Case Study: B+T Group

BACKGROUND

B+T Group was cofounded in 2000 by Dinesh Bhat and CEO Chad Tuttle. The company has grown from a two-man structural engineering firm into a full-service wireless engineering, construction and technical services firm, including Tower Modifications, Structural Analysis, A&E Services, Site Acquisition, DAS/Small Cell Services, Tower Construction. The firm is licensed and certified to provide engineering services in all 50 states, supported by 170 employees operating within six regional offices across the United States.

CHALLENGE

A chance encounter between Jay Perkins, Product Lead for B+T Group, and HOSTING Founder and EVP Joel Daly led them to join forces in order to handle B+T Group's growing data needs. B+T Group recently launched Site360, a solution using photogrammetry (the process of making surveys and maps through the use of photographs) to deliver detailed, accurate cell tower, compound and site information safer, more economically and with greater efficiency. Using Site360, B+T Group can take photos using camera-equipped drones or standard cameras, upload these images to a proprietary software program, and deliver high-resolution imagery, site maps, and 3D models. This information can be easily shared with customers, which can be used to analyze structural defects or determine real estate needs to house additional equipment.

All of these information assets generate several terabytes of data. On average, 350 pictures are taken for each cell site, which translates into 6-7 megabytes of data per photo. One to two gigabytes of data are generated from the pictures taken of the cell compound. And cell tower pics generate approximately a half a gigabyte of data.

B+T Group's initial goal was to process the data from 400 cell sites per month, equal to 1.6 terabytes of data. However, since the firm was analyzing all of its data on their own workstations, scaling to meet this goal was an issue. During a meeting of B+T Group's board of directors, Jay presented his case for engaging with a cloud service provider that could help him "crunch a lot of data."

WHY HOSTING

B+T Group wanted to take advantage of the flexibility and scalability that a cloud-based solution could offer. Yet, neither Amazon Web Services (AWS) nor Azure Public Cloud could provide them with the data processing power they required. Leveraging some of the Hyper

> *"The HOSTING solution saves us quite a bit of money compared to other services and to having to process the data internally."*
>
> *— Jay Perkins, Product Lead for B+T Group*

Scale services from Microsoft Azure, along with HOSTING cloud infrastructure, the HOSTING team created a custom unified cloud solution that allows B+T Group to scale their data processing servers as needed. A custom software program automates data processing. B+T Group can upload images into the HOSTING data center, designate certain workflow parameters and process data on a private cloud.

THE BENEFITS

HOSTING initially built a prototype in one of its data centers and challenged Jay to "break it" by sending over as much data as he could. Jay was up for the challenge, providing data for approximately four cell sites per day/per server. While the HOSTING solution easily processes 448 cell sites a month, it can scale up by more than 50%.

"I tried to break the servers over the 4th of July holiday (without any luck)," Jay notes. *"Everything is going well. It's a well-oiled machine."*

B+T GRP

"The HOSTING solution saves us quite a bit of money compared to other services and to having to process the data internally," Jay continues. *"And the Site360 process takes us approximately 15 minutes to capture pictures. Before, it would take two hours for crews to measure the cell sites with a tape measure. The solution is ten times cheaper and a lot more accurate."*

ABOUT HOSTING

HOSTING delivers secure, compliant, highly available cloud solutions that empower companies to increase their revenues, reduce their expenses and manage their risk. Headquartered in Denver, Colorado, HOSTING owns and operates six geographically-dispersed data centers under an ITIL-based control environment validated for compliance against HIPAA, PCI DSS and SOC frameworks. Its superior infrastructure, expert cloud architects and industry-leading customer satisfaction scores have been consistently recognized by Gartner in the Cloud-Enabled Managed Hosting Magic Quadrant.

Learn more at www.HOSTING.com.