

Service Overview

Public Cloud – Fanatical Support for Microsoft Azure

With Rackspace Service Blocks



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Service overview

Many businesses want to leverage the power of Microsoft® Azure® 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. Others may have the ability, but choose to maintain focus on their core business. Many larger businesses are on a multi-phase journey to the cloud, requiring transition and management services that can adapt to an evolving set of needs.

Fanatical Support® for Microsoft Azure is the answer for businesses facing these challenges. As an Azure Expert Managed Services Partner, Rackspace provides customized cloud service offerings to meet your specific needs. These offerings provide the flexibility to change or grow your cloud services as your Azure needs change and to increase value by delivering essential services and support. This includes architecture help, access to experts you need to solve your problems, security assistance, always-on management, cost governance and many other value-added services — all backed by Azure-certified architects and engineers.

Azure region availability

Fanatical Support for Microsoft Azure is available to Rackspace customers deploying infrastructure into all Azure public global regions existing as of the publication date of this document. This excludes some of the Microsoft Azure Sovereign Regions (e.g., Azure Gov and Azure China). Some Azure regions are available only to customers with specific billing addresses in that region. Contact a Rackspace representative if you have questions about a specific region.

Service offerings

Fanatical Support for Microsoft Azure addresses the core challenges that businesses face in implementing and operating Azure environments. The following five Service Blocks allow customers to customize their service experience.

Platform Essentials

Platform Essentials is the base platform for Rackspace Managed Public Cloud services upon which all other services are built. Platform Essentials includes troubleshooting Azure service issues (including escalation to Microsoft engineers, if required), unified billing for all of your Rackspace platforms and other Managed Public Cloud environments, and access to the Fanatical Support for Microsoft Azure Control Panel to manage your Azure subscriptions and users.

Architect & Deploy

To expedite the move to Azure, Rackspace provides best-practice design principles, automation and deployment methodologies — all executed by your Rackspace Account Manager (AM), Azure-certified build engineers and onboarding managers, who have collectively deployed more than a thousand applications to the cloud. Architect & Deploy is required for customers using the Manage & Operate offer.

Discover & Enhance

Certified cloud experts review your existing public cloud environment to identify areas for enhancement. Based on your input, Rackspace engineers apply best practices to update your public cloud infrastructure so that you can be confident it will continue to meet your business needs, while minimizing costs and maximizing availability, security and performance. Discover & Enhance is required for customers who have an existing Azure environment and who would like to leverage the Manage & Operate offer.

Manage & Operate

This service block provides tooling, automation, monitoring and 24x7x365 access to certified cloud specialists for day-to-day operational support and management. Manage & Operate leverages Rackspace proprietary tooling like Passport (secure VM access tool), Access Grants (our secure Azure portal access tool) and Watchman (which turns our Azure Monitor alerts into tickets for Rackspace specialists to address). Rackspace support professionals are accessible 24x7x365 to help resolve your issues quickly and effectively.

Complex Cloud Operations

As your business matures or your cloud spend increases, operating Azure can become more complex. Complex Cloud Operations helps you manage this complexity with Rackspace experts that have worked with other similarly complex cloud environments. Whether you desire a deeper technical relationship to drive outcomes or need assistance handling your architecture's complexity, Complex Cloud Operations can assist your organization in finding the right solution.

Combining service offers

The Manage & Operate service block can be applied to individual Azure subscriptions, enabling 24x7x365 monitoring of your mission-critical production workloads while avoiding unnecessary costs associated with development and test environments.

Service matrix

Azure Subscription Management	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Customer Control Panel A consolidated view and management of all Azure subscriptions	•				
Cloud Billing Dashboard A consolidated view of your usage, invoices and payment history	•				
Cost Reporting Dashboards of Azure usage and billing details with self-service ability to filter and export reports	•				
Compliance and Identity Management	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Identity Federation from Azure AD to Rackspace SSO Ability to securely federate into your Rackspace control panel from your Azure AD environment without a separate log-in	•				
Certified Level 1 Payment Card Industry (PCI) Service Provider on Azure Rackspace complies with a set of security standards for companies that accept, process, store or transmit credit card information	•				
Passport and Boarding Pass	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Passport – Secure Azure VM Access (Racker-only) PCI-certified Rackspace management access tool for Azure VMs using named-user, time-bound, auditable and MFA-authenticated Rackspace corporate identities				•	
Access Grants – Secure Azure Portal Access (Racker-only) PCI-certified Rackspace management access tool for the Azure portal that provides a compliance and security-focused approach by delivering a named-user, on-demand, time-bound, auditable and MFA-authenticated Rackspace corporate identities				•	
Best Practices and Architecture	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Azure Detailed Design Diagram Design of Azure environment deployment based on analysis of your application and requirements, which adheres to Azure and Rackspace best practices		•	•		
Architecture Diagrams of Existing Azure Infrastructure On-demand visual depictions of your current Azure deployments					•
Opinionated Azure Architecture Reviews Environment review conducted by Azure-certified solution architects to standards focused on delivering operational stability, security, performance and cost efficiency					•
Azure Training Sessions Scheduled training sessions for members of your team on Azure subjects relevant to your business					•
Guidance on Emerging Technologies Guidance on new public cloud technologies from Azure experts					•
Architectural Recommendations Quarterly recommendations of architecture changes geared to reduce Azure account spend					•

Cloud Deployment	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Deployment Status Meeting Weekly scheduled meeting to review outstanding action items, dependencies and risks with you and the Rackspace implementation team		•			
Creation of Deployment Templates Azure Resource Manager (ARM) templates built using the Rackspace template library		•			
Deployment of New Azure Environment Azure environment deployed by build engineers using default OS configurations		•			
Discovery of Existing Azure Environment Review of existing Azure environment and report of recommended enhancements			•		
Enhancement of Existing Azure Environment Implementation of required enhancements to existing Azure environment according to Rackspace best practices			•		
Implementation of Optional Best Practices Implementation of recommended enhancements to existing Azure environment according to Rackspace best practice standards			Add-On Services Available		
Infrastructure Configuration Management Creation and maintenance of basic scripts for post-deployment infrastructure configuration management					•
Cloud support	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Azure Infrastructure Guidance Azure-certified Rackspace engineers available 24x7x365 for guidance, best practices and escalation support for your Azure infrastructure	•				
Microsoft Premier Support Escalation Management Your account receives Microsoft Premier Support privileges to be used by Rackspace during incident escalations	•				
Cloud Management	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
24x7x365 Azure Infrastructure Management Azure-certified Rackspace engineers available 24x7x365 for configuration, monitoring and ongoing management of your Azure Infrastructure				•	
Cloud Networking	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Azure VPN Provisioning (Azure side) Creation of Azure-side VPN connections, including the definition and configuration of VPN gateways		•	•		
Azure VPN Troubleshooting and Monitoring (Azure side) Management of Azure-side VPN connections, including the monitoring and troubleshooting of VPN gateways and connections using Azure Network Performance monitor				•	
Azure ExpressRoute Provisioning (Azure side) Creation of Azure side of ExpressRoute private connection, including the definition and configuration of the private gateway and connections		•	•		
Azure ExpressRoute Troubleshooting and Monitoring (Azure side) Management of Azure side of ExpressRoute private connections, including monitoring and troubleshooting of ExpressRoute private connections using Azure Network Performance monitor				•	

