



Enabling an Always-On Telkom Indonesia with reduced enterprise costs, greater agility and compliance through virtualization

Synergy and transformation in Telkom Indonesia's IT infrastructure better enabled the group to achieve its vision of becoming a leading TIMES player in the region with the agility, flexibility and security needed. The virtualized and consolidated IT infrastructure reduced total cost of ownership by 40 percent and also afforded the company with greater efficiency and enhanced security and compliance to regulatory requirements.

PT. Telekomunikasi Indonesia Tbk, or publicly known as Telkom Indonesia, is the largest telecommunication provider in Indonesia serving over 100 million customers in the nation. With its vision to become a leading player in the Telecommunication, Information, Media and Edutainment Service (TIMES) in the region, Telkom Indonesia has been transforming the focus of its business, infrastructure, system, organization, human resources, and corporate culture since 2008, to remain competitive.

As the parent company of Telkom Group, it provides a comprehensive portfolio of telecommunication services, ranging from Fixed Phone, Mobile Communications, Interconnection & International Traffic, Fixed Broadband, Wi-Fi, Network Services, Satellite, and Tower, that caters to various customer segments, including Personal, Consumer/Home, SME, Enterprise, Wholesale, and International customers.

The Challenge

Efficient and cost effective always-on connectivity to all of Indonesia

In the business of connecting businesses, people and communities throughout Indonesia, it is critical for Telkom Indonesia to ensure always-on service delivery. The implementation of VMware's solutions helped Telkom Indonesia to realize company's strategic goal and commitment to having a better broadband access throughout the nation. By building data center spanning across 100,000 square meters, 75,000 kilometers of nationwide broadband backbone, and 20,000 of broadband access lines, ensuring 24/7 service delivery was a key business challenge.

Varying levels of infrastructure development across the country also impeded the efficiency and quality of service rendered. With the network and technical complexities across the vast geographical reach of Indonesia, Telkom Indonesia needed a robust IT infrastructure that enable fast delivery of services with a high level of availability to sustain rising business growth. With high IT investments including the 100,000 m² wide of data centers and more, Telkom Indonesia needed to ensure its assets were operating at high levels of efficiency, low total cost of ownership (TCO) whilst ensuring 24/7 service provisioning. This meant high level of availability and performance, and the flexibility to cater to changing business requirements that were easily, securely and centrally managed for efficiency.

"The commitment to help connect Indonesia, its businesses and people requires capabilities of providing an always-on service model. In the business of connecting millions of consumers and businesses across Indonesia, an always-on service model across vast geographies and technical development stages is critical," said Sihmirno Adi, Deputy Senior General Manager ISC, Telkom Indonesia.

Managing a vast portfolio of businesses and customer groups across Indonesia is no easy feat.

INDUSTRY

Telecommunications

LOCATION

Indonesia

KEY CHALLENGES

- To enhance operational efficiency and provide always-on services alongside fast growth, in support of its corporate's vision to become a leading Telecommunication, Information, Media & Edutainment Services (TIMES) player in the region
- High costs and inefficiencies from the lack of synergy in IT investments across subsidiaries with varying standards, development stages and platform complexities
- To ensure regulatory compliance and maintaining the right levels of security and resiliency across all business data and processes

SOLUTION

Telkom Indonesia leveraged VMware's solutions to drive transformation, enhance efficiency, agility and lower enterprise costs to provide an always-on service for growing business and customer demands.

“At Telkom Indonesia, we see IT as the enabler to provide us with the agility, flexibility and performance to connect our customers. Virtualization allowed us to consolidate our IT infrastructures across the group from storage, application and server, data center, link to access, enhancing efficiencies in delivering services to our customers securely, and cost effectively. Our IT infrastructure became integrated, consolidated, and homogenous, with the availability necessary to meet growing business needs”

Sihmirmo Adi
Deputy Senior General Manager ISC
Telkom Indonesia

BUSINESS BENEFITS

- Telkom Indonesia supported by an always-on data center with 99.99 percent service availability, with a high performance level of IT operation
- 40 percent reduction in total cost of ownership through virtualization of the IT infrastructure
- Faster time to market with less virtual machine (VM) provisioning taking less than 30 minutes instead of 8 hours
- Enabling compliance to regulatory requirements of storing and managing 7 years of data retention, which also allowed for better Business Continuity Plan and Disaster Recovery Plan governance

Serving hundreds of thousands of customers across Indonesia with its comprehensive telecommunication services requires high application usage and service availability. In order to remain competitive and to become a leading TIMES player in the region, Telkom Indonesia needed to enhance its operational efficiency and to better synergize all parts of the business in order to maximize growth and productivity.

