

Configuring the Diameter Application (SRC CLI)

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Configuring the Diameter Application Properties

Use the following configuration statements to configure the properties for the Diameter application:

```
system diameter {
  java-heap-size java-heap-size;
  java-new-size java-new-size;
  java-garbage-collection-options java-garbage-collection-options;
  protocol [(tcp | sctp)...];
  local-address [local-address...];
  port port;
  origin-host origin-host;
  origin-realm origin-realm;
  active-peers;
  debug-mode;
  load-balancing-mode (failover | round-robin);
  transaction-processing-log (log-no-messages | log-severe-messages |
    log-normal-messages | log-debug-messages);
  packet-trace-log (log-no-messages | log-severe-messages | log-normal-messages |
    log-debug-messages);
  peer-state-machine-log (log-no-messages | log-severe-messages |
    log-normal-messages | log-debug-messages);
  configuration-log (log-no-messages | log-severe-messages | log-normal-messages |
    log-debug-messages);
}
```

To configure the Diameter application:

1. From configuration mode, access the configuration statement for the Diameter application.

```
user@host# edit system diameter
```

2. If you encounter problems caused by lack of memory, change the maximum memory size available to the JRE.

```
[edit system diameter]
user@host# set java-heap-size java-heap-size
```

3. Configure the amount of space available to the JRE when the Diameter server starts.

```
[edit system diameter]
```

```
user@host# set java-new-size java-new-size
```

4. Configure the garbage collection functionality of the Java Virtual Machine.

```
[edit system diameter]
user@host# set java-garbage-collection-options java-garbage-collection-options
```

5. Specify the protocol for the transport connection.

```
[edit system diameter]
user@host# set protocol [(tcp | sctp)...]
```

6. (Optional) Specify the local IP addresses that remote peers can use to reach this server.

```
[edit system diameter]
user@host# set local-address [local-address...]
```

7. (Optional) Specify the port for the server.

```
[edit system diameter]
user@host# set port port
```

8. (Optional) Specify the fully-qualified domain name used to identify this host to its Diameter peers.

```
[edit system diameter]
user@host# set origin-host origin-host
```

9. (Optional) Specify the DNS name used to identify this host to its Diameter peers.

```
[edit system diameter]
user@host# set origin-realm origin-realm
```

10. (Optional) Specify whether the peer connection is in active mode and automatically starts communicating with the IMS AAA Server.

```
[edit system diameter]
user@host# set active-peers
```

11. (Optional) Specify whether the peer connection is in debug mode.

```
[edit system diameter]
user@host# set debug-mode
```

12. (Optional) Configure the load-balancing mode for peer selection when forwarding a request message.

```
[edit system diameter]
user@host# set load-balancing-mode (failover | round-robin)
```

13. (Optional) Configure the log level for the transaction processing log.

```
[edit system diameter]
user@host# set transaction-processing-log log-level
```

where *log-level* is one of the following:

- **log-no-messages**—Do not log any messages.
- **log-severe-messages**—Log only severe messages.
- **log-normal-messages**—Log only normal messages.
- **log-debug-messages**—Log only debug messages.

14. (Optional) Configure the log level for the packet tracing log.

```
[edit system diameter]
user@host# set packet-trace-log log-level
```

where *log-level* is one of the following:

- **log-no-messages**—Do not log any messages.
- **log-severe-messages**—Log only severe messages.
- **log-normal-messages**—Log only normal messages.
- **log-debug-messages**—Log only debug messages.

15. (Optional) Configure the log level for the peer state machine log.

```
[edit system diameter]
user@host# set peer-state-machine-log log-level
```

where *log-level* is one of the following:

- **log-no-messages**—Do not log any messages.
- **log-severe-messages**—Log only severe messages.
- **log-normal-messages**—Log only normal messages.
- **log-debug-messages**—Log only debug messages.

16. (Optional) Configure the log level for the configuration log.

```
[edit system diameter]
user@host# set configuration-log log-level
```

where *log-level* is one of the following:

- **log-no-messages**—Do not log any messages.
- **log-severe-messages**—Log only severe messages.
- **log-normal-messages**—Log only normal messages.
- **log-debug-messages**—Log only debug messages.

Configuring the Diameter Client Properties

Use the following statements to configure the properties for the Diameter client:

```
system diameter client {  
    threads threads;  
    keep-alive-time keep-alive-time;  
}
```

To configure the Diameter client properties:

1. From configuration mode, access the configuration statement for the Diameter client.

```
user@host# edit system diameter client
```

2. (Optional) Specify the minimum number of threads to use.

```
[edit system diameter client]  
user@host# set threads threads
```

3. (Optional) Specify the time to wait for new commands.

```
[edit system diameter client]  
user@host# set keep-alive-time keep-alive-time
```

Configuring the Diameter Server Properties

Use the following statements to configure the properties for the Diameter server:

```
system diameter server {  
    threads threads;  
    keep-alive-time keep-alive-time;  
}
```

To configure the Diameter server properties:

1. From configuration mode, access the configuration statement for the Diameter server.

```
user@host# edit system diameter server
```

2. (Optional) Specify the minimum number of threads to use.

```
[edit system diameter server]  
user@host# set threads threads
```

3. (Optional) Specify the time to wait for new commands.

```
[edit system diameter server]  
user@host# set keep-alive-time keep-alive-time
```

Configuring Logging Destinations

Use the following configuration statements to configure logging destinations for Diameter:

```
system diameter logger name ...

system diameter logger name file {
    filter filter;
    filename filename;
    rollover-filename rollover-filename;
    maximum-file-size maximum-file-size;
}
```

To configure logging destinations to store log messages in a file:

1. From configuration mode, access the configuration statement that configures the name and type of logging destination.

```
user@host# edit system diameter logger name file
```

2. Specify the properties for the logging destination.

```
[edit system diameter logger name file]
user@host# set ?
```

For more information about configuring properties for the logging destination, see [Configuring Logging Destinations to Store Messages in a File \(SRC CLI\)](#).