Operating system management	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Red Hat Enterprise Linux 6 Support Instance creation, deletion and management of Red Hat Enterprise Linux 6 OS				•	
Red Hat Enterprise Linux 7 Support Instance creation, deletion and management of Red Hat Enterprise Linux 7 OS				•	
CentOS 6 Support Instance creation, deletion and management of CentOS 6 OS				•	
CentOS 7 Support Instance creation, deletion and management of CentOS 7 OS				•	
Ubuntu LTS Version 18.04 Support (Bionic Beaver) Instance creation, deletion and management of Ubuntu LTS Version 18.04 OS				•	
Windows Server 2008 R2 Support Instance creation, deletion and management of Windows Server 2008 R2 OS				•	
Windows Server 2012 R2 Support Instance creation, deletion and management of Windows Server 2012 OS				•	
Windows Server 2016 Support Instance creation, deletion and management of Windows Server 2016 OS				•	
Windows Server 2019 Support Instance creation, deletion and management of Windows Server 2019 OS				•	
Patch Management	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Setup Azure Update Management Setup of OS-level patching, leveraging the Azure Update Management services for Azure VMs		•	•		
Patching Errors Troubleshoot patching errors				•	
Modifying Patch Groups Modify patch groups as requested				•	
Modifying Maintenance Windows Modify maintenance windows as requested				•	
Patch Compliance Reporting On-demand report of patch compliance detail				•	
Patch Compliance Issues Remediation of patch compliance issues				•	
Custom Pre- or Post-Scripts Create custom pre- or post-scripts to apply before and after patching					•
Monitoring	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Cloud Monitoring Configuration Initial configuration of Rackspace standard monitors for incident ticket creation				•	
Custom Cloud Monitors On-demand creation of log analytics monitors					•
Updates to Cloud Monitoring On-demand changes to configuration of Rackspace standard monitors					•

Incident & Change Management	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Incident Management 24x7x365 access to Azure-certified Rackspace support engineers to assist with the identification and remediation of issue from monitoring alerts				•	
Escalation Path 24x7x365 access to Azure-certified Rackspace support engineers to escalation path for incidents using customer-specific support runbooks				•	
Change Management 24x7x365 access to Azure-certified Rackspace support engineers to assist with configuration changes for your Azure environment				•	
Problem Management ITIL problem management of recurring incidents to remediate underlying issue					•
Rackspace Resources	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Billing Specialists Access to billing specialists to answer questions about your invoices and payments	•				
Named Onboarding Manager Your onboarding manager coordinates the process of getting your Azure environment up and running		•	•		
Named Account Manager Your account manager serves as the main point of contact at Rackspace for ongoing business assistance with your Azure environment	Included at Rackspace service spend above \$1,500			•	
Named Technical Resource Your named technical resource manager participates in your change advisory boards and stand-ups					•
Business Review Activities	Platform Essentials	Architect & Deploy	Discover & Enhance	Manage & Operate	Complex Cloud Operations
Account Service Reviews Your service delivery manager reviews reporting that summarizes your account usage details	Included at Rackspace service spend above \$1,500			•	
Quarterly Business Review Your account manager delivers a quarterly business review that details spend and operational actions of the prior three months, and plans activities for the next quarter	Included at Rackspace service spend above \$1,500			•	
Roadmap Reviews In-depth roadmap reviews for Rackspace offers and Azure products					•
Best Practices Review and Remediation Detailed review of recommendations in security, availability and performance using Azure Advisor with remediation plan					•

Human expertise

Your Rackspace Support for Azure Team

Fanatical Support for Microsoft Azure provides specialized resources to deliver ongoing service and support for your business. Rackspace provides you with Azure-certified solutions architects and engineers who are ready to deliver always-on support and expertise to your business, 24x7x365.

Onboarding Manager

When you purchase Architect & Deploy, the onboarding manager is your personal contact for assistance with the Rackspace onboarding process. As your dedicated guide, your onboarding manager will work with you to coordinate the resources and project management associated with the deployment of your Azure environment.

Account Manager (AM)

Manage & Operate customers will be assigned an AM to help guide them through the Rackspace support process and oversee the day-to-day management of accounts, including service, change and incident management.

Azure-certified Cloud Engineers

The Rackspace account management team is backed by a team of Azure-certified engineers, responsible for 24x7x365 monitoring and operational support for Azure subscriptions covered by Manage & Operate.

How to contact support

Tickets: One of the primary ways to interact with Rackspace is by creating a ticket in the Rackspace Support for Azure control panel. Once logged in, click the “Tickets” button from the menu to create a new ticket or view an existing ticket.

The automated system will also create tickets for events on your Azure account that require either your attention or the attention of a Rackspace team member. For example, the Watchman monitoring service will create a ticket when an alarm is raised, and a Rackspace team member will triage the alarm and take appropriate action. Any time a ticket is updated, you will receive an email directing you back to the Rackspace customer portal to view the latest comments.

Phone: You can also call your support teams 24x7x365 to speak to someone who will be more than happy to assist.

Microsoft Premier Support escalations

Regardless of whether you purchase your Azure infrastructure directly from Microsoft (EA/Direct) or through the Rackspace Cloud Solution Provider (CSP) agreement, Rackspace serves as your sole point of contact for supporting your Azure environments. As a part of the Platform Essentials service, if Microsoft ever needs to be contacted for technical escalations, Rackspace will do so on your behalf by leveraging our Microsoft Partner Premier Support agreement.

Escalations may occur for the following scenarios:

- An Azure subscription service limit increase is required (e.g., number of CPU cores).
- An issue that requires the involvement of a specific Azure product or engineering team to resolve.
- An issue where multiple customers are impacted (e.g., Azure service outages).
- Azure infrastructure SLA credit requests (when infrastructure is purchased through Rackspace CSP).

As one of Microsoft’s elite partners certified as an Azure Expert MSP, Rackspace provides managed access to Microsoft Premier Support, as well as Microsoft product and engineering teams.

