



QUICK REFERENCE

EMC Solutions Enabler Symmetrix CLI Version 6.0

Quick Reference

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This quick reference summarizes the spectrum of the V6.0 EMC Solutions Enabler Symmetrix CLI (SYMCLI) command set. It also identifies required license keys and optional environment variables.

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Contents

License Matrix.....	4
SYMCLI Commands	6
symacl.....	6
symapisrv.....	6
symaudit	7
symbcv	7
symcfg	9
symcg.....	10
symchg	11
symchksum.....	12
symcli.....	12
symclone	12
symconfigure.....	15
symdev	15
symdg.....	17
symdisk	17
symdrv	18
symerase.....	18
symevent.....	18
symgate	18
symhost	19
symhostfs	19
syminq	19
symioctl	20
symlabel	20
symld	21
symlv	22
symmask	23
symmaskdb.....	24
symmir	24
symoptmz	27
sympart	28
sympd.....	28
symqos.....	28
symrcopy.....	29
symrdb	29
symrdf	31
symreplicate	34
symreturn.....	35
symrslv	35
symsnap	35
symstat	38
symvg	39
Environment Variables	40

License Matrix

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

Table 1 License Matrix

Required Component License	Command Available
SYMAPI Server	symapisrv
Base	symacl
	symaudit
	symbcv
	symcfg
	symcg
	symcli
	symdev
	symdg
	symdisk
	symdrv
	symevent
	symgate
	syminq
	symlabel
	symld
	sympd
	symqos
	symstat
Configuration Manager	symconfigure
DeltaMark (Change Tracker)	symchg
Device Masking	symmask
	symmaskdb
Double Checksum (Oracle PAK)	symchksum

Table 1 License Matrix (continued)

Required Component License	Command Available
Mapping Solution (SRM)	symhost
	symhostfs
	symioctl
	symlv
	sympart
	symrdb
	symrslv
	symvg
Open Replicator/LM ^a Open Replicator/DM ^b	symrcopy
Optimization (Control)	symoptmz
Symmetrix® Secure Erase	symerase
SRDF® or SRDF/Synchronous	symrdf
	symioctl
SRDF/A	symrdf set mode async (Asynchronous mode support)
SRDF/Automated Replication ^c	symreplicate ^d
SRDF/Consistency Groups ^c	symcg -cg CgName enable
TimeFinder® or TimeFinder/Mirror	symmir
	symreturn
	symioctl
TimeFinder/Clone	symclone symmir ^e
TimeFinder/Consistency Groups ^c	symmir split -consistent symreplicate start -consistent symsnap activate -consistent symclone activate -consistent
TimeFinder/Snap or EMC Snap™	symsnap

- a. Online Pull only.
- b. All functions except Online Pull.
- c. Applies to Enginuity™ 5670.55 or greater.
- d. Also requires an SRDF and TimeFinder 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 Access Control 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 -sid SymmID [-noprompt]
            release

symacl [-sid <SymmID|ALL>]
            show accpool PoolName [-acl]
            accgroup GroupName [-acl]

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

symacl      -sid SymmID
            backup -file CommandFile

symacl -unique
```

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

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

```
symapisrv -h

symapisrv [-background]
            start
            [-service Servicename] |
            [-node Node][-port Port] |
            [-address Address][-port Port]

symapisrv
            stop
            [-service Servicename] |
            [-node Node][-port Port] |
            [-address Address][-port Port]
```

symaudit *Component License: Base Product Guide: Symmetrix Base 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
```

```
symaudit list -sid SymmID [-v] [-text] [-h]  
                [-function_class ClassName]  
                [-action_code ActionName]  
                [-host HostName]  
                [-vendor_id VendorId]  
                [-application_id ApplId]  
                [-symdev_range StartDevname:EndDevname]  
                [-start_date date_time]  
                [-end_date date_time]  
                [-record_num RecordNumber]  
                [-n RecordCount]
```

