



Service Guide

# Rackspace Managed Public Cloud

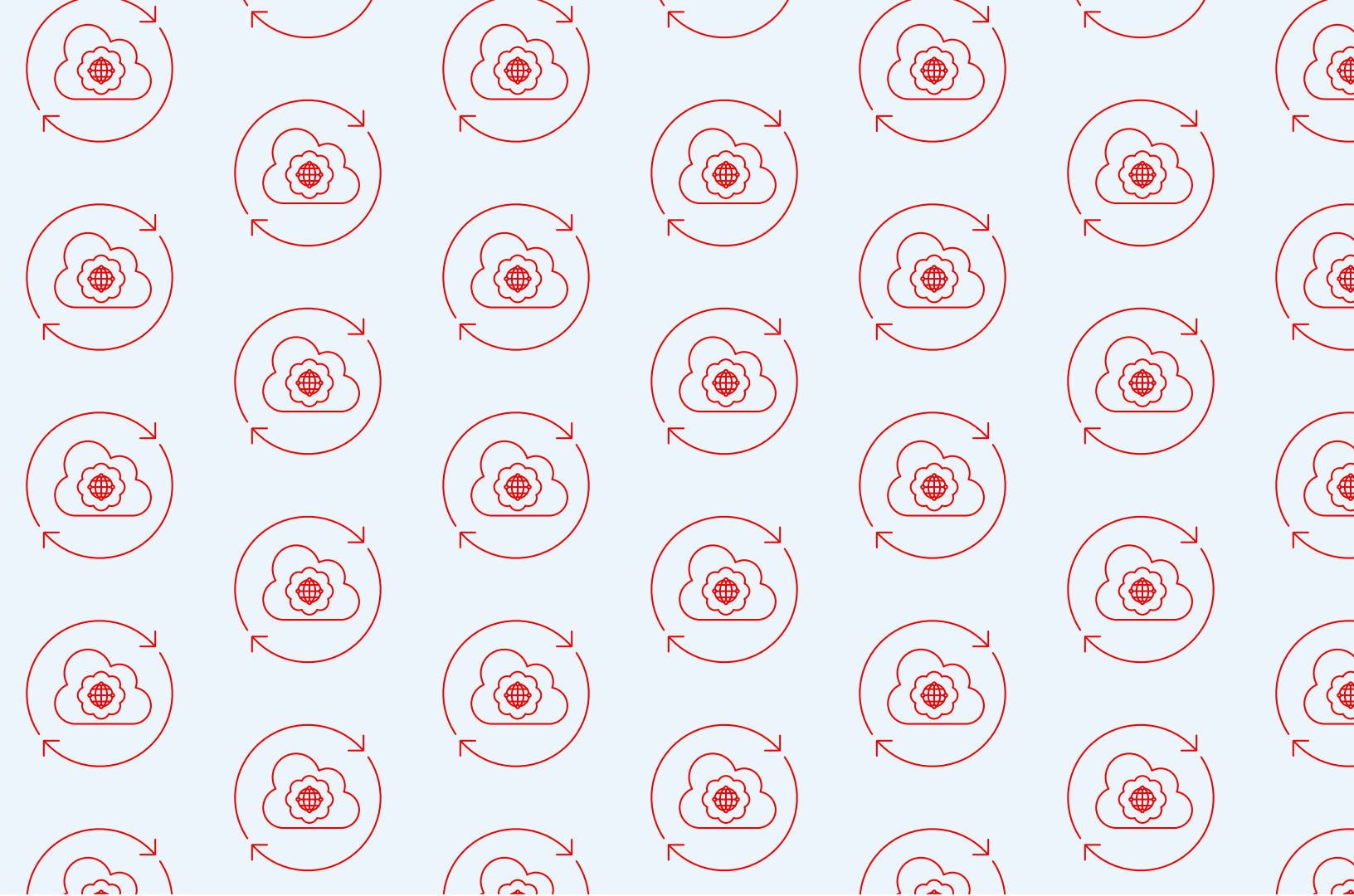
Rackspace Elastic  
Engineering, Rackspace  
Rackspace Modern  
Operations and Optimizer+

**rackspace**  
technology®

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## Overview

Rackspace Technology® helps customers get the most out of their public cloud investment. Experience the agility, flexibility and scalability the public cloud offers — without it becoming your core business.

Public cloud customers trust Rackspace Technology because of our proven expertise managing clouds and our delivery of Fanatical Experience® — our results-obsessed focus on customer success. Rackspace Technology consistently delivers high-quality results and end-to-end support to our customers to help ensure cloud excellence, prevent downtime and greater resilience.

Rackspace Technology delivers tailor-made solutions, such as Rackspace Elastic Engineering and Rackspace Modern Operations, to meet customers in any cloud maturity model, while providing a broad range of support services for end-to-end lifecycle management of cloud environments. We help you innovate and transform in order to achieve your core business objectives while delivering the support you need to meet your evolving business model.

## Supported Cloud Platforms

The services described in this document apply to the following cloud providers:

- Amazon Web Services (AWS)
- Microsoft® Azure®
- Google Cloud Platform



# Rackspace Elastic Engineering

Rackspace Elastic Engineering is a DevOps model that provides on-demand access to public cloud experts through a process of agile-based, ongoing sprints to continually remediate, innovate, evolve and improve a customer's environment. Rackspace Elastic Engineering is delivered as a tier of hours per month by a team (referred to as a "pod") of engineers.

This flexible, collaborative approach to professional services allows customers to dynamically change scope and priorities based on business needs while collaborating side-by-side with highly skilled Rackspace Technology cloud experts to build, migrate, optimize and transform their cloud environments.

The table below provides a sample of the types of services provided by Rackspace Elastic Engineering. Tasks, scheduling, and priorities are coordinated between Rackspace Technology and the customer.

Service	Description
Infrastructure Builds	<ul style="list-style-type: none"><li>• Deploy infrastructure or applications into cloud environments</li><li>• Modify infrastructure to reduce cost, increase performance, and scale optimization</li></ul>
DevOps and Automation	<ul style="list-style-type: none"><li>• Manage, maintain, and enhance automation systems for operational effectiveness, stability, and security</li><li>• Change existing automation systems or develop new automation systems</li></ul>
Performance Management	<ul style="list-style-type: none"><li>• Identify performance targets and continuously adjust infrastructure to deliver the desired performance at the optimal cost</li><li>• Tune applications, provide detailed analysis of application-level performance problems</li></ul>
Database Management	<ul style="list-style-type: none"><li>• Scale databases, and provide performance management and maintenance services</li><li>• Create database clusters, read replicas, etc.</li></ul>
Security Management	<ul style="list-style-type: none"><li>• Use architectural best practices to maintain environment security</li><li>• Respond to security incidents identified by the customer's Security Team</li><li>• Deploy customer-provided third-party security tools</li><li>• Create reports or contribute to reports that a customer needs as part of an infrastructure audit for certification purposes</li></ul>
Disaster Recovery Planning	<ul style="list-style-type: none"><li>• Run disaster recovery solutions, extend existing solutions, and run customer-directed tests of disaster recovery systems</li></ul>
Planned Maintenance	<ul style="list-style-type: none"><li>• Perform preventative maintenance so that infrastructure, database, and application operations are stable and secure during business hours</li><li>• Perform optional maintenance and customer-directed changes during business hours</li><li>• Planned maintenance must be performed during business hours of each pod's local time zone</li></ul>
Cost Optimization	<ul style="list-style-type: none"><li>• Implement architectural changes to support cost management decisions</li></ul>
Advice and Support	<ul style="list-style-type: none"><li>• Answer questions related to cloud usage and best practices, and make a wide variety of cloud service recommendations</li></ul>

# Rackspace Elastic Engineering Experience

Rackspace Elastic Engineering provides customers a block of monthly hours that can be used to engage with a team of Rackspace Technology cloud experts assigned to a customer's account. Rackspace Elastic Engineering is delivered via an organized group of cloud engineers, known as a pod, that operate according to the following principles:

- Pods offer a shared resource model to customers
- Employ a sprint-based project methodology with emphasis on partnering with the customer's internal stakeholders
- Emphasis on enablement, automation, and transformation
- Build a practice of ongoing innovation, rather than focus on break-fix
- Execute projects that deliver continuous, incremental improvement
- Help customers evolve into a cloud native business

Customers are not locked into long-term contacts and are given the opportunity to adjust their monthly hours up or down to match business needs and budgetary constraints.

The pod of engineers brings a deep understanding of the customer's business requirements and cloud environment, providing a more efficient process to deliver expected outcomes.

## Rackspace Elastic Engineering Delivery Model

A Rackspace Elastic Engineering pod possesses the following characteristics:

- **Diversified group of experts:** A pod includes cloud experts, architects, engineers, and an engagement manager working together as a single unit
- **Consistent team structure:** Pod members have been working together across multiple client engagements and projects
- **Shared knowledge and resources:** Pod members create and share resources, platform tools, and frameworks with other pods to continually drive efficiency, which customers then benefit from.

## Rackspace Elastic Engineering Pod Members

Rackspace Elastic Engineering pods consist of the following members:

**Engagement Manager (EM):** The EM is the customer's primary point of contact and is responsible for the success of the customer engagement. The EM oversees monthly hours consumption, customer requests, and acts as a point of escalation. The EM also acts as a Scrum Master, assisting the team in:

- Project planning
- Resource coordination
- Establishing project timelines and quarterly goals
- Scheduling and leading weekly meetings, monthly retrospectives, and quarterly business reviews
- Providing work accomplished, budget, and planning delivery reports

**Lead Cloud Architect:** The Lead Cloud Architect owns the technical management and overall performance of the pod. The lead cloud architect works closely with the EM and the customer to ensure goals are met.

