

Royal Flying Doctor Service (Queensland Section)



RFDS (Queensland Section) uses Riverbed solutions to power journey to the cloud and improves essential healthcare services to rural and remote communities across the state

The Royal Flying Doctor Service (Queensland Section) (RFDS) operates an extensive IT network to ensure it can deliver consistent, high-quality healthcare services across the state, including rural and remote communities with little to no connectivity. The network also supports administrative services for its 400 employees.

Connectivity and communication are key to RFDS's success. Yet as the organization increasingly embraced cloud services, it was pushing the limit of what the existing IT network could deliver. This was starting to impact service delivery. Simply purchasing more network bandwidth was not an option due to the high costs involved.

RFDS deployed Riverbed solutions to increase network visibility and accelerate mission-critical applications, enabling the organization to improve and expand life-saving healthcare services for its patients, as well as establish a firm foundation for its journey to the cloud.

Company description

The Royal Flying Doctor Service (RFDS) is one of the largest and most comprehensive aeromedical organizations in the world, responsible for delivering fly-in fly-out GP, nursing, and allied health clinics to rural and remote communities across Australia.

Using the latest in aviation, medical, and communications technology, the iconic organization delivers extensive primary healthcare and 24-hour emergency services to more than 290,000 Australians each year. In Queensland the RFDS operates 19 aircraft from eight operational bases, with a workforce of more than 400. This includes pilots, doctors, engineers, administration, and support roles serving 95,000 residents across the state.

With a waiting room that's 7.3 million square kilometers, communication and access to data through multiple devices is critical to success. Examples include round-the-clock access to flight information and sharing clinical documentation over email.

In Brief

Challenges

- Employee productivity impacted by poor performance of mission-critical applications
- Increased adoption of bandwidth-intensive cloud services and applications straining existing network capacity, causing frequent outages
- Lack of insight into overall network performance making it difficult to resolve issues, hold service providers accountable to SLAs and confidently move to the cloud
- Maximize limited IT resources

Solution

- Riverbed® SteelCentral™ NetExpress
- Riverbed® SteelHead™ SaaS
- Riverbed® SteelHead™ CX

Benefits

- Improved network and application performance across the organization
- Ability to rapidly detect and fix the root cause of issues plaguing the network and impacting performance
- Reduced bandwidth usage by up to 70 percent, eliminating the need for costly upgrades
- Boosted employee productivity and operational efficiency, reducing costs and enabling more effective delivery of healthcare services
- Established a foundation for RFDS's migration to the cloud, enabled by improved network visibility and successful optimization of cloud applications
 - Cloud-first strategy enables the IT team of three at RFDS to focus on other areas adding value to the organization's offerings

Challenge: Maintaining one of Queensland's largest and most complex IT networks

To fulfill its commitment of providing the finest healthcare services to the farthest corners of Australia, RFDS's IT network is required to balance and combine the needs of a medical provider with that of an aviation business.

It's a complex challenge heightened by the need to equip employees with mobile devices and applications empowering them to work on the move, and who also need to seamlessly exchange information with IT networks across Queensland's hospitals and medical centers. RFDS is also required to operate in regional areas and communities offering limited—or in some instances zero—access to communication networks.

Further, the nature of RFDS's work requires 24/7 secure access to critical information including patient information, emergency procedures and flight plans, which are centrally maintained in Microsoft SharePoint.

RFDS's IT system also supports the transmission of thousands of emails per hour as well as bandwidth-intensive video content vital for training field staff.

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Dean Coulter, ICT Infrastructure Manager
RFDS (Queensland Section)

Driven by a goal to more effectively manage its limited IT resources, RFDS made the decision to move an increasing number of mission-critical applications and services to the cloud, which further increased the importance of network connectivity and visibility in delivering effective services. They soon began to push the limits of what their existing network could deliver. As a result, the level of service employees could provide and the speed at which they were delivered suffered.

