

# DRP Agent Configuration Mode Commands

The primary GSSM uses Director Response Protocol (DRP) agents to determine the most proximate answer for a DNS request relative to the requesting D-proxy. A DRP agent can be a Cisco IOS-based router or another GSS configured as a DRP agent. This section describes the commands in the DRP agent configuration mode, which enable you to configure DRP agent functions on the GSS.

To access the DRP agent configuration mode, use the **drp** command in global configuration mode. The CLI prompt then changes to the DRP agent configuration mode as follows:

```
gssm1.example.com(config)# drp
gssm1.example.com(config-drp)#
```

**drp** [**authentication key** | **enable** | **probe icmp-rtt** | **probe path-rtt** | **probe tcp-rtt**]

<b>authentication key</b>	See the <a href="#">(config-drp) authentication key</a> command for a detailed syntax description.
<b>enable</b>	See the <a href="#">(config-drp) enable</a> command for a detailed syntax description.
<b>probe icmp-rtt</b>	See the <a href="#">(config-drp) probe icmp-rtt</a> command for a detailed syntax description.
<b>probe path-rtt</b>	See the <a href="#">(config-drp) probe path-rtt</a> command for a detailed syntax description.
<b>probe tcp-rtt</b>	See the <a href="#">(config-drp) probe tcp-rtt</a> command for a detailed syntax description.

## (config-drp) authentication key

To enable Director Response Protocol (DRP) authentication key chain IDs, use the **authentication key** command in DRP agent configuration mode. To disable DRP authentication key chain IDs, use the **no** form of this command.

**authentication key** *key id 0-255*

**no authentication key** *key id 0-255*

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### Syntax Description

*key id 0-255*

DRP authentication key chain ID. Valid values are from 0–255.

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### Command Modes

DRP agent configuration

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### Examples

The following example shows how to enable DRP authentication key chain ID 240:

```
gssm1.example.com(config)# drp
gssm1.example.com(config-drp)# authentication key 240
gssm1.example.com(config-drp)# exit
gssm1.example.com(config)#
```

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### Related Commands

[\(config-drp\) enable](#)

[\(config-drp\) probe icmp-rtt](#)

[\(config-drp\) probe path-rtt](#)

[\(config-drp\) probe tcp-rtt](#)

## (config-drp) enable

To enable the GSS as a Director Response Protocol (DRP) agent, use the **enable** command in DRP agent configuration mode. To disable the GSS as a DRP agent, use the **no** form of this command.

**enable**

**no enable**

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### Syntax Description

This command has no keywords or arguments.

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### Command Modes

DRP agent configuration

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### Examples

The following example shows how to enable the GSS as a DRP agent:

```
gssm1.example.com(config)# drp  
gssm1.example.com(config-drp)# enable  
gssm1.example.com(config-drp)# exit  
gssm1.example.com(config)#
```

The following example shows how to disable the GSS as a DRP agent:

```
gssm1.example.com(config)# drp  
gssm1.example.com(config-drp)# no enable  
gssm1.example.com(config-drp)# exit  
gssm1.example.com(config)#
```

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### Related Commands

[\(config-drp\) authentication key](#)

[\(config-drp\) probe icmp-rtt](#)

[\(config-drp\) probe path-rtt](#)

[\(config-drp\) probe tcp-rtt](#)

## (config-drp) probe icmp-rtt

To configure parameters related to the Internet Control Message Protocol (ICMP) probe, use the **probe icmp-rtt** command.

### probe icmp-rtt timeout

#### Syntax Description

<b>timeout</b>	See the <a href="#">(config-drp-icmp-rtt) timeout</a> command for a detailed syntax description.
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#### Command Modes

DRP agent configuration.

#### Usage Guidelines

After you enter the command, the CLI prompt changes and you are in the TCP RTT configuration submode.

#### Examples

The following example shows how to configure parameters related to the ICMP probe:

```
gssml.example.com(config-drp)# probe icmp-rtt
gssml.example.com(config-drp-icmp-rtt)#
```

#### Related Commands

- [\(config-drp\) enable](#)
- [\(config-drp\) authentication key](#)
- [\(config-drp\) probe path-rtt](#)
- [\(config-drp\) probe tcp-rtt](#)

## (config-drp-icmp-rtt) timeout

To configure a timeout value for the Internet Control Message Protocol (ICMP) probe, use the **timeout** command. To indicate that no timeout value will be specified, use the **no** form of this command.

