SIMPLIFICATION TO OPTIMIZE IT SYSTEMS

Introduction

PetroVietnam Oil Corporation (PV OIL) is a subsidiary of Vietnam National Oil and Gas Group (PetroVietnam), established on June the 6th 2008 through consolidation of Petroleum Trading Joint Stock Company (Petechim) and PetroVietnam Oil Processing and Distribution Company (PDC). The company is headquartered in Ho Chi Minh City.

With a 35 years tradition in oil and gas trading and crude oil import and export together with abundant resources and experience in oil product trading, after 8 years of establishment, PV Oil has been growing significantly with business activities all over Vietnam territory and overseas expansion. The company is proud itself to be the only corporation to conduct safe and effective exporting duties for Vietnam crude oil production.

Currently, PV Oil owns around 30 member companies, including base depots and joint stock companies where PV Oil is the majority shareholder and 2 overseas subsidiaries, nearly 600 member petrol stations and a system of agents, retailers and industrial customers.

Mission

PV Oil is extremely aware of the vital role that IT plays in running its business and production activities. Between 2015 – 2020, PV Oil aims to accelerate the deployment of specialized applications for the sale and distribution of gasoline. To realize the task, together with development of IT infrastructure, PV Oil will also focus on developing qualified and professional staff to master the system. In addition, a system of documents on regulations, policies and processes in IT sector will be created and perfected, helping to set the stage for development of PV Oil IT system.

Key IT Infrastructure Challenges

HOW TO UTILIZE TECHNOLOGY TO STRENGTHEN BUSINESS

The adoption of IT into business activities and more integration of applications and data is the top priority for PV Oil between 2015 – 2020 in order to improve operating efficiency and deliver cost savings.

By the end of 2015, PV Oil completed the deployment of Portal and centralized Email to all of its subsidiaries, providing services to approximately 2,400 user accounts across the country. The company also developed many PV Oil portal integrated business application software. As a result, networks and transmission systems are under constant pressure to handle multiple, simultaneous connections, and to meet stability, continuity and security requirements.

Currently, stand-alone server solutions are no longer considered to be an appropriate platform for meeting the requirements of continuously developing applications, which typically requires dynamic adjustment to configure hardware (CPU, RAM, HDD and so on) to match different business software needs at different points in time.

In addition, the manpower resources required for the configuration, installation and management of the systems are big challenges when upgrading or replacing equipment.

Managing multiple server systems across different platforms is a challenging task for any IT team. For this reason, an integrated administration website that can manage the entire system is another urgent requirement.

In the period 2015–2020, PV Oil also intends to deploy unified communications (UC). This in turn presents challenges to network security and high-speed wireless network access, especially considering the rapid growth in smartphone use.

Another big challenge is the fact that, with more than 20 petroleum storage facilities, and around 600 petrol stations all over the country, data and application integration must be matching characteristics of the transmission infrastructure that exists in each province and city as well as different technology systems. This creates complication in connection and receiving information through systems, requiring multiple steps of configuration and time-consuming deployment. For this reason, simplifying IT infrastructure is an urgent imperative for PV Oil in the current period.

Solutions

OPTIMIZING OPERATION THROUGH MOBILITY AND UCS VIRTUALIZATION

Upgrading IT management

Fully aware of the challenges, PV Oil proactively researched and selected Cisco's solutions. After upgrading, almost all critical business applications now run on Cisco UCS with Unified Fabric Nexus 7000. This gives the organization effective centralized management, and far greater control over applications. Unified Fabric Nexus 7000 is the core device providing storage access at approximately 50% faster speed than the previous system. This creates time savings for critical data access applications that require high level of data security. In addition, application users can use Wi-Fi or wired networks to access with the same level of security. The Wi-Fi connections are configured for staff and guest access with improved security and network effectiveness.

In addition, the deployment of Nexus 5500 — a core device that provides storage and database access — also accelerates application use and accesses critical data around 50% faster than the previous system.

Users can now use Wi-Fi or wired networks to access the same level of security and policies, helping to enhance effectiveness of IT systems as well as employee satisfaction on data and application software access.

Without the need to manage complex infrastructure, PV Oil can now centrally manages all of the systems right at the company headquarter. Cisco UCS and Mobility solutions helped to consolidate and simplify infrastructure as well as actual applications. Some of the recent statistics show that this can help to create a 10-20% cost savings yearly in system management.
In addition, users can easily access PV Oil systems with a few steps. IT administrators can deliver information when requested via templated solutions, rather than performing them one step by another. With network bandwidth expanded by 50–70%, users have noticed that they are served 20–30% faster than previously.

Optimizing technology and security

PV Oil application software can run faster and migrated to the same UCS platform to save costs, rather than being deployed separately.

Security has also been strengthened, as IronPort email security and ASA VPN have been deployed in parallel with firewall and network security, especially in the context of Internet growth and higher skills of hackers in breaching information nowadays.