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

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

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

When specifying help:

```
symbcv -h
```

When listing devices:

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

When specifying physical device names:

```
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]
```

When specifying Symmetrix device names:

```
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]
```

When specifying logical device names:

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

```
disassociate ld LdevName [-force]
```

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

When moving or removing all devices:

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

When specifying composite groups:

```
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]

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]

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]
```

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

symcfg *Component License: Base Product Guide: Symmetrix Base 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 | -clarion]
scan
```

```
symcfg
sync      [-sid SymmID] [-rdf | -bcv | -local |
           -dirsts | -snap | -cfgmgr]
remove    [-sid SymmID] [-noprompt]
release   [-sid SymmID] [-noprompt] [-lockn <#>] [-force]
verify    -sid SymmID
```

```
symcfg [-cid ClarID]
        -clarion sync
```

```
symcfg [-sid SymmID] [-ssid] [-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 #]]
list [-FA <#|ALL>] [-P #]] [-address [-available]]
list [-RA <#|ALL>] [-switched] [-v]
list [-SA <#|ALL>] [-P #]
list [-SA <#|ALL>] [-P #] [-address [-available
[-fibre]]
```

```
symcfg [-cid ClarID]
        -clarion list
```

```
symcfg [-sid SymmID]
list -memory
list -rdfg <#|ALL> [-dynamic | -static]
```

```
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] [-lockn <#|RDF|GNS|ALL>]
```

```

list [-connections [-sorthost] [-capacity]]
list [-applications [-client] [-host HostName]]
list [-cuimage]
show <AppID> -applications [-client] [-host HostName]
show -cuimage cuImageNumber [-ssid_num <SSIDnumber>]

symcfg [-v]
list [-services] [offline]
list [-semaphores]

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

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

symcfg authorization list
authorization <add | update> -host HostName
                        -username UserName -password PassWord
authorization delete -host HostName -username UserName

```

symcg *Component License: Base and SRDF/CG (for enable)* *Product Guide: Symmetrix Base 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]
import 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]

symcg -cg CgName -sid SymmID
add dev SymDevName [LdevName] [-vdev]
remove dev SymDevName [-force] [-symforce]

symcg -cg CgName [-sid SymmID] [-RDFG GrpNum]
    [-RANGE <SymDevStart:SymDevEnd>] [-vdev]

addall [[pd]|dev] [-R1|-R2] [-vdev]
rmall [-force] [-symforce]

```

```

symchg -cg CgName [-noprompt] [-v] [-force]
    enable
    disable

symchg -cg CgName [-sid SymmID] [-noprompt] [-v]
    [-bcv | -vdev] [-force]

    write_disable [LdevName [LdevName...]]
    rw_enable [LdevName [LdevName...]]
    ready [LdevName [LdevName...]]
    not_ready [LdevName [LdevName...]]
    relabel [LdevName [LdevName...]]

symchg -cg CgName [-sid SymmID]
    [-v] [-noprompt] [-force]
    [-bcv|-rbcv|-brbcv|-rrbcv|-vdev]

    hold [LdevName [LdevName...]]
    unhold [LdevName [LdevName...]]

```

symchg *Component License: DeltaMark Product Guide: Symmetrix Change Tracker 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 mmddyyyy hh:mm] [-stop mmddyyyy 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 Double Checksum 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]

    disable dev SymDevName -force

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

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

    disable [-v]

    validate [-v]

    verify [-v]
```

symcli *Component License: Base Product Guide: Symmetrix Base 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/Mirror 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]
          [-preserveTGTLocks -lockid LockNum]
          [[-rdf [-bcv]] | -rrbcv]

    create [-opt|-exact] [[-copy|-precopy] -differential]
          [-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]\
          [-preaction Script] [-postaction Script]
          [-not_ready] [-skip]
```

```

    <<[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] [-precop]
    <<[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|-exact] [-copy [-differential]]]
    <<[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]

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

verify [-created|-copied|-copyinprog|-copyonaccess|
    -precop] [-cycled]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...> |

symclone -g DgName [-h]
    set mode [copy|precop|nocop]
    <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
    <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
    <<[LdevName [[SYM|BCV] ld LdevName]]>...> |

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

create [[-copy] [-precop] -differential] [-skip]

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

terminate [-symforce] [-skip]

recreate [-skip] [-precop]

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

