

# Inferno Nettverk A/S

## Dante Module Documentation

# Bandwidth Module

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## 1 Description

The *Bandwidth* module gives control over how much bandwidth the clients of the *Barefoot* server can consume.

The module can be used to limit bandwidth to non-work related web/FTP sites, or to prevent FTP-related traffic from impacting too much on interactive telnet/ssh traffic.

It can also be used to give more bandwidth to certain clients or for traffic to certain sites.

## 2 Syntax

The syntax of the `bandwidth` statement is as follows:

```
bandwidth: <bytes>
```

`bytes` is the maximum bandwidth to use per second, measured in bytes.

## 3 Semantics

The `bandwidth` statement integrates as a part of the *rules*. See *barefootd.conf(5)* for more information about rules in *Barefoot*.

The maximum allowed `bandwidth` set for a rule will be shared by all clients matching that rule. The *Barefoot* server will attempt to distribute the bandwidth to the matching clients in a least-recently used fashion, trying to let all clients get a fair share.

### 3.1 SIGHUP

Sending the server a SIGHUP signal forces a reload of the configuration file. It should be noted that *this does not* affect current sessions or limits placed on them.

A reload of the configuration file only affects sessions created after the reload. It will not affect any of the existing sessions.

This means that changing e.g., a *pass* statement to a *block* statement, does not terminate the session of any existing client. Likewise, changing the limits set in a rule does not change the values for any existing session.

After a reload of the configuration file, old sessions will continue to operate in a separate space, using the old configuration, while new sessions will use the new configuration.

## 4 Examples

This section shows several examples of how the *bandwidth* module can be used.

### 4.1 Limiting web/http bandwidth

The below rule shows how to limit the bandwidth used for traffic to and from the web server *internal-web-server* to a total of 10240 bytes (10 KiloBytes/second).

```
client pass {
    from: 0.0.0.0/0 to: barefoot-server port = http
    bounce to: internal-web-server
```

```
    bandwidth: 102400
}
```

## 4.2 Limiting the number of clients from a specific country

Assume you want to do something more complex, where you have important customers from a specific company accessing your web server, and you do not want to impose bandwidth limits on them, but still impose limits for everybody else.

Lets assume all your important customers come from the domain *important.example.com*.

The next two rules then shows how you could accomplish this.

```
# clients from important company will not be bandwidth-limited.
client pass {
    from: .important.example.com to: barefoot-server port = http
    bounce to: internal-web-server
}

# clients from anywhere else will be bandwidth-limited.
client pass {
    from: 0.0.0.0/0 to: barefoot-server port = http
    bounce to: internal-web-server
    bandwidth: 50000
}
```