RACKSPACE MANAGED SERVICES FOR GOOGLE CLOUD PLATFORM

Google Cloud Platform

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OVERVIEW

Many businesses want to realize the power of Google Cloud Platform (GCP) without having to incur the challenge and expense of managing it themselves. Some businesses lack the technical expertise or capacity to operate cloud infrastructure, tools and applications while others may have the ability but choose to maintain focus on their core business. Many larger businesses are on a multi-phased journey to the cloud, requiring transition and management services that can adapt to an evolving set of needs. Rackspace Managed Services for Google Cloud Platform is the answer for businesses facing these challenges. As Google's first Premier Managed Services Partner, Rackspace blends technology and automation plus human expertise to deliver ongoing architecture, security and 24x7x365 operations backed by GCP-certified engineers and architects.

OUR SERVICE LEVELS

Rackspace works with customers to identify the scope and criticality of their applications and determine the service level that best addresses their needs. Rackspace offers two service levels on GCP to meet varying customer requirements:

Aviator™ is a fully managed service for critical workloads, including expert architecture and implementation, proactive monitoring and 24x7x365 support from Google-certified GCP experts.

Runway is an unmanaged service level designed for non-critical applications. Runway customers benefit from best practices for GCP workloads, unified billing and an integrated customer interface for multi-cloud environments.

AVIATOR KEY FEATURES:

HUMAN EXPERTISE

Expert Cloud Engineers
· 24x7x365 hands-on incident response from GCP-certified experts backed by response-time SLAs
· System administration work including: monitoring, logging, patching, backups and system updates
· Creation and maintenance of a custom operations runbook designed specifically to business objectives
· DevOps expertise and guidance in architecting, configuring and utilizing CI/CD processes and pipeline for code and infrastructure deployment
· Trusted advice and insight from senior engineers who have resolved hundreds of critical incidents across thousands of customer environments

Innovative Solutions Architects
· Detailed cloud designs and architectures mapped to customer business objectives
· Analysis of customer environment to identify potential gaps in moving to the cloud
· Ongoing optimization of cloud deployments for security, automation and cost
· Sophisticated architecture design that is sustainable, scalable and reliable

Dedicated Technical Account Managers (TAMs)
· Personal oversight of technical onboarding and initial environment deployment on GCP
· Ongoing business and technical assistance, including analyzing account metrics and conducting regular account reviews
· Identification and prioritization of recommendations that optimize for cost, security, utilization, inventory management and cloud best practices

Seasoned Deployment Engineers
· Implementation of industry-leading deployment standards
· Collaboration with solutions architect to define architectures that meet business objectives
· Creation of automation and autonomous deployment including autoscaling
· Configuration of cloud networking and security standards

TOOLING AND AUTOMATION

Management of GCP Projects
· Simplified management of GCP projects (e.g., dev, prod)
· Billing and monitoring tooling to improve cloud experience without replacing existing tools

Identity and Permissions Management
· Implementation of GCP IAM security best practices
· Management of default access policies across all GCP projects
· Single Rackspace login to manage multi-cloud environments

Monitoring and Alerting
· Preconfigured monitoring for comprehensive tracking, logging, and auditability for all GCP projects
· Automatic ticket generation based on specified thresholds and alerts
· SLA-based response times for default and custom alerts

Deployment Tools
· Infrastructure deployment tools and processes (e.g., Ansible)
· Shared private Git repo between customer and Rackspace
· Enforcement of configuration and version control to ensure scalable infrastructure operations
· Access to best-practice Google Deployment Manager (GDM) standards and templates that include opinionated network designs including VPC, multiple zones, subnet sizing, etc.

ADD-ON SERVICES
· Customer reliability engineering (CRE)
· Migration assistance getting your applications and data moved to GCP
· Custom DevOps professional services
· Big data, IoT, application modernization and container services
· Rackspace managed services for digital, security, Pivotal Cloud Foundry and others

APPENDIX 1

Service Relationships (Roles and Responsibilities)

It is anticipated that there are two parties involved in supporting your GCP environment, specifically:

· You, the customer (including any in-house IT resources)
· Rackspace, our GCP-Certified experts

For Aviator service level customers, the table below outlines the responsibilities of these parties throughout your GCP environment deployment.

