WAN-Restoral Initial Configuration Ís backup diaÌ No circuit configured? NOTE Configure the serial interface This is a basic configuration. Depending on the type of network, additional configuration steps may be according to the procedures in the Configuring ISDN or the V.25 bis Initial Configuration Yes required. quick reference cards. For detailed information on how to access the configuration and monitoring prompts, see the back of Configure a dial circuit according to the procedures in this card. the Configuring Dial Circuits quick reference card. WAN-reroute Reroute or restoral? WAN-restoral On both routers, ensure that routing protocols Ensure that routing protocols are configured at are configured on the primary interface ONLY. both ends of the primary circuit and the alternate circuit. Access the configuration process Config> from the * prompt. Access the circuit configuration process for Syntax: t6 the dial circuit from the Config> prompt. Syntax: n dial-circuit# All commands are now entered from the Identify primary serial line interface and note Circuit Config> prompt. primary interface number. Syntax: li dev Map the dial circuit to the backup line interface. Syntax: sn interface# Configure the data-link type for the backup line interface. For WAN-restoral, the data-link type must be the same as the primary. At the Config> prompt, enter: Set the idle timeout to 0. Syntax: sd data-link-type interface# Syntax: s id 0 digital

Part Number: AV-QLHSD-TE WAN-Restoral and WAN-Reroute Quick **Reference Card** Version 2.0 September 1996



 \oplus

 \oplus

WAN-Restoral and WAN-Reroute Configuration Commands

This quick reference card summarizes the WAN restoral and WAN reroute configuration and console commands. The front panel of this card provides the initial configuration steps for this protocol. The back panel tells you how to access the CONFIG process.

Enter the following configuration commands at the WRS 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 to the following prompt:

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

<u>a</u>dd

- <u>a</u>lternate-circuitalternate-interface# primary-interface#
 - Maps an alternate interface to a primary interface forWAN reroute.
- secondary-circuitsecondary-interface# primary-interface#
 - Maps a secondary interface to a primary interface for WAN restoral.

<u>d</u>isable

- alternate-circuitalternate-interface#
 - Disables WAN reroute for the primary interface that is mapped to this alternate interface.
- secondary-circuit secondary-interface# Disables WAN restoral for the primary interface that is mapped to this secondary interface.

<u>w</u>rs

Globally disables WAN restoral or WAN reroute on this router.

enable

- <u>a</u>lternate-circuit *alternate-interface#* Enables WAN reroute for the primary interface that is mapped to this alternate interface.
- secondary-circuit secondary-interface# Enables WAN restoral for the primary interface that is mapped to this secondary interface.

<u>w</u>rs

Globally enables WAN restoral or WAN reroute on this router.

list

2

Shows WAN restoral and WAN reroute configuration and status on this router. Lists each primary-to-secondary interface mapping and whether or not WAN restoral is enabled for those interfaces. Lists each primary-to-alternate interface mapping and whether or not WAN reroute is enabled for those interfaces.

<u>r</u>emove

alternate-circuitalternate-interface#

- Removes mapping of the alternate interface to the primary interface for WAN reroute.
- secondary-circuit secondary-interface# Removes mapping of the secondary interface to the primary interface for WAN restoral.

<u>s</u>et

Sets stabilization intervals for use by WAN reroute.

default first-stabilization interval

Sets the interval that will be used as a default value for the first-stabilization time.

default stabilization interval

Sets the interval that will be used as a default value for the subsequent stabilization time.

first-stabilization interval

Sets the interval that will be used for the first stabilization time.

stabilization interval

Sets the interval that will be used for the subsequent stabilization time.

<u>ex</u>it

Returns to the Config> prompt.

WAN-Restoral Console Commands

Enter these commands from the WRS> prompt. The back of this card tells you how to access the CGWCON process. To list the WAN-restoral console commands and their options, enter a ? at the WRS> prompt.

Use the WAN-restoral console to monitor WAN restoral and WAN reroute configurations.

<u>c</u>lear

Clears the statistics dsiplayed by the **list** commands. Does not clear the "Most recent restoral period" statistics.

disable

<u>a</u>lternate-circuit *alternate-interface#*

Disables the rerouting of the primary interface that is mapped to this alternate interface until the next restart, reload, or **enable alternate** command if both interfaces were previously configured and bound together in a WAN reroute configuration.

secondary-circuit *secondary-interface#* Disables the restoral of the primary interface that is mapped to this second-

ary interface until the next restart, reload, or **enable secondary** command if both interfaces were previously configured and bound together in a WAN restoral configuration.

<u>w</u>rs

Disables WAN restoral or WAN reroute on the router until the next restart, reload, or **enable wrs** command.

enable

alternate-circuit alternate-interface#

Enables the rerouting of the primary interface that is mapped to this alternate interface. The interface remains enabled only until the next time you restart the router or until you issue the **disable** command.

secondary-circuit secondary-interface#

Enables the restoral of the primary interface that is mapped to this secondary interface. The interface remains enabled only until the next time you restart the router or until you issue the **disable** command.

<u>w</u>rs

Globally enables WAN restoral or WAN reroute on this router.

list

alternate-circuit alternate-interface# Lists statistics for the selected alternate circuit.

circuit

Provides statistics for all alternate and secondary dial circuits and their associated primary interfaces.

secondary-circuit secondary-interface# Lists statistics for the selected secondary circuit.

<u>st</u>atus

Lists status information for individual alternate and secondary circuits and their associated primary interfaces.

<u>s</u>et

Sets stabilization intervals for use by WAN reroute.

default first-stabilization interval

Sets the interval that will be used as a default value for the first-stabilization time.

default stabilization interval

Sets the interval that will be used as a default value for the subsequent stabilization time.

first-stabilization interval

Sets the interval that will be used for the first stabilization time.

stabilization interval

Sets the interval that will be used for the subsequent stabilization time.

<u>e</u>xit

Returns to the GWCON (+) prompt.

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, which is 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): yes
The new configuration is loaded when the console displays the fol-
lowing information:
```

Copyright 1995-1996 Digital Equipment Corp.

```
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 (+):

- 1. After the router boots, the console displays the * prompt. Enter **status** to display the pid (process ID) of CGWCON, which is 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.

Copyright © Digital Equipment Corporation 1996. All rights reserved.

DEC, DECnet, OpenVMS, PATHWORKS, ThinWire, VAX, VAXcluster, VMS, VT, and the DIGITAL logo are trademarks of Digital Equipment Corporation.

All other trademarks and registered trademarks are the property of their respective holders.

digital