Service operations

With Architect & Deploy, Rackspace will create your Azure environments. If you also elect to purchase Manage & Operate, the Rackspace support team will work with you to create a customized runbook to help manage the day-to-day support of your Azure environment, addressing incident and change management policies that can be implemented for your business.

Customer Runbooks

When Manage & Operate is purchased, your onboarding manager and account manager will work with you during the Architect & Deploy process to create a customized monitoring response runbook. This runbook defines the immediate responses (IRs) the Rackspace support team will use as our standard operating procedures for your environment(s). Rackspace IRs include custom escalation

procedures in accordance with your business needs and best practices. These customer runbooks are designed to present the right information at the right time to our support teams to enable a world-class support experience. Providing relevant and focused guidelines to our support teams increases availability of customer solutions.

Monitoring (Watchman)

Rackspace uses a combination of Azure-native monitoring services and a Rackspace service, called Rackspace Watchman, as the primary monitoring and reporting tools for Azure workloads covered by the Manage & Operate service. Watchman is composed of seven discrete components that serve to deliver valuable insights about the health of Azure environments and provide customers with reliable, scalable and intelligent monitoring services.

Monitoring components

1. **Azure Log Analytics** – An Azure-native log aggregation and analytics service that provides a powerful and scalable alerting platform.
2. **Rackspace Event Horizon (Alert Processing)** – Rackspace event processing system that parses alert data from Azure monitor and provides integration into the Rackspace ticketing system.
3. **Rackspace Ticketing** – Rackspace ticketing system that is embedded in the Rackspace customer portal
4. **Rackspace Smart Tickets (Auto Remediation & Enrichment)** – Proprietary Rackspace automation framework that enables the delivery of real-time incident enrichment and remediation of incidents by running automation services (PowerShell/Bash for VMs, APL/CLI for Azure platform and PaaS services) in response to defined alerts.
5. **Rackspace Alert Synchronization (Alert Governance)** – Proprietary Rackspace automation service that performs ongoing synchronization and enforcement of the production Rackspace alert definitions to all environments within the managed service fleet to ensure customers have the latest and most up-to-date alert definitions.
6. **Rackspace Log Analytics Workspace Synchronization (Alert Governance)** – Rackspace-proprietary automation service that performs ongoing synchronization and enforcement of the configuration of all standard Rackspace definitions (data sources and solutions) in each of the Azure Workspaces within the managed service fleet.
7. **Rackspace PaaS Monitoring Synchronization (Alert Governance)** – Proprietary Rackspace automation platform that enables the configuration and reporting of key resource monitors for PaaS components of the Azure platform.

Alert definitions

Manage & Operate customers will receive the complete set of Watchman alerts, including coverage for issues associated with anti-malware, Windows Active Directory, MSSQL, IIS, Azure Activity logs, general system health and availability, Platform-as-a-Service metrics and numerous Linux, and Windows VM performance counters. Please reach out to your Account Manager to receive a copy of the most current list of the Rackspace Watchman alert definitions.

URL availability monitors

In addition to the Watchman alert definitions, Manage & Operate customers are eligible to request the configuration of up to three web test availability monitors based out of the OMS Application Insights service to help provide stronger service availability monitoring.

Incident Management

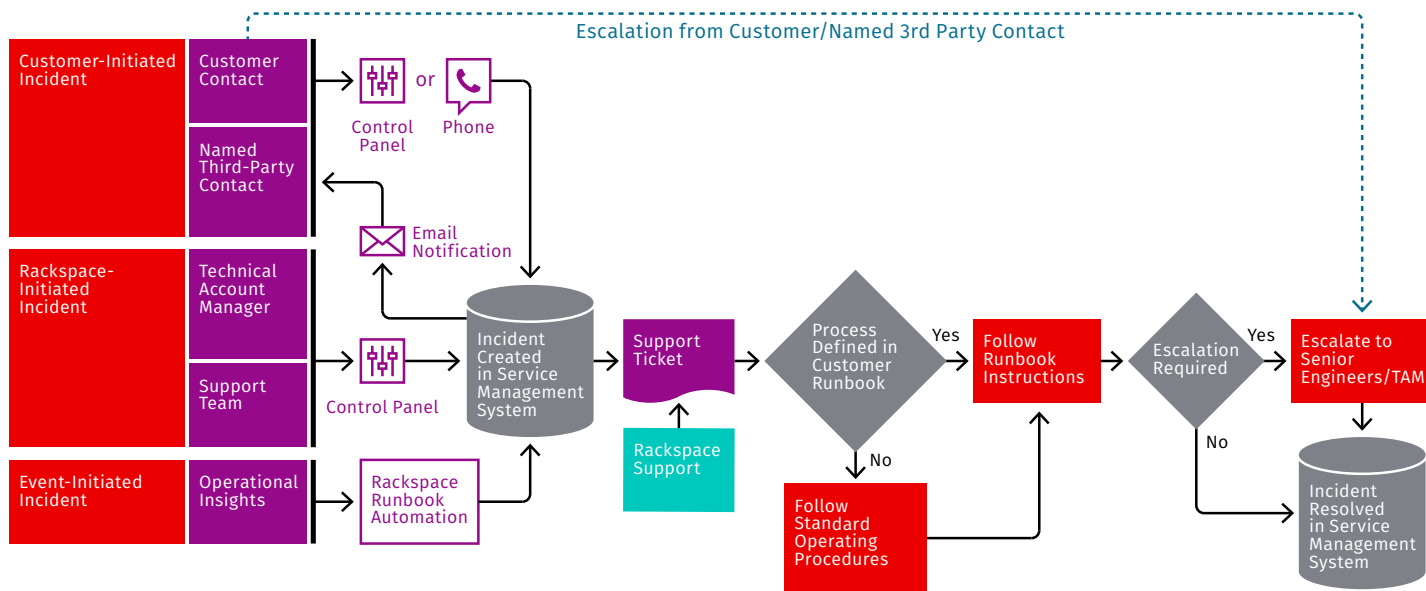
Incident management refers to the management of incidents where restoration of the services is the primary objective. For workloads covered by Manage & Operate, Rackspace endeavors to restore normal service as quickly as possible when a problem or an incident occurs. Rackspace will work to apply a consistent approach to all incidents, except where a specific approach has been previously agreed upon in accordance with your incident runbook. (Note: Incident events can only be initiated by authorized customer contacts, Rackspace and event management tools, such as Watchman.)

