

Wysetek Implements Virtual App/Desktop for leading bank

The Customer's Business

The bank has been an integral part of the country's development story. Since 2005, bank has built on vision to be the 'one firm' that looks after the diverse needs of infrastructure development. Whether it is financial intermediation for infrastructure projects and services, adding value through innovative products to the infrastructure value chain or asset maintenance of existing infrastructure projects, bank's focus on supporting companies to get the best return on investments.

Bank's growth has been driven by the substantial investment requirements of the infrastructure sector in India combined with the growth in the Indian economy over the last several years. Its ability to tap global as well as Indian financial resources makes them the acknowledged experts in infrastructure finance. This, coupled with a strong synergy between the company management and key shareholders, and a dedicated team of over 550 people makes them an organization that is committed to improving the face of India's infrastructure sector.

Bank works closely with government entities and regulators to advise and assist them in formulating policy and regulatory frameworks that support private investment and public-private partnerships in infrastructure development.

Need for a Solution

The company was facing lot of issues in day-to-day management of their existing solution.

Bank relies on Xendesktop technology for delivering desktops and applications. Bank has requested Wysetek System Technologists assistance for designing of Xendesktop and carryout a review of environment. As part of this engagement, Wysetek System Technologists has provided the following:

Xendesktop Design

Detailed Design of Xendesktop 7.15 LTSR CU3 environment.

Pre-Production Environment Review of the XenDesktop Environment

Conduct the Environment Review before rolling out to Production users

The Implementation

Wysetek Team worked with Bank's IT team and collected requirements for the XenApp (Hosted Shared Desktop) environment.

Remote Branch Operations. The environment support the following categories of branches:

WB – Wholesale banking branches

Consumer Banking – Consumer banking branches

Bharat Banking – Rural Banking branches

Redundant and stable environment. The environment is highly available and is having redundant components to avoid any single points of failure. The farm has been deployed in the (Ctrl+S) datacenter based in Navi Mumbai and DR is available in Chennai Data Centre.

Fully Virtualized Environment. The environment is deployed on a virtualized platform. Bank had deployed the XenApp (HSD) environment on a virtualized hardware platform using VMWare ESXi 6.5 which is designed for the Bank.

User Density. The Team has designed the environment for targeted to existing users of Xendesktop 7.6.

Wysetek team helped them to achieve seamless access and Plugin Delivery. All users now have access to the environment using a single access point using internal network. External access is not permitted at this moment.

The Benefits

The company was benefited in the terms have to update a single image which is then streamed to hundreds, or thousands of desktops. No more unreliable software deployments across your desktop fleet, just install the new software once on the master image and when the PVS clients ('target devices' in PVS speak) reboot, they get the updated image with the new software Provisioning Services (PVS) allows you to have a single instance image management of your XenApp and/or XenDesktop VMs.

Every update to a PVS image (vDisk) creates a new version of the vDisk which provides some version control. Having versioned vDisks allows changes to be rolled-back as easily as they were rolled-out. Rather than an unreliable software uninstalls, a roll-back with PVS uses the previous version of the vDisk from before the updates were made, which guarantees a successful roll-back. The other key benefit to PVS is that troubleshooting is greatly reduced; have an issue with a desktop? Just reboot it and the desktop will stream the vDisk like the first time it booted

Key Features of Backup Solution

- Provisioning Services relies on network streaming of the master image, is able to deliver the image to virtual and physical endpoint
- PVS imaging wizard captures an image from the master machine, and then stores it in a VHD format (vDisk) on the Provisioning Server. The vDisk can then be shared (streamed) by multiple VDIs. As a .vhd/.vhdx file then streams a read-only copy to a target device.
- Provisioning Services bridges the gap between the physical and virtual world.

- Provisioning Services is more IOPS effective than Machine Creation Services. Introduction of caching to device RAM, the IOPS used by a PVS deployment can be greatly reduced (<1 IOP in some cases). MCS uses about 21% more IOPS than PVS (If MCS provisioned on Hyper-V or Esxi).
- Provisioning Services it is now possible to have a persistent cache on a target device disk. So you can now safely use Provisioning Services for dedicated desktops.
- PVS is an elegant solution, and scales well in large enterprise-class deployments. Multiple PVS servers can be built out to balance the vDisk streaming load, providing redundancy as needed.
- PVS has better versioning. The versions of a vDisk consume less space since the version only contains the changes that were made during the last update
- PVS allows for instant rollback: rollback is simply assigning the previous working version.
- Provisioning Services links user experience to the stability and performance of your network.
- PVS utilizing a combination of RAM and local storage for the write cache, PVS can significantly reduce write IOPS going to the hypervisor's storage. This helps reduce costs as well as improve the user experience.