Multicloud Network Blueprints

Build your Ideal Multicloud Network

Megaport

Multicloud Network Blueprints

Through Megaport's Software Defined Network (SDN), enabling multicloud has never been easier for your enterprise. By leveraging Megaport's dedicated, private connection, connecting to your suite of clouds is fast, secure, and scalable. With cloud-to-cloud connectivity, your data can move between your various clouds directly, without having to stop off at a data center first – reducing latency and boosting application performance.

These blueprints are designed to help your enterprise visualize the ideal network architecture required for your operations, depending on your unique needs. While we've chosen leading cloud service providers (CSPs) to illustrate, these architectures can be adjusted to include the variety of cloud services used by your enterprise.

Need a bit more help? If you can't find the right architecture below or want to discuss your specific needs, please reach out to our knowledgeable team of Solution Architects. We can get you started on your multicloud journey and answer any other network virtualization questions you may have.

Which design is right for you?

1. **Do you need connectivity back to a data center?**
   View the hybrid multicloud network blueprints.

2. **Do you need connectivity back to a data center, and need your clouds to be able to communicate with each other?**
   View the hybrid cloud-to-cloud network blueprints.

3. **Are you cloud-native (i.e. do not rely on data centers) but want to establish cloud-to-cloud traffic?**
   View the cloud-native multicloud network blueprints.

4. **Do your branches/site locations need direct multicloud access?**
   View the branch-to-multicloud network blueprints.

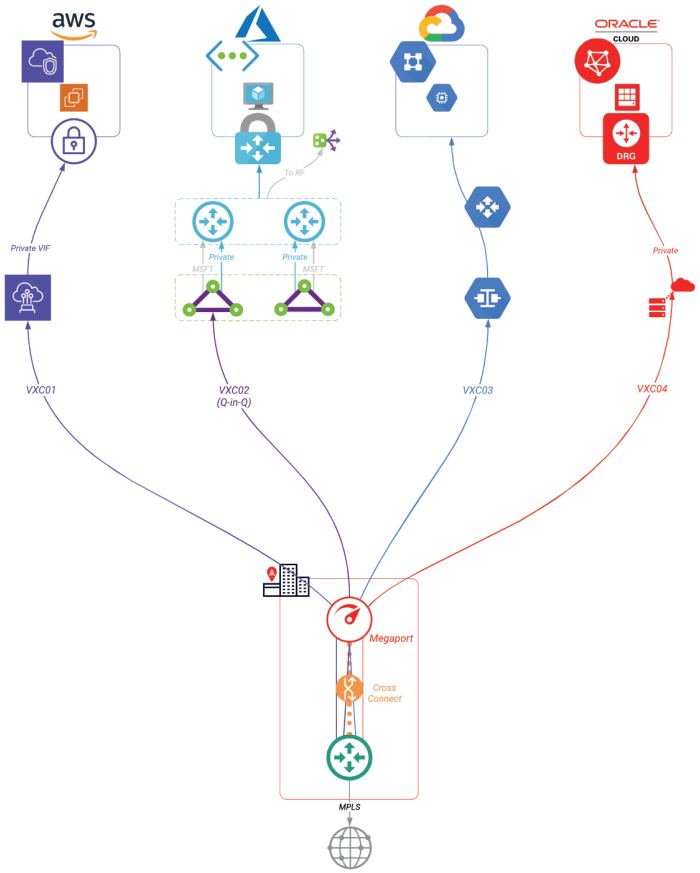
1. Multicloud Network Blueprints | Hybrid Multicloud Design

A hybrid multicloud design allows your enterprise to connect your data center(s) to multiple clouds without the need for traffic to flow directly between the clouds. The following scenarios depict different levels of built-in redundancy.

The benefits

- Private, scalable connectivity to clouds of your choice
- Connectivity deployed within minutes
- Data does not travel via internet VPN tunnel, which can result in poor latency, inconsistent bandwidth, and exposure to public internet
- Different levels of resilience can be facilitated easily by choosing diverse ports, data centers, and locations or regions

Blueprint 1: Hybrid multicloud, non-redundant



Legend

Port (Megaport)

Port (Megaport)
Diversity Zone (Red)

Port (Megaport)
Diversity Zone (Blue)

MVE (Megaport Virtual Edge)

Cross Connect

VXC (Virtual Cross Connect)