You can expect the following from the Rackspace incident management process:

- All incidents are logged in tickets accessible via the Rackspace Customer Portal. Rackspace support teams will investigate the incident in accordance with your service level once it is logged.
- Priority for tickets entered manually via the Customer Portal are initially set to “Standard.” If required, please phone your Rackspace support team or your assigned AM to request a priority escalation of your request. Incidents logged with a specific priority will not be changed to another priority without the agreement of all parties involved.
- Prior to investigation, Rackspace support will carefully review instructions on your account as documented via your incident runbook.
- Rackspace will collaborate with you and with any third parties that you nominate as technical contacts on your account to help resolve the incident(s) .
- Rackspace support teams will communicate regularly with you throughout the incident, detailing their findings and any actions taken.

- If a Rackspace support engineer is unable to resolve an incident, he or she will escalate the incident until resolution is achieved. This escalation may be hierarchical (to a more senior Rackspace Engineer or the Account Manager/Lead Engineer – if applicable) or functional (involving specialist technical expertise from other functional groups or Microsoft).
- 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 Azure environments. 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 act to resolve the incident, which will be communicated should such a need occur.
- An incident is deemed closed when you confirm that it is resolved. This is achieved through the incident ticket being set to a “Solved” status.

Rackspace standard incident management process example



Change Management

Change management includes a standardized set of procedures that enables Rackspace to deliver efficient and prompt handling of all changes in an organized manner to help ensure minimum impact on the Services.

- Your Rackspace AM will be available to work with you on all operational, technical and commercial changes to the environment.
- All changes will be managed through the Rackspace ticketing systems. This supports long-term tracking of all information and the optimum delivery of services through the various lifecycle processes of deployment, change management, incident management, etc.
- Rackspace will raise a ticket accessible via the Fanatical Support for Microsoft Azure Customer Portal for changes that are owned or initiated by Rackspace. Conversely, you can raise a ticket for situations where Rackspace support is required for any changes owned and initiated by your business. You may also call the 24x7x365 support line to discuss a change and request that a ticket be created.
- Rackspace will organize support engineers with specific domain expertise to manage the change(s) as scheduled and keep you fully informed on resolution progress.
- For changes or upgrades to your own internal infrastructure, you are responsible for coordinating with your internal resources and third-party contacts to manage the change(s) as scheduled and to keep Rackspace informed of the progress via a Rackspace support ticket.

Ongoing Management Services with Manage & Operate

Patching: Rackspace can enable automatic patching within the operating system for Fanatical Support for Microsoft Azure customers who subscribe to the Manage & Operate service. This includes all OS-related patches of any supported VM instances within your Azure subscriptions covered by the Manage & Operate service. Customers can request specific hotfixes or service packs be installed on their behalf via a support ticket. Alternatively, customers have the control to install these patches themselves. During the implementation process, Rackspace will consult with you on your patching needs to ensure that your compliance and availability requirements are being met.

Note: Rackspace will not patch middleware or customer applications due to the potential for harming customers' environments when changes have not been thoroughly tested in the specific environment.

Backups: Manage & Operate customers are entitled to have Rackspace support teams configure image-level backups for their Azure VMs. Image-level backups are non-intrusive and provide customers with the ability to restore an entire virtual machine. Currently, Azure supports application-consistent backups for Windows and file-consistent backups on Linux.

Should a backup job fail to complete, Manage & Operate customers will benefit from Rackspace automation services that will automatically attempt to resolve the issue and re-run the backup job. If a subsequent failure is detected, the issue will be escalated to the Fanatical Support for Microsoft Azure teams to investigate further and escalate to Microsoft as required.

In the unlikely event that you require data restored from an image-level backup, phone in or log a ticket in the Fanatical Support for Microsoft Azure control panel. Please provide detailed information regarding the VM instance and Azure storage account you need restored, and to what VM that snapshot should be attached. Rackspace will only restore an image-based backup to a new volume, and you will be responsible for validating any restored data and moving it into your application.

Anti-virus: The Manage & Operate service also enables the Rackspace Managed Anti-virus solution for Windows operating systems running on the Azure platform to help solve for increasingly complex challenges associated with security and compliance. Leverage the Managed Anti-virus service to help ensure all of your VMs within your Windows server solutions are protected by the enterprise-grade Windows Defender service and are backed by 24x7x365 support teams. The Rackspace Managed Anti-virus service helps reduce your attack surface for new security threats by ensuring that the following is true for every Windows VM deployed into your subscription:

- Windows Defender Antimalware extension is properly installed.
- Anti-malware extension is properly configured.
- Windows Defender service runs the most up-to-date virus definitions.
- If an anti-malware event is detected, the Watchman service is leveraged to alert a Rackspace engineer to investigate further.

Operating systems support: Customers with Azure subscriptions covered under the Manage & Operate service are entitled to operating system support for their Azure VM instances running supported operating systems versions or distributions. For in-depth information on Rackspace operating system support, please visit the following Rackspace Support articles:

Linux: <https://support.rackspace.com/how-to/linux-spheres-of-support-for-dedicated-and-managed-ops>

Windows: <https://support.rackspace.com/how-to/cloud-servers-with-managed-operations-support-for-windows>

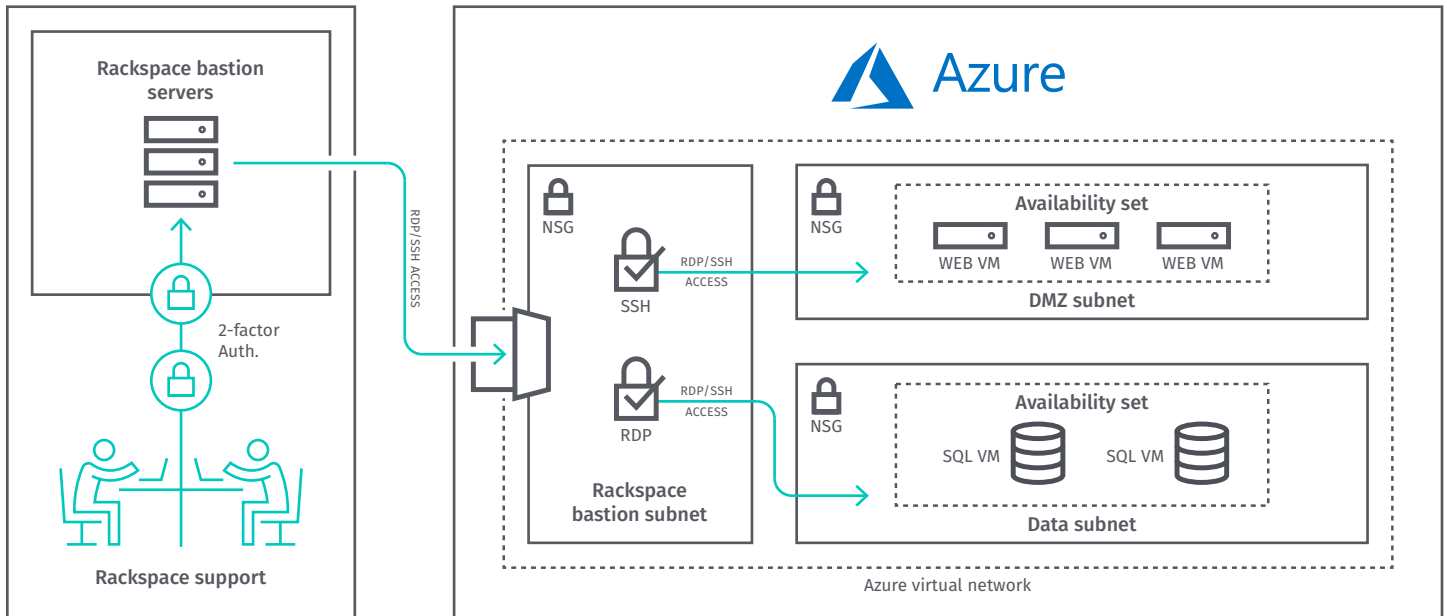
Passport (secure Azure VM access): Rackspace support engineers servicing customer Azure subscriptions under the Manage & Operate service will leverage a proprietary tool used to provide a highly secure, named-employee, time-bound, audited and MFA-authenticated access service for Rackspace engineers to access your Azure VMs. In addition, Rackspace has established a bastion server management standard, which must be present in the customer environment and which must meet stringent security requirements.

