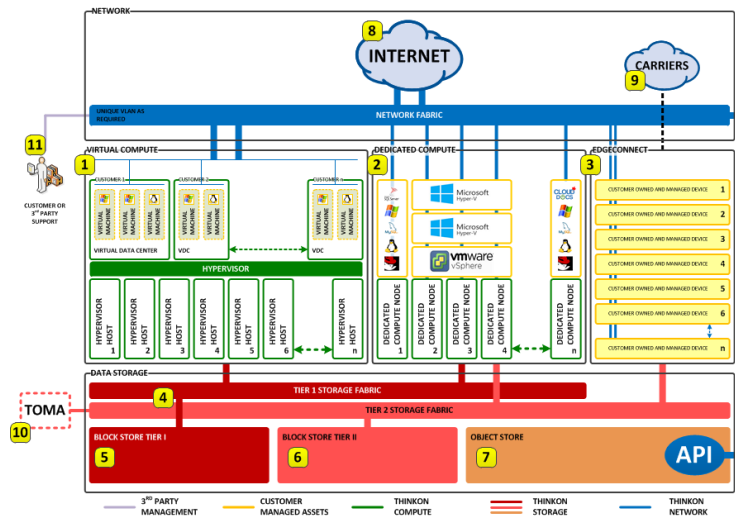


ThinkOn operates Canada’s only Converged Infrastructure as a Service utility. This utility is offered exclusively to SaaS providers, Integrators and VARs that desire to leverage a turnkey SLA backed service to support their go-to-market cloud initiatives. There are a number of compelling, and in some cases unique attributes associated with the ThinkOn design that are summarized following the service delivery architecture diagram found below.



- 1. Virtual Compute:** Unlike many cloud providers that sell virtual servers, ThinkOn offers customers virtual data centres outfitted with a reserved amount of compute resources in a unit of measure called a “Cloud Compute Unit”. A Cloud Compute Unit is comprised of 1Ghz of CPU and 2GBytes of RAM. Compute units are allocated to a virtual data center at the time of purchase. Once allocated to a virtual data center the compute units can be used to construct a virtual server of any type simply by adjusting the Cloud Compute Units allocated.

A key aspect of the Virtual Compute design is that unlike the large public clouds each virtual server being deployed is inherently highly available and in the event a hardware component were to fail the affected workload would automatically be recovered on the remaining hardware.
- 2. Dedicated Compute:** A great advantage of the ThinkOn service delivery architecture is the ability to deploy cloud and bare metal compute services within the same network and storage fabrics. This hybrid design allows customers the option of deploying a private cloud using any hypervisor technology or to deploy software that would benefit from being installed directly on bare metal. ThinkOn provides two classes of dedicated compute; a low density option comes with 72GB of RAM and a minimum of 16 GHz of compute while the high density option includes 192GB of RAM and a minimum 24 GHz of compute. Both models include direct access to our Hitachi storage infrastructure as well as access to multiple 10Gbit network interfaces to ensure very high interconnectivity performance.
- 3. EDGEconnect:** Unlike most cloud only providers that do not allow customer owned assets to co-exist with their cloud environment we think it’s a great way to get the most out of the technology investments customers have already made. Our EDGEconnect service allows customers to place their own assets into our secure environment and cross connect directly into our service delivery network. We support redundant Ethernet and Fibre Channel connectivity so whether it’s a carrier’s router or a disk array we can make it work. This service is sold in one "U" (1.75") increments and includes 100 watts of power for every “U” ordered.
- 4. Storage Fabric:** We take performance and data security very seriously. From our very beginnings we have been committed to helping our customers get the best performance possible while maintaining an ultra-reliable security framework. Many of our competitors believe they can cut corners by using iSCSI or other low cost and potentially insecure storage transport. We’ve taken a second step and isolated the high performance storage from our general purpose Tier 2 storage.
- 5. High Performance Data Storage:** Is a perfect place for databases or any other performance sensitive storage application. To ensure optimal performance the service delivery infrastructure is constructed using a scale out

service design. Scale out means that as we add storage capacity we also add storage controller and cache capacity to ensure the workload continues to be well served within the entire storage platform. Storage is allocated directly to a virtual machine or dedicated compute and is consider in use upon allocation. Data availability is supported through a high availability design. All data paths are redundant and the data itself is stored using RAID6 data protection mechanisms.

6. **Write Optimized Data Storage:** Is our general purpose storage tier. This storage service has performance characteristics that support near-line applications such as on-line backup and data archiving typical for data protection and media vaulting applications or any other application where write workloads significantly exceed reads. To ensure optimal performance the service delivery infrastructure is constructed using a scale out service design. Storage is allocated directly to a virtual machine or dedicated compute and is consider in use upon allocation. Pricing is per Gbyte and the minimum storage allocation is 100GB of storage. Data availability is supported through a high availability design. All data paths are redundant and the data itself is stored using RAID6 data protection mechanisms.
7. **ObjectStore:** This service is ideal for applications requiring very high data durability more so than high performance. The ThinkOn ObjectStore is based on Hitachi Content Platform and is fully S3 compatible. One of the most compelling aspects of ObjectStore is that there is no pre-allocation required. Customers are billed on an “as used” basis in 1 Gbyte increments.
8. **InternetConnect:** The ThinkOn InternetConnect is a multi-homed, carrier diverse managed Internet service. In order to access any of the above services it is necessary to subscribe to minimum of 100GBytes of data transfer or an EdgeConnect service. Pricing is per GBYTE transferred and is based on the higher of inbound or outbound actual cumulative usage for the billing period. (Note that all Inbound ObjectStore utilization is excluded from this calculation).
9. **Carrier Connectivity:** As mentioned in the EDGEconnect section above we can support carrier provided CPU gear and directly connect that same carrier circuit to a customer owned virtual or dedicated compute instance. We support all the major direct carriers as well as 3<sup>rd</sup> party value added network resellers. The net result to our customers and their customers is that we can easily support a quality of service backed connection which isn’t something you can get from an Internet centric service provider.
10. **TOMA:** The ThinkON Migration Appliance is purpose built to enable the high-speed bulk transfer of large data sets from a customer premise to the ThinkOn Service Delivery infrastructure. TOMA is available in 20, 40 and 80 TByte configurations and supports both Fibre Channel and iSCSI connections while at the customer premise.
11. **Application and Guest VM Management:** ThinkOn provides a unique way for both customers and authorized 3<sup>rd</sup> parties to securely access and remotely manage the virtual and dedicated compute deployed as part of any customer solution. It starts with our ability to securely connect customers through our service delivery framework. We accomplish this through a none-shared design whereby no two customers ever exist either on the same VLAN or network segment and we can extend this design to network termination within the EDGEconnec.

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