National Grid NG SINGAPORE

FEMLAB Proof-of-Concept

Project Introduction

Objectives
To explore provisioning FEMLAB on a pay-per-use or subscription business model.

Project Investigator / Manager
Choo Thong Tiong
National Grid Office
thongtiong@ngp.org.sg

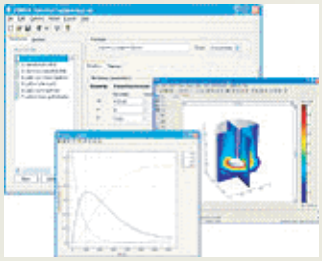
Period of Project
Jan 2005 – Mar 2005

Abstract
FEMLAB is a commercial multi-physics software that is useful for the engineering industry. It is at the same time expensive. If successful, this project will remove the need of users to make hefty investment upfront.

Project Details

Description
FEMLAB is a multi-physics software which provides ease in performing multi-physics modelling and analyses. Its relatively recent development history is also an advantage as it allows the software to progress and develop, with advances in science and engineering technologies taken into consideration, as compared to other commercial software in the market. Its versatility is another plus point as it allows the behaviour of diverse science and engineering disciplines, such as structural mechanics, chemical engineering, electronics and electromagnetic, etc, to be modelled, either individually or as coupled systems or as multi disciplinary entities. It is with this in mind that Grid-enabling the FEMLAB software would be the ideal showcase application tool in current science and engineering industries.

FEMLAB is an expensive software and a pay-per-use model will remove the need for organizations to make a hefty upfront investment.



The expected benefits are:
- Cost savings for user organizations;
- Encouraging R&D & high-value design activities; and
- Improving compute resources utilization.

At the end of the proof-of-concept, IHPC acquired 2 copies of FEMLAB to service the research institutes under A*STAR and for use by industry users.

Collaborating Organizations:
- Institute of High Performance Computing
- I-Math Pte Ltd