**Cloud Architect (CA):** The CA owns the successful delivery of a solution that meets the customer's technical objectives. The CA understands and translates customer requirements into the architecture and design that constitutes the blueprint for a cloud solution.

**Senior Cloud Engineer (SCE):** The SCE contributes technical expertise in one or more domains in the context of the larger solution. The SCE collaborates with the Cloud Architect and peers to deliver a complete cloud solution.

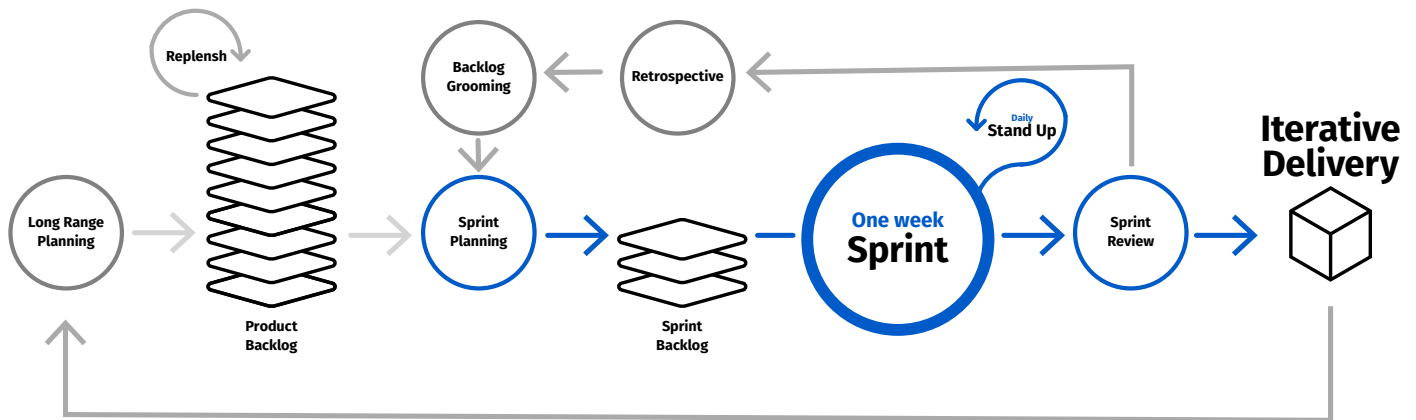
**Cloud Engineer (CE):** The CE is a group of hands-on engineers that write code across cloud infrastructures.

# Rackspace Elastic Engineering Onboarding

At the beginning of the Rackspace Elastic Engineering engagement, Rackspace Technology schedules a project kickoff call with the customer. For new customers, a walk-through of the Rackspace Customer Portal is offered to help them become familiar with Rackspace Technology ticketing services and notifications. All onboarding work is delivered as Rackspace Elastic Engineering time and utilizes hours from the customer's selected Rackspace Elastic Engineering tier.

## Rackspace Elastic Engineering Continuous Development and Delivery

The below diagram illustrates how Rackspace Elastic Engineering and customers partner in the continuous development and delivery model.



**Engagement Delivery Framework:** The Rackspace Elastic Engineering delivery framework provides an agile process which closely follows the principles of Scrum. This approach provides ongoing visibility to key stakeholders, which allows required course corrections to be made throughout the project. Rackspace Technology begins the engagement with a long-range planning session, where the project is divided into achievable work items that can be delivered and demonstrated in weekly iterations.

**Backlog and Sprint Planning:** Before each iteration (known as a sprint), Rackspace Technology works with customer to document and review a backlog of user stories. This planning meeting is known as backlog grooming. At the start of each sprint, Rackspace Technology and the customer participate in another sprint planning meeting where new tasks for the sprint are selected from the top of the backlog. As much as possible, any unknown details regarding the selected tasks will be resolved during this meeting. If a task requires additional definition, analysis, or design work, then an alternate task to accomplish that work during the sprint can be selected in place of the ambiguous task.

**During the Sprint:** A sprint begins on the day of the sprint planning meeting and ends the day before the next planning meeting. During the sprint, Rackspace Technology engineers conduct all analysis, design, engineering, and testing activities. The team meets each day for a standup meeting, where each member discusses their previous day's accomplishments, their plan for the day, and any issues that are blocking progress.

**Sprint Demo and Retrospective:** The end of each sprint is celebrated with a demonstration to key stakeholders of the functionality completed during the sprint. The end-of-sprint demonstration allows the customer to continually monitor the progress of the project. The team also holds a retrospective meeting, where lessons from the completed sprint are used to improve future sprints.

**Customer Acceptance:** Rackspace Technology is responsible for the quality and performance of Rackspace Technology resources. Rackspace Technology adheres to its standard Engagement Delivery Framework, and during the sprint planning meeting, tasks and acceptance criteria are reviewed with the customer. At the end of each sprint, Rackspace Technology reviews the completed tasks with the customer's stakeholders. Tasks are marked complete if they meet the agreed upon acceptance criteria.

If the task does not meet the agreed-upon acceptance criteria, and the customer wants to make changes to that task, an additional task is created, added to the backlog, and prioritized by the customer and incorporated into a later sprint.

# Rackspace Elastic Engineering Hourly Consumption

Customers will be invoiced each month based on the Rackspace Elastic Engineering tier purchased.

Unused hours do not carry over to the next month and no credits or refunds are available for unused hours. On the service start date, the customer starts at the purchased tier. Customers can change tiers subject to the following restrictions:

- Customer may request an upgrade to a higher tier at any time, and such upgrade will be effective beginning on the first day of the second full calendar month after the customer's upgrade request.
- Customer may not request downgrade to a lower tier within 30 days of a tier upgrade taking effect.
- Any notice received within this 30-day downgrade moratorium will be considered received on the 31st day following downgrade, and downgrade will be effective beginning on the first day of the second full calendar month after a request is considered received.
- Tier change requests must be communicated to Rackspace Technology via ticket submitted through the Rackspace Technology provided Customer Portal. Notwithstanding the foregoing, the customer cannot downgrade its applicable tier for the first 90 days of its services.

## Rackspace Elastic Engineering Roles and Responsibilities

The following table identifies who is responsible and accountable for specific engagement activities:

- **Responsible** means, for the purposes of the RACI matrices, the party who carries out the process or task assignment and is responsible to get the job done.
- **Accountable** means, for the purposes of the RACI matrices, the person who is ultimately accountable for the process or task being completed appropriately.
- **Consulted** means, for the purposes of the RACI matrices, those who provide input based on how it will impact the business/tasks.
- **Informed** means, for the purposes of the RACI matrices, those who receive output from the process or task, or who have a need to stay informed.

Activity	Customer	Rackspace Elastic Engineering
Provide Rackspace Technology with a list of the customer's engineers that will use Rackspace Technology services.	Accountable	Informed
Periodically update list of the customer's engineers that will use Rackspace Technology services.	Accountable	Informed
Train the customer's users, clients, and suppliers to follow Rackspace Technology's established procedures to report incidents or make requests.	Informed	Accountable
Provide Rackspace Technology's engineers with full administrative access to all cloud accounts supported by the pod.	Accountable	Informed
Make staff available to work with Rackspace Technology resources during the handling of an incident or request.	Accountable	Informed
Provide Rackspace Technology all documentation, information, and knowledge that Rackspace Technology requests in relation to the cloud environments supported by the pod.	Accountable	Informed
Provide customers with timely reports related to off hours incidents and post-mortem of any infrastructure related incidents that occur in accounts managed by the assigned pod.	Informed	Accountable

In addition, the following customer responsibilities are necessary for successful completion of Rackspace Elastic Engineering services.

- Customer must assign a primary point of contact with whom Rackspace Technology will interface, who has the authority to act on the customer's behalf in all aspects of the service.
- Review and approve all deliverables, as necessary
- Ensure that any communication between the customer and Rackspace Technology is made via the appropriate Engagement Manager

# Rackspace Modern Operations

Customers today face a myriad of challenges, from architectural complexity and scarce expertise to business resilience, rapid pace of cloud change and cost efficiency. Customers need partners like Rackspace Technology to help mitigate these challenges and provide valued-added services that scale with the business. Rackspace Modern Operations is a stand-alone service that provides 24x7x365 ticket- and phone-based support for operational and systems administration tasks in the cloud. This service provides customers of all cloud maturity levels an ability to achieve operational excellence. In addition, Rackspace Modern Operations provides a glide path to modernization via our expertise-based support model and compatibility with Rackspace Elastic Engineering. Rackspace Modern Operations provides cloud expertise across the three major public cloud providers (AWS, Microsoft Azure and Google Cloud Platform), allowing customers the ability to offload and innovate, while managing risk at the same time.

## Rackspace Modern Operations Customer Experience

- Named Customer Success Manager (CSM) with customer affinity
- Named Technical Account Manager (TAM) with customer affinity (if customer infrastructure spend is greater than \$20K per month)
- Ability to purchase services of Lead Engineer (defined below) with customer affinity (Premium Tier)
- Emphasis on management and increasing operational resiliency
- Provide break-fix support in cloud environment
- Configure and enable cloud native operational services (monitoring, security, backup, patching, OS, etc.)
- Act as customer advocate and provide value-add insights and guidance
- Allows customers to focus on core business objectives

Customers are not locked into long-term contracts and can utilize the pool of hours for a wide variety of operational and system administration tasks. In addition, if the need arises, customers can purchase additional hours on an ad-hoc or ongoing basis to help ensure their operational needs are managed properly so that they can focus on business strategy and transformation. Unlike a traditional reactive-only support model, Rackspace Modern Operations provides customers' cloud environments with the attention needed to help ensure resiliency and uptime, while also providing valuable insights into cloud best practices and areas of improvement. The support staff at Rackspace Technology has decades of cloud expertise and will develop a deep understanding of customers' business requirements and cloud environments. Cloud engineers manage not only a customer's compute, storage, network, and operating system resources, but also the cloud native complex tools that run on top of that infrastructure. As customer business needs change, Rackspace Modern Operations capabilities grow and evolve to help guide and support customers throughout the entire cloud lifecycle.

