

High Availability

Email and collaboration availability – it's critical to the success of your organisation. It's also one of the biggest pain points imaginable. If it goes down, your customers and colleagues raise an uproar. Even worse, work comes to a standstill and, with it, revenue generation.

High availability is so critical – that's why we've invested considerable resources into building our highly available **exchange2go Hosted Exchange** platform.

High Availability

With no single points of failure in our Exchange environment and our years of experience supporting complex applications, **exchange2go Hosted Exchange** delivers the highest levels of reliability, performance, and uptime. This is not your every-day **Hosted Exchange** solution, this is **exchange2go**.

High Availability makes a difference in a lot of ways:

- Fully redundant High Availability (HA) infrastructure designed and built to minimise the impact of any component failure
- Load balanced and clustered environment
- Delivering 99% server uptime – guaranteed

High Performance Cluster

Downtime Protection – If a cluster node fails or is taken offline for maintenance, our passive-active cluster server configuration activates another node, protecting **exchange2go Hosted Exchange** from downtime and service disruption.

Infinite Scalability – The **exchange2go Hosted Exchange** clustered environment makes it easy to add Exchange servers and drives for storage without any downtime – creating an infinitely scalable and stable solution.

Consistently High Performance – We intentionally keep our Exchange server utilisation low to ensure that memory/CPU performance is never degraded.

Network Redundancy and Security – **exchange2go Hosted Exchange** runs on Rackspace's Zero-Downtime Network™. So 100% network uptime isn't wishful thinking, it's a guaranteed reality. Rackspace designed and built the Zero-Downtime Network to minimise downtime, which allows us to deliver fast response times to any issues that may arise.

Our **exchange2go Hosted Exchange** servers are located in one of Rackspace's eight fully redundant, world-class datacentres across the globe that are secured by keycards, biometric scanning, and constant surveillance in a fully redundant environment.

- Zero-Downtime Network (Utilises 9 Network Providers) – By building multiple redundancies into the network, information flows to and from end users' mailboxes quickly.
- Redundancy On Top of Redundancy – We ensure that all traffic and requests are efficiently processed without fail or delay. Our **exchange2go Hosted Exchange** environment includes multiple firewalls and load balancers to keep it running smoothly under any circumstances and to protect your email and mailboxes.

Monitoring Exchange Performance

The entire Exchange Engineering Team works with advanced monitoring tools that keep a watchful eye over all aspects of the **exchange2go Hosted Exchange** environment, 24x7x365. Intelligent checks built into our system keep Exchange working and email flowing, so that, should a component of our **exchange2go Hosted Exchange** environment behave abnormally, automatic failover occurs behind the scenes, and users are never impacted. Simultaneously, our Exchange Engineering Team is immediately notified of the incident so they can identify the cause.

Datacentre

A datacentre must be intentionally constructed from the floor up to offer high availability to the services hosted inside. With Rackspace (our strategic partners) as our datacentre provider, we are confident that the datacentre physical plant and network infrastructure will allow our customers to rest easy knowing services will always be available.

- **Bandwidth** – Best practices for high availability are in place, such as the use of physically distant entry points for several tier-one network carriers, including Sprint, AT&T and MCI. Multiple edge routers and an internally redundant network co-designed with Cisco provide assurance that data will be routed to and from the Internet with low latency and high availability. Rackspace datacentres offer a 100% network uptime guarantee (SLA). All important aspects of network availability and performance are monitored by staff 24x7.
- **Power** – Conditioned power is used for all servers and network equipment. In the event of a power degradation or outage, uninterruptible power supplies (UPS) instantaneously provide the necessary energy to continue all services. Fail-over UPSs are also installed and configured to assume power control if needed. An extended outage would trigger on-site diesel engine generators. To ensure proper operation, the generators are regularly inspected and tested.
- **Cooling** – A large capacity HVAC system is a must for server rooms packed with heat-producing servers. The HVAC system is also redundant in the event that primary coolers experience issues. To reduce dust and keep air cool, the air in the datacentre is filtered and cycled every 90 seconds.

- **Security** – Continuous surveillance, biometric authentication, keycards, and limited access only to employees who have undergone thorough background checks make sure that only authorised individuals have physical access to servers and network equipment.
- **Fire Suppression** – State of the art fire suppression is also in place to immediately halt the progress of any detected fire and to allow key services to continue without interruption.
- **Staff** – All staff are certified and experienced in maintaining and monitoring critical networks and servers. The combined experience of our staff and Rackspace’s personnel is extremely valuable in quickly solving common and not-so-common issues.