



Baker Hill[®] teams up to unlock a powerful cloud advantage—in record time



“There are a lot of providers out there that offer similar services to Azure, so you ask yourself: ‘What foundation do I want to build on? One that’s good enough for today or one that’s going to grow with us and stay ahead of the compliance and regulatory updates?’ For me, that was the compelling reason for choosing Azure. There’s simply no one else who can provide that kind of depth and scope.”

—Michael Horrocks,
Senior Director of
Solutions Management,
Baker Hill

A history of pushing the boundaries

Baker Hill has a more than 30-year history of being at the cutting edge with technology solutions for its financial services customers. In fact, the company is a leader in the application service provider (ASP) space and was the first to offer banking solutions with a browser interface over the Internet in a software as a service (SaaS) environment in the late 1990s. Because of regulatory, competitive, and risk pressures, progressive banks and credit unions have come to rely on Baker Hill for innovative solutions to address all three.

“These are our roots, and our clients have come to expect that from us,” said Niles Bay, Chief Operating Officer at Baker Hill. “They expect that we’re going to push delivery channels, that we’re going to push different ways of accessing, moving, and using the data they have so they can make informed and profitable decisions.”

Baker Hill’s innovative practices have attracted over 600 financial institutions as clients, accounting for more than 20 percent of the top 150 banks and 20 percent of the top 25 credit unions in the United States.

Moving 10 TB of data in under 48 hours: a unique problem required a unique solution

In late 2015, Baker Hill became independent from its parent company and needed to move 10 terabytes of data from the parent company’s datacenter in just 48 hours to be live on Monday morning for its customers. While Baker Hill is no stranger to the cloud, the challenge of migrating several hundred databases in such a short period of time was daunting.

Baker Hill also recognized that this was a prime opportunity to transform its business for future innovation by moving straight to the cloud. So, it teamed up with one of Microsoft’s National Systems Integrator (NSI) partners for guidance.

“We run into a lot of institutions that are hesitant of the cloud because their IT departments feel like they lose something when they don’t have that control of the system and the data. But in reality, they don’t lose control; they gain security and integrity,” said Michael Horrocks, Senior Director of Solutions Management at Baker Hill. “We removed any doubt around the philosophy of the cloud by partnering with Microsoft on Azure.”

Baker Hill and Microsoft’s NSI partner worked with Microsoft’s Developer Experience (DX) Azure team to develop a first-of-its-kind plan to move such a large amount of data in such a short amount of time.

Inside the 48 hours: how they pulled off the seemingly impossible

Working together, the team addressed two major hurdles. First, they needed to allow time for crucial testing, given the regulatory nature of the information. Second, they were not able to touch anything in the datacenters. Although it's a common practice to install agents to transfer data in chunks, that was not a viable option.

They reached out to Equinix, an Azure partner that provides carrier-neutral datacenters and Internet exchanges to enable interconnection. Though Equinix traditionally supplies long-term contracts, Microsoft worked with the partner to secure an agreement for a short-term contract that allowed Equinix to build out a cage at its site to serve as an on-ramp to Azure for a large-scale migration over a short time—a new business model for the company.

Microsoft's Azure ExpressRoute, connected via Equinix, provided a high-speed network connection to Azure with up to a 10-gigabit-per-second connection on both primary and backup routing. Azure ExpressRoute enables you to create private connections between Azure datacenters and infrastructure that's on your premises or in a colocation environment. The connections do not go over the public Internet and offer more reliability, faster speeds, lower latencies, and higher security than typical connections over the Internet. To meet the tight timeline, the team doubled the connection to 20 Gbps by bursting across the primary and backup ExpressRoute circuits simultaneously. Functionality tests proved the migration plan was feasible, and a migration weekend was set.

On a Friday evening, the 10 TB of data were downloaded from the originating datacenters in the Dallas, Texas, suburbs of McKinney and Allen onto biometrically encrypted hard disks and physically moved to the Equinix datacenter in Dallas by IT and security personnel. Using ExpressRoute, the data was migrated to Azure, validated, and restored into the new environment. After a final round of tests, the name servers were updated transparently, moving all customer loads to Azure with plenty of time to spare before the Monday morning deadline.

"We understand our customers and their processes, so we managed to have minimal impact on them," Horrocks said. "Microsoft gave us best practices to get back up as quickly and securely as possible. We chose Microsoft Azure because of our shared

commitment to improving the client experience and their unmatched capabilities and willingness to partner with us on our project. It was a network of players coming together to make this happen. At the end of the day, the fact that we all had a common tie back to Azure truly helped us and was pretty incredible."

The power of the right partnerships

Now that Baker Hill has been successful with Azure, the company won't stop there as it continues to transform its offerings, leveraging Azure to do even more for its business and customers. Right now, Baker Hill is moving workloads and solutions from other locations over to Azure as part of an ongoing relationship, while Microsoft's DX team, Premier Support team, and Regional Sales and Azure High-Performance teams are providing support.

"We've had great success with the Microsoft team," Bay said. "They have truly played the role of partner, and there's definitely been a sense of teamwork and support in trying to figure out what challenges a client may be having."

"The Baker Hill migration demonstrated that Microsoft has a secure, high-speed migration path to Azure for customers with large amounts of data, enabling Microsoft's NSI partners to create a repeatable practice they can use to help other companies transform by moving to Azure swiftly and securely," said Marc Spiotta, General Manager of Microsoft DX. "This project transformed a challenge into a blueprint for Microsoft customers to accomplish high-speed migration to Azure for large amounts of data—taking unique needs and transforming them into repeatable solutions."

In addition, Baker Hill is working closely with Microsoft to explore future offerings for its customers, such as leveraging advanced analytics and big data. Azure will be a key partner for Baker Hill in the future as it continues to build on its differentiation in the market.

Microsoft is pushing the limits of the Azure platform, and Baker Hill is pushing the platform to benefit its particular customers and industry. It's the strong partnership Azure has with its customers and partners that makes the difference.

"Before, we looked at the cloud as simply a platform. But now, with Azure, it's a solution," Horrocks said.

Challenge

- Move 10 TB of data from a datacenter to Microsoft Azure in 48 hours without being able to load a transfer agent or touch anything in the originating datacenter.

Results

- Best-of-breed teamwork as Baker Hill, Microsoft, and Equinix came together to seek a cutting-edge solution to Baker Hill's data migration challenge.
- Microsoft ExpressRoute, connected via Equinix's high-speed network connection, proved to be instrumental to migrating 10 TB of data representing hundreds of databases to Azure in less than 48 hours, with time to spare for testing and an on-time release.
- Bursting across primary and backup ExpressRoute circuits allowed the team to double the upload speeds to 20 Gbps, exceeding performance requirements.

Snapshot

- Organization: Baker Hill
- Industry: Technology/Financial Services
- Location: Carmel, Indiana, and Beaverton, Oregon
- Website: www.bakerhill.com
- Customer since: 2015