netapp_com_dgp scspr0473539001_06-15-2018_01.45.02.7306_0T' QUEUED with jobId '376' INFO: The command 'Refresh-SmClone' executed successfully.
```

# Remove-SmBackup - Deletes the backup(s) from the SnapCenter.

# **Description**

Deletes the backup(s) from the SnapCenter. Specify either backup names or ids to be deleted.

# **Usage**

sccli Remove-SmBackup [-BackupIds <backupId1, backupId2, backupId3 ...> | -BackupNames <backupName1, backupName2, backupName3 ...>] [-DeleteSecondaryMetadata] [-CleanupBackups] [-CleanupSecondaryBackups] [-WaitForCompletion] [-SetConsoleOutputWidth]

## **Parameters**

#### -Backuplds

Specifies the id of backup that need to be removed. Multiple backup ids can be specified in a comma separated list.

#### -BackupNames

Specifies the name of the backup that need to be deleted. Multiple backup names can be specified in a comma separated list.

## -DeleteSecondaryMetadata

Indicates that the secondary backup metadata of the specified backups should also be deleted.

## -CleanupBackups

Indicates that all the backups in SnapCenter that have no Snapshot copies to be cleaned up.

## -CleanupSecondaryBackups

Indicates that all the secondary backups in SnapCenter that have no secondary Snapshot copies to be cleaned up.

## -WaitForCompletion

Indicates whether to wait till the remove backup job is completed.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays how to remove a backup.

```
[root@rhel-linux ~]# sccli Remove-SmBackup -BackupNames 'stddb-ds_rhel-linux_11-24-2015_00.55.10.2377_0'
Are you sure you want to remove the specified backup(s) from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): y

INFO: The command 'Remove-SmBackup' executed successfully.
```

The following example displays how to remove a backup and its secondary metadata.

```
[root@rhel-linux ~] # sccli Remove-SmBackup -BackupIds 15 -
DeleteSecondaryMetadata
INFO: You have also chosen to delete the secondary backup metadata
of the specified backups.
Are you sure you want to remove the specified backup(s) from
SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): y

INFO: The command 'Remove-SmBackup' executed successfully.
```

The following example displays how to clean up all secondary backups in SnapCenter that do not have secondary Snapshot copies.

```
[root@rhel-linux ~] # sccli Remove-SmBackup - CleanupSecondaryBackups
INFO: You have chosen to cleanup all the secondary backups in SnapCenter that have no secondary Snapshot copies.
Are you sure you want to cleanup all the secondary backups that have no secondary Snapshot copies from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y
INFO: The command 'Remove-SmBackup' executed successfully.
```

# Remove-SmClone - Deletes an existing clone.

# **Description**

Deletes an existing clone.

# **Usage**

sccli Remove-SmClone -CloneName <cloneName> -CloneAppObjectId <cloneName> [-AppPluginCode <SCO|SCU>] [-WaitForCompletion] [-SetConsoleOutputWidth] [-Force]

## **Parameters**

#### -CloneName

Specifies the name of the clone you want to remove.

#### -CloneAppObjectId

Specifies the application object identifier of the clone that you want to remove.

### -AppPluginCode

Specifies the type of plug-in. You need to specify a plug-in type because deletion of clone is specific to one type of plug-in. For example, if you want to delete a clone of a resource contained in a SnapCenter Plug-in for Oracle Database, the plug-in type is SCO.

Possible Values: [SCO, SCU]

Default: SCO.

## -WaitForCompletion

Indicates whether to wait till the clone remove job is completed.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

#### -Force

Enables you to unregister a clone that has been removed outside of SnapCenter.

# **Examples**

1. The following example displays the removal of a clone with clone name.

```
[root@rhel-linux ~] # sccli Remove-SmClone -CloneName 'stddbds clone 11-25-2015 23.31.23'
Are you sure you want to remove the specified clone from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): y

INFO: The command 'Remove-SmClone' executed successfully.
```

following example displays the removal of a clone with clone appObject Id.

```
[root@rhel-linux ~] # sccli Remove-SmClone -CloneAppObjectId 'scspr0322092001.gdl.englab.netapp.com\cln2'
Are you sure you want to remove the specified clone from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): y

INFO: The command 'Remove-SmClone' executed successfully.
```

# Remove-SmCredential - Deletes a Credential account from SnapCenter.

# **Description**

Deletes a Credential account from SnapCenter.

# **Usage**

sccli Remove-SmCredential -Name < Credential name > [-SetConsoleOutputWidth]

## **Parameters**

#### -Name

Specifies name of the Credential account to be removed.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays the removal of Credential account from SnapCenter.

```
[root@rhel-linux ~] # sccli Remove-SmCredential -Name 'snap-server'
Are you sure you want to remove the specified Credential account
from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y

INFO:The command 'Remove-SmCredential' executed successfully.
```

# Remove-SmPolicy - Deletes one or more policies from SnapCenter.

# **Description**

Deletes one or more policies from SnapCenter. In order to delete the polices from SnapCenter, you must have already detached them from all the resource groups with which they are associated.

# **Usage**

sccli Remove-SmPolicy -PolicyNames <policy1, policy2, policy3 ...> [-SetConsoleOutputWidth]

## **Parameters**

#### -PolicyNames

Identifies the policy you want to delete. You can provide an individual policy name or a commaseparated list.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays the removal of policies from SnapCenter.

```
[root@rhel-linux ~] # sccli Remove-SmPolicy -PolicyNames
'offline_data_daily'
Are you sure you want to remove the specified policy/policies from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y

ERROR: This p1 policy has Resource Group attached. Please detach the policy from Resource Group before removing the policy.
Server return code: -1
```

```
[root@rhel-linux ~]# sccli Remove-SmPolicy -PolicyNames 'offline data_daily'
Are you sure you want to remove the specified policy/policies from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y

INFO:The command 'Remove-SmPolicy' executed successfully.
```

```
[root@rhel-linux ~] # sccli Remove-SmProtectResource -Resources 'host=host1-linux.netapp.com,type=Oracle Database,names= [ORACLE_DB1]' -Resources 'host=host2-linux.netapp.com,type=Oracle Database,names=[ORACLE_DB3]' -Force
Are you sure you want to remove protection for the specified resources from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y

INFO: The command 'Remove-SmProtectResource' executed successfully.
```

# Remove-SmResourceGroup - Deletes resource groups from SnapCenter.

# **Description**

Deletes one or more existing resource groups.

# **Usage**

sccli Remove-SmResourceGroup -ResourceGroupNames <resourceGroup1, resourceGroup2, resourceGroup3 ...> [-Force] [-SetConsoleOutputWidth]

## **Parameters**

#### -ResourceGroupNames

Specifies the name of the resource group that needs to be removed. Multiple resource group names can be specified in a comma separated list.

#### -Force

Indicates whether to perform force removal of resource groups.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays the removal of resource groups.

