

Virtualization | Case Studies



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Warid Telecom

New Horizon virtualizes the desktop environment at Warid Telecom. Citrix technology is used to provide the desktop virtualization solution. New Horizon provided Citrix NetScaler MPX 5500 Standard Edition, Citrix XenDesktop Enterprises edition licenses and also included 1 Year 24/7 support and Maintenance to Warid Telecom.



With Citrix XenDesktop, Warid can securely deliver individual Windows, web and SaaS Applications, or fully virtual desktops, to PCs, tablets, smartphones, laptops and thin clients all with a high-definition user experience. New Horizon suggested Warid Telecom to virtualize the environment and overcome the challenges through Citrix technology.

Having the numerous certified professionals on board with a number of previous implementations both in Pakistan and Afghanistan, New Horizon was the perfect choice for Warid Telecom to acquire the solution.

The solution provided will help the Telecom Operator to:

- **Cuts costs** - By reducing the number of physical servers required in the datacenter, the organization will be able to save on their power and cooling costs.
- **Increases IT agility and efficiency** - Warid can easily adapt to changing datacenter and computing needs by dynamically flexing capacity, optimizing VM placement, and automating repetitive management tasks.
- **Improves performance and user productivity** - By enabling 'zero downtime' maintenance, automatically recovering from hardware failure, and providing failover capabilities in disaster situations, end users are ensured access to mission critical application in all scenarios.

Citrix XenDesktop is a desktop virtualization solution that transforms Windows desktops and applications into an on-demand service available to any user, anywhere, on any device. XenDesktop helps businesses:

- Enable virtual work styles to increase workforce productivity from anywhere
- Leverage the latest mobile devices to drive innovation throughout the business
- Rapidly adapt to change with fast, flexible desktop and application delivery for offshoring, M&A, branch expansion and other initiatives
- Transform desktop computing with centralized delivery, management and security

Warid Telecom is one of the leading telecom operators in Pakistan. It is a joint venture between Abu Dhabi Group & SingTel Group. Abu Dhabi Group entered into a strategic alliance with Singapore Telecom.



NRSP Bank

New Horizon provides virtualization solution to NRSP Microfinance Bank Limited basing on VMware technology. Through virtualizing the IT infrastructure, NRSP Bank will be able to:



- Reduce hardware and operating costs
- Reduce the time it takes to provision new servers by up to 70%
- Decrease downtime and improve reliability with business continuity and built-in data disaster recovery
- Deliver IT services on-demand now and in the future, independent of hardware, OS, application or infrastructure providers

To fulfill hardware requirement of the virtualization solution, New Horizon also provided HP DL580 Servers and EMC VNX5100 Storage to Bank.

With the EMC VNX5100, the Bank will achieve new levels of performance, protection, compliance, and ease of management. High-performing unified storage with unsurpassed simplicity and efficiency, optimized for virtual applications.

The HP DL580 continues to deliver best-in-class HP performance, manageability, and reliability features with the latest Intel processor technology and it is the ideal choice for the Bank which is ready to deploy large databases that require scale-up compute processing, large memory and I/O intensive applications.

NRSP Microfinance Bank Limited has commenced operations in March 2011. It has been planned to gradually transform the micro credit operations of the country's largest provider of microfinance services (National Rural Support Program) into a regulated microfinance bank.

Colgate-Palmolive Limited

New Horizon provides Virtual Desktop Infrastructure Solution to Colgate Palmolive. The solution is an integration of both Citrix and Microsoft technologies. The components included in the solution are Citrix XenDesktop and Microsoft Windows Remote Desktop Services 2008.



New Horizon will also train the IT resources at Colgate-Palmolive by conducting a session led by a Citrix Certified instructor on the particular technology.



Through Citrix XenDesktop, Colgate-Palmolive can transform Windows desktops and applications into an on-demand service available to any user, anywhere, on any device. XenDesktop will help the organization by:

- Enabling virtual work styles to increase workforce productivity from anywhere
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Microsoft Windows Remote Desktop Services provides technologies that enable users at Colgate-Palmolive to access Windows-based programs that are installed on a Remote Desktop Session Host server, or to access the full Windows desktop. With Remote Desktop Services, users can access an RD Session Host server from within a corporate network or from the Internet.