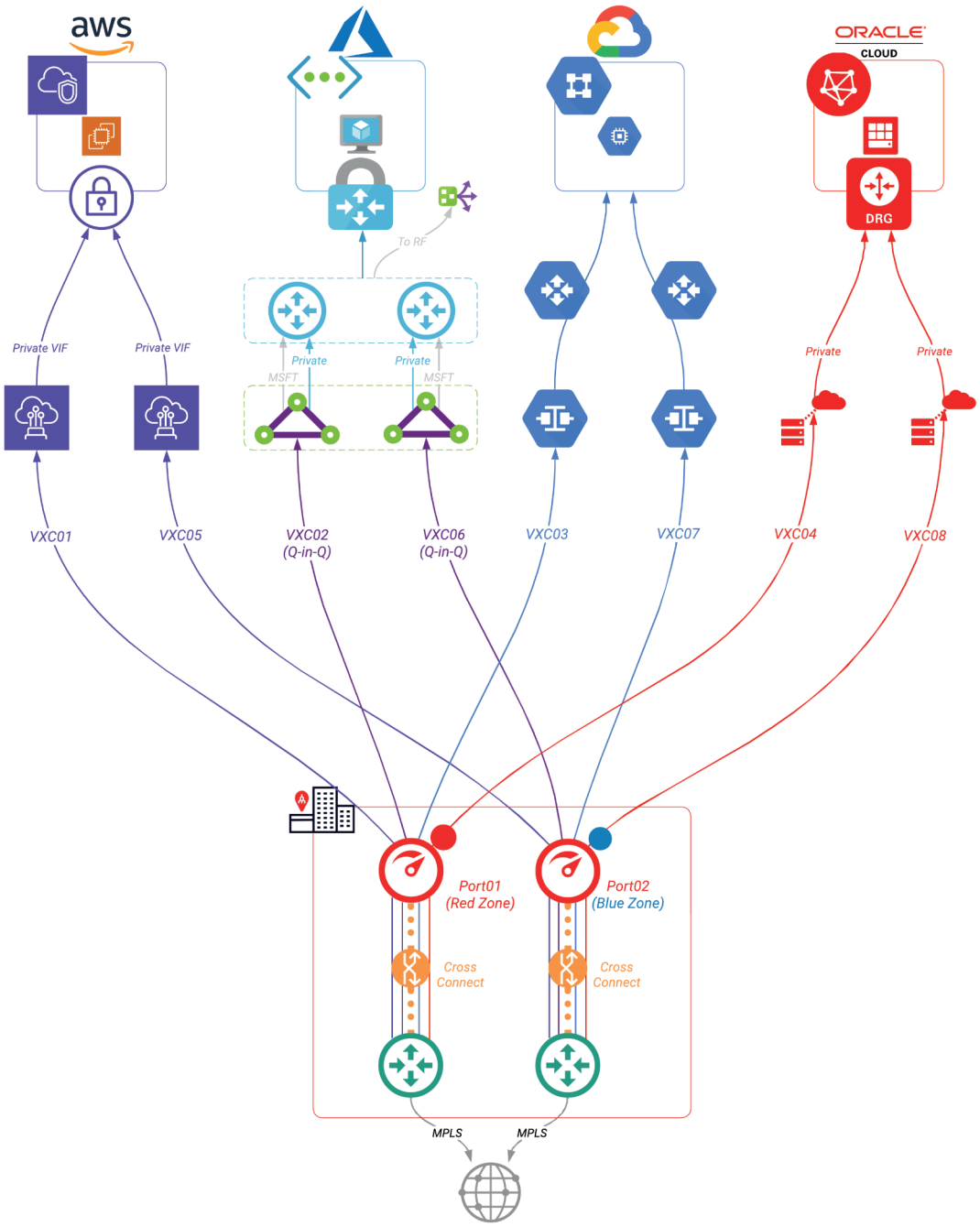
MCR (Megaport Cloud Router)

Megaport Enabled Location

MCR/MVE Enabled Location

Multicloud Network Blueprints | Hybrid Multicloud Design

Blueprint 2: Hybrid multicloud, redundant (single location)



Legend

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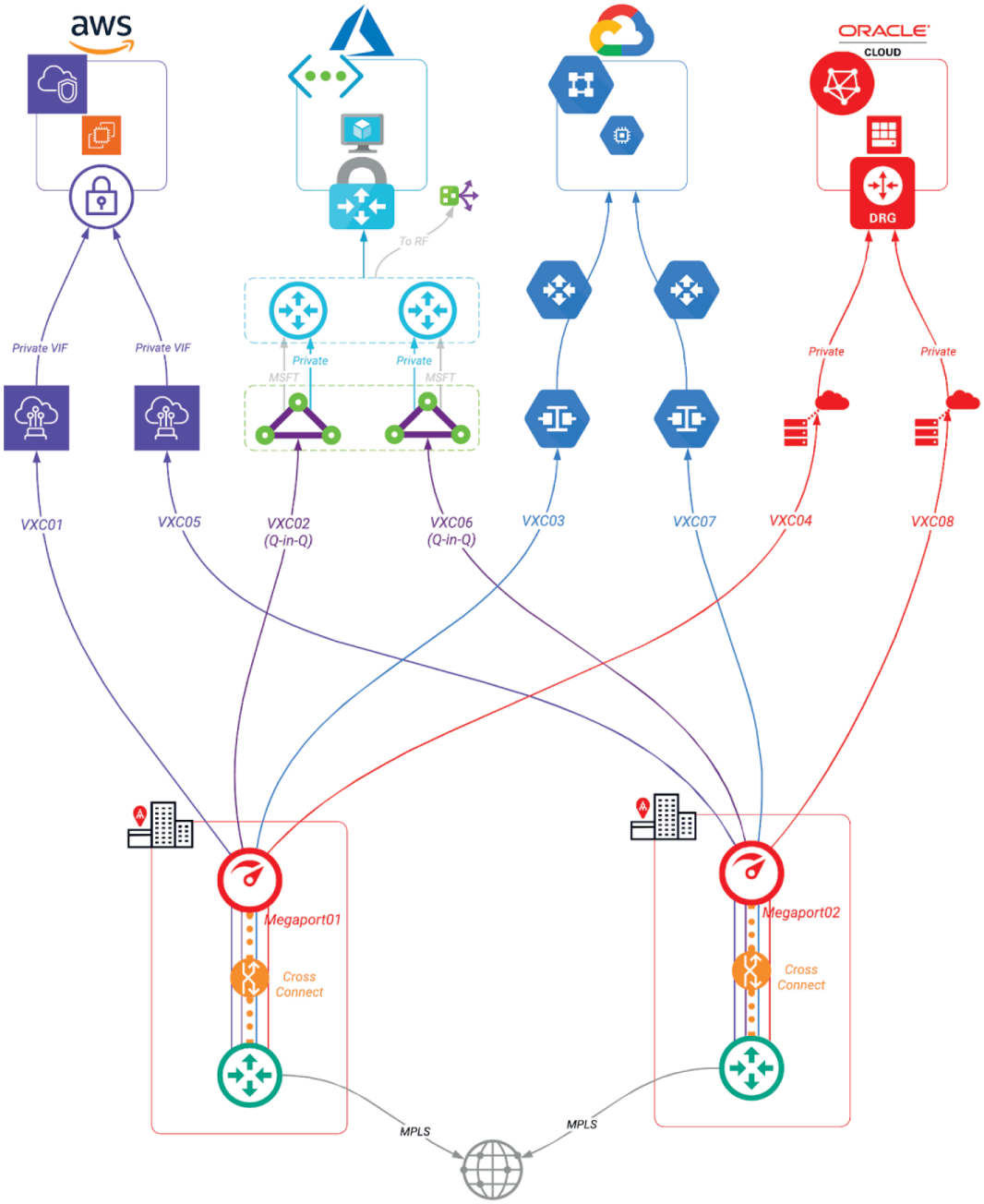
Multicloud Network Blueprints | Hybrid Multicloud Design