Passport bastion details: Rackspace support engineers will leverage a secure bastion server from known and controlled networks in Rackspace data centers using the remote desktop protocol (RDP) or secure shell (SSH). Once access has been established, Rackspace Support engineers will access your environment using RDP and/or WinRM and/or SSH from the bastion host. Traffic from the bastion host will pass across the Azure bastion virtual subnet to the various subnets within your Azure virtual network.

Rackspace will create the bastion server within a specific subnet and will create one bastion per virtual network (VNET). The preferred virtual machine for the bastion host is:

Instance	Cores	RAM	Disk size	Operating system
a1v2	1	2GB	30GB	CentOS 7

Bastion server example topology



Access Grants (secure Azure portal access)

Customers with Azure subscriptions covered under the Manage & Operate service are onboarded into the Rackspace Access Grants tool, which provides a scalable, auditable and secure access management service for the Azure portal. The Access Grants service is leveraged by Rackspace support engineers to access your Azure environment to facilitate a requested change or respond to an emergency alert. It provides a compliance and security-focused approach to access management by delivering a named-employee, on-demand, time-bound, documented (auditable) and MFA-secured Azure subscription management service.

The system leverages the Azure Active Directory (AAD) B2B invitation service/API to import users from the Rackspace Azure Active Directory (AAD) tenant, and takes advantage of existing corporate identities with dual-factor authentication.

Service reviews

Service Reviews are available upon request for Manage & Operate customers and provide an opportunity for regular governance sessions of your environment's performance, and to review operational information such as the status of backups, patching and anti-virus. The review may include items such as:

- Support tickets
- Monitoring alerts
- Upcoming change or maintenance events
- Product roadmap updates
- Microsoft Azure announcements

Response time guarantee SLA

Support Tickets fall into one of the following severity levels:

- Emergency: Business-Critical System Outage/Extreme Business Impact – 15-Minute SLA (Manage & Operate only)
- Urgent: Production System Impaired/Moderate Business Impact – 1-Hour SLA (Manage & Operate only)
- Standard: Issues and Requests/Minimal Business Impact – 4-Hour SLA for Manage & Operate/24-Hour for SLA for Platform Essentials

Note: All customer-submitted requests via the control panel are automatically categorized as standard requests by the Rackspace ticketing system. Please call Rackspace support 24x7x365 to escalate the issue to an urgent or emergency classification.

Additional services

Application migration assistance

Transitioning from an existing environment to Azure requires specific expertise and resources skilled in technology transformation, migration planning and risk mitigation. For an additional fee and with assistance from other businesses where needed, Rackspace will own the process of migrating your applications to Azure. Please engage your sales representative for further information regarding pricing and timelines.

Advanced database support

Rackspace has extensive experience and comprehensive support expertise to provide database support for MS SQL Server. We operate teams of highly trained and certified database experts focused on delivering an exceptional experience, 24x7x365. Our experts are available throughout every stage of your project, from architecture and design to administration and monitoring.

As part of our Manage & Operate offer, Rackspace will provide support for Microsoft SQL Server and Azure SQL Server instances, including installation, basic configuration, monitoring, troubleshooting and backups, as illustrated below. Additionally, Rackspace can provide advanced DBA services tailored to your specific needs for an additional fee.

Included in Manage & Operate	Advanced DBA add-on services
<ul style="list-style-type: none">• Best-practice guidance• Knowledge base• Community support	<ul style="list-style-type: none">• General database consultation• Advanced architecture design & monitoring• Partner engagement
<ul style="list-style-type: none">• Database setup and configuration• Microsoft SQL Server cluster initial setup• User administration• Security administration• Database health monitoring	<ul style="list-style-type: none">• Performance tuning and diagnostics• Data import and export• Microsoft SQL Server mirroring and log shipping• Microsoft SQL Server cluster maintenance/change
<ul style="list-style-type: none">• Backup and recovery (limited to full DB restores)• Configuration of Microsoft SQL Server backups (DB and transaction log)• Monitoring/troubleshooting Microsoft SQL backup job failures	<ul style="list-style-type: none">• Customized maintenance plans• Refresh and migrate data between instances and data centers• Advanced restore requests (point-in-time recovery)
<ul style="list-style-type: none">• Availability issues in production	<ul style="list-style-type: none">• In-depth incident retrospective

