

## Configuring Border Gateway Protocol 4 (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.

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Border Gateway Protocol 4 Quick Reference Card  
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## 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*  
Deletes 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 database.

### **sizes**

Displays the number of entries stored in various databases.

### **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 **Return** again.

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

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

To return to the `*` prompt, press **Ctrl/P**.

## 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 **Ctrl/P**.

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