Blueprint 3: Hybrid multicloud, additional redundancy (multiple locations or regions)



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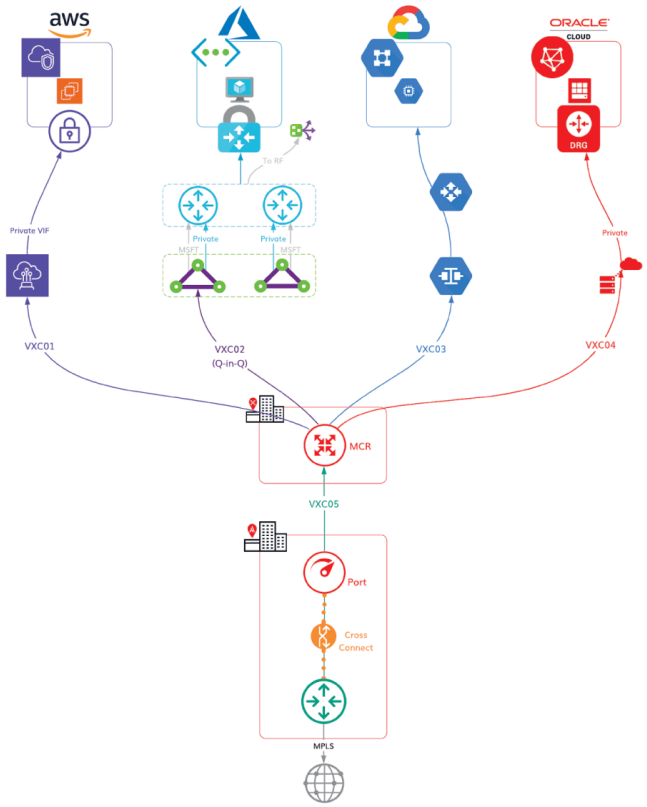
2. Multicloud Network Blueprints | Hybrid Cloud-to-Cloud Design

Hybrid cloud-to-cloud design involves connecting your data center(s) to multiple clouds and enabling these clouds to communicate with each other.

The benefits

- Reduced latency due to removed need to hairpin traffic via a data center
- Significantly lowered egress fees
- No physical hardware required – instead, routing is virtual
- Improved network performance due to virtual routing typically being in the same vicinity as the cloud on-ramp
- Reduced latency due to removed need to hairpin traffic via a data center
- Fine-tuned control through route filtering capabilities
- Different levels of resilience can be facilitated easily by choosing diverse ports, data centers/locations, or regions

Blueprint 4: Hybrid cloud-to-cloud, non-redundant



Legend

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Port (Megaport)
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Cross Connect

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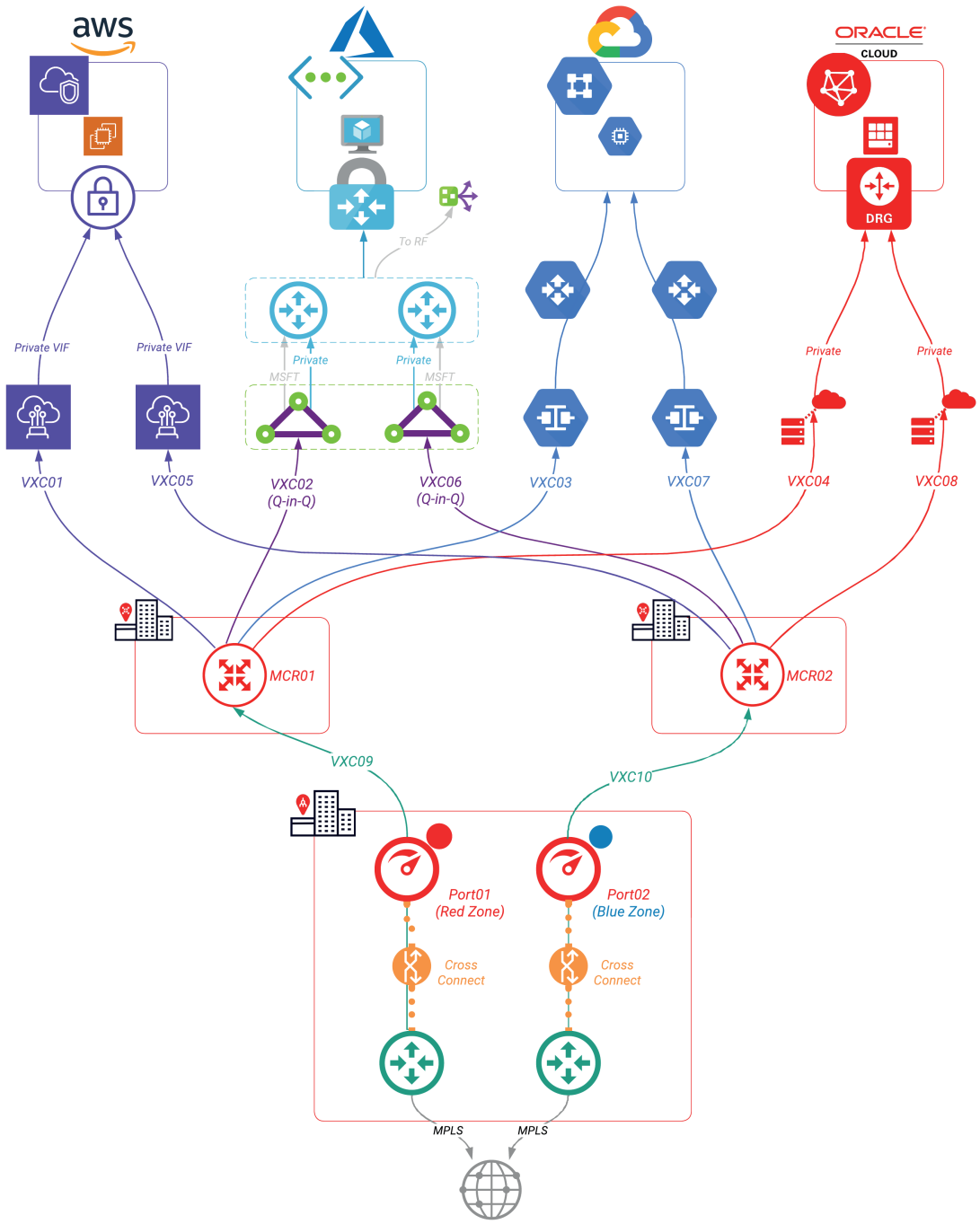
MCR (Megaport Cloud Router)

