

## PROJECT INTRODUCTION

### Objectives

To provide an intuitive web-based interface for submission and monitoring of Grid jobs. Using OGSA as the backbone of the portal, several supporting Grid services were developed to support the portal.

### Project Investigator / Manager

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### Period of Project

Jan 2004 – Jun 2004

### Website

<http://www.nyp.edu.sg>

### Abstract

A portal that allows job submission, scheduling and monitoring, and data transfer between Grid resources. An intelligent resource broker is incorporated to facilitate scouring of the most optimum resource to perform the assigned jobs.

## PROJECT DETAILS

### Description

This project is developed on Globus Toolkit and integrated with local schedulers such as Condor and OpenPBS. An MDS based broker is utilised to search for the most optimum resource. Job Submission, Scheduling and Monitoring are performed with the assistance of OGSA compliant Grid Services. Another OGSA compliant GridFTP based Grid Service is developed to support data transfer among resources. Finally, Ganglia is used as the Grid network monitoring tool.

The technologies and tools used for this project include

1. Globus Toolkit v3 (OGSI Reference Implementation) for Grid Service Implementation
2. Globus Toolkit v2.x on some Grid-enabled resources/nodes
3. Java COG Toolkit
4. Java Server Pages
5. Tomcat Application Server