**timeout** *1-5*

**no timeout**

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### Syntax Description

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<i>1-5</i>	Timeout value for the ICMP probe. Valid timeout values are from 1–5 seconds with 3 seconds as the default.
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### Command Modes

ICMP RTT configuration submode

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### Examples

The following example shows how to configure a timeout value for the ICMP probe:

```
gssm1.example.com(config-drp-icmp-rtt)# timeout 5  
gssm1.example.com(config-drp-icmp-rtt)# exit  
gssm1.example.com(config-drp)#
```

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### Related Commands

[\(config-drp\) probe icmp-rtt](#)

## (config-drp) probe path-rtt

To configure parameters related to the path probe, use the **probe path-rtt** command.

```
probe path-rtt [probe-type {tcp | udp} | burst-size 1-20 | timeout 1-10 |
destination-port 1-65535 | sourceport {dynamic | static} | init ttl 1-32 |
max-failure-ttl 1-32 | max ttl 1-255]
```

### Syntax Description

<b>probe-type</b> <b>tcp</b>   <b>udp</b>	See the <a href="#">(config-drp-path-rtt) probe-type</a> command for a detailed syntax description.
<b>burst-size</b> <i>1-20</i>	See the <a href="#">(config-drp-path-rtt) burst-size</a> command for a detailed syntax description.
<b>timeout</b> <i>1-10</i>	See the <a href="#">(config-drp-path-rtt) timeout</a> command for a detailed syntax description.
<b>destination-port</b> <i>1-65535</i>	See the <a href="#">(config-drp-path-rtt) destination-port</a> command for a detailed syntax description.
<b>sourceport</b> <b>dynamic</b>   <b>static</b> <i>1-65535</i>	See the <a href="#">(config-drp-path-rtt) sourceport</a> command for a detailed syntax description.
<b>init ttl</b> <i>1-32</i>	See the <a href="#">(config-drp-path-rtt) init-ttl</a> command for a detailed syntax description.
<b>max-failure-ttl</b> <i>1-32</i>	See the <a href="#">(config-drp-path-rtt) max-failure-ttl</a> command for a detailed syntax description.
<b>max ttl</b> <i>1-255</i>	See the <a href="#">(config-drp-path-rtt) max ttl</a> command for a detailed syntax description.

### Command Modes

DRP agent configuration.

### Examples

The following example shows how to configure parameters related to the path probe:

```
gssm1.example.com(config-drp)# probe icmp-rtt
gssm1.example.com(config-drp-icmp-rtt)#
```

**Related Commands**

- (config-drp) authentication key
- (config-drp) enable
- (config-drp) probe icmp-rtt
- (config-drp) probe tcp-rtt

## (config-drp-path-rtt) probe-type

To configure the type of packet (UDP or TCP) to be used for path probing, use the **probe-type** command.

```
probe-type { tcp | udp }
```

### Syntax Description

<b>tcp</b>	Configures TCP as the type of packet used for path probing. The default is a TCP-SYN-ACK packet.
<b>udp</b>	Configures UDP as the type of packet used for path probing. The default is a TCP-SYN-ACK packet.

### Command Modes

Path RTT configuration submode

### Examples

The following example shows how to configure the type of packet (UDP or TCP) to be used for path probing:

```
gssm1.example.com(config-drp)# probe path-rtt
gssm1.example.com(config-drp-path-rtt)# probe-type udp
gssm1.example.com(config-drp-path-rtt)# exit
gssm1.example.com(config-drp)#
```

### Related Commands

(config-drp-path-rtt) [burst-size](#)  
 (config-drp-path-rtt) [timeout](#)  
 (config-drp-path-rtt) [destination-port](#)  
 (config-drp-path-rtt) [sourceport](#)  
 (config-drp-path-rtt) [init-ttl](#)  
 (config-drp-path-rtt) [max-failure-ttl](#)  
 (config-drp-path-rtt) [max ttl](#)

## (config-drp-path-rtt) burst-size

To configure the number of TCP-SYN-ACK packets sent at a time, use the **burst-size** command. To designate that burst sizes will not be sent, use the **no** form of this command.

