



## About Statoil

Statoil is an integrated Oil and gas company based in Norway. They are the leading operator on the Norwegian continental shelf and are also experiencing strong growth in their international operations. Production outside Norway represented 15.7% of all output in 2006, which averaged 1,135,000 barrels of oil equivalent per day. They are one of the world's largest sellers of crude oil and a substantial supplier of natural gas to the European market.

For more information, visit:  
<http://www.statoil.com>

## Statoil Compute Grid

Increasing competition, new technology and energy trends have become the constant pressure points right through the Oil & Gas Eco-System. In the Upstream sector, seismic data processing and reservoir simulation have become the fundamentals of Oil & Gas exploration. Engineers with massively complex compute infrastructures need to make better decisions through higher quality and immediately available operational data.

In parallel, the pressure for faster, more sophisticated and cost efficient analysis of Oil & Gas reserves has become a challenge for the IT department. Now more than ever, the ability to maximize infrastructure performance and increase ROI in an asset-rich business like Oil & Gas, has translated to bottom line profit.

When Statoil set out to optimize their Compute Grid, they aimed for improved use of existing compute assets while still permitting Engineers to make cost critical decisions. To take on the task they looked to NICE, pioneer and provider of Grid Portals for mission-critical enterprise applications in Oil & Gas.



## The Business Challenge

Build a true Grid that could exploit the computing resources in 5 sites located in Trondheim, Stavanger, Harstad, Bergen and Houston as a single and uniform Enterprise-level resource and solve the data management requirements. A true multi-national Grid solution, should ensure that geography would no longer be an issue for international offices dealing with reservoir simulation. Make complexity and infrastructure details transparent to the end users, specifically for data management and simulation progress monitoring. The transparency means users should require no additional effort to make jobs run on another site. Minimize new system deployment effort with a friendly transition from old to new solution and with minimal user training. The user interface should be intuitive, containing only the necessary choices and information.



## NICE Srl

Via Marchesi di Roero, 1  
14020 Cortanze (AT), Italy  
Phone: +39 0141.90.15.16

2033 Gateway Pl, Suite 500  
San Jose, CA 95110, USA  
Phone: +1-408-573-NICE (6423)

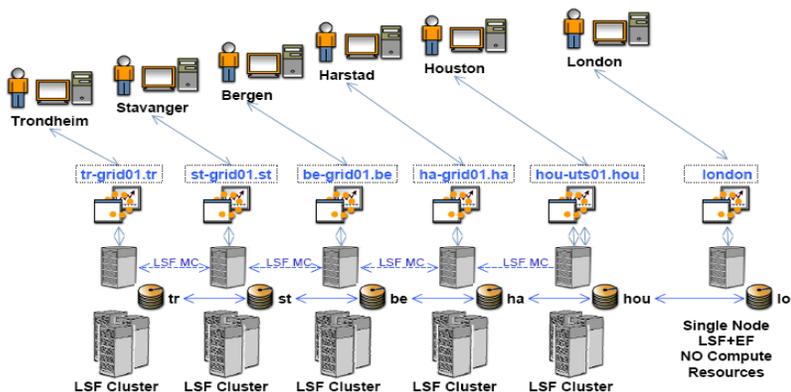
## About NICE

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

NICE products complete the Grid solution by increasing its usability and user-friendliness, without sacrificing flexibility and control in the most advanced computing scenarios.

## The solution for Statoil?

Developing a focused solution for reservoir simulation meant bringing together two other big players in Oil & Gas: Platform Computing and Schlumberger to create a tailor-made solution with the NICE EnginFrame Grid front-end serving a LSF MultiCluster Grid spanning five different sites. With the Grid Portal, reservoir researchers could then submit jobs into the MultiCluster Grid and easily monitor remote results on different continents while the calculation is running. One EnginFrame server is installed in each Statoil domain where all users on all sites have the same user ID and Password, but different NIS-services.



Statoil and NICE engineers put the full solution together in a series of logical steps:

- Dedicated file systems are copied from one site to another.
- Switched off sourcing of users profiles in the execution of EnginFrame, to avoid long response times.
- Each job gets its own directory created within these file systems. Not automatically deleted.

## Benefits

As a result of the intuitive and user friendly interface, end-users could begin using the solution within a very short timeframe and most importantly with very little instruction.