



QUICK REFERENCE

EMC[®] Solutions Enabler Symmetrix[®] CLI Version 6.4

Quick Reference

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This quick reference summarizes the spectrum of EMC Solutions Enabler V6.4 Symmetrix CLI (SYMCLI) commands. It also identifies the required license keys and optional environment variables.

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License matrix

Table 1 can be used to determine which SYMCLI commands are licensed with each Solutions Enabler component.

Table 1 License matrix (Sheet 1 of 3)

Required component license	Command available
SYMAPI Server	storsrvd
	symapisrv
Base	symacl
	symaudit
	symauth
	symbcv
	symcfg
	symcg
	symcli
	symdev
	symdg
	symdisk
	symdrv
	symevent
	symgate
	syminq
	symlabel
	symld
	sympd
	symqos
	symreturn
	symstat
Configuration Manager	symconfigure
DeltaMark (Change Tracker)	symchg

Table 1 License matrix (Sheet 2 of 3)

Required component license	Command available
Device Masking	symconnect
	symmask
	symmaskdb
Double Checksum (Oracle PAK)	symchksum
Dynamic Cache Partitioning	symqos -cp
Mapping Solution (SRM)	symhost
	symhostfs
	symioctl
	symlv
	sympart
	symrdb
	symrslv
	symvg
Open Replicator/LM ^a Open Replicator/DM ^b	symrcopy
Optimization (Control)	symoptmz
SRDF [®] /Synchronous	symrdf
	symioctl
SRDF/A	symrdf set mode async (<i>Asynchronous mode support</i>)
SRDF/Automated Replication	symreplicate ^c
SRDF/Consistency Groups	symcpg -cg <i>CgName</i> enable
SRDF/Star	symstar ^d
Symmetrix Priority Control	symqos -pst
TimeFinder [®] or TimeFinder/Mirror	symioctl
	symmir
	symreturn

Table 1 License matrix (Sheet 3 of 3)

Required component license	Command available
TimeFinder/Clone	symclone symmir ^e
TimeFinder/Consistency Groups	symmir split -consistent symreplicate start -consistent symsnap activate -consistent symclone activate -consistent
TimeFinder/Snap	symsnap

- a. Online Pull only.
- b. All functions except Online Pull.
- c. Also requires SRDF and TimeFinder licenses.
- d. Also requires SRDF/A, SRDF/Synch, and SRDF/CG licenses.
- e. For Emulation mode.

SYMCLI commands

This section provides a quick reference to each SYMCLI command's syntax. In addition, it identifies the component license(s) needed to run each command and the Solutions Enabler product guide to refer to for conceptual information. For complete command descriptions, refer to the *EMC Solutions Enabler Symmetrix CLI Command Reference*.

symacl *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Sets up or updates Symmetrix® Access Control information.

```
symacl -h

symacl <-file CommandFile | (redirect stdin)> [-v|-noecho]
    preview

symacl  -sid SymmID [-v|-noecho]
    <-file CommandFile | (redirect stdin)>
    prepare

    commit [-force] [-restore]

symacl
    release -sid SymmID [-noprompt]

symacl [-sid <SymmID|ALL>]
    list [-v]

    list [-accpool | -accgroup | -acl]

    show accpool PoolName [-acl]

    show accgroup GroupName [-acl]

symacl
    backup -sid SymmID -file CommandFile

symacl -unique
```

symapisrv *Component License: SYMAPI Server* *Product Guide: Symmetrix Array Management CLI*

Starts or stops an executable image, called the SYMAPI server, which executes remote SYMAPI routines with the remotely-connected Symmetrix arrays.

Note: The symapi server command is still supported in V6.3, however, it will soon be deprecated. It is recommended that you transision your server operation to the new storsrvd daemon.

```
symapisrv [-h] [-background]

symapisrv
    start
    start [-service Servicename]
    start [-port Port] [secllevel Seclevel]

symapisrv [-h] [-background]
    stop [-port Port]
```

symaudit

*Component License: Base
Product Guide: Symmetrix Array Management CLI*

Allows records to be extracted from a Symmetrix audit log file to determine which application on which host initiated actions that directed Symmetrix array behavior. In addition, it provides the ability to determine the date, time, and size of the current log file.

```
symaudit show -sid SymmID [-h]

symaudit list -sid SymmID [-v] [-text] [-h]
  [-function_class [-exclude] ClassName][,ClassName,
  ...]]
  [-action_code [-exclude] ActionName][,ActionName, ...]]
  [-host HostName]
  [-vendor_id VendorId]
  [-application_id ApplId][,ApplId, ...]]
  [-activity_id ActivityId]
  [-symdev_range StartDevname:EndDevname]
  [-start_date date_time] [-end_date date_time]
  [-record_num RecordNumber]
  [-n RecordCount]
  [-last_n RecordCount]
  [-user UserName]

symaudit monitor -sid SymmID [-text | -v] [-h]
  [-i Interval] [-c Count]
```

symauth

*Component License: Base
Product Guide: Symmetrix Array Management CLI*

AllowSets or updates the Symmetrix array User Authorization information.

```
symauth -h

symauth [-sid SymmID] [-h] [-noprompt]
  enable
  disable

symauth [-sid SymmID] [-h] [-noprompt]
  set enforcement <advise | enforce>

symauth [-sid SymmID] [-h] [-noprompt]
  set server_policy <trust_client | validate_client>

symauth [-sid SymmID] [-h]
  list
  list -users [-by_role | -by_user | -by_domain]

symauth [-h]
  list -roles
  show -username

symauth [-sid SymmID] [-v | -noecho] [-noprompt]
  <-file CommandFile | "redirect stdin">
  preview
  commit
```

symbcv *Component License: Base Product Guide: Symmetrix TimeFinder Family CLI*

Performs TimeFinder operations on one or more Symmetrix BCV (Business Continuance Volume) devices.

```
symbcv [-sid SymmID] [-h] [-offline] [-v]
        [-resv] [-i Interval] [-c Count]

    list pd
    list [dev]

symbcv -g DgName [-h] [-offline]

    associate pd PdevName [LdevName]

    associateall [pd|-host HostName]
        [-sid SymmID] [-SA <#|ALL>] [-P #]
        [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
        [-RANGE SymDevStart:SymDevEnd]

    disassociate pd PdevName [-force]

    move pd PdevName DestDgName [-force] [-rename]

    copy pd PdevName DestDgName [-force] [-rename]

symbcv -g DgName
        [-h] [-offline]
        [-sid SymmID]
        [[[-rdf] [-bcv]] | [-rrdf]]
        [-rdfg GrpNum] [-remote_RDFG Remote_Grp_num]

    associate dev SymDevName [LdevName]

    associateall [dev|-host HostName]
        [-rdfg GrpNum] [-remote_RDFG Remote_Grp_num]
        [-SA <#|ALL>] [-P #]
        [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
        [-RANGE SymDevStart:SymDevEnd]

    disassociate dev SymDevName [-force]

    move dev SymDevName DestDgName [-force] [-rename]

    copy dev SymDevName DestDgName [-force] [-rename]

symbcv -g DgName
        [-h] [-offline] [[[-rdf] [-bcv]] | [-rrdf] [-force]]

    disassociate ld LdevName [-force]
    move ld LdevName DestDgName [-rename]

    moveall DestDgName [-SA <#|ALL>] [-P #]
        [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
        [-RANGE SymDevStart:SymDevEnd] [-rename]

    copy ld LdevName DestDgName [-rename]

    copyall DestDgName [-SA <#|ALL>] [-P #]
        [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
        [-RANGE SymDevStart:SymDevEnd] [-rename]

    rmall
        [-SA <#|ALL>] [-P #]
        [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
        [-RANGE SymDevStart:SymDevEnd]
```

```

symbcv -cg CgName
        [-h] [-offline]

        associate pd PdevName [LdevName]

        associateall [pd|-host HostName]
            [-sid SymmID [-SA <#|ALL>] [-P #]
            [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
            [-RANGE SymDevStart:SymDevEnd]
        disassociate pd PdevName [-force]

        move pd PdevName DestCgName [-force]

        copy pd PdevName DestCgName [-force]

symbcv -cg CgName -sid SymmID [-h] [-offline] [[-rdf]
        [-bcv] | -rrdf][-rdfg GrpNum]
        [-remote_rdfg Remote_GrpNum]

        associate dev SymDevName [LdevName]

        associateall [dev|-host HostName]
            [-SA <#|ALL>] [-P #]
            [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
            [-RANGE SymDevStart:SymDevEnd]

        disassociate dev SymDevName [-force]

        move dev SymDevName DestCgName [-force]

        disassociate ld LdevName [-force]

        move ld LdevName DestCgName [-force] [-rename]

        copy ld LdevName DestCgName [-force] [-rename]

symbcv -cg CgName -sid SymmID
        [-h] [-offline] [-force]
        [[-rdf] [-bcv] | -rrdf]
        [-rdfg GrpNum] [-remote_rdfg Remote_GrpNum]

        moveall DestDgName
            [-SA <#|ALL>] [-P #]
            [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
            [-RANGE SymDevStart:SymDevEnd] [-rename]

        copyall DestDgName
            [-SA <#|ALL>] [-P #]
            [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
            [-RANGE SymDevStart:SymDevEnd] [-rename]

        rmall
            [-SA <#|ALL>] [-P #]
            [-CAP #] [-N #] [-R1|-NOR1] [-R2|-NOR2]
            [-RANGE SymDevStart:SymDevEnd]

```

symcfg

Component License: Base
Product Guide: Symmetrix Array Management CLI

Discovers or displays Symmetrix configuration information. Refreshes the host's Symmetrix database file or removes Symmetrix information from the database file. Rebuilds the set of devices known to the local host. It can also be used to view or release a 'hanging' Symmetrix exclusive lock, online or offline RDF (RA) or front-end (SA or FA) director ports.

```
symcfg -h

symcfg [-version | -kit | -db]

symcfg
  discover [-all | -symmetrix | -clariion | -pdev
           [-sid SymmID] | -sid SymmID] [-cache | -nocache]

  discover -clariion -file AsstDiscoFile

  scan

symcfg
  sync [-sid SymmID]
      [-rdf | -bcv | -local | -dirsts | -snap | -cfgmgr | -rcopy]

  sync -sid SymmID -env_data

  remove [-sid SymmID] [-noprompt]

  release [-sid SymmID] [-noprompt] [-force] [-lockn #]

  verify -sid SymmID

symcfg sync -clarrion [-cid ClarID]

symcfg [-sid SymmID] [-offline]
  list [-CA <# | ALL>] [-v]
  list [-DA <# | ALL>] [-v]
  list [-DIR <# | ALL>] [-v]
  list [-DIR <# | ALL>] [-address [-available] [-fibre]]
  list [-EA <# | ALL>] [-v]
  list [-EA <# | ALL>] [-P #]] [-address [-available]]
  list [-EF <# | ALL>] [-v]
  list [-EF <# | ALL>] [-P #]] [-address [-available]]
  list [-FA <# | ALL>] [-P #]] [-address [-available]]
  list [-FA <# | ALL>] [-P #]] [-v [-ALL]]
  list [-RA <# | ALL>] [-switched] [-v]
  list [-SA <# | ALL>] [-P #] [-v [-ALL]]
  list [-SA <# | ALL>] [-P #] [-address [-available] [-fibre]]
  list [-SE <# | ALL>] [-P #] [-v]

symcfg list -clarrion [-cid ClarID]

symcfg [-sid SymmID]

  list -memory

  list -rdfg <# | ALL> [-dynamic | -static] [-offline]

  list -status

symcfg [-sid SymmID] [-v] [-offline]

  list [-SA <# | ALL>] [-port]
  list [-FA <# | ALL>] [-port]
  list [-RA <# | ALL>] [-port]
```

```

symcfg [-sid SymmID] [-v]

    list [-LRU <#|ALL>] [-offline]
    list [-lock]
    list [-lockn <# | RDFA | RDF | SRDF_MSCS | GNS | ALL>]
    list [ssid]
    list [-connections [-sorthost] [-capacity]]
    list [-applications [-client] [-host HostName]
          [-offline]]
    list [-timestamps [-sid SymmID | -host HostName]
          [-time [mm/dd[/yy]:][hh:mm[:ss]]] [-chronological]
          [-offline]]
    list [-cuimage]

    show -applications <AppID> [-client] [-host HostName]
    show -cuimage cuImageNumber [-ssid_num SSID]

symcfg -sid SymmID [-v] [-offline]

    list -env_data [-service_state [not]degraded |
                  [not]failed | [not]normal]

    show -env_data BayName

symcfg [-v]

    list [-services] [offline]
    list [-semaphores]

symcfg [-sid SymmID] [-offline]

    list [-pools [-snap] [-rdfa_dse [-rdfg GrpNum]]
          [-fba] [-ckd3390] [-ckd3380] [-as400] [-all] [-v]]
    list [-savedevs [-fba] [-ckd3390] [-ckd3380] [-as400]]

    show pool PoolName [-snap | -rdfa_dse] [-all]
          [-fba | -ckd3390 | -ckd3380 | -as400]

symcfg -RA <#|ALL> [-sid SymmID] [-noprompt] [-v]

    online
    offline

symcfg -SA # -P # [-sid SymmID] [-noprompt] [-v]

    online
    offline

symcfg

    authorization list [-vmware]

    authorization <add | update>
      -host HostName -username UserName -password PassWord
      [-vmware -namespace Namespace -vmport Port]

    authorization delete -host HostName -username UserName
      [-vmware]

