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# Introduction to RackConnect Global

In today's hybrid cloud world, businesses face the challenge of managing IT infrastructure, applications and data across multiple environments, cloud providers and data center locations.

RackConnect Global provides highly available and secure network connectivity from your Rackspace Technology® managed dedicated environment to your private data centers, Microsoft® Azure®, Google Cloud Platform™ (GCP) and Amazon Web Services (AWS). This allows you to optimally distribute application workloads to best-fit your multicloud infrastructure, while backed by always-on support from Rackspace Technology.

# Benefits of RackConnect Global

**High performance:** Achieve reliable, high-performance, low-latency connection speeds with a highly available direct network connection that bypasses your internet service provider to remove network congestion.

**Optimum security:** Protect your business-critical data with private networking from Rackspace Technology that bypasses the internet for secure connectivity to your other data centers and cloud environments.

Flexibility: Extend your application workloads and data from Rackspace Technology to your other data centers and cloud environments, such as Microsoft Azure, Google and Amazon Web Services, for the ultimate in multicloud flexibility.

To view the technical specifications of RackConnect Global, including current connectivity providers, data center locations, and bandwidth speed options, please view: <a href="https://www.rackspace.com/hybrid/rackconnect/global">www.rackspace.com/hybrid/rackconnect/global</a>

**Colocation Facility** 

#### **Rackspace Technology Data Center**

#### Rackspace Edge Technology Edge Rackspace Technology Private Backbone Network switches RackConnect Global **Cloud Provider Dedicated Servers** Device Edge aws Microsoft **Customer On-premises**

**Figure A:** RackConnect Global use case for multicloud connectivity backed by the security and reliability of dedicated Rackspace Technology managed infrastructure

#### RackConnect Global for Amazon Web Services

RackConnect Global has been designed to help you directly connect to your AWS cloud environment leveraging the following use cases:

- **1.** RackConnect Global for AWS (Dedicated)
- **2.** RackConnect Global for AWS (Partner Fabric such as Equinix Fabric and Megaport)

### Scenario 1: RackConnect Global for AWS (dedicated)

In this scenario, a Rackspace Technologymanaged dedicated customer has deployed a new customer-facing web application on Fanatical AWS. The application requires a low-latency, highbandwidth network connection to backend databases that reside in a Rackspace Technology data center. As a result, the customer selects a RackConnect Global connection to its AWS Cloud.

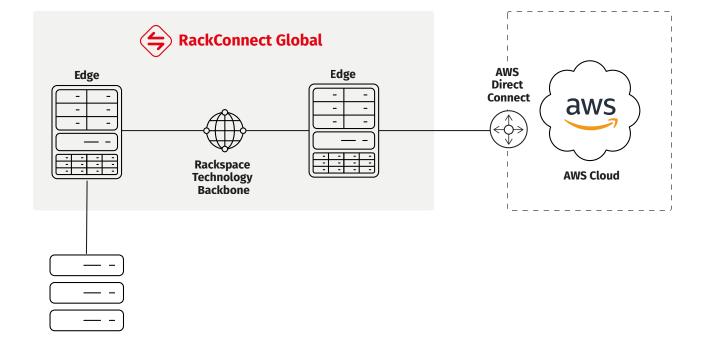
#### Several factors drove this decision, including:

 Application required a high-bandwidth connection to databases in Rackspace Technology data center

- Customer required a connection that included an uptime SLA
- Customer did not have the IT ops resources necessary to build and maintain VPN connections between AWS and Rackspace Technology

With RackConnect Global, our Fanatical Support team built a dedicated connection between the customer's managed dedicated and Fanatical AWS environments.

Leveraging the customer's dedicated aggregation routers, a dedicated connection was established across the Rackspace Technology private backbone to AWS.



