

PROJECT INTRODUCTION

Objectives

To develop a mobile application that shows the plausible integration between Grid Computing and Mobile Computing technology

Project Investigator / Manager

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Website

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Abstract

This project integrates Grid Computing and Mobile Computing technology to provide a multi-channel and multi-devices access framework to computing resources on an on-demand basis. The basis of this project is to bring the immense power of Grid Computing to the fingertips of mobile phone users.

PROJECT DETAILS

Description

A J2ME application is developed to act as an interface for mobile phone users to services available in the Grid container in the Grid network.

A job listener is developed in the grid container in one of the nodes in the Grid network acting as a server, to listen for and process any incoming requests from the J2ME application. The job listener, upon receiving a request will invoke two Grid services residing in the container.

The first Grid service to be invoked is the Brokering grid service which is used to locate the most suitable resource to run the job.

The second Grid service to be invoked is the Grid service to process the job itself. In this project, the second Grid service is developed on BLAST (Basic Local Alignment Searching Tools) program. BLAST is a bioinformatics program that is used to perform matching of sequences between the databases' and the inputs' made by the users.

Once this second Grid service is done with the process, the result will be passed back to the user via GPRS connection with the assistance of the job listener which previously listened for the request.