**burst-size** *1-20*

**no burst-size**

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### Syntax Description

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<i>1-20</i>	Number of TCP-SYN-ACK packets sent at a time. Valid values are from 1–20 with a default burst size of 5.
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### Command Modes

Path RTT configuration submode

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### Examples

The following example shows how to configure the number of TCP-SYN-ACK packets sent at a time:

```
gssm1.example.com(config-drp)# probe path-rtt
gssm1.example.com(config-drp-path-rtt)# burst-size 5
gssm1.example.com(config-drp-path-rtt)# exit
gssm1.example.com(config-drp)#
```

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### Related Commands

[\(config-drp-path-rtt\) probe-type](#)  
[\(config-drp-path-rtt\) timeout](#)  
[\(config-drp-path-rtt\) destination-port](#)  
[\(config-drp-path-rtt\) sourceport](#)  
[\(config-drp-path-rtt\) init-ttl](#)  
[\(config-drp-path-rtt\) max-failure-ttl](#)  
[\(config-drp-path-rtt\) max ttl](#)

## (config-drp-path-rtt) timeout

To configure the timeout value for the path probe, use the **timeout** command. To indicate that no timeout value will be configured, use the **no** form of this command.

**timeout** *1-10*

**no timeout**

### Syntax Description

<i>1-10</i>	Timeout value for the path probe. Valid values are from 1–10 with a default timeout value of 3 seconds.
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### Command Modes

Path RTT configuration submode

### Examples

The following example shows how to configure the timeout value for the path probe:

```
gssm1.example.com(config-drp)# probe path-rtt
gssm1.example.com(config-drp-path-rtt)# timeout 3
gssm1.example.com(config-drp-path-rtt)# exit
gssm1.example.com(config-drp)#
```

### Related Commands

- [\(config-drp-path-rtt\) probe-type](#)
- [\(config-drp-path-rtt\) burst-size](#)
- [\(config-drp-path-rtt\) destination-port](#)
- [\(config-drp-path-rtt\) sourceport](#)
- [\(config-drp-path-rtt\) init-ttl](#)
- [\(config-drp-path-rtt\) max-failure-ttl](#)
- [\(config-drp-path-rtt\) max ttl](#)

## (config-drp-path-rtt) destination-port

To configure the path probe destination port, use the **destination-port** command. To indicate that no path probe destination port will be configured, use the **no** form of this command.

```
destination-port 1-65535
```

```
no destination-port
```

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### Syntax Description

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<i>1-65535</i>	Path probe destination port value. Valid values are from 1–65535 with a default destination port of 53.
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### Command Modes

Path RTT configuration submode

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### Examples

The following example shows how to configure the path probe destination port:

```
gssm1.example.com(config-drp)# probe path-rtt  
gssm1.example.com(config-drp-path-rtt)# destination-port 555  
gssm1.example.com(config-drp-path-rtt)# exit  
gssm1.example.com(config-drp)#
```

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### Related Commands

[\(config-drp-path-rtt\) probe-type](#)

[\(config-drp-path-rtt\) burst-size](#)

[\(config-drp-path-rtt\) timeout](#)

[\(config-drp-path-rtt\) sourceport](#)

[\(config-drp-path-rtt\) init-ttl](#)

[\(config-drp-path-rtt\) max-failure-ttl](#)

[\(config-drp-path-rtt\) max ttl](#)

## (config-drp-path-rtt) sourceport

To configure the path probe source port, use the **sourceport** command. To indicate that the path probe source port will not be configured, use the **no** form of this command.

```
sourceport dynamic | static 1-65535
```

```
no sourceport dynamic | static 1-65535
```

Syntax Description	dynamic	Configures a dynamic path probe source port.
	<b>static</b>	Configures a static path probe source port number.
	<i>1-65535</i>	Port numbers can range from 1–65535 with a default source port of 53.