```
[root@rhel-linux ~] # sccli Remove-SmResourceGroup -
ResourceGroupNames 'stddb_ds'
Are you sure you want to remove the specified resource group from
SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y

ERROR: Detach any policies from resource group stddb_ds before you
delete it.
To detach policies, go to the resource group page and click
Modify.
From the Modify resource group wizard, deselect the policies
attached to the resource group
Server return code: 0
```

```
[root@rhel-linux ~]# sccli Remove-SmResourceGroup -
ResourceGroupNames 'stddb_ds' -Force
Are you sure you want to remove the specified resource group from
SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y

INFO: The command 'Remove-SmResourceGroup' executed successfully.
```

# Remove-SmStorageConnection - Deletes an Storage Virtual Machine (SVM) connection.

# **Description**

Deletes an SVM connection. You can remove one SVM connection at a time.

# **Usage**

sccli Remove-SmStorageConnection -SVM <SVM name or IP> [-SetConsoleOutputWidth]

## **Parameters**

#### -SVM

Specifies name or IP address of the Storage Virtual Machine.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

# **Examples**

The following example displays the removal of a Storage Virtual Machine connection from the SnapCenter.

```
[root@rhel-linux ~] # sccli Remove-SmStorageConnection -SVM 'my-vsim1.eng.btc.netapp.in'
Are you sure you want to remove the specified storage connection from SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): Y

INFO: The command 'Remove-SmStorageConnection' executed successfully.
```

## Removes-SvmPreferredDataPath - Deletes the SVM preferred data path.

## **Description**

Deletes the SVM preferred data path entry from storage preference configuration file. You can remove one SVM preferred data path entry at a time.

## **Usage**

sccli Removes-SvmPreferredDataPath -SVM <SVM Name> [-SetConsoleOutputWidth]

## **Parameters**

#### -SVM

Specifies the name of the Storage Virtual Machine for which you want to remove the preferred data path.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to remove SVM preferred data path.

```
[root@rhel-linux ~] # sccli Remove-SvmPreferredDataPath -SVM 'tonic'
Are you sure you want to remove the specified SVM preferred data path?
Enter either [Y] Yes or [N] No (default is 'N'): Y
INFO: Preferred data path entry for SVM 'tonic' removed successfully.
INFO: The command 'Remove-SvmPreferredDataPath' executed successfully.
```

## Rename-SmBackup - Rename existing backup on SnapCenter.

## **Description**

Rename an existing backup on SnapCenter. You can specify the existing backup name, new backup name, and the plug-in type

## **Usage**

sccli Rename-SmBackup -BackupName <BackupName> -NewBackupName <NewBackupName> [-PluginType <SCO | SCU>] [-SetConsoleOutputWidth]

## **Parameters**

#### -BackupName

Specifies the backup you want to rename. You can provide an individual backup name.

#### -NewBackupName

Specifies the new name of the backup.

#### -PluginType

Specifies the type of plug-in. You need to specify a plug-in type. For example, if you want to rename a backup for resources contained in a SnapCenter Plug-in for Oracle Database, the plug-in type is SCO. Possible Values: [SCO, SCU]

Default: SCO

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following command displays the usage of the rename command of backup.

```
[root@rhel-linux ~]# sccli Rename-SmBackup -BackupName
'existing backup'
-NewBackupName 'New Backup name'
 -PluginType SCO
INFO: The command 'Rename-SmBackup' executed successfully.'
```

## Restore-SmBackup - Restore data from the backup.

## **Description**

Restore data from the backup.

## **Usage**

sccli Restore-SmBackup [-BackupId <backup Id> | -BackupName <backup name> | - RestoreLastBackup <number>] -AppObjectId <appObject Id> [-PluginCode <SCO | SCU>] [-SecondaryLocator 'Primary=<SVM>:<volume>,Secondary=<SVM>:<volume>'] [-OracleFullRestore] [-OracleControlFileRestore] [-RestoreOnClusterHost <cluster hostname>] [-RestoreOracleRedoLogFile] -OraclePluggableDatabases <PDB1, PDB2, ..., PDBn> -OracleTablespaces <TBSP1, TBSP2, ..., TBSPn> [-OracleChangeState] [-OracleSkipRecovery] [-OracleUntilScn <SCN number>] [-OracleUntilTime 'yyyy-MM-dd HH:mi:ss'] [-AlternateArchiveLogPaths 'location1, location2, ..., locationN'] [-OracleOpenDatabaseAfterRecovery] [-OracleOpenPluggableDatabasesAfterRecovery] [-OracleOpenTablespacesAfterRecovery] [-ForceInplaceRestore] [-PreScriptPath <script path>] [-PostScriptArguments <arg1 arg2 ... argN>] [-PostScriptPath <script path>] [-PostScriptArguments <arg1 arg2 ... argN>] [-ScriptTimeout <timeout>] [-EnableEmail] [-EmailTo <email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS | ON\_ERROR | ON\_ERROR\_OR\_WARNING | NEVER>] [-EnableEmailAttachment] [-WaitForCompletion] [-SetConsoleOutputWidth]

## **Parameters**

#### -Backupld

Specifies the backup ID.

## -BackupName

Specifies the backup name.

## -RestoreLastBackup

Specifies the last backup to be used for restore. Value 0 indicates the latest backup.

## -AppObjectId

Specifies the application object identifier which you want to restore. Specify the application object identifier format as 'host\database' for Oracle standalone database or 'clustername\database' for Oracle RAC database.

## -PluginCode

Specifies the plug-in code for the restore operation.

Possible Values: [SCO, SCU]

Default: SCO

#### -SecondaryLocator

Specifies the secondary (SnapVault or SnapMirror) storage location details (destination volume) for each unique primary storage (source volume). Specify this option more than once to provide secondary storage location details for multiple unique primary storage. Primary (source volume) and secondary (destination volume) storage location details should be specified as name-value pairs in a comma separated list. For example: -SecondaryLocator

'Primary=oracle\_vs1:db1\_data\_vol,Secondary=oracle\_vs1\_mirror:db1\_data\_vol\_mirror' - SecondaryLocator

'Primary=oracle\_vs2:db1\_log\_vol,Secondary=oracle\_vs2\_mirror:db1\_data\_log\_mirror'.

#### -OracleFullRestore

Indicates that you want to restore the complete Oracle database (datafiles).

#### -OracleControlFileRestore

Indicates that you want to restore Oracle control files.

#### -RestoreOnClusterHost

Specifies the host of a cluster on which restore operation need to be performed. This option should be specified only for an Oracle RAC database. If not specified restore will be done on the host where the backup was taken.

#### -RestoreOracleRedoLogFile

Indicates that you want to restore Oracle redo log files. Redo log file restore is only supported for Data Guard and Active Data Guard standby database.

#### -OraclePluggableDatabases

Specifies a list of pluggable databases to be restored. Multiple pluggable databases can be specified in a comma separated list.

#### -OracleTablespaces

Specifies a list of tablespaces to be restored. Multiple tablespaces can be specified in a comma separated list.

#### -OracleChangeState

Indicates that you want to allow change database state during restore operation.

## -OracleSkipRecovery

Indicates that you want to skip recovery of Oracle database.

#### -OracleUntilScn

Specifies the SCN of logs till which you want to recover.

#### -OracleUntilTime

Specifies the date and time till which you want to recover. You must specify the date and time in the 'yyyy-MM-dd HH:mm:ss' format. For example: '2015-01-26 20:30:00'.

#### -AlternateArchiveLogPaths

Specifies the alternate paths for archive logs to be used for recovery. Multiple alternate archive log paths can be specified in a comma separated list.

#### -OracleOpenDatabaseAfterRecovery

Indicates that you want to open the database after recovery is performed.

#### -OracleOpenPluggableDatabasesAfterRecovery

Specifies that the pluggable databases must be opened after recovery is performed.

#### -OracleOpenTablespacesAfterRecovery

Specifies that the tablespaces must be opened after recovery is performed.

## -ForceInplaceRestore

Indicates that you want to perform In Place restore which will bypass all restore validations.

## -PreScriptPath

Specifies the prescript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

## -PreScriptArguments

Specifies the prescript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

## -PostScriptPath

Specifies the postscript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

## -PostScriptArguments

Specifies the postscript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

#### -ScriptTimeout

Specifies the script timeout in seconds. If not specified, the value defaults to 60 seconds.

Default: 60

#### -EnableEmail

Indicates whether to enable email notification.

#### -EmailTo

Specifies to whom email need to be sent.

#### -EmailFrom

Specifies from whom email has to be sent.

#### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON ERROR, ON ERROR OR WARNING, NEVER]

#### -EnableEmailAttachment

Specifies that you are adding an email attachment.

#### -WaitForCompletion

Indicates to wait until the restore job is completed.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to restore all datafiles with control file of an Oracle Database from backup and recover till SCN using logs in alternate location.