```

```

        [-full [-opt|-exact] [-copy [-differential]]]

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

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

query      [-multi]

verify     [-created | -copied | -copyinprog |
           -copyonaccess | -precopy [-cycled]]

set mode   [precopy|copy|nocopy]

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

list

symclone -cg CgName [-h] [-v] [-noprompt]
           [-force] [-i Interval] [-c Count] [-sid SymmID]
           [[-rdf [-bcv]] | -rrbcv]

create     [-opt|-exact] [[-copy] [-precopy]
           -differential]
           [-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]
           [-preaction Script] [-postaction Script]
           [-not_ready] [-skip]
           <<[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]
           [-preaction Script] [-postaction Script]
           [-not_ready] [-skip]
           [-full [-opt|-exact] [-copy [-differential]]]
           <<[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] [-c Count] [-sid SymmID]

```

```

query      [LdevName [LdevName...]]
           [-multi] [-bcv] [-rdf] [-rrbcv]

verify     [-created | -copied | -copyinprog |
           -copyonaccess |
           -precopy [-cycled] | -recreated]
           <<[LdevName [[SYM|BCV] pd PdevName]]>...> |
           <<[LdevName [[SYM|BCV] dev SymDevName]]>...> |
           <<[LdevName [[SYM|BCV] ld LdevName]]>...>

```

symconfigure *Component License: Configuration Manager Product Guide: Symmetrix Configuration Change CLI*

Allows the user to manage major 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] Cmd_Filename | (redirect stdin)
    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]

```

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

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

```

symdev -h

symdev      [-sid SymmID] [-offline] [-v] [-resv] [-wnn]
    list    [-SA <#|ALL>] [-P #] [-CAP #] [-N #] [-cyl]
            [-scsi][-fibre] [-held] [-RADIANT]
            [-noport|-multiport|-firstport]
            [-RANGE SymDevStart:SymDevEnd]
            [-R1][-R2] [-bcv|-nobcv|-drv] [-vcm]
            [-meta] [-hotspare] [-dynamic] [-worm]
            [-vdev] [-savedev] [-raids] [-raid5]
            [-rdfa] [-disk_group nn]
    list    [pd]

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] -inventory list

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

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

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

symdev    -sid SymmID [-noprompt]
          rw_enable    SymDevName [-SA <#|ALL> [-P #]]
          write_disable SymDevName [-SA <#|ALL> [-P #]]
          ready        SymDevName
          not_ready    SymDevName
          relabel      SymDevName
          hold         SymDevName
          unhold       SymDevName
symdev -sid SymmID -file <filename> [-noprompt]

          rw_enable    [-SA <#|ALL> [-P #]]
          write_disable [-SA <#|ALL> [-P #]]
          ready
          not_ready
          relabel
          hold
          unhold

```

symmdg

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

Performs operations on a Symmetrix device group.

symmdg -h

symmdg

```
create DgName [-type REGULAR | RDF1 | RDF2]
delete DgName [-force]

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

import DgName [-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 [-bcv | -nobcv | -rbcv | -rrbcv |
                    -brbcv | -vdev] [-force] [-rename]
                    [-apidb | -ppath | -rdf_consistency]

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

list [-inactive]

activate DgName [-noprompt]

activateall [-noprompt]

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

rename DgName NewDgName

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

symmdisk

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

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

symmdisk [-h]

```
symmdisk [-sid SymmID] [-v [-hypers]] [-hotspares]\
          [-cyl] [-by_diskgroup] [-disk_group nn]

list [-da <#|ALL>] [-interface <#|ALL>]\
     [-tid <#|ALL>]

symmdisk [-sid SymmID] [-cyl]
show DiskAddress
```