```

symcg *Component License: Base and SRDF/CG (for enable) Product Guide: Symmetrix Array Management CLI*

Performs operations on a Symmetrix RDF composite group (cg).

symcg -h

```
symcg
  create CgName [-type REGULAR | RDF1 | RDF2]
                    [-apidb | -ppath | -rdf_consistency]
  delete CgName [-force] [-symforce]
  rename OldCgName NewCgName

  export CgName [-f FileName] [-rdf]
  exportall CgName [-f FileName] [-rdf]

  import CgName [-f FileName] [-apidb | -ppath |
                    -rdf_consistency] [-rename]
  importall CgName [-f FileName] [-apidb | -ppath |
                    -rdf_consistency]

  list [-apidb | -ppath | -rdf_consistency] [-offline] [-v]
  list [-inactive]
  show CgName [-inactive] [-offline | -lock]

  activate CgName [-noprompt]
  activateall [-noprompt]
  release CgName [-force] [-noprompt] [-sid SymmID]
                    [-lock #]

symcg -cg CgName
  add [pd] PdevName [LdevName]
  remove [pd] PdevName [-force] [-symforce]
  show ld LdevName
  rename ld OldLdevName NewLdevName
  remove ld LdevName [-force] [-symforce]
  remove [pd] PdevName [-force] [-symforce]
  move ld LdevName DestCgName [-force] [-rename]
  copy ld LdevName DestCgName [-force] [-rename]
  set [-name Name | -recovery_rdfg GrpNum
        [-rdfg SymmID: GrpNum[,GrpNum...] | all[,...] |
        Name:Name[,Name]]]

symcg -cg CgName -sid SymmID [-rdf -rdfg GrpNum]
  add dev SymDevName [LdevName] [-vdev | -tgt]
  remove dev SymDevName [-force] [-symforce]

symcg -cg CgName [-sid SymmID] [-rdfg GrpNum]
  [-RANGE SymDevStart:SymDevEnd] [-vdev | -tgt]
  addall [[pd]|dev [-rdf]] [-R1|-R2]
  rmall [-rdf] [-force] [-symforce]

symcg -cg CgName [-sid SymmID] [-rdfg GrpNum]
  [-RANGE SymDevStart:SymDevEnd] [-vdev | -rvdev |
  - tgt | -rtgt]
  moveall DestCgName [-force] [-symforce]
  copyall DestCgName [-force] [-symforce]

symcg -cg CgName [-i Interval] [-c Count] [-noprompt]
  [-rdfg Name:Name] [-star] [-v]
  enable
  disable [-force]

symcg -cg CgName [-sid SymmID] [-noprompt] [-v]
  [-bcv | -vdev | -tgt] [-star] [-force]
  write_disable [LdevName [LdevName...]]
  rw_enable [LdevName [LdevName...]]
  relabel [LdevName [LdevName...]]
```

```

symchg -cg CgName [-sid SymmID] [-v] [-noprompt] [-force]
          [-star] [-bcv|-rbcv|-brbcv|-rrbcv|
          -vdev|-rvdev|-tgt|-rtgt]]
          [-rdfg SymmID: GrpNum[,GrpNum...] |
          all[,...] | Name:Name[,Name]]
ready [LdevName [LdevName...]]
not_ready [LdevName [LdevName...]]
hold [LdevName [LdevName...]]
unhold [LdevName [LdevName...]]

```

symchg *Component License: DeltaMark Product Guide: Symmetrix Array Management CLI*

Marks areas of Symmetrix disk storage so that objects occupying those areas can be monitored for changes by the Change Tracker.

```
symchg -h
```

```

symchg [-v] [-sid SymmID]
  create dev SymDevname
  delete dev SymDevname
  mark dev SymDevname
  remove dev SymDevname

```

```

symchg <-g DgName | -cg CgName> [-bcv] [-v]
  create ld LdevName
  delete ld LdevName
  mark ld LdevName
  remove ld LdevName

```

```

symchg <-file DevFile> -sid SymmID [-v]
  create
  delete
  mark
  remove

```

```

symchg [-v] [-sid SymmID]
  list [-session [dev]]

```

```

symchg [-v] [-session] [[-reset | -multi] [-i Interval]
  [-c Count]]
  view dev SymDevname [-sid SymmID]
  view <-g DgName | -cg CgName> [-bcv] [-log LogFile]
  view <-g DgName | -cg CgName> ld LdevName
  view -file DevFile [-log LogFile]

```

```

symchg [-ra NumRAs] [-rate KB/s] [-resync [mmmm|hh:mm]]
  [-start mmdyyy yy hh:mm] [-stop mmdyyy yy hh:mm]
  [-backend] [-range start:end] [-v]
  report -log LogFile <-g DgName | -cg CgName> [-bcv]
  report -file DevFile -log LogFile [-sid SymmID]

```

symchksum *Component License: Double Checksum Product Guide: Symmetrix Array Controls CLI*

Performs Symmetrix checksum operations on the RDBMS database devices, RDBMS tablespace devices, or Symmetrix devices.

```
symchksum [-h]
```

```
symchksum [-sid SymmID]
```

```
list [-v]
```

```

show dev SymDevName [-blocks|-kb|-mb]

symchksum -type generic -sid SymmID [-g DeviceGroup]
        [dev SymDevName] [-range SymDevStart:SymDevEnd]

enable

disable

symchksum [-type RdbType] [-db DbName] [-tbs TbsName]
        [-control] [-redo] [-h]

enable [-reject_io] [-fractured_reject_io] [-discard]
        [-phone_home] [-v] [-check_dba]
        [-check_all_blocks] [-straddle]
        [-suppress_feature Keyword[, Keyword]]

disable [-v]

validate [-v]

verify [-v]

disable -force -sid SymmID dev SymDevName

```

symcli *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Provides a brief description of all the commands included in the Symmetrix Command Line Interface (SYMCLI).

```
symcli [-env] [-def] [-h] [-v]
```

symclone *Component License: TimeFinder/Clone* *TimeFinder/ CG (for -consistent)* *Product Guide: Symmetrix TimeFinder Family CLI*

Performs TimeFinder clone operations on a Symmetrix device group, composite group, devices within a device group, or devices in a device file.

```

symclone -h

symclone -g DgName [-v] [-noprompt] [-force] [-i Interval]
        [-c Count] [-star] [-preserveTGTLocks -lockid LockNum]
        [[-rdf [-bcv]] | -rrbcv]

create [-opt|-exact] [[-differential] [-copy|-precopy]]
        [-skip] [-concurrent]
        <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
        <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
        <<[LdevName [[SYM|BCV] ld LdevName]]>...>

split [skip]
        <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
        <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
        <<[LdevName [[SYM|BCV] ld LdevName]]>...>

activate [-vxfs <MountPoint...>]
        [-ppath <SRCDEVS|PowerPathPdevName...>]
        [-rdb -dbtype DbType [-db DbName]]
        [-consistent [-both_sides]]
        [-preaction Script] [-postaction Script]
        [-not_ready] [-skip] [-concurrent]
        <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
        <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
        <<[LdevName [[SYM|BCV] ld LdevName]]>...>

```

```

terminate[-symforce] [-skip]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

recreate    [-skip] [-precopy]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

establish    [-vxfs <MountPoint...>]
    [-ppath <SRCDEVS|PowerPathPdevName...>
    [-rdb -dbtype DbType [-db DbName]]
    [-consistent -both_sides]]
    [-preaction Script] [-postaction Script]
    [-not_ready] [-skip]
    [-full [-opt|-exact]] [-concurrent]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

restore    [-preaction Script] [-postaction Script]
    [-full]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

symclone -g DgName [-offline] [-i Interval] [-c Count]
    [[-rdf [-bcv]] | -rrbcv]

query    [LdevName [LdevName...]] [-multi]

verify    [-created|-copied|-copyinprog|-copyonaccess|
    -copyonwrite |-precopy] [-cycled] | -recreated |
    -restored |-restinprog | split] [-force]
    [-concurrent]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

symclone -g DgName [-h] [copy | precopy | nocopy] [-force]
    [[-rdf [-bcv]] | -rrbcv]

set mode    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

symclone -sid SymmID <-file DeviceFileName |
    -noprompt 'redirect stdin'> -force] [-noprompt]
    [-i Interval] [-c Count] [-star]
    [-preserveTGTLocks -lockid LockNum] [-v] [-h]

create    [[-differential] [-copy | -precopy]] [-skip]

split        [skip]

activate    [-vxfs <MountPoint...>]
    [-ppath <SRCDEVS | PowerPathPdevName...> |
    [-rdb -dbtype DbType [-db DbName] ]
    [-consistent [-both_sides]]
    [-preaction Script] [-postaction Script]
    [-not_ready] [-skip]

terminate    [-symforce] [-skip]

recreate    [-skip] [-precopy]

establish    [-vxfs <MountPoint...>]
    [-ppath <SRCDEVS | PowerPathPdevName...> |
    [-rdb -dbtype DbType [-db DbName] ]
    [-consistent]
    [-preaction Script] [-postaction Script]
    [-not_ready] [-skip]
    [-full [-opt | -exact]]

```

```

restore  [-preaction Script] [-postaction Script]
         [-full]

symclone -sid SymmID <-file DeviceFileName |
         -noprompt 'redirect stdin'>
         [-h] [-force] [-i Interval] [-c Count]

query [-multi]

verify   [-created | -copied | -copyinprog |
         -copyonaccess | -copyonwrite | -precopied
         [-cycled] | -recreated | -restored | -restinprog
         | -split] [-force] [-concurrent]

set mode  [precopied|copied|nocopied]

symclone [-sid SymmID] [-h] [-i Interval] [-c Count]
         [-offline] [-v]

list

symclone -cg CgName [-h] [-v] [-noprompt]
         [-force] [-i Interval] [-c Count] [-star]
         [[-rdf [-bcv]] | -rrbcv]
         [-sid SymmID | -rdfg
         <SymmID:<GrpNum[, GrpNum, ...] | all> [, ...] |
         name:Name[, Name, ...]>]]

create    [-opt | -opt_rag | -exact] [[-differential]
         [-copy | -precopied]] [-skip]
         [-concurrent]
         <<[LdevName [[SYM|BCV] pd PdevName]]>...>
         <<[LdevName [[SYM|BCV] dev SymDevName]]>...>
         <<[LdevName [[SYM|BCV] ld LdevName]]>...>

split     [skip]
         <<[LdevName [[SYM|BCV] pd PdevName]]>...>
         <<[LdevName [[SYM|BCV] dev SymDevName]]>...>
         <<[LdevName [[SYM|BCV] ld LdevName]]>...>

activate  [-vxfs <MountPoint...>]
         [-ppath <SRCDEVS | PowerPathPdevName...>]
         [-rdb -dbtype DbType [-db DbName] ]
         [-consistent [-both_sides]]
         [-preaction Script] [-postaction Script]
         [-not_ready] [-skip] [-concurrent]
         <<[LdevName [[SYM|BCV] pd PdevName]]>...>
         <<[LdevName [[SYM|BCV] dev SymDevName]]>...>
         <<[LdevName [[SYM|BCV] ld LdevName]]>...>

terminate [-symforce] [-skip]
         <<[LdevName [[SYM|BCV] pd PdevName]]>...>
         <<[LdevName [[SYM|BCV] dev SymDevName]]>...>
         <<[LdevName [[SYM|BCV] ld LdevName]]>...>

recreate  [-skip] [-precopied]
         <<[LdevName [[SYM|BCV] pd PdevName]]>...>
         <<[LdevName [[SYM|BCV] dev SymDevName]]>...>
         <<[LdevName [[SYM|BCV] ld LdevName]]>...>

establish [-vxfs <MountPoint...>]
         [-ppath <SRCDEVS | PowerPathPdevName...>]
         [-rdb -dbtype DbType [-db DbName]]
         [-consistent]
         [-preaction Script] [-postaction Script]
         [-not_ready] [-skip]
         [-full [-opt | -opt_rag | -exact]]
         [-full [-opt | -exact]] [-concurrent]
         <<[LdevName [[SYM|BCV] pd PdevName]]>...>
         <<[LdevName [[SYM|BCV] dev SymDevName]]>...>
         <<[LdevName [[SYM|BCV] ld LdevName]]>...>

restore   [-preaction Script] [-postaction Script]
         [-full]
         <<[LdevName [[SYM|BCV] pd PdevName]]>...>