```
[root@rhel-linux ~]# sccli Restore-SmBackup -BackupId 3 -
AppObjectId 'rhel-linux.netapp.com\STDDB'
-OracleChangeState -OracleFullRestore -OracleControlFileRestore
```

```
-OracleUntilScn '3234156' -OracleOpenDatabaseAfterRecovery -AlternateArchiveLogPaths '/mnt/recover_logs/1, /mnt/recover_logs/2' INFO: You have chosen to restore the control files.

Are you sure you want to perform restore on the specified entity/entities with the above options? Enter either [Y] Yes or [N] No (default is 'N'): Y

INFO: Job 'Restore 'rhel-linux.netapp.com\STDDB'' QUEUED with jobId '76' INFO: The command 'Restore-SmBackup' executed successfully.
```

The following example displays how to restore Oracle pluggable databases from 2nd recent backup with All logs recovery.

```
[root@rhel-linux ~] # sccli Restore-SmBackup -RestoreLastBackup 1 - AppObjectId 'rhel-linux.netapp.com\CDB' -OracleChangeState -OraclePluggableDatabases 'HRDB, SALESDB' -OracleOpenPluggableDatabasesAfterRecovery

INFO: You have chosen to perform restore using last backup number '1' having backup name 'CDB_rhel-linux_01-14-2016_18.08.12.2020_0'. Are you sure you want to perform restore on the specified entity/entities with the above options?
Enter either [Y] Yes or [N] No (default is 'N'): Y INFO: Job 'Restore 'rhel-linux.netapp.com\CDB'' QUEUED with jobId '79' INFO: The command 'Restore-SmBackup' executed successfully.
```

The following example displays how to restore tablespaces of an Oracle pluggable database from backup with All logs recovery.

```
[root@rhel-linux ~] # sccli Restore-SmBackup -BackupName CDB_rhel-linux 01-14-2016 20.07.57.9759_0
-AppObjectId 'rhel-linux.netapp.com\CDB'
-OracleChangeState -OraclePluggableDatabases 'SALESDB'
-OracleTablespaces 'CLIENTS, REPORT, CREDIT' -
OracleOpenTablespacesAfterRecovery
Are you sure you want to perform restore on the specified entity/entities with the above options?
Enter either [Y] Yes or [N] No (default is 'N'): Y

INFO: Job 'Restore 'rhel-linux.netapp.com\CDB'' QUEUED with jobId '80'
INFO: The command 'Restore-SmBackup' executed successfully.
```

# Set-PreferredHostIPsInStorageExportPolicy - Updates the preferred IP addresses of the host for the storage export policy.

## **Description**

Updates the preferred IP addresses of the host for the storage export policy. Allows you to choose/control the IP addresses of the host to be added to the storage export policy for Mount and Clone operations. By default all the IP addresses of the host are added by SnapCenter to the storage export policy.

## **Usage**

sccli Set-PreferredHostlPsInStorageExportPolicy -lpAddresses <lpAddr1, lpAddr2, ..., lpAddrN> [-SetConsoleOutputWidth]

## **Parameters**

#### -lpAddresses

Specifies a list of preferred IP address of the host for storage export policy. Multiple IP addresses can be specified in a comma separated list.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to update the preferred IP addresses of the host in storage export policy.