**Figure B:** RackConnect Global connects Rackspace Technology dedicated to AWS Cloud



### Scenario 2: RackConnect Global for AWS (Partner Fabric)

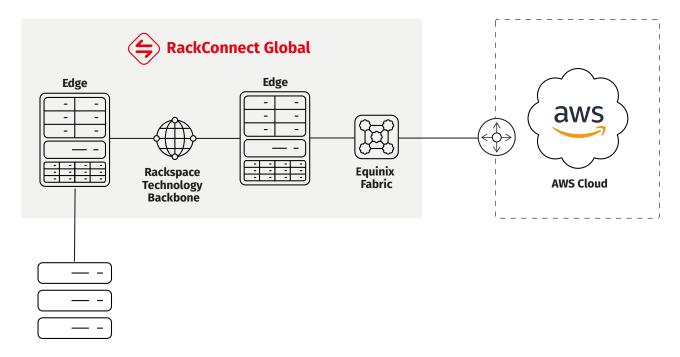
In this scenario, a managed dedicated customer has migrated all of its development environments on Fanatical AWS. The development environments require network connectivity on the customer's managed dedicated environment to synchronize configuration data and test results. As a result, the customer selects RackConnect Global for AWS with a Partner Fabric such as Equinix Fabric, Megaport.

#### Several factors drove this decision, including:

- Development environment required private connectivity back to the dedicated environment
- Customer did not have the IT ops resources to build and maintain VPN connections between AWS and Rackspace Technology

#### Add or remove connections at short notice

With RackConnect Global, our Fanatical Support team built a virtual connection between the customer's managed dedicated and Fanatical AWS environments using Equinix Fabric. Leveraging the customer's dedicated aggregation routers, a virtual connection was established across the Rackspace Technology private backbone to AWS.



**Figure C:** RackConnect Global connects Rackspace Technology dedicated to AWS Cloud using Equinix Fabric



# RackConnect Global for Microsoft Azure

RackConnect Global has been designed to help companies directly connect to their Azure cloud environments leveraging the following use cases:

- RackConnect Global for Azure (Partner Fabric)
- **2.** RackConnect Global for Azure and third party (Partner Fabric)

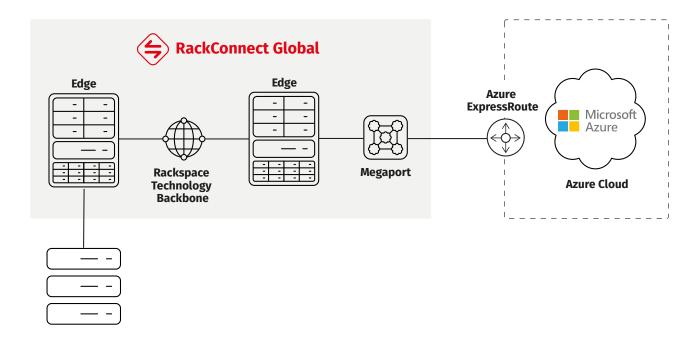
### Scenario 1: RackConnect Global for Azure (Partner Fabric)

In this scenario, a managed dedicated customer is hosting its Exchange and Active Directory (AD) service on Azure. All of the servers in the customer's managed dedicated environment require connectivity to AD for authentication. Since Azure does not support direct connectivity, the customer selects RackConnect Global for Azure with Megaport.

#### Several factors drove this decision, including:

 Each server in the managed dedicated environment required a private connection to Active Directory  Customer did not have the IT ops resources to build and maintain VPN connections between AWS and Rackspace Technology

With RackConnect Global, our Fanatical Support team built a virtual connection between the customer's managed dedicated and Fanatical Azure environments using Megaport. Leveraging the customer's dedicated aggregation routers, a virtual connection was established across the Rackspace Technology private backbone and Megaport to Azure.



**Figure D:** RackConnect Global and Megaport connect Rackspace Technology dedicated to Azure Cloud



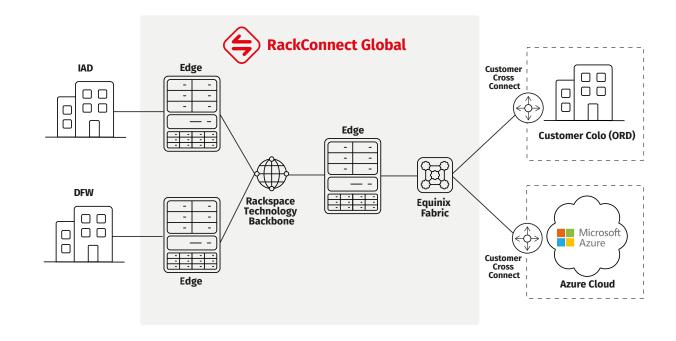
#### Scenario 2: RackConnect Global for Azure and customer data center connectivity