```

```

    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

symclone -cg CgName [-h] [-offline] [-i Interval]
    [[-rdf [-bcv]] | -rrbcv]
    [-c Count] [-sid SymmID |
    -rdfg <SymmID:<GrpNum[,GrpNum,...]|all> [,...] |
    name:Name[,Name,...]>]]

query      [-multi] [LdevName [LdevName...]]

verify     [-created | -copied | -copyinprog |
    -copyonaccess|-copyonwrite | -precopy [-cycled]
    | -recreated | -restored |-restinprog |-split]
    [-force] [-concurrent]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

symclone -cg CgName [-h] [copy | precopy | nocopy] [-force]
    [[-rdf [-bcv]] | -rrbcv]

setmode <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...>

```

symconfigure *Component License: Configuration Manager Product Guide: Symmetrix Array Controls CLI*

Allows the user to manage configuration changes affecting devices of a specified Symmetrix array, as well as manage dynamic (hot) spares.

```

symconfigure -h

symconfigure list -sid SymmID [-v | -freespace
    [-units cylinders | MB]]

symconfigure -sid SymmID [-noprompt] [-noecho] [-v]
    [-i Interval] [-c Count]
    [-f[file] CmdFile | 'redirect stdin']
    [-reserve_id ResvID[,ResvID[,ResvID]]]
    [-remote_reserve_id ResvID[,ResvID[,ResvID]]]

    preview
    prepare
    commit

symconfigure verify -sid SymmID

symconfigure query -sid SymmID [-i Interval] [-c Count] [-v]

symconfigure abort -sid SymmID

symconfigure -version [-v] [-sid SymmID]

symconfigure -sid SymmID [-expire ExpirationDate]
    -f[file] CmdFile [-noprompt] [-v]
    -owner Owner -comment UserComment
    [-enforce | -advise]

    reserve

symconfigure -sid SymmID [-noprompt]
    -reserve_id ResvID [,ResvID [,ResvID]]

    release

symconfigure -sid SymmID -reserved
    list

symconfigure -sid SymmID -reserve_id ResvID
    show

```

symconnect *Component License: Device Masking Product Guide: Symmetrix Array Controls CLI*

Allows the administrator to setup or modify the Symmetrix security functionality, including CHAP authentication and Radius server.

```
symconnect -h

symconnect -sid SymmID [-dir <#|all> -p <#|all>] [-v]
               [chap | radius] [-iscsi <iscsi> |
               -initiator] [-dir_port]
    list

symconnect -file FileName [-dir <#|all> -p <#|all>] [-v]
               [-iscsi <iscsi> | -initiator] [-dir_port]
    list

symconnect -sid SymmID -iscsi <iscsi> -dir # -p #
    set chap -cred <Credential> -secret <Secret>
    set radius

symconnect -sid SymmID -iscsi <iscsi>
               [-dir <#|all> -p <#|all>]
    enable <chap | radius>
    disable <chap | radius>
    delete <chap | radius>

symconnect -sid -dir # -p #
    set chap -cred <Credential> -secret <Secret>
    set radius -server <ServerName> -ip <Ip> -key <Key>
               [-port <Port>]
               -rank <primary | backup1 | backup2>
               [-c Count -i Interval]

symconnect -sid SymmID [-dir <#|all> -p <#|all>]
    enable chap
    disable chap
    delete chap
    enable radius [-rank <primary | backup1 | backup2>]
    disable radius [-rank <primary | backup1 | backup2>]
    delete radius [-rank <primary | backup1 | backup2>]

symconnect -sid SymmID -file FileName [-noprompt]
    backup <chap | radius>
    restore <chap | radius>
    init <chap | radius>
```

symdev *Component License: Base Product Guide: Symmetrix Array Management CLI*

Displays information for the selected, or all, Symmetrix devices.

`symdev -h`

```
symdev [-sid SymmID] [-offline] [-v] [-resv] [-wwn] [-all]
  list [-SA <#|ALL>] [-P #] [-scsi] [-fibre]
    [-RANGE SymDevStart:SymDevEnd] [-R1] [-R2] [-cyl]
    [-CAP #] [-N #] [-vcm] [-held] [-gige] [-ficon] [-escon]
    [-noport|-firstport|-multiport] [-bcv|-nobcv|-drv]
    [-meta] [-hotspare] [-dynamic] [-worm] [-vdev]
    [-savedev] [-raids] [-rdfa] [-disk_group nn]
    [-raid5 [-protection 3+1 | 7+1]]
    [-raid6 [-protection 6+2 | 14+2]]
    [-emulation fba | ckd | as400 | celerra] [-star_mode]
    [-star_sync_target] [-star_async_target]
    [-half_pair] [-dup_pair] [-bcv_emulation]
    [-reserved | -noreserved]
    [-service_state [not]degraded | [not]failed |
    [not]normal]

  list pd [-SA <#|ALL>] [-P #] [-scsi] [-fibre]
    [-RANGE SymDevStart:SymDevEnd] [-R1] [-R2] [-cyl]
    [-CAP #] [-N #] [-vcm] [-held] [-gige] [-ficon] [-escon]
    [-noport|-firstport|-multiport] [-bcv|-nobcv|-drv]
    [-meta] [-hotspare] [-dynamic] [-worm] [-vdev]
    [-savedev] [-raids] [-rdfa] [-disk_group nn] [-raid5]
    [-raid5 [-protection 3+1 | 7+1]]
    [-raid6 [-protection 6+2 | 14+2]]
    [-emulation fba | ckd | as400 | celerra] [-star_mode]
    [-star_sync_target] [-star_async_target]
    [-half_pair] [-dup_pair] [-bcv_emulation]
    [-reserved | -noreserved]
    [-service_state [not]degraded | [not]failed |
    [not]normal]

symdev [-sid SymmID] [-offline]
  list [-DA <#|ALL>] [-interface <#|ALL>]
    [-disk <#|ALL>] [-hyper <#|ALL>] [-firstport]

symdev [-sid SymmID] [-offline]
  list -space [-cyl] -DA <#|ALL>

symdev [-sid SymmID] [-v]
  list -lock [-RANGE SymDevStart:SymDevEnd]

symdev [-sid SymmID] [-offline]
  list -inventory

symdev [-cid ClariID] [-offline]
  list -clariion [-CAP #] [-N #]
    [-RANGE SymDevStart:SymDevEnd]

symdev [-sid SymmID] [-offline] [-cyl]
  show SymDevName

symdev [-sid SymmID] [-force]
  release [-lock #] [-RANGE SymDevStart:SymDevEnd]
    [-noprompt]

symdev -sid SymmID [-noprompt] [-celerra] [-star]
  rw_enable      SymDevName [-SA <#|ALL>] [-P #]]
  write_disable  SymDevName [-SA <#|ALL>] [-P #]]
  ready          SymDevName
  not_ready      SymDevName
  relabel        SymDevName
```

```
hold          SymDevName
unhold        SymDevName [-symforce]
```

```
symdev -sid SymmID -file FileName [-noprompt][-celerra]
        [-star]
rw_enable    [-SA <#|ALL> [-P #]]
write_disable [-SA <#|ALL> [-P #]]
ready
not_ready
relabel
hold
unhold [-symforce]
```

symdmg *Component License: Base Product Guide: Symmetrix Array Management CLI*

Performs operations on a Symmetrix device group.

```
symdmg -h
```

```
symdmg
create DgName [-type REGULAR | RDF1 | RDF2]

delete DgName [-force]

export DgName [-f FileName] [-delete]
        [[-rdf [-rdfg GrpNum]] | [-sid SymmID]]

exportall [-delete] [-f FileName]
        [[-rdf [-rdfg GrpNum]] | [-sid SymmID]]

import DgName [-f FileName]

importall [-f FileName]

dg2file DgName [-f FileName] [-ftype STD | R1BCV |
        STD_BCV | STD_R1BCV | STD_VDEV | BCV_VDEV]

file2dg DgName [-f FileName]
        [-type REGULAR | RDF1 | RDF2]

dg2cg DgName CgName [-rename] [-force] [-bcv | -nobcv |
        -rbcv | -rrbcv | -brbcv | -vdev | -rvdev | -tgt |
        -rtgt] [-apidb | -ppath | -rdf_consistency]

list [-sid SymmID] [-offline] [-v]

list [-inactive]

show DgName [-offline | -lock | -inactive]

activate DgName [-noprompt]

activateall [-noprompt]

rename DgName NewDgName

release DgName [-force] [-lock #] [-noprompt]
```

symdisk *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Reports on the configuration and status of disks and their hypervisors within Symmetrix arrays.

```
symdisk [-h]

symdisk [-sid SymmID] [-v [-hypers][-spare_info] [-gaps]]
        [-hotspares] [-cyl][-by_diskgroup] [-disk_group #]
        list [-da <#|ALL>] [-interface <#|ALL>] [-tid <#|ALL>]

symdisk [-sid SymmID] [-cyl]
        show DiskAddress [-gaps_only]
```

symdrv *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Displays information for selected DRV devices.

```
symdrv -h

symdrv [-sid SymmID] [-offline] [-v]
        list [-CAP #] [-i Interval] [-c Count]
```

symevent *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Enables the monitoring and tracking of events on Symmetrix arrays.

```
symevent [-h]
symevent [-sid SymmID] [-v] [-warn | -error | -fatal]

        monitor [-i Interval] [-c Count]

        list [-start <Date:Time>] [-end <Date:Time>] [-dir]
```

symgate *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Performs support operations on a gatekeeper device.

```
symgate [-offline] [-h]
        associate pd PdevName -g DgName

        disassociate pd PdevName -g DgName

        define pd PdevName

        undefine pd PdevName

symgate [-offline][-sid SymmID] [-h]
        associate dev SymDevName -g DgName

        disassociate dev SymDevName -g DgName

        define dev SymDevName

        undefine dev SymDevName

symgate list [-h] [-offline][-sid SymmID] [-v]
```

symhost *Component License: Mapping Solution* *Product Guide: Symmetrix SRM CLI*

Displays host configuration information and performance statistics.

```
symhost show -config [-h]

symhost stats [-h] [-i Interval] [-c Count]
               [-type CPU | MEMORY | DISK | ALL]
```

symhostfs *Component License: Mapping Solution* *Product Guide: Symmetrix SRM CLI*

Displays mapping information about file systems, directories, and regular files that are defined on the host system.

```
symhostfs -h

symhostfs [-meta|-data] [-kb | -mb | -blocks]

list      [ObjName] [-file FileName] [-dir DirName] [-R] [-v]

show      ObjName [-collapse|-expand|
                  -no_extents|-phys_collapse]
```

syminq *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Issues a SCSI INQUIRY command, and optionally a SCSI READ CAPACITY command, on one or all devices. In addition, it can be used to obtain a list of the local host's HBAs.

```
syminq [-h]

syminq [-sym] [-bcv] [-powerpath] [PdevName] [-symmids]
        [-la | -nocapacity] [-pdevfile] [-cache | -nocache]
        -v [-nocapacity]] [-copa] [-wwn [-colons]]
        [-winvol]

syminq [-clariion] [-powerpath] [PdevName] [-cids]
        [-la | -nocapacity] [-v [-nocapacity]]
        [-wwn [-colons]]

syminq [-hds] [PdevName] [-hids] [-la | -nocapacity]
        [-v [-nocapacity]]

syminq [-storworks] [PdevName] [-swids] [-la | -nocapacity]
        [-v [-nocapacity]]

syminq hba [-fibre | -scsi | -iscsi | -snia]
```

symioctl *Component License: TimeFinder, SRDF, or Mapping Solution. Product Guides: Symmetrix TimeFinder Family CLI, Symmetrix SRDF Family CLI, Symmetrix SRM CLI*

Sends I/O control commands to a specified database server application.

```
symioctl -h

symioctl -type DbType [-noprompt]

begin backup  [<Object> <Object> ...] [-checkpoint]
end backup   [<Object> <Object> ...]
freeze       [<Object> <Object> ...] [-checkpoint]
thaw         [<Object> <Object> ...]
checkpoint   [<Object> <Object> ...]
archive log

begin snapshot Object SAVEFILE SaveFile
              [-checkpoint] [-overwrite]

restore snapshot Object SAVEFILE SaveFile
              [-norecovery] [-standby]

end snapshot Object

abort snapshot Object
```

symlabel *Component License: Base Product Guide: Symmetrix Array Management CLI*

Performs device label (signature) support operations on devices in a device group.

