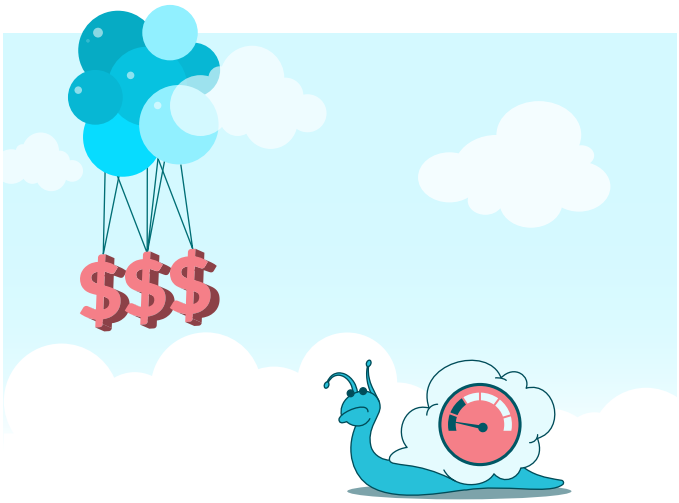
SERRA LABS

Reduce Cloud Costs
Improve Cloud Performance

with

Serra Labs
Cost-Performance Optimizer (CPO)

Why are Cloud Costs Often High and Cloud Performance Often Slow?



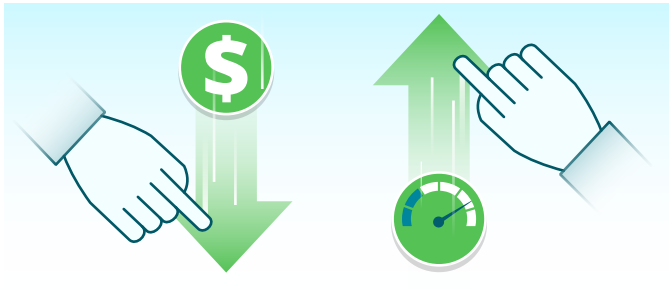
As enterprise users move their workloads from on-premises data centers to the public and private clouds, the focus is invariably on ensuring that the migration is successful. Similarly, when cloud users develop cloud-native applications, the focus is first and foremost on application function and delivery.

It is only later that users come to realize that infrastructural resources used by their migrated workloads and native applications are, in fact, over-provisioned leading to waste or under-provisioned leading to slowdown.

Waste translates into excess cloud costs while slowdown is often caused by infrastructural performance bottlenecks. It is estimated that over 30% of what runs on the cloud is wasteful and close to 50% of what runs in the cloud exhibits worse performance than expected.

Most users face a tension between cost and performance – how much cost needs to be reduced versus how much performance needs to be improved. There is invariably a tradeoff between cost and performance for each VM and this tradeoff needs to be taken into account when optimizing them.

Strategies to Reduce Costs and Improve Performance?