Megaport Enabled Location

MCR/MVE Enabled Location

Multicloud Network Blueprints | Hybrid Cloud-to-Cloud Design

Blueprint 5: Hybrid cloud-to-cloud, redundant (single location)



Legend

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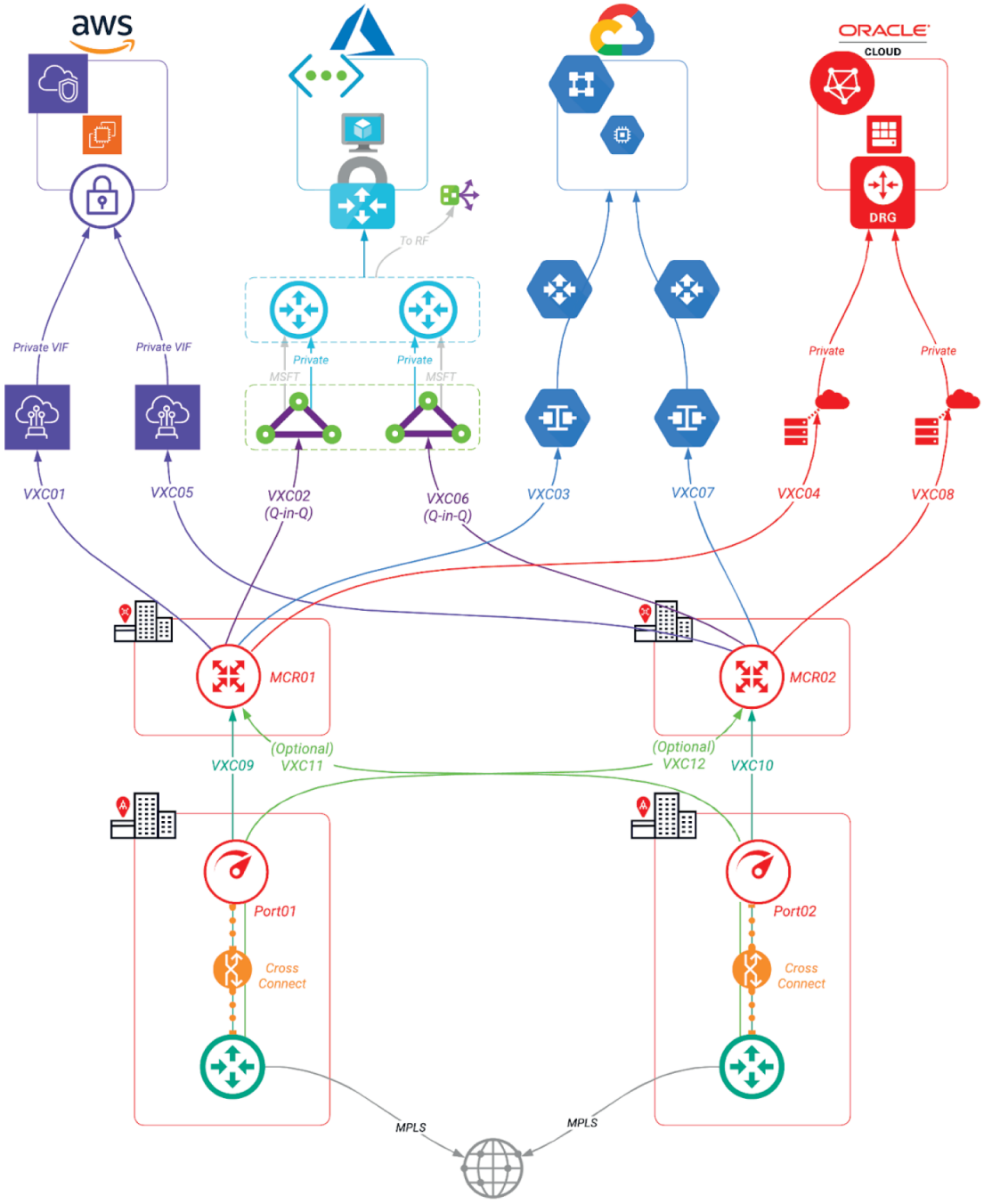
Multicloud Network Blueprints | Hybrid Cloud-to-Cloud Design

Blueprint 6: Hybrid cloud-to-cloud, additional redundancy (multiple locations or regions)