The Solution

Synergizing Telkom Indonesia's IT infrastructure to provide Always-on Service with Virtualization

Telkom Indonesia began its software-defined enterprise journey with VMware's virtualization solution, VMware vSphere®, and virtualized its IT infrastructures from platform to servers, and across various operating systems and applications. At present, nearly all of the core applications, such as Operating Support Systems (OSS), Business Support Systems (BSS) which include SAP Finance and SAP CRM, have been virtualized. The deployment of VMware's virtualization solution allowed Telkom Indonesia to consolidate all of its IT resources, including its legacy systems, into a virtualized environment with the ability to expand quickly with growth in capacity requirements of its subsidiaries.

To enable the delivery of 24/7 always-on service, Telkom Indonesia also deployed other VMware technologies, including vCenter Server™, Horizon®, vCenter™ Site Recovery Manager™, vCloud® Automation Center™, Cloud Business, Cloud Operations, vRealize Operations, and VMware NSX™, to establish the software-defined data center (SDDC) environment. This afforded Telkom Indonesia with the ability to perform application management at a high level of availability, security and scalability, while optimizing and managing the infrastructure on the storage, network, cloud and compute fronts.

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Business Benefits

Resilient and consolidated IT Infrastructure to support business and IT operation efficiency

Indonesia has the highest mobile penetration across ASEAN¹, and the potential for growth as fueled by the government's plan to connect the nation is immense. On the back of high growth and the need to ensure 24/7 connectivity and service delivery, the adoption of VMware's virtualization solutions enabled Telkom Indonesia's always-on capability. The company managed to achieve almost 100 percent (99.99 percent) service availability with its always-on data centers at high performance across its business. In addition, Telkom Indonesia now has the capability to store and manage 7 years of data, a critical function for ensuring regulatory compliance for the telecommunications industry.

“As we embark on our software-defined enterprise journey, our deployment with VMware enabled us to provide 24/7, always-on service with minimal server downtime and close to 100 percent service availability. Telkom Indonesia can now better serve the needs of our customers, supporting our vision to be the leader in TIMES for the region,” said Sihmirmo.

¹GSMA: Capitalising on ASEAN's mobile moment

VMware Case Study

“Telkom Indonesia was able to transform our IT infrastructure with great agility to meet the growing needs of our subsidiaries, with a 40 percent reduction in total cost of ownership. Having virtualized our IT infrastructure with VMware, provisioning of services and applications now takes less than 30 minutes, and this greatly enhanced our response time to provisioning new services and applications. We now have the capability to support Indonesia’s plans towards developing the connectivity and broadband across the nation, in line with the government’s Indonesia Broadband Plan of accelerating connection”

Sihmirno Adi
Deputy Senior General Manager ISC
Telkom Indonesia

VMWARE FOOTPRINT

- VMware vSphere®, VMware vCenter Server™, VMware Horizon®, VMware vCenter™ Site Recovery Manager™, VMware vCloud® Automation Center™, VMware Cloud Business, VMware Cloud Operations, VMware vRealize Operations, and VMware NSX™

APPLICATIONS VIRTUALIZED

- OSS, BSS, ERP.

PLATFORM

Linux/Microsoft Windows x86

Storage: EMC

Network: Cisco

The deployment of VMware’s solutions to virtualize and consolidate IT infrastructures not only simplified management with centralized control, but more importantly, improved business’ agility and reduced enterprise costs. The nature of the business requires Telkom Indonesia to provide quality and prompt service on the back of rising customer expectations. Instead of 8 hours, Telkom Indonesia now only requires less than 30 minutes for IT to determine and provision virtual machines, reducing time taken to respond to new service requests. The VMware deployment empowered the business with the agility to respond faster to each new request, therefore accelerating its time to market.

Day to day, the telecommunications sector generates large amounts of data ranging from customer information, financial records to administrative processes. VMware’s solution enabled Telkom Indonesia to better manage the capacity of existing IT infrastructure. Centralized control provided the group with easier and simplified management of assets across subsidiaries whilst meeting growing needs, thereby reducing total cost of ownership by 40 percent. Efficiency was also improved, arming Telkom Indonesia with a high level of agility to anticipate and meet the dynamic needs of future IT requirements.

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Looking Ahead

As the market landscape continues to be more demanding and fluid, Telkom Indonesia is preparing to further leverage its virtualized infrastructure to improve the manageability of its IT resources and change the way that the IT team provides resources to the business. With the improved agility and cost savings, as the parent company of Telkom Group, Telkom Indonesia plans to further its partnership with VMware to virtualize the IT infrastructure of its subsidiaries to replicate the success and achieve its vision of becoming one of the region’s leading TIMES player.

For more information, please visit <http://www.vmware.com/software-defined-datacenter/>



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com

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