By deploying a program on an RD Session Host server instead of on each device, Colgate-Palmolive can enjoy many benefits. These include the following:

- **Application Deployment:** The organization can quickly deploy Windows-based programs to computing devices across an enterprise. Remote Desktop Services is especially useful when they have programs that are frequently updated, infrequently used, or difficult to manage.
- **Application Consolidation:** Programs are installed and run from an RD Session Host server, eliminating the need for updating programs on client computers. This also reduces the amount of network bandwidth that is required to access programs.
- **Remote Access:** Users can access programs that are running on an RD Session Host server from devices such as home computers, kiosks, low-powered hardware, and operating systems other than Windows.
- **Branch Office Access:** Remote Desktop Services provides better program performance for Colgate-Palmolive branch office workers who need access to centralized data stores.

Colgate-Palmolive (Pakistan) Ltd. is one the renowned multinational FMCG Company involved in oral, personal, surface, and fabric care.

Sui Northern Gas Pipelines Limited (SNGPL)

Sui Northern Gas Pipelines Limited (SNGPL) signs a Service Level Agreement (SLA) for EMC RecoverPoint and procures Server Virtualization Solution from New Horizon.



The SLA signed includes the troubleshooting of errors in the EMC RecoverPoint solution by certified engineers from New Horizon and EMC. SNGPL now can focus on



their core domain whereas New Horizon and EMC together will take care of the problems and keep the solution running smoothly.

SNGPL also procured Server Virtualization Solution powered by VMware from New Horizon. The solution includes licenses VMware vSphere 5 and vCenter Server 5. SNGPL was previously applying the traditional technology that increased the number of physical servers that also increased the operational cost, provision time of new servers, downtime and disprove reliability. New Horizon suggested the gas supplying company to virtualize their IT environment and overcome the challenges.

VMware vSphere 5 sets the standard in virtualization, delivering better application performance and availability for all business-critical applications while automating the management of an increasingly broad pool of datacenter resources.

VMware vCenter Server provides a centralized and extensible platform for managing virtual infrastructure. VMware vCenter Server manages VMware vSphere environments allowing IT administrators simple and automated control over the virtual environment to deliver infrastructure with confidence.

- Provides centralized control and visibility at every level of virtual infrastructure
- Delivers the security and availability of vSphere through automated proactive management

New Horizon also conducted a certified professional led training for the IT wing of SNGPL for administration, advance administration, performance tuning and problem determination of the solution.

Sui Northern Gas Pipelines Limited (SNGPL) is the largest integrated natural gas company in Pakistan. The company's transmission system extends over 7300 km from Sui, Baluchistan to Peshawar, Khyber-Pakhtunkhwa; the company's distribution network is over 83000 km long, and services Punjab and Khyber-Pakhtunkhwa provinces.

Aisha Steel Mills Limited

New Horizon provides a solution to virtualize SAP Application at Aisha Steel Mills. This solution is deployed for the first time in Pakistan in any industry.



Aisha Steel Mills acquired VMware powered vSphere Solution for their server consolidation that significantly reduces the server sprawl in their data center, VMware vSphere Virtualization Solution provided key benefits to Aisha Steel Mill, VMware vSphere solution cuts capital and operating costs while increasing IT service delivery without being locked into limited choices of operating systems,



applications, and hardware, Aisha Steel Mills can reduce hardware and operating costs as much as and energy costs up to 80% by saving more than \$3,000 per year for every server workload virtualized.

VMware vSphere coupled with New Horizon consulting services significantly reduces the time to provision new servers by up to 70%. It decreases downtime and improve reliability with business continuity and built-in data disaster recovery.

Aisha Steel Mills Limited (ASML), a Joint-Venture between blue-chip Pakistani and Japanese business groups, namely, Arif Habib Group and Metal One Corporation Japan (part of Mitsubishi Corporation Japan). Arif Habib Group is one of the largest conglomerates in Pakistan whereas Metal One Corporation is the world's largest steel trading company.

