<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
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<td>Frukostfika</td>
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<td>10.00</td>
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<td>Lunch</td>
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<td>Eftermiddagsfika</td>
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<td>16.00</td>
<td>Avslut</td>
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<td>Time</td>
<td>Topic</td>
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<td>10.00</td>
<td>Pres. Resilans</td>
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<td>CWDM, DWDM, EDFA</td>
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<td></td>
<td>bfdd/quagga</td>
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<td>Quagga</td>
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<td>Child Abuse filter</td>
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<td>Raspberry pi</td>
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<td>DOM in 5 min</td>
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<td>Vanilla Linux on telephones</td>
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<td>CoAP/Contiki</td>
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<td>UNET news/status Activites</td>
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<td>pktgen_RX (pktrec)</td>
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<td>WSN uplinks</td>
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<td>Bifrost status</td>
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<td>Network Sniffing</td>
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<td>cligen</td>
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<td>git &amp; github</td>
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Progress of Quagga

Bengt Gördén
Resilans AB
"Soppan/the mess" Quagga

- As we all know Quagga is a fork of Zebra
- Official repository on Savannah
- Notable "forks" of Quagga
  - EURO-IX Quagga (opensourcerouting.org, source on github)
    - A fork/branch to get vendor specific patches
    - Currently on Quagga 0.99.20
  - Quagga-RE (source on github)
    - Started to get a more stable release cycle
    - Based on 0.99.17 (currently on 0.99.17.11)
  - Rpki Quagga (LACNIC)
  - Vyatta
  - Google
    - ISIS, BGP-MP
• Bad performance with multiple tables and lots of peers
• ISIS to buggy
  • 15 ”MUST” bugs needs to be ironed out
Major bugs

• Route Recursion
  • Indirect BGP routes not or wrong installed to RIB
• BGP Route Decision
  • Lowest peer as tie breaker in best path decision
• BGP Aggregate
  • Multiple bugs in BGP route aggregation
Focus for OSR (EURO-IX) Quagga

- **ISIS/OSPF**
  - Fixing ISIS (IPv4) to get it to a useable state
  - OSPF unnumbered interfaces
  - IGP Stability fixes

- **Data structures**
  - Trying to improve internal RIB structures
  - (Cleanup and Performance Changes)

- **API**
  - Add API to decouple FIB updates from the OS below and allow forwarding engines to subscribe to direct updates from Zebra
Other routing engines

- OpenBGPd
- BIRD
- XORP
  - Pica8
pktgen-rx/pktrec

- Daniel Turulls patches were refused by DM
- Technically right?
- What to do about it and do we want to do something about it?
- Is Dave's comment regarding tracepoints valid?
I completely disagree with this patch on two levels:

1) pktgen is for "generating" packets, not receiving them. Trying to put lipstick on a pig is never a good idea.

2) The information it gathers and shows is completely useless. What's interesting as "RX work cost" is what happens deep down in the netif_receive_skb() code paths, IP input, Routing, netfilter, whatever... but that is not what this thing is measuring at all.

Sorry, I'm not applying this. You can probably do something more clever with tracepoints.
Links

OSR
- http://opensourcerouting.org/
- http://confluence.isc.org/dashboard.action
- https://github.com/opensourcerouting/quagga

Quagga-RE
- https://github.com/Quagga-RE/quagga-RE

Main line Quagga
- http://www.nongnu.org/quagga/
- http://git.savannah.gnu.org/cgit/quagga.git