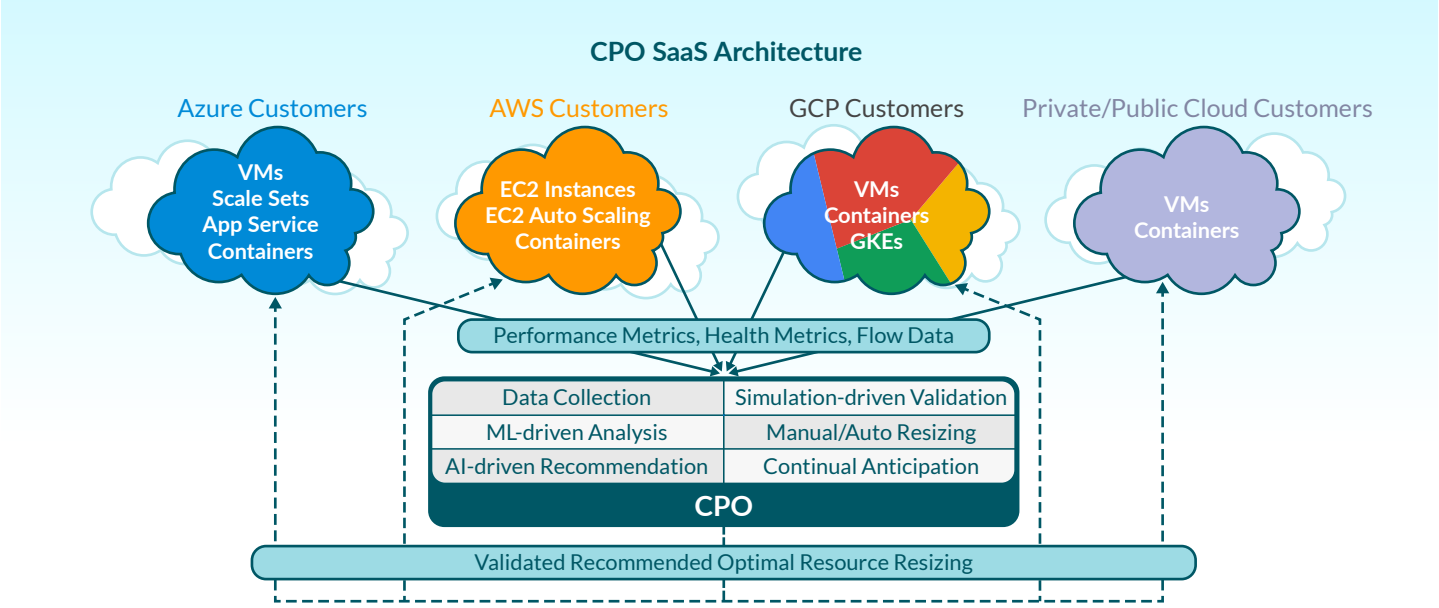


A simple way to achieve cost reduction is to shutdown VMs when they are not being used. However, costs for associated disks/storage continue to be incurred with most cloud providers. Shutdown is effective when VMs have distinct daily up-down behavior. Unfortunately, many VMs do not exhibit such behavior to be eligible for periodic shutdown.

Another simple way to reduce costs is to reserve (lease) the VM in a set configuration for a 1-year or 3-year term at a much lower monthly price but with an early-lease-termination penalty which varies with different cloud providers.

What most cost-reduction solutions offer is using recent history of resource usage to estimate a lower limit so that cost can be reduced. However, they do not consider future trends and do not consider impact on performance, both of which are important considerations.

When performance improvement is sought by changes to resources, most solutions simply do not address it. Such a capability is seen as part of performance monitoring and management tools despite performance management being intertwined with cost management. In fact, cost and performance are two sides of the same coin, commonly referred to as resource optimization.



Serra Labs CPO Solution

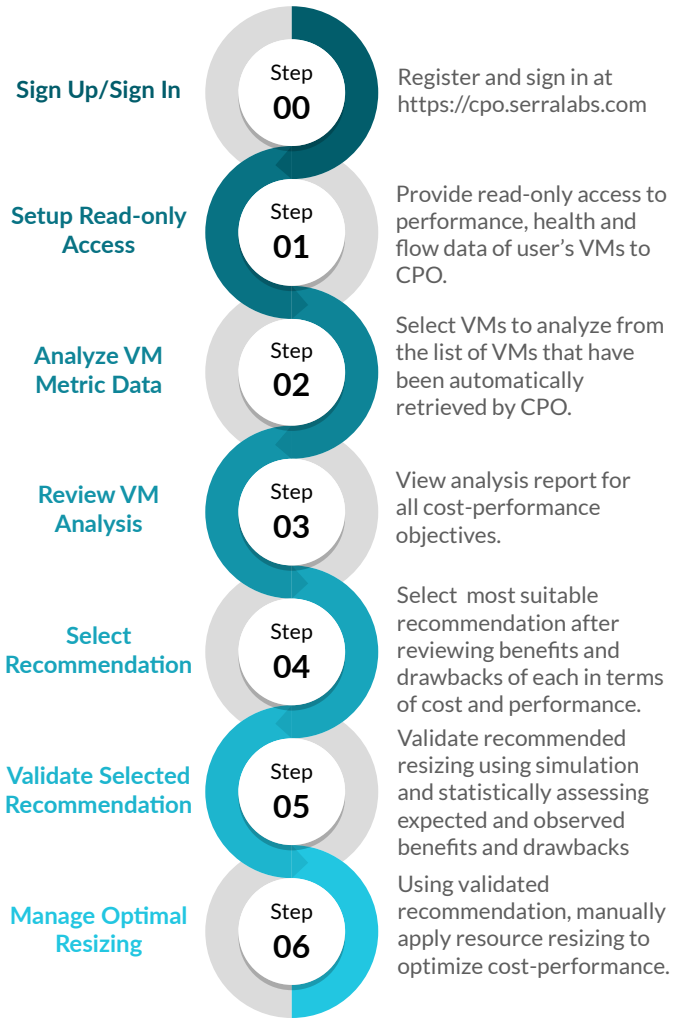
The Serra Labs' unique approach is based on optimizing both cost and performance at the same time using advanced machine learning, AI and simulation. The solution is called Cost-Performance Optimizer (CPO).