## Rackspace Modern Operations Delivery Model

Customer outcomes and success are driven by the following:

- **A diversified group of experts:** Deep cloud expertise from certified cloud engineers providing cloud specific knowledge
- **Consistent team structure:** All customers will have a named Customer Success Manager (CSM), and qualifying customers will also have a named Technical Account Manager (TAM), who will act as guides and customer advocates. In addition, customers who purchase the Premium Tier will have a named Lead Engineer (LE) to provide greater in-depth cloud expertise and advisory services. See below for more CSM, TAM and LE details.

**Shared knowledge and resources:** Customers benefit from shared knowledge and tools, and can achieve economies of scale as our engineers apply best practices learned from across our large customer base and leverage tools and processes designed for cloud operations.



# Rackspace Modern Operations Delivery Model

Rackspace Modern Operations support consists of the following members:

**Customer Success Manager (CSM):** The CSM is the customers' primary business point of contact and is responsible for the success of each customer engagement. The CSM assists customers with Rackspace Technology ticketing system support, Customer Portal walkthroughs, internal support escalations and billing questions.

**Technical Account Manager (TAM)\*:** The TAM is the customer's primary technical point of contact and is responsible for the success and health of the customer's cloud environment. The TAM is primarily the customer advocate who will work with Rackspace Technology cloud engineers, CSM, and other stakeholders to translate business and technical objectives into Rackspace Technology solutions. TAMs provide impartial advocacy, ongoing support, and assistance for workloads; bring innovative technologies and products to the customer; and provide value-add insight to the customer to help ensure cloud efficiency and operational excellence in a hands-off keyboard role.

\* Applies to customers meeting qualifying spend

**Cloud Engineers (CE):** The CEs are a group of cloud-specific and certified hands-on engineers that write automation scripts across cloud infrastructures, configure cloud services, and provide wide-ranging troubleshooting and support to help ensure the customer cloud environments have maximum uptime.

**Lead Engineer (LE)\*\*:** The LE is an experienced cloud expert who provides customers with tactical and strategic thought leadership, design and optimization recommendations, cloud best practices, and governance advice. In addition, the LE has customer affinity and builds a deep understanding of each customer's unique business and technological requirements to provide insight designed to make long-lasting and impactful recommendations. Lastly, the LE provides customers with proactive reviews, training sessions, and architecture reviews which create an ecosphere of proactivity by design. The LE brings extensive experience related to enterprise architecture, strategy and thought leadership, while providing hands-on keyboard services. Think of the LE as your fractional CTO who can help ensure that your business has the expertise needed to manage cloud environments.

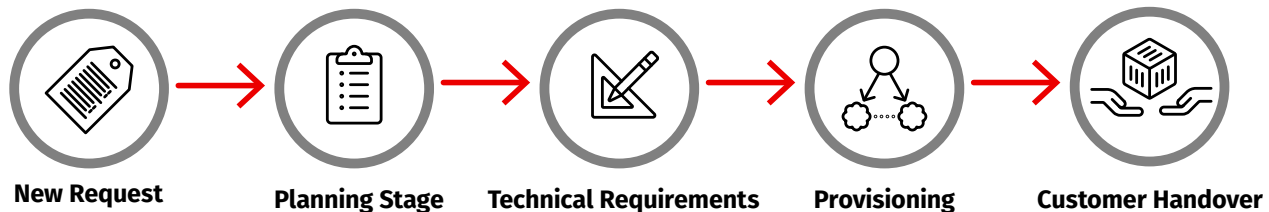
\*\* Premium Tier purchase required

## Rackspace Modern Operations Onboarding and Implementation

A customer purchasing Rackspace Modern Operations as a stand-alone service offering will be onboarded by the Rackspace Technology onboarding team after a solution design has been completed by Rackspace Technology Cloud Solution Architects and cloud specific pre-requisites are met. After initial onboarding is completed, future build activities will be delivered under Rackspace Modern Operations and use hours from the customer's pool of available hours.

A customer purchasing Rackspace Modern Operations in conjunction with Rackspace Elastic Engineering will be onboarded by the Rackspace Elastic Engineering team. Provisioning services conducted by the Rackspace Technology onboarding team are available Monday through Friday, during business hours, local time. Depending upon the size, complexity and contract length, an onboarding fee may be applicable, based upon the estimated build solution determined by the Solution Architects.

At the beginning of the onboarding process, Rackspace Technology schedules a project kickoff call with the customer. For new customers, a walk-through of the Customer Portal is offered to help customers become familiar with Rackspace Technology ticketing services and notifications. The below process details the onboarding and implementation process for customers purchasing Rackspace Modern Operations as a stand-alone service.



Once a new opportunity is closed, a Technical Onboarding Manager (TOM) is assigned to guide the customer through the implementation process. Afterward, a call with the customer will occur to outline requirements so that the solution design can be created. Once the customer has approved the solution design, the onboarding team will begin deploying infrastructure, creating custom runbooks documenting service delivery and support, conducting quality checks, and preparing the environment for customer handover. Once the cloud environment has been handed over to the customer and accepted by the customer, onboarding will be completed in

# Rackspace Modern Operations Pricing Model

Rackspace Modern Operations is based on a customer's cloud infrastructure spend, providing a minimum number of allocated hours per month, to be used as desired for operational tasks. Customers will be invoiced monthly based on the tier assigned. Customers are required to purchase a minimum allotment of support hours that is based on infrastructure spend. The higher the infrastructure spend, the more support hours are required for the minimum allotment. A tiered model is used to map bands of infrastructure spend to required minimum hours.

Rackspace Modern Operations is applied at the AWS Account, Azure Subscription and Google Cloud project level, providing customers flexibility in managing their environments.

Customers who purchase Rackspace Modern Operations in conjunction with Rackspace Elastic Engineering will have the option to pay a reduced percentage of infrastructure spend, compared to customers who purchase Rackspace Modern Operations as a stand-alone service.

A customer may purchase additional blocks of hours in the event business requirements expand beyond the base allotted hours.

Customers who require additional cloud expertise for help with long-range planning, developing a cohesive cloud strategy and thought leadership have the option to purchase the services of a Lead Engineer, also known as the Premium Tier. The services purchase in the Premium Tier will be tracked separately from the minimum tier allotted hours in Rackspace Modern Operations.

All hours, whether related to the Standard Tier or the Premium Tier, shall be tracked and counted by internal Rackspace Technology tooling and shall be displayed in the Customer Portal. In addition, the Rackspace Technology CSM will work with the customer to help ensure that the appropriate number of hours are allocated to an account. Rackspace Technology automation in the Customer Portal shall notify the customer, CSM and TAM once certain percentages of hourly utilization have been reached.

Unused hours do not carry over to the next month, and no credits or refunds are available for unused hours. Once the environment has been handed over to the customer, the utilization of hours by a customer shall commence. All support functions and work shall count against the customer's allotted hours.

Customers have the ability to flex their allotted hours once every quarter to account for incident management and support overages as a reprieve. If a customer repeatedly exceeds the number of monthly allotted hours, the CSM and TAM will work with the customer to conduct a true-up on a quarterly basis of the aggregate hours utilized, whereby the customer will need to either pay for the overages or purchase additional hours going forward to ensure proper support coverage.

## Rackspace Modern Operations Support Scope

The Rackspace Modern Operations service offering is separated into two functional buckets of support: core services and reasonable endeavors. The core services, enumerated in the Expertise Catalogs, are those cloud services in which Rackspace Technology has deep cloud expertise and requires little or no upskilling and training to support. All other services outside of the Expertise Catalog will be considered reasonable endeavors and may require additional time and/or training. Rackspace Technology has developed this methodology to ensure customers are supported in their adoption of new cloud provider services while also creating an organic training mechanism to help ensure that Rackspace Technology cloud engineers can continue to evolve their cloud expertise according to customer needs. Product management, cloud engineers, and other business stakeholders utilize an agile approach to help ensure regular reviews of the Expertise Catalog are conducted and to promote greater support efficiency amongst cloud engineers.

In the event that the Rackspace Technology cloud engineers are not able to support a cloud service, or it does not fit the criteria of Rackspace Modern Operations (ex. long running projects), the customer may be referred to Rackspace Elastic Engineering or Rackspace Professional Services.

# Rackspace Modern Operations AWS Expertise Catalog

The following table enumerates the core cloud services supported by Rackspace Technology AWS cloud engineers. All AWS cloud services outside of those listed below are to be considered reasonable endeavors and may be subject to additional chargeable time (including training time, as applicable) in order to troubleshoot/support.

AWS Service	Service Type
API Gateway	Account Governance
Athena	Data Analytics
AWS Backup	Backup
AWS Config	Account Governance
AWS Organizations	Account Governance
AWS Systems Manager (SSM)	Fleet Management
AWS Secrets Manager	Security
AWS Directory Service	Security
AWS Certificate Manager	Security
AWS CloudFormation	Infrastructure as Code (IaC)
Amazon CloudFront	CDN
AWS CloudTrail	Logging
Amazon CloudWatch	Monitoring
AWS CodeBuild	CI/CD
AWS CodeDeploy	CI/CD
AWS CodePipeline	CI/CD
Amazon Cognito	Security
AWS Control Tower	Account Governance
Amazon DynamoDB	Database
Amazon EC2 Container Service (ECS)	Containers
AWS Elastic Beanstalk	Orchestration
Amazon Elastic Compute Cloud (EC2)	Compute
Amazon Elastic Container Service for Kubernetes (EKS)	Containers
Amazon Elastic File System (EFS)	Storage
AWS Elastic Load Balancers (ELB)	Networking
Amazon ElastiCache	Caching
AWS Event Bridge	Event-driven
Amazon FSx	Storage
AWS Identity and Access Management (IAM)	Security
AWS Key Management Service (KMS)	Security
AWS Lambda	Compute
Amazon Redshift	Database
Amazon Relational Database Service (RDS)	Database

# Rackspace Modern Operations AWS Expertise Catalog

AWS Service	Service Type
Amazon Route 53	DNS
Amazon Simple Email Service (SES)	Messaging
Amazon Simple Notification Service (SNS)	Messaging
Amazon Simple Queue Service (SQS)	Messaging
Amazon Simple Storage Service (S3)	Storage
AWS Transit Gateway (TGW)	Networking
Amazon Virtual Private Cloud (VPC)	Networking

# Rackspace Modern Operations Azure Expertise Catalog

The following table enumerates the core cloud services supported by Rackspace Technology Azure cloud engineers. All Azure cloud services outside of those listed below are to be considered reasonable endeavors and may be subject to additional billable time (including training time, as applicable) in order to troubleshoot/support.