“Network outages became more frequent, the performance of mission-critical apps slowed, and we started to receive more and more complaints from our staff,” explained Dean Coulter, ICT Infrastructure Manager, RFDS (Queensland Section). “But simply purchasing more network bandwidth wasn’t an option due to the high costs involved.”

At the same time, the RFDS IT team was flying blind with regards to its network performance and lacked sufficient tools to identify the root cause of issues, as well as hold service providers accountable to their service-level

agreements—essential to the successful implementation of their cloud strategy.

It was clear to Coulter that RFDS needed to make their existing technology work better for patients, flight staff and doctors, and he and his team approached Riverbed to help.

“We needed to solve the immediate performance challenges we were facing, but at the same time, if our cloud strategy was going to succeed, we needed assurance that our IT network could handle the increasing demands placed on it. We looked at several providers, with Riverbed the standout performer in terms of the team, capabilities, and value for money.”

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Solution: Optimising existing platforms and applications to address business challenges

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Supported by Riverbed partner Zero1, the organization trialed a proof of concept based on Riverbed SteelHead SaaS to speed up user access and accelerate the delivery of SaaS applications, and SteelCentral NetExpress for visibility across RFDS’s applications, network, and infrastructure.

The family of SteelHead technologies would empower RFDS employees to access applications and data from anywhere and on any device in a cost-effective manner, increasing the level of service delivered and freeing up resources for investment in other critical areas. The

insights delivered by NetExpress would help RFDS better plan its cloud migration.

“The Riverbed solution gives us a solid foundation to confidently move to the cloud. At the same time, we’ve been able to reduce bandwidth costs significantly and employee complaints have all but dropped. This has empowered our doctors, nurses, pilots, and support staff to focus on expanding and improving the delivery of the life-saving healthcare services, which have been the cornerstone of RFDS’s work for 80 years.”

Dean Coulter, ICT Infrastructure Manager
RFDS (Queensland Section)

Benefits: Improved network insights powers flight to the cloud

“The results were powerful and immediate. We saw a 60-70% reduction of traffic on the network with SteelHead,” explained Coulter. “But just as big of an achievement for us as the acceleration is the visibility. With SteelCentral NetExpress we were able to see we had legacy equipment and misconfigured applications hogging valuable bandwidth, and address it immediately. That level of insight is critical for us as our network expands and moves further into the cloud.”

The ability to identify and address inefficiencies on the network in a cost-effective manner has also helped to free up further capacity to boost performance of mission-critical applications.

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The cloud-first strategy at RFDS also overcomes IT resourcing challenges at RFDS, with the dedicated in-house IT team of three now supported by those vendors delivering the online services to increase the overall value provided by technology.

Speaking about the project, Neil Short, Principal Consultant at Zero1, said: “Riverbed’s application optimization and network performance management services are the foundations upon which RFDS’ cloud platform is built. Specifically, SteelHead will enhance the delivery of Microsoft Office 365, which RFDS is now deploying across all devices and locations. Quite simply,

RFDS could not have moved to the cloud as quickly and efficiently as it has without Riverbed.”

“It was important to us not only to find a solution that would solve our network challenges, but also to find a technology partner that really cares about what we do. Riverbed and Zero1 delivered,” said Fiona Foley, Executive Manager, ICT Services and Business Solutions, RFDS (Queensland Section). “The conversations we have now with the business are just totally different. We’re no longer talking about network outages, and we’re able to better focus on our core mission: delivering excellent healthcare services to the people of Queensland.”

RFDS has deployed SteelHead across all its regional sites in Queensland, with plans to implement SteelHead Mobile on laptops and mobile devices, empowering doctors to take advantage of 3G and 4G connectivity when working in remote locations with limited connectivity.

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About Riverbed

Riverbed enables organizations to modernize their networks and applications with industry-leading SD-WAN, application acceleration, and visibility solutions. Riverbed’s platform allows enterprises to transform application and cloud performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Learn more at riverbed.com.

The Riverbed logo consists of the word "riverbed" in a bold, lowercase, sans-serif font. The letters are a vibrant orange color.