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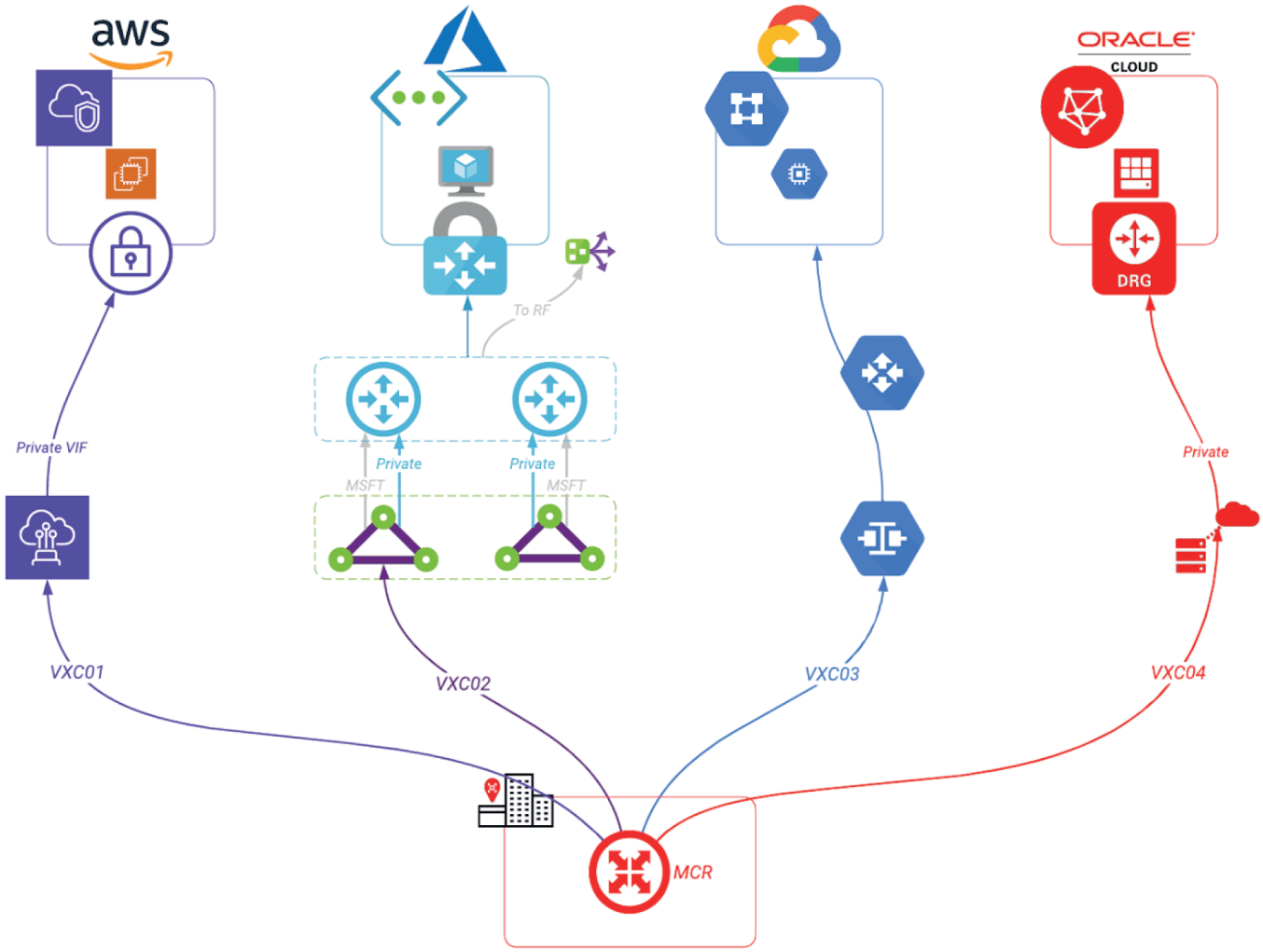
3. Multicloud Network Blueprints | Cloud-Native Multicloud Design

Cloud-native multicloud designs are a typical setup for a born-in-the-cloud organization that doesn't require connectivity back to a data center and benefits from a fully virtualized cloud architecture.

The benefits

- Private, scalable connectivity to clouds of your choice
- Connectivity deployed within minutes
- Different levels of resilience can be facilitated easily

Blueprint 7: Cloud-native, non-redundant



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VXC (Virtual Cross Connect)

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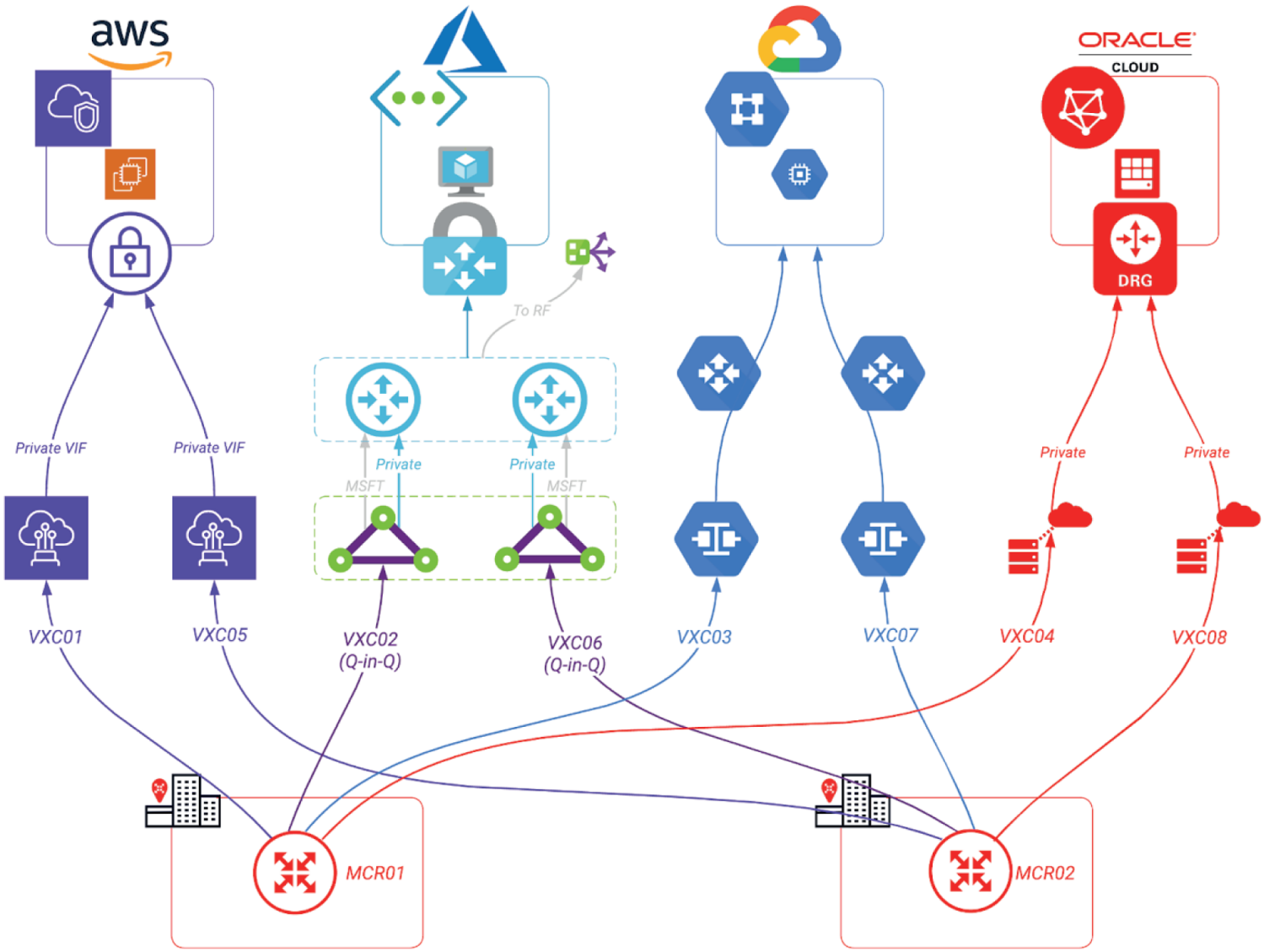
Megaport Enabled Location

