nc -- реализация подключений и ожиданий входящих соединений, через TCP и UDP

NC(1) **FreeBSD General Commands Manual** **NC(1)**

???????????

nc -- ????????? ??????????? ? ???????? ???????? ??????????, ????? TCP ? UDP

??????? ?????

nc [-46DEdhklnorStUuvz] [-e IPsec_policy] [-i interval]
[-P proxy_username] [-p source_port] [-s source_ip_address] [-T ToS]
[-w timeout] [-X proxy_protocol] [-x proxy_address[:port]] [hostname]
[port[s]]

????????

??????? **nc** (??? **netcat**) ??????????? ??????????? ??? ?????, ??? ????????
TCP ??? UDP. ???????? TCP ??????????, ??????? UDP ???????, ??????????-
??? TCP ? UDP ??????, ??????????? ??????, ? ?????? ? ???????? IPv4 ?
IPv6. ? ??????? ?? telnet(1), nc ??????? ????????? ?? ??????? ?? ????-
??????? ????? ??????, ?????? ??????? ?? ?? ?????? ??????????? ?????, ???
??? ?????? telnet(1).

???????? ??????????:

- ??????????? TCP ????????????
- ????????? shell-????????? ??????????? HTTP ???????
- ??????????? ??????? ???????
- SOCKS ??? HTTP ProxyCommand ??? ssh(1)
- ? ??????, ?????? ??????

????????? ????????? ?????:

-4 ??????????? ?????? IPv4 ??????.

-6 ??????????? ?????? IPv6 ??????.

-D ???????? ??????? ?? ??????.

-d ?? ?????? ??????????? ????(stdin).

-h ??????? ??????? ?? nc.

-E ??????????? ????????? "-e 'in ipsec esp/transport//require'

-e 'out ipsec esp/transport//require'", ??????? ???????? ?????-
??????? ????? IPsec ESP ? ????? ???????????

-e ???? ????????? IPsec ????????, ?? ????? ??????? ???????????? ???????? IPsec, ?????? ?????????, ????????? ? ipsec_set_policy(3). ???? ?????????, ???? ???? ????? ???? ??????? ??? ????, ?? ?????? ??????? ??? ??????? ??????????.

-i interval
????????? ???????? ???????? ????? ??????????? ? ???????????? ???????? ??????. ??? ?? ?????? ???????? ???????? ????? ??????-??????? ? ????????? ??????.

-k ????????? ???????(???????) ????????? ?????????, ????? ????, ??? ??????? ????????? ???? ???????. ???????? ???????????? ??? ????? ??? ????? -l.

-l ??????? ???????? ?????????, ?????? ??????????? ? ????????? ?????. ???????? ???????????? ??? ????? ? ?????? ? ??????? -p, -s, ??? -z. ????? ????, ????? ???? ??? ????????? ? ??????? ????? -w ????????????.

-n ?? ??????????? ??????? ????????????? ???? ? ????????, ? ?????? ? ?????? ??????.

-o ''Once-only ?????''. ?? ????????, nc ?? ????????? ?????? ?? ??????? EOF ???????????? ?? ?????????? ????, ? ????????? ?????? ?? ??? ???, ???? ???? ?? ?????? ?? ?????????. ???? -o ????????? ???????? ????????? ??????? EOF.

-P proxy_username
??? ????????????, ????? ???????????? ?????? ???????, ????????? ?????????????. ???? ?? ??????? ??? ????????????, ????? ?????-????????? ?? ???????. ?? ?????? ?????? ?????? ????????????? ????????????? ?????? ??? HTTP ?????????.

-p source_port
???????? ????, ??????? nc ?????? ????????????. ???????? ??????-?????? ??? ????? ? ?????? ? ?????? -l.

-r ???????? ????? ?/??? ????? ????????? ????? ??????? ? ????????? ???????, ?????? ? ???????????????.

-S ???????? RFC 2385 TCP MD5 ???????.

-s source_ip_address
IP ?????????, ??????? ???????????? ??? ??????? ???????. ???????? ???????????? ??? ????? ? ?????? ? ?????? -l.

-T ToS ??? ???????????? (ToS) IP ??? ?????????. ?????????? ????????, ???????????? ???????? "lowdelay", "throughput", "reliability",

??? 8-??????? ???????????????? ????????? ??????????????, ???
"0x".

