



INDUSTRY

Transport

SOLUTION

A gradual virtualization roll-out, starting from the testing and development of 2 virtual servers to the virtualization of all highly critical applications.

RESULTS

- A high-performance, 95 per cent virtualized IT Server infrastructure with savings on power, footprint and management requirements
- Started piloting “IaaS” Automation Center
- An improvement from a few physical servers to 260 virtual servers
- Improved response time, offering end users a quick and responsive turn-around time for requests
- Fully Utilizing Existing Infrastructure resources
- Facility for easy Capacity planning
- Costs and Efforts savings
- Visibility on Infrastructure Provisioning.
- A centralized monitoring system, so customization can be done in minutes, rather than days or months.



The Department of Transport plans, develops and regulates an efficient and well-integrated transport system that contributes to the economic growth, quality of life and environmental sustainability of the Emirate of Abu Dhabi. DoT serves the public interest by enhancing mobility and delivering safe, secure and environmentally responsible Aviation, Maritime, Public Transport and Highways sectors.

The Department of Transport aimed to virtualize its data center as it was expanding its environment and purchasing hundreds of physical servers became too expensive to maintain and manage. Aviation, Maritime, Public transport and Road transport services, online portals, CRM, Maximo, Oracle applications and DARB were some of the business services offered. With the expansion of its service offerings, the demands on the ICT Division was increasing, and DoT needed a highly available, flexible, and dynamic IT infrastructure to manage their technology demands.

“VMware’s leadership, dedication, and sophisticated products helped the Department of Transport to virtualize its highly critical applications, thus enabling us to respond to our customers faster, power our Internal Corporate Services and Public transportation applications, and improve our services to the public in the Emirate of Abu Dhabi that encourages the use of public transportation.”

- Saeed Al Ghailani, Head, Infrastructure and Telecom

Department of Transport Speeds Up Services with VMware

Department of Transport (DoT) is a government body which plans, develops and regulates the transport infrastructure for aviation, maritime and road transportation in the Emirate of Abu Dhabi. In line with the growth and sophistication of services that are being offered to the corporations and public of the Emirate, DoT aimed to have an advanced, highly-available infrastructure that would reduce downtime and effectively manage their resources.

Today, with a custom-designed VMware virtualization solution of the vCloud suite, the department of Transport achieved 95% virtualisation of its IT server infrastructure to meet the operational and business needs of a state-of-the-

art transportation network, resulting in increased performance and availability, savings on hardware maintenance and running costs, and effective planning and management of resources.

The Department of Transport’s major project, unveiled in 2011, is its robust Geographical Information System (GIS) portal www.darb.ae The DARB portal gives users to access fast, up-to-date and reliable information on Abu Dhabi Transportation Systems Like; driving directions, car travel maps, bus travel maps (bus routes and bus stops), bus terminals, points of interest, ferry routes, and timings in Emirates of Abu Dhabi .

With its high-end offerings placing substantial demands on its IT infrastructure, DoT turned to VMware to develop a plan to gradually virtualize its physical servers with the testing and development of 5 virtualized servers. By 2011, DoT virtualized its Disaster Recovery applications. By the end of 2012, 35 per cent of DoT’s 130 servers were virtualized.

In 2013, DoT moved towards the virtualization of its critical GIS application, its Customer Relationship Management

DoT uses VMware vCloud® Automation Center™ to drive business agility by automating the delivery of personalized IT services, moving all provisioning to the cloud. This means that with a self-service user portal, DoT’s clients can provision

VMWARE CASE STUDY

VMWARE FOOTPRINT

- VMware vCloud Suite (which contains) :
- vSphere Enterprise Plus
- vCenter Operations Management Suite
- vCloud Automation Center

VIRTUALIZED OPERATING SYSTEMS

- Linux
- Windows

KEY CRITICAL VIRTUALIZED APPLICATIONS

- Geographic Information System
- CRM
- Maximo
- Sharepoint
- DoT External Portal
- CARS Systems
- Avaya
- Oracle DB
- Oracle Applications
- Customer Relationship Management
- Traffic Data Management System

STORAGE

- EMC VMAX Enterprise Storage Array
- EMC VNX
- HP Storage

a new machine within minutes. DoT also uses VMware vCenter Operations Manager to proactively diagnose, manage and monitor the VMware infrastructure. vCenter Operations Management Suite enables significant increases in capacity utilization, consolidation ratios, and infrastructure performance.

“By installing VMware’s leading virtualization solutions, we have improved our delivery time to our customers, reducing the speed at which they receive the service from months to just minutes. We have increased our flexibility and resource management, and saved on physical space, power, cooling, management and maintenance costs. VMware’s solutions worked perfectly on our systems, Virtualizing DoT Mission Critical services like Maximo, DoT Portal and CRM including the backup and High availability systems was a step forward beyond our road map and expectation in our green initiatives direction, which is aligned with the sustainability strategy of the Abu Dhabi Government=,” said Al Ghailani.

Results

- DoT’s Server infrastructure is now 95 per cent virtualized
- Significant reduction in Time to Market
- Delivery time reduced from a few months to a few minutes
- Business Agility : Ability to scale effectively to meet increasing demands
- High availability resulting in reduced downtime
- Increase the Visibility on ICT Infrastructure service
- Easy and comprehensive reporting facility on Technical and management level (CRM), and its Traffic Demand Module (TDM). VMware also aided in the implementation of a virtual demilitarized environment (vDMZ), separating the DoT Public facing network from the DoT internal Backend Services.

