

## Packet Forwarding (aka Packet Rewriting) Ver 1.0

1. Check CRC (if bad, drop, done); check dest MAC addr (if not me, drop, done);  
**strip L2 framing**
2. Check for VLAN tags and strip them (there may possibly be some processing)  
**L3 Packet modified / re-written**
3. Check IP header details: verify checksum and if okay then check destination IP if dest IP is me, punt up to Control Plane, done; else continue forwarding!
4. Decrement TTL count by 1; if now 0, punt up to Control Plane for ICMP msg  
**L3 Packet modified / re-written**
5. Recalculate Checksum in IP header  
**L3 Packet modified / re-written**
6. Check routing table for best longest(!) match to destination IP
7. Determine encap required for egress interface: Dest MAC, Src MAC, (VLAN?)  
**L2 frame modified / re-written**
8. Compute CRC and add to egress frame  
**L2 frame modified / re-written**