With the vCloud Director solution service providers can build secure, multi-tenant private cloud for hosting infrastructure resources into virtual data centers and exposing them to users through Web-based portals and programmable interfaces as fully automated, catalog-based services.

A management service operating on the vCenter Server level. It understands the vCenter Server level concepts for starting the replication workflow for the virtual machines. It must have TCP access to the Lookup Service and all the vCloud Availability Replicator appliances in both local, and remote sites.

Provides the main interface for the cloud-to-cloud replication operations. It understands the vCloud Director level concepts and works with vApps and virtual machines using vCD API calls.

It provides tenants and service providers with a graphic user interface to facilitate the management of the vCloud Availability for Cloud-to-Cloud DR solution. It also provides overall system and workload information.

Single appliance that contains the following services:
- vCloud Availability Replication Manager
- vCloud Availability vApp Replication Manager
- vCloud Availability for Cloud-to-Cloud DR portal

The PSG provides common infrastructure services to the vSphere environment. Services include licensing, certificate management, and authentication with VMware vCenter Single Sign-On.

This solution requires that each component on a local site has bidirectional TCP connectivity to each remote site. If bidirectional connections between sites are a problem you configure Cloud-to-Cloud Tunneling. You must provide connectivity between the vCloud Availability Tunnel appliances on each site. It simplifies provider networking setup by channelling all incoming and outgoing traffic for a site through a single point.

You must set an IP and port in the local site that is reachable for remote sites and forward it to the private address of the vCloud Availability Tunnel appliance, port 8080. For example, by using destination network address translation (SNAT) in a firewall.

[Diagram of Cloud Provider Data Center – Site A (vCloud Availability C2C Components)]

[Diagram of Cloud Provider Data Center – Site B (vCloud Availability C2C Components)]