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

Displays information for selected DRV devices.

symdrv -h

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

symerase *Component License: Symmetrix Secure Erase*
 Product Guide: Symmetrix Secure Erase CLI

Allows the user to erase data from Symmetrix devices.

```
symerase [-sid SymmID] [-h] [-noprompt] [-noecho]
          [-pattern RANDOM | ZEROS | ONES | UserPattern]
          [ dev SymDevName[:SymdevName] |
            pd PdevName |
            -g DgName ld [LdevName | ALL] |
            filesystem DriveLetter ]
verify
commit [-confirm]
```

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

Enables the monitoring and tracking of events on Symmetrix arrays.

```
syevent  [-h]
syevent  [-sid SymmID] [-v] [-warn | -error | -fatal]
monitor  [-i Interval] [-c Count]
list     [-start <date:time>] [-stop <date:time>]
```

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

Performs support operations on a gatekeeper device.

symgate -h

When specifying physical device names:

```
symgate [-offline]
        associate pd -g PdevName DgName
        disassociate pd -g PdevName DgName
        define     pd PdevName
        undefine   pd PdevName
```

When specifying Symmetrix device names:

```
symgate [-offline][-sid SymmID]
        associate dev SymDevname -g DgName
        disassociate dev SymDevname -g DgName
        define     dev SymDevname
        undefine   dev SymDevname
```

```
symgate list [-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 Base 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]
        [-v [-nocapacity]]
        [-copa] [-wwn [-colons]]

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 Base Management CLI

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

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 Base 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]

    addall [-sid SymmID] [-SA <#|ALL>] [-P #]
           [-vdev | -RDFG #]
           [-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 #] [-vdev]
          [-CAP #] [-N #] [-RANGE SymDevStart:SymDevEnd]

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

    rename LdevName NewLdevName

symld -g DgName [-noprompt] [-SA <#|ALL>] [-P #] [-bcv |
               -vdev]
    rw_enable [LdevName [LdevName...]]
    write_disable [LdevName [LdevName...]]

symld -g DgName [-noprompt] [-bcv | -vdev]
    ready [LdevName [LdevName...]]
    not_ready [LdevName [LdevName...]]
    relabel [LdevName [LdevName...]]

symld -g DgName [-noprompt] [-bcv | -rbcv | -brbcv |
               -rrbcv | -vdev]
    hold [LdevName [LdevName...]]
    unhold [LdevName [LdevName...]]
```

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]

symlv -g VgName [-type VgType]

    stats [-i Interval] [-c Count] [-g VgName [-lv LVolName]]

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

    delete LVolName

    add LVolName -nmirror Mirrors [-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...]
```

symmask

*Component License: Device Masking
Product Guide: Symmetrix Device Masking 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 |  
  
    set lockdown <on <fcid>|off> -dir # -p #

symmask -sid SymmID -wwn wwn |  
                                -awwn awwn |  
                                -iscsi iscsi |  
                                -aiscsi aiscsi |  
  
    list logins [-pdev PdevName] [-v]  
                [-dir all [-p all] | -dir # [-p #|all]]

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

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

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

add devs startSymDevname:endSymDevname |  
        SymDevname|SymDevname,,...  
        -dir # -p # [-noprompt]

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

replace <wwn | iscsi>

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

symmask -sid SymmID <-wwn wwn | -iscsi iscsi>  
    rename          <awwnNew | aiscsiNew>

symmask -sid SymmID [-noprompt]  
    refresh

symmask -sid SymmID -iscsi iscsi | -aiscsi aiscsi  
    set authentication -type authentication_type  
                      -credential credential_name  
                      -secret secret_value

symmask -sid SymmID -iscsi iscsi | -aiscsi aiscsi  
    [ enable | disable | show ] authentication
```

symmaskdb *Component License: Device Masking Product Guide: Symmetrix Device Masking CLI*