-t ???????? RFC 854 DON'T ? WON'T ?????? ? DO ? WILL ???????. ???
?????? ????????? ??????????? nc ??? ????????? ???????? telnet
??????.

-U ??????????? ?????? (Unix Domain Sockets).

-u ??????????? UDP, ?????? ???????????? ??-????????? TCP.

-v ???????? ?????? ????????? ??????????.

-w timeout
???? ????????? ? ?????????? ???? ?? ??????????? ?????? ???
???????? ???? ??? ? ????????, ????? ????????? ????????. ????
-w ?? ????????? c ?????? -l, ?.?. nc ????? ??????? ??????????
??????, ? ??? ??? ????? -w. ?? ????????? ???? ??? ?? ?????.

-X proxy_protocol
??????????? ????????? ????????, ??? ????????? ? ?????? ???????.
??????????? ????????? "4" (SOCKS v.4), "5" (SOCKS v.5) ?
"connect" (HTTPS proxy). ???? ???????? ?? ??????, ???????????
SOCKS 5 ??????.

-x proxy_address[:port]
?????????? ? ????? ????????? ?????? ? ??????? proxy_address ?
?????? port. ???? port ?? ??????, ????? ????? ????????????
?????????? ????? ??? ?????? ????????? (1080 ??? SOCKS ? 3128
??? HTTPS).

-z ??????????? ?? ??????? ????????? ???????, ??? ??????? ?? ??????.
???????? ??????????? ??? ????? ? ?????? ? ?????? -l.

??? ????? ????? ???? ??????? ? ???? IP ?????? ??? ??? ????? (???? ??
?????? ????? -n). ?????? ??? ????? ?????? ??????????, ????? ?????? ?
????????????? ????? -l (??????? ????????? ??????).

????? ????? ???? ??????? ?? ??????, ???? ? ????????. ???????? ? ???????
nn-mm. ?????? ???? ????????? ?????? ???? ??????, ????? ??????? ?
????????????? ????? -U (??????????? ?????).

??? ????? ????? ???? ??????? ? ???? IP ?????? ??? ??? ????? (???? ??
?????? ????? -n). ?????? ??? ????? ?????? ??????????, ????? ?????? ?
????????????? ????? -l (??????? ????????? ??????).

????? ????? ???? ??????? ?? ??????, ???? ? ????????. ???????? ? ???????
nn-mm. ?????? ???? ????????? ?????? ???? ??????, ????? ??????? ?
????????????? ????? -U (??????????? ?????).

?????? ??????/??????

????? ????? ????????? ??????????? ?????? ??????/?????? ????????? nc. ?? ????? ??????? ????????? nc ??????? ????????? ???? ?? ??????????.

??????:

```
$ nc -l 1234
```

nc ??????? ???? 1234 ?? ??????????. ?? ?????? ??????? (??? ?? ?????? ??????) ??????????? ? ??????? ?? ????????????? ????:

```
$ nc 127.0.0.1 1234
```

?????? ????????? ?????????? ????? ???????. ???, ??? ????? ??????? ?? ?????? ???????, ????? ?????????? ?? ?????? ? ????????. ????? ????, ??? ????? ??????????? ??????????, nc ?? ???????, ????? ?? ?????? ????? ?????????????, ??? `server', ? ?????, ??? `client'. ?????????? ????? ???? ???????? ????????? EOF (`^D').

???????? ??????

?????????? ?????? ????? ???? ????????, ??? ?????????? ???????? ??????. ????? ????????? ??????????? ? ???? ?? ?????? ?????????? ????? ???????? ?? ?????? ?????, ? ???? ? ????? ????? ????? ???? ????????? ? ????? ??????????????????, ????? ??????????? ???????? ??????.

??????? ????????? nc ??? ???????????? ?????, c ??????????????? ?? ???? ??????:

```
$ nc -l 1234 > filename.out
```

??????????? ?????? ??????, ??? ??????????? ? ?????????? ???????? nc, ? ??????????????? ? ???? ???????????? ?????.

```
$ nc host.example.com 1234 < filename.in
```

????? ???????? ?????, ?????????? ???????????? ?????????.

??????? ? ????????