AWS Service	Service Type
Azure Active Directory	Security
Azure App Service Environment	Platform
Azure Application Gateway	Load Balancer
Azure Backup	Backup
Azure Cosmos DB	Database
Azure Networking Support	Network
Azure Redis Cache	Cache
Azure SQL	Database
Azure SQL Managed Instances	Database
Azure Storage	Storage
Azure Site Recovery	Disaster Recovery
Azure Update Management	Patching
Azure Virtual Machine	Compute
Azure Virtual Machine Scale Set	Compute
Azure App Services	Platform
Azure Service Bus	Messaging
SQL Server Always On	Database
Azure Network Performance Monitor	Monitoring
Azure ExpressRoute	Network
Azure Kubernetes Service	Containers
Azure Key Vault	Security
Azure Policy	Governance
Azure Defender for Cloud	Security
Azure NetApp Files	Storage
Azure Virtual Network	Network
Azure Front Door	CDN
Azure Managed Disks	Storage
Azure Firewall	Network
Azure Virtual WAN	Network
Azure Automation	Management

# Rackspace Modern Operations Azure Expertise Catalog

AWS Service	Service Type
Azure Automation	Management
Azure Monitor	Monitoring
Azure Container Registry	Registry
Azure Event Grid	Management
Azure Sentinel	Security
Azure Logic Apps	Compute
Azure API Management	Management
Azure Functions	Compute

# Rackspace Modern Operations Google Cloud Expertise Catalog

The following table enumerates the core cloud services supported by Rackspace Technology Google Cloud engineers. All Google Cloud services outside of those listed below are to be considered reasonable endeavors and may be subject to additional billable time (including training time, as applicable) in order to troubleshoot/support.

Google Cloud Service	Service Type
Google Compute Engine (GCE)	Compute
Google Kubernetes Engine (GKE)	Compute
Google App Engine	Compute
Cloud Functions	Compute
Cloud Run	Compute
Cloud Monitoring	Management
Cloud Logging	Management
Cloud Scheduler	Management
Container/Artifact Registry	Management
Cloud Source Repositories	Management
Cloud DNS	Management
OS Patch Management	Management
OS Configuration Management	Management
Inventory Management Service	Management
Google Virtual Private Cloud (VPC)	Network
Cloud CDN	Network
Cloud Interconnect	Network
Cloud Load Balancing	Network
Cloud VPN	Network
Identity Aware Proxy (IAP)	Security
Cloud Armor	Security
Cloud Identity Access Management (IAM)	Security
Secrets Manager	Security
Security Command Centre	Security
Cloud Storage	Storage
Cloud SQL	Storage
Cloud Spanner	Storage
Cloud Memorystore	Storage
Cloud Volumes	Storage
Filestore	Storage
BigQuery	Analytics
Cloud Pub/Sub	Analytics
Cloud Composer	Analytics

# Rackspace Modern Operations Service Level Agreement

Rackspace Technology commits to the following initial response times for alerts.

Severity	Definition	Contact Method	Initial Response Time
Emergency	Business-critical system outage/extreme business impact	Automated alert	15 minutes
Urgent	Business critical system outage with extreme business impact/production system outage/significant business impact	Automated alert or ticket	60 minutes
High	Production system Impaired with moderate business impact	Automated alert or ticket	4 hours
Normal	Minimal business impact	Automated alert or ticket	12 hours
Low	General monitoring information, questions, and guidance	Ticket	24 hours

## Rackspace Modern Operations Dependencies

**AWS-specific** – Rackspace Modern Operations requires that either an Optimizer+ or no-resell customer always upholds AWS Business Support or better on all accounts using Rackspace Modern Operations. This dependency helps to ensure our ability to submit support cases on the behalf of customers as a result of monitoring alerts.

## Rackspace Modern Operations Customer Responsibilities

The following table identifies who is responsible and accountable for specific engagement activities below:

- **Responsible** means, for the purposes of the RACI matrices, the party who carries out the process or task assignment and is responsible to get the job done.
- **Accountable** means, for the purposes of the RACI matrices, the person who is ultimately accountable for the process or task being completed appropriately.
- **Consulted** means, for the purposes of the RACI matrices, those who provide input based on how it will impact the business/tasks.
- **Informed** means, for the purposes of the RACI matrices, those who receive output from the process or task, or who have a need to stay informed.

Activity	Customer	Rackspace Technology
Periodically update the list of the customer's engineers who will use Rackspace Technology services.	Accountable	Informed
Provide training to the customer's users, clients, and suppliers to follow Rackspace Technology procedures to report incidents or make requests.	Informed	Accountable
Provide Rackspace Technology engineers with sufficient access, as defined by Rackspace Technology to all cloud accounts supported.	Accountable	Informed
Make staff available to work with Rackspace Technology resources during the handling of an incident or request.	Responsible	Informed
Provide Rackspace Technology with all documentation, information, and knowledge that it requests in relation to the cloud environments supported.	Responsible	Accountable
Provide customers with timely reports related to off-hours incidents and conduct post-mortem review of any infrastructure-related incidents that occur in accounts managed by Rackspace Technology.	Informed	Accountable



# Rackspace Modern Operations Monitoring & Resolution Overview

Rackspace Technology leverages cloud native monitoring systems to deliver Rackspace Modern Operations Monitoring and Response (MOMR).

This is CloudWatch on AWS, Azure Monitor on Azure, and Cloud Monitoring in Google Cloud.

The cloud monitoring services available with AWS, Azure, or Google Cloud are the primary monitoring systems used by Rackspace Modern Operations support teams. While the cloud monitoring service might be available to customer accounts at all service levels, customers using the MOMR service can opt to have Rackspace Technology respond to generated alarms using standard or customized runbooks. Rackspace Watchman provides the middleware responsible for creating Rackspace Technology support tickets from the alarms and the certified experts who take the actions necessary to mitigate the indicated alarm conditions 24x7x365.

Cloud monitoring alarms are configured to trigger when the value of a specified metric deviates from its expected value for a specified period of time. For example, if an application URL is down or CPU usage on a compute instance exceeds 80% for a period of five minutes or more, the alarm is configured to send an alert to Rackspace Watchman to generate a ticket for further investigation by Rackspace Modern Operations support.

Cloud monitoring services provide the ability to create custom metrics to allow monitoring of the resources that are most critical to applications' uptime. With MOMR, customers will collaborate with the support team to create the customized monitoring solution that best fits their needs.

With Rackspace Technology acting as an extension of your 24x7x365 operational team, you can focus on what matters most to your business.

## Rackspace Modern Operations Monitoring & Resolution Scope

The following list describes the scope of activities that Rackspace Technology performs as part of Rackspace Modern Operations Monitoring & Response.

Configure monitoring based on well-established best practices and principles using Cloud vendor tooling, including:

- Google Cloud Monitoring
- AWS CloudWatch, AWS EventBridge, CloudWatch Synthetics
- Azure Monitor

Support for external monitoring tools — external monitoring tools refers to monitoring tools provided by third-party sources.

- Support will be available for New Relic, Datadog and Prometheus/Alert Manager.
- Rackspace Technology support will be limited to ingesting events from these sources and following the documented runbook.
- Rackspace Technology will not access these tools for any purpose. Customer will be responsible for configuring and managing alerts. If an equivalent monitor is available in the cloud vendor native tool, Rackspace Technology recommends using those monitors as it allows Rackspace Technology to better support the end-to-end workflow.
- Rackspace Technology will provide configuration settings and documentation to help customer configure the respective monitoring tools to be able to send events to the Rackspace Technology ticketing system. The actual configuration of the third-party tools is the customer's responsibility. Please review our online product guide for more information.

Rackspace Technology will work with the customer to help ensure that the monitoring setup is working as expected, but the customer is ultimately responsible for these third-party monitoring configurations. Here are the following services that Rackspace Modern Operations support will take:

- Write a customized runbook that outlines alert troubleshooting suggestions per current best-practices.
- Follow alert troubleshooting suggestions as outlined in the runbook.
- The Rackspace Technology response is bound by the SLAs documented in the Service Level Agreement section.
- Rackspace Technology restores the service to an available or degraded-but-functional state either by following the runbook, taking appropriate actions, or by escalating to the customer.
- Install and configure monitoring agents.
- Provide an on-demand summary of the monitors configured on an account/project/subscription.
- Create monitoring dashboards using cloud native services and tools.
- Assist in Root Cause Analysis activities.
- Basic security monitoring.

Note: The following activities are not included in the Rackspace Modern Operations service:

- 24x7x365 Security Operations Center (SOC) and advanced security services
- Major architectural changes
- Application support and operations

## Rackspace Modern Operations Monitoring & Resolution Runbook

Rackspace Technology shall work with customer to create a customized monitoring response runbook. The runbook documents any actions specific to the customer's environment that is needed in the assistance of troubleshooting and/or escalations. These customer runbooks are designed to present the right information, at the right time, to the Rackspace Technology support team. It is important to be able to respond quickly and effectively to service disruptions. Providing relevant details and documented suggestions to our support team increases the availability of customer solutions and overall responsiveness.