```
[root@rhel-linux ~] # sccli Set-
PreferredHostIPsInStorageExportPolicy -IpAddresses '192.168.1.1,
192.168.1.2'
INFO: Preferred IP addresses of the host for storage export policy
are updated successfully.
INFO: The command 'Set-PreferredHostIPsInStorageExportPolicy'
executed successfully.
```

```
[root@rhel-linux ~]# sccli Set-
PreferredHostIPsInStorageExportPolicy -IpAddresses '192.168.1.1,
192.168.1.2, 192.168.1.3, 192.168.1.4'
Are you sure you want to overwrite the existing preferred IP
```

addresses of the host for storage export policy? Enter either [Y] Yes or [N] No (default is 'N'): Y INFO: Preferred IP addresses of the host for storage export policy are updated successfully. INFO: The command 'Set-PreferredHostIPsInStorageExportPolicy' executed successfully.

## Set-SmConfigSettings - Sets the configuration settings.

## **Description**

Sets the configuration settings for plugin and server. Multiple configuration parameters can be set by specifying the values in a key value pair.

## **Usage**

sccli Set-SmConfigSettings [-PluginCode <SCO | SCU>] [-HostName <hostname>] -ConfigSettings 
'KEY=<keyName>,VALUE=<value>' -ConfigSettingsType <Plugin | Server> [-SetConsoleOutputWidth]

## **Parameters**

#### -PluginCode

Specifies the plugin code for which the configuration settings have to be set.

#### -HostName

Specifies the host for which the configuration settings have to be set.

### -ConfigSettings

Specifies the configuration parameters that you want to set. You must provide the configuration parameter in a key value format and it must contain the KEY and VALUE. -ConfigSettings "KEY=ORACLE\_SQL\_QUERY\_TIMEOUT,VALUE=190". To set multiple configuration parameters, you can use -ConfigSettings option multiple times.

## -ConfigSettingsType

Specifies the type of configuration settings which needs to be retrieved. If config settings type is of plugin, then plugin code must be specified.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to set configuration settings for a plugin.

## Set-SmCredential - Modifies an existing Credential account with specified credentials.

## **Description**

Modifies an existing Credential account with specified credentials. You can use a Credential account to perform application-specific operations within SnapCenter.

## **Usage**

sccli Set-SmCredential -Name <Credential name> -CredentialType <WINDOWS | LINUX |
ORACLEDATABASE | ORACLEASM | ORACLERMANCATALOG> [-Username <username>] [SetConsoleOutputWidth]

## **Parameters**

#### -Name

Specifies the name of the Credential account to modify.

#### -CredentialType

Specifies the authentication mode.

Possible Values: [WINDOWS, LINUX, ORACLEDATABASE, ORACLEASM, ORACLERMANCATALOG]

#### -Username

Specifies the user name.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to modify an existing Credential account with the specified credentials.

```
[root@rhel-linux ~] # sccli Set-SmCredential -Name snap-server - AuthMode WINDOWS
Enter the Credential account user name: NetApp\SnapCenterAdmin
Enter the Credential account password:
```

INFO: The command 'Set-SmCredential' executed successfully.

```
[root@rhel-linux ~] # sccli Set-SmCredential -Name cdb_credential -AuthMode ORACLEDATABASE
Enter the Credential account user name: c##dba
Enter the Credential account password:

INFO: The command 'Set-SmCredential' executed successfully.
```

## **Set-SmPolicy - Modifies an existing policy.**

## **Description**

Modifies an existing backup policy.

## **Usage**

sccli Set-SmPolicy -PolicyName <policy name> -PolicyType <policy type> [-PluginPolicyType <plug-in policy type>] [-Description <description>] [-UpdateSnapMirrorAfterbackup] [-MirrorVaultUpdateRetryCount <retry count>] [-UpdateSnapVaultAfterbackup] [-SnapVaultLabel <label>] [-ScheduleType <HOURLY | DAILY | WEEKLY | MONTHLY>] [-VerificationScheduleType <HOURLY|DAILY|WEEKLY|MONTHLY>] [-VerificationScriptoptions ScriptTimeout=timeout|PreScriptPath=verification-script-path|PostScriptPath=verification-scriptpath|PreScriptArguments=verification-script-arguments|PostScriptArguments=verification-scriptarguments] [-RetentionSettings <BackupScope=DATA|LOG,SCHEDULETYPE=HOURLY | DAILY | WEEKLY | MONTHLY, RetentionCount = number-of-snapshot-count-to-keep or RetentionDays=number-of-days-to-keep-snapshot>] [-PreScriptPath <script path>] [-PreScriptArguments <arg1 arg2 ... argN>] [-PostScriptPath <script path>] [-PostScriptArguments <arg1 arg2 ... argN>] [-ScriptTimeout <timeout>] -OracleBackupType <ONLINE | OFFLINEMOUNT | OFFLINESHUTDOWN> -OracleBackupScope <FULL | DATA | LOG> [-OracleSkipPDBSaveState] [-OracleDeleteArchiveLogBackup] [-OracleArchiveLogBackupRetentionType <DayBase | CountBase>] [-OracleDeleteArchiveLogBackupDays <number of days>] [-OracleDeleteArchiveLogBackupCounts <backup count>] [-OraclePruneArchiveLog] [-OraclePruneArchiveLogDestinationType <AllDestinations</pre> | OnlyBackupDestinations>] [-OraclePruneArchiveLogType <AllLogs | OlderLogs>] [-OraclePruneArchiveLogOlderThanDays < number of days > ] [-CatalogBackupWithOracleRMAN] [-SetConsoleOutputWidth]