Note: This command only pertains to applications running on a Windows NT 4.0 platform.

```
symlabel -h

symlabel -g DgName [-noprompt]

define LdevName [label Label] -type <WNT|AS40>

undefine LdevName

symlabel -g DgName -type <WNT|AS40> [-offline]

list [-bcv | -vdev]

show LdevName
```

symld *Component License: Base Product Guide: Symmetrix Array Management CLI*

Performs operations on one or more standard devices (STD) or virtual devices (VDEV) in a device group (dg).

```
symld -h

symld -g DgName [-offline]

    add pd PdevName [LdevName]

    add dev SymDevName [LdevName] [-sid SymmID]
        [<-vdev | -tgt> -rdf [-rdfg GrpNum]]

    addall [-sid SymmID] [-SA <#|ALL>] [-P #]
        [<-vdev | -tgt> -rdf [-rdfg GrpNum]] [-CAP #] [-N #]
        [-RANGE SymDevStart:SymDevEnd]
        [pd | dev | -host HostName]

    break [LdevName] [-noprompt] [-vdev]

    list [-v] [-resv] [-cyl] [-held]

    show LdevName

    remove LdevName [-force]

    rmall [-force] [-SA <#|ALL>] [-P #] [-CAP #] [-N #]
        [-RANGE SymDevStart:SymDevEnd]
        [<-vdev | -tgt> -rdf [-rdfg GrpNum]]

    move [-force] [-rename] LdevName DestDgName

    moveall DestDgName [-force] [-rename]
        [-SA <#|ALL>] [-P #] [-CAP #] [-N #]
        [-RANGE SymDevStart:SymDevEnd]
        [-vdev | -rvdev | -tgt | -rtgt]

    copy LdevName DestDgName [-force] [-rename]

    copyall DestDgName [-force] [-rename]
        [-SA <#|ALL>] [-P #] [-CAP #] [-N #]
        [-RANGE SymDevStart:SymDevEnd]
        [-vdev | -rvdev | -tgt | -rtgt]

    rename LdevName NewLdevName

symld -g DgName [-noprompt] [-SA <#|ALL>] [-P #]
    [-bcv | -vdev | -tgt]

    rw_enable [LdevName [LdevName...]]

    write_disable [LdevName [LdevName...]]

symld -g DgName [-h] [-noprompt] [-bcv | -vdev | -tgt]

    relabel [LdevName [LdevName...]] [-force]

symld -g DgName [-noprompt] [-bcv | -rbcv | -brbcv |
    -rrbcv | -vdev | -rvdev | -tgt | -rtgt]

    ready [LdevName [LdevName...]]
    not_ready [LdevName [LdevName...]]

    hold [LdevName [LdevName...]]
    unhold [LdevName [LdevName...]] [-symforce]
```

symlv *Component License: Mapping Solution Product Guide: Symmetrix SRM CLI*

Displays mapping information about one or more logical volumes that are defined in a specific logical volume manager's volume group.

```
symlv -h

symlv -g VgName [-type VgType] [-kb|-blocks|-mb]

    list [-v]

    show LVolName [-expand|-collapse|-no_extents|
                    -pdev_extents] [-stripe_column]

    create LVolName -size Size [-nmirror Mirrors]
            [-mir MirName] [-striped|-RAID5]
            [-ncols Columns] [-strsize StripeSize]
            [-pd Pdevname...]

    delete LVolName

    add LVolName -nmirror Mirrors [-mir MirName]
        [-striped|-RAID5] [-ncols Columns]
        [-strsize StripeSize] [-pd Pdevname.....]

    remove LVolName [-nmirror Mirrors] [-mir MirName]

    extend LVolName -size Size [-pd Pdevname...]

    reduce LVolName -size Size [-pd Pdevname...]

symlv [-type VgType [-g VgName [-lv LVolName]]]

    stats [-i Interval] [-c Count] [-h]
```

symmask *Component License: Device Masking Product Guide: Symmetrix Array Controls CLI*

Sets up or modifies Symmetrix Device Masking functionality.

```
symmask -h
symmask discover hba [-rename] [-v]

symmask list hba [-v]

symmask -sid SymmID <-wwn wwn | -awwn awwn | -iscsi iscsi |  
-aiscsi aiscsi> -dir # -p # [-celerra]  
[-reserve_id ResvID [, ResvID [, ResvID]]]

add devs startSymDevName:endSymDevName | SymDevname |  
SymDevname,...  
[-dynamic_lun | -lun <Address>  
<address,address,address...>] |  
[-noprompt] [-remove_unmapped]

add -g DgName [-std] [-bcv] [-vdev] [-noprompt]  
[-dynamic_lun | -lun <Address>] [-remove_unmapped]

add -file DeviceFileName [src] [tgt] [-noprompt]  
[-dynamic_lun | -lun <Address>] [-remove_unmapped]

remove devs startSymDevname:endSymDevname |  
SymDevname|SymDevname,... [-force]

remove -g DgName [-std] [-bcv] [-vdev] [-force]

remove -file DeviceFileName [src] [tgt] [-force]

symmask -sid SymmID <-wwn wwn | -awwn awwn | -iscsi iscsi |  
-aiscsi aiscsi>

list logins [-dir all [-p all] | -dir # [-p # | all]]  
[-pdev PdevName] [-v]

set heterogeneous <on <hostConfigFlag> | off>  
-dir # -p #

set hba_flags <on <flag,flag,flag...>  
<enable | disable | off>  
-dir # -p #

set lunoffset <on <offset> <base> | off> -dir # -p #

set visibility <on | off> -dir # -p #

replace <wwn | iscsi> [-noprompt]

delete [-dir # -p # | -dir all -p all] [-login]

symmask -sid SymmID <-wwn wwn | -awwn awwn>  
set lockdown <on <fcid>|off> -dir # -p #

symmask -sid SymmID <-wwn wwn | -iscsi iscsi>  
rename <awwn | aiscsi>

symmask -sid SymmID [-noprompt]  
refresh

symmask -sid SymmID -iscsi iscsi | -aiscsi aiscsi

set authentication -type authentication_type  
-credential credential_name -secret secret_value  
authentication [ enable | disable | show ]
```

symmaskdb

*Component License: Device Masking
Product Guide: Symmetrix Array Controls CLI*

Backs up, restores, initializes, and shows the contents of the Device Masking database.

```
symmaskdb -h

symmaskdb -sid SymmID | -file FileName

    list database [-v] [-dir all [-p all] | -dir #
                  [-p # |all]] [-wwn wwn | -awwn awwn |
                  -iscsi iscsi | -aiscsi aiscsi]

    list devs -wwn wwn | -awwn awwn | -iscsi iscsi |
              -aiscsi aiscsi

symmaskdb -sid SymmID [-v]

    list assignment [-v] -dev StartSymDevName:EndSymDevName
                        | SymDevName | SymDevName,SymDevName...

    list no_assignment [-dir all [-p all] | -dir #
                       [-p # |all]]

    list capacity -host Hostname

symmaskdb -sid SymmID -file FileName [-noprompt]

    restore [-skip_authentication] [-vcmdb_type 4|5]

    backup

symmaskdb -sid SymmID -file FileName

    init [-vcmdb_type 3 | 4 | 5 ]

symmaskdb -sid SymmID [-noprompt]

    convert [-vcmdb_type 4 | 5 -file FileName]

    set no_direct_io | direct_io

    remove -meta_member
```

symmir

*Component Licenses: TimeFinder/Mirror, TimeFinder/
CG for -consistent, TimeFinder/Clone for emulation
Product Guide: Symmetrix TimeFinder Family CLI*

Performs Symmetrix BCV control operations on a device group, on a device within the device group, or on pairs listed in a device file.

```
symmir -h

symmir -g DgName [-v] [-force] [-symforce] [-reverse] [-star]
               [-noprompt] [[-rdf] [-bcv] | [-rrbcv]]
               [-i Interval] [-c Count]
               [-preserveTGTLocks -lockid LockNum]
               [-preaction Script] [-postaction ScriptFile]

    establish [-full [-opt | -opt_rag | -exact] [-protbcvest]
              [-skip] [-concurrent]
              <<[LdevName [BCV pd PdevName]]>...> |
              <<[LdevName [BCV dev SymDevName]]>...> |
              <<[LdevName [BCV ld LdevName]]>...>
```

```

restore [-full [-exact] [-remote] [-bypass] [-not_ready]
        [-protect]
        <<[LdevName [BCV pd PdevName]]>...> |
        <<[LdevName [BCV dev SymDevName]]>...> |
        <<[LdevName [BCV ld LdevName]]>...>

split [-remote] [-bypass] [-not_ready] [-diff] [-protect]
        [-std_protect] [-skip] [-instant | -consistent]
        [-both_sides] [-vxfs <MountPoint...> |
        -ppath <STDDEVS | PowerPathPdevName...> |
        -rdb -dbtype DbType [-db DbName] ] | -consistent ]
        <<[LdevName [BCV pd PdevName]]>...> |
        <<[LdevName [BCV dev SymDevName]]>...> |
        <<[LdevName [BCV ld LdevName]]>...>

symmir -g DgName [[-rdf] [-bcv] | [-rrbcv]]
        [-offline] [-i Interval] [-c Count]

query [[-attach] [-multi] [-protect] [-protbcvest]
        [-bg [-percent]]] | [-summary]
        [LdevName [LdevName...]]

verify [-synched|-restored [-protect] | -split
        [-bg] | -syncinprog|-restinprog [-protect] ]
        [-concurrent] [-force]
        <<[LdevName [BCV pd PdevName]]>...>
        <<[LdevName [BCV dev SymDevName]]>...>
        <<[LdevName [BCV ld LdevName]]>...>

        -bcv_mirrors [-ready | -syncinprog |
        -restinprog] [-concurrent]
        <<[LdevName [BCV pd PdevName]]>...> |
        <<[LdevName [BCV dev SymDevName]]>...> |
        <<[LdevName [BCV ld LdevName]]>...>

symmir -g DgName [-v] [[-rdf] [-bcv] | [-rrbcv]]
        [-i Interval] [-c Count] [-noprompt]

attach <<[LdevName BCV pd PdevName]>...> |
        <<[LdevName BCV dev SymDevName]>...> |
        <<[LdevName BCV ld LdevName]>...>

detach <<[LdevName [BCV pd PdevName]]>...> |
        <<[LdevName [BCV dev SymDevName]]>...> |
        <<[LdevName [BCV ld LdevName]]>...>

cancel [-force] [-skip] [-star]
        <<[LdevName BCV pd PdevName]>...> |
        <<[LdevName BCV dev SymDevName]>...> |
        <<[LdevName BCV ld LdevName]>...>

symmir -cg CgName [-v] [-force] [-symforce] [-reverse]
        [-noprompt] [[-rdf] [-bcv] | [-rrbcv]]
        [-i Interval] [-c Count] [-star]
        [-preaction ScriptFile] [-postaction ScriptFile]
        [-sid SymmID | -rdfig <SymmID:<GrpNum[, GrpNum,...]
        | all>[, ...] | name:Name[, Name,...]>]]

establish [-full [-opt | -opt_rag | -exact] [-protbcvest]
        [-skip] [-concurrent]
        <<[LdevName [BCV pd PdevName]]>...> |
        <<[LdevName [BCV dev SymDevName]]>...> |
        <<[LdevName [BCV ld LdevName]]>...>

restore [-full [-exact] [-remote] [-bypass] [-not_ready]
        [-protect]
        <<[LdevName [BCV pd PdevName]]>...> |
        <<[LdevName [BCV dev SymDevName]]>...> |
        <<[LdevName [BCV ld LdevName]]>...>

split [-remote] [-bypass] [-not_ready] [-diff]
        [-protect] [-std_protect] [-skip] [-instant]
        [-both_sides] [-vxfs <MountPoint...> |
        -ppath <STDDEVS | PowerPathPdevName...> |
        -rdb -dbtype DbType [-db DbName] ] | -consistent]