The customer from Scenario 1 requires private connectivity from its network to both its managed dedicated and Azure cloud environments. The customer's employees require a private connection to their Microsoft Exchange servers hosted in the Fanatical Azure cloud. As a result, the customer selects RackConnect Global for Azure through Equinix Fabric and direct connectivity back to its network via Cloud Exchange.

#### Several factors drove this decision, including:

- Employees required a private connection to their Microsoft Exchange server
- Employees required connectivity to the managed dedicated environment from their corporate network
- Customer did not have the IT ops resources to build and maintain VPN connections between Azure and Rackspace Technology

With RackConnect Global, our Fanatical Support team built a virtual connection between the customer's managed dedicated, Fanatical Azure and customer network environments using Equinix Fabric. Leveraging the customer's dedicated aggregation routers, a virtual connection was established across the Rackspace Technology private backbone to Azure and customer COLO.



**Figure E:** RackConnect Global and Equinix Fabric connect Rackspace Technology dedicated to Azure Cloud and customers network



#### RackConnect Global for GCP

RackConnect Global has been designed to help companies directly connect to their GCP cloud environments leveraging the following use cases:

- **1.** RackConnect Global for GCP (Partner Fabric)
- **2.** RackConnect Global for GCP and third party (Partner Fabric)

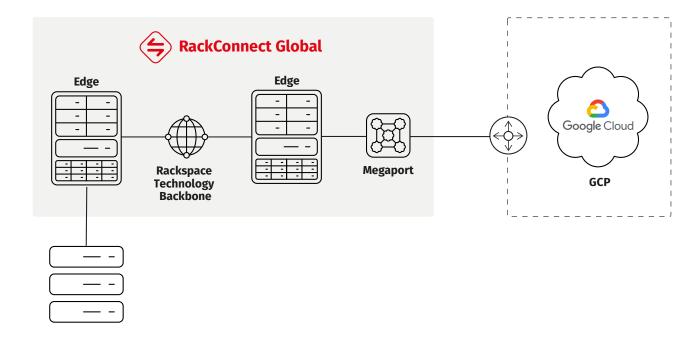
### Scenario 1: RackConnect Global for GCP (Partner Fabric)

In this scenario, a managed dedicated customer wishes to connect to workloads on GCP. All of the servers in the customer's managed dedicated environment require connectivity to GCP. Since GCP does not support direct connectivity, the customer selects RackConnect Global for GCP with Megaport.

#### Several factors drove this decision, including:

 Each server in the managed dedicated environment required a private connection to GCP  Customer did not have the IT ops resources to build and maintain VPN connections between GCP and Rackspace Technology

With RackConnect Global, our Fanatical Support team built a virtual connection between the customer's managed dedicated and GCP environments using Megaport. Leveraging the customer's dedicated aggregation routers, a virtual connection was established across the Rackspace Technology private backbone and Megaport to GCP.



**Figure F:** RackConnect Global and Megaport connect Rackspace Technology dedicated to GCP Cloud



# Scenario 2: RackConnect Global for GCP and customer data center connectivity

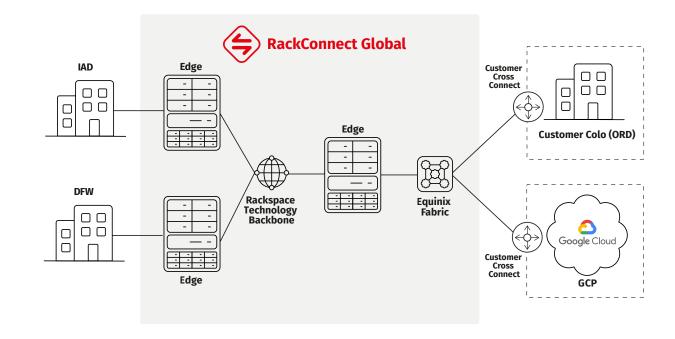
The customer from Scenario 1 requires private connectivity from its network to both its managed dedicated and GCP cloud environments. The customer's employees require a private connection to their Microsoft Exchange servers hosted in the GCP cloud. As a result, the customer selects RackConnect Global for GCP through Equinix Fabric and direct connectivity back to its network via Cloud Exchange.