MCR/MVE Enabled Location

Multicloud Network Blueprints | Cloud-Native Multicloud Design

Blueprint 8: Cloud-native, redundant



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4. Mutlicloud Network Blueprints | Branch-to-Multicloud Network Design

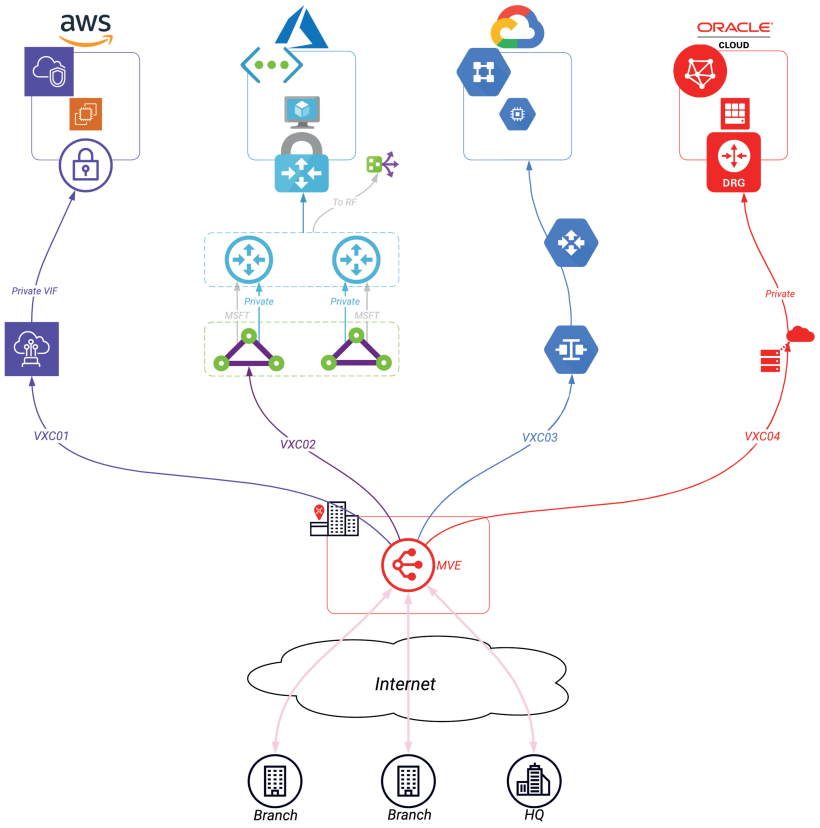
Branch-to-mutlicloud connectivity extends private, dedicated cloud access to the edge by providing branches or site locations with direct access to cloud environments, without the need to connect through a data center first.

Ability to host SD-WAN, NextGen Firewall and virtual routing solutions on the Megaport Virtual Edge device.

The benefits

- More reliable cloud access with lower latency due to reduced internet paths
- Reduced data egress fees
- Bolstered network security
- Dedicated, individualized private cloud services for branches instead of shared cloud access with other branches
- Different levels of resilience can be facilitated easily by choosing diverse ports, data centers/locations, or regions
- Possibility for single internet underlay or dual internet and private underlay as per preference