**Command Modes** Path RTT configuration submode

**Examples** The following example shows how to configure the path probe source port:

```
gssm1.example.com(config-drp)# probe path-rtt
gssm1.example.com(config-drp-path-rtt)# sourceport static 65530
gssm1.example.com(config-drp-path-rtt)# exit
gssm1.example.com(config-drp)#
```

**Related Commands**

- [\(config-drp-path-rtt\) probe-type](#)
- [\(config-drp-path-rtt\) burst-size](#)
- [\(config-drp-path-rtt\) timeout](#)
- [\(config-drp-path-rtt\) destination-port](#)
- [\(config-drp-path-rtt\) init-ttl](#)
- [\(config-drp-path-rtt\) max-failure-ttl](#)
- [\(config-drp-path-rtt\) max ttl](#)

## (config-drp-path-rtt) init-ttl

To configure an initial Time-to-Live (TTL) for path probing, use the **init ttl** command. To indicate that no TTL will be configured, use the **no** form of this command.

```
init-ttl 1-32
```

```
no init-ttl
```

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**Syntax Description**

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*1-32* Initial TTL for path probing. Valid values are from 1–32 with a default of 1.

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**Command Modes**

Path RTT configuration submenu

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**Examples**

The following example shows how to configure an TTL for path probing:

```
gssm1.example.com(config-drp)# probe path-rtt  
gssm1.example.com(config-drp-path-rtt)# init-ttl 20  
gssm1.example.com(config-drp-path-rtt)# exit  
gssm1.example.com(config-drp)#
```

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**Related Commands**

[\(config-drp-path-rtt\) probe-type](#)  
[\(config-drp-path-rtt\) burst-size](#)  
[\(config-drp-path-rtt\) timeout](#)  
[\(config-drp-path-rtt\) destination-port](#)  
[\(config-drp-path-rtt\) sourceport](#)  
[\(config-drp-path-rtt\) max-failure-ttl](#)  
[\(config-drp-path-rtt\) max ttl](#)

## (config-drp-path-rtt) max-failure-ttl

To configure an acceptable number of last successive failure packets, use the **max-failure-ttl** command. To indicate that no acceptable number of failure packets will be configured, use the **no** form of this command.

```
max-failure-ttl 1-32
```

```
no max-failure-ttl
```

### Syntax Description

<i>1-32</i>	Acceptable number of last successive failure packets. Valid values are from 1–32 with a default of 5.
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### Command Modes

Path RTT configuration submode

### Examples

The following example shows how to configure an acceptable number of last successive failure packets:

```
gssm1.example.com(config-drp)# probe path-rtt
gssm1.example.com(config-drp-path-rtt)# max-failure-ttl 12
gssm1.example.com(config-drp-path-rtt)# exit
gssm1.example.com(config-drp)#
```

### Related Commands

- [\(config-drp-path-rtt\) probe-type](#)
- [\(config-drp-path-rtt\) burst-size](#)
- [\(config-drp-path-rtt\) timeout](#)
- [\(config-drp-path-rtt\) destination-port](#)
- [\(config-drp-path-rtt\) sourceport](#)
- [\(config-drp-path-rtt\) init-ttl](#)
- [\(config-drp-path-rtt\) max ttl](#)

## (config-drp-path-rtt) max ttl

To configure a maximum TTL for path probing, use the **max-ttl** command. To indicate that no maximum TTL for path probing will be configured, use the **no** form of this command.

```
max-ttl 1-255
```

```
no max-ttl
```

### Syntax Description

<i>1-255</i>	Maximum TTL for path probing. Valid values are from 1–255 with a default of 32.
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### Command Modes

Path RTT configuration submode

### Examples

The following example shows how to configure a maximum TTL for path probing:

```
gssm1.example.com(config-drp)# probe path-rtt
gssm1.example.com(config-drp-path-rtt)# max-ttl 37
gssm1.example.com(config-drp-path-rtt)# exit
gssm1.example.com(config-drp)
```

### Related Commands

- [\(config-drp-path-rtt\) probe-type](#)
- [\(config-drp-path-rtt\) burst-size](#)
- [\(config-drp-path-rtt\) timeout](#)
- [\(config-drp-path-rtt\) destination-port](#)
- [\(config-drp-path-rtt\) sourceport](#)
- [\(config-drp-path-rtt\) init-ttl](#)
- [\(config-drp-path-rtt\) max-failure-ttl](#)

