Qirx and VMware supporting the AIHW's hybrid workplace and cloud transformation

Australian Institute of Health and Welfare

The AIHW is an independent federal government agency with more than 30 years of experience reporting on long-term trends and patterns of the health and welfare experiences of Australians. Its role is to collect and manage data on health and welfare issues and turn that data into useful information and reports to support better policy and service delivery decisions.

www.aihw.gov.au

INDUSTRY
Government

HEADQUARTERS
Canberra, Australia

FOUNDED
5 June 1987

STAFF
600

CUSTOMER STRATEGIC PRIORITIES

- Ongoing requirement to ensure the protection and secure processing of sensitive data.

- Urgent response to pivot to whole-of-business remote working operations.

- Support for hybrid workplace and technology environment, and longer-term cloud transformation program.

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Mat Rogers
Chief Information Technology Officer,
Australian Institute of Health and Welfare

Qirx

Managing Sensitive Data in the Modern World

Australian Institute of Health and Welfare (AIHW) has around 500 analysts and researchers who work with diverse and complex data sets, publicly releasing over 200 reports and analyses annually covering more than 75 health and welfare topics. The AIHW also provides end-to-end data services for community, policymakers, researchers and service providers on a wide range of health and welfare matters.

This highly sensitive data is managed by the AIHW with respect, privacy and confidentiality using the 'Five Safes' framework. Five Safes is an internationally recognised approach to considering strategic, privacy, security, ethical and operational risks as part of a holistic assessment of the risks associated with data sharing or release.

To help meet the requirements of the Five Safes framework, AIHW internal technicians and Qirx on-site resources deployed VMware Horizon. The AIHW had a logically isolated internal network, secured and separated from the rest of its corporate environment. VMware Horizon gave AIHW's analysts the virtual desktop infrastructure (VDI) they needed to access the network and server resources to undertake secure data analysis. That ensured both the data and its processing always stayed in that separate environment.

"Even though the data we work with is de-identified, we have a responsibility to protect and provide access to that data via a secure mechanism, which can also be extended to external researchers as well as our own analysts to work with data sets," explained Mat Rogers, Chief Information Technology Officer, AIHW.

Adapting Quickly to Dramatic Changes

With the first COVID-19 lockdown in March 2020, everything changed dramatically for the AIHW. The biggest issue was the scale of its remote access environment. There were only a small number of VMware Horizon licences, which were available from dedicated internal pods. The configuration of VMware Horizon Full Clones in these pods wasn't remote-capable or readily scalable, while an ageing Citrix environment allowed about 40 concurrent users to access the corporate network remotely. Most users had desktops, with a fleet of fewer than 150 laptops that staff could use to connect over a VPN.

"We were under-prepared for 550 to 560 staff to revert quickly to remote working," said Gavin Thomson, ICT Infrastructure Manager, AIHW.

It was virtually impossible for the AIHW to source extra laptops due to overwhelming demand and supply chain issues caused by the pandemic, and the Citrix environment wasn't easily scalable to meet the AIHW's needs.

The AIHW called on assistance from Qirx and VMware to help design and deploy a secure remote access solution based on adapting and extending the capacity of its VMware Horizon environment.

Qirx had previously worked with the AIHW to expand the capacity of its internal Nutanix cluster to meet the Institute's future growth requirements, so there was already sufficient infrastructure that could be made available.

"Within the first two weeks of deployment, we were up and running at capacity. "

Qirx

"VMware gave us a trial licence for 500 Horizon seats to make sure that we had more than enough capacity, and we worked together with Qirx to free up the resources and space required on the Nutanix clusters to ramp up the Horizon environment," said Thomson.

The solution combined VMware Horizon Instant Clones and App Volumes, allowing the infrastructure to adapt to times of high demand. An Instant Clone builds the virtual machine on demand then removes it when the session ends, while App Volumes dynamically assigns the applications and services needed by each user. Multi-factor authentication was set up using F5 and RSA technologies.

The AIHW had its initial remote working environment operational in a week, followed by additional testing and development of further functionality. That allowed staff to securely connect to internal and cloud-based corporate resources and applications from their home networks using either corporate or personal devices.

"Within the first two weeks of deployment, we were up and running at capacity. The first week was getting people logged in to do business-critical work, and then the second week was dealing with any adjustments or issues that came up and adding those 'nice-to-haves'," said Thomson.

Supporting a hybrid environment

Since the initial lockdown, the AIHW has maintained a hybrid workplace using its VMware Horizon platform for secure remote access. The Institute has also completed a hardware refresh to enhance flexibility, deploying laptops for all users.

It was a seamless transition to remote work when Canberra went into lockdown for the second time in July 2021 – which the AIHW's CITO Mat Rogers experienced first-hand.

"My first day at the Institute was the first day of that second lockdown in Canberra. I went into

the office, collected my laptop, came home with the instructions, and logged on straight away. I was able to launch videoconferencing, email, and all the corporate applications I needed to get onboarded into the organisation. That's when you know that the IT is working, and that you've got a good stable environment to build upon," said Rogers.

The AIHW's hybrid workplace is also reflected in its technology infrastructure, and the Institute's longer-term strategies in moving to the cloud. Currently, the AIHW maintains a significant on-premises capability, plus a range of corporate applications and services in the cloud, including Microsoft Azure and 365.

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Throughout it all, Qirx has been the Institute's networking and infrastructure support partner, also delivering its services in a hybrid model. Qirx combines dedicated on-site resources with the ability to scale up to help the AIHW deliver projects or respond to issues.

"Qirx is a valuable strategic partner in helping support the AIHW environment. The rapid expertise that can be deployed to address critical infrastructure or project requirements based on their inherent knowledge of our environment through our partnership has been critical to achieving several outcomes over the past 12 months. Continuing to enhance a hybrid workforce model with Qirx is an area we will continue to embrace," Rogers concluded.

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About Qirx

Qirx has been providing innivative and robust tailored IT solutions since 2000. They have earned a reputation for excellence built on a distinctive depth of experience. You can be confident that a Qirx solution is designed around leading technology and current best practise.

Qirx AIHW

Stronger evidence,
better decisions,
improved health and welfare

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