Sinar Mas Land reduces desktop total cost of ownership by 15 percent and provisioning times from four weeks to minutes under project supporting the merger of PT Bumi Serpong Damai Tbk and PT Duta Pertiwi Tbk into Indonesia’s largest and most diversified property developer.

Formerly AFP Properties, Sinar Mas Land took on its current name in April 2011 when two commercial property organizations, PT Bumi Serpong Damai Tbk and PT Duta Pertiwi Tbk, merged. In Indonesia, Sinar Mas Land is the largest and most diversified property developer and employs more than 6,200 people.

Sinar Mas Land’s mission is to become the leading property developer in South East Asia, trusted by customers, employees, society and other stakeholders.

The Challenge

With the commercial property businesses amalgamating their operations and Sinar mas land preparing ambitious growth plans, the IT team needed to combine two diverse IT environments. Across the two organizations, about 3,000 employees used personal computers, while the server environments were vastly different.

To run its core business applications in Indonesia, PT Bumi Serpong Damai operated about 30 servers in a single datacenter, while PT Duta Pertiwi operated 58 servers across 40 different locations. PT Duta Pertiwi’s highly distributed environment was particularly expensive and time-consuming to administer, while its effectiveness was limited.

The company’s operations were hampered by poor connectivity and a siloed approach that saw each geographic entity report independently to head office.

“Just to maintain the environments across both businesses in Indonesia, we had to employ a technical support team comprising 32 people,” said Irvan Yasni, Chief Information Officer, Sinar Mas Land.

To extract the best possible value from the merger, the IT team needed to deploy a flexible, dynamic infrastructure that could scale and support rapid application development.

With a long list of priorities straining the company’s capital investment budget, Sinar Mas Land also needed to keep costs low and maximize returns from its new infrastructure.
In early 2011, Sinar Mas Land worked closely with VMware® partner Packet Systems Indonesia to design and deploy an infrastructure that could meet its requirements. Settling on virtualization as the answer, the property developer closely reviewed research firm Gartner’s analysis of virtualization suppliers. Based on this analysis and its consultations with Packet Systems Indonesia, Sinar Mas Land realized only VMware vSphere™ could fulfill its business and technical requirements.

“With help from Packet Systems Indonesia, Cisco and VMware, we designed and implemented the solution, and started converting our physical servers to virtual machines,” Yasni said. “We now have most of our applications, including some legacy applications, our anti-virus and our Microsoft Active Directory, running in the virtualized infrastructure.”

The organization then decided to extend virtualization to the desktop, and with assistance from VMware partner Dimension Data, undertook a technical review of VMware Horizon View™ and a competing Citrix XenDesktop system. This review comprised an evaluation by the IT team of the performance of each product in opening the same Microsoft Excel file. The team found that it could open the Excel file two seconds faster using VMware Horizon View than when using Citrix XenDesktop.

The evaluation also found that the VMware product was cheaper to acquire than the Citrix alternative, and was also very competitive when it came to costs such as server resource consumption and client operation.

Crucially, users would experience similar performance from applications accessed via virtual desktops as they had with their personal computers—minimizing user resistance to the desktop virtualization project.

Based on these results, Sinar Mas Land elected to deploy VMware Horizon View, and engaged Dimension Data to undertake the implementation. Dimension Data understood Sinar Mas Land’s challenges, and demonstrated its expertise in the technologies and practices involved in desktop virtualization. The firm proved invaluable in guiding and managing the deployment. “We were very impressed by the expertise and professionalism shown by the Dimension Data Indonesia team,” said Yasni.

Sinar Mas Land is running the virtual desktop environments—which include standard desktop applications such as Microsoft Office as well as specialized technical applications—on two Cisco UCS chassis holding a combined total of eight blade servers. These are connected to an EMC VNX5500 storage system.

On the server side, the organization is running critical applications and databases in more than 100 virtual machines on a cluster of eight Cisco UCS blade servers.

To support its business and ensure continued operations in the event of a disaster, Sinar Mas Land is running this infrastructure across two datacenters in an active-active configuration.

Business Results & Benefits

Having deployed desktop virtualization to 200 of its employees by the end of 2012, Sinar Mas Land now plans to extend it to 3,000 employees by 2016.

“We decided to start first with users who had a local area network connection in our headquarters, as well as regional users on our wide area network who urgently needed a desktop upgrade,” said Yasni.

As Sinar Mas Land expands its portfolio through organic growth and joint ventures, the organization will quickly be able to add new employees and integrate people from other organizations into its infrastructure.

Centralizing its desktop environment also allows the property development company to reduce the number of people required to support its desktop fleet. “For those people who are no longer required in that area, we can train them to take more fulfilling roles, such as network engineering,” said Yasni.

In addition, the organization can manage its licensing and software inventory more effectively, allowing it to avoid the risks of inadvertently using unlicensed or pirated products.

“Thanks to VMware, our IT team is now equipped to support the business units as they look at expanding into new markets and geographies.”

Irvan Yasni, CIO, Sinar Mas Land
VMWARE CASE STUDY

“We have improved the performance of our SAP HCM module by 30 percent by moving it from a physical to a virtualized infrastructure.”

Irvan Yasni, CIO
Sinar Mas Land

VMWARE FOOTPRINT
• VMware vSphere featuring ESXi
• VMware vCenter Server
• VMware View

APPLICATIONS VIRTUALIZED
• Microsoft Office
• Legacy DOS, Foxpro and VB-based business applications
• SAP Human Capital Management
• SAP Business Planning and Consolidation
• MapInfo geographical information system
• Hyland OnBase document management system
• In-house built SAP front end
• Microsoft Active Directory

PLATFORM
• Cisco UCS blade servers
• EMC storage
• HDS storage
• Cisco networking

By providing users with access only to the desktop applications they need to perform their roles—and preventing them from downloading additional software onto the corporate network—Sinar Mas Land is limiting the threat to sensitive information posed by malware such as viruses.

As well as standard office support applications such as Microsoft Word and Microsoft Excel, employees in relevant roles can use their virtual desktop to access an SAP client to complete business-critical tasks such as ‘request to pay’ or ‘order to cash’.

Sinar Mas Land is also reducing the overall total cost of ownership of its desktop environment. “When you include support, the total cost of ownership of a virtual desktop is up to 15 percent less than that of a physical desktop, depending on sizing and configuration” said Yasni. “If you multiply this over several thousand desktops, the overall saving is quite considerable.”

The benefits to Sinar Mas Land of deploying VMware are not limited to the desktop. By mid-2012, the organization had migrated its SAP human capital management (HCM) module, SAP Business Planning and Consolidation and a Business Objects management dashboard to VMware vSphere, and now plans to switch its entire SAP system to the virtualized infrastructure by 2015.

“We have improved the performance of our SAP HCM module by 30 percent by moving it from a physical to a virtualized infrastructure,” said Yasni. “We expect to replicate this across our entire SAP enterprise resource planning system, which we use for critical functions such as accounting and procurement.” Sinar Mas Land also expects to reduce the cost of operating its SAP system by about 33 percent by moving it into the VMware environment.