

## Case Study

### DuPont Experience with Virtualization

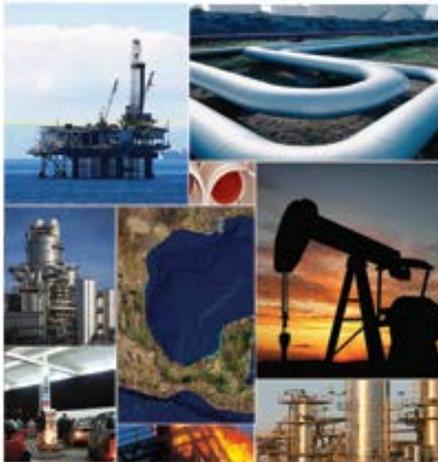


“Virtualization has helped us to accelerate our project by two years. Every month that we can incorporate into the project is translating into significant savings. We don’t have to wait for the production design to complete before creating configurations.”

- Gabriel Rivera, Process Control and Automation Engineering Consultant, DuPont

#### Background

Since its 1925 investment in a dynamite factory, located in Durango, until today, DuPont has had a constant industrial focus in Mexico, contributing to its development, employment and modernization. With more than 86 years in Mexico, DuPont’s first investment outside the United States, a joint venture with Hercules Dynamite, resulted in the purchase of the Mexican Company to form the Company Dynamite Explosivos Mexicana (CME) in July 1925. The arrangement was successful, and in less than ten years DuPont had already begun to diversify its product offerings in Mexico beyond explosives, to include automotive paint brands like Duco®, Dulux® and Speedy enamels.



Today, DuPont has more than 3000 employees in the Republic, and is results-oriented, fostering teamwork and leadership skills. The staff is considered the most important asset of the company, and gender diversity is an important aspect: one-third of the DuPont Mexico labor force is women. The fusion of science, chemistry and biotechnology characterize DuPont’s vision into the next century, and is a reality in Mexico.

DuPont engineering consultants were working on an upgrade path for one of their DCS systems and needed to accelerate the integration phase.

#### Benefits

For many of today’s manufacturers, the process control environment requires separate servers to support different applications. Virtualization resolves this issue by allowing a single server to run multiple operating systems and applications simultaneously. It also improves reliability by insulating these operating systems from hardware changes and the net benefit to users results in lower operational costs.

#### Challenge

Compressing schedules and delivering on a time sensitive project is a challenge faced by many organizations today, including the DuPont effort in Mexico.

“The challenge that we experienced in the project we were handling in Mexico was to accelerate the integration phase necessary to run in parallel with the production design. The project was cost and schedule driven, and we didn’t have the funds at that time to purchase a large number of servers for the system configuration. We considered the capability to virtualize the entire environment that we needed in order to start building configurations instead of the more costly approach of purchasing the physical hardware equipment,” said Gabriel Rivera.

#### Solution

The DuPont team selected virtualization as a way to meet schedule demands, control costs, and work in parallel.

#### Results

“The beauty of virtualization as incorporated into DuPont is that we have the ability to take all the resources that would have been needed to purchase and maintain the physical hardware and consolidate in a single server cabinet. I have the ability to perform more than a dozen simulations, with more than half a dozen

Experion servers simulated. This allows me to start interfacing the virtual world with the real world,” explained Rivera.

DuPont is experiencing benefits from a planning and implementation perspective relative to new R&D efforts. Rather than pre-ordering equipment months in advance of implementation, DuPont is “able to start adding more equipment on demand. I am able to create a virtual machine for the new effort, and the machine will be ready to go just by incorporating the necessary licensing,” Rivera explained.

“Honeywell support played a key role in the virtualization effort at DuPont Mexico, helping us from the design to the completion of the work, through factory acceptance test and site acceptance test.”

### About Virtualization

HPS’ virtualization offerings are developed with VMware®, the world’s largest supplier of virtualization products and solutions. These solutions help industrial plants reduce PC hardware requirements and minimize the frequency and impact of operating system and hardware changes while simplifying overall system management and improving availability, reliability and disaster recovery.

The popularity of virtualization is growing rapidly throughout the IT industry as a whole, with a recent study by Gartner showing that over 40% of servers are virtualized today and that figure will rise to 75% by 2015<sup>1</sup> HPS’ holistic approach to industrial virtualization encompasses the delivery and support of virtualization infrastructure uniquely tailored to the needs of the process control industry. Additionally, Honeywell provides a full range of applications that can be supported through virtualization, providing end users with a complete solution right out of the box.

As the broad shift in the IT industry towards virtualization extends to the industrial marketplace, it is becoming more and more common to see applications and infrastructure deployed virtually rather than physically. Honeywell is the only company able to deliver total virtualization support for process automation environments. Virtualization is viewed as game-changing, and Honeywell offerings have been developed as strategic, long-term automation tools.

### For More Information

Learn more about Honeywell’s products and services, visit our website [www.honeywellprocess.com](http://www.honeywellprocess.com) or contact your Honeywell account manager.

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