Navigating hybrid cloud automation and improving operational effeciency



American Express Global Business Travel (GBT) is the world's leading business partner for managed travel, helping keep global businesses moving with the support of teams in more than 140 countries. Companies of all sizes and in all places rely on GBT to provide travel management services and solutions, organize meetings and events, and deliver business travel consulting.

IT PROFILE

GBT IT is responsible for supporting thousands of users and applications worldwide while managing the technology needs of dozens of business units. To better serve both their internal and external stakeholders, the IT group set a goal to build faster ways to deliver new services and facilitate more developer innovation. The organization is also increasingly tasked with the integration of technology stacks from companies that GBT has acquired.

"Having Morpheus in place for automation accelerated deployment of our hybrid cloud model and helped us shave months off of our project timeline."

INITIAL CHALLENGE AND SOLUTION: IMPROVING EFFECIENCY OF INFRASTRUCTURE AUTOMATION

2020 brought with it major business and technology challenges for organizations globally and GBT was no exception. The first major area of focus was the speed and efficiency of automated infrastructure deployment in disaster recovery scenarios.

The company had an established relationship with a third-party systems integrator that had a large team in place to manually test and execute disaster recovery (DR), including provisioning applications and infrastructure. GBT decided to overhaul this approach to create a more time-efficient and cost-effective way to execute hot/cold site-level rebuilds.

Charles Nelles, Global Infrastructure Vice President at GBT, had previous experience working with Morpheus Data, and he trusted them to be able to step in and help bring automation to the DR approach. The first step in the solution was to integrate with the hypervisors and other tools in the infrastructure. From there, the Morpheus team was able to analyze the current manual steps and orchestrate an automation strategy for the provisioning of new applications in the event of a site failure.

This initial DR automation process set the foundation for pinpointing other opportunities to improve process efficiency. For example, GBT leveraged Morpheus visibility and guidance features to identify resources that could be further optimized. As Nelles put it, "As long as you're looking under the hood, it's smart to go ahead and optimize as much of the engine as you can."

EXPANDING BENEFITS INTO THE FUTURE: IMPROVING SPEED AND AGILITY ACROSS HYBRID CLOUDS

The success of the initial engagement with Morpheus spurred an interest in leveraging the platform to assist in datacenter consolidation and public-cloud adoption. This new project came with its own set of familiar requirements. It needed to be cost-efficient with a rapid time to market. This was critical for GBT to be able to pull CapEx out of the equation to enable reinvestment in technology innovation.

"We want to be able to design an application once with great fluidity around provisioning, and we want to innovate without custom assembly," said Nelles when describing his most recent challenge.

The search for a solution—and the fact that the timing was right—combined to trigger the development of an aggressive public cloud strategy. As the GBT team identified project requirements, they realized access to the right platform to accelerate their plans was already in place with Morpheus Data.

Using Morpheus for hybrid cloud management and developer self-service, GBT can manage both on-prem and public cloud workloads—with the ability to replatfrom workloads as needed.

The Morpheus blueprinting engine lets app development teams create templatized service catalog items that can be flexibly deployed into the on-prem VMware environment as well as public clouds like AWS and Azure. It can also provide advanced development teams to use those templates via API within their CI/CD pipelines.

Additionally, GBT is constantly expanding its IT estate with new business acquisitions. In most cases, acquired entities are already operating in the cloud. Morpheus can enable GBT to quickly integrate new technology stacks into a common control plane without requiring massive change. This can accelerate the business value that GBT can realize from new acquisitions while minimizing the disruption to how those firms operate.



RESULTS AND NEXT STEPS

After seeing positive ROI from the initial Morpheus project and putting it at the center of its hybrid cloud ambitions, GBT is looking at how Morpheus can help obtain these key IT infrastructure objectives:

- Prevent virtual machine and application sprawl
- Reduce tool sprawl and software license overhead
- Bridge the hybrid cloud skills gap to simplify management
- Ease day-2 management activities for the ops team
- Simplify and accelerate provisioning for development groups
- Control expansion by having guardrails and policy in place



ADVICE FOR OTHERS - Nelles has two pieces of advice based on his hard-fought experiences in multiple hybrid cloud automation projects.

1. Plan an incremental approach: This means setting your end goal and breaking the steps needed to achieve it into logical phases. Succeed with the early steps and you can use those wins to justify the next phases. As you accrue small wins, you can then reinvest and expand.

"It's hard for big, complex enterprises to wrap their heads around the value of large investments in larger technology shifts," Nelles observes. "You will likely have more success—and earn management buy-in earlier on—if you make the case to solve incremental problems in a logical, focused way."

2. Know what other teams want: The reality is, IT infrastructure teams speak a different language from finance and application development teams. That's why it's important to present your case through the lens of what your stakeholder cares most about.

"What your CFO wants and gets measured on is very different from what, say, your line of business leader or app developer wants or gets measured on," says Nelles. "Consider your audience and speak to how your project can meet their specific objectives."

