

# vCloud Air Direct Connect

**Q. What is VMware vCloud Air Direct Connect?**

A. Direct Connect is a private, high-throughput, dedicated connectivity option available with vCloud Air, in addition to standard VPN connection options. VMware works with leading network service providers (NSPs) to establish these high-throughput and secure links from customer data centers (either in a remote location or in the same colocation facility) to vCloud Air Dedicated Cloud, Disaster Recovery Cloud, or Virtual Private Cloud instances.

There are two parts to the Direct Connect service:

- Customer-side connection: The network service provider manages the connection from the customer's on-premises data center (or co-located cage) to the provider's switch at a vCloud Air location.
- vCloud Air-side connection: VMware provides a port connection from the connection point in the MMR/MDF to the customer's virtual data center in vCloud Air. VMware also handles the cross connect between termination points in the Meet Me Room (MMR) or Main Distribution Frame (MDF) and will manage provisioning, order management, and billing of this connection on the customer's behalf.

**Q. Why Should Customers order vCloud Air Direct Connect?**

- A. Direct Connect offers the following:
- Consistent High Throughput - Hybrid applications such as Big Data, Desktop-as-a-Service, and web apps require large amounts of data transfer. Customers can increase bandwidth throughput for these workloads.
  - Low Latency: Traffic over the public Internet can have variable latency as packets travel different routes to reach the destination. Video and voice applications that are sensitive to variable latency can benefit from this option.
  - Private and Secure: Direct Connect is inherently more secure as it is a completely private link between the customer data center or co-located equipment and vCloud Air.
  - Multi-Point Connections: Customers can set up secure connections from multiple endpoints, providing branch or

remote office access to vCloud Air.

- Custom Compute, Storage or Network: Customers can maximize performance of applications requiring custom compute, storage or networking hardware. They can connect to their colocation cage with the custom hardware.
- Advanced & Hybrid Networking: Customers can utilize Direct Connect with vCloud Air's advanced and hybrid networking services to streamline routing, speed up bi-directional workload migration, and enable on and off-premises network integration.

**Q. Is the service generally available globally?**

A. Direct Connect for Network Exchange is initially available to support select NSPs in vCloud Air's US Texas, Japan West, and Europe UK locations. New locations and NSPs will be introduced as available.

Direct Connect with Cross Connect for private lines and connections from collocated equipment will soon be available in all existing vCloud Air locations worldwide.

**Q. What will be required to implement the service?**

A. Direct Connect is an add-on service to vCloud Air Dedicated, Disaster Recovery, or Virtual Private Clouds. Customers will have to be subscribed to one of these options and have one port available within their vCloud Air environment's Edge Gateway.

Additionally, customers must arrange the network service connection from a connected network service provider.

**Q. Can customers only connect to their on-site data center with vCloud Air Direct Connect?**

A. Customers can use Direct Connect to connect from a remote site or from within the same colocation facility in which their vCloud Air instance resides.

Customers can have a dedicated, secure, private line connection from remote sites into their vCloud Air tenant instance via a network service provider's termination device. This private line is provided by a network service provider and is a separate obligation and billing relationship from the

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vCloud Air subscription.

The second option is to have a high speed cross-connection from the customer environment in the same colocation facility into the vCloud Air tenant instance via a partner device. Both the Direct Connect port and cross connection can be ordered together from VMware as an add-on to the customer's vCloud Air subscription.

VMware provides both the port connection from the termination point inside the MMR/MDF to the customer's virtual data center in vCloud Air as well as the cross connect between the NSP and vCloud Air termination points within the MMR/MDF under all Direct Connect options.

## Q. What do customers buy from VMware?

A. Customers can purchase 1 or 10 Gbps port connections (includes cross connect) from VMware as add-ons to existing core subscriptions (10 Gbps is only available for Dedicated Cloud instances).

There are two sets of add-ons to support Private Lines/Connections from colocated equipment as well as Network Exchange-based NSP connectivity.

The Direct Connect service will co-term with the Core Virtual Private Cloud, Disaster Recovery Cloud, or Dedicated Cloud service. Monthly and Prepaid billing options with applicable term and prepaid discounting are available.

