



DCM QUICK REFERENCE CARD

DCM Startup/Shutdown and Help

dcm [-a *ATM_port*] [-d *log_level*] [-l *log_file*] [-f *filename*]
[-h *hostname*] [-p *TCP_port*] [-s] [*command*;[*command*]]

quit | **exit**

help [*dcm_command*]

Setting the Message Logging Level

loglevel [0 | 1 | 2 | 3]

Displaying Port and Driver Information

show [all] [host *ip_hostf*] [port *portnum*] [*directed_outf*]

Changing Default Host and Port

host ([attach | detach] *ip_hostf ip_addr [TCP_portf]*) | **show**
port portnum

Creating, Modifying and Deleting PVCs

☆ **create** *vcnum (hostname | ip_addr) (rate=rate [unif] | max [best]
| (tx rate=rate | max | {req_rate [unif],accpt_rate [unif]}
[best] rx rate=rate [unif] | max [best])) [cip] [snap |
nosnap] [host ip_hostf]*

☆ **delete** *vcnum | all [host hostname] [port portnum]*

☆ **modify** *vcnum (rate=rate [unif] | max [best] | tx rate=rate | max
| {req_rate [unif],accpt_rate [unif]} [best] &|
[rx rate=rate [unif] | max [best]]) [host ip_hostf]*

Saving PVCs

save [cip | all] [port *portnum*] [host *ip_hostf*] [*directed_out*]

Displaying and Testing PVCs

show conn[ection] [all] [port *portnum*] [host *ip_hostf*]
[*directed_outf*]

loopback *vcnum [segment | end[-to-end]]*

Monitoring Statistics

☆ **clear stats** *aal5 | atm | all [port portnum] [host ip_hostf]*

show *vcnum | atm | phy [host ip_hostf] [directed_outf]*

show stat [*atm | aal5*] [*timerf*] [port *portnum*] [host *ip_hostf*]
[*directed_outf*]

show stat conn[ection] [*vcnum [timerf]*] [host *ip_hostf*] [*directed_outf*]

Viewing/Modifying ATM Address of the Adapter

show netprefix [port *portnum*] [host *ip_hostf*] [*directed_outf*]

show address [port *portnum*] [host *ip_hostf*] [*directed_outf*]

☆ **set address** *atm_addr [port portnum] [host ip_hostf] [directed_outf]*

☆ **clear address** *atm_addr | all [port portnum] [host ip_hostf]*

Viewing/Modifying ILMI Configuration

show ilmi [port *portnum*] [host *ip_hostf*] [*directed_outf*]

☆ **start ilmi** [*noregistration*] [port *portnum*] [host *ip_hostf*]

☆ **stop ilmi** [port *portnum*] [host *ip_hostf*]

☆ **set ilmi** *ilmi_option [port portnum] [host ip_hostf]*

☆ **reset ilmi** [port *portnum*] [host *ip_hostf*]

☆ **set uni** (3.0 | 3.1)

Commands and parameters can be abbreviated to the least number of unique characters

[] *Denotes optional parameters*

() *Denotes related, required parameters*

| *Indicates one OR the other parameter*

& | *Indicates one AND/OR the other parameter*

☆ *Requires root user access*

Refer to Other Side for Parameter Definitions

DCM Startup Command Parameters

-a ATM_port	Sets the default ATM port number. Valid range: 1-16
-d loglevel	Sets the startup logging level to 0,1, 2, or 3.
-l log_file	Uses the specified <i>log_file</i> for the default log file.
-f filename	Reads DCM commands from <i>filename</i> instead of <i>stdin</i> . If <i>filename</i> is a binary file, it may cause DCM to exit.
-h hostname	Connects to decnmd daemon running on <i>hostname</i> .
-p TCP_port	Specifies the TCP/IP port number to use when connecting to the decnmd daemon.
-s	Silent mode – only valid when reading commands from a file. No errors will be displayed for systems that are not connected.

DCM Subcommand Parameters

<i>hostname</i> or <i>ip_addr</i>	Specifies the hostname or IP address of the node that to which the ATM PVC connection is being made.
<i>ip_host</i>	Optional hostname or IP address to which the specified command is to be directed. The host must first be connected via the " host " command.
<i>portnum</i>	Optional port to which the specified command is to be directed. The port can be an integer from 1-16.
<i>vcnum</i>	Specified as <i>[[port/]VPI/]VCI</i> . The port, VPI, and VCI values must be non-negative integers.
<i>rate</i>	Specifies the rate in cells per second, unless a <i>unit</i> modifier is used.
<i>unit</i>	Can be " cps ", " kbs " or " mbs ". Rates specified in Mbps cannot be > than the line rate minus the physical layer overhead (149 or equivalent in kbps).
max	Specifies the maximum available connection rate.
best	Requests a rate as close to the specified rate as possible.
<i>req_rate</i>	Specifies a desired rate that might not be available.
<i>TCP_port</i>	The TCP port to use for the connection if no IP connection to the specified host exists.

snap | nosnap

Specifies whether or not to use LLC/SNAP encapsulation. By default, LLC encapsulation is enabled, allowing the multiplexing of several protocols over a single ATM virtual circuit.

acct_rate

Upper or lower limit on the range of rates to try if the requested rate is not available.

If *acct_rate* > *req_rate*, selected rate will be $\geq req_rate$.

If *acct_rate* is < *req_rate*, selected rate will be $\leq req_rate$.

If the keyword **best** is specified, *acct_rate* is not used.

Requested and accepted rates must be < the remaining available bandwidth. On SONET adapters, all transmit rates must add up to < 353,208 cps (~149 Mbps). If a transmit *rate* is specified by itself, it is taken as the requested rate and the acceptable rate is assumed to be zero.

ilmi_option Consists of one of the following options:

vpi vpi VPI for the reserved ILMI PVC (always 0).

vci vci VCI for ILMI PVC. The default VCI is 16.

rdv value Rate Divisor - used to calculate the maximum bandwidth as a percentage of line rate for the ILMI PVC.

cst seconds Coldstart Timeout - time in seconds between trap intervals.

gto seconds Get Timeout - time in seconds to await a response to an SNMP *get* request.

grc retries Get Retry Count - maximum number of retries for a *get* request.

sto seconds Set Timeout - time in seconds to await a response to an SNMP *set* request.

src retries Set Retry Count - maximum number of retries for a *set* request.

directed_out Directs output to a file. Valid formats are:

> *filename* Creates or overwrites *filename*.

>> *filename* Creates or appends to *filename*.

| *command* Pipes the output of the DCM command to the specified UNIX command.

atm_addr Up to 40 hexadecimal digits, separated by at least one dash or colons for readability.

timer Causes the stats to be averaged over the *timer* polling period and displayed repeatedly until stopped by <Control-C>. The value entered for *timer* is assumed to be seconds, unless "**min**" or "**hr**" is specified after the value.

noregistration

Enables ILMI without enabling the address registration function. ILMI will still provide a communication interface between the switch and end-station, but the ATM address for the end-station will have to be defined manually.