#### Several factors drove this decision, including:

- Employees required a private connection to their Microsoft Exchange server
- Employees required connectivity to the managed dedicated environment from their corporate network
- Customer did not have the IT ops resources to build and maintain VPN connections between GCP and Rackspace Technology

With RackConnect Global, our Fanatical Support team built a virtual connection between the customer's managed dedicated, GCP and customer network environments using Equinix Fabric.

Leveraging the customer's dedicated aggregation routers, a virtual connection was established across the Rackspace Technology private backbone to GCP and customer COLO.



**Figure G:** RackConnect Global and Equinix Fabric connect Rackspace Technology dedicated to GCP and customers network



# RackConnect Global for multicloud connectivity

RackConnect Global has been designed to help companies directly inter-connect their public cloud environments.

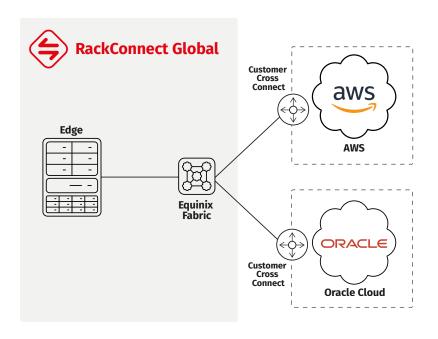
# Scenario 1: RackConnect Global for connectivity between AWS and Oracle Cloud via Partner Fabric

In this scenario, a managed dedicated customer wants to establish private, high speed and low latency connectivity among workloads present in AWS and Oracle public clouds. The customer selects RackConnect Global for multicloud connectivity with Megaport.

#### Several factors drove this decision, including:

- Consistent performance
- Customer did not have the IT ops resources to build and maintain VPN connections between AWS and Oracle
- Eliminate overhead from encryption
- Eliminate transit bandwidth charges
- Reduce outbound data transfer charges

The RCG team built virtual connections to customer cloud environments using Equinix Fabric. Leveraging the Edge routers in the Equinix colocation facilities, private network connection was established between public clouds.



**Figure H:** Rackconnect Global provides multicloud connectivity



#### RackConnect Global for external access to Rackspace Technology

RackConnect Global also includes some advanced networking options that are described in the following use cases:

- 1. External dedicated connectivity
- 2. External Cloud Exchange connectivity
- **3.** Geographically redundant dedicated connectivity
- 4. Public connection peering

### Scenario 1: External dedicated connectivity

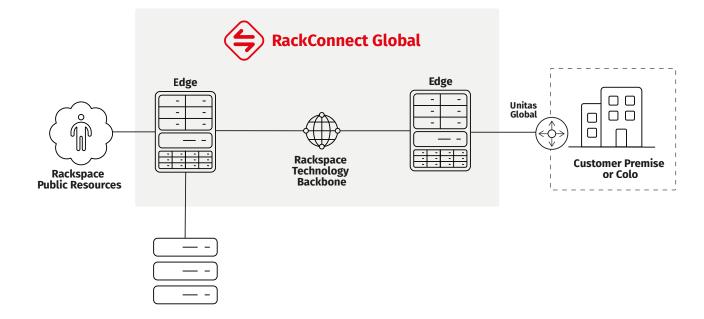
In this scenario, a Rackspace Technology managed dedicated customer has a large user base that requires access to several large applications hosted at a Rackspace Technology data center. Access to these applications at all times is critical for the operation of its business. The customer also indicates that VPN over the internet is not reliable enough to meet its needs.

As a result, the customer selects RackConnect Global to establish a private dedicated network connection between its corporate data center and its managed dedicated environment in a Rackspace Technology data center.