```

```

    <<[LdevName [BCV pd PdevName]]>...> |
    <<[LdevName [BCV dev SymDevName]]>...> |
    <<[LdevName [BCV ld LdevName]]>...>

symmmir -cg CgName [[-rdf] [-bcv] | [-rrbcv]] [-offline]
    [-i Interval] [-c Count] [-sid SymmID | -rdfg
    <SymmID:<GrpNum[,GrpNum,...] | all>[,...]] |
    name:Name[,Name,...]>]]

query [[-attach] [-multi] [-protect] [-protbcvest]
    [-bg [-percent]]] | [-summary] [LdevName [LdevName...]]

verify [-synched|-restored [-protect] | -split [-bg] |
    -syncinprog | -restinprog [-protect] ]
    [-concurrent] [-force]
    <<[LdevName [BCV pd PdevName]]>...> |
    <<[LdevName [BCV dev SymDevName]]>...> |
    <<[LdevName [BCV ld LdevName]]>...>
    -bcv_mirrors [-ready | -syncinprog | -restinprog]
    <<[LdevName [BCV pd PdevName]]>...> |
    <<[LdevName [BCV dev SymDevName]]>...> |
    <<[LdevName [BCV ld LdevName]]>...>

symmmir -cg CgName [-v] [[-rdf] [-bcv] | [-rrbcv]]
    [-i Interval] [-c Count] [-noprompt]
    [-sid SymmID | -rdfg
    <SymmID:<GrpNum[,GrpNum,...] | all>[,...]] |
    name:Name[,Name,...]>]]

attach <<[LdevName BCV pd PdevName]>...> |
    <<[LdevName BCV dev SymDevName]>...> |
    <<[LdevName BCV ld LdevName]>...>

cancel [-force] [-skip] [-star]
    <<[LdevName BCV pd PdevName]>...> |
    <<[LdevName BCV dev SymDevName]>...> |
    <<[LdevName BCV ld LdevName]>...>

detach [-sid SymmID]
    <<[LdevName [BCV pd PdevName]]>...>
    <<[LdevName [BCV dev SymDevName]]>...>
    <<[LdevName [BCV ld LdevName]]>...>

symmmir -sid SymmID <-file DeviceFileName |
    -noprompt 'redirect stdin'>
    [-v] [-force] [-symforce] [-reverse] [-noprompt]
    [-i Interval] [-c Count] [-star]
    [-preaction ScriptFile] [-postaction ScriptFile]
    [-preserveTGTLocks -lockid LockNum]

establish [-full] [-protbcvest] [-skip]

restore [-full] [-bypass] [-not_ready] [-protect]

split [-diff] [-bypass] [-not_ready] [-skip]
    [-protect] [-std_protect]
    [-instant [-vxfs <MountPoint...> |
    -ppath <STDDEVS | PowerPathPdevName...> |
    -rdb -dbtype DbType [-db DbName]] | -consistent]

symmmir -sid SymmID <-file DeviceFileName |
    -noprompt 'redirect stdin'>
    [-force] [-i Interval] [-c Count]

query [[-attach] [-multi] [-protect] [-protbcvest]
    [-bg [-percent]]] | [-summary]

verify [-synched | -restored [-protect] | -split [-bg] |
    -syncinprog | -restinprog [-protect] ]
    [-concurrent]

verify -bcv_mirrors [-ready | -syncinprog | -restinprog]

```

```

symmir -sid SymmID <-file DeviceFileName |
    -noprompt 'redirect stdin'>
    [-v] [-noprompt] [-i Interval] [-c Count]
attach

detach

cancel [-skip] [-star]

```

symoptmz *Component License: Optimizer Product Guide: Symmetrix Array Controls CLI*

Sets parameters that control the behavior of the Symmetrix Optimizer and displays its current status.

```

symoptmz -h

symoptmz -sid SymmID
    enable
    disable
    rollback
    clear_stats
    query [-v]
    sync -version

symoptmz -sid SymmID
    list [-range <StartDevName:EndDevName>]
        [-n NumDevs]
    show [-parms | -swap_hist | -swap_list | -composite |
        -rollback_list | -activity_list]
    read -log_type <RUNTIME | ERROR> [-start DateTime]
        [-stop DateTime]

symoptmz [-sid SymmID]
    release

symoptmz [-sid SymmID] -file CommandFile | 'redirect stdin'
    [-v | -noecho]
    preview
    prepare
    commit

symoptmz [-sid SymmID] [-v]
    set <sample_freq SFVal | min_samples MSVal |
        samples_per_cycle SPCVal |
        cycle_max_time CMTVal ...>

symoptmz [-sid SymmID] [-v]
    set [-tw_index TWIndex] <data_xtw | swap_xtw
        [-start DateTime | -stop DateTime | clear]>

symoptmz [-sid SymmID] [-v]
    set [-range <StartDevName:EndDevName>] [-n NumDevs]
        <swap_priority NONE | NORMAL | HIGH>

```

sympart *Component License: Mapping Solution Product Guide: Symmetrix SRM CLI*

Displays partition information about a host device.

```
sympart -h [-v] [-kb|-blocks|-mb]

show HostDevName
```

sympd *Component License: Base Product Guide: Symmetrix Array Management CLI*

Displays information about one or all Symmetrix devices that are visible to your host.

```
sympd -h

sympd [-sid SymmID] [-offline] [-v]

list [-resv]

list [-DA <#|ALL>] [-interface <#|ALL>]
    [-disk <#|ALL>] [-hyper <#|ALL>]

list [-SA <#|ALL>] [-P #] [-scsi] [-fibre] [-escon]
    [-ficon] [-gige] [-powerpath] [-vcm] [-pdevfile]
    [-cyl]

sympd show PdevName

sympd

export -file FileName

verify -file FileName [-v]
```

symqos *Component License: Base Product Guide: Symmetrix Array Controls CLI*

Provides Quality of Service (QOS) controls on specified devices.

```
symqos -h

symqos -g DgName [-bcv|-nobcv]

set <BCV | RDF | MIR | CLONE pace|priority Value>
    [LdevName]
set LRU <#,#,#|ALL> [LdevName]
set LRUname LruName [LdevName]

reset LRU [LdevName]

query [-lru]

symqos [-sid SymmID]

list [-range <SymdevStart:SymdevEnd>] [-lru <#|ALL>]

list [-range <SymdevStart:SymdevEnd>]
    [-lruname <LruName|ALL>]
```

```

symqos -pst -sid SymmID

    enable
    disable

symqos -pst -sid SymmID -range <SymdevStart:SymdevEnd>
    set hostio priority <Value>

symqos -pst -g DgName [-std] [-bcv] [-vdev]
    set hostio priority <Value>

symqos -pst
    list -sid SymmID [-range <SymdevStart:SymdevEnd>]
        [-all | -hostio_priority <value|ALL>]

        list -g DgName [-std] [-bcv]
            [-hostio_priority <value|ALL>]

symqos -cp -sid SymmID

    enable
    disable

symqos -cp -name Name -sid SymmID

    create -target <target_percent>
        -min <minimum_percent>
        -max <maximum_percent>
        -wp <write_pending_limit>
        -time <donation_time>

    modify [-target <target_percent>]
        [-min <minimum_percent>]
        [-max <maximum_percent>]
        [-wp <write_pending_limit>]
        [-time <donation_time>]

    rename -new_name NewName
    delete

symqos -cp -name Name -sid SymmID

    add dev SymDevName
    remove dev SymDevName

symqos -cp -name Name -sid SymmID
    [-range <SymdevStart:SymdevEnd> | -rdfig GrpNum]
    addall
    rmall

symqos -cp -name Name -g DgName

    add ld LdevName
    remove ld LdevName
    addall [-std] [-bcv] [-vdev]
    rmall [-std] [-bcv] [-vdev]

symqos -cp [-name Name]

    list -sid SymmID
        [-range <SymdevStart:SymdevEnd> | -rdfig GrpNum]
    list -g DgName [-std] [-bcv] [-vdev]
    list -sid SymmID -settings [-usage] [-v]

symqos -cp -sid SymmID
    list [-range <SymdevStart:SymdevEnd> | -all]

```

symrcopy

*Component License: Open Replicator
Product Guide: Symmetrix Open Replicator CLI*

Performs Symmetrix remote copy control operations on a collection of devices in a device file.

```
symrcopy [-h]

symrcopy -file FileName [-noprompt] |
        -noprompt 'redirect stdin' [-star]

        create <-push {-hot | -cold} [differential]|
                -pull> {-hot [-donor_update]|-cold}>
                [-name Name] [-copy | -precopy]
                [-force_copy][-pace Pace]

        remove

symrcopy [-file FileName | -session_name SessionName
        -noprompt 'redirect stdin'][-v] |[-noprompt]
        [-force][-star]

        activate [-vxfs <MountPoint...>] |
                [-ppath <SRCDEVS | PowerPath device...>] |
                [-rdb <dbtype DbType -db DbName>] |[-consistent]

        recreate [-name Name] [-pace Pace] [-precopy]

        restore [-pace Pace]

        rename -name Name

        set mode <copy | nocopy | -precopy>

        set pace Value

        terminate [-symforce] [-all_sessions]

symrcopy [-v | -noprompt]

        set ceiling Value -sid SymmID -dir <#|ALL>
        [-port <#|ALL>]

symrcopy [-sid SymmID]

        list [-offline] [-detail|-wwn]

        list ceiling -dir <#|ALL> [-port <#|ALL>]

symrcopy [-file FileName | -name SessionName
        -noprompt 'redirect stdin'] [-offline]
        [-i Interval] [-c Count][-star]

        query [-detail | -wwn]

        verify [-createinprog | -created | -recreateinprog|
                -recreated | -copyinprog | -copyonaccess |
                -copyonwrite | -copied | -terminateinprog |
                -failed | -verifyinprog | -restored | -restinprog
                | -precopy [-cycled]]

symrcopy [-noprompt] [-sid SymmId]

        export [-file FileName | -name SessionName]
```

symrdb *Component License: Mapping Solution Product Guide: Symmetrix SRM CLI*

Displays mapping information about one or more schemas, tables, files, tablespaces, or segments that are defined in a specified database instance.

symrdb -h

symrdb [-h] [-v] -type *Option* [-db *DbName*] [-sid *SymmID*]
[-rdfg *GrpNum*] [-R1|-R2] [-bcv | -nobcv | -vdev]
[-data] [-log] [-control] [-force]

rdb2dg *DgName* [-dgtype REGULAR | RDF1 | RDF2]

rdb2cg *CgName* [-cgtype RDF1 | RDF2] [-apidb | -ppath |
-rdf_consistency]

symrdb [-h] [-v] -type *Option* [-db *DbName*] [-sid *SymmID*]
[-rdfg *GrpNum*] [-R1 | -R2] [-bcv | -nobcv | -vdev]
[-data] [-log] [-control] [-force]

tbs2dg -tbs *TblSpName* *DgName*
[-dgtype REGULAR | RDF1 | RDF2]

tbs2cg -tbs *TblSpName* *CgName*
[-cgtype REGULAR | RDF1 | RDF2]
[-apidb | -ppath | -rdf_consistency]

symrdb list -type *DbType* [-db *DbName*] [-kb | -mb | -blocks]
[-v]

[TBS | FILE [-datalog] | SCHEMA | TABLE] [-unalloc]
[FILE | SEG | TABLE] -tbs *TblSpName*
[FILE | SEG | TABLE] -schema *SchemaName*

symrdb show -type *DbType* [-db *DbName*] [-kb | -mb | -blocks]
[-expand | -collapse | -no_extents]

[TBS *TblSpName* | FILE *FileName* | SCHEMA *SchemaName* |
TABLE *TableName*] [-tbs *TblSpName*
[FILE *FileName* | SEG *SegmentName* | TABLE *TableName*]]
[-schema *SchemaName* [FILE *FileName* |
SEG *SegmentName* | TABLE *TableName*]]

symrdb show -config [-all] [-h] [-v] -type *DbType*
[-db *DbName*]

symrdb startup

-type Oracle [[FORCE] [RESTRICT] [PFILE=*filename*]
[QUIET] [MOUNT [-db *DbName*] | [[OPEN |
OPEN_READ_ONLY | OPEN_READ_WRITE |
OPEN_READ_WRITE_RECOVER | OPEN_RECOVER]
[-db *DbName*]] | NOMOUNT]] |
[[PFILE=*FileName*] MIGRATE [QUIET]]

-type SqlServer -s *instance* [-c] [-f] [-m] [-n] [-x]
[-p *master_file_path*] [-e *error_log_path*]
[-l *master_log_path*] [-g *virtual_addr_space*]
[-t *trace_number*]

-type Sybase -f *runserver_file* [-m] [-t *delay_time*]

-type IBMUDB [-n *Node* [ADDNODE -u *HostName* -p *Port*
[-c *Computer*] [-nt *NetName*]
[NODE | CATALOG -tsn *tablespace_node*]] |
[RESTART [-u *HostName*] [-p *Port*] [-nt *NetName*]] |
[STANDALONE]]

symrdb shutdown

```
-type Oracle [ABORT | IMMEDIATE | NORMAL |  
TRANSACTIONAL [LOCAL]]  
  
-type SqlServer -s instance  
  
-type Sybase [-f srvname] [-w <wait|nowait>]  
  
-type IBMUDB [FORCE | DROP] [DROP_ACT | CONTINUE |  
TERMINATE] [-f profile] [-n node]
```

symrdb stats -type *DbType* -target *DBtarget* [-h] [-v]
[-i *Interval*] [-c *Count*] [-g *virtual_addr_space*]
[-t *trace_number*]

```
-type Sybase -f runserver_file [-m] [-t delay_time]  
  
-type IBMUDB [-n Node [ADDNODE -u HostName -p Port  
[-c Computer] [-nt NetName] [NODE | CATALOG  
-tsn tablespace_node]] | [RESTART [-u HostName]  
[-p Port] [-nt NetName]] | [STANDALONE]]
```

symrdb shutdown

```
-type Oracle [ABORT | IMMEDIATE | NORMAL |  
TRANSACTIONAL [LOCAL]]  
  
-type SqlServer -s instance  
  
-type Sybase [-f srvname] [-w <wait|nowait>]  
  
-type IBMUDB [FORCE | DROP] [DROP_ACT | CONTINUE |  
TERMINATE] [-f profile] [-n node]
```

symrdb stats -type *DbType* -target *DBtarget* [-h] [-v]
[-i *Interval*] [-c *Count*]

symrdf *Component Licenses: SRDF, SRDF/CG (only for symcg), SRDF/A (Asynchronous mode)* Product Guide: Symmetrix SRDF Family CLI

