

IBM unveils plans to build first European quantum data center in Germany



● By [Dan O'Shea](#) posted 06 Jun 2023

IBM announced plans to open its first Europe-based quantum data center, which will be located at an IBM facility in Ehningen, Germany, and is expected to be operational in 2024.

The announcement follows IBM's 2021 deployment of an IBM Quantum System One computer in Ehningen for research organization Fraunhofer-Gesellschaft. At the time, that was the first such IBM system installed in the European region.

The new data center, which also will serve as IBM Quantum's European cloud region, similar to the quantum data center it maintains in New York, but with all processing and job data remaining within European Union borders to comply with data regulations. Inside the data center will be "multiple IBM quantum computing systems, each with utility-scale quantum processors [the third and latest version of IBM's 127-qubit Eagle processor]," according to IBM. They will be used by companies, research organizations, and governments.

Jay Gambetta, IBM Fellow and Vice President of IBM Quantum, said during a briefing about the news that the quantum computing sector is beginning to advance beyond the "quantum awareness phase," and that "we're starting this phase that I like to call 'utility.' This is where we want to show how useful quantum computing can be to the world."

He added that each of the systems at the data center will be "of utility scale, and by that I mean they will have more than 100 qubits, and capable of performing advanced error mitigation and running quantum circuits that are beyond what can be simulated using classical computing."

"Our quantum datacenter in Europe is an integral piece of our global endeavor," said Ana Paula Assis, IBM General Manager for EMEA. "It will provide new opportunities for our clients to collaborate side-by-side with our scientists in Europe, as well as their own clients, as they explore how best to apply quantum in their industry."

The announcement of the new data center also comes after an announcement last March that IBM is working with Fundaci3n Ikerbasque to build a "quantum computational center" in San Sebastian, Spain, as it continues to expand its efforts throughout Europe. That center is due to be operational before the end of 2024.

The IBM Quantum Network currently has more than 60 organizations across Europe accessing quantum hardware and software via the cloud, including Bosch; Bundeswehr University; Cr3dit Mutuel Alliance F3d3rale, including its technology subsidiary Euro-Information, and Targobank; Deutsches Elektronen-Synchrotron; the European Organization for Nuclear Research (CERN); Fraunhofer-Gesellschaft; Poznan Supercomputing and Networking Center (PSNC); and T-Systems.

"At T-Systems, we are collaborating with IBM to combine quantum and classical computing in a seamless and scalable experience for our customers to explore applications of quantum computing," said Adel Al-Saleh, Deutsche Telekom board member and Chief Executive of T-Systems. "Having access to a quantum data center dedicated to Europe will help lower the access barrier for our customers as they decide on how to take their first, decisive steps in exploring and using quantum."

Dan O'Shea has covered telecommunications and related topics including semiconductors, sensors, retail systems, digital payments and quantum computing/technology for over 25 years.