

# Sovereign quantum encryption in the cloud

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 An Australian firm is helping to roll out the nation's first sovereign quantum encryption service. Credit: AP



An Australian firm has announced a partnership with a global leader in encryption technology to roll out the nation's first sovereign quantum encryption service.

AUCloud is one of a handful of companies trusted by governments worldwide to host secure sovereign cloud services.

To protect our private data and essential services such as hospitals, electricity and banking, the cloud provider on Wednesday announced a deal with Arqit to provide stronger, simpler encryption.

Genuine sovereign cloud services can protect citizens' data and the content of data centres from being handed over to foreign powers, and help secure critical infrastructure against nosy or malicious hackers.

The recent trilateral alliance between Australia, the United Kingdom and the United States, known as AUKUS, has defence innovation and technology at its heart and aims to lift the allies' game on cyber security, quantum computing, artificial intelligence (AI) and space technology.

"The world needs stronger, simpler encryption, and it is important that allied countries work together," Arqit founder David Williams said.

Arqit's Federated Quantum System (FQS) is designed for allied governments only.

The unique quantum encryption service makes the communications links of any networked device secure against current and future forms of attack - even from a quantum computer.

The market is every connected device, according to Arqit.

As one of Australia's sovereign cloud Infrastructure-as-a-Service (IaaS) providers, AUCloud already serves federal, state and local governments and critical national industries.

Phil Dawson, managing director and co-founder of AUCloud, said the partnership with Arqit would deliver an immediate capability to customers in these and other enterprise sectors, including financial services, intelligence and defence.

Listed on the Australian stock exchange as Sovereign Cloud Holdings (SOV), AUCloud is independently certified to meet Australian Signals Directorate information security standards and handle protected data.

The company is also a member of the Defence Industry Security Program and is "certified strategic" as a cloud provider by the Digital Transformation Agency.

A consortium of Australian government agencies, the Australia National University, and industry partners are working on the supply chain, technical aspects of deployment and planning for long-term funding of the full system across the country.

This first phase of work with Arqit was included in the "Space Bridge" agreement signed by then minister for Industry, Science and Technology Karen Andrews and British High Commissioner Vicki Treadell almost a year ago.