



IT Company improves business agility with desktop virtualization

VDI helps simplify IT infrastructure, increase productivity and enhance end-user experience

EXECUTIVE SUMMARY

- ♦ **Customer Name:** KPIT Cummins Infosystems Ltd
- ♦ **Industry:** IT Consulting and Software services
- ♦ **Location:** India, US, Europe
- ♦ **Number of Employees:** 7000+ globally

BUSINESS CHALLENGE:

- ♦ Manage exponential business growth and dynamically scale IT Infrastructure
- ♦ Enable employees to easily access corporate data from anywhere and over a broad range of end-user devices without compromising security
- ♦ Improve operational efficiency and people productivity by effective implementation of IT solutions.
- ♦ Ensure cost reduction through better utilization of existing physical infrastructure

NETWORK SOLUTION:

- ♦ Cisco datacenter architecture and UCS framework along with VCE coalition to deliver a broad range of IT capabilities
- ♦ The VCE Vblock platform for virtual desktop infrastructure (VDI) to serve 1200 users across India
- ♦ Solution included Cisco UCS Blade servers, Nexus fabric interconnects, Cisco SAN switches

BUSINESS RESULTS:

- ♦ Reduced need for IT manpower to support end users by 75% (for 1200 users)

Business Challenge

KPIT Cummins is an end-to-end product design, engineering and IT services company with a workforce of around 7000+ globally and is credited as the world's second company to have achieved the SPICE level 5 certification. KPIT is home to the largest third party ODC in automotive and semiconductor space globally and has business presence in a geographic spread that covers US, UK, Germany, France, Japan, South Africa, Korea, China and India.

KPIT Cummins IT team was looking for the better solution for desktop refresh and also simplified migration from older version of operating system to newer. IT team was also looking for solution for faster desktop and application provisioning and improving information security. Management was expecting to improve the utilization of IT assets and physical infrastructure and providing flexibility for users to work from anywhere without compromising security. The criticality of IT functions at KPIT meant that they could not afford downtime with either application availability or security.

The challenges from a desktop perspective included the need to upgrade physical desktops regularly and provide users with machines having good memory and compute power to add applications in accordance with the changing business environment. Upgrading so many physical machines was a daunting task and required a lot of time and manpower.

From an IT perspective there were other challenges as regards the provision of software tools during on-boarding, off-boarding employees and changing project requirements given various compliance and security issues. Most of the security tools were device based and having limitations for effective implementation of information security policies. As the user data, application and special privileges given to user for effective execution of project were configured on local desktop meant they could not access the data/applications stored on their physical machines when out of office. This in turn restricted the user to work from home or any other devices.

EXECUTIVE SUMMARY

- ◆ Provisioning and de-provisioning of IT resources for employees reduced to 15 minutes from a couple of days earlier
- ◆ Use of thin clients rather than a typical desktop brings down power consumption to a near 55 watts (thin client+ monitor) from 150 watts(desktop)

In addition to the above, the company realized that a large percentage of employees were either on travel or at customer sites so physical infrastructure (workstations, PCs etc) was not being fully used. There was an urgent need to ensure better utilization of workplace resources and cut down costs. One way to address the problem was to detach physical infrastructure from data, applications and compute through 'virtualization.'

Network Solution

KPIT was looking for a solution that would help manage their datacenter/desktops better while also reducing the number and

cost of physical machines. The company was looking to scale its infrastructure and enable employees to easily access to corporate data from anywhere and over a broad range of end-user devices.

Given their issues with infrastructure manageability, KPIT decided to implement virtualization at the desktop level instead of refreshing PCs in a traditional way as was the norm every once in four years. The datacenter architecture and the UCS framework from Cisco along with the VCE Vblock platform appeared to be the ideal way forward to cater to both technology and business challenges. The VDI solution helped the KPIT achieve greater manageability, security and efficiency.

KPIT deployed the Vblock platform for a virtual desktop interface (VDI) implementation to serve 1200 users across India. The Vblock 1, which is designed for large virtual machines was deployed in a compact footprint and provided for a mid-sized configuration to deliver a broad range of IT capabilities to the organization. The network solution included Cisco UCS B250 M2 Blade servers, UCS 5108 Blade server chassis, Nexus 1K and UCS 6140xP 40 Port fabric interconnects. Part of the solution were also Cisco MDS 9148 SAN switches, Cisco Nexus 5k, Cisco Nexus 7K, Identify Service Engine and Overlay Transport Virtualization(OTV), EMC Celerra NS 480 along with VmWare Enterprise Plus for server consolidation and VMware View 5.0 for VDI.

