Cloud Cost Optimization

We designed Beacon Cloud to optimize cloud resources for your desired level of service, balancing the cost of compute pools with the readiness and responsiveness required to meet demand and deliver an excellent user experience.

Cloud Compute Services Costing Too Much? Beacon Cloud Solves That.

It starts with infrastructure-as-code.

Beacon Cloud's infrastructure-as-code implementation provides the foundations for using cloud compute resources dynamically, unlocking the full potential of the cloud. Infrastructure templates and virtual host configurations enable our platform to spin up and tear down hosts on demand, setting up each host with the required hardware and software to complete the task at hand.

The ability to dynamically adjust available compute resources allows clients to control how cloud resources respond with demand. Whether you have daily, weekly, monthly, or less predictable surges of demand, Beacon Cloud gives you the capabilities to optimize your cloud expense.

Challenge

The lift-and-shift approach to cloud computing often misses out on the cloud's key benefits. Servers are provisioned, applications deployed, and processes configured – but little changes from the on-premise architecture. This approach leaves most of the agility, scalability, and automation benefits of the cloud out of reach.

Solution

Beacon Cloud's infrastructure-as-code, containerized workloads, and elastic compute grid enable optimal performance according to the needs of each client and application. Host management controls and detailed dashboards provide real-time visibility on resource usage and spending, and automatically align capacity to demand.

Result

More than just cost savings. Beacon Cloud delivers consistent infrastructure, version controlled templates and configurations, and a fully reproducible environment. Clients can reduce unnecessary cloud expenditure and focus on areas of competitive advantage. Ephemeral hosts shrink the potential attack surface. Distributed computing enables faster simulations and larger sets of what-if scenarios.

Optimized Cloud Operations

Minimal baseline cost with dynamic scaling

Beacon's single tenant cloud platform has a minimal cloud footprint. Core services, including source code hosting, database links, secrets management, and monitoring typically run at a cost of less than $1,000 per month. Beyond that the platform scales with your business.

Maximal control with useful abstractions

Beacon exposes low-level cloud controls for maximal flexibility and control. But the platform also includes a range of multi-layered abstractions, for user-friendly management, provisioning, and config changes – useful guardrails without restricting flexibility.

Built-in orchestration and automation

More than just a cloud service, Beacon Cloud comes with integrated automation and productivity boosters, including deployment workflows, monitoring dashboards, continuous backups, and automated recovery from failures.

Beacon Cloud Optimization:
You Choose, We Optimize

Work at the optimal scale for your projects.

Layered management and controls

Beacon's multi-layered abstractions enable clients to focus on their financial applications' business logic, not underlying infrastructure. Graphical user interfaces handle provisioning resources and config changes automatically, or work directly with config files and infrastructure controls.
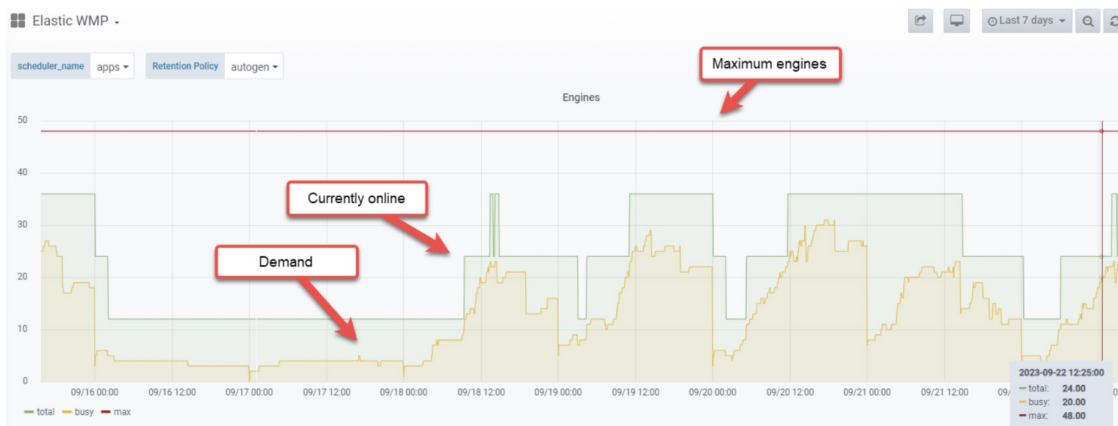
- Beacon provides simplified configuration abstractions with Domain Configurator UI, providing user-friendly management that generates underlying JSON config objects and changes.

- For more detailed info, edit JSON configuration objects to define domain resources like virtual hosts and compute engines, enabling version control and reproducibility.

- At the lowest level, Beacon Cloud leverages and exposes provisioning controls for defining cloud infrastructure resources, providing maximum flexibility and control.

Easily configurable compute pools

Beacon monitors capacity demands for processing and storage, ensuring that you have the cloud services you need when you need them. Beacon allows you to configure elastic compute pools to align resources with use cases. Use memory optimized hosts for memory intensive applications, GPU-based instances for machine learning, or cheaper general purpose hosts for less specialized tasks.

Visual dashboards

Beacon's dashboard allows you to visualize compute availability and fine tune the behavior to meet your needs. **For typical client use cases we see savings of around 40% with our elastic engine compared to an always-on environment.**

To learn more about Beacon Cloud and its cost optimization capabilities, contact your Account Manager, fill out our contact form, or email info@beacon.io