

Basic Ping Commands

Ping a Host (Default Settings)

```
samgalope@devdigest ~ % ping example.com
```

Ping a Specific IP Address

```
samgalope@devdigest ~ % ping 8.8.8.8
```

Advanced Ping Options

```
samgalope@devdigest ~ % ping -c 5 example.com
```

Set a Timeout for Each Ping Response

```
samgalope@devdigest ~ % ping -W 2 example.com
```

Change the Packet Size

```
samgalope@devdigest ~ % ping -s 1024 example.com
```

Flood Ping (Super Fast, Root Required)

```
samgalope@devdigest ~ % ping -f example.com
```

Network Troubleshooting with Ping

Detect Packet Loss

```
samgalope@devdigest ~ % ping -c 10 example.com
```

Measure Network Latency (Response Time)

```
samgalope@devdigest ~ % ping example.com
```

Test a Local Network Connection

```
samgalope@devdigest ~ % ping 192.168.1.1
```

Basic Telnet Commands

Connect to a Remote Server

```
samgalope@devdigest ~ % telnet example.com 23
```

Connect to a Specific Port

```
samgalope@devdigest ~ % telnet example.com 80
```

Exit a Telnet Session

```
samgalope@devdigest ~ % Ctrl + ]
```

Advanced Telnet Usage

Check if a Port is Open on a Remote Server

```
samgalope@devdigest ~ % telnet example.com 443
```

Send an HTTP Request via Telnet

```
samgalope@devdigest ~ % telnet example.com 80
GET / HTTP/1.1
Host: example.com
```

Test an SMTP Mail Server (Port 25 or 587)

```
samgalope@devdigest ~ % telnet mail.example.com 25
```

```
samgalope@devdigest ~ %
HELO example.com
MAIL FROM: user@example.com
RCPT TO: recipient@example.com
DATA
Subject: Test Email
This is a test email.
.
QUIT
```

Basic Netstat Commands

Show All Active Network Connections

```
samgalope@devdigest ~ % netstat -a
```

Show Only Listening Ports

```
samgalope@devdigest ~ % netstat -l
```

Show Active TCP Connections

```
samgalope@devdigest ~ % netstat -at
```

Show Active UDP Connections

```
samgalope@devdigest ~ % netstat -au
```

Display Process IDs (PIDs) of Active Connection

```
samgalope@devdigest ~ % netstat -tp
```

Show Routing Table

```
samgalope@devdigest ~ % netstat -r
```