Colgate Palmolive

Colgate-Palmolive virtualizes the servers through VMware technology. New Horizon provided this server consolidation solution and suggested Colgate-Palmolive to virtualize the servers on which their core application is running. Other than this, New Horizon is providing training to the IT wing of FMCG Company. The solution also included Veeam Monitor for VMware.



Veeam Monitor for VMware provides a comprehensive, performance-oriented view of your entire virtual infrastructure that complements vCenter Server's administrative console. Veeam Monitor gives busy administrators the information they need to see the true performance of their VMware infrastructure.

The training provided by New Horizon is for installation, configuration and management of VMware vSphere.

Colgate-Palmolive (Pakistan) Ltd. is one the renowned multinational FMCG Company involved in oral, personal, surface, and fabric care.

Getz Pharma

Getz Pharma virtualizes its server environment through VMware technology. The pharmaceutical company was applying the traditional technology that increased the number of physical servers that also increased the operational cost, provision time of new servers, downtime and disprove reliability. New Horizon suggested the pharmaceutical company to virtualize the environment and overcome the challenges.



Through VMware vSphere 4 Advanced and basic support for it, Getz Pharma will be able to not overcome the challenges but also deliver IT services on-demand now and in the future, independent of hardware, OS, application or infrastructure providers.

Getz Pharma is a member of the Getz Group of Companies. Getz Brothers & Co. Inc. has operations in 23 countries, primarily in Asia and Australia. Getz Brothers International distributes consumer products, pharmaceutical products and medical devices in these countries.

Pakistan Mercantile Exchange Limited

New Horizon provided a complete virtualization solution to Pakistan Mercantile Exchange Limited. The solution comprised of HP DL385 G7 Server and VMware vSphere 5 Enterprise Edition and vCenter Server 5 Foundation. Virtualization solution not only reduces the number of physical servers but also reduces the operational cost, increases IT agility and efficiency, and improves performance and user productivity.



Pakistan Mercantile Exchange (formerly National Commodity Exchange Limited) is the first technology driven, web-based, demutualized commodity exchange in Pakistan. It is licensed and regulated by the Securities and Exchange Commission of Pakistan and has a 100 % Institutional shareholding. Pakistan Mercantile Exchange Limited started its operations in May 2007 as a fully electronic exchange with nationwide reach.

NIFT

New Horizon virtualizes National Institute of Facilitation Technologies (Pvt.) Limited through VMware technology. To cut the operating cost and to increase the IT agility, efficiency, performance and user productivity, New Horizon provided the company with licenses for VMware vSphere 5.0 Enterprise edition and VMware vCenter Server 5.0 Enterprise Edition. Along with the virtualization solution, New Horizon also provided Microsoft licenses for Windows 7, Windows Server 2008 Enterprise edition and SQL Server 2008 Enterprise Edition.



NIFT is a joint venture between a consortium of six major banks and private sector. It is responsible for the establishment and management of automated clearinghouse facilities in Pakistan. NIFT is proactively involved in the modernization of payment systems in Pakistan.



TPL Trakker

TPL Trakker gets virtualized through VMware technology provided by New Horizon. In order to deploy a virtualized technology, TPL Trakker acquired HP ProLiant DL-585 G7 Servers along with HP E6600 Switch Series and licenses for VMware vSphere Enterprise Plus. Through virtualizing the IT infrastructure, TPL Trakker will be able to:



- Reduce hardware and operating costs
- Reduce the time it takes to provision new servers by up to 70%
- Decrease downtime and improve reliability with business continuity and built-in data disaster recovery
- Deliver IT services on-demand now and in the future, independent of hardware, OS, application or infrastructure providers

Operational since 1999, TPL Trakker's Limited is Pakistan's first multi-national company in Vehicle and Fleet Management Services operating across Pakistan and the Middle East.

Aman Foundation

In a world where cost reduction and doing more with less have become the norm, AMAN foundation continue to seek ways of increasing efficiencies and enhancing employee productivity while sustaining ever higher standards in health care.