## **Parameters**

## -PolicyName

Specifies the name of the policy you want to modify.

## -PolicyType

Specifies the policy type.
Possible Values: [BACKUP]

## -PluginPolicyType

Specifies the plug-in type. You need to specify a plug-in type because policies are settings that are specific to a type of plug-in. For example, if you want to create a policy for Oracle resources or Oracle resource groups, the plug-in type is SCO.

Possible Values: [SCO, SCU]

Default: SCO

#### -Description

Provides a description of the policy you are modifying.

#### -UpdateSnapMirrorAfterbackup

Indicates that you want to update the SnapMirror relationship after the backup operation. SnapMirror is disabled by default.

#### -MirrorVaultUpdateRetryCount

Specifies the retry count for SnapMirror or SnapVault update.

Default: 3

#### -UpdateSnapVaultAfterbackup

Indicates that you want to update the SnapVault relationship after the backup operation. SnapVault is disabled by default.

#### -SnapVaultLabel

Provides a SnapVault label.

### -ScheduleType

Specifies the scheduler type.

Possible Values: [HOURLY, DAILY, WEEKLY, MONTHLY]

## -VerificationScheduleType

Specifies the verification scheduler type.

Possible Values: [HOURLY, DAILY, WEEKLY, MONTHLY]

Only backup schedule type can be part of verification schedule type. If the schedule type is not part of backup schedule type then it cannot be added to verification schedule.

## -VerificationScriptOptions

Specifies verification script options, which are run after verification of backup, arguments are optional you can specify only required once. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'. For example -VerificationScriptoptions ScriptTimeout=10,PreScriptPath=/var/opt/snapcenter/spl/scripts/name-of-the-script,PreScriptArguments=arg1 arg2 ... argN,PostScriptArguments=arg1 arg2 ... argN

#### -RetentionSettings

Specifies the retention period of the backup. Retention count specifies the number of backups that you want to keep. If the number of backups exceed the specified number, the backups are deleted with the oldest backup deleted first. Retention days specifies the number of days for which you want to keep the Snapshot copies before deleting them. If the retention period is not specified, the default retention period of RetentionCount=7 will be applied to schedule type of the backup scope. You can specify RetentionCount or RetentionDays but not both. If SCHEDULETYPE is not specified, then retention period is applied to on-demand backup policy. For example -RetentionSettings BackupScope=DATA,SCHEDULETYPE=HOURLY,RetentionCount=2, -RetentionSettings BackupScope=DATA,SCHEDULETYPE=DAILY,RetentionDays=10, -RetentionSettings BackupScope=LOG,RetentionDays=10.

#### -PreScriptPath

Specifies the prescript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

#### -PreScriptArguments

Specifies the prescript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

#### -PostScriptPath

Specifies the postscript path. For SnapCenter Plug-in for Oracle Database, any executable script should be located at '/var/opt/snapcenter/spl/scripts' or any directory underneath scripts folder and the complete absolute path must be specified.

## -PostScriptArguments

Specifies the postscript arguments. Multiple arguments can be specified in a space separated list. For example: 'arg1 arg2 arg3'.

## -ScriptTimeout

Specifies the script timeout value in seconds. If not specified, the default vaule is 60 seconds.

Default: 60

## -OracleBackupType

Specifies the type of Oracle Database backup.

Possible Values: [ONLINE, OFFLINEMOUNT, OFFLINESHUTDOWN]

## -OracleBackupScope

Specifies the scope of Oracle Database backup.

Possible Values: [FULL, DATA, LOG]

#### -OracleSkipPDBSaveState

Indicates whether to skip saving the state of pluggable databases.

#### -OracleDeleteArchiveLogBackup

Indicates whether to delete the older archive log backups based on ArchiveLogBackupRetentionType.

#### -OracleArchiveLogBackupRetentionType

Specifies the retention type for archive log backup.

Possible Values: [DayBase, CountBase]

#### -OracleDeleteArchiveLogBackupDays

Specifies the number of days for which the archive log backups must be retained before deleting.

#### -OracleDeleteArchiveLogBackupCounts

Specifies the maximum number of archive log backups to be retained.

#### -OraclePruneArchiveLog

Indicates whether to prune archive logs after log backup.

#### -OraclePruneArchiveLogDestinationType

Specifies the type of destinations to prune archive logs.

Possible Values: [AllDestinations, OnlyBackupDestinations]

**Default: AllDestinations** 

## -OraclePruneArchiveLogType

Specifies the type of archive log pruning.

Possible Values: [AllLogs, OlderLogs]

## $\hbox{-}Oracle Prune Archive Log Older Than Days$

Specifies the number of days for which the archive log backups must be retained before pruned.

## -CatalogBackupWithOracleRMAN

Indicates whether the backup should be cataloged using Oracle Recovery Manager (RMAN).

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example shows how to modify an existing policy.

