

VMware helps international financial services firm deploy custom desktop cloud

Enables bulk provisioning of hundreds of virtual desktops in minutes

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A multi-billion dollar global firm, growing both organically and through acquisitions, has been rapidly adding employees and offices in locations around the world. It has separate departments for managing and maintaining servers and desktops, which use a broad mix of distributed tools that, by the end of 2012, will be managing approximately 65,000 machines. Growth such as this comes with challenges.

Global growth, global challenges

Challenge 1: the Company's most critical challenge was the requirement to ensure that their desktop could scale rapidly and easily in response to any change in requirements anywhere in the world. They needed to provision hundreds –and in some cases, thousands – of desktops in a single day as new branches came online. Even with automation this was impractical using the toolset currently in place.

Challenge 2: Over time, the merging of internal and external IT departments and the resulting heterogeneous mix of monitoring and management tools became increasingly difficult to manage. The wide variety of different, non-integrated off-the-shelf tools and solutions from an assortment of vendors led to increased costs due to poor communications and inefficient operations.

Challenge 3: IT management across infrastructure and operational functions was silo-ed, with no hope of coordinating operations. Independently functioning management tools and solutions suites frustrated efforts to share data and operating information. IT was locked into a system of reactive, inefficient management, which had a negative impact on service delivery.

Challenge 4: Dispersed support teams lacked local control and flexibility, which hampered their efforts to operate efficiently. Moreover, the lack of standardized processes prevented timely response to user requests for services ranging from initial provisioning to managing desktop system updates. IT struggled to respond to user demands and could not address user needs in a timely manner. It was impossible to pro-actively detect and address operational anomalies in order to avoid problems.

IT operations and performance were hard-pressed to deliver and maintain high quality mission-critical services due to the diversity of desktop platforms, processes and tool sets in use. Efforts to improve operational effectiveness, efficiency and performance were frustrated, and the increasing operational expenses resulting from continued growth meant that the current management model was untenable. How then could the company deploy and manage tens of thousands of globally deployed virtualized desktops – and add new ones at a moment's notice – with the existing tools and processes?

IT and business managers met, acknowledged the need to move off the existing mix of vendors, tools and solutions, and began to search for new a methodology that would sustain corporate growth.

International Financial Services Firm

This industry-leading financial services firm operates globally to provide a complete portfolio of services that address the needs of corporations, governments, financial institutions and individuals.

Over 59,000 employees operate in more than 40 countries from nearly 1500 different offices across three continents to meet their clients' needs for a diverse set of financial services that include wealth management, investment banking and financial management.

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Moving to a cloud architecture – requirements and concerns

Faced with the frequent need to provision large numbers of virtual desktops on a worldwide basis, and to accommodate an often-changing set of customization requirements, the company decided that a solution based on a private cloud could most effectively manage their global desktop operations. Services delivered via the cloud appeared to offer a way to increase operational efficiencies, standardize processes and regain control over the operating environment. In addition, they also knew that their desktop implementation had numerous specialized requirements. They needed a cloud management platform which could be easily adapted to meet their specific needs without requiring lengthy professional services engagements.

Any such solution they chose would be expected to:

- Automatically create, deploy, manage, retire and maintain virtual desktop versions of their global inventory of tens of thousands of desktops, eliminating – or at least severely reducing – the need for operator intervention
- Maintain the value of the company's existing investment in infrastructure, best practices, tools and other IT assets that were already in place
- Implement end-to-end lifecycle management that provided centralized oversight, but which also allowed local operational flexibility so that remote desktops with special needs could be serviced efficiently and according to local requirements
- Permit self-servicing, just-in-time provisioning, and automated delivery of services
- Empower their operations team to extend the out of the box capabilities to meet their specific needs and be flexible enough to meet the requirements of a broad array of business functions
- Scale both upwards and downwards as needed, and be capable of evolving to meet future needs.

The complicated nature of the company's infrastructure also meant that the implementation of any new solution was also a cause for concern. The mix of multiple tools and hardware architectures, along with a multitude of diverse IT processes had always required heavy involvement of IT personnel whenever there was a need to enable, adapt and extend the existing infrastructure. Particularly when moving to the cloud, many companies have found it necessary to bring in outside consultants to make the needed upgrades, despite often questionable results of such engagements and the time and expense required.