#### Several factors drove this decision, including:

- The customer required a highly available connection to its Rackspace Technology environment
- VPN over the internet was not reliable enough to meet the customer's needs

With RackConnect Global, our Fanatical Support team built a dedicated virtual circuit between the customer's Rackspace Technology dedicated environment and its network device in the colocation facility. Leveraging the data center edge router, a private network connection was established across the Rackspace Technology private backbone to the edge router in the Equinix colocation facility and on to the customer's network.



**Figure I:** RackConnect Global connects Rackspace Technology dedicated to customer's corporate network using Unitas Global



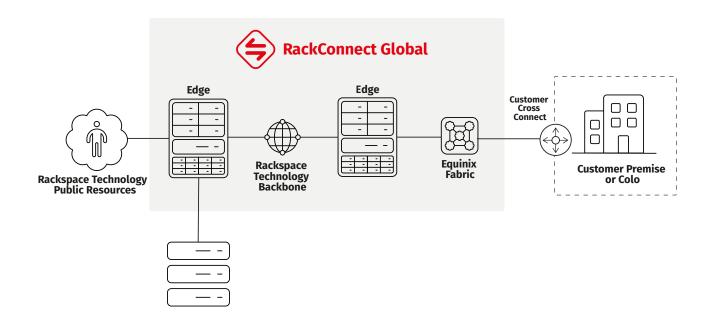
# Scenario 2: External cloud exchange connection to Rackspace Technology

In the previous scenario, a customer leveraged RackConnect Global to directly connect to the Rackspace Technology network. The only difference in this scenario is that the customer connects to Equinix Fabric, which brokers a connection to Rackspace Technology.

#### Several factors drove this decision, including:

- The customer required a highly available connection to its Rackspace Technology environment
- The customer was interested in connecting to other cloud providers, so it chose Equinix Fabric
- VPN over the internet was not reliable enough to meet the customer's needs

With RackConnect Global, our Fanatical Support team built a dedicated virtual connection between the customer's managed dedicated environment and the Equinix Fabric router in the colocation facility. Leveraging the Rackspace Edge router, a private network connection was established across the Rackspace Technology private backbone to the Rackspace Edge router in the Equinix colocation facility and on to Equinix Fabric.



**Figure J:** RackConnect Global and Equinix Fabric connect Rackspace Tehnology dedicated to customer's corporate network



# Scenario 3: Geo-redundant cloud exchange connection to Rackspace Technology

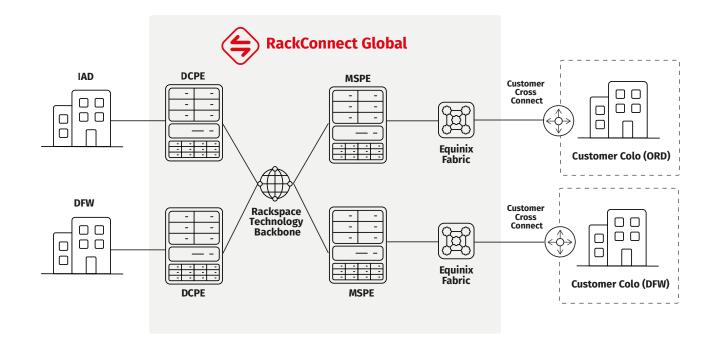
In the previous scenario, a customer leveraged RackConnect Global and Cloud Exchange to connect to the Rackspace Technology network. The only difference in this scenario is that the customer connects to Equinix Fabric in two geographically redundant locations to create a highly available private mesh network between its data centers and its Rackspace Technology environment.

### Several factors drove this decision, including:

- The customer required highly available, redundant connectivity to its Rackspace Technology environment
- The customer was interested in connecting to other cloud providers, so it chose Cloud Exchange
- VPN over the internet was not reliable enough to meet the customer's needs

With RackConnect Global, our Fanatical Support team built two dedicated virtual circuits between the customer's Rackspace Technology dedicated environment and the Equinix Fabric routers in the colocation facilities.

Leveraging the Edge routers, private network connections were established across the Rackspace Technology private backbone to the Edge routers in the Equinix colocation facilities and on to Cloud Exchange.