Blueprint 9: Branch-to-multicloud, not connected to data center, non-redundant



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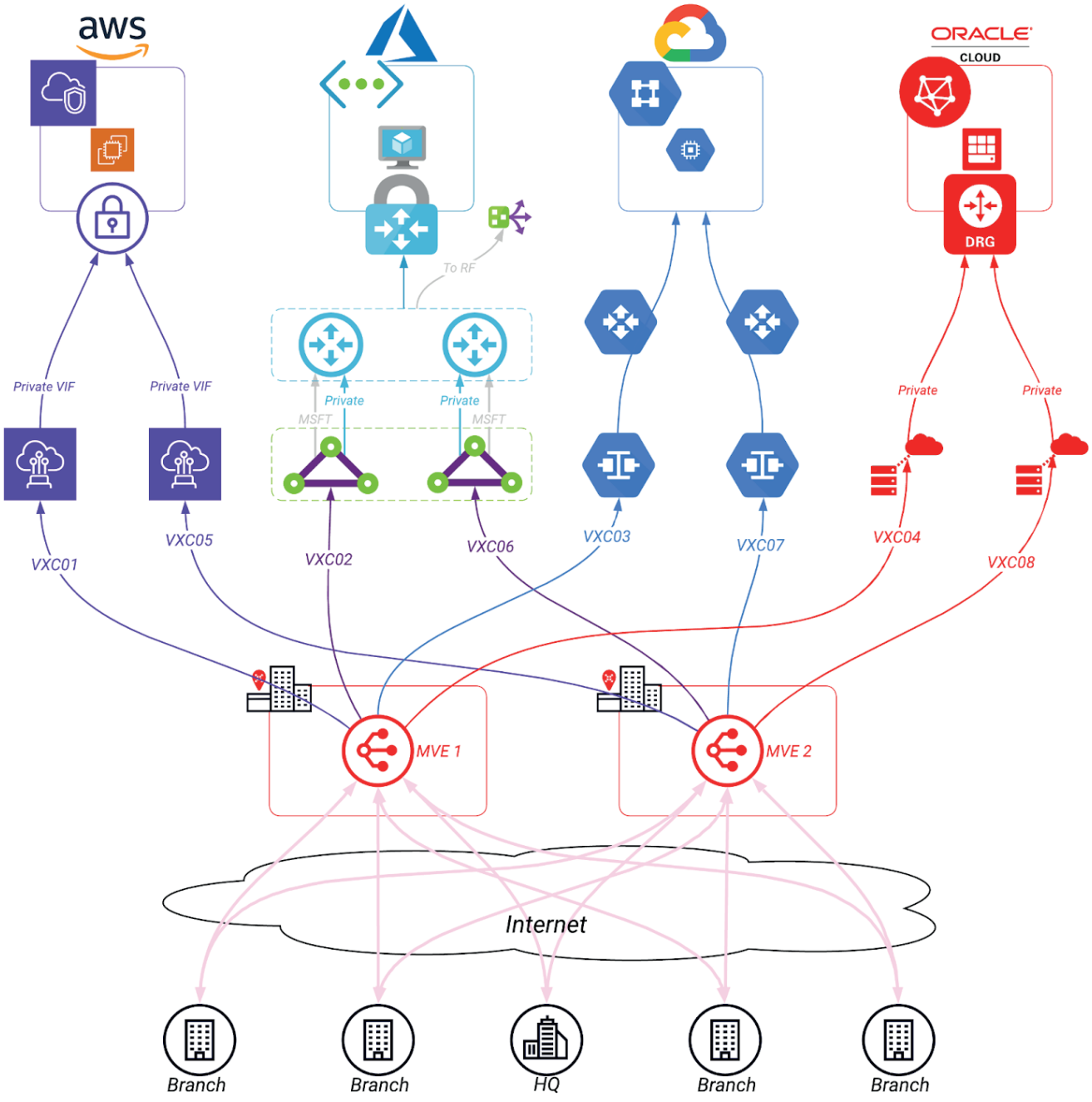
Megaport Enabled Location

MCR/MVE Enabled Location

Mutlicloud Network Blueprints | Branch-to-Multicloud Network Design

Blueprint 10: Branch-to-multicloud, not connected to data center, redundant



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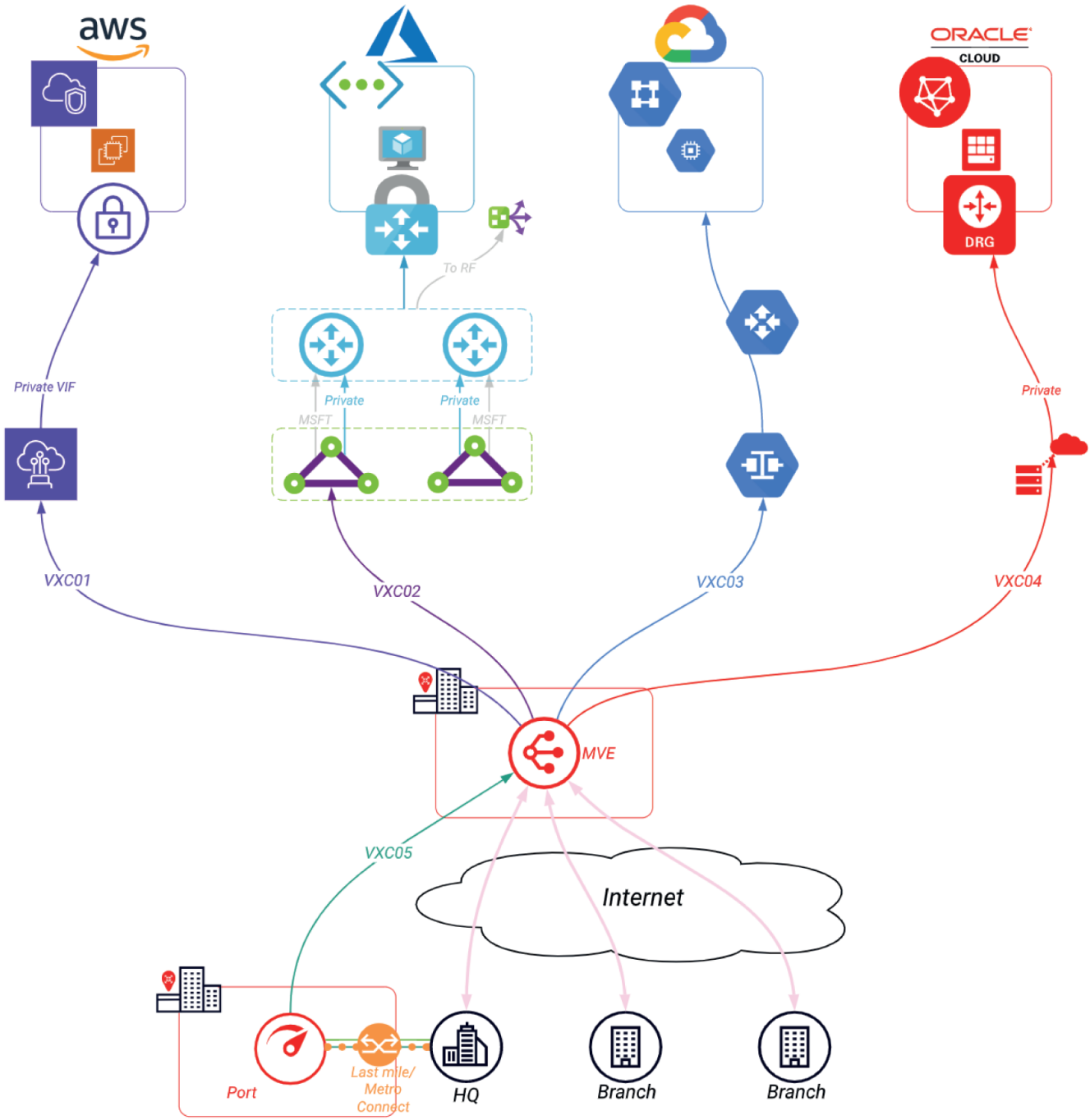
Mutlicloud Network Blueprints | Branch-to-Multicloud Network Design

