

# AppleTalk Phase 1 Initial Configuration

Access the AppleTalk Phase 1 configuration process from the `Config>` prompt.

**Syntax:** `p apl`

All commands are now entered from the `APL config>` prompt.

Enable AppleTalk Phase 1.

**Syntax:** `en a`

Enable interfaces running AppleTalk Phase 1.

**Syntax:** `e i interface#`

Enable checksumming.

**Syntax:** `en c`

Set the AppleTalk network numbers (entered separately for each network).

**Syntax:** `s ne interface# AppleTalk-net#`

Set node addresses (entered separately for each network).

**Syntax:** `s no interface# node#`

Set AppleTalk zone names (entered separately for each network).

**Syntax:** `s z interface# name`

Set routing table size.

**Syntax:** `s nn #-of-networks`

Configure any other protocols for your router by returning to the `Config>` prompt. If all protocols are configured, do the following:

1. Enter **exit** at the `APL config>` prompt.
2. Press **<ctrl-p>** to display the OPCON prompt (\*).
3. Enter **restart** and respond **yes** to the prompt.

## NOTE

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.

## AppleTalk Phase 1 Configuration Commands

This quick reference card summarizes the AppleTalk Phase 1 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 `APL 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
```

### **disable**

`apl`

Disables the AppleTalk Phase 1 protocol as a whole.

`checksum`

Disables checksumming on packets that the specified interface generates.

`interface interface#`

Disables AppleTalk Phase 1 on the specified interface.

`takedown`

Prevents ZIP takedown and bringup packets from affecting the routers network numbers and zone names. This is the default for security reasons.

### **enable**

`apl`

Enables the AppleTalk Phase 1 packet forwarder.

`checksum`

Enables checksumming on packets that the specified interface generates.

`interface interface#`

Enables AppleTalk Phase 1 on the specified interface.

`takedown`

Prevents ZIP takedown and bringup packets from affecting the routers network numbers and zone names. This is the default for security reasons.

### **list**

Displays the current AppleTalk Phase 1 configuration.

### **set**

`ddp-header long interface#`

Specifies long DDP headers for packets sent on that interface number. This is the default, and is recommended by Apple.

`ddp-header short interface#`

Specifies short DDP headers for packets sent on that interface number. Use this only for compatibility with software that does not support long DDP headers.

`net-number interface# AppleTalk Phase 1-net#`

Assigns an AppleTalk Phase 1 network number to the associated directly-connected network.

`node-number interface# node#`

Specifies the number of the interface. This is optional. The default is auto-configure.

`nnets#`

Specifies the size of the AppleTalk Phase 1 routing table.

`zone interface# name`

Specifies the zone name to be seeded on this network.

### **exit**

Returns to the previous prompt level.

## AppleTalk Phase 1 Console Commands

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

To list the AppleTalk Phase 1 console commands and their options, enter a `?` after the `APL>` prompt.

### **counters**

Displays the number of packet overflows on each network that sends and receives AppleTalk Phase 1 packets.

### **dump**

Displays the routing table information about the interfaces on the router that forwards AppleTalk Phase 1 packets.

*Dest net*      The destination network number in decimal.

*Cost*          The number of route hops to this destination network.

*State*          The state of the entry in the routing table.

*Next hop*      The next hop for packets going to networks that are not directly connected. For directly connected networks, this is node number 0.

*Source*          The originating network type for that routing table entry. *APL* indicates an AppleTalk Phase 1 network. *AP2* indicates an AppleTalk Phase II.

*Zone*            Specifies the human-understandable name for that network. The zone name is enclosed in double quotes in case there are embedded spaces or non-printing characters.

### **interface**

Displays the addresses of all the interfaces in the router on which AppleTalk Phase 1 is enabled.

### **exit**

Returns to the previous prompt level.

## Further Configuration Considerations

To allow Phase 1 hosts to transparently communicate with Phase 2 hosts, you must enter the AppleTalk Phase 2 configuration process on the router running AP2 and enable the AppleTalk Phase 1/2 translation function via that router's AP2 **enable translation** configuration command.

In addition to providing the gateway translation function, this router now acts as both a Phase 1

and Phase 2 router on whatever interfaces these protocols are configured. Routing information is passed between Phase 1 and Phase 2 networks by the gateway resulting in a (logically) single internet.

For more information on the **enable translation** command and AppleTalk Phase 2, refer to the chapter "Configuring AppleTalk Phase 1" in the *Protocol Configuration Guide, Volume 2*.

## 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.
2. Enter **talk** and the pid 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 load the new configuration:

- 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:

```
Copyright Notices:
Copyright 1996 Digital Equipment Corp.
Copyright 1985-1994 Proteon, Inc.
Copyright 1984-1987, 1989 by J. Noel Chiappa
```

```
MOS Operator Control
*
```

## Accessing the CGWCON Process

Use the CGWCON 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 GWCON prompt (+):

1. After the router boots, the console displays the \* prompt. Enter **status** to display the pid (process ID) of CGWCON.
2. Enter **talk** and the pid 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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