Rackspace Technology shall:

- Develop a monitoring operations runbook in accordance with the transition plan that complies with the following conditions:
  - The monitoring operations runbook documents any specific customer procedures needed to properly troubleshoot monitoring alerts.
  - Rackspace Technology and customer shall jointly use the monitoring operations runbook to enable close cooperation and communication between the parties.
  - The monitoring operations runbook includes checkpoint reviews, testing, acceptance, and other procedures for customer to assure the quality of Rackspace Technology performance.
  - Perform the services in accordance with current best practices with the aid of customer-approved operations runbook.

The operations runbook contains the following items, at a minimum:

- Steps to resolve issue
- AWS accounts, Azure subscriptions/management groups, or Google Cloud projects in scope
- Customer contact escalation plan
- Rackspace Technology escalation plan
- List of monitors
- List of customer-specific procedures
- Customer environment documentation

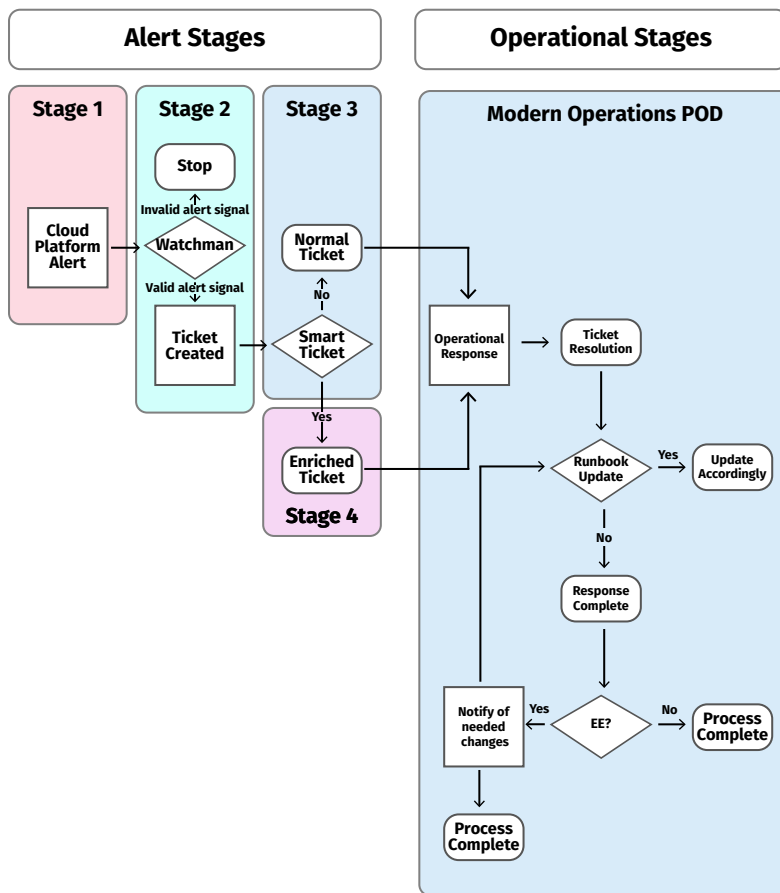
# Rackspace Modern Operations Monitoring & Resolution Onboarding

Onboarding activities are critical to ensuring that the right level of monitoring is applied to workloads based on their criticality.

At the beginning of the engagement, a Rackspace Technology Technical Onboarding Manager (TOM) works with the customer to complete the following onboarding activities:

1. The customer is taken through the onboarding process, which includes an introduction to the Rackspace Technology Customer Portal and account setup.
2. Rackspace Technology meets with the customer to advise on a monitoring strategy that meets the customer's requirements. If the customer has also purchased the Rackspace Elastic Engineering service, this consultative engagement is delivered by the customer's Rackspace Elastic Engineering team. Otherwise, the Rackspace Technology onboarding team executes this engagement.
3. A customer-specific runbook is written to document cloud environment monitors, thresholds, and basic troubleshooting steps.
4. After the customer agrees to the runbook, Rackspace Technology deploys the monitors into the customer's cloud environment.

# Rackspace Modern Operations Monitoring & Resolution Ticketing Process



**Stage 1:** Monitoring is performed by the cloud monitoring tooling. For monitors that require action by Rackspace Technology, we create alert policies that are ingested by Rackspace Watchman.

**Stage 2:** Rackspace Watchman generates tickets using the determined priority level and then passes the ticket to the Rackspace Technology SmartTicket system.

**Stage 3:** The SmartTicket system enriches the alert by collecting diagnostics information about the alert. The diagnostics can be as simple as collecting audit logs close to the alert time, or running diagnostics on the underlying operating system. SmartTicket automation may attempt to auto-resolve the alerted issue, thus requiring less manual interaction.

At the same time the SmartTicket system collects diagnostics information about the ticket, the ticket is visible to the Rackspace Technology support team, who will begin working with the customer, consulting the custom runbook, ensuring the runbook is updated and begin other support related activities.

# Rackspace Modern Operations Virtual Machine Ops

Virtual Machine Operations (VMOps) makes your most critical and time-consuming server tasks easy to complete. Designed to be multi-cloud, VM Ops provides patch management for Customer's virtual machines (VMs) wherever they are located through a simple interface and included as part of the Rackspace Modern Operations service. Set up your cloud the way you want and then proceed to your migrations, transformations, and new development activities.

## Rackspace Modern Operations Patch Management

### Automated VM Ops-Patching

Rackspace Technology recommends this model for the majority of cloud servers as it aligns well with modern cloud operations and automation principles. While initial setup will require some effort, ongoing maintenance of this model is much easier and requires less effort. In this model, Rackspace Technology will:

- Leverage cloud native tooling (AWS SSM, Azure AUM, Google Cloud OS Patch management) to setup server patch groups and configure patching policies and/or baselines.
- Servers will be patched automatically using scheduled maintenance windows and/or OS schedulers.
- Patch exclusions and policies will be governed by the features provided by the cloud native tooling.
- Reporting will also be provided by cloud tooling.
- Customer will be required to provide a runbook for any pre-approved actions that can be taken by Rackspace Technology in relation to patching.

### API and UI access via Rackspace Technology Control Panel

VM Ops patch management provides standard baseline patching. Customers can create custom patch baselines, patch groups, and maintenance windows to adhere to their own patching strategy. All these services are available via the API for customization.

The patch baselines are defined according to best practices for a wide variety of systems, including ERP, Microsoft SQL, Windows, and Linux OS, but can be configured to fit customer needs. In addition, customers can inject their own customization for patching to allow for process interruptions like reboots, non-standard package downloads, and so on. Customization may be limited to the abilities of the cloud native patch management tooling.

Task	Owner
Provide details of patching groups, related configuration, and any custom instructions	Customer
Provide operating system guidance in relation to patching	Rackspace Modern Operations
Setup of cloud native tooling as per the requirements	Rackspace Modern Operations
Setup and configuration of patching windows	Rackspace Modern Operations
Patch reporting guidance as per the features of the Cloud native tooling	Rackspace Modern Operations
Troubleshooting patching failures or patching configuration	Rackspace Modern Operations

## Manual VM Ops Patching

For services that require hand-holding and manual intervention, we can assist with the following:

- Setup of OS repositories and any OS wide patching exclusions
- Collaborate with the customer and other Rackspace Technology teams (if additional services are consumed) to build a robust patching plan. While Rackspace Technology will execute the plan, the customer is ultimately responsible for the sign-off of the plan. A plan must contain the following:
  - Step-by-step instructions for all the actions take — for example, commands to stop a service and start it.
  - Any order of patching for servers in a cluster or that have unique requirements
  - Steps to test that the application is functional after patches have been applied
  - Any rollback instructions
  - Escalation instructions and contacts if patching issues cannot be resolved
  - The plan and any future changes must be quality checked via peer review

- Execution of the patching plan as per desired schedule. The schedule can be decided by the customer, but is subject to availability of a maintenance window slot with the Rackspace Technology support teams. Customer is responsible for notifying Rackspace Technology using a ticket.
- Troubleshooting & escalation as per the plan.

Task	Owner
Setup of OS repositories and any OS wide patching exclusions	Rackspace Modern Operations
Build a patching plan in conjunction with the customer and other teams	Rackspace Modern Operations
Provide operating system guidance in relation to patching	Rackspace Modern Operations
Provide application specific details in the patching plan. Instructions to stop/start applications, instructions to test applications etc.	Customer (or other Rackspace Technology services, if purchased)
Notify Rackspace Technology and coordinate patching maintenances	Customer (or other Rackspace Technology services, if purchased)
Manually apply patching as per the agreed maintenance window	Rackspace Modern Operations
Troubleshooting patching failures or patching configuration	Rackspace Modern Operations

## Limitations

The following apply to both models:

- Only operating systems that are supported by the OS vendor are supported by Rackspace Modern Operations. EOL products are not supported.
- Unless there is a customer-defined process, Rackspace Technology does not test patches.
- Patching will use OS-supplied package managers (like Yum, Apt). Patching libraries or applications using source code is not supported.

## Rackspace Modern Operations Performance Monitoring

A critical part of Rackspace Modern Operations VMOps is monitoring virtual machine performance. This is key to maintaining healthy applications and will also provide needed data for financial optimization exercises. Whether you are on AWS, Azure, or Google Cloud, VMOps comes standard with a robust set of default performance monitoring techniques and alerts. Depending upon the cloud provider, these defaults can be set up through automated functions or manually configured. Should there be a need to add an additional alert that does not exist, this can be done as well utilizing allotted hours.

