



# CASE STUDY

## Virtualisation as a Service

Virtual infrastructure as a service for one of the world's largest Paint and Coatings Companies and a leading Chemicals Producer

### The Idea: Executive Summary

Offering computing capacity on demand in a virtualised environment on a pay per use model, without any Capital investment cost by the customer.

### CLIENT

One of the world's leading Paints, Coatings and Chemicals companies based in Europe. They make and supply a wide range of Decorative Paints, Performance Coatings and Specialty Chemicals.

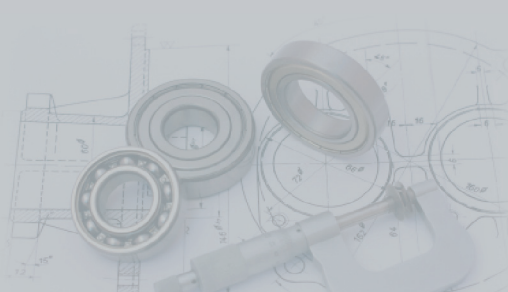
### BUSINESS CHALLENGES : BEFORE

Customer's virtualization architecture had evolved in pockets, specifically set up for meeting individual Business Units' requirements. Sharing of computing power across the Business Units was limited. The initial purpose of the virtualisation was to provide a platform for hosting retired applications which needed to be retained for legal purposes. Gradually the scope had expanded to hosting non-critical production systems. This evolution had led to a virtualized landscape which

was not scalable, had inherent maintenance issues and excess capacity which could not be optimized. Moreover, the need to build a business case for every virtualisation requirement and acquiring and installing the hardware was a continuous challenge.

The shortcomings in the existing infrastructure included:

- A single host with multiple VMs dedicated to a Business Unit, which could not be fully loaded because of the risk of resource constraints
- Higher application licensing and maintenance costs due to inefficiency in the architecture to provide availability and resiliency.





- This exclusivity resulted in unused capacity within the server estate
- Inability to free up hosts for maintenance, leading to higher down time compared to the physical environment
- Host machines could not be fully loaded because the load could not be balanced across different hosts
- Since hosts were in silos and underutilised, capacity optimisation based on forecasting could not be done

#### **WIPRO SOLUTION: HOW WIPRO HELPED**

Wipro worked with the customer to develop a high-level business case to demonstrate potential cost savings and return on investment. This business case included the transfer of all customer-owned licenses to Wipro and decommissioning the existing hardware. The business case showed a potential earn-back period of 12 months including a write-off on all existing asset liabilities.

- Wipro's VMWare consultants developed an architecture which was scalable, maintainable and established a strong foundation for moving towards Cloud computing.
- As a part of architecture validation, Wipro engaged with partner VMWare to identify the components of the operational framework in the new virtualised environment.

- Developed a pricing ladder for different volumes of VMs under the various service models.
- Designed the High Availability architecture and implemented the ESX cluster farms and virtual networks enabling VMotion and Distributed Resource Scheduling
- Designed new processes for demand management, server and storage provisioning, capacity and availability management, patching, infrastructure upgrades and disaster recovery.
- Migrated all existing VMs to the new architecture using a cloning strategy.

#### **BUSINESS RESULTS: AFTER**

The new virtual architecture was modelled as a service and allowed for direct costs savings of 50%-60% through the virtualisation of physical servers and applications. It created a uniform and sharable model without requiring any capital investments by the customer. The customer now enjoys an on-demand service with a simple volume-based pricing model. The service model consists of three categories -Gold, Silver and Bronze which can be selected based on the business criticality of the applications.

Other key benefits are:

- Infrastructure was turned into a utility which could be provisioned dynamically on request of Business and decommissioned when not in use by the IT.

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- There was more intelligent and dynamic mapping of the infrastructure costs to application requirements and various tiers of services ensured appropriate mapping of IT Costs.
- Application service levels could be increased and decreased during critical periods of the application in a calendar year with minimal overhead and cost.
- Higher availability through a reduction of planned downtime, leading to improved service continuity
- Saving in CO<sub>2</sub> emissions and contributing to the Green IT strategy
- Higher resource utilisation and optimisation
- Faster server provisioning of virtual machines
- Faster provisioning of additional hardware resources (CPU, memory, etc.)
- Better storage management and allocation
- Better virtualisation management and ease of patch management
- A reduced hardware footprint requiring reduced expenditure
- A sturdy foundation to move into cloud computing platform

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