Responsible :: **A**ccountable :: **C**onsulted :: **I**nformed

AVIATOR SERVICE LEVEL ACTIVITIES	RACKSPACE	CUSTOMER
Provide 24x7x365 support & monitoring response via ticketing and phone	R,A	C,I
ACCOUNT MANAGEMENT AND TOOLING		
Provide named Technical Account Manager (TAM) resource	R,A	C,I
Conduct regular account reviews	R,A	C,I
Regularly identify opportunities for cost and performance optimization	R,A	C,I
Consolidate billing across GCP Projects	R,A	C,I
Role-based user management across GCP projects	R,A	R,C,I
Provide secure network access to environment via short-lived bastion service	R,A	C,I
Provide opinions and best-practices around account architecture	R,A	C,I
Provide prioritized escalation to Google Platinum Support engineers if needed	R,A	C,I
DISCOVERY		
Understand business objectives, current challenges, SLAs and how they map to various applications (e.g. migration to GCP, refactoring current GCP footprint)	R,A	C
Schedule and conduct deep-dive discovery session to understand environments, dependencies, gap analysis, TCO	R,A	C
DESIGN / ARCHITECTURE		
Define and propose architecture options to be considered (e.g. lift & shift vs. refactoring) according to business objectives	R,A	R,C,I
Select GCP architecture that best map to business objectives	C,I	R,A
Provide detailed application architecture documentation	C,I	R,A
Generate detailed infrastructure architecture documentation that maps to application architecture and business objectives	R,A	C,I
Provide networking design approaches that map to business objectives	R,A	C,I
INFRASTRUCTURE IMPLEMENTATION		
Deploy and verify infrastructure via source-controlled infrastructure deployment automation	R,A	C,I
Conduct User acceptance testing	C,I	R,A
Configure & test Rackspace-controlled GCP connectivity	R,A,I	R,C,I
Configure & test customer-controlled GCP connectivity	C,I	R,A
Organize Projects according to best practices (e.g. using labeling and project folders)	R,A,I	C,I
Create, test, and deploy Google App Engine (GAE) configuration	R,A	C,I
Create, test, and deploy Google Container Engine (GKE) configuration	R,A	C,I

AVIATOR SERVICE LEVEL ACTIVITIES	RACKSPACE	CUSTOMER
Configure infrastructure-specific bootstrapping of supported operating systems	R,A	C,I
Configure Google DNS for customer zones where applicable	R,I	A,C, I
Determine/enforce infrastructure deployment process and standards (e.g. YAML, Ansible, etc.)	R,A	C,I
NETWORK AND ACCESS SECURITY IMPLEMENTATION		
Create, test and apply IAM roles and polices of supported GCP services	R,C,I	R,A,C,I
Create, test and apply IAM roles and polices of GCP services with limited support	C,I	R,A,C,I
Create, test and apply firewall rules	R,C,I	R,A,C,I
Manage operating system via third-party tools (e.g. CloudForms, Cloudify)	C,I	R,A,C,I
AntiVirus installation and management and escalation	C,I	R,A,C,I
APPLICATION IMPLEMENTATION		
Deploy application code / source control (e.g. Git / VSTS, etc.)	C,I	R,A
Migrate application data	C,I	R,A
Develop and deploy application configuration management artifacts (Chef, Salt, Ansibile, etc.)	C,I	R,A
Create and manage continuous integration and continuous deployment (CI/CD) pipelines	C,I	R,A
Create and manage customer golden images	C,I	R,A
Create and manage Rackspace templated images	R,A	C,I
Configure application-specific bootstrapping of supported operating systems	C,I	R,A
Create, test, and deploy Google App Engine (GAE) configuration	R,A	C,I
Create and test container configuration	C,I	R,A
Deploy container configuration	R,A	C,I
Install, configure and manage Active Directory	C,I	R,A
DATA SERVICES		
Create, migrate and import database schema	C,I	R,A
Migrate and import databases	C,I	R,A
Import and export data to and from BigQuery and other GCP supported services	R,C,I	R,A
Integrate Big Query into IAM	C,I	R,A
Design and manage Google Data Studio or Cloud Datalab		R,A,C,I
Design and operate Query Composer		R,A,C,I
create and expand cluster in Cloud Dataproc	R,C,I	R,A
Import and export data to and from Cloud Dataproc and other GCP supported services	R,C,I	R,A
Schedule and manage Cloud Dataproc jobs		R,A,C,I
Design and manage Cloud Dataproc ecosystems, schemas, and APIs/coding (such as Spark jobs, Hbase tables, etc.)		R,A,C,I
Design and manage Cloud Dataflow		R,A,C,I
Design and manage Cloud Dataprep		R,A,C,I
Design and manage Cloud Pub/Sub		R,A,C,I
Create and expand Cloud Bigtable instances	R,C,I	R,A
Provide guidance on Cloud Bigtable performance and architecture	C,I	R,A
Import and export data to and from Cloud Bigtable and other GCP supported services	C,I	R,A
Import and export data to and from Cloud Datastore and other GCP supported services	C,I	R,A
Design and manage Cloud Datastore		R,A,C,I
Import and export data to and from Cloud SQL and other GCP supported services	R,C,I	R,A
Create and configure Cloud SQL	R,A	R,C,I