The Aman Foundation is a local, self-funded, not-for-profit trust, based and operating in Pakistan. Inspired by a proactive commitment to the cause of human development, the Foundation aspires to make strategic interventions in Pakistan to support development in the areas of:

- **Healthcare** - with systems ranging from emergency medical response, community health workers, and tele-health initiatives to mother-and-child hospitals.
- **Education and Skills** - with a Vocational Training Institute designed to transform unemployed and untrained youth into productive members of society.
- **Nutrition** - with an emphasis to provide nutritious and hygienic food to school children to reduce hunger and malnutrition, and simultaneously increase enrolment and attendance.

AMAN Foundation was looking forward to implement number of discrete applications on individual servers that included HMRI, Nortel IP Telephony, Microsoft Infrastructure, etc. In many cases, each application required a dedicated server along with computing resources, their associated resources such



as electrical power, cooling, rack space, cabling, and support personnel also needed an efficient management system.

To overcome these data center challenges, New Horizon worked with AMAN Foundation to deploy virtualized servers and other technologies like Nortel IP Telephony and Microsoft Infrastructure. Instead of the traditional design where one application runs on one physical server, a single physical server can now host multiple virtualized servers (also called virtualized machines) and support multiple applications from a single device.

AMAN Foundation uses VMware as the foundation for server virtualization in the data center. VMware vSphere supports the creation of virtualized servers, each potentially using multiple CPUs and multiple gigabytes of memory.

To maintain its leading position in the global market, AMAN Foundation also required a communications network that could keep up with its expanding and changing business, an investment that could bring in a flexible and scalable platform to meet current business needs and fulfill future business requirements. New Horizon provided an ideal solution to implement unified communications. The deployment included Nortel Contact Center and Microsoft Infrastructure elements along with VMware Server Virtualization, which was weaved together to create an integrated communications and applications platform for AMAN Foundation. The homogenous network encompasses multimedia, voice, telephony applications, complete HMRI Applications along with Microsoft infrastructure with the flexibility to easily evolve to meet AMAN Foundation's future needs.

1 Link Guarantee Limited

1 Link Guarantee Limited virtualizes its IT environment by consolidating the physical servers through VMware technology. As a VMware Enterprise Partner, New Horizon is authorized to provide and deploy VMware technology at enterprises in Pakistan.



VMware vSphere Virtualization Solution will provide multiple benefits to the organization. 1 Link Guarantee Limited can control its IT infrastructure with VMware vSphere, can cut their capital and operating costs while increasing IT service delivery without being locked into limited choices of operating systems, applications, and hardware, can reduce hardware and operating costs as much as 50% and energy costs up to 80%, by saving more than \$3,000 per year for every server workload virtualized.

This solution reduces the time it takes to provision new servers by up to 70%. It also decreases downtime and improves reliability with business continuity and built-in data disaster recovery. This solution is capable to deliver IT services on-demand now and in the future, independent of hardware, OS, application or infrastructure providers.



1LINK (Guarantee) Limited is a consortium of major banks that own and operate the largest representative shared financial services network of Pakistan.

United Refrigeration Industries Limited (Dawlance)

New Horizon provided a distinctive Disaster Recovery Solution to Dawlance. New Horizon fulfilled the requirement of Dawlance of deploying a DR Site to safeguard the critical data of the organization.



Dawlance was engaged with New Horizon for planning their DR Site and lining out a plan that ensures a minimum outage in case of calamity. In this reference, New Horizon proposed a solution to Dawlance which features a robust and cost-effective DR Site. This solution includes virtualization technology, whereas the data is replicated through Veeam and Oracle Dataguard.

Virtualization offers a unique value proposition, with the opportunity to reduce costs while also increasing service levels. Nowhere is this value proposition more apparent than with data protection. Veeam provides the most comprehensive protection for your virtual environment, offering backup and replication through one solution. This gives flexibility to meet different recovery objectives (RTOs and RPOs) for different virtual machines (VM). You can replicate a VM on-site for high availability, off-site for disaster recovery, or back up using less expensive hardware and techniques. You save on software licenses-and realize additional benefits from virtualization. To ease data transfer to and from off-site locations, Veeam uses WAN bandwidth efficiently and lets you replicate over slow WAN links.

