Compute Engine

Google Compute Engine lets you create and run virtual machines on Google infrastructure.

Google Compute Engine Concepts

Features

- Large-scale IaaS workloads.
- High CPU, high memory, standard, and shared-core machine types.
- Persistent disks on standard (HDD), SSD, and local SSD.
- Resize disks and migrate instances with no downtime.
- Startup scripts and metadata.
- Robust networking:
 - Default and custom networks.
 - Firewall rules.
 - Regional HTTP(s) load balancing.
 - Network load balancing.
 - Subnetworks.
- Advanced APIs for auto-scaling and instance group management.
- Per-minute billing with sustained use discounts.
- Preemptible instances.
- High throughput to storage at no extra cost.
- Custom machine types allow you to only pay for what you need.

Points of Interest

- Windows virtual machines require you to set a username and password.
- Configuration management options include:
 - Startup script for Compute instances.
 - Google Cloud Deployment Manager.
 - Open-source tools such as Pupper, Chef, Salt, and Ansible.