Performs Symmetrix SRDF ping, control, or modify operations on a device group, composite group, device file, or on a device within a device group. The device group must have a type of either RDF1 or RDF2. Lists all RDF devices, regardless if they are in a device group. Performs dynamic RDF group controls to add, modify or remove a dynamic RDF group.

symrdf -h

```
symrdf [-sid SymmID] [-i Interval] [-c Count]
  ping [-rdf]
  list [pd|dev] [-v] [-R1|-R2|-both] [-rdfg GrpNum]
    [-bcv|-nobcv] [-resv] [-offline] [-dynamic]
    [-concurrent] [-consistency] [-rdfa] [-half_pair]
    [-dup_pair] [-star_mode] [-star_sync_target]
    [-star_async_target]
```

Device groups

```
symrdf -g DgName
  [-v|-noecho] [-noprompt] [-force][-symforce]
  [-bypass] [-bcv|-rbcv|-brbcv|-all] [-rdfg GrpNum]
  [-star][-i Interval][-c Count]]
  establish [-full] [LdevName [LdevName...]]
  restore [-full] [LdevName [LdevName...]] [-remote]
  split [LdevName [LdevName...]]
  failover [LdevName [LdevName...]] [-establish]
  failback [LdevName [LdevName...]] [-remote]
  suspend [LdevName [LdevName...]]
  resume [LdevName [LdevName...]] [-remote]
  merge [LdevName [LdevName...]]
  update [-until InvalidTracks] [LdevName [LdevName...]]
    [-remote]
  deletepair
  half_deletepair
  ready [LdevName [LdevName...]] r1|r2
  not_ready [LdevName [LdevName...]] r1|r2
  rw_enable [LdevName [LdevName...]] r1|r2
  write_disable [LdevName [LdevName...]] r1|r2
  refresh [LdevName [LdevName...]] r1|r2
  invalidate [LdevName [LdevName...]] r1|r2
  rw_disable [LdevName [LdevName...]] r2

symrdf -g DgName [-v|-noecho] [-noprompt] [-force]
  [-symforce] [-bypass] [-bcv|-all] [-i Interval]
  [-c Count] [-star]
  swap [-refresh R1|R2]

symrdf -g DgName [-bcv|-rbcv|-brbcv|-all] [-rdfg GrpNum]
  [-offline] [-i Interval] [-c Count]
  query [LdevName [LdevName...]] [-rdfa]
  verify [-synchronized] [-suspended] [-enabled] |
    -susp_offline | -split | -failedover | -updated |
    -syncinprog | -updateinprog | -partitioned | -valid |
    -consistent [LdevName [LdevName...]]

symrdf -g DgName [-v] [-noprompt] [-bcv|-rbcv|-brbcv|-all]
  [-star][-force][-bypass] [-i Interval] [-c Count]
  [-rdfg GrpNum]
  set mode sync|semi|acp_disk|acp_wp|acp_off
    [skew SkewVal] [LdevName [LdevName...]]
  set mode sync [-consistent]
  set mode async
  set domino on|off [LdevName [LdevName...]]
  set acp_skew SkewVal [LdevName [LdevName...]]
  set nr_if_invalid on|off [LdevName [LdevName...]]
```

Device group operations specific to SRDF/A

```
symrdf -g DgName [-v|-noecho] [-noprompt] [-force]
        [-symforce] [-star] [-bypass] [-bcv|-all]
        [-i Interval] [-c Count]
enable
disable
failover [-immediate] [-establish]
split    [-immediate]
suspend  [-immediate]
activate -rdfa_dse
deactivate -rdfa_dse

symrdf -g DgName [-bcv|-rbcv|-brbcv|-all] [-rdfg GrpNum]
        [-offline] [-i Interval] [-c Count] [-rdfa]
checkpoint
```

Composite groups

```
symrdf -cg CgName [-v|-noecho] [-noprompt] [-force]
        [-symforce] [-sid SymmID]
        [-bypass] [-i Interval] [-c Count]
        [-bcv|-rbcv|-brbcv] [-star]
        [-rdfg sid:GrpNum,...|all...|name:Name[,Name,...]]
establish [-full] [LdevName [LdevName...]]
restore   [-full] [-remote] [LdevName [LdevName...]]
split     [LdevName [LdevName...]]
failover  [LdevName [LdevName...]]
failback  [-remote] [LdevName [LdevName...]]
suspend   [LdevName [LdevName...]]
resume    [-remote] [LdevName [LdevName...]]
merge     [LdevName [LdevName...]]
msc_cleanup
update    [-until InvalidTracks] [-remote] [LdevName...]
ready     r1 r2 [LdevName [LdevName...]]
not ready r1 r2 [LdevName [LdevName...]]
rw_enable r1 r2 [LdevName [LdevName...]]
write_disable r1 r2 [LdevName [LdevName...]]
refresh   r1 r2 [LdevName [LdevName...]]
invalidate r1 r2 [LdevName [LdevName...]]
rw_disable r2 [LdevName [LdevName...]]

symrdf -cg CgName [-offline] [-i Interval] [-c Count]
        [-sid SymmID] [-bcv|-rrbcv|-brbcv]
        [-rdfg sid:GrpNum,...|all|name:Name[,Name,...]]
query    [-detail] [LdevName [LdevName...]]
verify   [-synchronized] [-suspended] [-enabled]
        [-susp_offline] [-split] [-failedover] [-updated]
        [-syncinprog] [-updateinprog] [-partitioned] [-valid]
        [-cg_consistent]] [LdevName [LdevName...]]

symrdf -cg CgName [-v] [-noprompt] [-force]
        [-bcv|-rbcv|-brbcv] [-bypass] [-i Interval]
        [-c Count] [-sid SymmID] [-star]
        [-rdfg sid:GrpNum,...|name:Name[,Name,...]]
set mode sync|semi|acp_disk|acp_wp|acp_off
        [skew SkewVal] [LdevName [LdevName...]]
set mode async
set domino on|off [LdevName [LdevName...]]
set acp_skew SkewVal [LdevName [LdevName...]]
set nr_if_invalid on|off [LdevName [LdevName...]]
```

Composite group operations specific to SRDF/A

```
symrdf -cg CgName [-v|-noecho] [-noprompt] [-force]
        [-symforce] [-bcv|-rbcv|-brbcv] [-star]
        [-bypass] [-i Interval] [-c Count] [-sid SymmID]
        [-rdfg sid:GrpNum,...|name:Name[,Name,...]]
msc_cleanup
failover [-immediate] [-establish]
split    [-immediate]
```

```
suspend [-immediate]
activate -rdfa_dse
deactivate -rdfa_dse
```

```
symrdf -cg CgName [-offline] [-i Interval] [-c Count]
checkpoint
```

Device file

```
symrdf -file Filename -sid SymmID -rdfg GrpNum
    [-v|-noecho] [-star] [-noprompt] [-force]
    [-symforce] [-i Interval] [-c Count] [-bypass]
establish [-full] [-remote]
restore [-full] [-remote]
split
failover [-establish]
failback [-remote]
suspend
resume [-remote]
merge
update [-until InvalidTracks] [-remote]
createpair -type <RDF1 | RDF2> -rdfg GrpNum -establish |
    -restore | -invalidate [R1 | R2] [-g NewDg]
    [-remote]
deletepair
half_deletepair
swap [-refresh R1 | R2]
ready r1 | r2
not ready r1 | r2
rw_enable r1 | r2
write_disable r1 | r2
refresh r1 | r2
invalidate r1 | r2
rw_disable r2
```

```
symrdf -file Filename [-sid SymmID] [-rdfg GrpNum]
    [-offline] [-i Interval] [-c Count]
query [-rdfa]
verify [-synchronized | -suspended [-enabled] |
    -susp_offline | -split | -failedover | -updated |
    -syncinprog | -updateinprog | -partitioned |
    -valid | -consistent ]

symrdf -file Filename -sid SymmID -rdfg GrpNum [-force]
    [-v] [-noprompt] [-bypass] [-i Interval] [-c Count]
    [-star]
set mode semi|acp_disk|acp_wp|acp_off [skew SkewVal]
set mode sync [-consistent]
set mode async
set domino on|off
set acp_skew SkewVal
set nr_if_invalid on|off
```

Device file operations specific to SRDF/A

```
symrdf -file Filename -sid SymmID -rdfg GrpNum
    [-v|-noecho] [-noprompt] [-force] [-symforce]
    [-i Interval] [-c Count] [-bypass]
enable
disable
split [-immediate]
failover [-immediate] [-establish]
suspend [-immediate]
activate -rdfa_dse
deactivate -rdfa_dse

symrdf -file fileame -sid SymmID -rdfg GrpNum [-offline]
    [-i Interval] [-c Count]
checkpoint
```

Dynamic RDF groups

```
symrdf addgrp -label GrpLabel -rdfg GrpNum -sid SymmID
    -dir Dir -remote_rdfg GrpNum
    -remote_sid SymmID -remote_dir Dir [-i Interval]
    [-c Count] [-noprompt] [-link_domino]
    [-remote_link_domino] [-farpoint] [-fibre] [-gige]
    [-auto_link_recovery] [-remote_auto_link_recovery]
    [-link_limbo Secs] [-rem_link_limbo Secs]

symrdf modifygrp <-add | -remove> <-rdfg GrpNum |
    -label GrpLabel> -sid SymmID [-dir Dir]
    [-remote_dir Dir] [-noprompt]
    [-i Interval] [-c Count] [-star]

symrdf removegrp -sid SymmID <-rdfg GrpNum |
    -label GrpLabel> [-i Interval] [-c Count]
    [-noprompt] [-star]

symrdf -sid SymmID -rdfg GrpNum [-v] [-noprompt]
    [-i Interval] [-c Count]
    activate -rdfa_dse [-both_sides]
    deactivate -rdfa_dse [-both_sides]
    msc_cleanup
    set link_limbo

symrdf monitor [-sid SymmID] [-i Interval] [-c Count]
    [-offline] [-percent <1-100> -action ScriptFile]
    [-norepeat]] [-svp <PoolName>]
```

symrecover *Component Licenses: SRDF, and SRDF/AR Product Guide: Symmetrix SRDF Family CLI*

Provides the user interface to the EMC SRDF Session Recovery tool.

```
symrecover [-h]

symrecover [-env | -version]

symrecover start [-g DgName | -cg CgName]
    -mode {SYNC | ASYNC} [-out <LogPath>]
    [-options OptionFile]
```

symreplicate *Component Licenses: TimeFinder/Mirror, TimeFinder/CG, SRDF, and SRDF/AR* *Product Guide: Symmetrix SRDF Family CLI*

Performs automated, consistent replication of data via BCV pairs and over SRDF links.

`symreplicate -h`

```
start    [-g DgName | -cg CgName] -options OptionFile
         [-sid SymmID] [-log LogFile] [-noprompt]
         [-preaction ScriptFile] [-postaction ScriptFile]
         [-foreground] [-recover] [-postcycle ScriptFile]
         [-steperror ScriptFile] [-vxfs MountPoint... |
         -ppath <STDDEVS|PowerPathPdevName...> |
         -rdb -dbtype DbType [-db DbName] | -consistent]
         [-setup [-optimize | -optimize_rag | -exact]]
         [-recover]

setup    [-g DgName | -cg CgName] -options OptionFile
         [-sid SymmID] [-log LogFile]
         [-optimize | -optimize_rag | -exact]
         [-foreground] [-noprompt] [-recover]

stop     [-g DgName | -cg CgName | -log LogFile] [-noprompt]
         [-sid SymmID] [-step]

restart  [-g DgName | -cg CgName | -log LogFile]
         [-noprompt] [-recover] [-foreground]
         [-options OptionFile] [-recover] [-sid SymmID]

query    [-g DgName | -cg CgName | -log LogFile]
         [-sid SymmID] [-i Interval] [-c Count]

show     [-g DgName | -cg CgName | -log LogFile]
         [-sid SymmID] [-args] [-devs] [-opts] [-all]

list     [-sid SymmID] [-sort Field]

delete   [-g DgName | -cg CgName | -log LogFile]
         [-sid SymmID]

release  [-g DgName | -cg CgName | -log LogFile]
         [-sid SymmID] [-force]

stats    [-g DgName | -cg CgName | -log LogFile]
         [-sid SymmID] [-force] [-cycle] [-itrks] [-all]
```

symreturn *Component License: Base* *Product Guide: Symmetrix Array Management CLI*

Indicates a return value within pre-action and post-action scripts.