This solution delivers comprehensive resource consumption and workload data for hosts, clusters and data stores, with visibility all the way down to the individual VMs and applications running inside it. The solution has the capabilities to speed up analysis and troubleshooting, and will help Dawlance to determine potential resource bottlenecks for virtual server workloads and eventually the future of IT roadmap of Dawlance will be aligned with the latest technology.

Dawlance is the Premiere Home Appliances Company in Pakistan with 30 years of history. The company began its operation in 1980 with the production of Refrigerators. Today, beside Refrigerators, Dawlance is producing Washing Machines, Chest Freezers, Vertical Freezers, and Split AC & Microwave Ovens. Over these years Dawlance has not only developed the largest dealers' network but has also established the largest after sales service set-up across Pakistan.



NED University

New Horizon provides VMware solution to NED University. The solution includes VMware vSphere 4 which features ESX4.0, and VMware vCenter Server.

NED was facing the challenge of Server Clustering solution with easy management deployment and up-gradation, reduce power and cooling costs and deliver the scalability to support business expansion. New Horizon being an Enterprise Partner of VMware provided the university with the best-fit solution through VMware which enables consolidation of physical hardware to eradicate server sprawl and lower power and cooling costs while offering scalability, performance and high availability.



NED University Of
Engineering & Technology

The NED University of Engineering and technology is the oldest institution now in Pakistan for teaching and turning out Graduate Engineers; it is in the Public Sector – i.e. Government owned – having begun initially as an Engineering College in 1922 established by subscriptions from private donors. The University retains the initials in honor of the principal donor for that College – Nadirshaw Edulji Dinshaw in its name.

DATA Steel

New Horizon provides a complete virtualization solution to Data Steel Pipe Industries. The solution includes the virtualization of servers and desktops with VMware technology. To attain the complete version of virtualization solution, Data Steel procured HP Proliant DL 385 and HP Proliant DL 185 Servers, HP Storage Works 2000 G2, HP Compaq t5145 Thin Clients, HP Compaq Elite 8000 Desktops bundled with Microsoft Windows 7 as a part of hardware. Data Steel also procured licensed software for the hardware procured. The licensed software purchased is for VMware V Sphere 4, VMware View Enterprise Desktop, Microsoft Server 2008 Standard edition and Microsoft Windows 7.



In addition, New Horizon will also install and deploy the solution and will also provide support and training for the solution.

The virtualization to the desktop environment will deliver enterprise- class control and manageability while maintaining the familiar end-user environment. VDI virtualizes desktop images that can be deployed from centralized hosting server. This provides the reduction of operational cost and improved security while maintaining the current end-user experience. VDI technology provides companies with a true win-win with Enterprise Desktop Consolidation, Remote Developer Support, Desktops as a Secured Managed Service, Business Continuity and Disaster Recovery and Remote or Branch Offices and Secure Remote Access.



Virtualizing the datacenter will enable consolidation of physical hardware to eradicate server sprawl and lower power and cooling costs while offering scalability, performance and high availability.

DATA Steel Pipe Industries is a market leader in the production, delivery and service of Steel line pipes in Pakistan and aims to provide the best products and services with maximum value for money.

Atlas Bank

New Horizon provides VMware solution to Atlas Bank. The solution includes VMware vSphere 4 which features ESX4.0 and VMware Consolidation Backup, and VMware vCenter Server.



Atlas Bank was facing the challenge to support an expansion program that saw 20 branches opened in 2008, while upgrading its core banking system and using a Customer Relationship Management (CRM) application to segment and analyze its customer base. The bank is also modernizing its datacenter infrastructure to reduce server sprawl. The bank also faced the problem of securing production data held on distributed test and development servers, reduce power and cooling costs, and deliver the scalability to support business expansion. New Horizon provided the bank with the appropriate solution through VMware which enables consolidation of physical hardware to eradicate server sprawl and lower power and cooling costs while offering scalability, performance and high availability.

