

Considering a move to public cloud?

Comparing various public clouds for a potential migration? Don't make a move without consulting CloudPhysics first!

Selecting a public cloud is hard: each has advantages and disadvantages, depending on your specific needs. Plus, configuring your public cloud most cost-effectively can be even more complex. CloudPhysics can instantly discover the right path *for you* through this complexity.

If you are considering GCP, you face a complex array of questions:

- How does GCP compare to AWS and Azure?
- What is the right amount of resources for my on-premises VMs in GCP?
- Are predefined instances the most cost-effective for me—or do I need custom instances?
- How much could I save using preemptible instances, or GCP's sustained-use discounts?
- What are the cost differences among the various storage options at GCP?

CloudPhysics has built customized analytics and cost calculators that provide the most sophisticated and accurate tools available to help you plan and design your hybrid cloud architecture and migration strategy. These resources enable you to immediately discover the proper cloud strategy for your organization.

Key Benefits

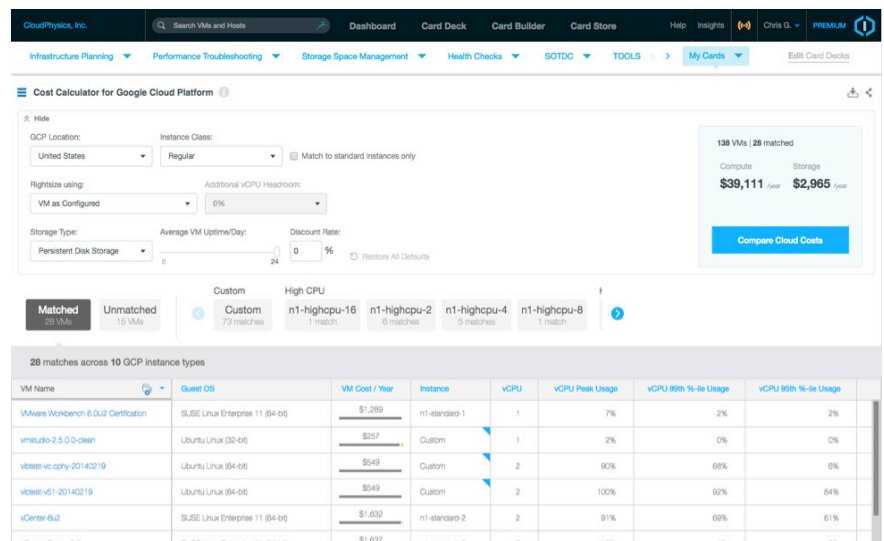
- Delivers the fastest way to start planning cloud migration strategy
- Matches GCP instance types or supports custom image sizes
- Applies sustained use discounts to maximize your savings
- Utilizes customized analytics and cost calculators, offering the most advanced tools available
- Takes only minutes to activate and start generating results

What is the Hybrid Cloud Assessment for Google Cloud?

The Hybrid Cloud Assessment is the fastest way to start planning your cloud migration strategy. Within minutes of activation, CloudPhysics maps your entire VMware infrastructure against current GCP pricing and configuration options. CloudPhysics can also analyze your current data center infrastructure and determine how much it costs to run your workloads on-premises. This analysis allows you to compare your current costs to your estimated GCP costs.

The centerpiece of the Hybrid Cloud Assessment for GCP is the Cost Calculator for GCP. This analytic enables you to accurately forecast the cloud hosting costs of current virtual machines in a GCP compute environment.

CloudPhysics helps ensure the workloads remaining on premises are running on the most cost-effective infrastructure possible.



VM Name	Guest OS	VM Cost / Year	Instance	vCPU	vCPU Peak Usage	vCPU 95th %ile Usage	vCPU 95th %ile Usage
vMware Workbench 6.GU2 Certification	SUSE Linux Enterprise 11 (64-bit)	\$1,289	n1-standard-1	1	7%	2%	2%
vmstudio-2.5.0.0-clean	Ubuntu Linux (32-bit)	\$257	Custom	1	2%	0%	0%
vBee-v1-cppy-20140219	Ubuntu Linux (64-bit)	\$549	Custom	2	90%	68%	6%
vBee-v1-20140219	Ubuntu Linux (64-bit)	\$549	Custom	2	100%	92%	64%
vCenter-6.2	SUSE Linux Enterprise 11 (64-bit)	\$1,632	n1-standard-2	2	91%	69%	61%
vCenter Server 4.4	SUSE Linux Enterprise 11 (64-bit)	\$1,637	n1-standard-2	2	49%	4%	5%