```
[root@rhel-linux ~] # sccli Set-
SmPolicy -PolicyName

'offfline_data_daily'
-PolicyType BACKUP -

PluginPolicyType SCO
-Description 'Offline Mount Data
Policy with hourly schedule changed to weekly'
-OracleBackupType OFFLINEMOUNT -

OracleBackupScope DATA
-ScheduleType WEEKLY
-RetentionSettings

'BackupScope=DATA, RetentionCount=2, SCHEDULETYPE=WEEKLY'

Executed successfully.

INFO: The command 'Set-SmPolicy'
```

## Set-SmProtectResource - Modifies policies and schedules of the resource.

## **Description**

Modifies policies and schedules of the resource.

## **Usage**

sccli Set-SmProtectResource [-Description <description>] [-PluginCode <SCO | SCU>] [-Policies <policy1, policy2, ..., policyN>] -Resource host=localhost.domain,type=Oracle Database,names=[db1] -Schedules
PolicyName=name-of-the-policy,ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY],StartTime=YYYY-MM-DD hh:mm:ss,EndTime=YYYY-MM-DD hh:mm:ss,Repeat\_Every\_Hour=hh::mm,DaysInterval=number-of-days,DaysOfTheWeek=

[SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear= [January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth= [1,2,3 ... 30,31] -VerificationSchedules BackupPolicyName=name-of-the-backup-policy,BackupScheduleType=scheduletype-of-the-backup-policy,DeferredBackupCount=number-of-backup-count-to-be-deferred,VerifyOnSecondary=[true | false],VerificationType=[VERIFY AFTER BACKUP |

VERIFY\_SCHEDULED],ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY],StartTime=YYYY-MM-DD hh:mm:ss,EndTime=YYYY-MM-DD hh:mm:ss,Repeat\_Every\_Hour=hh::mm,DaysInterval=number-of-days,DaysOfTheWeek=

[SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear=
[January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth=
[1,2,3 ... 30,31] [-ExcludeArchiveLogDestinationsFromBackup 'location1,location2, ..., locationN'] [BackupArchiveLogsAfterRecentMissingOne] [-RemoveCustomSnapShot] [-CustomSnapShotFormat
'\$ResourceGroup\$Policy\$HostName\$ScheduleType\$CustomText'] [-SecondaryLocator 'Primary=<SVM>:
<volume>,Secondary=<SVM>:<volume>'] [-EnableEmail] [-EmailTo <email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS | ON\_ERROR | ON\_ERROR\_OR\_WARNING |
NEVER>] [-EnableEmailAttachment] [-SetConsoleOutputWidth]

## **Parameters**

#### -Description

Provides an optional description of the resource to be protected.

#### -PluginCode

Specifies the plug-in code for the resource to be protected.

Possible Values: [SCO, SCU]

Default: SCO

#### -Policies

Specifies one or more polices you want to attach to the resource. Multiple policies can be specified in a comma separated values.

#### -Resource

Specifies the resource you want to protect. You must provide the resource information in a key value format, and it must contain the resource name, type, and the host on which it is located. Valid type values are: Oracle Database. For example, -Resource 'host=host1,type=Oracle Database,names=[db1]'

#### -Schedules

Specifies the schedules you want to add to the resource. You must provide the schedule information in a key value format, and it must contain the policy name, schedule type, required schedule arguments depending on the schedule type and the start time. Schedule type can be HOURLY|DAILY|WEEKLY|MONTHLY. It is necessary to specify the required arguments depending on the schedule type. HOURLY: Repeat\_Every\_Hour -Specifies that you want backups to be created with an interval of a designated hour::minute. The default value is 1. DAILY: DaysInterval - Specifies that you want backups to be created with an interval of a designated number of days. The default value is 1. WEEKLY: DaysOfTheWeek – Specifies that you want backups to be created on designated days of the week. The values are specified in a comma separated list. MONTHLY: MonthsOfTheYear - Specifies that you want backups to be created on designated months. The values are specified in a comma separated list. DaysOfTheMonth - Specifies that you want backups to be created on the designated days of the month. The values are specified in a comma separated list. If EndTime is not specified, schedules will run indefinitely.

#### -VerificationSchedules

Specifies the verification schedules you want to add to the resource. Verification must be enabled for the schedule types specified in the policy to verify the backup. You must provide the verification schedules information in a key value format, and it must contain the backup policy name, backup schedule type, verification type. Depending on the verification type you need to specify other required schedule arguments. If verification type is VERIFY\_AFTER\_BACKUP then it is not required to specify the schedule details. However, if it is VERIFY\_SCHEDULED, then it is necessary specify schedule type and its related schedule arguments. These arguments are the same as you had specified for the -Schedules option. The verification schedule type cannot be lower than the backup schedule type. For example, if backup schedule type is WEEKLY then verification schedule type cannot be DAILY, it should be greater than or equal to WEEKLY.

#### -ExcludeArchiveLogDestinationsFromBackup

Specifies the archive log destinations to be excluded from backup. Archive log files present in the specified destinations will be excluded during log backup. Multiple entries can be specified using comma separated list. For example: -ExcludeArchiveLogDestinationsFromBackup '/arch/logs/on/local/disk1, /arch/logs/on/local/disk2'.

#### -BackupArchiveLogsAfterRecentMissingOne

Specifies that you want to backup archive log files, which are created after the most recent missing archive log files and ignore the files created prior to it. If this option is not specified then all archive log files except the missing archive log files are be backed up.

#### -RemoveCustomSnapShot

Specifies the removal of the custom naming format of the Snapshot copy.

#### -CustomSnapShotFormat

Specifies the custom naming format to be used. Specify the format using keywords like \$ResourceGroup, \$Policy, \$ScheduleType, \$HostName and \$CustomText.

#### -SecondaryLocator

Specifies the secondary (SnapVault or SnapMirror) storage location details (destination volume) for each unique primary storage (source volume) of resource on which you want to perform secondary verification. Specify this option more than once to provide secondary storage location details for multiple unique primary storage. Primary (source volume) and secondary (destination volume) storage location details should be specified as name-value pairs in a comma separated list. For example: -SecondaryLocator

'Primary=oracle\_vs1:db1\_data\_vol,Secondary=oracle\_vs1\_mirror:db1\_data\_vol\_mirror' -SecondaryLocator 'Primary=oracle vs2:db1 log vol,Secondary=oracle vs2 mirror:db1 data log mirror'.

#### -EnableEmail

Indicates whether to enable email notification.

#### -EmailTo

Specifies to whom the email has to be sent.

#### -EmailFrom

Specifies from whom the email has to be sent.

#### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON ERROR, ON ERROR OR WARNING, NEVER]

#### -EnableEmailAttachment

Specifies that you are adding an email attachment.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example shows how to modify policies and schedules attached to a resource.

```
[root@rhel-linux ~] # sccli Set-SmProtectResource
-Description 'Modifying attached policy to
Resource' -PluginCode 'SCO'
-Resource 'host=rhel-linux.netapp.com,type=Oracle
Database,names=[ORACLE_DB1]'
'policy_with_schedule,offline_data_daily,hourly'
-Schedules

