Runtime Dispatching Node graph

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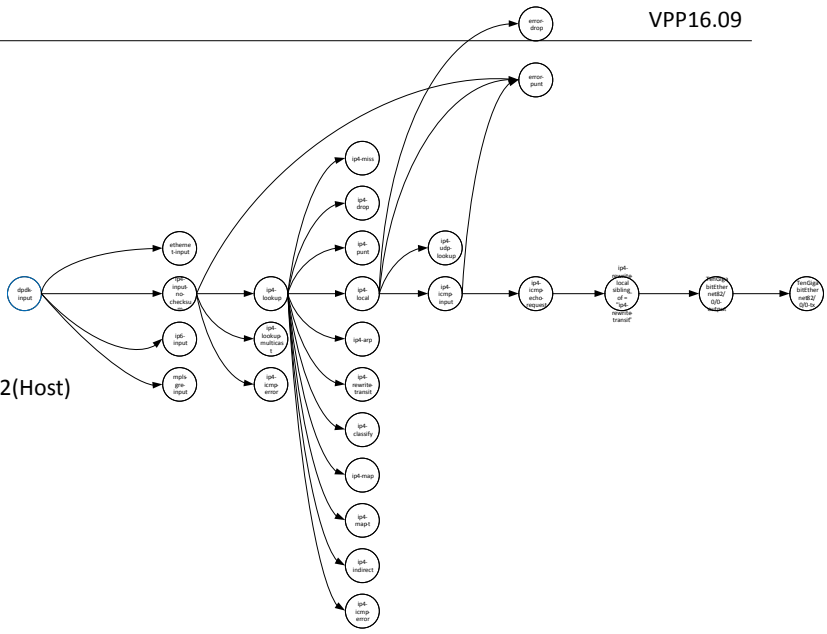
Node Graph VPP16.09

1. Node type
   - Process
   - Input
   - Internal
   - Sibling
2. Graph arc

The node graph for example
- ping 100.1.0.1(VPP) from 100.1.0.2(Host)



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Show trace

VPP16.09

```
15:12:46:260666: dpdk-input
  TenGigabitEthernet82/0/0 rx queue 0
  buffer 0x1b390: current data 14, length 84, free-list 0, totlen-nifb 0, trace 0x1
  PKT MBUF: port 0, nb_segs 1, pkt_len 98
    buf_len 2176, data_len 98, ol_flags 0x0, data_off 128, phys_addr 0x7b587540
    packet_type 0x10
    Packet Types
      RTE_PTYPE_L3_IPV4 (0x0010) IPv4 packet without extension headers
  IP4: 90:e2:ba:84:1c:3a -> 90:e2:ba:84:45:b2
  ICMP: 100.1.0.2 -> 100.1.0.1
    tos 0x00, ttl 64, length 84, checksum 0x43d4
    fragment id 0x2ed0, flags DONT_FRAGMENT
  ICMP echo_request checksum 0x500c
15:12:46:260675: ip4-input-no-checksum
  ICMP: 100.1.0.2 -> 100.1.0.1
    tos 0x00, ttl 64, length 84, checksum 0x43d4
    fragment id 0x2ed0, flags DONT_FRAGMENT
  ICMP echo_request checksum 0x500c
```

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Show trace(cont')

VPP16.09

```
15:12:46:260683: ip4-lookup
  fib 0 adj-idx 4 :  100.1.0.1/24 flow hash: 0x00000000
  ICMP: 100.1.0.2 -> 100.1.0.1
    tos 0x00, ttl 64, length 84, checksum 0x43d4
    fragment id 0x2ed0, flags DONT_FRAGMENT
  ICMP echo_request checksum 0x500c
15:12:46:260691: ip4-local
    ICMP: 100.1.0.2 -> 100.1.0.1
      tos 0x00, ttl 64, length 84, checksum 0x43d4
      fragment id 0x2ed0, flags DONT_FRAGMENT
    ICMP echo_request checksum 0x500c
15:12:46:260695: ip4-icmp-input
  ICMP: 100.1.0.2 -> 100.1.0.1
    tos 0x00, ttl 64, length 84, checksum 0x43d4
    fragment id 0x2ed0, flags DONT_FRAGMENT
  ICMP echo_request checksum 0x500c
15:12:46:260699: ip4-icmp-echo-request
  ICMP: 100.1.0.2 -> 100.1.0.1
    tos 0x00, ttl 64, length 84, checksum 0x43d4
    fragment id 0x2ed0, flags DONT_FRAGMENT
  ICMP echo_request checksum 0x500c
```

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Show trace(cont') VPP16.09

```
15:12:46:260706: ip4-rewrite-local
  tx_sw_if_index 1 adj-idx 7 : TenGigabitEthernet82/0/0
                        IP4: 90:e2:ba:84:45:b2 -> 90:e2:ba:84:1c:3a flow hash: 0x00000000
  IP4: 90:e2:ba:84:45:b2 -> 90:e2:ba:84:1c:3a
  ICMP: 100.1.0.1 -> 100.1.0.2
    tos 0x00, ttl 64, length 84, checksum 0x9fb2
    fragment id 0xd2f1, flags DONT_FRAGMENT
  ICMP echo_reply checksum 0x580c
15:12:46:260708: TenGigabitEthernet82/0/0-output
  TenGigabitEthernet82/0/0
  IP4: 90:e2:ba:84:45:b2 -> 90:e2:ba:84:1c:3a
  ICMP: 100.1.0.1 -> 100.1.0.2
    tos 0x00, ttl 64, length 84, checksum 0x9fb2
    fragment id 0xd2f1, flags DONT_FRAGMENT
  ICMP echo_reply checksum 0x580c
15:12:46:260710: TenGigabitEthernet82/0/0-tx
  TenGigabitEthernet82/0/0 tx queue 1
  buffer 0x1b390: current data 0, length 98, free-list 0, totlen-nifb 0, trace 0x1
  IP4: 90:e2:ba:84:45:b2 -> 90:e2:ba:84:1c:3a
  ICMP: 100.1.0.1 -> 100.1.0.2
    tos 0x00, ttl 64, length 84, checksum 0x9fb2
    fragment id 0xd2f1, flags DONT_FRAGMENT
  ICMP echo_reply checksum 0x580c
```

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