

## PROJECT INTRODUCTION

### Objectives

To help the local construction and manufacturing industries embrace tools and applications derived from collaborative problem solving and distributed computing technologies.

### Project Investigator / Manager

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### Period of Project

01 Aug 2004 – 31 Jul 2008

### Website

<http://www.ida.gov.sg/idaweb/techdev/index.jsp>

### Abstract

The Collaborative Engineering Programme (CEP) is an example of industry-academia collaboration to exploit technology for growth. It leverages on distributed computing technologies such as P2P and Grid Computing to develop new collaborative engineering tools such as in IIT-related distributed collaborative design integrated with grid-based simulation-based design; design management, and production scheduling tools for construction projects. In general, these tools facilitate timely information-sharing and knowledge among construction and manufacturing companies so that they are more synchronised, productive and responsive to market changes.

## PROJECT DETAILS

### Description

The programme strategy is to develop collaborative engineering tools to address key activities within the collaborative engineering value chain:

- Design
- Planning and Management
- Realisation

New tools such as simulation-based design and project scheduling, design flow management and distributed collaborative design are developed by leveraging emerging technologies such as peer-to-peer and Grid Computing. A collaborative engineering Grid test bed will also be set up to support the program for simulation and product modelling with industry case studies.

Realistic cases and problems will be leveraged to guide the development efforts. Users from local construction and manufacturing companies are also involved to encourage adoption of these tools in terms of:

- Collaboration to determine present and future requirements for such tools based on industry needs
- Pilots and trials of new tools developed

### Collaborating Organizations:

- STEE-Infosoft Pte Ltd
- APSTC, Sun Microsystems
- Infocomm Development Authority