"What we needed was an end-to-end lifecycle management solution capable of providing suitable entitlements to our widely dispersed support teams. Beyond that, self-servicing and just-in-time provisioning were at the top of our list of must-haves." – product manager for virtual desktop, international financial services firm

Even when external resources are not brought into play, large integration projects, particularly when they involve complex efforts to accommodate such things as a multi-tenanted environments, have typically been expensive and time-consuming.

With all that in mind, the firm chose VMware to help them implement automated, self-serviced desktop management.

VMware vCloud® Automation Center™ was selected over competitive products because the product was seen as being "mature and capable of being tailored to our specific requirements... We wanted a framework-style product that could be extended to meet our unique challenges. The pedigree of the

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company and the focus on virtual machine lifecycle management- were crucial”, said the vice president of desktop infrastructure at a leading international financial services firm.

VMware Cloud Automation

VMware vCloud Automation Center provides unified cloud management for desktops and servers across virtual and physical systems in private and public cloud deployments. Its VMware vCloud Automation Center Designer visual workflow editor allows administrators to modify existing processes and adapt them to a firm’s existing changing needs. It is built on familiar Microsoft technologies (Visual Studio, C#, and .NET), and has designed-in capabilities that leverage a site’s existing infrastructure and management systems to manage cloud infrastructure and applications. The VMware vCloud Automation Center Development Kit makes it easy for developers to extend automated management to new use cases as needs change.

VMware transforms traditional IT infrastructures into an on-demand cloud environment that automatically delivers services when they are needed, enabling data centers to provision new applications and new users in minutes. Ongoing management throughout the lifecycle of each physical and virtual resource is fully automated, providing a wide variety of monitoring and management services while at the same time freeing IT staff for other, high-value duties.

The Payoff

So far, the most challenging aspect of implementing the new software has been the tendency of some IT staffers to cling to the legacy tools as long as they remain available. This reluctance is being overcome as the usefulness of the new toolset becomes more apparent, and as the members of the IT team find themselves freed from many of the repetitive tasks that were once part of their daily routine.

In order to be able to globally deploy hundreds of desktops in a matter of minutes, desktop operations used standard VMware functionality to pre-provision a pool of virtual desktops. When it is time to allocate desktops to users, that task can quickly be accomplished in bulk by assigning virtual desktop machines from the preconfigured pool. The IT team used the VMware vCloud Automation Center Development Kit to create custom provisioning workflows that allocate users a new desktop from the pool, register the desktop and the user with the a connection broker, and update their proprietary configuration management data base with the latest information.

Since implementing vCloud Automation Center, the IT department has provided its user community with much more flexibility, and given its regional support teams more localized control than was previously possible. At the same time, it has asserted a consistency across the firm’s worldwide operations. The company now globally manages tens of thousands of virtual desktops as both thin and fat clients – deploying hundreds of new virtual desktops each day – and does it all with far greater operational efficiency than had previously been possible. The wide variety of deployment and other management tools previously in use have been reduced to a centralized, standardized set, and

“We are just beginning to realize the full potential and possibilities that the VMware solution has to offer. Some benefits though are already clear, with a significant improvement in build rates. VMware has been engaged with us throughout the process of adoption and has proven time and again their commitment to continuous improvement, product growth and customer enablement.. ...helping us tailor builds to our specific needs.” - product manager for virtual desktop, international financial services firm

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manual processing has been largely eliminated. The result of this is that service delivery times have been significantly reduced, and are delivered more predictably and with greater accuracy.

When asked to describe the overall experience with VMware over the past year IT management had this to say: "They've been very responsive and willing to help us on both a technical and an account level, providing solutions to potential show stoppers as required. They are engaged, and spend the time to understand our environment and needs...we have regular contact and updates", said the vice president of desktop infrastructure.

