

# Granulate for GCP

**Improve Google Cloud Performance to Cut Costs by Up to 45%**

Granulate's real-time, continuous optimization solution uses granulate agents to learn the application's particular resource usage pattern and data flow, resulting in up to 45% reduction in GCP compute costs while improving latency and quality of service.

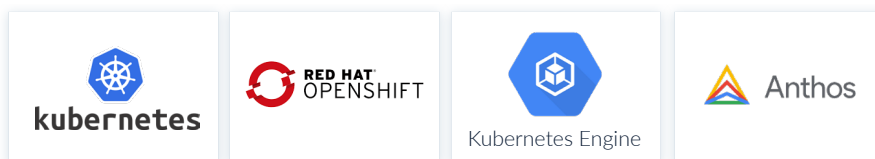


## GCP ready from day one

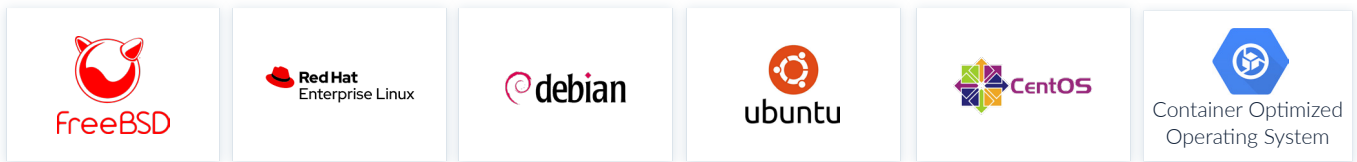
Granulate is GCP-ready from day one, with broad support for GCP compute resources and services. **Granulate supports GCP by running on:**

- GKE
- Dataproc
- GCE

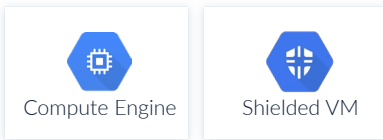
### Orchestration



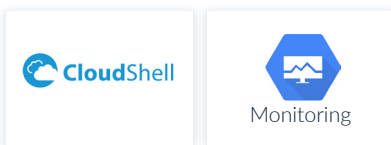
## Operating Systems



## Compute



## GCP Services



# Simple Installation - No Maintenance Required

Improving workload performance on GCP has never been easier with Granulate, which requires only one line of code for installation and no ongoing maintenance

- **Easy Installation** - By entering just one line of code in the command line, organizations can manually install Granulate's agents in minutes. Standard provisioning tools such as Google Cloud Deployment Manager, Chef, Ansible, and Puppet are fully supported as well.
- **No Maintenance** - Each Granulate agent is autonomous and does not require ongoing maintenance, they continuously tune and update themselves.
- **No Code Changes or R&D Required** - Agents monitor and then automatically and continuously update to reflect the application's needs - without human intervention, code changes, or any R&D efforts.



No  
Maintenance



No  
R&D effort



No  
code changes



Line of code  
installation

# Sample Granulate Use Cases

Granulate supports a wide variety of IT infrastructures and use cases, including:

## 1 *Kubernetes Orchestration on GKE*

Granulate's Kubernetes monitoring and orchestration agent is only deployed on Kubernetes clusters. gMaestro provides full visibility into GKE clusters, seamlessly interacts with HPA scaling policies, and achieves your cost-performance goals by applying custom rightsizing recommendations based on actual usage in production.



## 2 *Optimizing Big Data Workloads on Dataproc*

Granulate excels at operating on GCP Dataproc when processing large data sets. Granulate optimizes resource allocation on Dataproc autonomously and continuously, so that your data engineering team doesn't need to repeatedly manually monitor and tune the workload. Granulate also optimizes JVM runtime on Dataproc workloads.

## 3 *Runtime Optimization on GCP Services*

Granulate sAgents perform PGO (profile-guided optimizations) of resource allocation decision-making at the runtime levels. Granulate's sAgents load the runtime optimizations to the running processes which perform continuous optimization to the runtime resource management and code execution, resulting in immediate improvement in CPU utilization and processing time.

## Why Granulate? Instant Benefits

### *Cut GCP Compute Costs by up to 45% -*

By customizing to each application's specific needs, Granulate ensures the same workload can be supported with much less compute.

### *Improve Workload and Application Performance -*

Granulate's agents dramatically increase throughput (by as much as 10x) while slashing response time by 15% or more.

For more information contact [info@granulate.io](mailto:info@granulate.io)

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