New Horizon being a VMware Enterprise Partner is authorized to sell and deploy VMware solutions in Pakistan.

Atlas Bank Limited is supported by the trusted equity of Atlas Group, a leading manufacturing, financial services and trading group that has been at the forefront of country's economic development since 1962.

Tullow Oils

Tullow Pakistan (Developments) Ltd. gets their IT Infrastructure virtualized. Tullow was helped by New Horizon to consolidate their IT Infrastructure using VMware technology.



New Horizon is deploying the VMware Web Sphere Solution at Tullow. This solution will save the Company's valuable time, money and resources, so that it can focus on IT innovation rather than IT maintenance.

Tullow Pakistan (Developments) Ltd. provides oil and gas exploration services. The company is based in Islamabad, Pakistan. As of March 20, 2009, Tullow Pakistan (Developments) Ltd. operates as a subsidiary of Pakistan Petroleum Ltd.



Hamdard University

Solution Provided: Deployment of datacenter virtualization with VMware vSphere.

Customer: Hamdard University on the educational scene of Pakistan is a relatively recent phenomenon but the progress it has made so far is phenomenal. The University, however, does not want to rest on its achievements and therefore strives hard for further expansion in order to be at par with renowned universities. The resources of the University are devoted to fulfill its mission, aimed at developing qualified, value-oriented professionals and scholars, capable of creating new horizons on the glorious foundations of oriental heritage of knowledge. The University provides an academic and conducive environment, which is based on the philosophical belief that the ultimate reality can be reached through pure reason and intellectual pursuits.



Study: New Horizon provides VMware solution to Hamdard University. The solution includes VMware vSphere 4 which features ESX4.0, and VMware vCenter Server.

Hamdard University was facing the challenge of Server Clustering solution with easy management deployment and up-gradation, reduce power and cooling costs and deliver the scalability to support business expansion. New Horizon being an Enterprise Partner of VMware provided the university with the best-fit solution through VMware which enables consolidation of physical hardware to eradicate server sprawl and lower power and cooling costs while offering scalability, performance and high availability.

Dalda Foods

New Horizon virtualizes the technology infrastructure of Dalda Foods by providing VMware vSphere 4 Licenses, HP ProLiant DL 385 G6, HP Storage Works 2000 and VMware vCenter Server 4 Foundation for vSphere that will support up to 3 hosts.



New Horizon will also install and deploy the solution, provide Datacenter Administration Training, resident engineer for 60 days to administer the datacenter and accessories for the datacenter as a part of Value Added Services.

Dalda Foods was enhancing its datacenter by increasing the number of physical servers. New Horizon proposed an alternative solution of virtualized environment which was more cost effective, consolidated and scalable. By deploying the virtualized solution Dalda will enable consolidation of physical hardware to eradicate server sprawl and lower power and cooling costs while offering scalability, performance and high availability.



Shaheed Benazir Women Support Program

New Horizon provides a unique solution to Shaheed Benazir Women Support program. The solution includes form designing, printing, data entry, verification and issuance of plastic cards. Other than this New Horizon also established more than 70 Data consoles and Datacenters in virtualized environment powered by VMware technology.



Under the Shaheed Benazir Women Support Program, which will benefit half-a-million poor women in the first year, each Member of Provincial Assembly (MPA) will be given 1000 forms to be given to women assessed poor by them. Poor women will get a monthly support income of Rs. 1000/-.

The solution provided consisted of 4 phases. First the designing of forms such that it could be copied due to unique ID of EMIS Code and Barcode present on form for the reason to collect the data with 100% accuracy and the designing was done in such a way that form data can be captured easily to minimize the data entry. Secondly, the establishment of Data Entry site equipped with latest HP machines and a complete network for entering the data and its verification. The data is verified by NADRA and then stored in the database through an application made by New Horizon. Third phase constituted of establishment of Data Center powered by HP Servers and Storage. Finally, Plastic PVC Cards were printed for the unique identification of the women who will benefit from the program.