`symreturn [-h] [<return code>]`

symrslv *Component License: Mapping Solution Product Guide: Symmetrix SRM CLI*

Displays logical-to-physical mapping information about a logical object that is stored on a disk.

```
symrslv -h

symrslv [-version] [-kb | -blocks | -mb]
        [-no_extents | -expand | -pdev_extents]

pd PdevName

lv LvolName -g VgName [-stripe_column] [-type VgType]

file FileName [-collapse | -phys_collapse]

dir Directory

fs MountPoint
```

symsnap *Component License: TimeFinder Product Guide: Symmetrix TimeFinder Family CLI*

Performs TimeFinder/Snap control operations on a device group, composite group, on devices within the group, or on pairs listed in a device file.

```
symsnap -h

symsnap -g DgName [-v] [-noprompt] [-i Interval] [-c Count]
        [-force] [-preserveTGTLocks -lockid LockNum]
        [-star]

create [-exact] [-bcv | -rdf | -rbcv] [-skip]
        [-svp PoolName] [-concurrent]
        <[LdevName [VDEV pd PdevName]]>...> |
        <[LdevName [VDEV dev SymDevName]]>...> |
        <[LdevName [VDEV ld LdevName]]>...>

activate [-not_ready] [-bcv | -rdf | -rbcv] [-skip]
        [-concurrent] [-preaction ScriptFile]
        [-postaction ScriptFile]
        [-vxfs <MountPoint...>] [-consistent [-both_sides]]
        [-ppath <SRCDEVS | PowerPathPdevName...> |
        [-rdb -dbtype DbType [-db DbName] ]
        <<[LdevName [VDEV pd PdevName]]>...> |
        <<[LdevName [VDEV dev SymDevName]]>...> |
        <<[LdevName [VDEV ld LdevName]]>...>

terminate [-symforce] [-bcv | -rdf | -rbcv] [-skip]
        [-restored]
        <<[LdevName [VDEV pd PdevName]>...]> |
        <<[LdevName [VDEV dev SymDevName]>...]> |
        <<[LdevName [VDEV ld LdevName]>...]> |
        <<[LdevName [SYM pd PdevName]>...]> |
        <<[LdevName [SYM dev SymDevName]>...]> |
        <<[LdevName [SYM ld LdevName]>...]> |
        <<[LdevName [BCV pd PdevName]>...]> |
        <<[LdevName [BCV dev SymDevName]>...]> |
        <<[LdevName [BCV ld LdevName]>...]>

restore [-full [-bcv]] [-not_ready]
        <<[LdevName [VDEV pd PdevName]>...]> |
        <<[LdevName [VDEV dev SymDevName]>...]> |
        <<[LdevName [VDEV ld LdevName]>...]>
```

```

symsnap -g DgName [-offline] [-i Interval] [-c Count]
        [-bcv | -rdf | -rbcv]

query [LdevName [LdevName...] [-multi]
      [-restore | -changed] [-attach] [-pools] ]

verify [-created | -copied | -copyinprog | -copyonwrite |
        -restinprog | -restored | -failed] [-force]
        [-concurrent]
        <<[LdevName [VDEV pd PdevName]]>...> |
        <<[LdevName [VDEV dev SymDevName]]>...> |
        <<[LdevName [VDEV ld LdevName]]>...> |
        <<[LdevName [SYM pd PdevName]]>...> |
        <<[LdevName [SYM dev SymDevName]]>...> |
        <<[LdevName [SYM ld LdevName]]>...> |
        <<[LdevName [BCV pd PdevName]]>...> |
        <<[LdevName [BCV dev SymDevName]]>...> |
        <<[LdevName [BCV ld LdevName]]>...>

symsnap -g DgName [-v] [-noprompt] [-i Interval] [-c Count]

attach <<[LdevName VDEV pd PdevName]>...>
       <<[LdevName VDEV dev SymDevName]>...>
       <<[LdevName VDEV ld LdevName]>...>

detach <<[LdevName VDEV pd PdevName]>...>
       <<[LdevName VDEV dev SymDevName]>...>
       <<[LdevName VDEV ld LdevName]>...>

symsnap -cg CgName [-v] [-noprompt] [-i Interval] [-c Count]
        [-force] [-sid SymmID] [-star]
        -rdfg <SymmID:<GrpNum[,GrpNum,...] |
        all>[,...] | name:Name[,Name,...]>]]

create [-exact] [-bcv | -rdf | -rbcv] [-skip]
        [-svp PoolName] [-concurrent]
        <<[LdevName [VDEV pd PdevName]]>...>
        <<[LdevName [VDEV dev SymDevName]]>...>
        <<[LdevName [VDEV ld LdevName]]>...>

activate [-not_ready] [-bcv | -rdf | -rbcv] [-skip]
        [-concurrent] [-preaction ScriptFile]
        [-postaction ScriptFile] [-vxfs <MountPoint...>] |
        [-ppath <SRCDEVS | PowerPathPdevName...> |
        [-rdb -dbtype DbType [-db DbName] ] |
        [-consistent [-both_sides]]
        <<[LdevName [VDEV pd PdevName]]>...> |
        <<[LdevName [VDEV dev SymDevName]]>...> |
        <<[LdevName [VDEV ld LdevName]]>...>

terminate [-symforce] [-bcv | -rdf | -rbcv] [-skip]
        [-restored]
        <<[LdevName [VDEV pd PdevName]>...> |
        <<[LdevName [VDEV dev SymDevName]>...> |
        <<[LdevName [VDEV ld LdevName]>...> |
        <<[LdevName [SYM pd PdevName]>...> |
        <<[LdevName [SYM dev SymDevName]>...> |
        <<[LdevName [SYM ld LdevName]>...> |
        <<[LdevName [BCV pd PdevName]>...> |
        <<[LdevName [BCV dev SymDevName]>...> |
        <<[LdevName [BCV ld LdevName]>...>
restore [-full] [-bcv | -rdf | -rbcv] [-not_ready]
        <<[LdevName [VDEV pd PdevName]>...> |
        <<[LdevName [VDEV dev SymDevName]>...> |
        <<[LdevName [VDEV ld LdevName]>...>

symsnap -cg CgName [-offline] [-i Interval] [-c Count]
        [-bcv | -rdf | -rbcv] [-sid SymmID]

```

```

-rdfg <SymmID:<GrpNum[,GrpNum,...]|all>[,...] |
name:Name[,Name,...]>]]

query [-multi] [-restore] [-changed] [-attach]
[-sid SymmID] {-pools}
[LdevName [LdevName...]]

verify [-created | -copied | -copyinprog | -copyonwrite |
-restinprog | -restored | -failed] [-force]
[-concurrent]
<<[LdevName [VDEV pd PdevName]]>...> |
<<[LdevName [VDEV dev SymDevName]]>...> |
<<[LdevName [VDEV ld LdevName]]>...> |
<<[LdevName [SYM pd PdevName]]>...> |
<<[LdevName [SYM dev SymDevName]]>...> |
<<[LdevName [SYM ld LdevName]]>...> |
<<[LdevName [BCV pd PdevName]]>...> |
<<[LdevName [BCV dev SymDevName]]>...> |
<<[LdevName [BCV ld LdevName]]>...>

symsnap -cg CgName [-v] [-noprompt] [-i Interval]
[-c Count] [-sid SymmID]

attach <<LdevName VDEV pd PdevName>...> |
<<LdevName VDEV dev SymDevName>...> |
<<LdevName VDEV ld LdevName>...>

detach <<LdevName VDEV pd PdevName>...> |
<<LdevName VDEV dev SymDevName>...> |
<<LdevName VDEV ld LdevName>...>

symsnap -sid SymmID <-file DeviceFileName |
-noprompt 'redirect stdin'> [-v] [-force]
[-noprompt] [-i Interval] [-c Count]
[-preserveTGTLocks -lockid LockNum] [-star]

create [-skip] [-svp <PoolName>]

activate [-not_ready] [-skip]
[-preaction ScriptFile] [-postaction ScriptFile]
[-vxfs <MountPoint...>] |
[-ppath <SRCDEVS | PowerPathPdevName...> |
[-rdb -dbtype DbType [-db DbName] ] |
[-consistent [-both_sides]]

terminate [-symforce] [-skip] [-restored]

restore [-full] [-not_ready]

symsnap -sid SymmID <-file DeviceFileName |
-noprompt 'redirect stdin'>
[-force] [-i Interval] [-c Count]

query [-multi] [-restore] [-changed] [-attach] [-pools]

verify [-created | -copied | -copyonwrite | -restinprog |
-restored | -failed]

attach [-created | -copied | -copyonwrite | -restinprog |
-restored | -failed]

detach [-created | -copied | -copyonwrite | -restinprog |
-restored | -failed]

symsnap [-sid SymmID] [-i Interval] [-c Count] [-offline]

list [-pools [-all]] | [-svp <PoolName>] | [-savedevs
[-fba |ckd | -ckd3390 | -ckd3380 | -as400] [-all]
[-svp <PoolName>]]

```

```

symsnap -sid SymmID [-offline]

        show pool PoolName [-all] [-fba | -ckd | -ckd3390 |
                        -ckd3380 | -as400]]

symsnap [-sid SymmID] [-i Interval] [-c Count] [-offline]
        [-percent <1-100> -action <ScriptFile>
        [-norepeat]] [-svp PoolName]

monitor

```

symstar *Component License: SRDF/Star, SRDF/S, SRDF/A, SRDF/CG*
 Product Guide: Symmetrix SRDF Family CLI

Performs Symmetrix SRDF Star control operations on a composite group.

```

symstar -h

symstar show CgName [-detail]

symstar -cg CgName

        buildcg -site SiteName

        cleanup -site SiteName {-force} [-v]

        connect -site SiteName {-force} [-v] [-full]
                [-keep_data SiteName [-remote]]

        disable [-force] [-v]

        disconnect -site SiteName {-force} [-v]

        enable [-force] [-v]

        halt [-reset] [-force] [-v]

        isolate -site SiteName [-force] [-v]

        protect -site SiteName [-force] [-v]

        query [-detail] [-offline]

        reset -site SiteName [-force] [-v]

        setup -options optionsfile [-clear] [-reload options]

        switch -site SiteName [-keep_data SiteName] [-force]
                [-full] [-v]

        unprotect -site SiteName [-force] [-v]

```

symstat *Component License: Base Product Guide: Symmetrix Array Management CLI*

Displays statistics information about a Symmetrix array, any or all directors, a device group, a disk, or a device.

```
symstat -h

symstat [-i Interval] [-c Count]

[-type REQUESTS [-g DgName [-bcv | -all]]]
[-type REQUESTS] -sid SymmID -RepType rdfa [-v]
    [-g ALL|-rdfg <#|ALL>|-cg <CgName|ALL>]
[-type REQUESTS] -g DgName -RepType rdfa [-v]
[-type REQUESTS] -sid SymmID -RepType rdf
    [-g ALL | -rdfg <#|ALL>]
[-type REQUESTS] -g DgName -RepType rdf
[-type REQUESTS] -sid SymmID -RepType rcopy
    [-name <SessionName>]

[-type REQUESTS] -sid SymmID -CA <# | ALL>
[-type REQUESTS] -sid SymmID -EA <# | ALL>
[-type REQUESTS] -sid SymmID -EF <# | ALL>
[-type REQUESTS] -sid SymmID -RA <# | ALL>
[-type REQUESTS] -sid SymmID -SA <# | ALL>

-dir <#|ALL> [-sid SymmID -RepType rcopy]

-type PREFETCH [-sid SymmID] [-DA <#|ALL>]
-type CACHE [-sid SymmID] [-CA <#|ALL>]
-type CACHE [-sid SymmID] [-EA <#|ALL>]
-type CACHE [-sid SymmID] [-RA <#|ALL>]
-type CACHE [-sid SymmID] [-SA <#|ALL>]
-type CACHE [-sid SymmID] [-dir <#|ALL>]
-type CACHE [-sid SymmID] [-lru <#|ALL|name>]
-type CACHE -sid SymmID -RepType rdfa
    [-g ALL | -rdfg <#|ALL> | -cg <CgName|ALL>]
-type CACHE -g DgName -RepType rdfa

-type CYCLE -sid SymmID -RepType rdfa
    [-g ALL | -rdfg <#|ALL> | -cg <CgName|ALL>]
-type CYCLE -g DgName -RepType rdfa

-type PORT [-sid SymmID] -dir <#|ALL> [-port <#|ALL>]
-type PORT -sid SymmID -dir <#|ALL> [-port
    <#|ALL>] -RepType rcopy

-type PATH -sid SymmID -RepType rcopy
    [-by_session | -by_port]

-type DISK -sid SymmID
    [-disk <DA|ALL>[,<int|ALL>[,<id|ALL>]]]

-type BACKEND -g DgName -ld LdevName [-mirror #]
-type BACKEND -pd PdevName [-mirror #]
-type BACKEND -dev SymDevName [-sid SymmID] [-mirror #]

-type MEMIO -g DgName [-ld LdevName | -bcv | -all]
-type MEMIO -pd PdevName
-type MEMIO -dev SymDevName [-sid SymmID]

-type DMSP -g DgName -ld LdevName
-type DMSP -pd PdevName
-type DMSP -dev SymDevname [-sid SymmID]

-type RDF [-dev SymDevname | -g DgName | -ld LdevName]
    [-rdfg <#|ALL>] [-dir <#|ALL>] [-dir <#> -rdflink]
```

```
-type ISCSI [-sid SymmID] -RE # -ip <RemoteIPAddr>]
    [-rdf_spdlmt | -rdf_nw_comp | -spdlmt_grp]

-type ISCSI [-sid SymmID] -SE # -ip <RemoteIPAddr>]
    [-tcp_conn | -gige_dir]
```