## (config-drp) probe tcp-rtt

To configure parameters related to TCP probing, use the **probe tcp-rtt** command.

```
probe tcp-rtt [destination-port 1-65535 | sourceport {dynamic | static
1-65535} | timeout value]
```

### Syntax Description

<b>destination-port</b> <i>1-65535</i>	See the <a href="#">(config-drp-tcp-rttprobe) destination-port</a> command for a detailed syntax description.
<b>sourceport dynamic</b>   <b>static</b> <i>1-65535</i>	See the <a href="#">(config-drp-tcp-rttprobe) sourceport</a> command for a detailed syntax description.
<b>timeout</b> <i>value</i>	See the <a href="#">(config-drp-tcp-rttprobe) timeout</a> command for a detailed syntax description.

### Command Modes

DRP agent configuration.

### Usage Guidelines

After you enter the command, the CLI prompt changes and you are in the TCP RTT configuration submode.

### Examples

The following example shows how to configure parameters related to TCP probing:

```
gssml.example.com(config-drp)# probe tcp-rtt
gssml.example.com(config-drp-icmp-rtt)#
```

### Related Commands

[\(config-drp\) authentication key](#)  
[\(config-drp\) enable](#)  
[\(config-drp\) probe icmp-rtt](#)  
[\(config-drp\) probe path-rtt](#)

## (config-drp-tcp-rttprobe) destination-port

To configure a TCP destination port, use the **destination-port** command. To indicate that no destination port will be configured, use the **no** form of this command.

```
destination-port 1-65535
```

```
no destination-port
```

---

### Syntax Description

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<i>1-65535</i>	TCP destination port number. Valid values are from 1–65535 with a default of 53.
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### Command Modes

TCP RTT probe configuration submode

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### Examples

The following example shows how to configure a TCP destination port:

```
gssm1.example.com(config-drp)# probe tcp-rtt  
gssm1.example.com(config-drp-tcp-rttprobe)# destination-port 17  
gssm1.example.com(config-drp-tcp-rttprobe)# exit  
gssm1.example.com(config-drp)#
```

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### Related Commands

[\(config-drp-tcp-rttprobe\) sourceport](#)

[\(config-drp-tcp-rttprobe\) timeout](#)

## (config-drp-tcp-rttprobe) sourceport

To configure the TCP probe source port, use the **sourceport** command. To indicate that the TCP probe source port will not be configured, use the **no** form of this command.

```
sourceport dynamic | static 1-65535
```

```
no sourceport dynamic | static 1-65535
```

Syntax	Description
<b>dynamic</b>	Configures a dynamic TCP probe source port.
<b>static</b>	Configures a static TCP probe source port to be used for the entire TCP-SYN/SYN-ACK packet.
<i>1-65535</i>	TCP probe source port number. Valid values are from 1 to 65535 with a default source port of 53.

**Command Modes** TCP RTT probe configuration submode

**Examples** The following example shows how to configure a TCP probe source port:

```
gssm1.example.com(config-drp)# probe tcp-rtt
gssm1.example.com(config-drp-tcp-rttprobe)# sourceport dynamic
gssm1.example.com(config-drp-tcp-rttprobe)# exit
gssm1.example.com(config-drp)#
```

**Related Commands** [\(config-drp-tcp-rttprobe\) destination-port](#)  
[\(config-drp-tcp-rttprobe\) timeout](#)

## (config-drp-tcp-rttprobe) timeout

To configure the timeout value for the TCP probe, use the **timeout** command. To indicate that no timeout value will be configured, use the **no** form of this command.

**timeout** *value*

**no timeout**

---

### Syntax Description

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<i>value</i>	Timeout value for the TCP probe. Valid values are from 1– 5 with a default timeout value of 3 seconds.
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### Command Modes

TCP RTT configuration submode

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### Examples

The following example shows how to configure the timeout value for the TCP probe:

```
gssm1.example.com(config-drp)# probe tcp-rtt
gssm1.example.com(config-drp-tcp-rttprobe)# timeout 4
gssm1.example.com(config-drp-tcp-rttprobe)# exit
gssm1.example.com(config-drp)#
```

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### Related Commands

[\(config-drp-tcp-rttprobe\) destination-port](#)

[\(config-drp-tcp-rttprobe\) sourceport](#)