Blueprint 11: Branch-to-multicloud, connected to data center, non-redundant, dual underlay



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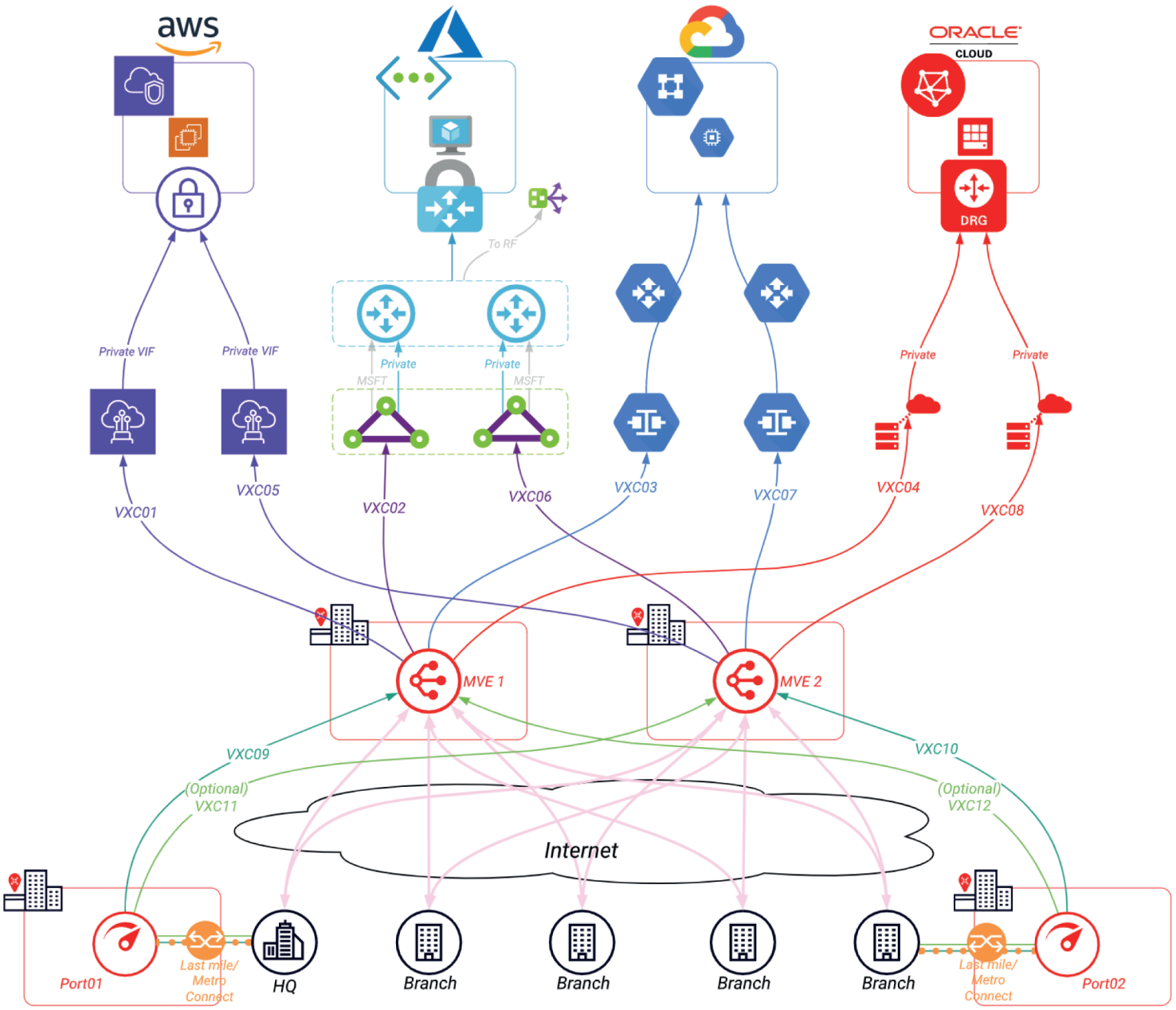
Mutlicloud Network Blueprints | Branch-to-Multicloud Network Design

Blueprint 12: Branch-to-multicloud, connected to data center, redundant, dual underlay



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More information

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- Access Megaport Portal
- Megaport Videos
- Megaport Cost Estimator
- Contact Us

Reimagine connectivity.

Megaport is a leading provider of Network as a Service (NaaS) solutions. The company's global Software Defined Network (SDN) helps businesses rapidly connect their network to other services via an easy-to-use portal or our open API. Megaport's network offers greater agility, reduced operating costs, and increased speed to market compared to traditional networking solutions. Megaport partners with the world's top cloud service providers, including AWS, Microsoft Azure, and Google Cloud, as well as the largest data centre operators, systems integrators and managed service providers in the world. Megaport is an ISO/IEC 27001-certified company.

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