PolicyName=policy_with_schedule,ScheduleType=WEEKLY,StartTime='2016-08-18
```

```
13:19:59',
                          EndTime='2016-09-03 13:27:59', DaysOfTheWeek=
[Friday, Saturday]
             -Schedules
PolicyName=hourly, ScheduleType=hourly, StartTime='2016-08-18 13:19:59', EndTime='2016-09-03 13:27:59',
             repeat every hour=22:01
                          -Schedules
PolicyName=offline data daily,ScheduleType=DAILY,StartTime='2016-08-18
                          13:19:59',
                          EndTime='2016-09-03 13:27:59', DaysInterval=10
                          -VerificationSchedules
BackupPolicyName='policy with schedule',BackupScheduleType='WEEKLY',Deferr
edBackupCount='1',
VerificationType='VERIFY SCHEDULED', VerifyOnSecondary='true', ScheduleType=
'WEEKLY', DaysOfTheWeek=[Friday, Saturday],
                          StartTime='2016-08-03 13:19:59', EndTime='2016-09-
03 13:27:59'
                          -VerificationSchedules
BackupPolicyName='offline data daily',BackupScheduleType='DAILY',DeferredB
ackupCount=11',
VerificationType='VERIFY AFTER BACKUP', VerifyOnSecondary='false'
                          INFO: The command 'Set-SmResourceGroup' executed
successfully.
```

## Set-SmResourceGroup - Modifies a resource group.

## **Description**

Modifies a resource group.

## **Usage**

sccli Set-SmResourceGroup -ResourceGroupName <resource group name> [-Description <description>] [-Tags <tag1,tag2,...,tagn>] [-PluginCode <SCO | SCU>] [-Policies <policy1, policy2, ..., policyN>] -Resources host=localhost.domain,type=Oracle Database,names=[db1,db2,db3] -Schedules PolicyName=name-of-the-policy,ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY],StartTime=YYYY-MM-DD hh:mm:ss,EndTime=YYYY-MM-DD hh:mm:ss,Repeat\_Every\_Hour=hh::mm,DaysInterval=number-of-days,DaysOfTheWeek=

[SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear= [January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth= [1,2,3 ... 30,31] -VerificationSchedules BackupPolicyName=name-of-the-backup-policy,BackupScheduleType=scheduletype-of-the-backup-policy,DeferredBackupCount=number-of-backup-count-to-be-deferred,VerifyOnSecondary=[true | false],VerificationType=[VERIFY\_AFTER\_BACKUP | VERIFY\_SCHEDULED],ScheduleType=[HOURLY | DAILY | WEEKLY | MONTHLY],StartTime=YYYY-MM-DD hh:mm:ss,EndTime=YYYY-MM-DD hh:mm:ss,Repeat\_Every\_Hour=hh::mm,DaysInterval=number-of-days,DaysOfTheWeek=

[SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY],MonthsOfTheYear= [January,February,March,April,May,June,July,August,September,October,November,December],DaysOfTheMonth= [1,2,3 ... 30,31] [-ExcludeArchiveLogDestinationsFromBackup 'location1,location2, ..., locationN'] [-BackupArchiveLogsAfterRecentMissingOne] [-RemoveCustomSnapShot] [-CustomSnapShotFormat '\$ResourceGroup\$Policy\$HostName\$ScheduleType\$CustomText'] [-SecondaryLocator 'Primary=<SVM>: <volume>,Secondary=<SVM>:<volume>'] [-EnableEmail] [-EmailTo <email address>] [-EmailFrom <email address>] [-EmailSubject <subject>] [-EmailPreference <ALWAYS | ON\_ERROR | ON\_ERROR\_OR\_WARNING | NEVER>] [-EnableEmailAttachment] [-SetConsoleOutputWidth]

## **Parameters**

#### -ResourceGroupName

Specifies the name of the resource group to be modified.

#### -Description

Provides an optional description for the resource group that you are modifying.

#### -Tags

Provides optional tags for the resource group.

#### -PluginCode

Specifies the plug-in code for which the resource group is created.

Possible Values: [SCO, SCU]

Default: SCO

#### -Policies

Specifies one or more polices you want to attach to the resource group. Multiple policies can be specified in a comma separated values.

#### -Resources

Specifies the resources you want to add to the resource group. You must provide the resource information in a key value format, and it must contain the resource name, type, and the host on which it is located. Valid type values are: Oracle Database. You can include comma-separated values for names. To specify resources from multiple host you can use -Resources option multiple times. For example, -Resources 'host=host1,type=Oracle Database,names=[db1,db2,db3]' -Resources 'host=host2,type=Oracle Database,names=[db3,db4]'

#### -Schedules

Specifies the schedules you want to add to the resource group. You must provide the schedule information in a key value format, and it must contain the policy name, schedule type, required schedule arguments depending on the schedule type and the start time. Schedule type can be HOURLY DAILY WEEKLY MONTHLY. It is necessary to specify the required arguments depending on the schedule type. HOURLY: Repeat\_Every\_Hour -Specifies that you want backups to be created with an interval of a designated hour::minute. The default value is 1. DAILY: DaysInterval - Specifies that you want backups to be created with an interval of a designated number of days. The default value is 1. WEEKLY: DaysOfTheWeek – Specifies that you want backups to be created on designated days of the week. The values are specified in a comma separated list. MONTHLY: MonthsOfTheYear - Specifies that you want backups to be created on designated months. The values are specified in a comma separated list. DaysOfTheMonth - Specifies that you want backups to be created on the designated days of the month. The values are specified in a comma separated list. If EndTime is not specified, schedules will run indefinitely.

#### -VerificationSchedules

Specifies the verification schedules you want to add to the resource group. Verification must be enabled for the schedule types specified in the policy to verify the backup. You must provide the verification schedules information in a key value format, and it must contain the backup policy name, backup schedule type, verification type. Depending on the verification type you need to specify other required schedule arguments. If verification type is VERIFY\_AFTER\_BACKUP then it is not required to specify the schedule details. However, if it is VERIFY\_SCHEDULED, then it is necessary specify schedule type and its related schedule arguments. These arguments are the same as you had specified for the -Schedules option. The verification schedule type cannot be lower than the backup schedule type. For example, if backup schedule type is WEEKLY then verification schedule type cannot be DAILY, it should be greater than or equal to WEEKLY.

#### -ExcludeArchiveLogDestinationsFromBackup

Specifies the archive log destinations to be excluded from backup. Archive log files present in the specified destinations will be excluded during log backup. Multiple entries can be specified using comma separated list. For example: -ExcludeArchiveLogDestinationsFromBackup '/arch/logs/on/local/disk1, /arch/logs/on/local/disk2'.

#### -BackupArchiveLogsAfterRecentMissingOne

Specifies that you want to backup archive log files, which are created after the most recent missing archive log files and ignore the files created prior to it. If this option is not specified, then all archive log files except the missing archive log files are be backed up.

#### -RemoveCustomSnapShot

Specifies removal of the custom naming format of the Snapshot copy.

#### -CustomSnapShotFormat

Specifies the custom naming format to be used for the Snapshot copy name. Specify the format using keywords like \$ResourceGroup, \$Policy, \$HostName, \$ScheduleType and \$CustomText.

#### -SecondaryLocator

Specifies the secondary (SnapVault or SnapMirror) storage location details (destination volume) for each unique primary storage (source volume) of all resources in resource group on which you want to perform secondary verification. Specify this option more than once to provide secondary storage location details for multiple unique primary storage. Primary (source volume) and secondary (destination volume) storage location details should be specified as name-value pairs in a comma separated list. For example: -SecondaryLocator 'Primary=oracle\_vs1:db1\_data\_vol,Secondary=oracle\_vs1\_mirror:db1\_data\_vol\_mirror' -SecondaryLocator 'Primary=oracle vs2:db1 log vol,Secondary=oracle vs2 mirror:db1 data log mirror'.

#### -EnableEmail

Indicates whether to enable email notification.

#### -EmailTo

Specifies to whom the email has to be sent.

#### -EmailFrom

Specifies from whom the email has to be sent.

#### -EmailSubject

Specifies subject for the email.

#### -EmailPreference

Specifies when emails should be sent.

Possible Values: [ALWAYS, ON\_ERROR, ON\_ERROR\_OR\_WARNING, NEVER]

#### -EnableEmailAttachment

Specifies that you are adding an email attachment.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example shows how to modify an existing resource group.

```
[root@rhel-linux ~]# sccli set-
SmResourceGroup -ResourceGroupName
resource_group_1
```