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AVIATOR SERVICE LEVEL ACTIVITIES	RACKSPACE	CUSTOMER
Support for basic (level 1) functions in MySQL and Postgres databases in Cloud SQL	R,C,I	R,A
Support for advanced (level 2+) functions in MySQL and Postgres databases in Cloud SQL	C,I	R,A
Design Cloud SQL schemas		R,A,C,I
Create and size Cloud Spanner instances	R,A	R,C,I
Design Cloud Spanner schemas and indexes		R,A,C,I
Configure and manage Google Data Transfer Service	R,C,I	R,A
Define object storage lifecycle policy as defined by business objectives	C,I	R,A
Implement object storage lifecycle policy	R,A	C,I
MONITORING		
Configure OS monitoring on GCP compute infrastructure using Rackspace standard tools	R,A	C,I
Configure GCP service monitoring for supported applications using Rackspace standard tools	R,A	C,I
Configure GCP service monitoring for "limited support" data services using Rackspace standard tools.	C,I	R,A
Configure base app monitoring for supported applications using Rackspace standard tools	R,A	C,I
Configure base app monitoring (other)	R,C,I	R,A
Configure app monitoring (outside Rackspace standard tools)	C,I	R,A
Configure and manage aggregation of system logs using Rackspace standard tools	R,A	C,I
Configure and manage aggregation of application logs using Rackspace standard tools	R,C,I	R,A
Configure and manage logs via other mechanisms (e.g. Splunk)	C,I	R,A
Configure application synthetic transaction monitors	C,I	R,A
Configure application performance monitoring (e.g. New Relic, AppDynamics, etc.)	C,I	R,A
TICKETING / ALERTING		
Define alert triggers, thresholds, notification, and remediation	R,A	R,C,I
Create and configure automated responses to known issues	R,A	C,I
Configure standard alerts	R,A,C,I	I
Configure custom alerts	R,C,I	R,A,I
Provide detailed application information for Runbook creation	C,I	R,A
Create RunBook that describes infrastructure and application environment, alert triggers, thresholds, notification, and remediation	R,A	R,C,I
Respond to alerts within SLAs and conduct troubleshooting and escalation as defined in the RunBook	R,A	C,I
BACKUPS AND DISASTER RECOVERY		
Define backup policies and schedules that map to SLAs (e.g. RPO, RTO, RCO)	C,I	R,A
Implement backup policies and schedules that map to SLAs (e.g. RPO, RTO, RCO)	R,A	R,C,I
Configure and manage volume backups and recovery based on customer requirements	R,A	C,I
Test and validate restored volumes from backups	C,I	R,A
Configure and manage relational database back up and recovery based on customer requirements	R,A	C,I
Test and validate restored relational database from backups	C,I	R,A
Install customer-provided file agent backup (must be natively automatable)	R,C,I	R,A
Configure file agent backup	C,I	R,A
Configure and manage agent backups and recovery based on customer requirements	C,I	R,A
Test and validate restored agent backups	C,I	R,A
PATCHING		
Manage OS patching per agreed–upon Runbook	R,A	R,C,I
Manage third-party patching systems	C,I	R,A

