INTERNATIONAL HOSPITALITY ENTERPRISE IMPROVES FLEXIBILITY, CUTS IT COST BY 30 PERCENT

VxRack FLEX advantages in both production and development environments shine for one of the world’s largest hotel brands. This international hospitality enterprise operates dozens of hotel brands in over 100 countries worldwide.

Business needs
In 2016, new IT leadership instituted an aggressive digital transformation campaign. The initiative called for a flexible, hyper-converged infrastructure for back-end operations and a complete refactoring of all internal applications to next-generation, cloud-first design. Leadership wanted an engineered solution that would require minimal assembly and integration. Selecting VxRack FLEX delivered on these requirements, speeding time to implementation and results.

Solutions at a glance
• 9 different systems of Dell EMC VxRack FLEX with over 180 nodes
• Dell EMC VxRack FLEX for application development environment
• VMware NSX-T for software-defined networking
• Six data centers running their website, Ansible, and a common API interface for all applications

Business Results
• 30% savings in cost of operations
• Processing $30 billion per year in customer transactions

Development Environment
• Red Hat OpenShift for Container Management
• Terraform, Chef, Puppet, Jenkins for automating container deployments
The Challenge
Successful hospitality brands have been key business and tech disruptors since the emergence of e-commerce in the 1990s. They are also targets for disruption, as new hospitality business models have emerged from app-driven and peer-to-peer marketplaces. Maintaining a leadership position requires more than clean rooms and ideally-located hotel properties.

The hotelier’s new IT leadership recognized that staying ahead not only of industry peers but also of new competitors would require a dramatic digital transformation. That transformation was being held back by aging, conventional IT infrastructure.

Examining Options
The hotelier weighed the costs of building a new converged infrastructure in an ad hoc fashion. This option was dismissed due to the delays, complexities, and potentially higher costs of assembling a converged infrastructure from disparate components. Instead, the company chose to keep its dozens of cloud engineers focused on business improvements and sought engineered hyper-converged solutions from vendors.

Dell EMC quickly rose to the top of the list with the combination of flexibility, scalability, and high availability the hotelier required. Of key importance was VxRack FLEX support for multiple hypervisors, since the hotelier wanted to avoid being vendor- and technology-locked to a single hypervisor.

The Solution
The hotelier moved quickly with Dell EMC to replace the production environment which operates both the customer-facing website and internal applications with a VxRack FLEX solution. Because moving to a cloud-first development environment is also a key requirement of the digital transformation, the company adopted a second VxRack FLEX.

“*They didn’t want to be stuck with just one hypervisor. VxRack FLEX gives them the capability to employ multiple hypervisors.*”

Both VxRack FLEX deployments communicate with four distributed data centers running Couchbase, which manage and replicate the enterprise’s considerable records. In addition they communicate with the core reservation system, which currently remains on mainframe hardware.

At present, VMware vSphere is the sole hypervisor in the two VxRack FLEX environments, but the ability to support multiple hypervisors means that this could change as the hotelier’s digital transformation evolves. In time, the hotelier expects to migrate reservations to VxRack as well.
The Benefits

Moving to hyper-converged infrastructure has given this international enterprise a solid, flexible, and rapidly expandable base to fuel its digital transformation efforts. Switching provided an immediate 30 percent reduction in IT operating costs.

In addition, the new infrastructure provides room to grow, experiment, and pivot without the constraints of traditional IT infrastructure. Those are all extremely important for an enterprise representing thousands of worldwide hotel properties generating tens of billions of dollars in annual transactions. The brand has also been on an aggressive growth trajectory in recent years. The VxRack FLEX architecture provides room for expansion and integration of new properties.

The hyper-converged development environment gives the company’s large application dev team the ability to quickly spin up new projects in just one hour. Because IT leadership has mandated brand-new, cloud-first development instead of a lift-and-shift approach, removing barriers to new project development is crucial to meeting tight deadlines.

“The client really pushed Dell EMC to support what they needed in the hyper-converged environment, and we delivered what they wanted.”

“VxRack FLEX is supporting the aggressive push for a reimagined website, a cloud-first development attitude, and a variety of new workloads.”