



Procter & Gamble Deploys EnginFrame to Create a Productivity Grid Portal

To get new consumer-based products to market quickly and keep prices competitive, designers and engineers at consumer goods industry giant Procter & Gamble (P&G) rely on computer-aided engineering (CAE) software tools. These tools enable prototypes of products to be designed and tested digitally. This helps to eliminate expensive and time-consuming physical prototyping and trial-and-error testing.

P&G was finding that computing resources in its supercomputing center near Cincinnati, Ohio, were not being used efficiently enough to support the growing computing needs of these advanced CAE tools. In addition, the interface used for submitting jobs to the CAE applications was cumbersome for all but the most experienced users, and provided reduced visibility into how jobs were running.

At a Glance

Overview

Procter & Gamble product developers use advanced computer-aided engineering applications to digitally design and test new products, and the production machinery used to manufacture them. P&G needed a simpler way to submit jobs, have them run faster and be able to monitor and control job status in a user-friendly Web interface.

Challenge

Optimize the utilization of existing computing resources in P&G's supercomputing center, and implement a more effective user interface that simplifies job submission and tracking for product developers – especially those operating from remote global locations.

Solution

EnginFrame from NICE

Results

The Grid Portal saves time, simplifies job submission and tracking, and shelters users from the complexities of back-end systems.

Remote developers have fast, convenient access to centralized corporate computing resources, and made to feel as if they are 'part of the family'.

To enhance usability, the EnginFrame computing portal solution from NICE was installed, giving product developers a *user-friendly, Web-based interface* for submitting and tracking jobs and monitoring results in addition to LSF from Platform Computing to optimize the computational workload.

Business Challenge

Designing and testing products digitally, for example to simulate how different bottle designs will fill and empty, or how they will withstand dropping from the shelf, requires P&G product developers to submit many jobs to CAE applications such as Fluent, ABAQUS and LS-Dyna.

Developers – especially those in remote P&G centers in Europe or Asia – found that the command line interface to the UNIX operating system was not user-friendly and made submitting jobs and modifying as well as transferring data input files cumbersome and time consuming.

Compounding this, the P&G super-computing center often taps into additional computing resources at a remote Supercomputing Center, adding further complexity to job submission.

The Solution

P&G decided that a Grid portal would provide a simpler and user-friendlier job submission environment, and after investigating other solutions, chose to implement the EnginFrame portal from NICE. EnginFrame provides a Web-based front-end for job submission and tracking as well as integrated datamanagement that enables P&G users to access applications and other services via the Internet by simply logging into the Grid portal from anywhere using a standard browser.

Commenting on their choice, Clisham adds, "We chose *EnginFrame* because it *integrates seamlessly with Platform LSF and other Grid software*. We like its open, modular structure which makes it quick and easy to add and configure new applications or services."

Quote

"EnginFrame allows us to provide our engineers an intuitive Grid Portal to access the distributed computational infrastructure easily and growing the productivity by adding features like project management and integrated meta-data search."

**John Clisham, Grid Project Manager,
The Procter & Gamble Company**

In addition to convenient Intranet accessibility – particularly helpful to P&G developers in the remote centers – EnginFrame has made job submission easier by offering the 'point & click' approach re-using default values from previous runs found important in a Grid Portal. With EnginFrame, users' data is stored automatically in project directories, and users can change input data remotely without having to transfer large files every time they want to run a new job via the Editing feature.

Soon after the implementation of the Grid Portal also the experienced users using submission scripts before felt more comfortably taking advantage of EnginFrame with its integrated data management capabilities enabling them to organize and monitor data easily. Additional features like integrated project management, searching Meta-Data attached to different runs as well as "Streaming Output" updating the display of output-files created during the computation significantly helped the users to increase their productivity.

With the help of EnginFrame, P&G now has an advanced and user-friendly computing environment integrating multiple supercomputer platforms running different operating systems and applications. EnginFrame provides a convenient and highly usable window into all these resources, while keeping the back-end complexities hidden from users.

About Procter & Gamble

P&G has one of the largest and strongest portfolios of trusted brands, including Pampers, Tide, Ariel, Always, Pantene, Bounty, Folgers, Pringles, Charmin, Downy, Iams, Crest, Actonel and Olay. P&G consists of nearly 98,000 people working in almost 80 countries worldwide. What began as a small, family-operated soap and candle company now provides products and services of superior quality and value to consumers in 140 countries. The company provides branded products and services of superior quality and value that improve the lives of the world's consumers. For more information, visit <http://www.pg.com>

About NICE

NICE develops the industry-leading EnginFrame grid portal, delivering user-friendly, highly customizable access to grid-enabled applications and infrastructures.

Leveraging distributed computing experience and a longstanding partnership with Platform Computing (active since 1996), NICE products complete the Grid solution by increasing its usability and user-friendliness, without sacrificing flexibility and control for the most advanced computing scenarios. For more information, visit <http://www.nice-italy.com>