

Configuring BGP4

NOTE

This is a basic configuration. Depending on the type of network, you may need to configure additional parameters.

Access the BGP configuration module from the Config> prompt.

```
Config>protocol bgp
BGP config>
```

Enable BGP as shown.

```
BGP config>enable bgp speaker
AS [0]? 125
TCP segment size [1024]?
```

The AS number identifies the speaker's autonomous system. The TCP segment size represents the maximum segment size BGP uses for passive TCP connections.

Define BGP neighbors. Neighbors either have a direct connection to the speaker, or have an indirect connection within the speaker's AS.

```
BGP config>add neighbor 192.18.32.12
```

Adding a neighbor automatically enables it, causing the speaker to send the neighbor a connection request.

Define policies. Digital's BGP4 implementation supports **originate**, **send**, and **receive** policy commands.

When you are finished configuring the router, restart it as described on the back of this card to load the new configuration.

BGP4 Configuration Commands

This section summarizes the BGP4 configuration commands. Enter these commands at the BGP Config> prompt. Enter ? to list available commands or their options.

add

aggregate *network-prefix network-mask*

Causes the BGP speaker to aggregate a block of addresses and advertise a single address to its neighbors.

neighbor

Defines a BGP neighbor. An external neighbor must be on the same network as the speaker.

no-receive *AS number*

Excludes updates from a specified AS.

originate-policy...

Adds an originate-policy definition.

receive-policy...

Adds a receive-policy definition.

send-policy...

Adds a send-policy definition.

change

aggregate...

Changes information associated with the current aggregate.

neighbor...

Changes information associated with a neighbor router.

originate-policy...

Changes an existing originate-policy definition.

receive-policy...

Changes an existing receive-policy definition.

send-policy...

Changes an existing send-policy definition.

delete

aggregate *index number*

Deletes an aggregate.

neighbor *network address*

Deletes a BGP neighbor.

no-receive *AS number*

Delete the no-receive policy associated with a specified AS.

originate-policy *index number*

Deletes an originate-policy.

receive-policy *index number*

Deletes a receive-policy.

send-policy *index number*

Deletes a send-policy.

disable *BGP speaker or neighbor*

Disables a previously enabled BGP speaker or neighbor.

enable *BGP speaker or neighbor*

Disables a BGP speaker or neighbor.

BGP4 Configuration Commands (*continued*)

list

aggregate

Lists all aggregated records defined with the **add aggregate** command.

all

Lists the BGP neighbors, policies, aggregated routes, and no-receive-AS records in the current configuration.

BGP speaker

Lists information on the BGP speaker.

neighbor

Lists information on BGP neighbors.

no-receive

Lists information on no-receive-AS definitions.

originate-policy

Lists information on originate policies.

receive-policy

Lists information on receive policies.

send-policy

Lists information on send policies.

exit

Returns to the `Config>` prompt.

BGP4 Monitoring Commands

This section summarizes the BGP4 monitoring commands. Enter these commands at the `BGP>` prompt. Enter ? to list available commands or their options.

destinations *network-address*

advertised-to *network-address*

Dump information on routes advertised to a specified network address.

received-from *network-address*

Dump information on routes received from a specified network address.

neighbors *internet-address*

Displays information on all active neighbors, or a specified BGP neighbor.

paths

Displays the path descriptors stored in the path descriptions data base.

sizes

Displays the number of entries stored in various data bases.

exit

Returns to the `Config>` prompt.

Configuring the Router

Enter configuration commands at the `Config>` prompt. Access the config prompt as shown:

```
*talk 6
Gateway user configuration
Config>
```

If the `Config>` prompt does not appear, press again.

To enter BGP4 configuration commands, display the BGP `config>` prompt as shown:

```
Config>protocol bgp
BGP config>
```

To return to the * prompt, press .

Restarting the Router

When you are done configuring the router, restart it to load the new configuration. Enter **restart** at the * prompt and respond yes to the following prompt:

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

When the new configuration is finished loading, the terminal displays the * prompt.

Monitoring the Router

Enter monitoring commands at the `GWCON` prompt (+). To enter BGP monitoring commands, display the `BGP>` prompt as shown:

```
*talk 5

CGW Operator Console
+protocol bgp
BGP>
```

To return to the * prompt, press .