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Part Number: AV–QL20D–Tf OSI/DNA V Quick Reference Card AV-QL20D-TE



# **OSI/DNA V Configuration Commands**

This quick reference card summarizes the Open Systems Interconnection (OSI) configuration and console commands. The front panel of this card provides initial configuration steps for this protocol and also tells you how to access the CONFIG process.

Enter the following configuration commands at the OSI config> prompt. To list the configuration commands and their options, enter a ?.

After you have configured all of the protocols, enter **restart** at the OPCON prompt (\*), and respond **yes** after the following prompt:

Are you sure you want to restart the router? (Yes or No) : yes

# <u>a</u>dd

# <u>ch</u>ange

<u>a</u>lias

filter

Adds an ASCII string that designates a particular address or system ID.

<u>ar</u>ea

Adds additional area addresses that the node supports.

filter

Adds parameters to determine acceptance of incoming X.25 calls on a routing circuit (static incoming circuit or DA circuit).

permitted-neighbor

Adds a system ID (permitted neighbor) and its verifier password for system level security.

prefix-address

Adds static routes to destinations external to the IS-IS domain.

receive-password

Adds an ASCII character string (8 characters maximum) that authenticates all incoming packets.

routing-circuit

Adds a communication channel for X.25 SVCs (*static-in, static-out* or *DA*).

summary-address

Adds a summary address for abbreviating IP routing information at Level 2.

template

Adds a template for making outgoing X.25 static-out or X.25 DA circuits).

Modifies an incoming X.25 call filter.

permitted-neighbor

Modifies a permitted neighbor and its verifier password.

prefix-address

Modifies a static route.

routing-circuit

Modifies the configuration of an X.25 routing circuit.

summary-address

Modifies an IP summary address.

#### template

Modifies an outgoing X.25 call template.

<u>cl</u>ear

receive-password

Erases all configured receive-passwords.

#### <u>s</u>ram

Erases the OSI configuration for SRAM.

transmit-password

Erases the configured transmit-password.

# <u>del</u>ete

#### <u>adj</u>acency

Removes statically configured ES adjacency.

# <u>al</u>ias

Removes a configured alias.

# delete (continued)

#### <u>ar</u>ea

Removes the specified configured area address.

#### filter

Removes a configured incoming X.25 filter.

#### permitted-neighbor

Removes a permitted neighbor and its verifier password.

# prefix-address

Removes a configured prefix-address.

#### routing-circuit

Removes a configured routing circuit.

#### subnet interface #

Removes a configured subnet from the specified interface.

#### summary-address

Removes the specified statically configured IP summary address.

#### template

Removes a configured outgoing X.25 call template.

#### virtual-circuit

Removes a configured X.25 or Frame Relay virtual circuit.

#### disable

integrated-isis

Disables Integrated IS–IS. Disables capability to route IP traffic in addition to OSI traffic using OSI IS–IS Routing.

<u>o</u>si

Disables the OSI protocol running on the router.

#### routing-circuit routing-circuit-name

Disables the specified routing circuit.

#### subnet interface #

Disables the subnet on the specified interface.

# <u>en</u>able

# integrated-isis

Enables Integrated IS–IS to use a single routing protocol for routing both OSI and IP packets.

#### <u>o</u>si

Enables the OSI protocol running on the router.

routing-circuit routing-circuit-name

Enables the specified routing circuit. subnet *interface* #

Enables the subnet on the specified interface.

# <u>l</u>ist

#### adjacencies

Displays all statically configured ES adjacencies.

# <u>alg</u>orithm

Displays the routing algorithm when running the DNA V protocol.

# <u>ali</u>as

Displays the configured aliases and their corresponding address segments.

#### filter

Displays the defined filters for incoming X.25 routing circuits

#### <u>gl</u>obals

Displays a summary of the OSI configuration.

#### integrated-isis

Displays Integrated IS-IS configuration parameter settings.

#### permitted-neighbor

Displays the permitted neighbors and their verifier passwords.

# <u>ph</u>aseivpfx

Displays the configured DNA IV address prefix.

#### prefix-addresses

Displays all the SNPAs for statically configured routes.

# routing-circuit

Displays a summary of all routing circuits or details of each circuit.

# list (continued)

subnets [detailed | summary] interface #

Displays either a summary or detailed report for the specified interface.

