

# The Telnet Protocol

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**David Clinton**

LINUX SYSTEM ADMINISTRATOR

[www.bootstrap-it.com](http://www.bootstrap-it.com) | [www.bootstrap-it.com/blog](http://www.bootstrap-it.com/blog)

Telnet

- Use cases

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- Use cases
- Inside the Telnet protocol

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- Use cases
- Inside the Telnet protocol
- Troubleshooting

Ingredients  
to Telnet  
Success

- TCP integration

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- ASCII character set (by default)

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- Network Virtual Terminals

Ingredients  
to Telnet  
Success

- TCP integration
- ASCII character set (by default)
- Network Virtual Terminals
- Symmetrical design



# Telnet: When Not to Use It

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# How Telnet Works

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# Telnet Commands

NAME	CODE	MEANING
SE	240	End of subnegotiation parameters.
NOP	241	No operation.
Data Mark	242	The data stream portion of a Synch.
Break	243	NVT character BRK.
Interrupt Process	244	The function IP.
Abort output	245	The function AO.
Are You There	246	The function AYT.
Erase character	247	The function EC.
Erase Line	248	The function EL.
Go ahead	249	The GA signal.
SB	250	Indicates Option subnegotiation.
<b>Options Codes:</b>		
WILL	251	Indication of confirmation or start of option performance.
WON'T	252	Indication of refusal to perform option.
DO	253	Request that the other party perform indicated option.
DON'T	254	Request for other party to cease performing indicated option.

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# Telnet Commands

**Define a shell variable**

environ define <variablename> <value>

Send argument

send ayt

Display status

send getstatus

Command line argument

telnet -X <mode> <TelnetHostAddress>

Scripting with Telnet

Telnet help

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# Troubleshooting Telnet Connections

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# Telnet and Network Ports

Telnet  
Configuration  
Resources

`/etc/inetd.conf`

Telnet  
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`/etc/inetd.conf`

`/etc/xinetd.d/telnet`

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Windows registry:

`HKEY_LOCAL_MACHINE\Software\Microsoft\TelnetServer\1.0`

## Telnet Configuration Resources

`/etc/inetd.conf`

`/etc/xinetd.d/telnet`

`/home/username/.telnetrc`

Windows registry:

`HKEY_LOCAL_MACHINE\Software\Microsoft\TelnetServer\1.0`

Windows PowerShell:

`tIntadm`

Telnet  
Command  
Termination

\r\n

## Review

```
telnet 10.0.3.234
```

```
telnet
```

```
> open -l ubuntu 10.0.3.234
```

```
Interrupt Process (IP) 244
```

```
WILL (option code) 251
```

```
CTRL+] ]
```

```
environ define stuff hello
```

```
send ayt
```

```
./telnet-login.sh
```

```
sudo nano /etc/services
```

```
tlntadm [\server] config port=PortNumber
```

```
ip netns exec redns telnet 10.0.3.234
```



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tlntadm [\\server] config port=PortNumber
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ip netns exec red -- telnet 10.0.3.234
```

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telnet
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```
ip netns exec ns1 telnet 10.0.3.234
```

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```

```
iptables -A INPUT -s 10.0.3.234 -j ACCEPT
```