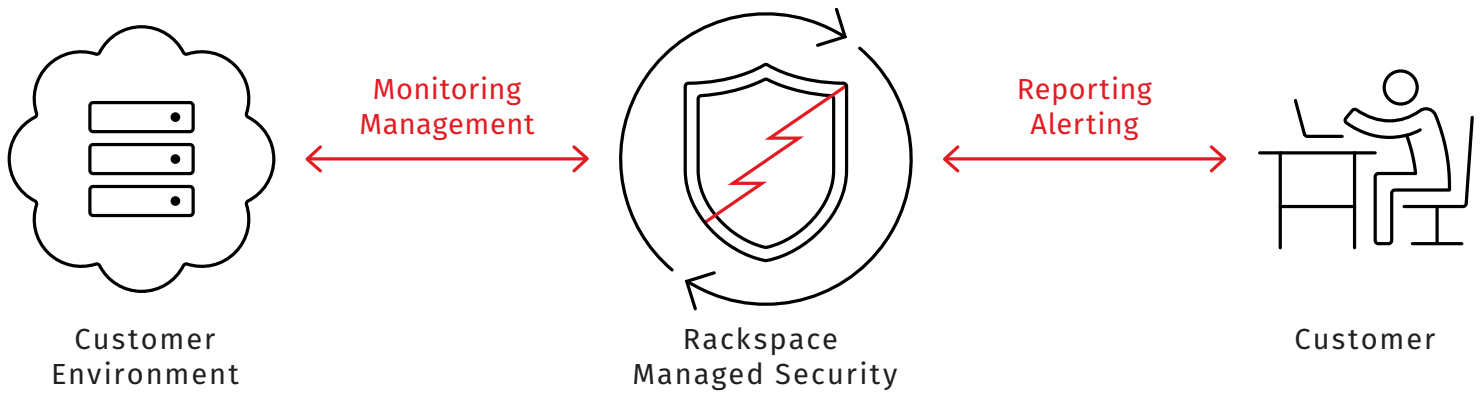
Rackspace Application Services (RAS)

Available as an add-on service for Manage & Operate customers, Rackspace Application Services (RAS) extends Rackspace support up the stack to the application layer. RAS provides application expertise, performance monitoring and proactive support for your mission-critical websites and applications. RAS enables end-to-end transaction visibility and real-time end-user experience monitoring using industry-leading tools to help you meet uptime requirements for mission-critical applications with a cost-effective model. RAS is available in blocks of 10, 20 or 40 hours per month. Benefits include:

- The ultimate application services experience (set up, monitoring and proactive optimization)
- 100% Production Platform Uptime Guarantee with approved HA environments
- Proactive guidance to help ensure stable application environments
- Proactive application and infrastructure monitoring and tuning for maximum application performance
- Constant analysis of performance metrics and trending reports
- Highly customized solutions delivering a complete view of your environment
- End-user experience analysis and incident detection
- Real-time transaction-level monitoring
- Diagnostic performance reporting

Rackspace Managed Security (RMS)

Available as an add-on service for Manage & Operate customers, Rackspace Managed Security (RMS) protects your IT environment against advanced persistent threats (APTs) and other cyberattacks. RMS provides deep expertise, leading technology and advanced threat intelligence, tailored to your business needs for a 24x7x365 defense — often at a significantly lower total cost of ownership (TCO) than internally developed security operations centers and comparable managed security service offerings.



Reasons to choose Rackspace Managed Security

- 24x7x365 detection and response: Your experienced Rackspace security team monitors and manages your environment around the clock, responding to threats based on your specific business needs and IT requirements.
- Leverage security experts: Use the Rackspace Managed Security service as a security force multiplier. Security professionals tailor support to meet your security goals — from strategic planning for best-practice cloud security, to tactical day-to-day security monitoring and threat analysis.
- Employ industry best practices and advanced security solutions: Rackspace works closely with a select list of security providers to deliver access to collective expertise from across the industry and advanced technology to protect your managed cloud.
- Meet security goals while lowering TCO: The advanced security protection of Rackspace Managed Security can significantly lower TCO over internally developed security operations centers and comparable managed security service offerings.

Feature	Benefits
Host and network protection	Get advanced host and network protection platforms targeted at zero-day and non-malware attacks and traditional compromise tactics.
Security analytics	Leverage a leading security information and event management (SIEM) platform, paired with big data analytics platforms, to collect and analyze data from your environment.
Vulnerability management	Get advanced scanning and agent technologies to understand environment specifics and respond to threats and attacks based on your needs.
Log management	Use Rackspace to collect standard OS logs and assist in identifying additional data that may be collected.

Custom DevOps professional services

Rackspace has extensive experience working with DevOps methodologies, practices and toolchains. We can assist customers in adopting DevOps methodologies and practices inside their own organizations via a professional services engagement.

Rackspace DevOps Professional Services has two methods of delivering DevOps outcomes for customers:

- Working with you to identify and implement any additional custom tooling necessary to achieve your business goals.
- Assisting you in evaluating and assessing the maturity of DevOps practices within your organization if you are in the early stages of your DevOps journey.

You can expect the following from our Professional Services engagement:

- Creation of in-depth customization for your application using the Microsoft DevOps toolchain.
- Assistance in the writing of customized configuration management code using third-party tools.
- Implementation and customization of continuous integration and continuous deployment (CI/CD) toolchains using third-party tools
- Custom plug-in integration between DevOps and ChatOps tools like Slack.

DevOps maturity and strategy planning

As part of a DevOps Professional Services engagement, Rackspace will help deliver the outcomes required via internal or trusted partner-led resources. These are one-time engagements using an agreed-upon fixed-time box, where we, or third parties that we work with, can help with application-specific engineering requirements. These include, but are not limited to, assistance with configuration management, continuous integration, continuous deployment and release management. During the engagement, you will gain these benefits:

- Learn the principles, benefits and tools behind a successful DevOps culture.
- Discover the techniques for building modern applications that are self-healing and self-sustaining.
- Review your current build and deployment processes with our experts.
- Develop a roadmap that outlines your goals and timelines and defines how to integrate DevOps automation into your environment.
- Classify applications and identify key stakeholders to help drive the adoption of DevOps practices.

Appendix 1:

Service relationships (roles and responsibilities)

There are traditionally two parties involved in supporting your Azure environment, specifically:

- You, the customer (including any in-house IT resources or contractors)
- Rackspace, our Microsoft Azure-certified support experts

