



## OVERVIEW

Canadian Cloud Backup (CCB) is a leader in the enterprise virtual datacenter environment, specializing in turnkey solutions that help companies of all sizes effectively and efficiently transition to a private cloud-based infrastructure. We're one of the biggest geographically redundant deployments of HP Matrix infrastructure in the country, and we're 100% owned and operated within Canada.

CCB is a client-focused company, committed to developing cloud infrastructure technology and solutions unparalleled in Canada.

CCB Cloud Infrastructure is built on VMware vCloud Technology that enables organizations to build and manage secure virtual datacenters on a trusted high-performance cloud infrastructure with extensive compute capacity. Some of the benefits include the following:

- **Security** — Maintain security and control over your virtual datacenter with policy-based user controls and virtual firewall technology. CCB Cloud Infrastructure allow customers to connect securely with VPNs, set up users, grant varying degrees of access permissions, and record log data.
- **Control** — Our portal gives you full access to your virtual datacenter resources, wherever and whenever you need them. Increase business agility by deploying preconfigured virtual machines from catalog-based templates, or use the open virtualization format (OVF) to upload your existing virtual infrastructure. Grow or shrink your resources as needed. You can even allocate resources for temporary test environments, store archival data offsite, or extend your internal or public facing systems into the CCB Cloud.
- **Easily move to and from the Cloud** — Leverage VMware's free vCloud Connector plug-in that allows you to securely and seamlessly transfer workloads between your existing vSphere installations and CCB Cloud Infrastructure. vCloud Connector simplifies the management and migration of multiple environments all within your vSphere Client.
- **Connectivity** — CCB works with premium Tier-1 bandwidth providers, ensuring minimal latency and fast connections to all points of the global internet
- **Colocation** — Available to cloud customers who need to colocate equipment that integrates with their cloud, including firewalls, routers for MPLS Networks, proprietary servers, and other specialized hardware.
- **Flexible Pricing Models** — Consume cloud resources such as CPU, RAM, disk storage, networking, and bandwidth in any way that meets your needs and manage it all from a single pane of glass.
- **CCB One-stop Service** — Our solution does not rely on outside service contractors. We provide hardware, hosting, management, and support services.
- **Precise, Fast Provisioning** — We allow a user to create a virtual machine with exactly the resources required; it does not force a pre-defined list of virtual machine images. Provisioning can be handled online in a matter of minutes for most configurations.
- **Scalability** — We can add or reduce computing power and capacity, as needed, to overcome scalability challenges that result from load, business cycle, or growth



## OUR COMMITMENT

- We certify that all cloud hosting services detailed in this response are 100% hosted and maintained in data centers located across Canada.
- We ensure that any and all data, applications, databases, and computer code remain under the sole ownership of the respective participating entity.
- The Customer is able to leverage the full capabilities of the vCloud Director interface to manage its CCB Dedicated Cloud environment, in a 24x365, on-demand, self-service manner. These capabilities include, but are not limited to, the deployment of additional virtual machines or the modification of the capacity of existing virtual machines (for example, increasing memory or CPU capacity within the available resources).
- CCB cloud service offerings supports a multi-stage environment. The CCB Dedicated Cloud with VMware utilizes the concept of vApps. A vApp is simply a container that can contain one or more virtual machines. A vApp can be powered on or off similar to a single virtual machine, and it can also be cloned. A subscriber can create a vApp with a standardized installation of applications and create clones of that vApp to serve as a test/staging, pre-production, quality, or production environment, or any other type of environment the subscriber requires. In addition, each instance or environment has customizable Role-Based Access Control (RBAC).
- Any database platform that is compatible with the selected operating system is supported. For instance, if the subscriber chooses a Microsoft Windows operating system any database that is capable of running on Windows is supported. This includes, but is not limited to, Microsoft SQL, Oracle for Windows, and MYSQL, among others.
- Conversely, if the subscriber elects to utilize a Linux-based operating system such as SUSE, any database compatible with SUSE Linux, such as Oracle, is supported.
- The infrastructure availability Service Level Agreement (SLA) for the CCB Dedicated Cloud is 99.999 percent.

## DIVERSE INFRASTRUCTURE & CONNECTIVITY (PRIVATE NETWORKING)

CCB's infrastructure is complimented with it's own private redundant MPLS network. Deploying multiple 10 Gig Ethernet backhauls between geographical redundant datacenters. CCB also has multiple network to network Interconnects (NNI's) along with wholesale agreements with the tier 1 and 2 carrier market. Enabling clients the ability to extend private layer 2 private networking as required and in part with CCB Internet and cloud based service environments.



## **GEOGRAPHICAL REDUNDANCY (DATA CENTRES)**

The CCB Primary Data Center is located in Kingston, Ontario at 2 Gore St. The data center has more than 1,500 square feet of raised floor space, fully redundant UPS systems, dual main power feeds, back-up generator, high density capabilities, 24x7 building monitoring and security and extensive environmental support.

Among the features and capabilities of the CCB Data Center:

- 1,500 square feet of raised floor space
- 4,000 square feet of office space to accommodate employees
- Battery backup for 120 minutes uptime at full load
- Back-up generator with sufficient onsite fuel to support 72 hours of operations without refueling
- 24x7 security provided by Chubb Edwards
- Industry standard fire suppression systems
- Fully redundant power and cooling capacity

## **CONNECTIVITY**

CCB has multiple 10 Gig diverse backbones interconnecting its datacenter and facilities.

- Backbone links (Kingston – Toronto, Kingston- Oakville, Kingston -Montreal)
- Diverse NNI w/Bell
- Diverse NNI w/Utilities Kingston
- Internet Peering w/Utilities Kingston

## **PHYSICAL SECURITY**

All personnel access to our facilities is only allowed through two token accesses—fob card and PIN. All non-staff visitors are escorted at all times by an authorized CCB representative. We record all activity at all locations within our data centers. CCTV security cameras monitor designated sensitive areas.

## **MONITORING**

All systems in our data centers are monitored 24x7. Monitoring includes, but is not limited to, Ping monitors, disk, CPU, and memory utilization, content/URL monitoring for all Web applications, database connectivity, and Simple Network Management Protocol (SNMP) monitoring of hardware instrumentation—temperature, power supplies, RAID, fans, CPU temp, etc.

We use large displays in our NOC to alert our engineering staff of any outages or potential problems with all monitors. Monitors are set up not only to inform our staff when services are affected, but also to monitor indicators that may show a potential problem before it becomes service affecting so it can be resolved without impact to the customer.

## **CERTIFICATIONS / COMPLIANCE**

CCB primary data center is compliant with PCI DCC, PIPEDA, and HIPAA. We are currently in the process of obtaining additional certifications such as SSAE16 which could be fast tracked if necessary. CCB also adheres to best practices in its operations and maintains focus on IT environments.