In addition to the infrastructure needed to perform monitoring, there will be a period of “tuning” the alerts to your specific environment. Because no two environments are the same, it is important to adjust monitoring/alerting to provide the most accurate representation of system use and performance.

Examples of default performance monitoring telemetry:

- If processor queues are filling up, check CPU usage exceeding thresholds over a given period of time
- Operation System installation disk capacity issues
- Consumed system memory over a given period of time

# Rackspace Modern Operations Backup and Recovery

Rackspace Modern Operations VMOps also provides robust protections against data loss utilizing each cloud native backup and recovery features. Each backup solution will be deployed with default settings/configurations and is capable of more advanced customization, which is not included.

The following cloud native products are used by default

- Azure Backup
- Google Backup and Disaster Recovery
- AWS Backup

Examples of how Rackspace Modern Operations supports Backup and Recovery

- Setup of cloud native backup resources
- Support to aid customers in implementing jobs for additional backup sources
- Monitor backup job failure
- Restore snapshot backups of managed services
- Delete existing backups

## Optimizer+

Optimizer provides world-class operational tooling, support, and expert guidance needed to get the most out of public cloud infrastructure. With Optimizer+, a team of cost-optimization experts provides detailed actions and recommendations to maximize workload performance while reducing costs and supplementing your IT staff.

The Optimizer+ service includes:

- Unified billing for all of customer Rackspace Technology platforms and other managed public cloud accounts
- Access to the Rackspace Technology Customer Portal for account and user management
- Basic VM monitoring (alerts directed to customer only)
- Basic architecture reviews
- Basic planned event support

## Optimizer+ Dependencies

When a customer purchases Optimizer+ for Google Cloud, there are no support escalations or ticket creations with Google Cloud. The expectation is that a Google Cloud customer purchasing Optimizer+ will have enterprise level platform support directly with Google.

Currently Optimizer+ is not available for Rackspace managed Azure. Customers purchasing Azure infrastructure through Rackspace Technology under CSP contract are required to have Optimizer+ Platform Support. Customers purchasing Azure infrastructure directly from Microsoft in the form of an Enterprise Agreement are expected to have Premier of Unified Support through Microsoft.

# Optimizer+ Cost Optimization

Rackspace Technology provides cost optimization guidance and assistance via cloud native and third-party tooling. Customers can create tickets for cost optimization questions and request general guidance for infrastructure spend. Upon receiving a request from a customer, the Rackspace Technology Optimizer+ team provides best-practice guidance that maximizes workload performance and reduces costs. Depending on the customer spend, cost optimization efforts can include the following activities:

- Access to CloudHealth, a leading multicloud management platform designed to drive increased business value at every stage of your cloud journey
- Cost optimization review, upon request
- Cost strategy guidance
- Tagging strategy guidance and reviews
- Saving recommendations
- Licensing guidance and reviews
- Planned event support (refer to Event Management)

## Optimizer+ Onboarding

The Rackspace Technology onboarding team assists customers throughout the deployment process and manages transitions to ongoing support and account management. Each customer is assigned an onboarding specialist, who works to deliver the contracted solution.

These teams are available to customers as needed through the onboarding process. During the deployment, customers receive direct communication via scheduled meetings, email, phone calls, and Rackspace Technology ticket updates. For new customers, Rackspace Technology offers a walk-through of the Rackspace Technology Customer Portal and cost optimization tooling resources to help customers become familiar with ticketing services and notifications.

Through its onboarding program, Rackspace Technology will:

- Assign a Rackspace Technology onboarding specialist to coordinate and communicate with a customer via a ticket throughout the onboarding process
- Provide a walkthrough of Cost Optimization tooling and resources along with an initial review
- Recommend account monitoring defaults that align with best practices
- Create a Rackspace Technology account and confirm user access

## Optimizer+ Cost Optimization Tickets

Cost Optimization Tickets are defined as any ticket relating to questions about cost savings, cost optimization, billing, or other financially related questions.

These tickets do not carry an SLA and are answered as quickly as possible. Rackspace Technology will:

- Respond to tickets created by the customer in the Rackspace Technology Customer Portal.
- Respond to tickets created by the Rackspace Technology automated system for events on customer's account or accounts that require the attention of Rackspace Technology or customer.

### **Customer shall:**

1. Primarily interact with Rackspace Technology by creating a ticket in the Rackspace Technology Customer Portal.

## Optimizer+ with Platform Support (O+ PS)

Optimizer+ with Platform Support includes all Optimizer+ services, plus the following public cloud support services powered by certified Rackspace Technology engineers and backed by top-level direct public cloud support.

All customers, regardless of the cloud provider, purchasing Optimizer+ Platform Support are required to provide the necessary administrative access to the environment in order for Rackspace Technology to provide cloud management services and conduct ticket validity checks.

# Optimizer+ PS Service Operations

If a customer purchases Optimizer+ with Platform Support, Rackspace Technology provides customers 24x7x365 platform level support, managing engagement with the cloud providers directly on behalf of customers. In addition to platform support, the customer gains access to Rackspace Technology tooling and cost optimization guidance for help getting the most out of their cloud environments.

Optimizer+ Platform Support is geared toward ensuring upkeep of the cloud provider platform and is not designed to provide true day-to-day operational support. The service allows customers access to the benefits of the long-standing relationships Rackspace Technology has with major cloud providers and priority escalations.

## Optimizer+ PS Cloud Platform Escalations

With Optimizer+ with Platform Support, Rackspace Technology is the sole point of contact for supporting customer cloud environments and coordinates with the cloud provider, if necessary. A firm requirement for platform level support is that the customer shall provide Rackspace Technology the necessary administrative access to the environment to conduct support operations.

Escalations can occur for the following scenarios:

- A service-limit increase
- An issue that requires the involvement of a specific cloud platform product team to resolve
- An issue where multiple customers are impacted (for example, cloud platform service outages)

Rackspace Technology can:

- Facilitate cloud platform SLA credit requests or other cloud platform billing issues
- Provide escalation management 24x7x365.
- Escalate issues at any time until resolution is achieved. This escalation may be hierarchical (to a more- senior engineer or the service delivery manager) or functional (involving specialized technical expertise from other functional groups or partner cloud teams).
- Escalate to technology or service vendor in the event of an incident.
- Advise of the appropriate workaround to restore service.
- Provide customer the opportunity to confirm an issue is resolved prior to closure of the ticket.

Cloud platform escalations are handled with the restoration of services as the primary objective. Rackspace Technology endeavors to provide cloud expertise and guidance to the customer, while closely partnering with the cloud provider, to aid in the resolution of the incident.

All issues are logged in tickets accessible via the Rackspace Control Panel.

Tickets can be initiated by either:

- Rackspace Technology
- Customer's named customer contacts (monitoring tickets only)

## Optimizer+ PS Account Reviews

Rackspace Technology can, through the customer's Rackspace Technology Customer Success Manager, provide reviews to analyze the performance of a customer's cloud environment and provide recommendations from our Cost Optimization Team. Using cloud provider billing reports and Rackspace Technology tooling, some of these recommendations may include reserved instances, savings plans, and investigation for performance improvements. The review can include the following items:

- Support tickets
- Monitoring alerts
- Product roadmap updates
- Potential cost optimization
- Rackspace Technology and cloud provider best practice recommendations
- Recent environment changes
- Upcoming customer events



# Support and Operations Tickets

Support and operations tickets are defined as tickets created by the Rackspace Technology automated alerting systems, generated by Rackspace Technology, or created by customer to notify Rackspace Technology of a customer impact or question related to infrastructure and production systems.

Rackspace Technology responds to customer support requests submitted to Rackspace Technology via ticket in the following timeframes. All requests should be made directly to Rackspace Technology and Rackspace Technology escalates to the cloud provider directly, if necessary.

- **Urgent:** Production system outage/significant business impact: If the services are functioning improperly or at less-than-optimal performance, and the failure is impacting business transactions, Rackspace Technology initial response is 60 minutes. customers must call Rackspace Technology immediately after creating the urgent ticket to trigger the one-hour response guarantee.
- **High:** Production system impaired/moderate business impact: If the cloud provider services are functioning improperly or at less-than-optimal performance, but the failure is not impacting business transactions, the Rackspace Technology initial response to the support request submitted via a ticket occurs within four hours.
- **Normal:** Issues and requests/minimal business impact: If the cloud provider services are functioning normally, but customer has a time-sensitive request, question, or issue that needs to be addressed, initial response to the support request submitted via a ticket occurs within 12 hours.
- **Low:** General information, questions, and guidance: If the cloud provider services are functioning normally, but customer requires information or assistance, wants to schedule maintenance, or requires the completion of any other non-immediate tasks, the Rackspace Technology initial response to the support request submitted via a ticket occurs within 24 hours.

Rackspace Technology shall:

- Respond to tickets created by customer in the Rackspace Technology Customer Portal.
- Respond to tickets created by the Rackspace Technology automated system for events on customer's account or accounts that require the attention of Rackspace Technology or customer.
- Respond to phone calls from customer to the 24x7x365 Rackspace Technology support team if customer purchases Optimizer+ with Platform Support.

Customer shall:

- Primarily interact with Rackspace Technology by creating a ticket in the Rackspace Technology Customer Portal.
- Respond to tickets created by the Rackspace Technology automated system for events on customer's account that require attention.
- Call the 24x7x365 support team at any time.

# Comprehensive Cloud Management Platform

Rackspace Technology uses tools to manage, monitor, and maintain environments. Licenses to these tools used in the standard delivery of the service are included under Rackspace Modern Operations.

These tools include:

- Rackspace Technology Customer Portal
- Rackspace Technology intellectual property-related automation, self-healing, and management of cloud environments
- Rackspace Technology monitoring, logging, and alerting tools
- If a customer requests that Rackspace Technology use any other tools, the customer must provide Rackspace Technology with licenses.