**Figure K:** RackConnect Global and Equinix Fabric connect Rackspace Tehnology dedicated to customer's corporate network in two geographically redundant locations



## Scenario 4: Public Connection (peering)

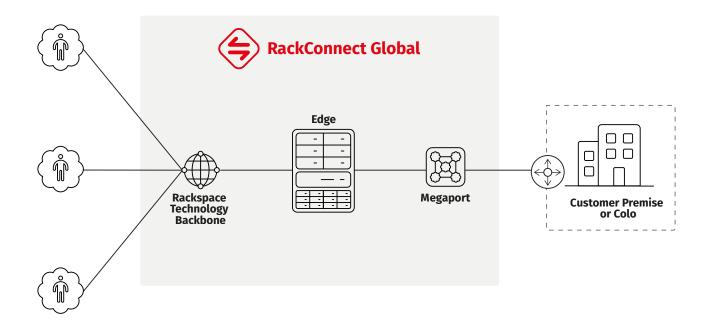
In all of the previous scenarios, customers required private connectivity from their managed dedicated Rackspace Technology environments to their corporate data centers. In this scenario, a customer wishes to privately connect (peer) with Rackspace Technology in order to directly access public-facing services.

The primary objective is to have a lower-latency network path to public-facing Rackspace Technology services and customer environments, as opposed to traversing the internet or a transit provider.

#### There are a few items of note for this product, including:

- It is available for both Direct Connect and Partner Fabric
- Geographic redundancy is available and highly recommended
- Only public routes/prefixes are available for this connection

With RackConnect Global, our Fanatical Support team built a dedicated virtual connection between the Edge router in the Equinix colocation facilities and Megaport.



**Figure L:** Customer gains direct access to public-facing Rackspace Technology Services via RackConnect Global connection to Rackspace Technology backbone from dedicated and Partner Fabric connections



#### RackConnect Global vs. VPN Over Internet

The following chart highlights the differences between using a VPN over the internet and using RackConnect Global.

Item	VPN Over Internet	RackConnect Global
Security	Encryption over internet	Direct, private virtual circuit
Performance	<ul> <li>Additional overhead from encryption</li> <li>Potential for higher latency and jitter</li> </ul>	<ul><li>No encryption overhead</li><li>Low-latency connection speeds</li></ul>
Fanatical Support	<ul> <li>Support on Rackspace Technology side only</li> <li>Cloud provider side of tunnel is not supported</li> </ul>	End-to-end Fanatical Support when using Fanatical AWS or Fanatical Azure
Complexity	Highly complex (configuration on cloud provider side)	Zero complexity (fully managed by Rackspace Technology)
SLA	No guarantee	99.9% connectivity guarantee*
Data Transfer Charges	Yes	No

#### Conclusion

For application workloads that can benefit from a secure, high-performance connection between multiple data centers and third-party cloud providers, RackConnect Global is the ideal choice. With a range of deployment options available, you are empowered to interconnect your applications and services with your end users through a multicloud strategy that best fits the needs of your business. By combining RackConnect Global with Rackspace Fanatical Support for AWS and Microsoft Azure, you'll have the ultimate flexibility, reliability and service for your mission-critical, multicloud applications.

<sup>\*</sup>Provided that there are two or more virtual circuit termination end points at the Rackspace Technology data center location and subject to the RackConnect Global SLA limitations



#### **About Rackspace Technology**

Rackspace Technology is the multicloud solutions expert. We combine our expertise with the world's leading technologies — across applications, data and security — to deliver end-to-end solutions. We have a proven record of advising customers based on their business challenges, designing solutions that scale, building and managing those solutions, and optimizing returns into the future.

As a global, multicloud technology services pioneer, we deliver innovative capabilities of the cloud to help customers build new revenue streams, increase efficiency and create incredible experiences. Named a best place to work, year after year according to Fortune, Forbes, and Glassdoor, we attract and develop world-class talent to deliver the best expertise to our customers. Everything we do is wrapped in our obsession with our customers' success — our Fanatical Experience<sup>TM</sup> — so they can work faster, smarter and stay ahead of what's next.

#### Learn more at www.rackspace.com or call 1-800-961-2888.

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