All in all this was a turnkey solution given by New Horizon which covered all the aspects of this project. New Horizon also got the honor to be the technical host in the launch ceremony of this program held at Chief Minister's House.

Bakhtar Bank

New Horizon provides Application Virtualization Solution to Bakhtar Bank, Afghanistan. Bakhtar Bank was previously operating several numbers of physical servers, applications and data used to be confined to the machine containing it. This resulted the Bank to spend more on operational cost, provision time of new servers, downtime and disprove reliability. New Horizon suggested the Bank to virtualize the environment and overcome the challenges through Citrix technology. The solution also included Citrix Repeater 8540 for the various branches of the Bank. New Horizon also provided Microsoft Server 2008 Enterprise edition and Microsoft SQL Server 2008 Enterprise edition licenses.



Server virtualization is a proven technology that enables multiple virtual machines to run on a single physical server which delivers cost-effective server consolidation and business continuity. XenDesktop helps in:

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Citrix XenApp is an on-demand application delivery solution that enables any Windows® application to be virtualized, centralized, and managed in the datacenter and instantly delivered as a service to users anywhere on any device. XenApp enables organizations to improve application management by:

- Centralizing applications in the datacenter to reduce costs
- Controlling and encrypting access to data and applications to improve security
- Delivering applications instantly to users anywhere

Citrix Branch Repeater accelerates, controls and optimizes services-desktops, applications and multimedia -for branch and mobile users.

Windows Server 2008 R2 is a multi-purpose server designed to increase the reliability and flexibility of your server or private cloud infrastructure, helping you to save time and reduce costs. It provides organizations with powerful tools to react to business needs faster than ever before with greater control and confidence.

Microsoft SQL Server 2008 R2 Enterprise delivers comprehensive security, reliability, manageability, and scalability for demanding transaction processing, business intelligence, and data-warehousing applications.

Bakhtar Bank is a local Afghani bank operating according to the international standards. It has set the objective to help the Afghan business community to prosper.

Azizi Bank

Azizi Bank virtualizes its technology infrastructure. Azizi Bank was previously operating several numbers of physical servers, applications and data used to be confined to the machine containing it. This resulted the Bank to spend more on operational cost, provision time of new servers, downtime and disprove reliability. New Horizon suggested the Bank to virtualize the environment and overcome the challenges through Citrix technology. The solution also included Citrix Repeater 8540 for the various branches of the Bank. New Horizon also provided Microsoft Server 2008 Enterprise edition and Microsoft SQL Server 2008 Enterprise edition licenses.



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Azizi Bank is a commercial bank set up in Afghanistan in terms of the licensing policy of Da Afghanistan Bank, the Central Bank of the country. The Management team at the Bank is a mix of youth and experience and skillfully supported by a young and well-trained operating team is aiming at transforming the banking scene in the country by offering a truly professional and pleasurable experience to the customers. The bank today has 1350+ strong team of employees.

For the past one year, New Horizon has been successfully fulfilling the requirements and providing consultancy to various organizations in Afghanistan and Azizi Bank is yet another milestone achieved in the country.

Dubai Islamic Bank

Dubai Islamic Bank (DIB) moves towards Branchless Banking. This challenge was long faced by many banks in Pakistan but DIB is took this initiative with the help of New Horizon to achieve this milestone.

The challenge faced by DIB was of desktop virtualization, in which desktops and applications are not installed locally at the terminal devices, but are centralized and virtualized in the datacenter and made available to users on demand. The security team of DIB faced a specific challenge, which needed to be addressed in order to achieve the business's compliance aims. It had to amend the way in which users authentication parameters was handled. This



بنك دبي الإسلامي
Dubai Islamic Bank



solution should provide an extra protection for users and technical staff who are logging onto the network from remote locations or internally from DIB's network.

With Citrix XenDesktop, DIB no longer needed high-cost, high-performance computers in the workplace. Since the slender terminal devices have no moving components, like hard disks or fans, they are also much quieter and more energy efficient than ordinary desktop computers.

