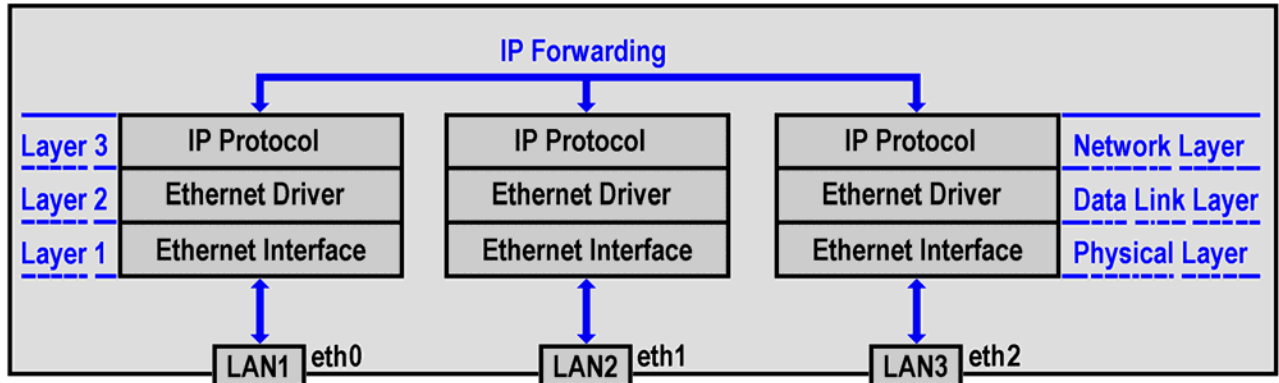


How to setup an IP Router (MB/1520-100-based IP Forwarding)

The Embedded Gateway Linux of your Application Board MB/1520-100 offers an IP router feature for the Ethernet network interfaces eth0, eth1 and eth2. This feature is based on the Linux IP forwarding. IP forwarding allows to transfer IP packets within the OSI layer 3 (Network Layer) from one interface to another.



The default state for the MB/1520-100 IP forwarding is **disabled**. Please enable the IP forwarding before the first use. With IP forwarding enabled, the MB/1520-100 act as IP router. The route of an IP packet depends on the destination IP addresses within the IP header and the current IP addresses for the MB/1520-100 Ethernet network interfaces eth0, eth1 and eth2.

- **1. Step:** Enter the following command sequence within a MB/1520-100 Telnet or RS232-based serial console session:

```
cat > autostart.sh
#!/bin/sh
echo "1" > /proc/sys/net/ipv4/ip_forward
CTRL-D (CTRL-D stops the Linux cat command)
chmod +x autostart.sh
```

The sample code creates a file **autostart.sh** with two lines of code. The MB/1520-100 comes with an Autostart feature. This feature allows you to start programs or execute Linux shell commands at boot time. With this sample code the Application Board MB/1520-100 works as IP router after each reset or power-up.

Please note: It is always possible to stop the IP forwarding functionality. For this, just enter the command:

```
echo "0" > /proc/sys/net/ipv4/ip_forward
```

within a Telnet or RS232-based serial console session.

That's all.