symvg *Component License: Mapping Solution Product Guide: Symmetrix SRM CLI*

Displays mapping information about one or more logical volume groups (vg) that are defined by your specific platform's Logical Volume Manager.

```
symvg -h

symvg [-type VgType]

    list [-v]

    show VgName

    deport VgName [-newvg NewVgName] [-overwrite]
        [-mapfile FileName] [-host HostID]

    import [VgName] [-newvg NewVgName] [-mapfile FileName]
        [-cluster] [-clear]

    rescan

    create VgName [-p PartitionSize] PdevName...

    destroy VgName

    adddev VgName PdevName...

    rmdev VgName PdevName...

    recover VgName

symvg [-v] [-type VgType] [-force] [-sid SymmID]
    [-rdfg GrpNum] [-R1|-R2] [-bcv|-nobcv] [-vdev]

    vg2dg VgName DgName [-dgtype REGULAR | RDF1 | RDF2]

    vg2cg VgName CgName [-cgtype REGULAR | RDF1 | RDF2]
        [-apidb | -ppath | -rdf_consistency]
```

Environment variables

SYMCLI provides a group of environment variables that can be preset to streamline and expedite your command line session. [Table 2 on page 49](#) lists and describes the supported environment variables.

These environment variables can be preset to be default settings for your given session.

To see what environment variables can be set, enter:

```
symcli -env
```

To see what environment variables you have set, enter:

```
symcli -def
```

Table 2 Environment variables (Sheet 1 of 5)

Variable name Default value	Description
<code>SYMCLI_ACCESS_PIN</code> DEFAULT=NULL	For symacl with ADMIN privileges, to enable the commit, prepare, and release actions, this variable must be set to the ADMIN PIN (4 to 12 characters). If this is not set, you will always be prompted for a PIN.
<code>SYMCLI_ASM_CONNECT</code> DEFAULT=NULL	When mapping Oracle ASM, this variable must be set with connection information for the ASM instance. Format: <i>user/passwd@service</i>
<code>BCV_EST_TYPE</code> DEFAULT=PARALLEL	Specifies the default method for establishing BCV pairs. Possible values are: SINGULAR Specifies to issue an establish to a single device, including a meta member, at a time. This method allows other tasks access to the Symmetrix array when doing a large number of establishes. PARALLEL Specifies to issue an establish to each servicing disk adapter (DA) in parallel, and then wait for a DA to finish before issuing another establish to that DA. This method will keep the Symmetrix DAs the busiest. SERIAL Specifies to issue establishes as fast as the Global Special Task (GST) queue can handle them. However, all members of a meta must be established before continuing to the next meta or device. This is the default method when using meta devices.
<code>SYMCLI_BCV_DELAY</code> DEFAULT=0	When the <code>SYMCLI_BCV_EST_TYPE</code> parameter (described earlier in this table) is set to SINGULAR or PARALLEL, this parameter specifies how long (in seconds) to wait between sending commands to the Symmetrix array. Possible values range from 0 to 30.
<code>SYMCLI_BCV_PAIR_POLICY</code> DEFAULT=CANCEL_OLDEST	Specifies the BCV pair cancel policy that SYMCLI subsequently uses when incrementally establishing a new BCV pair or when the maximum number of BCV pairs is reached. Possible values are: CANCEL_OLDEST CANCEL_NEWEST DONT_CANCEL
<code>SYMCLI_CG</code> DEFAULT=None	Specifies a default composite group name.

Table 2 Environment variables (Sheet 2 of 5)

Variable name Default value	Description
SYMCLI_CLONE_COPY_MODE DEFAULT=NOCOPY	Specifies the mode in which Clone sessions are created. Can be set to NOCOPY, COPY, PRECOPY, COPY_DIFF, or PRECOPY_DIFF.
SYMCLI_CLONE_EMULATION DEFAULT=DISABLED	Specifies whether TimeFinder commands should be mapped to Clone commands by default. Can be set to ENABLED or DISABLED.
SYMCLI_CLONE_PAIR_POLICY DEFAULT=DONT_TERM	Specifies the CLONE terminate policy, that SYMCLI uses when establishing a new clone and the maximum number of clones has been reached. Can be set to TERM_OLDEST or DONT_TERM.
SYMCLI_CONNECT DEFAULT=NULL	Specifies the SYMAPI server connection information.
SYMCLI_CONNECT_TYPE DEFAULT=LOCAL (when SYMCLI_CONNECT is NOT set) REMOTE (when the SYMAPI thin client is installed) REMOTE_CACHED (when SYMCLI_CONNECT is set)	Defines the local or remote mode of the host or client connection to the Symmetrix array. Possible values for the client are: LOCAL Defines a local connection to the Symmetrix array. (Not used for a client/server connection.) REMOTE Defines a client operation in which all the remote SYMCLI commands are strictly executed on the server, and the Symmetrix configuration database is strictly read and updated remotely. REMOTE_CACHED Defines a client operation in which the remote Symmetrix configuration database is modified remotely but cached in memory locally. Those functions that are control operations or that modify the configuration database are executed remotely. These modifications to the remote configuration database are then cached locally.
SYMCLI_CTL_ACCESS DEFAULT=EXCLUSIVE	Specifies how to obtain a lock on the Symmetrix configuration database file before starting a Symmetrix control operation. Possible values are: EXCLUSIVE PARALLEL
SYMCLI_DB_FILE DEFAULT=symapi_db.bin	Specifies the configuration database file pathname for the host Symmetrix array's configuration data.
SYMCLI_DG DEFAULT=None	Specifies a default device group name.
SYMCLI_FILE DEFAULT=None	Sets the default file for various operations.
SYMCLI_FULL_PDEVNAME DEFAULT=None	Can be set to 1 to preserve the complete PDEVNAME.
SYMCLI_GENERATOR_FILE DEFAULT=None	Specifies a file to write a log of all active commands (BCV, SRDF, and Snap).
SYMCLI_LDEV_NAMING DEFAULT=DEFAULT (LdevNaming)	Specifies a default device naming convention other than logical device names. Possible values are: DEFAULT, SYMDEV, or PDEV. SYMDEV or PDEV are for Symmetrix device names or physical device names, respectively. (DEFAULT = LdevNaming)

Table 2 Environment variables (Sheet 3 of 5)

Variable name Default value	Description
SYMCLI_LOCKID DEFAULT= None	Specifies the lock holder ID for commands that require the lock ID.
SYMCLI_LOG DEFAULT= None	Specifies a single file to be used as the log file where all new entries are appended to the file.
SYMCLI_MAP_PRESERVE_CASE DEFAULT= None	When set to 1, the case of the output fields is preserved. This setting is only valid for Windows environments.
SYMCLI_MAX_BCV_PAIRS DEFAULT= 8	Normally, SYMCLI allows up to 8 BCV device pairs, which can be incrementally established with standard devices. The maximum number of pairs can be custom adjusted from 1 to 16 pairs with this variable.
SYMCLI_MODE DEFAULT= None	Specifies the command output reporting style to be compatible with prior SYMCLI versions. Possible values are V55, V60, V61, V62, V63, and V64.
SYMCLI_NOLOGGING DEFAULT= 0	When set to 1, logging is disabled.
SYMCLI_NOPROMPT DEFAULT= 0	When set to 1, disables verification prompts.
SYMCLI_OFFLINE DEFAULT= 0	When set to 1, online access to Symmetrix device status is disabled (Symmetrix configuration database access only).
SYMCLI_OSM_VERSION DEFAULT= 4.0.0	Specifies the version reported by the SYMCLI OSM SRDF Compatibility mode.
SYMCLI_OUTPUT_MODE DEFAULT= Standard	Can be set to a specific mode to output SYMCLI utilities. Valid modes are: Standard XML XML_ELEMENT
SYMCLI_PDEV_FILE DEFAULT= NULL	Can be set to specify the pathname location of a physical-device definitions file. These definitions replace the physical devices previously discovered or defined.
SYMCLI_RCOPY_COPY_MODE DEFAULT= None	Specifies the mode in which Rcopy sessions are created. Can be set to COPY_DIFF, NOCOPY_DIFF, COPY_NODIFF, or NOCOPY_NODIFF.
SYMCLI_RDFG_CONSISTENCY DEFAULT= DISABLE	Can be set to enable consistency verification on an RDF Group level for consistent operations.
SYMCLI_RDB_CONNECT DEFAULT= NULL	Can be set to specify the default relational database connection information in the format <i>user/password@service</i> .
SYMCLI_RDB_NAME DEFAULT= NULL	Specifies the default relational database name (<i>DbName</i>).

Table 2 Environment variables (Sheet 4 of 5)

Variable name Default value	Description
SYMCLI_RDB_TYPE DEFAULT=NULL	Specifies a specific type (<i>DbType</i>) of database. Possible values: Oracle Informix SQLServer Sybase IBMUDB Exchange SharePoint
SYMCLI_REMOVE_SYMS DEFAULT=0	When set to 1, a discover will remove from the Symmetrix configuration database, any record of a Symmetrix array and its dependent devices and device groups, when the Symmetrix array is no longer reachable.
SYMCLI_SCHEMA_NAME DEFAULT=NULL	Specifies a relational database schema name (<i>SchemaName</i>).
SYMCLI_SID DEFAULT=None	Specifies a default Symmetrix ID.
SYMCLI_SKIP_ON_FAILURE DEFAULT=0	When set to 1, causes the symcfg discover command (which scans all bus-connected devices) to skip over any Symmetrix array encountered in an error state. This allows the command to complete the scan of the remaining units. (Otherwise, the command faults as it fails to complete the interrogation of all the Symmetrix arrays.)
SYMCLI_SNAP_PAIR_POLICY DEFAULT=DONT_TERM	Specifies the SNAP terminate policy, that SYMCLI uses when establishing a new snap and the maximum number of snaps has been reached. Can be set to TERM_OLDEST or DONT_TERM. The default is DONT_TERM which causes the snap operations to fail.
SYMCLI_SVP DEFAULT=DEFAULT_POOL	Can be set as the default SAVEDEV pool name.
SYMCLI_TBS_NAME DEFAULT=NULL	Specifies a relational database tablespace name (<i>TbSpName</i>).
SYMCLI_UPPERCASE DEFAULT=0	When set to 1, specifies that any user input in lowercase is entered as uppercase.
SYMCLI_VERBOSE DEFAULT=0	When set to 1, enables the verbose response mode for SRDF and BCV control operations.
SYMCLI_VG DEFAULT=None	Specifies a default logical volume group name.

Table 2 Environment variables (Sheet 5 of 5)

Variable name Default value	Description
<code>SYMCLI_WAIT_ON_DB</code> DEFAULT=0	When set to 1, SYMCLI will wait to obtain a lock on the Symmetrix configuration database when locked by another user. By default, a busy database will return an error.
<code>SYMCLI_WAIT_ON_GK</code> DEFAULT=0	When set to 1, causes the SYMCLI to wait for the retrieval of Symmetrix information when all gatekeepers are busy. Otherwise, a busy gatekeeper will cause an error.
<code>SYMCLI_XML_SCHEMA</code> DEFAULT=None	Can be set to specify a URL to the XML Schema document describing the output of SYMCLI in XML mode. It is advised that the schema is placed in a public location and this variable set to point to it. Without this variable set, no mention of a schema will occur. Note that this setting does nothing in non-XML mode.

For more information about these environment variables, see the *EMC Solutions Enabler Symmetrix CLI Command Reference*.

