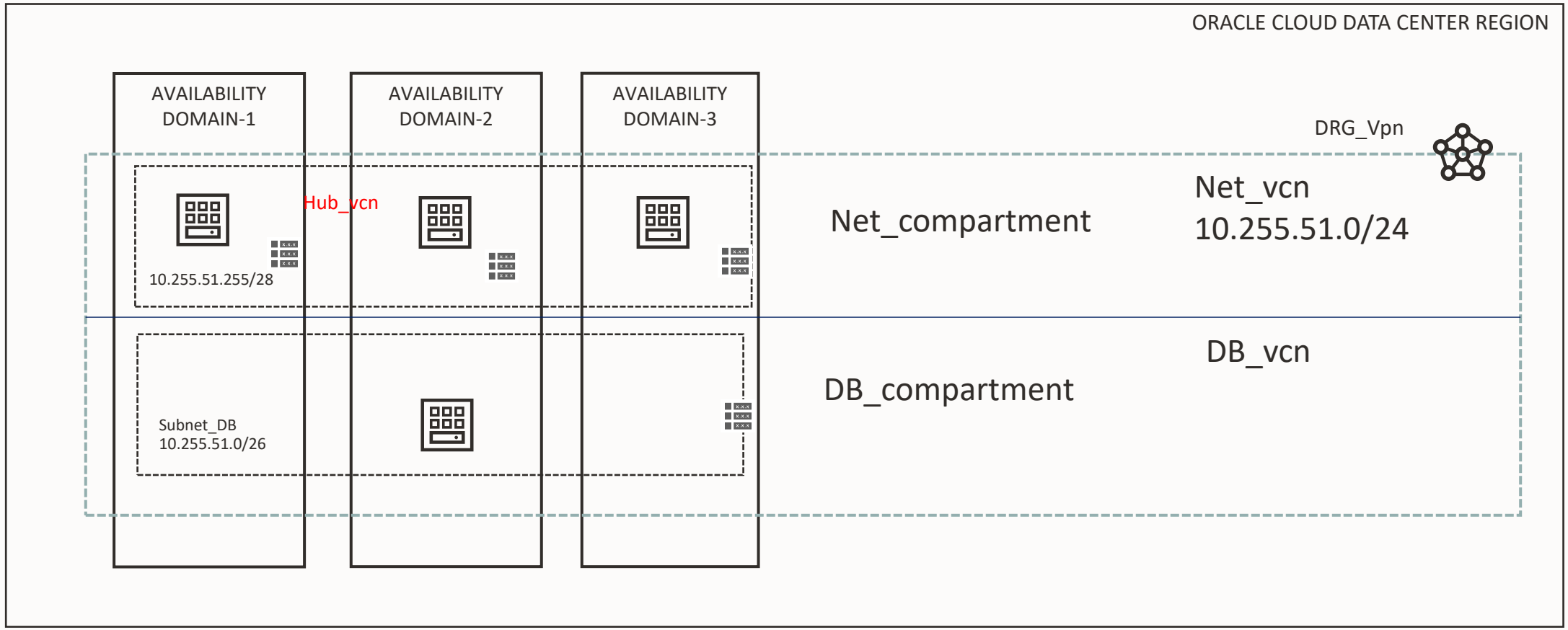
ORACLE

Virtual Cloud Network

Oracle Cloud Infrastructure

VCN & Subnets


ORACLE CLOUD DATA CENTER REGION
AVAILABILITY DOMAIN-1
AVAILABILITY DOMAIN-2
AVAILABILITY DOMAIN-3
DRG_Vpn
Hub_vcn
10.255.51.255/28
Net_compartment
Net_vcn
10.255.51.0/24
Subnet_DB
10.255.51.0/26
DB_compartment
DB_vcn

VCN Peering

- Enables connectivity between the resources in different VCNs
- Does not require public IPs or NAT to enable connectivity
- Traffic never leaves the Oracle Network
- Over other options such as connecting over the internet, VCN Peering offers
  - Faster connectivity
  - Higher security

