



Part Number: AV-R)8VA-TE Point-to-Point Protocol over Frame Relay Quick Reference Card Version 2.0 September 1996

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Point-to-Point over Frame Relay (PPP-FR) Configuration Commands

This quick reference card summarizes the Point-to-Point Protocol over Frame Relav (PPP-FR) pseudo-interface 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 PPP-FR 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

list

set

<u>a</u>ll

Lists all PPP-FR options and parameters.

authentication

Lists the authentication protocol parameters and options (CHAP and PAP).

<u>b</u>ncp

Lists Bridging Network control protocol options and parameters.

frame-relay

Lists the frame relay parameters associated with this PPP-FR pseudo interface.

<u>i</u>pcp

Lists the Internet Protocol control protocol options and parameters.

<u>l</u>cp

Lists the Link Control Protocol options and parameters.

<u>c</u>cp

Lists the Compression Control Protocol options and parameters.

parameters

Lists network control protocol options and parameters.

authentication

Sets the authentication protocol parameters and options (CHAP and PAP).

bncp

Sets Bridging Network control protocol Tinygram compression yes or no.

frame-relay

Creates a frame relay PVC and associates it with this PPP-FR pseudo interface.

ipcp

Use to enable and configure all Internet Protocol control protocol options for the link, including IP compression, and sending and requesting IP address.

- <u>I</u>cp options or parameters Sets the Link Control Protocol options and parameters.
- <u>c</u>cp options or parameters Sets the Compression Control Protocol options and parameters.

parameters

Sets network control protocol parameters including retry timer, configuration tries, NAK tries, and Terminate tries.

<u>e</u>xit

Returns to the Config> prompt.

PPP-FR Console Commands

Enter these commands after the PPP-FR> prompt. The back panel of this card tells you how to access the CGWCON process.

To list the PPP-FR console commands and their options, enter a ? at the PPP-FR> prompt.

<u>c</u>lear

Clears all statistics from point-to-point interfaces.

<u>l</u>ist

<u>al</u>l

Displays all information and counters related to the point-to-point interface and the PPP-FR options and parameters.

<u>ap</u>2

Lists number of AppleTalk Phase 2 packets, bytes, and protocol-reject packets transmitted and received over the current point-to-point interface.

atcp

Lists number of ATCP packets, bytes in octets, and protocol-reject packets transmitted and received over the current point-topoint interface.

<u>bncp</u>

Lists number of BNCP packets, bytes in octets, and protocol-reject packets transmitted and received over the current point-topoint interface.

<u>ccp</u>

Lists number of CCP packets, bytes in octets, protocol reset requests, acknowledgements, reject packets, and the recent compression ratios transmitted and received over the current point-to-point interface.

<u>ch</u>ap

Lists number of CHAP packets, bytes in octets, and authentication request, acknowledgement, and reject packets transmitted and received over the current point-to-point interface.

compression

Lists the number of compressed packets, bytes in octets, compressed octets, incompressible packets, discarded packets, and protocol-reject packets transmitted and received over the current point-to-point interface.

control control protocol

Lists information and counters related to the specified control protocol: LCP, PAP, CHAP IPCP, DNCP, IPXCP, BNCP, ATCP, OSICP, CCP.

dn

Lists number of DECnet packets, bytes in octets, and protocol-reject packets transmitted and received over the current pointto-point interface.

dncp

Lists number of DECnet control protocol packets, bytes in octets, and protocol-reject packets transmitted and received over the current point-to-point interface.

errors

Displays all error conditions tracked by the PPP-FR software.

frame-relay

Lists the frame relay parameters associated with this PPP-FR pseudo interface.

ip

Lists number of IP packets, bytes in octets, and protocol-reject packets transmitted and received over the current point-to-point interface.

ipcp

Lists number of IPCP packets, bytes in octets, and protocol-reject packets transmitted and received over the current point-topoint interface.

PPP-FR Console Commands (Continued)

ipx

Lists number of IPX packets, bytes in octets, and protocol-reject packets transmitted and received over the current point-topoint interface.

<u>ipxc</u>p

Lists number of IPXCP packets, bytes in octets, and protocol-reject packets transmitted and received over the current pointto-point interface.

lcp

Lists all of the Link Control Protocol statistics.

<u>osi</u>

Lists number of OSI packets, bytes in octets, and protocol-reject packets transmitted and received over the current point-topoint interface.

<u>osic</u>p

Lists number of OSICP packets, bytes in octets, and protocol-reject packets transmitted and received over the current pointto-point interface.

<u>pap</u>

Lists number of PAP packets, bytes in octets, and authentication request, acknowledgement, and reject packets transmitted and received over the current point-to-point interface.

<u>e</u>xit

Returns to the CGWCON 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:
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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 (+):

- 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.

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