Key Capabilities

- **Compare Clouds:** Compare the costs of GCP to other top public cloud platforms. This includes the ability to create and compare various scenarios.
- **Compare to On-Prem:** Compare on-premises infrastructure costs against complex cloud models to determine which solution makes the greatest financial sense.
- **Rightsize your virtual machines:** Simulate the effect of rightsizing your VMs during migration. This feature maps the compute & storage resources actually used by each of your VMs to GCP instances, assuring you that your cloud instance best fits the requirements of your workloads. Don't pay for what you don't need!
- **Optimize workloads remaining on premises:** CloudPhysics ensures that the workloads that remain on premises are running on the most cost-effective infrastructure possible.
- **Simulate GCP capabilities:** Match workloads to global GCP sites and instance types quickly; select from all GCP storage types; create Custom instances for your specific workloads; make strategic storage and compute availability decisions; simulate the benefits of GCP's sustained-use discounts.
- **Filter your Scope:** Filter your migration costing scenarios to specific data centers, clusters, or applications.
- **Scan the Globe:** Take advantage of the opportunity to lower costs even further by automatically matching lower-cost geographic regions to reduce migration outlay.

Cost Comparison of On-Prem IT vs. Public Cloud			
Calculate	Resource Costs as Configured	Rightsize using: Peak vCPU and Peak vRAM Usage	Rightsize using: 99th %ile vCPU and Peak vRAM Usage
On Premises IT 764 VMs Total: \$2,597,376 / year	On-Prem IT Public Cloud Total: \$2,523,606 / year	On-Prem IT Public Cloud Total: \$2,400,155 / year	On-Prem IT Public Cloud Total: \$2,400,155 / year
Google Cloud Platform 764 VMs 1750 Supported Total: \$1,163,298 / year	On-Prem IT Public Cloud Total: \$1,091,342 / year	On-Prem IT Public Cloud Total: \$956,658 / year	On-Prem IT Public Cloud Total: \$956,658 / year
Microsoft Azure 764 VMs 1746 Supported Total: \$2,160,220 / year	On-Prem IT Public Cloud Total: \$2,046,742 / year	On-Prem IT Public Cloud Total: \$1,823,553 / year	On-Prem IT Public Cloud Total: \$1,823,553 / year

VM Name	Guest OS	On-Premises	Microsoft Azure	Google Cloud Platform	vCPU	Peak CPU Usage	99th %
172.25.0.184_observer-2	Ubuntu Linux (64-bit)	\$1,206	\$478	\$319	2		
andy-20120728	Ubuntu Linux (64-bit)	\$1,308	\$478	\$319	2	66%	
aws-20161015-nvme-nvme	Other S.O.s (Linux 64-bit)	\$1,106	\$236	\$119	5		62%

How Does It Work?

- Download and activate the CloudPhysics virtual appliance. (This process takes less than 10 minutes.)
- CloudPhysics will collect and analyze performance and configuration metadata on the entire virtual infrastructure.
- Results are presented in easy-to-understand dashboards and analytics.
- Review results with CloudPhysics and your technology partner to plan your cloud migration strategy
- Benchmark key parameters against the CloudPhysics community, VMware best practices, and the global Knowledge Base

CloudPhysics data scientists perform the analysis and present actionable insights through intuitive dashboards.

Why CloudPhysics?

- **15 minutes to insights:** No software to install, no agents to deploy, no upgrades, no patches
- **Deep VMware expertise:** Founded by VMware engineers who developed core ESX feature sets and APIs
- **Highest resolution performance data:** We collect performance data at 20-second intervals for highest fidelity insights.
- **Data science delivered to you:** Our data scientists perform the analysis and present actionable insights through intuitive dashboards.

About CloudPhysics

CloudPhysics provides data-driven insights for smarter IT, giving IT teams more power than ever before to understand, troubleshoot, and optimize their virtualized data centers and drive better operational decision-making. The company, based in Santa Clara, California, serves thousands of users worldwide and is backed by Mayfield Kleiner Perkins Caufield & Byers, and Icon Ventures.