In CPO, the optimization objective can be one of three – economical (cost saving), enhanced (performance improving), or balanced (trading-off cost with performance).

Using the optimization objective, CPO analyzes historical performance and health data and uses forecasted trends to determine optimal sizing for resources along with its cost and performance benefits and drawbacks. The recommended optimal sizing is verified by way of simulation and statistical comparison so that the benefits are practically validated before any changes are made.

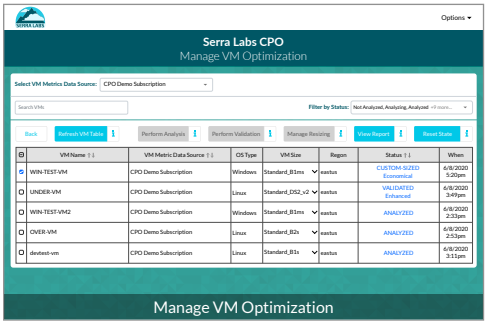
CPO in Steps

CPO is designed to help users get going as quickly as possible in optimizing their VM resources

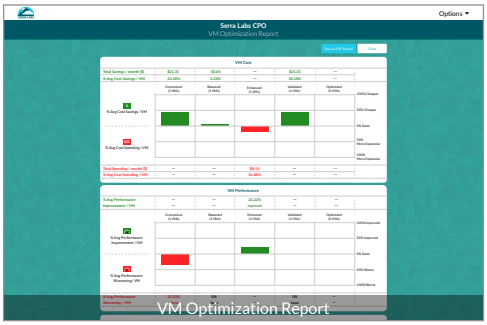


CPO in Action

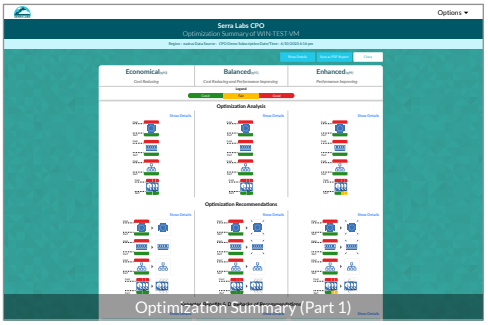
Click on image to view in detail



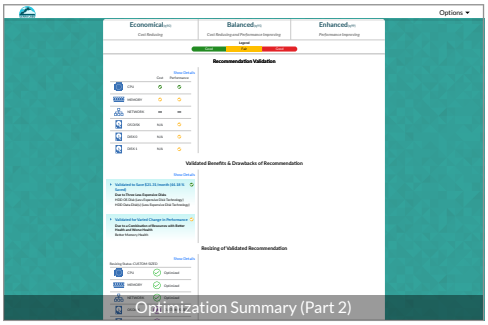
Manage VM Optimization

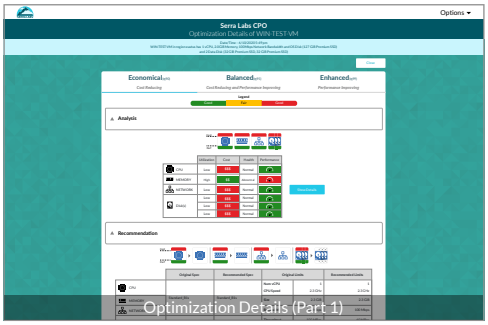


VM Optimization Report

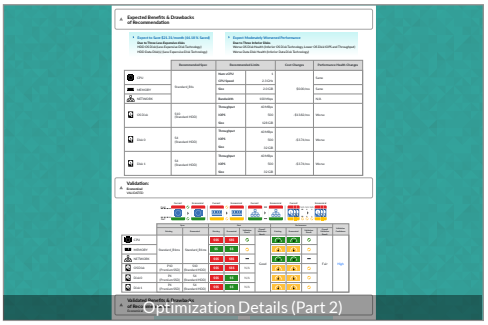


Optimization Summary (Part 1)


Optimization Summary (Part 2)



Optimization Details (Part 1)


Optimization Details (Part 2)

CPO Plans

CPO is available under the following plans

Free Trial	Pay-per-Use	Subscription
Try CPO on a single VM	Use CPO once on multiple VMs	Use CPO as often as you need on multiple VMs

CPO is delivered as a SaaS solution, thus requiring no installation. It currently supports Azure, with support for other public clouds forthcoming.

For more information, visit https://www.serralabs.com
or send email to info@serralabs.com or call +1-408-475-1358.

You can start using CPO right away by going to https://cpo.serralabs.com and contacting support@serralabs.com for assistance.