# Customer Success

Depending on a customer's service offering level, this section covers the following areas of customer success:

- Purpose
- Objectives and guiding principles
- Overall partnership governance structure

# Purpose

The purpose of the governance structure is to ensure that guiding principles, objectives, structures, operating guidelines, methods, and measures for implementing effective governance are clearly defined and consistently implemented.

The governance function is subject to change based upon the customer's decisions on target organization design.

## Objectives and Guiding Principles

This section describes the structure of the relationship model, with principles of partnership that define the levels in which Rackspace Technology and customer interact and align resources. It also defines a framework for innovation and growth that enables the relationship to evolve as customer's business changes, so that the partnership constantly works toward value improvement.

The governance model is designed to achieve the following guiding principles:

- Promotion of trust through transparency and bilateral communication.
- Maintaining the strength of the relationship between customer and Rackspace Technology as a critical success factor for both.
- Alignment of both parties' business and IT objectives.
- Realization of innovation priorities.
- Establishment of a shared organization and structure to streamline day-to-day management and administration of the outsourcing relationship.
- Allowing customer and Rackspace Technology management to focus on strategic issues.
- Optimizing customer and Rackspace Technology expertise to provide the most effective IT Services to Service recipients.
- Ensuring overall monitoring of contract performance on service levels, financials, deliverables, and customer satisfaction.
- Ensuring that potential issues are investigated, resolved and/or, if necessary, escalated.

## Partnership Governance Structure

The purpose of governance is to establish effective means for managing the delivery of services and innovation as determined by customer's outsourcing objectives and this service description. This is a joint framework managed equally by Rackspace Technology and the customer.

The three-tier governance model (Operational, Program, and Strategic) is used to account for business priorities, planning, oversight, recommendations, and approvals, as well as risk, action, issue, and dependency management:

Governance effectiveness is measured throughout the process with a joint scorecard that considers the parties' business objectives narrowed down in terms of IT priorities. The categories and variables are jointly defined by Rackspace Technology and customer. The joint scorecard is broken into three sections:

- Operational performance as viewed by the services consumer (e.g., line of business).
- Innovation and transformation as viewed by the services consumer (e.g., line of business).
- Realization of innovation and transformation objectives as viewed by customer's executive steering committee where applicable.

## Architecture Reviews

Rackspace Technology provides, at your request, an architecture review following the best practices in your cloud of choice. We evaluate your security posture, technological architecture, and use of cloud services, among other things. At the end of that engagement, you will get an executive report you can use to ensure your environment is compliant with cloud best practice recommendations.

Customers have two options for architecture reviews. Customers may purchase the Premium Tier of Rackspace Modern Operations and utilize those hours for an architecture review, or a customer may engage Rackspace Professional Services to conduct a Well Architected Review.

# Planned Event Support

Twice a year, Rackspace Technology can help you to plan for and manage a large-scale event. Commonly customers use this to help with events like Black Friday or their “Shark Tank” moment. We evaluate your architecture, services utilization and resiliency to help you form a strategy to withstand the sudden spike in visitors to your application.

## Event Management

If customer reaches an agreed-upon spend amount, Rackspace Technology can provide event management for Optimizer+ services described within this service description. The purpose of the event management is for Rackspace Technology to detect and identify exceptions to the services and to proactively manage these exceptions, using monitoring tooling to raise and handle incidents where appropriate. Event management follows the processes agreed upon by Rackspace Technology and customer.

Rackspace Technology can:

- Include event management costs within stated service costs
- Provide event management twice a year
- Implement event management processes based on best practices
- Implement event management toolsets based on suitable technology platforms
- Implement default alerting thresholds monitoring CPU and RAM utilization
- Establish escalation paths to nominated service personnel, including third parties
- Implement URL monitors to monitor public or internal facing web addresses
- Implement port monitors where possible or feasible

## Rackspace Technology Customer Portal

Rackspace Technology provides customer with access to the Rackspace Technology Customer Portal (<https://login.rackspace.com/login>).

The Rackspace Technology Customer Portal is the primary means of customer interaction with Rackspace Technology. Based on a customer’s service level, the Rackspace Technology Customer Portal provides customer the capability to:

- Create tickets.
- View and pay their bills.

Customers can also manage fine-grained permissions for their account users.

The Rackspace Technology Customer Portal focuses on customer’s ease of use by:

- Improving the experience for customer accounts.
- Adding self-service features that reduce support volume.
- Deprecating features that are not aligned with customer and Rackspace Technology strategies.

Rackspace Technology customers can access their respective cloud platform control panels through the Rackspace portal.

Through the cloud platform control panel, Rackspace Technology shall provide:

- The ability to manage AWS, Azure, and Google Cloud environments.
- Access to the Rackspace Technology administered tool set.
- The ability to raise support tickets (dependent upon service level) to quickly resolve service issues.
- Rackspace Technology users can view invoices and see payment history.

# Billing Roles and Responsibilities

Rackspace Technology shall:

- Assume one or more cloud platform accounts for customer and become customer's reseller of AWS, Azure, or Google Cloud Services, when customer signs up for Rackspace Modern Operations as part of Rackspace Managed Public Cloud offering. All billing of both infrastructure and management fees is provided through a consolidated Rackspace Technology bill, and customer does not have to maintain a payment relationship with AWS, Azure, or Google Cloud directly. The Rackspace Technology account is the top-level that contains one or more accounts.

Customers are responsible for ensuring that any past due balances with cloud providers are paid in full before accounts can be assumed into Rackspace Technology systems. Customers purchasing infrastructure directly from a cloud provider (no-resell) customers must give us access to their native cloud billing data via the payer account (on AWS)

- Provide the Usage page in the Rackspace Technology Customer Portal to give customer a mid-month view of charges and an estimate of a full month of charges, typically updated a few times per day, along with historical use from previous months.
- Provide cloud platform bills for all infrastructure on a calendar month basis. Cloud platform provider charges for the previous month vary by billing date of the month, however, after the charges are finalized by provider, both infrastructure and support charges are added to customer's Rackspace Technology account and appear on customer's next Rackspace Technology invoice. Each line item includes the month in which the charges were incurred. Rackspace Technology creates invoices on the 15th of each month.
- Customer can view charges and an estimate of full month's charges in the Rackspace Technology Customer Portal or the cloud platform control panel.

For AWS customers, Rackspace Technology shall:

- Provide default pricing and billing currency is U.S. dollars (USD). Billing in Australian dollars (AUD) is also available.
- Upon request and approval, provide customer with access to the native AWS billing console for their Rackspace Technology managed accounts.
- Due to Rackspace Technology Account Defaults and associated management tooling, approximately \$5 to \$10 of monthly infrastructure charges are posted on each AWS account that customer provisions, regardless of whether customer provisions any additional AWS resources.

For Azure customers, Rackspace Technology shall:

- Provide default pricing and billing currency in currencies that align to the infrastructure that Microsoft provides, based on the location of the customer's business entity and Rackspace Technology's local business entity (USD, EUR, GBP, and AUD are all Rackspace Technology-supported currencies).
- Due to Rackspace Technology account defaults and associated management tooling, approximately \$30 of monthly infrastructure charges are posted on each Azure subscription that customer provisions, regardless of whether customer provisions any additional Azure resources.

For Google Cloud customers, Rackspace Technology shall:

- Provide pricing and billing currency in USD.
- Provide customer with access to the native Google Cloud Platform billing console for their Rackspace Technology managed projects.

Customer shall:

- Be responsible for keeping account permissions, billing, and other account information up to date. For more detailed billing and usage information, customer can use the respective cloud platform control panel.
- Use the information available on the Usage page to avoid unexpected infrastructure charges.



# Managed Public Cloud Product Portfolio

Product Portfolio — summary:

	Optimizer+	Optimizer+ with Platform Support	Rackspace Modern Operations	Rackspace Elastic Engineering
Use Case	<ul style="list-style-type: none"> <li>• Cost Optimization</li> <li>• Consolidated buying power</li> </ul>	<ul style="list-style-type: none"> <li>• Provider support with Cloud Platform Vendor</li> </ul>	<ul style="list-style-type: none"> <li>• 24x7x365 operational and transactional based work</li> <li>• Monitoring, Backup, DR, Patching, Security, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• DevOps-based work</li> <li>• Sprint-based project work</li> <li>• Customer affinity - PODs</li> </ul>
Billing Model	No extra charges	% of infrastructure	Tiered hours based on a % of infrastructure with flex options	Tiered Hours
24/7 Incident Response	No	Cloud Service provider escalation – Platform Response	Yes, managed environment support	No, Rackspace Elastic Engineering operates during business hours only, but can utilize Rackspace Modern Operations, if purchased
24/7 Operational Support	No	No	Yes	No
Customer Affinity	No	No	No, but named CSM and TAM is provided	Yes, dedicated pod
Lead Engineer	No	No	Yes, limited to Premium Tier	No, dedicated pod of engineers
Support Level	Best practice advice	Best practice advice + cloud service provider escalation	<ul style="list-style-type: none"> <li>• Support for core set of services</li> <li>• Reasonable endeavor model for non-core services</li> </ul>	<ul style="list-style-type: none"> <li>• Support for a complete range of project-based cloud services</li> <li>• Ability to pick up new features and services</li> </ul>
Technical Onboarding Manager	Yes	Yes	Yes	Yes (Engagement Manager)
Customer Success Manager	No	Yes	Yes	No (Engagement Manager)
Technical Account Manager	No	No	Yes	No, Engagement Manager
Cost Consultant	Yes	Yes.	No	No
24/7 Ticket Based Contact	Yes	Yes	Yes	No
24/7 Phone Based Contact	Yes	Yes	Yes	Yes (business hours only)
Email Based Contact	No	No	Yes, if customer has Premium Tier	Yes (business hours only)

# Managed Public Cloud – RACI

The following table identifies who is responsible and accountable for specific engagement activities:

- **Responsible** means, for the purposes of the RACI matrices, the party who carries out the process or task assignment and is responsible to get the job done.
- **Accountable** means, for the purposes of the RACI matrices, the person who is ultimately accountable for the process or task being completed appropriately.
- **Consulted** means, for the purposes of the RACI matrices, those who provide input based on how it will impact the business/tasks.
- **Informed** means, for the purposes of the RACI matrices, those who receive output from the process or task, or who have a need to stay informed.

