Rackspace Technology Teams Up with Munster Technological University to Launch Ireland's First Quantum Cloud Platform on AWS, Advancing Collaborative Research

February 4, 2025

QCloud Connects 13 Research Institutes and Fuels 11 Major Quantum Computing Projects to Transform Ireland's Quantum Research Landscape

SAN ANTONIO, Feb. 04, 2025 (GLOBE NEWSWIRE) -- **Rackspace Technology® (NASDAQ: RXT)**, a leading provider of hybrid, multicloud, and AI technology solutions, today announced, working with Munster Technological University (MTU) to unveil QCloud, Ireland's first quantum cloud computing hub on Amazon Web Services (AWS). This groundbreaking initiative aims to enhance collaborative research and remove barriers to accessing cutting-edge quantum computing technologies.

Established in 2021, MTU operates across six campuses in southwestern Ireland and is at the forefront of national cybersecurity initiatives within the European Union. QCloud was developed due to MTU's commitment to democratizing access to quantum resources, enabling secure and scalable connectivity to genuine quantum computing power for researchers throughout Ireland. MTU partnered with Rackspace Technology on the project due to its expertise in navigating the European Open Science Cloud (EOSC) Future project, which encourages collaboration between commercial service providers and researchers.

"Rackspace collaborated with MTU to secure essential funding to launch QCloud, enhancing research opportunities across the region," said D K Sinha, Rackspace Technology, President Public Cloud. "We are proud of this accomplishment because, through QCloud, MTU has established Ireland as a quantum research hub, democratizing access to cutting-edge quantum computing resources and fostering the next generation of quantum innovation."

QCloud Implementation
Following a successful proposal process facilitated by Rackspace, MTU launched QCloud in February 2024 with funding from the EOSC Future project. This innovative platform provides centralized access to quantum computing resources for researchers, facilitating groundbreaking work in various fields, including autonomous systems security. Through QCloud, MTU establishes Ireland as a key player in the quantum research ecosystem, fostering innovation and democratizing access to quantum computing resources.

Collaboration between MTU, Rackspace Technology, and AWS resulted in a comprehensive quantum research environment that includes:

- A centralized platform providing quantum computing access to eight universities and 13 research institutes
- AWS Control Tower landing zone with Account Factory for streamlined project management
- Custom quantum cost control dashboard for Amazon Braket using Amazon Identity and Access Management (IAM), AWS Cloud Development Kit (CDK), Amazon EventBridge and Amazon CloudWatch
- Real-time cost tracking with automated budget alerts and management systems

"Rackspace's collaboration was essential for establishing the QCloud infrastructure. Their expertise in AWS technologies was invaluable throughout this process," said Dr. Anila Mjeda, Cybersecurity Lecturer at MTU. "QCloud opens doors for researchers to explore advanced applications while managing costs effectively, allowing for real-time monitoring and budget management. With QCloud, researchers can leverage actual quantum computers, moving beyond traditional simulators that fall short in accounting for real-world factors like quantum noise."

QCloud Impact and Vision
Since its inception, QCloud has connected multiple institutions, supporting 12 startups and 11 major research projects. The platform marks a significant shift in Ireland's quantum research landscape, empowering universities to provide hands-on experiences with quantum computing.

"In classical computing, information is stored in binary code, represented by ones and zeroes," said Dr. Hazel Murray, Ph.D., Cybersecurity Lecturer and QCloud Project Lead at MTU. "Quantum computing, however, leverages quantum particles, where information is encoded in the quantum states of electrons or photons, for instance. This enables exponentially greater flexibility in data representation, unlocking the potential to store and analyze information beyond the limitations of classical systems."

The university expects to double its research projects in the coming year and welcomes new participants. "This is a remarkable time for innovation in quantum computing. We're finally seeing ideas evolve into commercial and societally beneficial products while exploring new possibilities," added Murray.

For additional in-depth details on the groundbreaking Munster Technology University QCloud initiative, click to read the entire case study and view the video.

About Rackspace Technology
Rackspace Technology is a leading end-to-end, hybrid, multicloud, and AI solutions company. We can design, build, and operate our customers' cloud environments across all major technology platforms, irrespective of technology stack or deployment model. We partner with our customers at every stage of their cloud journey, enabling them to modernize applications, build new products, and adopt innovative technologies.

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