R = Responsible **A** = Accountable **C** = Consulted **I** = Informed

Service level activities (For Architect & Deploy + Manage & Operate customers)	Rackspace	Customer
Account management and tooling		
Provide named Account Manager (AM) resource	R, A	C, I
Standard account reporting	R, A	C, I
Identify opportunities for cost and performance optimization	R, A	C, I
Provide opinions and best practices around account architecture, security and resiliency	R, A	C, I
Create a Rackspace account with an owner/contributor role within the customer's subscription to enable Rackspace automation	C, I	R, A
Discovery		
Understand business objectives and current challenges (e.g., migration to Azure, refactoring current Azure footprint)	R, A	C, I
Schedule and conduct a deep-dive discovery session	R, A	C, I
Understand systems SLAs, RTO and PPO requirements	R, A	C, I
Design & architecture		
Define architecture options to be considered (e.g., lift & shift vs. refactoring)	R, A	C, I
Agree on high-level design (HLD) architecture	C, I	R, A
Generate high-level application and logical diagrams for proposed architecture(s)	R, A	C, I
Generate detailed infrastructure schematics for proposed architecture(s) (e.g., VNET, subnets and network security group design, etc.)	R, A	C, I
Create solution design document	R, A	C, I
Design for a high availability and security-first approach	R, A	C, I
Design for sizing, scalability and performance	R, A	C, I
Infrastructure implementation		
Deployment of Azure infrastructure (networking, storage and compute) using the Rackspace ARM template library	R, A	C, I
Configure IaaS components with VM extensions (anti-malware, monitoring and diagnostics)	R, A	C, I
Deployment of images outside of Rackspace Operating Systems Spheres of Support (SoS)	C, I	R, A
User acceptance testing (UAT) and sign-off environment deployment	C, I	R, A
Configure and test WAN connectivity for ExpressRoute and site-to-site VPN (Rackspace data centers and managed subscriptions)	R, A	C, I
Configure and test WAN connectivity for ExpressRoute and site-to-site VPN (customer data centers and unmanaged subscriptions)	C, I	R, A
Initial governance assistance through deployment of resource groups and implementation of Azure tagging for Rackspace-managed deployments	R, A	C, I
Implementation of ongoing change management for Azure infrastructure components	R, A	C, I

R = Responsible A = Accountable C = Consulted I = Informed

Service level activities (For Architect & Deploy + Manage & Operate customers)	Rackspace	Customer
Network and access security implementation		
Consult on identity access management (IAM) roles and polices	C, I	R, A
Define Network Security Groups and rules requirements	C, I	R, A
Implement Network Security Groups and rules	R, A	C, I
OS user management per Rackspace Spheres of Support	R, A	C, I
Anti-virus installation, configuration and monitoring for Windows VMs	R, A	C, I
Application implementation		
Deployment of application code and management of source control (Git/VSTS, etc.)	C, I	R, A
Migration of application data	C, I	R, A
Database schema creation, migration and import	C, I	R, A
Development and deployment of configuration management artifacts (Chef, Salt, Ansible, etc.)	C, I	R, A
Creation and management of continuous integration/continuous deployment pipelines	C, I	R, A
Azure Active Directory (AAD)		
Initial deployment of AAD	R, A	C, I
Configuration, maintenance and administration of AAD as needed to provide access for Rackspace engineering teams	R, A	C, I
Configuration, maintenance and administration of AAD as needed to provide access for clients or other third-party vendors	C, I	R, A
Configuration of AD Connect replication service to extend on-premises AD environment to AAD	C, I	R, A
Configuration of Active Directory Domain Services (ADDS)	C, I	R, A
Promotion of new domain controller on IaaS VM in Azure	R	A, C, I
Extending domain controller to new IaaS VM in Azure	R	A, C, I
Procurement, allocation and management of AAD premium licenses and features (Basic, P1, P2)	C, I	R, A
Monitoring		
Deployment and management of Rackspace standard OMS log analytics monitoring platform	R, A	C, I
Initial deployment of Azure Application Insights workspace	R, A	C, I
Configuration of up to 3 web test availability monitors	R, A	C, I
Configuration and management of Application Insights dashboards and custom event logging and alerting	C, I	R, A
Configuration of Application Insights synthetic transaction URL monitors	C, I	R, A
Configuration of application performance monitoring (APM) services, like Application Insights, New Relic, AppDynamics, etc.	C, I	R, A
Configuration of any custom OMS alerts	C, I	R, A
Ticketing/alerting		
24x7x365 access to support for Rackspace standard monitoring services, including initial responses, escalations and troubleshooting of incidents within Rackspace response time SLA guarantees	R, A	C, I
Ongoing definition, management and maintenance of Rackspace standard OMS monitoring platform, including the definition of alert triggers, thresholds and remediation instructions	R, A	C, I
Initial response, escalation and troubleshooting of custom alerts on Azure, including non-standard OMS alerts, APM alerts, etc.	C, I	R, A

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Service level activities (For Architect & Deploy + Manage & Operate customers)	Rackspace	Customer
Backups and disaster recovery		
Creation of an Azure Recovery Service Vault (RSV)	R, A	C, I
Creation and management of VM backup policies and schedules to Rackspace standards	R, A	C, I
Monitoring and remediation of backup failures on Rackspace standard backup service	R, A	C, I
Verification of validity of backup data and methodologies	C, I	R, A
Backup restoration testing	C, I	R, A
Backup restoration request	R	A, C, I
Installation, configuration and management of Azure file-level backup agents and service	C, I	R, A
Azure Site Recovery (ASR)		
Design of DR/BCP strategy, including end-to-end environment failover processes, communication strategy, or any related activity for the creation of a disaster recovery or business continuity plan	I	R, A
Design of ASR architecture to Rackspace best-practices for approved workloads from one Azure region to another	R, A	C, I
Configuration of simple ASR Recovery Plan using a single failover group (custom scripting excluded)	R, A	C, I
Configuration of custom ASR Recovery Plan using multiple failover groups and/or custom scripting	C, I	R, A
Configuration of Azure-to-Azure ASR replication services	R, A	C, I
Configuration of ASR replication module in Rackspace monitoring platform	R, A	C, I
Emergency failover using pre-configured ASR Recovery Plan	R	A, C, I
Perform ASR "Test Failover" service once every six months, allowing validation of infrastructure failover orchestration as well as data replication services (application failover testing excluded)	R, A	C, I
Application failover testing following ASR "Test Failover"	C, I	R, A
24x7x365 incident response for ASR replication issues	R, A	C, I
Azure Kubernetes Service (AKS)		
Design and deployment of AKS infrastructure, including configuration of AKS cluster, nodes, node pools, and Azure Container Registry (ACR)	R, A	C, I
Design and deployment of containers, load balancers, static IP addresses or any other service configured via YAML file	C, I	R, A
Implementation of other Kubernetes packages (like Prometheus, Grafana, Helm, Linkerd, fluentd, Envoy, etc.)	C, I	R, A
Configuration of geo-replicated Azure Container Registry	R, A	C, I
Build, automate, update and deploy container images with Azure Container Registry tasks	C, I	R, A
Monitoring and logging for AKS cluster and worker nodes	R, A	C, I
Monitoring and logging for containers, pods and controllers	C, I	R, A
AKS cluster and worker nodes troubleshooting	R, A	C, I
Containers, pods and controllers troubleshooting	C, I	R, A
Integration of AKS with Azure Active Directory or private docker container registry	C, I	R, A
Integration of AKS into a CI/CD pipeline	C, I	R, A
Upgrade an AKS cluster or patch security/kernel updates to worker nodes in AKS	R, A	C, I
Patching		
Installation and configuration of automated OS-level patching via the Azure update management service	R	A, C, I
Installation and configuration of automated OS-level patching via automatic updates within OS	R	A, C, I
Deployment, configuration and management of any other patch management service	C, I	R, A

Appendix 2:

Spheres of management

Platform Essentials Service Blocks enable access to the complete Microsoft Azure portfolio of services. For Manage & Operate customers, Rackspace has created the following Spheres of Management table highlighting the Azure services that fall under Rackspace Managed or a “reasonable effort” status in our service catalog.