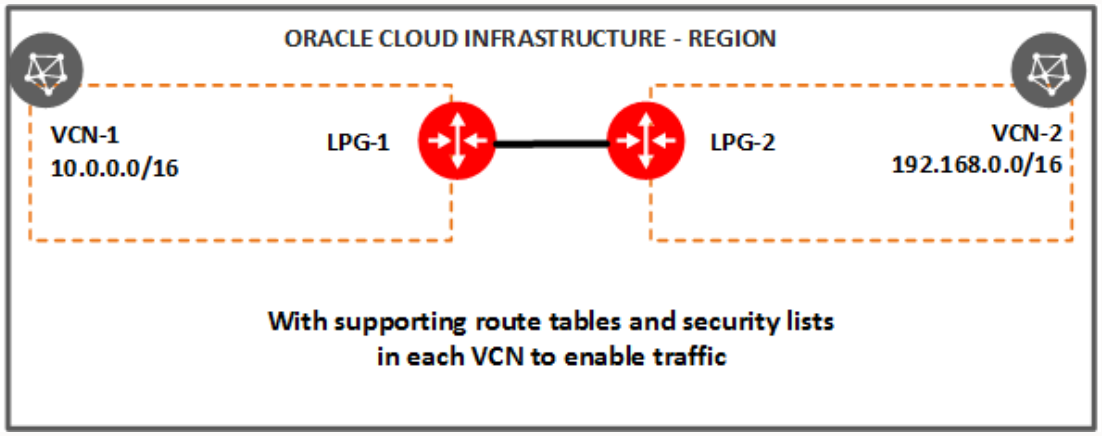
- Types of VCN Peering available
  - Local Peering (In-region)
  - Remote Peering (Cross-region)

Local VCN Peering – connecting VCNs in the same region

- Connecting two VCNs in the same region so that their resources can communicate using private IP addresses without routing the traffic over the internet or through your on-premises network.
- VCNs should not have overlapping IP addresses
- Local Peering VCNs can be either in the same or different tenancies (cross-tenancy peering)

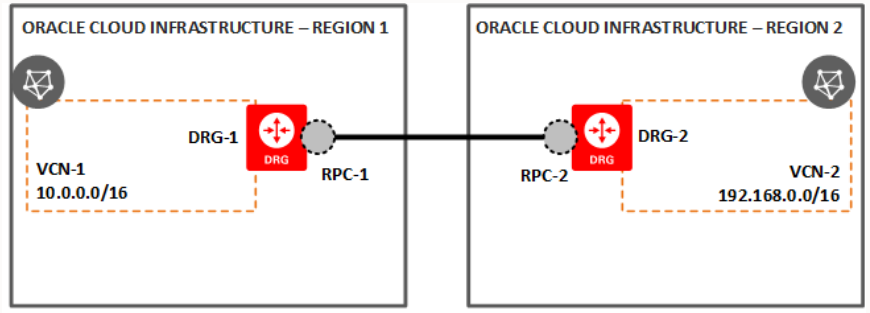
Local Peering Gateway (LPG)

- Like the Internet Gateway, LPG is a component on the VCN
- LPGs of two VCNs are connected to make a peering relationship
- Enable the data plane to learn about instances in peered VCNs



Remote VCN Peering – connecting VCNs in the different region

- Traffic flows between regions through the OCI backbone network
- Supported between ASH – PHX and LHR-FRA, other regions on roadmap.
- The two VCNs in the peering relationship must not have overlapping CIDRs
- Requires a DRG to set up the Remote Peering connection; vNIC of one VCN instance forwards traffic to its DRG, which forwards traffic to peer DRG in other region over backbone
- Enables features such as data replication across regions
- **Remote Peering Connection**
  - Like Virtual Circuits, the Remote Peering Connection is a component of DRG
  - RPCs of two DRGs from two regions are connected to create a peering relationship



VCN Peering Link and Demos

Demo to build Local Peering

- https://learn.oracle.com/ols/course/oracle-cloud-infrastructure-architect-associate-workshop/35644/80259/102540

Demo remote peering

- https://www.youtube.com/watch?v=2TOL5tJQ-fU

Demo transit routing Local+Remote Peering

- https://learn.oracle.com/ols/course/oracle-cloud-infrastructure-architect-professional-workshop/35644/86765/123287

A-Team doc

- https://www.ateam-oracle.com/interconnect-tenancies-across-regions#_Introduction

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