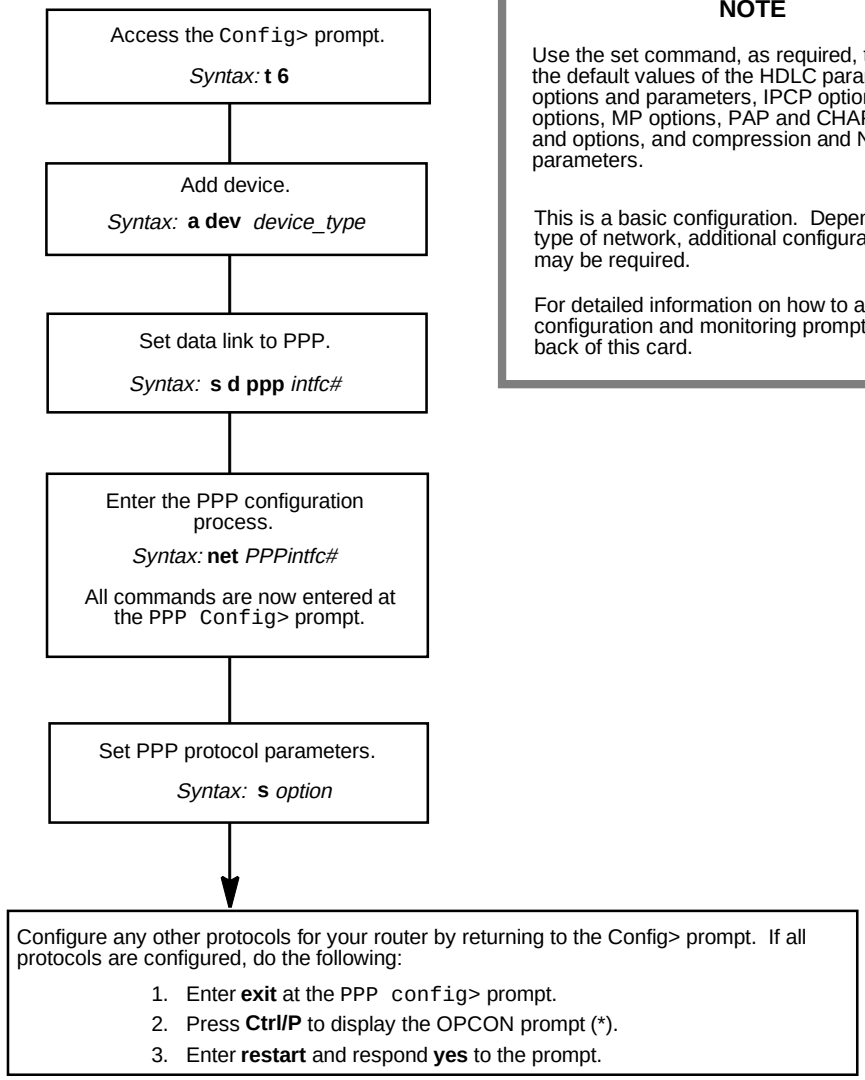
Point-to-Point Protocol Initial Configuration



NOTE

Use the set command, as required, to change the default values of the HDLC parameters, LCP options and parameters, IPCP options, BNCP options, MP options, PAP and CHAP parameters and options, and compression and NCP parameters.

This is a basic configuration. Depending on the type of network, additional configuration steps may be required.

For detailed information on how to access the configuration and monitoring prompts, see the back of this card.

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Point-to-Point Protocol Quick Reference Card
Version 2.0
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Point-to-Point Protocol Interface Configuration Commands

This quick reference card summarizes the Point-to-Point Protocol (PPP) 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 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

all
: Lists all PPP options and parameters.

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

bncp
: Lists Bridging Network control protocol options and parameters.

hdlc
: Lists the HDLC protocol options and parameters.

ipcp
: Lists the Internet Protocol control protocol options and parameters.

lcp
: Lists the Link Control Protocol options and parameters.

ccp
: Lists the Compression Control Protocol options and parameters.

mp
: Lists the Multilink Protocol and Bandwidth on Demand (BoD) options.

parameters
: Lists network control protocol options and parameters.

set

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

bncp
: Sets Bridging Network control protocol Tinygram compression yes or no.

ccp *options* or *parameters*
: Sets the Compression Control Protocol options and parameters.

hdlc cable *cable type*
: Sets the type of cable connected to this WAN interface port.

hdlc encoding *nrz* or *nzri*
: Sets to NRZ or NRZI.

hdlc idle *flag* or *mark*
: Sets data link idle state to either Flag or Mark.

hdlc transmit-delay *# of microseconds*
: Sets period of time to elapse between the transmission of each frame.

ipcp
: Enables and configures all Internet Protocol control protocol options for the link, including IP compression, sending and requesting IP address.

lcp *options* or *parameters*
: Sets the Link Control Protocol options and parameters.

mp
: Sets the Multilink Protocol and Bandwidth on Demand (BoD) options.

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

exit
: Returns to the `Config>` prompt.

Point-to-Point Protocol Interface Console Commands

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

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

clear

Clears all statistics from point-to-point interfaces.

list

all

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

ap2

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-to-point interface.

bncp

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

ccp

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

chap

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, MP.

dn

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

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-to-point interface.

ipx

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

ipxcp

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

lcp

Lists all of the Link Control Protocol statistics.

mp

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

osi

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

osicp

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

pap

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.

exit

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>`):

1. 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 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 (+):

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.