

Real Application Clusters

cluvfy

```
cluvfy -h
cluvfy [ -help ]
cluvfy stage { -list | -help }
cluvfy stage { -pre | -post } <stage-name> <stage-specific
options> [-verbose]
cluvfy comp { -list | -help }
cluvfy comp <component-name> <component-specific
options> [-verbose]
```

crs_stat

```
crs_stat -h
crs_stat [resource_name [...]] -t [-v] [-q] [-c
cluster_member]
crs_stat -p [resource_name [...]] [-q]
crs_stat [-a] application -g
crs_stat [-a] application -r [-c cluster_member]
crs_stat -f [resource_name [...]] [-q] [-c cluster_member]
crs_stat -ls [resource_name [...]] [-q]
```

```
crs_register -u resname
crs_profile
crs_relocate
crs_start
crs_stop
crs_unregister
```

clscfg

```
clscfg -h

install      clscfg -install
              - creates a new configuration
upgrade      clscfg -upgrade
              - upgrades an existing configuration
downgrade    clscfg -downgrade
              - downgrades an existing
              configuration
add          clscfg -add
              - adds a node to the configuration
delete       clscfg -delete
              - deletes a node from the
              configuration
local        clscfg -local
              - creates a special single-node
              configuration for ASM
concept      clscfg -concepts
              - brief listing of terminology used in
              the other modes
trace        clscfg -trace
              - may be used in conjunction with
              any mode above for tracing
```

crsctl

```
check stack    crsctl check crs
               - checks the viability of the CRS stack
check cssd     crsctl check cssd
               - checks the viability of CSS
```

```
check crs      crsctl check crsd
               - checks the viability of CRS
check evm      crsctl check evmd
               - checks the viability of EVM
set css        crsctl set css <parameter> <value>
               - sets a parameter override
get css        crsctl get css <parameter>
               - gets the value of a CSS parameter
reset css      crsctl unset css <parameter>
               - sets CSS parameter to its default
show votedisk  crsctl query css votedisk
               - lists the voting disks used by CSS
add votedisk   crsctl add css votedisk <path>
               - adds a new voting disk
delete votedisk crsctl delete css votedisk <path>
               - removes a voting disk
enable crs     crsctl enable crs
               - enables startup for all CRS daemons
disable crs    crsctl disable crs
               - disables startup for all CRS daemons
start          crsctl start crs
               - starts all CRS daemons.
stop           crsctl stop crs
               - stops all CRS daemons.
start resource crsctl start resources
               - starts CRS resources.
stop resource  crsctl stop resources
               - stops CRS resources.
statedump evm  crsctl debug statedump evm
               - dumps state info for evm objects
statedump crs  crsctl debug statedump crs
               - dumps state info for crs objects
statedump css  crsctl debug statedump css
               - dumps state info for css objects
log css        crsctl debug log css
               [module:level]{,module:level} ...
               - Turns on debugging for CSS
trace css      crsctl debug trace css - dumps CSS
               in-memory tracing cache
log crs        crsctl debug log crs
               [module:level]{,module:level} ...
               - Turns on debugging for CRS
trace crs      crsctl debug trace crs
               - dumps CRS in-memory tracing
               cache
log evm        crsctl debug log evm
               [module:level]{,module:level} ...
               - Turns on debugging for EVM
trace evm      crsctl debug trace evm - dumps EVM
               in-memory tracing cache
log res        crsctl debug log res <resname:level>
               - turns on debugging for resources
crs software   crsctl query crs softwareversion
               [<nodename>]
               - lists the version of CRS software
               installed
crs activation crsctl query crs activeversion
               - lists the CRS software operating
               version
lsmodules css  crsctl lsmodules css
               - lists the CSS modules that can be
               used for debugging
```

Real Application Clusters

```
lsmodules crs      crsctl lsmodules crs
                   - lists the CRS modules that can be
                   used for debugging

crsctl lsmodules evm
                   - lists the EVM modules that can be
                   used for debugging
```

srvctl

Options

```
help      srvctl -h
```

Start stop

```
Service      srvctl <stop | start> service -d
              <database_name>
Database     srvctl <stop | start> database -d
              <database_name>
Instance     srvctl <stop | start> instance -d
              <database_name> -i <instance_name>
Applicatie   srvctl <stop | start> nodeapps -n
              <node_name>
Listener     srvctl <stop | start> listener -n
              <node_name>
Asm          srvctl <stop | start> asm -n <node_name>
```

services active?

```
$CRS_HOME/bin/crs_stat -t
$CRS_HOME/bin/crs_stat
```

oifcfg

```
Help         oifcfg -help
             oifcfg iflist [-p [-n]]
nieuw       oifcfg setif {-node <nodename> | -
             global} {<if_name><subnet>:<if_type>}...
bekijken    oifcfg getif [-node <nodename> | -
             global] [-if <if_name>[<subnet>] [-type
             <if_type>] ]
verwijderen oifcfg delif [-node <nodename> | -
             global] [<if_name>[<subnet>]]
```

ocrconfg

```
help        ocrconfig -help
export      ocrconfig -export <filename> [-s online]
import      ocrconfig -import <filename>
upgrade     ocrconfig -upgrade [<user> [<group>]]
downgrade  ocrconfig -downgrade [-version <version
string>]
backup loc  ocrconfig -backuploc <dirname>
show backup ocrconfig -showbackup
restore     ocrconfig -restore <filename>
replace     ocrconfig -replace ocr | ocrmirror
             [<filename>]
overwrite  ocrconfig -overwrite
repair      ocrconfig -repair ocr | ocrmirror
             <filename>
help        ocrconfig -help
```

Beschikbaarheid percentages

Beschikbaarheid	Uitval / jaar	Uitval / mnd*	Uitval / wk
90%	36,5 dag	72 uur	16,8 uur
95%	18,25 dag	36 uur	8,4 uur
98%	7,30 dag	14,4 uur	3,36 uur
99%	3,65 dag	7,20 uur	1,68 uur
99.5%	1,83 dag	3,60 uur	50,4 min.
99.8%	17,52 uur	86,23 min.	20,16 min.
99.9%	8,76 uur	43,2 min.	10,1 min.
99.95%	4,38 uur	21,56 min.	5,04 min.
99.99%	52,6 min.	4,32 min.	1,01 min.
99.999%	5,26 min.	25,9 sec.	6,05 sec.

*Maand bestaat uit 30 dagen