Backs up, restores, initializes, and shows the contents of the device masking database.

```
symmaskdb -h

symmaskdb -sid SymmID | -file BackupFilename

    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 capacity -host Hostname

symmaskdb -sid SymmID -file BackupFilename [-noprompt]

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

    backup

symmaskdb -sid SymmID -file BackupFilename [-noprompt]

    init [-vcmdb_type 3 | 4 | 5 ]

symmaskdb -sid SymmID [-noprompt]

    convert [-vcmdb_type 4 | -vcmdb_type 5
            -file FileName]

    set no_direct_io | direct_io

    remove -meta_member
```

symmir *Component Licenses: TimeFinder/Mirror, TimeFinder/ CG (for -consistent) 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]
[-noprompt] [[-rdf] [-bcv] | [-rrbcv]] [-i Interval]
[-c Count] [-preserveTGTLocks -lockid LockNum]
[-preaction Script] [-postaction Script]
```

```

establish [-full [-opt|-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]
          [-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]]>...>

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]
          <<[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    <<[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] [-sid SymmID]
          [-preaction Script] [-postaction Script]

establish [-full [-opt|-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]
           [-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]]>>...>

symmir -cg CgName [[-rdf] [-bcv] | [-rrbcv]]
           [-offline] [-i Interval] [-c Count]
           [-sid SymmID]
           [[-attach] [-multi] [-protect] [-protbcvest]
           [-bg [-percent]]] | [-summary]

query      [LdevName [LdevName...]]

verfiy     [-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]]>>...>

symmir -cg CgName [-v] [[-rdf] [-bcv] | [-rrbcv]]
           [-i Interval] [-c Count] [-noprompt]

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

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

           [-sid SymmID]

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

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

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

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

```

```

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

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

attach

detach

cancel

```

symoptmz *Component License: Optimizer Product Guide: Symmetrix Optimization 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]
  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

```

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 Base Management CLI*

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

```
sympd -h
```

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

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

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

```
list [-resv]
```

```
show PdevName
```

```
export -file FileName
```

```
verify -file FileName [-v]
```

symqos *Component License: None Product Guide: Symmetrix Base Control CLI*

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

```
symqos -h
```

```
symqos -g DgName [-bcv|-nobcv]
```

```
set <BCV|RDF|BCS|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>]
```

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 [-v | -noprompt]

    create      <-push|-pull> <-hot|-cold>
                [-name SessionName]
                [-copy [-differential]]

symrcopy      -file FileName [-v | -noprompt] [-force]

    activate    [-consistent]
    recreate    [-name SessionName]
    set mode    <copy | nocopy>
    set pace    Value
    terminate   [-symforce]

symrcopy list [-sid SymmID] [-offline] [-detail|-wnn]

symrcopy      -file FileName [-offline] [-detail|-wnn]
               [-i <Interval>] [-c <Count>]
    query

symrcopy      -file FileName [-offline]
               [-i <Interval>] [-c <Count>]

    verify      [-createinprog | -created | -recreateinprog |
                -recreated | -copyinprog | -copyonaccess |
                -copyonwrite | -copied | -terminateinprog |
                -failed | -verifyinprog]
```

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][-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]

```

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]
    [-bcb|-nobcb] [-resv] [-offline] [-dynamic]
    [-concurrent] [-consistency] [-rdfa]
```

Device Groups

```
symrdf -g DgName
    [-v|-noecho] [-noprompt] [-force] [-symforce]
    [-bypass] [-bcb|-rbcb|-brbcb|-all] [-RDFG GrpNum]
    [-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...]]
merge     [LdevName [LdevName...]]
update    [-until InvalidTracks] [LdevName [LdevName...]]
    [-remote]