APPENDIX 2

Emergency Incident Management
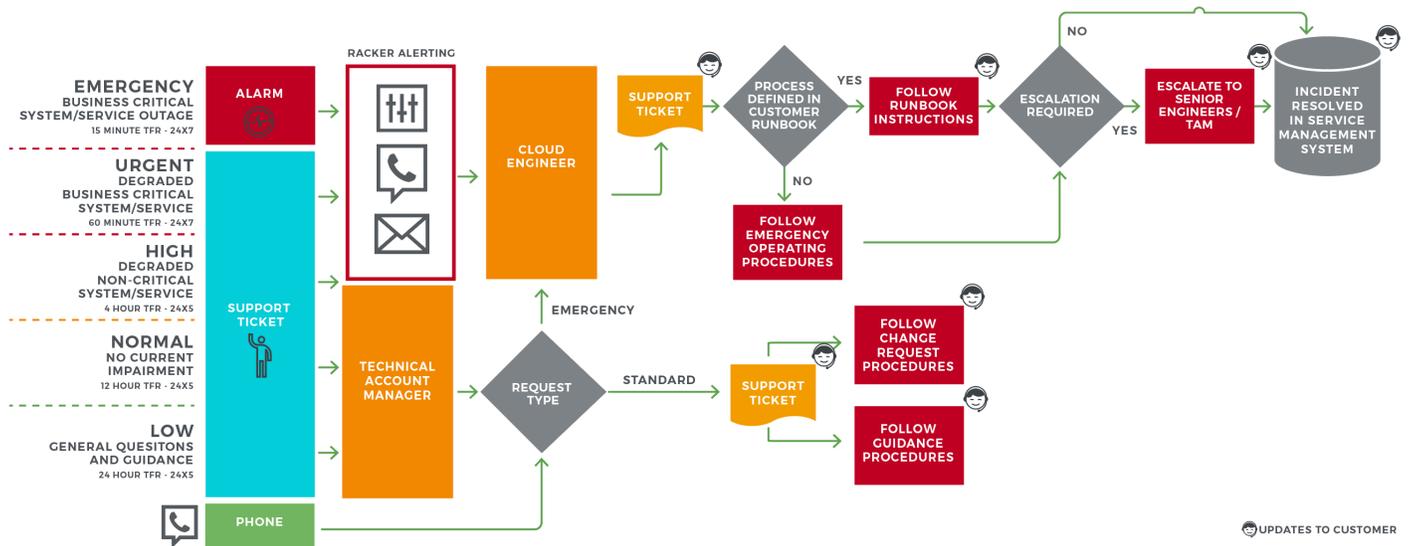
INCIDENT MANAGEMENT

Emergency Incident management refers to the management of incidents where restoration of the services is the primary objective. Rackspace endeavors to restore normal service as quickly as possible when a problem or incident occurs.

Rackspace will apply a consistent approach to all incidents, except where a specific approach is agreed upon with you in accordance with your account's custom runbook.

· Incidents can be initiated by either:
  – Named customer contacts
  – Rackspace
  – Event management tools (e.g., Stackdriver)

· All emergency incidents are logged in tickets accessible via the Rackspace Managed Services for GCP Control Panel.

· Rackspace support teams will investigate the incident in accordance with the agreed service level once logged.

· Priority for tickets can be entered via the control panel. Please refer to your onboarding guide for ticket priority criteria. We reserve the top priority for automated alerting. (E.g. Stackdriver).

· Prior to investigation, Rackspace support will carefully review instructions on your account (documented via the Custom Runbook & Account Management guidelines).

· Rackspace will collaborate with you as well as with any third parties you nominate as technical contacts through the Rackspace Managed Services for GCP Control Panel to resolve the incident.

· At all times you will have visibility into which support engineer is working on the incident via the ticketing system in your control panel.

· The Rackspace support teams will communicate regularly with you throughout the incident, detailing their findings and any actions taken.

· If a support engineer is unable resolve an incident, they may escalate the incident at any time until resolution is achieved. This escalation may be hierarchical (to a more senior engineer or the Technical Account Manager) or functional (involving specialist technical expertise from other functional groups or Google).

· The action required to resolve an incident will vary depending on investigative findings. In some cases, a proposed solution may be complex or cause additional disruptive impact to your GCP environment. In these cases, the incident will be handled as a change through the Rackspace change management process, and you will be consulted to determine the time window during which the solution or change may be implemented. Alternately, you may be required to take action to resolve the incident, which will be communicated should such need occur.

· An incident is deemed closed when you confirm that it is resolved. This is achieved through the incident ticket being set to "Solved" status. You may close the ticket or reopen it if you believe that further work is required.

ABOUT RACKSPACE

Rackspace, the #1 managed cloud company, helps businesses tap the power of cloud computing without the complexity and cost of managing it on their own. Rackspace engineers deliver specialized expertise, easy-to-use tools, and Fanatical Support® for leading technologies developed by AWS, Google, Microsoft, OpenStack, VMware and others. The company serves customers in 120 countries, including more than half of the FORTUNE 100. Rackspace was named a leader in the 2015 Gartner Magic Quadrant for Cloud-Enabled Managed Hosting, and has been honored by Fortune, Forbes, and others as one of the best companies to work for.

Learn more at www.rackspace.com or call us at **1–800–961–2888**.

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