# summary-addresses

Displays all statically configured IP summary address entries.

# template

Displays a list of all the defined templates for outgoing X.25 routing circuits.

#### timers

Displays the OSI/DNA V timer configuration.

virtual-circuit

Displays all configured X.25 or Frame Relay virtual circuits.

# set

#### adjacency

Adds or changes an ES adjacency.

# algorithm

This is a DNA V command that selects the routing algorithm, link-state or distance-vector.

# globals

Configures the global parameters required by the OSI protocol.

# network-entity-title

Configures the router's NET.

#### phaseivpfx

Configures the prefix-address of an attached DNA IV network.

# <u>su</u>bnet

Adds or changes a subnet.

#### <u>sw</u>itches

Turns OSI options (ES-IS checksum, ES-IS init, and authentication) on or off.

#### <u>t</u>imers

Configures the OSI timers, excluding any circuit timers.

# transmit-password

Sets or changes a transmit password.

# virtual-circuit

Configures an X.25 or Frame Relay virtual circuit.

#### <u>e</u>xit

Returns to the previous prompt level.

# **OSI/DNA V Console Commands**

Enter these commands after the OSI> prompt. The front panel of this card tells you how to access the CGWCON process.

To list the OSI/DNA V console commands and their options, enter a ? after the OSI> prompt.

#### addresses

Displays the router's NET and area addresses.

# change metric

Modifies the cost of a circuit.

#### clnp-stats

Displays OSI CLNP information.

# designated-router

Displays the designated router for the LAN subnets that are actively running IS-IS.

# dnav-info

Displays the Level 1 and Level 2 routing algorithm currently running on the router.

### es-adjacencies

Displays all ES adjacencies.

# es-is-stats

Displays the statistics for the ES-IS protocol.

# is-adjacencies

Displays all IS adjacencies.

# is-is-stats

Displays information associated with the IS-IS protocol.

### <u>l1-r</u>outes

Displays all L1 routes in the L1 database.

### <u>l2-r</u>outes

Displays all L2 routes in the L2 database.

#### 11-summary

Displays a summary of the L1 link state database.

# <u>l2-s</u>ummary

Displays a summary of the L2 link state database.

# l1-update

Displays a LSP for the specified L1 IS.

# l2-update

Displays a LSP for the specified L2 IS.

# <u>r</u>oute

Displays the next hop of a packet.

### <u>se</u>nd

Encodes an echo request message in the CLNP packet to the specified destination NSAP.

# show routing circuit

Displays the state of routing circiuts for the specified interface.

#### <u>su</u>bnets

Displays information on all operational subnets.

# toggle

Enables or disables the NSAP alias display function.

# traceroute

Tracks the path an OSI packet takes to a destination.

### virtual-circuits

Displays information on all X.25 virtual circuits.

# <u>e</u>xit

Returns to the previous prompt level.

# Accessing the CONFIG Process

Use the CONFIG process to display and change the current configuration in static RAM (SRAM). To display the CONFIG prompt (Config>):

- After the router boots, the console displays the \* prompt. Enter status to display the pid (process ID) of CONFIG, usually 6.
- 2. Enter talk and the pid (6) for CONFIG. This displays the following information:

```
Gateway user configuration Config>
```

If the Config> prompt does not appear, press **RETURN** again. You can now enter the configuration commands.

- 3. When you are done entering the configuration commands, do the following to make the new configuration active:
  - a. Press CTRL-P after the Config> prompt.

Config> **^p** \*

- b. Enter restart after the \* prompt.
- c. Respond yes to the following prompt:

```
Are you sure you want to restart the gateway? (Yes or No): \mathbf{yes}
```

The new configuration is loaded when the console displays the following information:

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MOS Operator Control \*

# Accessing the CGWCON Process

Use the CGWCON (also known as GWCON) process to monitor protocols, network interfaces, and system messages. You cannot access the CGWCON process if the router is in configuration-only mode (the prompt is Config only>). To display the CGWCON prompt (+):

- After the router boots, the console displays the \* prompt. Enter status to display the pid (process ID) of CGWCON, usually 5.
- 2. Enter **talk** and the pid (5) for CGWCON. This displays the CGWCON prompt (+). You can now enter the monitoring commands.

To return to the \* prompt, press CTRL-P.

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