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] [-bcb|-all]
    [-i Interval] [-c Count]
swap [-refresh R1|R2]

symrdf -g DgName [-bcb|-rbcb|-brbcb|-all] [-RDFG GrpNum]
    [-offline] [-i Interval] [-c Count] [-rdfa]
    [LdevName [LdevName...]]
query
verify [-synchronized |-suspended [-enabled] |
    -susp_offline |-split |-failedover |
    -updated |-syncinprog |-updateinprog |
    -partitioned |-valid |
    -consistent [LdevName [LdevName...]]]

symrdf -g DgName [-v] [-noprompt] [-bcb|-rbcb|-brbcb|-all]
    [-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] [-bypass] [-bcv|-all]
               [-i Interval] [-c Count]

    enable
    disable
    failover [-immediate] [-establish]
    split    [-immediate]
    suspend  [-immediate]

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] [-bypass] [-i Interval]
                 [-c Count] [-sid SymmID]
                 [-bcv|-rbcv|-brbcv]
                 [-RDFG sid:GrpNum,...]

    establish [-full] [LdevName [LdevName...]]
    restore   [-full] [-remote] [LdevName [LdevName...]]
    split     [LdevName [LdevName...]]
    failover  [LdevName [LdevName...]]
    failback  [-remote] [LdevName [LdevName...]]
    suspend   [LdevName [LdevName...]]
    resume    [LdevName [LdevName...]]
    merge     [LdevName [LdevName...]]
    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,...]

    query [LdevName [LdevName...]]
    verify [-synchronized] [-suspended [-enabled]]
           [-susp_offline] [-split] [-failedover]
           [-updated] [-syncinprog] [-updateinprog]
           [-partitioned] [-valid] [-cg_consistent]]

symrdf -cg CgName [-v] [-noprompt] [-force] [-bcv|-rbcv|-brbcv]
                 [-bypass] [-i Interval]
                 [-c Count] [-sid SymmID]
                 [-RDFG sid:GrpNum,...]

    set mode sync|semi|acp_disk|acp_wp|acp_off [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]
                 [-bypass] [-i Interval]
                 [-c Count] [-sid SymmID]
                 [-RDFG sid:GrpNum,...]

    failover [-immediate] [-establish]
    split    [-immediate]
    suspend  [-immediate]
```

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

Device File

```
symrdf -file Filename -sid SymmID -RDFG GrpNum [-v|
    -noecho][-noprompt] [-force][-symforce]
    [-i Interval][-c Count]
    [-bypass]
establish [-full] [-remote]
restore   [-full] [-remote]
split
failover  [-establish]
failback  [-remote]
suspend
resume
merge
update    [-until InvalidTracks] [-remote]
createpair -type <RDF1 | RDF2> -RDFG GrpNum
    -establish | -restore | -invalidate [R1 |
    R2] [-g NewDg] [-remote]

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]
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]

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

Dynamic Groups

```
symrdf addgrp -label GrpLabel -rdfg GrpNum -sid SymmID
              -dir Dir -remote_rdfg GrpNum
              -remote_sid SymmID -remote_dir Dir
              [-i Interval] [-c Count]
              [-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]
                 [-i Interval] [-c Count]

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

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]]

setup      [-g DgName | -cg CgName] -options OptionFile
           [-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]
           [-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     [-sid SymmID] [-log LogFile]

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

symreturn *Component License: TimeFinder/Mirror*
 Product Guide: Symmetrix TimeFinder Family 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/Snap*
 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]

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

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

terminate [--symforce] [--bcv] [--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]

query    [LdevName [LdevName...]] [-multi] [-restore]
        [-attach]]
verify   [-created | -copied | -copyinprog |
        -copyonwrite | -restinprog | -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]]>...>

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]

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

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

terminate [-symforce] [-bcv] [-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 -cg CgName [-offline] [-i Interval] [-c Count] [-bcv]

query    [-multi] [-restore] [-attach] [-sid SymmID]
        [LdevName [LdevName...]]

