

Linux for Embedded Objects

LEO1-E19

Networking

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Agenda



Sockets

Iptables

Infrastructure

Sockets



User Space representation of endpoint of network connection

Socat

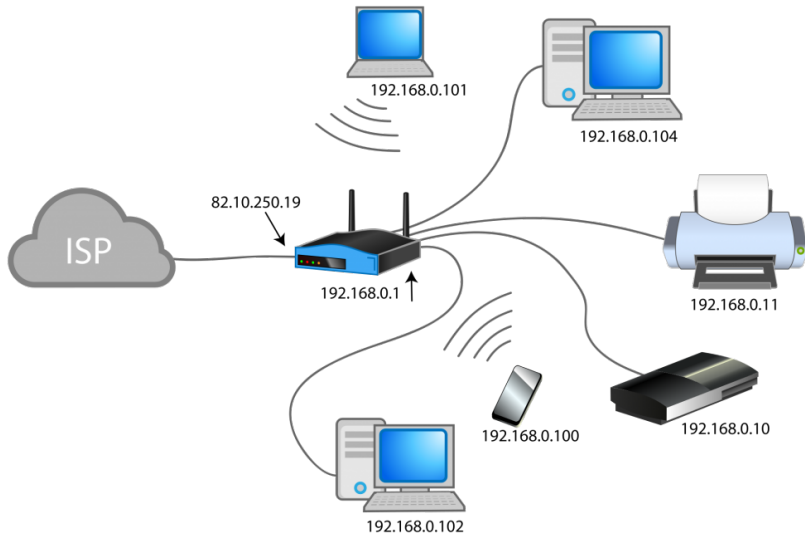
```
socat tcp-listen:8080,reuseaddr,fork exec:"cat file"
```

```
socat tcp:192.168.0.1:8080 - > file
```

Iptables



- Firewall
- SNAT
- DNAT



Iptables - Filter



Filter Table

Chain INPUT (policy ACCEPT)

target

prot opt source

destination

Chain FORWARD (policy ACCEPT)

target

prot opt source

destination

Chain OUTPUT (policy ACCEPT)

target

prot opt source

destination

Iptables - NAT



NAT Table

Chain PREROUTING (policy ACCEPT)

target

prot opt source destination

Chain INPUT (policy ACCEPT)

target

prot opt source destination

Chain OUTPUT (policy ACCEPT)

target

prot opt source destination

Chain POSTROUTING (policy ACCEPT)

target

prot opt source destination

Infrastructure



- ▶ DNS
 - ▶ nslookup
 - ▶ dig +trace
- ▶ DHCP
 - ▶ dhcpcd