

PROJECT INTRODUCTION

Objectives

To explore offering MATLAB as a service over the National Grid Pilot Platform (NGPP).

Project Investigator / Manager

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Period of Project

Dec 2005 - Current

Abstract

The MATLAB Distributed Computing Toolkit and Distributed Computing Engine are ideal for compute intensive applications that are too slow on standalone machines. This POC explores offering the toolkits over the Grid as a service and also seeks to establish a tested workflow for such a service.

PROJECT DETAILS

Description

The aim of this proof-of-concept (POC) is to lay the groundwork to offer MATLAB as a service over the NGPP. Such a service will mean that users need not invest heavily upfront in software licenses and hardware resources. This will result in cost savings for users and will mean users who could not justify the investment will be able to use the software under this model.

The other objectives of the POC are to gauge the demand of such a service if offered commercially as well as to develop and refine the workflow for such a service.

This POC offers the use of the MATLAB Distributed Computing Engine (DCE) and Distributed Computing Toolbox (DCT) for use by both industry and R&D users. The DCT/DCE option is ideal for compute intensive applications that would take too much time on MATLAB running on standalone machines. Figure 1 shows the relationship between DCE and DCT.

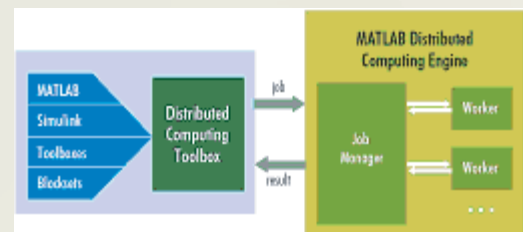


Figure 1. MATLAB DCT and DCE

Modification of existing MATLAB codes to port them to the DCE/DCT platform requires 5 steps. These steps do not entail changes throughout the program.

Techsource (distributor of MATLAB) provided the MATLAB licenses for the POC to be run on the NGPP.

Collaborating Organization:

Techsource Pte Ltd