Competitive platforms were being evaluated for network, server, storage and desktop. KPIT chose the Cisco solution because KPIT shared a strong relationship with Cisco and has deployed many of Cisco technologies and solutions at its premises. In EMC, Cisco and VMware, KPIT found partners who were willing to lead the consultation process and address specific customer needs. In the Vblock platform, KPIT found not only a certified solution but a convincing solution that could be deployed right out of the box, saving time and cost-ridden planning and architecting.

However, there were initial concerns about the UCS platform given that Cisco was a relatively new player in the server space, but after conducting the POC, KPIT discovered that the architecture benefits of the Cisco solution was pretty high.

“The benefits have been both qualitative and quantitative. On the one hand the implementation has helped us to right-size our infrastructure and improve its utility while on the other it has enabled easy migration of applications irrespective of the number of users.”

- Mandar Marulkar, Head -Technical Infrastructure Management Services and CISO

The interconnect that the solution provided between storage and networking along with good levels service support were the other reasons why KPIT opted for the Cisco solution. The biggest benefit of choosing the Cisco solution was that it enabled scalability, interoperability and there existed a single point of contact for support which was either Cisco or its partner, adding to the comfort of the customer and helping to reduce partner conflict.

Post implementation KPIT has managed to obtain optimum performance and right size its infrastructure in tandem with changing business needs. The advantages of the solution design enabled KPIT to move a number of core applications on to the VDI platform in a short period of time.

Business Results

The implementation helped KPIT to simplify and accelerate virtualization and enable the transition to private cloud infrastructure. The Vblock platform also offers KPIT processing, network performance and storage capacities to support incremental capacities such as enhanced security and business continuity.

The solution brings together the benefits of virtualization and cloud computing and helps KPIT manage the growing deluge of smart devices, data and applications along with an increasingly mobile workforce and constrained IT budgets. VDI deployment has also helped enhance user experience and improve employee productivity by enabling end-users connect with business critical data and applications via any device, on demand.

From a quality perspective since Cisco servers are designed for the cloud, KPIT can add on virtual desktops with ease while also reducing costs, carbon footprint and the need for administrative personnel. Since the solution is scalable and flexible, it helps achieve operational efficiency with growth, reduce downtime and improve business agility. . Importantly VDI has enabled central management of data and applications furthering the security levels of access.

Speaking on the benefits of the implementation, Mandar Marulkar, Head -Technical Infrastructure Management Services and CISO, KPIT Cummins said, "The benefits have been both qualitative and quantitative. On the one hand the implementation has helped us right-size our infrastructure and improve its utility while on the other it has enabled much faster provisioning/de-provisioning of desktops and applications irrespective of the number of users."

"The biggest benefit is that our employees now have the freedom to access corporate information securely from any device and on demand," he added.

In terms of numbers, post implementation KPIT has been able to reduce the need for IT manpower for supporting end users by 75% for 1200 users. Since most of the applications platforms reside in the cloud, on boarding and off boarding of employees is a lot easier in the virtual environment. The provisioning and de-provisioning of IT resources for employees has reduced from a couple of days earlier, to 15 minutes now. In terms of energy savings, the use of thin clients (in a virtual environment) for example, rather than a typical desktop helps to bring down power to a near 55 watts (thin client+ monitor) from 150 watts(desktop) amounting to almost 100 watt power saving per user. This is significant when interpolated to a large user base.

In addition to Virtual desktops, KPIT Cummins has deployed the Vblock platform for all core production applications on to it. Some of the critical applications include messaging and unified communication using Microsoft Exchange 2010 and Lync 2010, SAP ERP solution, Configuration management and project management systems etc.

PRODUCT LIST

- ♦ Cisco UCS B250 M2 blade servers (VDI)
- ♦ Cisco UCS B250 M2 blade servers (Server)
- ♦ Cisco UCS 5108 blade server chassis
- ♦ Cisco UCS 6140xP 40 Port fabric interconnects
- ♦ Nexus 1K
- ♦ Cisco MDS 9148 SAN switches
- ♦ Cisco Nexus 5k
- ♦ Cisco Nexus 7K + Overlay Transport Virtualization (OTV)
- ♦ Cisco Identity Service Engine
- ♦ EMC Celerra NS 480
- ♦ VmWare Enterprise Plus for server consolidation
- ♦ VmWare View for VDI

Next steps

So far 1200 virtual desktops have been configured and the company is looking to set up disaster recovery for the existing VDI setup. Company is also extending Vblock to accommodate further 400 additional VDIs and setting up self –service portal for 400+ test and development environment on the new Vblock platform.

For More Information

To find out more about Cisco VXI solutions, visit: www.cisco.com/go/vxi

To find out more about Cisco UCS, visit: www.cisco.com/go/ucs

To learn more about KPIT Cummins visit: www.kpitcummins.com

This customer story is based on information provided by KPIT Cummins and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

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