In the future, the users will be able to log on by means of a two factor authentication solution powered by RSA, RSA SecurID Token provides secure authentication to call up their personal desktop. Rapid workplace changes, frequently required in the savings bank field, are also supported: The user need only take out his RSA hard token to log off from a terminal device; the user session remains open on the server and can be resumed seamlessly again on another computer.

The desktop virtualization solution that the DIB implemented together with RSA SecurID, is based on the interaction of several components. Microsoft Hyper-V was implemented as a virtualization platform. DIB can simultaneously operate multiple desktops in virtual machines, coupled with a very secure 2-Factor authentication mechanism, provides DIB a robust and secure platform to deliver the high performance desktop user experience.

NETSOL

Solution Provided: Deployment of Data Center at NETSOL which includes installation of hardware & deployment of VMware.



Study: The challenge of managing the increasing business generation to NETSOL was faced which led to increase the number of servers and establishment of a datacenter. Instead of increasing the physical number of servers, New Horizon provided NETSOL the solution of virtualizing their datacenter through VMware technology.

VMware vSphere Virtualization Solution provided key benefits to NETSOL. From achieving its goals NETSOL controlled its IT infrastructure with VMware vSphere, cut capital and operating costs while increased IT service delivery without being locked into limited choices of operating systems, applications, and hardware, reduced hardware and operating costs as much as 50% and energy costs up to 80%, by saving more than \$3,000 per year for every server workload virtualized.

Proposed solution reduced the time it took to provision new servers by up to 70%. It decreased downtime and improved reliability with business continuity and built-in data disaster recovery.

The proposed solution delivered IT services on-demand now and in the future, independent of hardware, OS, application or infrastructure providers.



By consolidating server hardware with VMware vSphere, the most robust software suite in the industry for server consolidation, NETSOL is able to:

- Increase the utilization of existing hardware from 5-15% up to 80%
- Reduce hardware requirements by a 10:1 ratio or better

Rehman Medical Institute (RMI)

New Horizon provides Rehman Medical Institute (RMI) infrastructure virtualization solution based on Microsoft and Citrix technologies. New Horizon also provided technology infrastructure products to RMI which include HP Servers, Storage, and HP Thin Clients.



The infrastructure virtualization solution provided by New Horizon consists of Server Consolidation and VDI. Through Microsoft Hyper-V Server Consolidation solution, RMI will be able to run 50 virtual servers on 2 physical servers. This will provide a reliable and optimized virtualization solution enabling RMI to improve server utilization and reduce costs. The other part of the infrastructure virtualization solution is VDI powered by Citrix XenDesktop 5 which will enable RMI to deliver on-demand virtual desktop and applications anywhere their users work, anywhere their business takes them, to any type of device, bringing unprecedented flexibility and mobility to their workforce.

Previously, New Horizon has signed an agreement with Rehman Medical Institute for the establishment of complete LAN and Voice Infrastructure and for the establishment of inbound call-center.

Located at the gateway of Khyber, Rehman Medical Institute has revolutionized the concept of medical care in the Khyber Pakhtoonkhwa. The management totally believes that IT expenditures are investments, not expenses and it pays off in the long run. This remarkable effort from such an institution will open a new era of technology in KP, where the people will have access to healthcare facilities of international standards.

Virtualization Solution at SILKBANK

New Horizon delivers licenses for VMware vSphere along with value added services to Silk Bank. After a detailed performance assessment of the Bank's current VMware Infrastructure, New Horizon tuned the running environment and also provided VMware vSphere licenses to enhance the output.



With the virtualization solution provided by New Horizon, Silk Bank will be able to increasingly reduce operating and energy cost as well as reduces the time to provision new servers by up to 70%. This will decrease downtime and improve reliability which will add up more efficiency and productivity of the IT assets at the Bank.

SILKBANK Limited is one of the leading financial institutions in Pakistan. The institution previously known as the Prudential Bank was acquired by the management and associates of the Saudi Pak Industrial and Agricultural Investment Company (Pvt) Ltd (SAPICO).