```
-Tags
                        'tag3,tag4'
                                  -Description 'Creating Resource Group' -
PluginCode
                                  'SCO'
                                  -Resources 'host=rhel-
linux.netapp.com, type=Oracle
                                  Database, names=[ORACLE DB1, ORACLE DB2]'
                                  -Policies
'policy with schedule, offline data daily, hourly'
                                  -Schedules
PolicyName=policy with schedule, ScheduleType=WEEKLY, StartTime='2016-08-18
13:19:59',
                                  EndTime='2016-09-03
13:27:59', DaysOfTheWeek=[Friday, Saturday]
                 -Schedules
PolicyName=hourly, ScheduleType=hourly, StartTime='2016-08-18
13:19:59', EndTime='2016-09-03 13:27:59',
                 repeat every hour=22:01
                                  -Schedules
PolicyName=offline data daily, ScheduleType=DAILY, StartTime='2016-08-18 13:19:59', EndTime="2016-09-03 13:27:59',
                                  DaysInterval=10
                                  -VerificationSchedules
BackupPolicyName='policy with schedule',BackupScheduleType='WEEKLY',Deferr
edBackupCount='1',
VerificationType='VERIFY SCHEDULED', VerifyOnSecondary='true', ScheduleType=
'WEEKLY', DaysOfTheWeek=[Friday, Saturday],
                                  StartTime='2016-08-03
13:19:59', EndTime='2016-09-03 13:27:59'
                                  -VerificationSchedules
BackupPolicyName='offline data daily',BackupScheduleType='DAILY',DeferredB
ackupCount='1', VerificationType='VERIFY AFTER BACKUP',
                                  VerifyOnSecondary='false'
                                  -ExcludeArchiveLogDestinationsFromBackup
'/mnt/local logs 1,/mnt/local logs 2'
                                  INFO: The command 'Set-SmResourceGroup'
executed successfully.
```

## Set-SmSMTPServer - Specifies the SMTP server to use for sending data protection job reports to yourself or to others.

## **Description**

Specifies the SMTP server to use for sending data protection job reports to yourself or to others. The settings are applied globally for any SnapCenter job for which you configure email notification.

## **Usage**

sccli Set-SmSMTPServer -SMTPServer <SMTP server name> -EmailFrom <Email from> -EmailTo <Email to> -EmailSubject <SMTP server name> -IsSendEmail [-SetConsoleOutputWidth]

## **Parameters**

#### -SMTPServer

Specifies the name of the SMTP server.

#### -EmailFrom

Specifies the sender's email address.

#### -EmailTo

Specifies the recipient's email address.

#### -EmailSubject

Specifies the subject of the email.

Default: SnapCenter Server Notifications.

#### -IsSendEmail

When specified, sends email from the SMTP server specified.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to set default settings for email notifications.

```
[root@rhel-linux ~]# sccli set-smsmtpserver -emailto
user1@example.com -emailfrom user2@example.comm -smtpserver
smtp_server_address -issendemail
INFO: The command 'Set-SmSMTPServer' executed successfully.
```

## Set-SmStorageConnection - Sets your Storage Virtual Machine (SVM) connection.

## **Description**

Modifies your existing Storage Virtual Machine (SVM) connections.

## **Usage**

## **Parameters**

#### -SVM

Specifies name or IP address of the Storage Virtual Machine.

#### -Protocol

Specifies the communication protocol you want to use to connect to the SVM. Possible Values: [HTTP, HTTPS]

#### -Port

Specifies the port for the SVM connection.

## -PreferredlpAddress

Specifies the preferred IP address for the SVM management or data LIF IP address.

#### -Timeout

Specifies the SVM connection timeout in seconds.

Default: 60 seconds

#### -Username

Specifies the user name for Storage Virtual Machine.

## -DisableAsupOnFailure

Disables Auto Support in case of any failure.

#### -DisableSysLog

Disables system log feature.

#### -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

#### -IsSecondary

If the SVM is the secondary storage system in a backup relationship, then specify this option.

## **Examples**

The following example shows how to modify an existing SVM connection.

```
[root@rhel-linux ~] # sccli Set-SmStorageConnection -SVM 'my-vsim2.eng.btc.netapp.in' -Protocol HTTPS
Enter the SVM user name: vsuser
Enter the SVM password:
INFO: Using '443' as default port.

INFO: The command 'Set-SmStorageConnection' executed successfully.
```

## Set-SvmPreferredDataPath - Modifies the SVM preferred data path.

## **Description**

Modifies the SVM preferred data path entry in storage preference configuration file.

## **Usage**

sccli Set-SvmPreferredDataPath -SVM <SVM Name> -DataPath <IP address or FQDN> [-SetConsoleOutputWidth]

## **Parameters**

#### -SVM

Specifies the name of the Storage Virtual Machine for which you want to modify preferred data path.

#### -DataPath

Specifies the preferred data path for the SVM. The data path can be IP address or FQDN.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to remove the SVM preferred data path.

```
[root@rhel-linux ~] # sccli Set-SvmPreferredDataPath -SVM 'tonic' -DataPath 10.228.9.121
INFO: SVM 'tonic' is configured with '10.228.9.123' preferred data path.
Are you sure you want to overwrite the existing SVM preferred data path?
Enter either [Y] Yes or [N] No (default is 'N'): Y
INFO: Preferred data path entry for SVM 'tonic' modified successfully.
INFO: The command 'Set-SvmPreferredDataPath' executed successfully.
```

# Uncatalog-SmBackupWithOracleRMAN - Uncatalogs the Oracle Database backup(s) in SnapCenter with Oracle Recovery Manager (RMAN).

## **Description**

Uncatalogs the Oracle Database backup(s) in SnapCenter with Oracle Recovery Manager (RMAN). Specify either backup names or ids to be uncataloged.

## **Usage**

sccli Uncatalog-SmBackupWithOracleRMAN [-BackupIds <backupId1, backupId2, backupId3 ...> | -BackupNames <backupName1, backupName2, backupName3 ...>] [-WaitForCompletion] [-SetConsoleOutputWidth]

## **Parameters**

#### -Backuplds

Specifies the id of backup that need to be uncataloged. Multiple backup ids can be specified in a comma separated list.

## -BackupNames

Specifies the name of the backup that need to be uncataloged. Multiple backup names can be specified in a comma separated list.

## -WaitForCompletion

Indicates whether to wait till the uncatalog job is completed.

## -SetConsoleOutputWidth

Sets the column width of the output to be displayed on the console.

## **Examples**

The following example displays how to remove a backup.

```
[root@rhel-linux ~] # sccli Uncatalog-SmBackupWithOracleRMAN - BackupNames 'stddb-ds_rhel-linux_11-24-2015_00.55.10.2377_0' Are you sure you want to uncatalog the specified backup(s) in SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): y
```

INFO: Job 'Uncataloging Backup(s) stddb-ds rhel-linux\_11-24-2015\_00.55.10.2377 0' QUEUED with jobId '42' INFO: The command 'Uncatalog-SmBackupWithOracleRMAN' executed successfully.

```
[root@rhel-linux ~]# sccli Uncatalog-SmBackupWithOracleRMAN - BackupIds '31,35'
Are you sure you want to uncatalog the specified backup(s) in SnapCenter?
Enter either [Y] Yes or [N] No (default is 'N'): y

INFO: Job 'Uncataloging Backup(s) stddb-ds rhel-linux_11-24-2015_00.55.10.2377_0,stddb-ds_rhel-linux_1T-24-2015_00.55.10.2377_1' QUEUED with jobId '42'
INFO: The command 'Uncatalog-SmBackupWithOracleRMAN' executed successfully.
```

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