

Metric defaults have been carefully set to work for a wide variety of networks. Take great care when changing these values.

Default metrics are supported only when you are redistributing from EIGRP or static routes.

An administrative distance is a rating of the trustworthiness of a routing information source, such as an individual router or a group of routers. Numerically, an administrative distance is an integer from 0 to 255. In general, the higher the value the lower the trust rating. An administrative distance of 255 means the routing information source cannot be trusted at all and should be ignored.

SUMMARY STEPS

- 1. enable
- 2. configure terminal
- 3. router eigrp autonomous-system
- **4. network** *ip-address* [wildcard-mask]
- **5.** redistribute protocol [process-id] {level-1 | level-2 | [autonomous-system-number] [metric {metric-value | transparent}] [metric-type type-value] [match {internal | external 1 | external 2}] [tag tag-value] [route-map map-tag] [subnets]
- **6. distance eigrp** *internal-distance external-distance*
- 7. default-metric bandwidth delay reliability loading mtu
- 8. end

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode.
	Example:	• Enter your password if prompted.
	Device> enable	
Step 2	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 3	router eigrp autonomous-system	Enables an EIGRP routing process and enters router configuration mode.
	Example:	• A maximum of 30 EIGRP routing processes
	Device(config)# router eigrp 1	can be configured.

	Command or Action	Purpose
Step 4	network ip-address [wildcard-mask]	Associates networks with an EIGRP routing process.
	Example:	
	Device(config-router)# network 172.16.0.0	
Step 5	redistribute protocol [process-id] {level-1 level-1-2 level-2} [autonomous-system-number] [metric {metric-value transparent}] [metric-type type-value] [match {internal external 1 external 2}] [tag tag-value] [route-map map-tag] [subnets]	Redistributes routes from one routing domain into another routing domain.
	Example:	
	Device(config-router)# redistribute rip level1	
Step 6	distance eigrp internal-distance external-distance	Allows the use of two administrative distances—internal and external.
	Example:	
	Device(config-router)# distance eigrp 80 130	
Step 7	default-metric bandwidth delay reliability loading mtu	Sets metrics for EIGRP.
	Example:	
	Device(config-router)# default-metric 1000 100 250 100 1500	
Step 8	end	Exits router configuration mode and returns to privileged EXEC mode.
	Example:	
	Device(config-router)# end	

Configuring the EIGRP Route Summarization Autonomous System Configuration

Perform this task to configure EIGRP to perform automatic summarization of subnet routes into network-level routes in an EIGRP autonomous system configuration.