Progress Reports of MP-safe Networking in NetBSD

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Network Components at a Glance

- Device drivers: vioif, vmx, wm, ixg, ixv, etc.
- Layer 2:   Ethernet, bridge, ATM, FDDI, Firewire, IEEE 802.11, etc.
- Layer 3:   IPv4/ICMP/ARP, IPv6/ICMPv6/ND, MPLS, etc.
- Layer 4+:   TCP, UDP, DCCP, SCTP, socket, PCB, etc.
- Pseudo I/Fs: gif, l2tp, pppoe, tun, ppp, agr, carp, gre, tap, vlan, etc.
- Packet filters: npf, ipf, pf
- Others: ifnet, bpf, pfil, ipsec, altq, NFS, CIFS, opencrypto, etc.

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See `src/doc/TODO.smpnet` for the complete lits

How to try

- Disabled by default in -current yet
  - The big lock(s) remain
- Enabled by `NET_MPSAFE` kernel option
- Recomended setups
  - Router
    - IPv4/IPv6 forwarding
    - npf
  - Intel 1/10 Gbps NICs
- Have fun
  - ...at your own risk