Rackspace Elastic Engineering work is consumed using the hours included in the support tier per the Rackspace Elastic Engineering Scoping Document. Rackspace Modern Operations (ModOps) work is ticket- and phone-based work consuming the bucket of hours associated with the support tier, including any additional hours purchased.

Anything not enumerated in the table below shall be considered a reasonable endeavor in which Rackspace Elastic Engineering and ModOps will work in conjunction with the customer to identify the desired outcome.

Account Management	Customer	EE	ModOps
Provide named Customer Success Manager	I	I	R
Provide named Technical Account Manager	I	I	R
Provide named Lead Engineer	I	I	R
Provide named Engagement Manager	I	R	I
Provide named Rackspace Elastic Engineering Pod team	I	R	I
Standard account reporting	I	R	R
Identify opportunities for cost and performance optimization	I	R, C	R, C
Monitor and manage hours usage	I	R	R
Review customer-related Rackspace Elastic Engineering Pod hours for accuracy	I	R	I
Create and present monthly Rackspace Elastic Engineering-related reports	I	R	I
Create and present quarterly Rackspace Elastic Engineering-related quarterly business reviews	I	R	I
Manage daily technical communications	I	R	R
Monitor and participate in technical escalations	I	R	R
Understand system SLA	I	R	R
Process customer tier upgrades/downgrades	I	R	R
Present, gather customer approval and track progress of long-range plan against deliverables	I	R	R
Periodically update the list of the customer's engineers that will use Rackspace Technology services	R	I	I
Train the customer's users, clients, and suppliers to follow Rackspace Technology's established procedures to report incidents or make requests	I	R	R
Provide Rackspace Technology's engineers with full administrative access to all cloud service accounts supported	R	I	I
Provide Rackspace Technology all documentation, information, and knowledge that Rackspace Technology requests in relation to the cloud environments supported	R	I	I

Environment Lifecycle	Customer	EE	ModOps
Application development	R	C, I	I
Application infrastructure requirements analysis and design	C	R	C
Application deployment	C, I	R, A	I
Infrastructure deployment (Rackspace Elastic Engineering via IaC)	C, I	R, A	I
Infrastructure deployment (ModOps via console, cmd line interface)	C, I	I	R
Setup Infrastructure monitoring using standard Rackspace engineered automation, where available.	C	C, I	R, A
Setup Application monitoring using cloud native tools	C	C, I	R, A
Monitoring response – Troubleshoot and resolve operating system, network, and infrastructure issues	C, I	C, I	R, A
Monitoring response – Troubleshoot and resolve application issues	R, A	C	C
Application testing/optimization	R, A	C	C
Infrastructure optimization guidance	C, I	R	R
Design and setup of compute infrastructure; EC2/Azure VMs/GCE	C	R	R
Design and setup of container infrastructure; EKS/AKS/GKE	C	R	I

Incident Management	Customer	Rackspace Elastic Engineering	ModOps
Monitoring using cloud native tools	C, I	R	R
Monitoring using third-party tools	R	C	C, I
Respond to business disruptions and outages	R	C, I	R
Provide Incident response*	I	R	R, A
Implement customer specific monitoring	C	R, I	R, I
Provide Incident resolution/infrastructure restore**	R, C	R, I	R, I
Escalation to the Cloud vendor for issues related to the Cloud Platform ***	C	R	R, C
Provide a formal incident report for P1 incidents	C, I	R	R, A

\* ModOps is the primary owner of incident response, but EE teams will be available for escalation

\*\* Rackspace Technology will facilitate, but Customer engagement will be required.

\*\*\* This is only included where Rackspace Technology is reselling the Cloud Infrastructure and Optimizer with Platform Support services are consumed.

\*\*\* Customer must have appropriate Optimizer+ service offering and/or appropriate cloud provider support agreement

Change Management	Customer	Rackspace Elastic Engineering	ModOps
Defining the change management workflow	R	C	C, I
Raising change requests via tickets and/or other means	R	I	C, I
Maintenance of application change calendar	R	C	C, I
Notice of upcoming Maintenance Window	R	C	C, I



<b>Problem Management</b>	<b>Customer</b>	<b>EE</b>	<b>ModOps</b>
Identify Problems in Managed Environment as part of incident handling	C, I	C	R
Perform RCA for Problems in Managed Environment	C, I	C R	R
Remediation of Problems in Managed Environment*	C, I	R	R
Implement customer specific monitoring	C	R	R
Identify and remediate application problems	R	C, I	C, I

\* Rackspace Technology will facilitate, but Customer engagement will be required.

<b>Technical Account Management*</b>	<b>Customer</b>	<b>Rackspace Elastic Engineering</b>	<b>ModOps</b>
Request information using service requests via ticket	R	I	C, I
Respond to service requests related to infrastructure setup, operations & administration	I	R	R
Respond to service requests related to monitoring	C	I	R
Prepare and deliver monthly service report	I	C	R
Provide and deliver incident summary report	I	C	R
Provide and deliver root cause analysis report	I	C	R
Provide and deliver custom reports	I	C	R
Understand business objectives and currently challenges	I	R	R
Schedule deep dive discovery sessions	I	R	R
Create technical aspects of long-range plan	I	R	R

\* Applicable to qualifying customers

<b>Networking</b>	<b>Customer</b>	<b>Rackspace Elastic Engineering</b>	<b>ModOps</b>
Setup of Networking in the Cloud environment	C	R	I
Configure & operate non-provider-native services such as Firewalls/Proxy	R	C	C, I
Networking (e.g., Direct Connect or Express route, Cloud Interconnect) configuration and implementation on the Cloud environment that is managed by Rackspace Technology	C	R	R
Networking (e.g., Direct Connect or Express route, Cloud Interconnect) configuration and implementation on the environment that is not managed by Rackspace Technology	R	C	C, I

Database Management	Customer	Rackspace Elastic Engineering	ModOps
Monitoring database components using Cloud provider supplied monitoring services	C	C	R
Monitoring database components using third-party services	R	C	I
Responding to database alerts	C, I	C	R
Monitor master/slave/RO replication health*	R, C	C	R
Automated snapshot (backup) configuration	C	C, I	R
Coordinate and schedule DB engine patch Management	C	C	R
Recommend DB storage and IOPS capacity	C	R	C
Recommend instance sizing for running databases	C	R	C
Database Table Design, Indexing and schema optimization	R	C	I
DB table log analysis	R	C	I

Logging, Monitoring and Event Management	Customer	Rackspace Elastic Engineering	ModOps
Installation and configuration of agents and scripts for monitoring and OS access.	C	I	R
Installation and configuration of other agents and scripts for patching, security, etc.	C	C	R
Define customer specific monitoring and incident response requirements	R	C	C, I

Security Management	Customer	Rackspace Elastic Engineering	ModOps
Maintain best practice security design and configuration	C	R	R
Maintaining valid licenses for third-party security software	R	I, C	I
Configure/update third-party security software*	R	C	I
Monitoring malware alerts	I	C	R
Monitoring virus signature updates	I	C	R
Identify and remediate application problems	R	C	I
Security event management	R	C	C
Manage the lifecycle of users, and their permissions for local directory services, which are used to access cloud services	R	I	I
Operate federated authentication system(s) for customer access to cloud console/APIs**	R	C	I

\* Rackspace Elastic Engineering will facilitate, but Customer engagement will be required for Customer policy compliance.

\*\* Rackspace Elastic Engineering can manage the integration to the Cloud. Customer would be responsible for specific applications providing the federation.

<b>Vulnerability Management</b>	<b>Customer</b>	<b>Rackspace Elastic Engineering</b>	<b>ModOps</b>
Patching Management	C	C	R
Notify customer of upcoming updates	C	C	R
Exclude certain updates from patching activities	C	C	R
Apply updates per customer instructions	C	C	R
Patch middleware applications (e.g., BizTalk, JBoss, WebSphere)	R	C	C, I
Patch custom and third-party applications	R	C	C, I

<b>Backups and Disaster Management</b>	<b>Customer</b>	<b>Rackspace Elastic Engineering</b>	<b>ModOps</b>
Specify backup schedules	R	C	C, I
Execute backups per schedule	C	C	R
Validate backup activity success	R	C	R
Request backup restoration activities	R	C	C, I
Execute backup restoration activities	C	C	R
Create and own the end-to-end disaster recovery plan	R	C	C, I
Design and implementation of the DR infrastructure and services	C	R	C, I
Invoke DR procedures in case of a disaster	A	C	R, I

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Rackspace Technology is the multicloud solutions expert. We combine our expertise with the world's leading technologies — across applications, data and security — to deliver end-to-end solutions. We have a proven record of advising customers based on their business challenges, designing solutions that scale, building and managing those solutions, and optimizing returns into the future.

As a global, multicloud technology services pioneer, we deliver innovative capabilities of the cloud to help customers build new revenue streams, increase efficiency and create incredible experiences. Named a best place to work, year after year according to Fortune, Forbes, and Glassdoor, we attract and develop world-class talent to deliver the best expertise to our customers. Everything we do is wrapped in our obsession with our customers' success — our Fanatical Experience® — so they can work faster, smarter and stay ahead of what's next.

Learn more at [www.rackspace.com](http://www.rackspace.com) or call 1-800-961-2888.

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