```

```

verify  [-created | -copied | -copyinprog |
        -copyonwrite | -restinprog | -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]]>...>

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 |
        'redirect stdin'> [-v] [-force] [-noprompt]
        [-i Interval] [-c Count]
        [-preserveTGTLocks -lockid LockNum]

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

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

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

restore  [-full] [-not_ready]

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

query    [-multi] [-restore]

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

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

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

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

list      [-savedevs [-ckd] [-all]] [-svp PoolName]
        -pools [-all] [-v]

symsnap -sid SymmID [-offline]

show pool PoolName [-all] [-ckd]

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

monitor

```

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

Displays statistics information about a Symmetrix, 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]]]

        -sid SymmID -RepType rdfa [-type REQUESTS] [-v]
        [-g ALL | -rdfig <#|ALL>]

        -g DgName -RepType rdfa [-type REQUESTS] [-v]

        -dir <#|ALL>
        -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 -rdfa [-rdf1 | -rdf2]
        -type CACHE      -sid SymmID -RepType rdfa
                        [-g ALL | -rdfig <#|ALL>]
        -type CACHE      -g DgName -RepType rdfa

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

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

        -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]
```

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 RDF1 | RDF2]
                    [-apidb | -ppath]
```

Environment Variables

SYMCLI provides a group of environment variables that can be preset to streamline and expedite your command line session. Table 2 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

Variable Name	Description	Default
SYMCLI_ACCESS_PIN	For <code>symacl</code> with ADMIN privileges, to enable the commit, prepare, and release actions, this variable must be set to the ADMIN PIN (4 to 12 chars.). If this is not set, you will always be prompted for a PIN.	NULL
SYMCLI_BCV_PAIR_POLICY	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: CANCEL_OLDEST (the default) CANCEL_NEWEST DONT_CANCEL	CANCEL_OLDEST
SYMCLI_CG	Specifies a default composite group name.	None
SYMCLI_CLONE_COPY_MODE	Specifies the mode in which Clone sessions are created. Can be set to NOCOPY, COPY, PRECOPY, COPY_DIFF, or PRECOPY_DIFF.	NOCOPY
SYMCLI_CLONE_EMULATION	Specifies whether TimeFinder commands should be mapped to Clone commands by default. Can be set to ENABLED or DISABLED.	DISABLED

Table 2 Environment Variables (continued)

Variable Name	Description	Default
SYMCLI_CLONE_PAIR_POLICY	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.	DONT_TERM
SYMCLI_CONNECT	Can be set to specify the SYMAPI server connection information.	NULL
SYMCLI_CONNECT_TYPE	Defines the local or remote mode of the host or client connection to the Symmetrix. Possible values for the client are: 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 which modify the configuration database are executed remotely. These modifications to the remote configuration database are then cached locally. LOCAL Defines a local connection to the Symmetrix. (Not used for a client-server connection.)	LOCAL (when SYMCLI_CONNECT is NOT set) REMOTE_CACHED (when SYMCLI_CONNECT is set) REMOTE (when the SYMAPI thin client is installed)
SYMCLI_CTL_ACCESS	Specifies how to obtain a lock on the Symmetrix configuration database file before starting a Symmetrix control operation. Possible values are: EXCLUSIVE PARALLEL	EXCLUSIVE

Table 2 Environment Variables (continued)

Variable Name	Description	Default
SYMCLI_DB_FILE	Specifies the configuration database file pathname for the host Symmetrix array's configuration data.	symapi_db.bin
SYMCLI_DG	Specifies a default device group name.	None
SYMCLI_GENERATOR_FILE	Specifies a file to write a log of all active commands (BCV, SRDF, and Snap).	None
SYMCLI_LDEV_NAMING	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 = <i>LdevNaming</i>)	DEFAULT (LdevNaming)
SYMCLI_LOCKID	Specifies the lock holder ID for commands that require the lock ID.	None
SYMCLI_LOG	Specifies a single file to be used as the log file where all new entries are appended to the file.	None
SYMCLI_MAP_PRESERVE_CASE	When set to 1, the case of the output fields is preserved. This setting is only valid for Windows environments.	None
SYMCLI_MODE	Specifies the command output reporting style to be compatible with prior SYMCLI versions. Possible values are V32, V40, V41, V42, V43, V50, V51, V52, V53, V5.4, and V5.5.	None
SYMCLI_NOLOGGING	When set to 1, logging is disabled.	0
SYMCLI_NOPROMPT	When set to 1, disables verification prompts.	0
SYMCLI_OFFLINE	When set to 1, online access to Symmetrix device status is disabled (Symmetrix configuration database access only).	0
SYMCLI_OSM_VERSION	Specifies the version reported by the SYMCLI OSM SRDF Compatibility mode.	4.0.0

