

**Savings by use of On-Premises Datacenter
Versus the Public Cloud of Amazon AWS, Microsoft Azure and Google GCP**

BR Consulting

Cloud Infrastructure (ordered from lower TCO to higher TCO)	Total Annual Cost	Monthly Cost	5 Year TCO
Small/Medium Company (SME) with 100 employees,, 2 Datacenters and Functional Requirements SME → Each of the 2 Datacenters includes 1 Rack, 2 Air Conditioning Systems 15K Frig., one 20 Kva Natural gas generator (Generac), one 15 Kva UPS, 6 SuperMicro AMD Epyc AS-2023US-TR4 Servers with 2 Epyc Rome 7402 (24/C/48TX CPU – 48C/96T X Server, 1 TB RAM ECC, 4 X 4 TB SSDs NVMe, 8 X 8 TB SATA III HDs. 10 GBbE Local Connectivity. 2 Supermicro 3348T Top Of rack Switches, 10 GbE, high speed network 1 Gbps between the two Datacenters, Internet Access by way of multiple service providers with long term contracts.	632.000,00	63.200,00	632.000,00
Hosting of High-End Dedicated Servers – ISP HiVelocity (Tampa – Florida, 2 Datacenters) of smaller size of the on-premises equipment: 12 X SuperMicro 1 CPU AMD EPYC (24 cores y 48 threads cada CPU), RAM ECC 256 GB, Storage 4 x 2TB SSD + 8 x 8 TB SATA HD, networking 1Gbps Unmetered.	144.849,60	17.244,00	724.248,00
Equivalent Infrastructure to HiVelocity on Google GCP	458.939,00	45.893,90	2.294.695,00
Equivalent Infrastructure to HiVelocity on Amazon AWS	497.728,00	49.772,80	2.488.640,00
Equivalent Infrastructure to HiVelocity on Microsoft Azure	588.737,00	58.873,70	2.943.685,00

Notes

1) TCO = Total Cost of Ownership → 5 Years

2) The use of the Public Cloud of the Giants of Internet only is justified for short periods of times when there are comercial and computational activity that goes beyond the normal operations of the day-to-day (black monday, christmas, etc.). When there are stable computational loads, the on-premises solution is really less costly. The second alternative when the company searches for security and cost, the dedicated servers of second line service providers such as packet.net or hivelocity.net is a viable solution.

3) Long term prepaid contracts for Amazon AWS, Microsoft Azure and Google GCP

4) Prices at the end of 2019

https://en.wikipedia.org/wiki/Cloud-computing_comparison

HiVelocity Cluster

End of 2019

Concept	Price
Base System	269,00
Processor: 2.0GHz 24-Core 7401P AMD EPYC	59,00
Memory: 256 GB	175,00
Primary Hard Drive: 1.92TB SSD	69,00
Second Hard Drive: 1.92TB SSD	89,00
Third Hard Drive: 1.92TB SSD	89,00
Fourth Hard Drive: 1.92TB SSD	89,00
Fifth Hard Drive: 8TB SATA	55,00
Sixth Hard Drive: 8TB SATA	55,00
Seventh Hard Drive: 8TB SATA	55,00
Eighth Hard Drive: 8TB SATA	55,00
Ninth Hard Drive: 8TB SATA	55,00
Tenth Hard Drive: 8TB SATA	55,00
Eleventh Hard Drive: 8TB SATA	55,00
Twelfth Hard Drive: 8TB SATA	55,00
Chassis Upgrade: 12 Drive Chassis	59,00
Hardware Firewall: Juniper SRX-300	99,00
Operating System: Debian	0,00
Control Panel: Proxmox	0,00
Managed Services: Self Managed	0,00
Bandwidth: 100 TB on 1Gbps port	0,00
Internal Network: 1 Gbps	0,00
DDOS: Filtering Edge of Network System (FENS)	0,00
Cloud Storage: 10GB	0,00
Data Center Location: TPA2 (Tampa, FL)	0,00
Setup Fees	0,00
Monthly Price	1437,00
BUILD TO SUIT 24 HOURS OR LESS DEPLOYS TO	TAMPA – FL
Monthly Price	1437,00
Annually Save up to	12070,80 30%

Discounts with Longer Terms