## Q. What is the ordering and setup process for vCloud Air Direct Connect?

A. If a customer is interested in Direct Connect:

1. For a connection from a colocated cage, skip to Step 3. For a private line or network exchange connection, customers should contact any of the network service providers that terminate into the desired location to initiate the customer-side connection process. (Note that network exchange connections can only be provided by select partner NSPs in certain vCloud Air locations). If the customer's preferred network provider does not terminate into the desired location, they can establish a peering relationship with a provider that does. Turnaround time for a formal quote may take 2 to 3 days. Please account for a few

more days in case of long distance WAN circuits.

2. Wait until the customer side of the circuit is provisioned. This setup can take up to 30-60 days or more depending on the location of the customer's premise/cage.
3. Ensure that all relevant information for a Letter of Authorization – Connecting Facility Agreement (LOA-CFA) form is received from the NSP or colocation provider for circuit completion. This can take up to 14 days.
4. Order Direct Connect port from vCloud Air, choosing the appropriate type depending on the connection used: Direct Connect with Cross Connect (for private line/connection from colocated equipment) or Direct Connect for Network Exchange (for network exchange connections). This takes less than 72 hours to provision once the order is placed. As with other add-on orders, customers can submit a PO or order from their MyVMWare portal. The LOA-CFA received from the NSP or colocation partner should be submitted with the order.
5. For private lines and connections from colocated equipment, VMware will order and setup the cross connect between the NSP termination point or colocated equipment and vCloud Air's termination point in the MMR/MDF. (Network exchange connections have pre-provisioned cross connects).
6. After the vCloud Air side of the circuit is established, a VMware representative will schedule a "test and verify" meeting with the customer to confirm that the circuit is complete.

## Q. Is VMware partnering with any network service providers to deliver vCloud Air Direct Connect?

A. Yes, VMware is partnering with NSPs around the globe to deliver Direct Connect. The network service provider manages the connection from the customer's onsite data center to the provider's switch. VMware manages the connection between termination points in the MMR/MDF and provides a port connection from the termination point to the customer's virtual data center in vCloud Air. VMware is partnering with a range of NSPs to support our

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customers in all locations worldwide, with new partnerships forthcoming.

**Q. Can vCloud Air customers select any network service provider to provide their private line or network exchange service?**

A. Private line circuit connectivity can be provided by any network service provider with circuit termination in a vCloud Air location. If a customer's preferred network service provider does not directly terminate into a vCloud Air location, the customer can request that they peer with any of the existing connected providers.

- Network exchange connections can only be provided by partner NSPs in select vCloud Air locations.

- A list of key network providers per vCloud Air location can be found on the vCloud Air Direct Connect webpage.

**Q. Can a customer with two vCloud Air instances use the same Direct Connect line?**

A. No, they will not be able to leverage the same circuit. Direct Connect currently does not support lines between two edge gateways. A separate Direct Connect line is needed for each cloud instance.

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**Q. What are the differences between a standard vCloud Air connection and Direct Connect?**

A. The standard vCloud Air connection is routed over the Internet whereas Direct Connect is a dedicated, secure private link.

**Q. Does Direct Connect with Cross Connect provide redundant connections?**

A. If a customer has Direct Connect with Cross Connect, each connection consists of a single dedicated circuit between ports on the customer router and vCloud Air. If redundancy is desired, we recommend establishing a second connection and configuring BGP (Border Gateway Protocol) routing on the customer's virtual data center edge gateway. This gives the option of Active/Standby or Active/Active redundancy.

(Note that BGP routing is currently only available as part of the free basic networking services included for Dedicated Cloud customers who have upgraded their environment with Advanced Networking Services. Customers do not need to purchase an Advanced Networking add-on to upgrade their environment.)

**Q. Does Direct Connect for Network Exchange provide redundant connections?**

A. If a customer has Direct Connect for Network Exchange, each connection already includes two circuits, and customers can configure BGP routing on their virtual data center's edge gateway for Active/Standby or Active/Active redundancy utilizing these circuits.

(Note that BGP routing is currently only available as part of the free basic networking services included for Dedicated Cloud customers who have upgraded their environment with Advanced Networking Services. Customers do not need to purchase an Advanced Networking add-on to upgrade their environment.)

**Q. Where can one go for further information about the service?**

A. Refer to the vCloud Air Direct Connect webpage: <http://vmware.com/cloud-services/networking/direct-connect.html>

VMware partners may refer to Partner Central or direct questions / requests to [vchspartnersales@vmware.com](mailto:vchspartnersales@vmware.com).