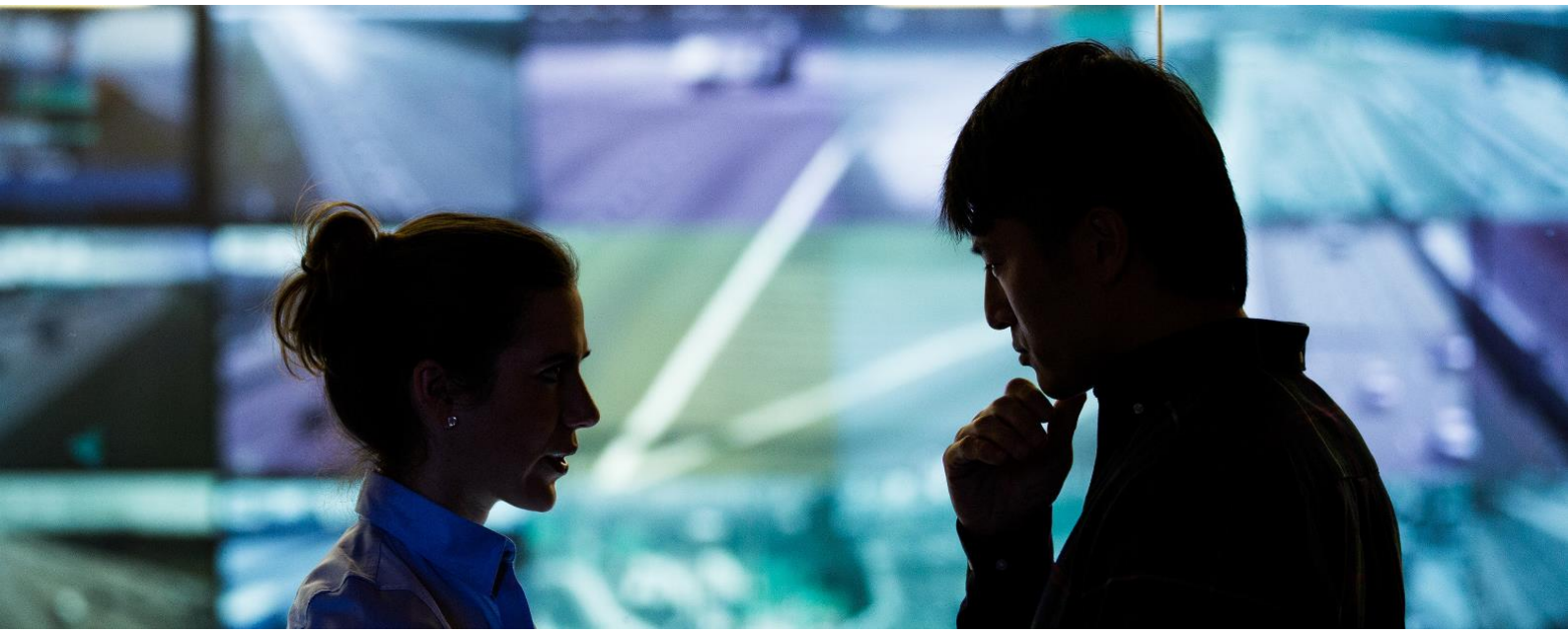
The new system is intentionally designed for easy integration of disaster recovery data center in the future. Users from any branch can now easily access security systems that are designed to provide the highest levels of safety.

Developing IT systems

With Cisco solutions, the PV Oil IT systems now operate at an accelerated speed, bringing about operational effectiveness, operational and management cost savings. With the advanced operational capabilities of the Core Nexus 7000 and UCS, PV Oil IS systems are now well placed to ensure continuity in business performance.

The new DC is also designed to ensure that future Data Recovery site can support Data Center – Data Recovery at the fastest speeds in operations and full function recovery. The new system also employs highest levels of security, including IronPort Email Security and ASA VPN, helping to ensure security for remote access.

As a result, Cisco has solved several key challenges facing system administrators and IT departments at PV Oil. In addition to simplifying deployment and operations, the new infrastructure will also help to enhance system performance, and ensure a lower total cost of ownership (TCO).



Benefits

IMPROVED TECHNOLOGY APPLICATIONS

Cisco's integrated solutions provide a simpler, more effective way to manage infrastructure on a large scale, and deliver significant cuts in maintenance costs, as well as helping to reduce complexity and speed up return on investment. Cisco's solutions also integrate seamlessly with automatic systems and popular applications such as Oracle, Microsoft, etc. The migration to Cisco provides a clear-cut benefit, as it removes the need for different servers for each application with much faster deployment process.

Cisco UCS management software significantly reduces the cost of management and administration. Managing up to 160 servers and thousands of components, Cisco UCS also includes embedded software and all management components. With Cisco UCS, management activities can also be expanded globally to thousands of servers, providing IT services in many different areas.

In summary, Cisco has provided PV Oil with an efficient and cost-effective way to manage and operate its software. This also helps PV Oil to better manage and operate application software. Besides optimizing hardware infrastructure, Cisco has also helped the business to gain greater efficiency across its operations, strengthen security, and prepare for a Data Center — Data Recovery connection. Looking forward, Cisco will be considered one of the most favorable suppliers for the future PV Oil's DR systems.

To learn more about PV Oil, visit www.pvoil.com.vn
To learn more about Cisco Solutions, visit www.cisco.com/vn