?????? ??????? ???????????? ? ???????? "????????????".??? ????? ?????? ?????? ????????????, ????? ???? ?????????? ????????, ????? ?????? ?????????? ?????? ???? ????????. ????????, ??? ????????? ???????? ???????? ??? ?????:

```
$ echo -n "GET / HTTP/1.0rnrn" | nc host.example.com 80
```

???????? ????????, ??? ????? ????? ?????????? ????????? ????????? ??? ????????. ??? ????? ???? ???????????? ? ??????? sed(1), ???? ??? ??????????.

????? ??????? ?????? ????? ???? ????????, ????? ??????????? ????? ?????? ?????? ??????????? ????????. ??? ?????? ??????, ????? ????????????? SMTP ???????:

```
$ nc localhost 25 << EOF
HELO host .example.com
MAIL FROM:
RCPT TO:
DATA
Body of email.
.
QUIT
EOF
```

??????????? ??????

??????? ????? ????? ????? ??????? ? ????? ??????? ???????? ?? ????????-
??? ??????. ???? -z ????? ???? ??????????, ????? ?????? ?? ????????
?????? ?? ????????? ??????????. ????????:

```
$ nc -z host.example.com 20-30
```

```
Connection to host.example.com 22 port [tcp/ssh] succeeded!
Connection to host.example.com 25 port [tcp/smtp] succeeded!
```

??? ?????? ???????? ?????? 20 - 30.
????? ??? ????? ???? ???????????, ????? ?????? ????? ????????? ????
???????, ? ??? ??????. ??? ????????? ???????? ????????????? ?????????.
??? ???????, ????? ??????? ???, ??????? ????????? ??????????? ???????-
???, ????? ???????? ???, ????? ????? ???????? ??????????. ??? ?????
???? ????????? ????????? ????????? ???? ???? ? ??????? ????? -w , ???
????? ??????????? ??????? "QUIT" ?? ???????:

```
$ echo "QUIT" | nc host.example.com 20-30
SSH-1.99-OpenSSH_3.6.1p2
Protocol mismatch.
220 host.example.com IMS SMTP Receiver Version 0.84 Ready
```

???????

??????? TCP ????????? ?? ???? 42 ?? host.example.com, ????????? 31337,
??? ???????? ????, ? ???? ????? ? 5 ??????:

```
$ nc -p 31337 -w 5 host.example.com 42
```

??????? UDP ????????? ?? ???? 53 ?? host.example.com:

```
$ nc -u host.example.com 53
```

??????? TCP ????????? ?? ???? 42 ?? host.example.com ????????? 10.1.2.3,
??? ???????? IP:

```
$ nc -s 10.1.2.3 host.example.com 42
```

??????? TCP ????????? ?? ???? 42 ?? host.example.com, ????????? IPsec
ESP ??? ????????? ? ????????? ???????.

```
$ nc -E host.example.com 42
```

??????? TCP ????????? ?? ???? 42 ?? host.example.com, ???????? IPsec ESP ?????? ??? ????????? ???????

```
$ nc -e 'out ipsec esp/transport//require' host.example.com 42
```

??????? ? ??????? ?? Unix Domain Socket:

```
$ nc -lU /var/tmp/dsocket
```

?????????? ?? ???? 42 ?? host.example.com ???????? HTTP ?????? 10.2.3.4, ???? 8080. ???? ?????? ????? ???? ?????????? ssh(1); ???????? ProxyCommand ???????? ? ssh_config(5) ??? ???????? ??????? ?????????.

```
$ nc -x10.2.3.4:8080 -Xconnect host.example.com 42
```

??? ???? ??????? ??????, ?? ???? ??? ??????????? ?????? ????????????? ? ?????? ??????????? "ruser", ???? ?????? ???????? ???:

```
$ nc -x10.2.3.4:8080 -Xconnect -Pruser host.example.com 42
```

???????? ?????

cat(1), ssh(1)

??????

??????????? ????????? ??????? *Hobbit* . ????????? ? ????????? ipv6 Eric Jackson .

?????????????

??????????? UDP ?????? ????? ?????? ???????? (?.?. ???????, ??? ????? ???????), ???????????? ????????? ?????? -uz ??????????? ?????????.

FreeBSD 7.0 May 21, 2006 FreeBSD 7.0

Источник (получено *2025-11-05 09:44*):
http://muff.kiev.ua/content/nc-realizatsiya-podklyuchenii-i-ozhidanii-vkhodyashchikh-soedinenii-cherez-tcp-i-udp