VIRTUAL TECH GURUS

FAST TRACK MIGRATION FOR A MAJOR MOTORCYCLE MANUFACTURER

A CASE STUDY

Virtual Tech Gurus (VTG) helped a major motorcycle manufacturer migrate 750 servers to a new Vblock™ System in less than six weeks with minimal downtime.

Working in partnership with VCE, a subsidiary of Vblock manufacturer EMC Corporation, the VTG team used proven methodologies and ZENfra™, our proprietary migration tool, to monitor and manage the process in a seamless, resource-efficient way that proved 30 percent faster than traditional methods.

The migration enabled all machines to meet a rigorous configuration standard and a 25-point validation check. The new virtualized infrastructure increased flexibility, eliminated over-provisioning and reduced total cost of ownership.

Background

The customer wanted to migrate its existing infrastructure of 750 Windows and Linux servers to EMC Corporation's Vblock™ System, the world's most advanced converged infrastructure. The Vblock platform includes Cisco United Computing System (UCS) blade servers, Cisco networking components, EMC storage systems and VMware vSphere virtualization.

The objective was to create a rigorous new IT infrastructure that would meet the customer's business needs and give them the ability to compete more effectively in global markets.

Challenges

The new infrastructure had to meet rigorous configuration standards. Before migration, only 23 of the 750 machines met the standard, and many servers were seriously overprovisioned.

The biggest challenge, however, was the timeframe. The migration had to be completed within six weeks, with minimal downtime and disruption to normal business processes.

Approach

VTG worked as a trusted expert with the customer, helping them evaluate and understand migration needs, and supporting them every step of the way from opportunity identification through planning, testing, implementation, validation to ongoing management.

Our team uses industry best practices, proven methodologies and proprietary tools to deliver a seamless, efficient, secure migration. The VTG migration process includes some essential stages:

- Collect information about the source and target

- Complete initial scoping

- Identify migration methodologies

- Create a migration plan for each server and storage device

- Identify problems to be fixed

- Test the migration method

- Create a wavelist for the migration

- Automate processes to eliminate the risk of human error

- Migrate servers to the new environment

- Carry out a 25-point health check on each migrated server

MIGRATION

Working in partnership with VCE, we completed the initial scoping and identified migration methodologies as part of the initial sales cycle. During the planning stages, we identified some issues that needed to be addressed:

- Removal of CD/floppy drive
- Upgrade of the hardware version
- Upgrade VMware tools
- Change the LUN size and increase the storage on some drives
- All servers brought up to the latest virtual hardware and VM tools

VTG worked with the customer to develop configuration standards for the VMs and set up a validation process to check that all VMs met the standards after the migration. Before starting the main wave, the team identified six servers to test the migration methods and tools in the new environment. We completed the initial migration in four hours with few modifications to our scripts.

We then created four waves for four weekends using our proprietary tool ZENfra™, which allows us to monitor closely and manage the migration. Based on each wave, we prepped the servers during the week to facilitate the weekend migration.

Although we encountered two server failures due to storage issues, our proactive approach enabled us to immediately provide backup within minutes of identifying the issue using snapshots we took before the migration. We fixed all the issues and included those servers in the next wave.

Because improving the environment on the target hardware is an integral part of our approach, we also upgraded all servers to the latest virtual hardware and VM tools, and right-sized some servers that were overprovisioned. When the migration was complete, we worked with the customer to test and validate the applications.

By using industry tools and ZENfra™, we were able to complete the migration during the customer-approved window with minimal downtime. This methodology has velocity (30 percent faster) and is very efficient, requiring less resource to complete the migration.

Although the customer had given us a six-week period to complete the migration, it was completed seamlessly, efficiently and successfully within five weeks without issue. The customer commented that there was nothing in the process that could have been improved, and they were extremely happy with the way the project was managed.

SOLUTION

Key Benefits

- Flexible infrastructure

- Lower total cost of ownership

- Seamless migration of 750 servers in five weeks

- Faster migration 30% faster than conventional methods

- All VMs configurations validated with 25-point health check

- Improved environment

- Minimal downtime – 40% less than conventional migration methods

Working with VTG

VTG partners with your organization to enhance information technology departments, support roles, and provide integrated solutions. We work as part of your team, solving business needs and becoming a trusted partner.

We work closely with you to align business needs with technology. We identify solutions that offer a cost-effective approach by leveraging the technologies you currently have. Our team can move your applications and workloads to the cloud with ease. We help plan and oversee your company's migration and help your business by reducing downtime and eliminating hardware costs.