Table 2 Environment Variables (continued)

Variable Name	Description	Default
SYMCLI_OUTPUT_MODE	Can be set to a specific mode to output SYMCLI utilities. Valid modes are limited to Standard and XML.	Standard
SYMCLI_PAGINATE	Can be set to FALSE to force inhibit of <i><press any key></i> message.	TRUE
SYMCLI_PDEV_FILE	Can be set to specify the pathname location of a physical-device definitions file. These definitions replace the physical devices previously discovered or defined.	NULL
SYMCLI_RCOPY_COPY_MODE	Specifies the mode in which Rcopy sessions are created. Can be set to COPY_DIFF, NOCOPY_DIFF, COPY_NODIFF, or NOCOPY_NODIFF.	0
SYMCLI_RDFG_CONSISTENCY	Can be set to enable consistency verification on an RDF Group level for consistent operations.	DISABLE
SYMCLI_RDB_CONNECT	Can be set to specify the default relational database connection information in the format <i>user/password@service</i> .	NULL
SYMCLI_RDB_NAME	Specifies the default relational database name (<i>DbName</i>).	NULL
SYMCLI_RDB_TYPE	Specifies a specific type (<i>DbType</i>) of database. Possible values: Oracle Informix SQLServer Sybase IBMUDB Exchange SharePoint	NULL
SYMCLI_REMOVE_SYMS	When set to 1, a discover will remove from the Symmetrix configuration database, any record of a Symmetrix and its dependent devices and device groups, when the Symmetrix is no longer reachable.	0

Table 2 Environment Variables (continued)

Variable Name	Description	Default
<code>SYMCLI_RETURN_MODE</code>	When set to FORMATTED for UNISYS platforms only, prints return code mnemonics and error strings following the execution of each SYMCLI command. DEFAULT disables this feature.	DEFAULT
<code>SYMCLI_SCHEMA_NAME</code>	Specifies a relational database schema name (<i>SchemaName</i>).	NULL
<code>SYMCLI_SID</code>	Specifies a default Symmetrix ID.	None
<code>SYMCLI_SKIP_ON_FAILURE</code>	When set to 1, causes the <code>symcfg discover</code> 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.)	0
<code>SYMCLI_SNAP_PAIR_POLICY</code>	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.	DONT_TERM
<code>SYMCLI_SVP</code>	Can be set as the default savedev pool name.	DEFAULT_POOL
<code>SYMCLI_TBS_NAME</code>	Specifies a relational database tablespace name (<i>TblSpName</i>).	NULL
<code>SYMCLI_UPPERCASE</code>	When set to 1, specifies that any user input in lowercase is entered as uppercase.	0
<code>SYMCLI_VERBOSE</code>	When set to 1, enables the verbose response mode for SRDF and BCV control operations.	0
<code>SYMCLI_VG</code>	Specifies a default logical volume group name.	None

Table 2 Environment Variables (continued)

Variable Name	Description	Default
SYMCLI_WAIT_ON_DB	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.	0
SYMCLI_WAIT_ON_GK	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.	0
SYMCLI_XML_SCHEMA	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.	None

For more information about these environment variables, see the *EMC Solutions Enabler Symmetrix Base Management CLI Product Guide*.

