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Customers curious about the potential of quantum computing get an Amazon option with Braket, a fully-managed service for the building, testing and running of quantum computing algorithms running on the the Amazon Web Services (AWS) cloud.

Aimed primarily at scientists, researchers and developers, Braket provides a development environment for building quantum algorithms, simulated quantum computers for testing and a choice of different quantum hardware technologies for testing. Developers can either build own quantum algorithms or choose from pre-built options, and the simulation service helps troubleshoot and verify the implementation.

On the actual quantum hardware side, Amazon counts D-Wave quantum annealing, ion trap devices from IonQ and Rigetti supercomputing chips. All are accessible through single user experience, and Amazon helps manage classical compute resources and establish low-latency connections to the quantum hardware.

In addition, Amazon offers the AWS Quantum Solutions Lab-- a means for researchers to collaborate on the technology. Users can work with experts in quantum computing, machine learning and high-performance computing, as well as choose through promising quantum computing applications in order to get, as the company puts it, "quantum ready."

“We believe that quantum computing will be a cloud-first technology and that the cloud will be the main way customers access the hardware,” Amazon says. “With our Amazon Braket service

and Amazon Quantum Solutions Lab, we're making it easier for customers to gain experience using quantum computers and to work with experts from AWS and our partners to figure out how they can benefit from the technology. And with our AWS Center for Quantum Computing and academic partnerships, we join the effort across the scientific and industrial communities to help accelerate the promise of quantum computing."

Go AWS Announces New Quantum Computing Service (Amazon Braket) along with AWS Center for Quantum Computing and AWS Quantum Solutions Lab