Rackspace managed

Rackspace has substantial support expertise and has developed specific support services to facilitate at-scale management of an Azure feature.

Reasonable effort

Rackspace will undertake reasonable activities to support our clients to troubleshoot issues (including escalation to Microsoft as needed), but cannot offer a management service with a guarantee of resolution, responsiveness or expertise with a specific Azure feature. Any Azure feature or service not listed below is to be considered “reasonable effort.”

Category	Reasonable Effort	Rackspace Managed
Compute		
Virtual Machines (VM)		•
VM Scale Sets (VMSS)		•
Batch	•	
Reserved Instances (RI)		•
Azure Kubernetes Service (AKS)		•
App Service Environment (ASE)		•
Web & mobile		
Web apps		•
Logic apps	•	
Functions	•	
API apps	•	
Data & storage		
SQL database		•
Azure SQL		•
Azure SQL – Managed Instance		•
Storage		•
Import/Export	•	
Redis Cache		•
Cosmos DB		•
Search		•

Category	Reasonable Effort	Rackspace Managed
Analytics		
HDInsight	•	
Networking		
Virtual Network		•
Traffic Manager		•
ExpressRoute		•
Azure DNS		•
Load Balancer		•
VPN Gateway		•
Application Gateway (& WAF)		•
Media & CDN		
CDN	•	
Hybrid integration		
Service bus		•
Backup		•
Identity & access management		
Azure Active Directory (AAD)		•
Multi-Factor Authentication (MFA)	•	
Azure Active Directory B2C	Unsupported	
Azure Active Directory Domain Services (AADDs)	•	
Developer services		
DevOps Pipelines/Visual Studio Team Services (VSTS)	•	
Azure Enterprise DevTest Subscriptions	Unsupported	
Management		
Scheduler	•	
Automation	•	
Log Analytics	•	
Key Vault		•
Security Center	•	
Application Insights	•	
Blueprints	•	
Policy	•	

Category	Reasonable Effort	Rackspace Managed
Internet of Things (IOT)		
Notification Hubs	•	
Machine Learning (ML)	•	
Event Hubs	•	
Stream Analytics	•	
Azure IoT Hub	•	
Azure Site Recovery (ASR)		
Azure-to-Azure ASR		•
Hyper V-to-Azure ASR		Service available as an add-on
VMware®-to-Azure ASR	•	
Bare Metal-to-Azure ASR	Unsupported	

Appendix 3:

Subscription management requirements

As a part of the Fanatical Support for Microsoft Azure offering, Rackspace will be required to perform actions in your Azure environment as a trusted partner. Rackspace cannot fulfill our role as your managed service provider without the correct level of access and permissions. Rackspace takes your trust and your security seriously and has integrated safeguards into our management service to avoid abuse of these services, leveraging Rackspace corporate identities (along with the built-in security features like MFA credentials, password rotation, etc.). If Rackspace is unable to secure the appropriate level of access required to deliver management services, Rackspace professionals are unable to deliver managed services in an at-scale manner using automation services and consistent tool sets for the global team of engineers (helping Rackspace drive cost efficiency into our managed service, which we pass along to our clients).

Owner/contributor access

To deliver our Fanatical Support for Microsoft Azure service, Rackspace requires “Owner” or “Contributor” permissions to all Azure subscriptions under our management. Several of our support offerings and/or tools require that the Owner/Contributor account be configured as an “organizational account” rather than as a “Microsoft account.” If you are unable or unwilling to provide Rackspace with an organizational account setup for Owner/Contributor permissions, some support services may not be available or may be limited in scope.

The Owner/Contributor account credentials will be stored within a secure password repository at Rackspace and used by Rackspace technicians during support, troubleshooting, deployment and other similar activities.

Azure Active Directory Service Principal Names (SPN)

Rackspace requires the configuration of SPNs to enable our management services to access resources that are secured by an Azure AD tenant. During onboarding activities, the user will be presented with an Azure AD application to consent to the required permissions for Rackspace to access resources within a tenant..

Rackspace SPNs are assigned a “least-permission levels” model, where Rackspace has defined the access policy and permissions, authentication and authorization to deliver programmatic access to resources within that subscription, enabling a host of automation services to deliver Fanatical Support for Microsoft Azure. SPN credentials are stored securely in an Azure Key Vault within an Azure subscription used by Rackspace for management services. The keys are encrypted at rest and in transit.

Access Grants – Azure Active Directory B2B SPN

Rackspace has developed a set of tools called Boarding Pass that are designed to provide Rackspace Support Engineers with on-demand, time-bound, audited and named access to customer subscriptions. The system leverages the Azure Active Directory (AAD) B2B invitation service/API to import users from the Rackspace AAD tenant, and takes advantage of existing corporate identities with dual-factor authentication. The feature is broken into two discrete services, Boarding Pass Enrollment and Boarding Pass Access:

- **Boarding Pass Enrollment:** The on-boarding tool prepares the subscription by configuring the necessary automation account or Service Principle Name (SPN), and setting up the predefined access groups.
- **Boarding Pass Access:** A secure web application that resides in the Rackspace operations portal and grants time-bound access to the selected subscription.

Boarding Pass is reserved exclusively for Azure-certified members of the Fanatical Support for Microsoft Azure engineering team. There are several security controls that have been put in place to manage access, including:

- User must have a presence in the Rackspace corporate directory (RSA dual-factor enforced).
- User must be a member of an LDAP group for access to the Fanatical Support for Microsoft Azure Operations Portal (restricted group).
- User must be a member of an LDAP group for access to the Boarding Pass portal (further restricted to either reader or contributor roles).

About Rackspace

At Rackspace, we accelerate the value of the cloud during every phase of digital transformation. By managing apps, data, security and multiple clouds, we are the best choice to help customers get to the cloud, innovate with new technologies and maximize their IT investments. As a recognized Gartner Magic Quadrant leader, we are uniquely positioned to close the gap between the complex reality of today and the promise of tomorrow. Passionate about customer success, we provide unbiased expertise, based on proven results, across all the leading technologies. And across every interaction worldwide, we deliver Fanatical Experience™. Rackspace has been honored by Fortune, Forbes, Glassdoor and others as one of the best places to work.

Learn more at www.rackspace.com or call 1-800-961-2888.

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