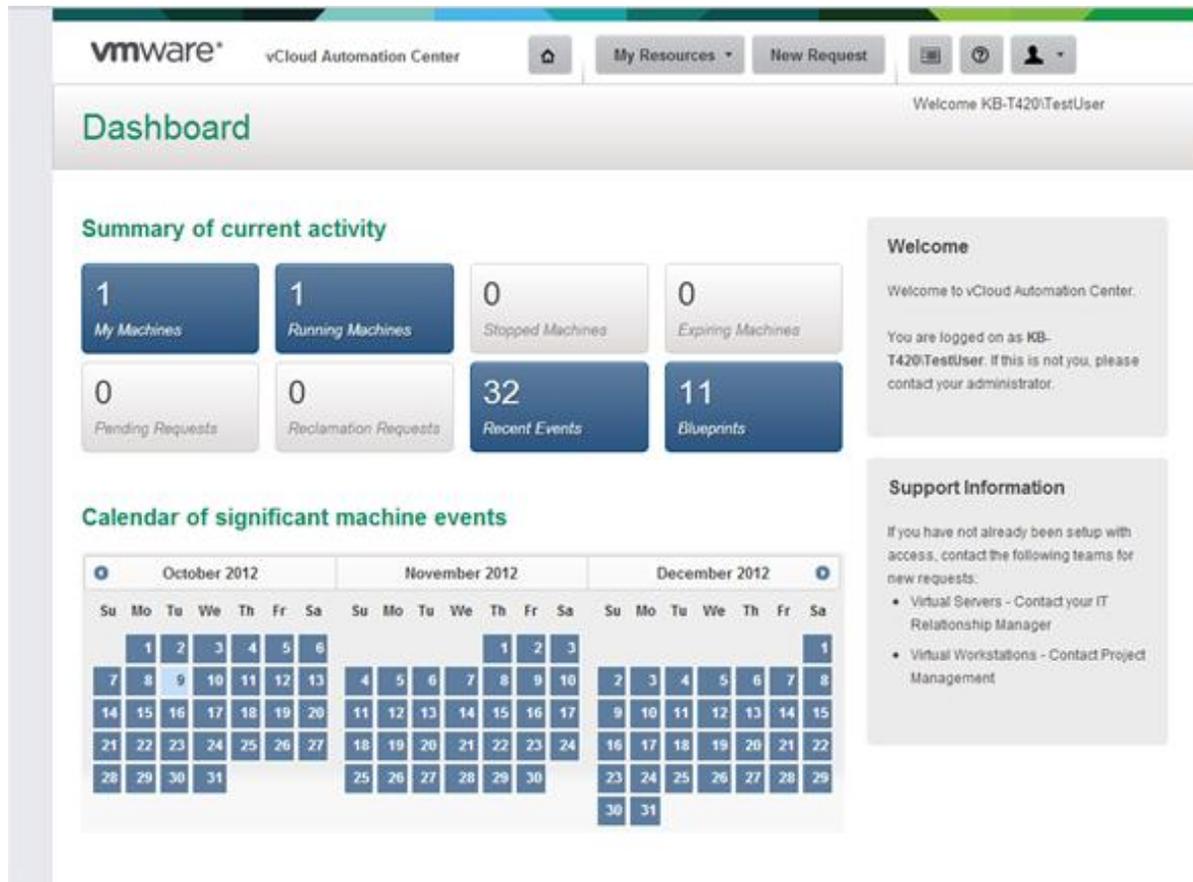


Figure: VMware self-service portal, user dashboard

Future Plans

During the early implementation stages, the company discovered that it could use the VMware vCloud Automation Center control system to manage its physical desktop and server space as well as its cloud environments. Going forward, they plan on exploring this opportunity for a common management interface across all devices. The plan is to integrate the VMware solution into the lifecycle management of all physical and virtual computing assets, including both solutions housed within the data center and those that reside in the cloud (such as the ServiceNow IT Service Management application).

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This international financial services firm, which provides services to nearly 9 million insurance clients, has been a customer of VMware since Q4 2010. By streamlining the creation and management of their custom desktop services, their IT management team has identified the following as significant benefits resulting from VMware vCloud Automation Center and VMware vCloud Automation Center Development Kit.

Faster and more accurate service delivery

- ✓ Reduced the need for manual processing
- ✓ Reduced integration times
- ✓ Maximized the use of cloud computing

Reduced operational expenses, increasing IT efficiency

- ✓ Automation provided a faster, more consistent and reliable custom desktop cloud implementation
- ✓ Standardized a worldwide set of management tools
- ✓ Improved oversight of management processes
- ✓ Improved IT staff productivity

Eliminated additional capital expenses

- ✓ Maintained the value of existing investment in IT tools and processes
- ✓ Eliminated overprovisioning and automated resource reclamation

Eliminated expensive Professional Service engagements

- ✓ Simply and quickly implemented their own modifications

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