Contrail vrouter on the compute node/host:  
  
Any container needs a compute node to host it. This host could be a BMS in your DC, or a VM (VM either in your DC or in public cloud). In this book, we will be using compute nodes hosted in AWS

for a compute node in the default docker setup, containers on the same host communicate with each other as well with other containers/services hosted on other host with Docker bridge  
but with contrail networking, on each compute the vrouter creates VRF per virtual network   
offering long list of feature as will discuss   
   
From the prospective of control plane the vrouter relay on XMPP to   
\*Exchange routes  
\*Receive low-level configuration (routing instances and forwarding policy)   
\*Report analytics (logs, statistics, and events)

\*Install forwarding state into the forwarding plane.

From the prospective of data plan the vrouter would   
\*Apply forwarding policy for the first packet of each new flow then install a flow entry in the flow table of the forwarding plan.  
\* Proxy DHCP, ARP, and DNS.

\*Encapsulating/decapsulating packets sent to or received from the overlay network.

\*Assign received packet from the overlay network to a routing instance based on the MPLS label or Virtual Network Identifier (VNI).

\*Forwarding the packer after a Destination address lookup (IP or MAC) in the Forwarding Information Base (FIB)

eth0

eth0



vethxx

vethyy

vethzz

Container

VN:RED

Container

VN:GREEN

eth0

*vRouter*

***SERVER WITH CONTRAIL BASED DOCKER***

eth0

eth0

eth0

Container

VN:RED

Container

VN:GREEN

Container

VN:BLUE

vethxx

vethyy

vethzz

***SERVER WITH DEFAULT DOCKER***

Container

VN:BLUE

eth0

eth0



*Docker0 bridge*

