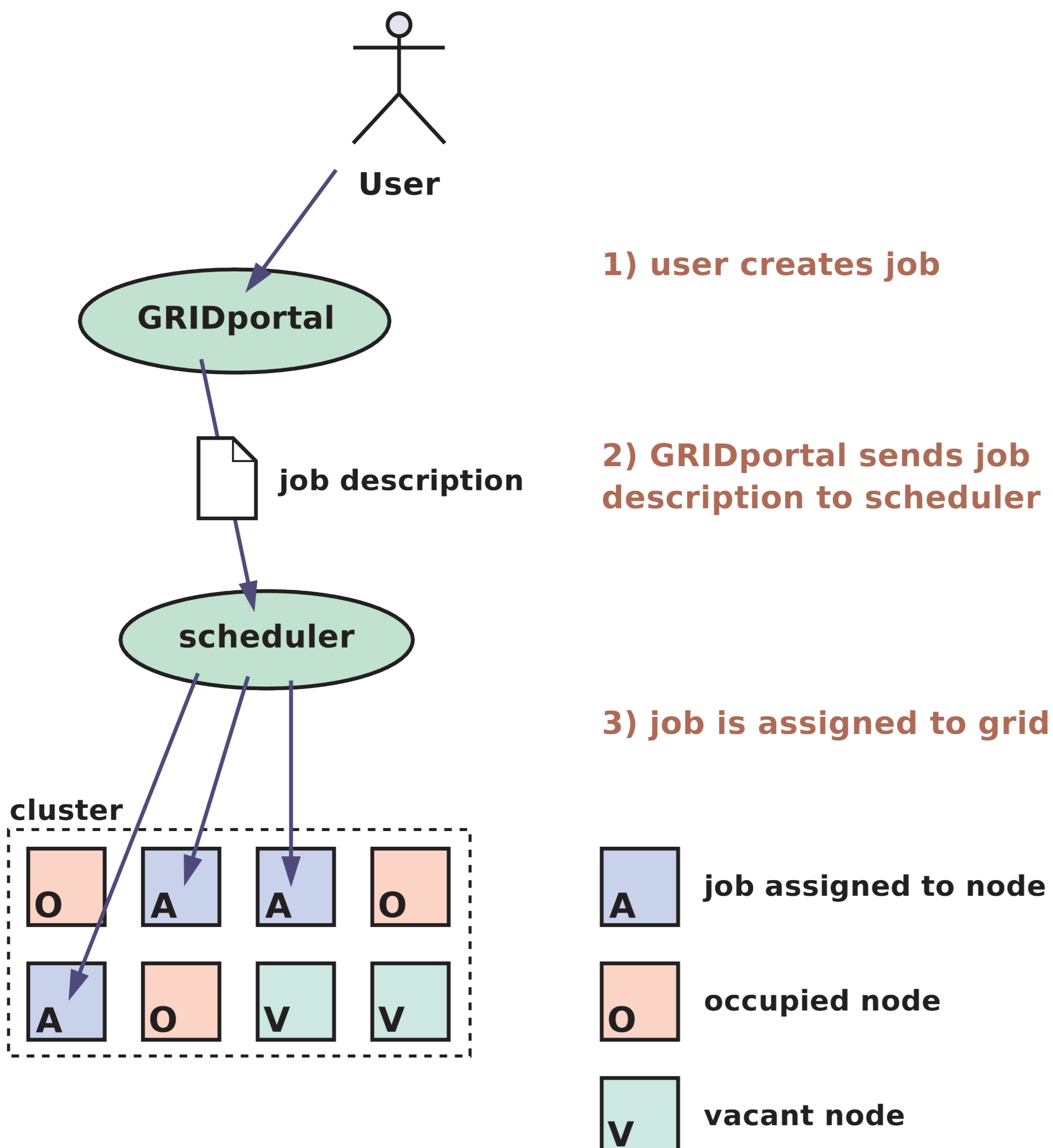


# GRIDportal

An application portal for grid computing



## What it is



Grid computing is invaluable to the scientific community but there are questions over usability of these grid resources. In many cases grids are underused because potential users find them obscure and don't have time to assume the learning curve.

The typical GRID user:

- \* is a scientist/researcher
- \* is well versed in scientific applications
- \* feels "at home" in a graphical environment (Windows/MacOS X/X11)
- \* is not familiar with GRID computing

GRIDportal aims to:

- \* make GRID computing easy to the "uninitiated" with a minimum of schooling
- \* conceal the intricate details of grid computing
- \* offer a pluggable interface to applications

GRIDportal offers:

- \* a layer of abstraction above the GRID runtime environment
- \* a web based graphical interface to make GRID computing accessible
- \* the same scientific applications with no loss of functionality (plugins currently exist for Abaqus, Matlab and BLAST/mpiBLAST)

GRIDportal system requirements:

- + A \*nix operating system
- + Apache HTTP server 1.3.x/2.x
- + Webware for Python
- + NorduGrid/ARC middleware

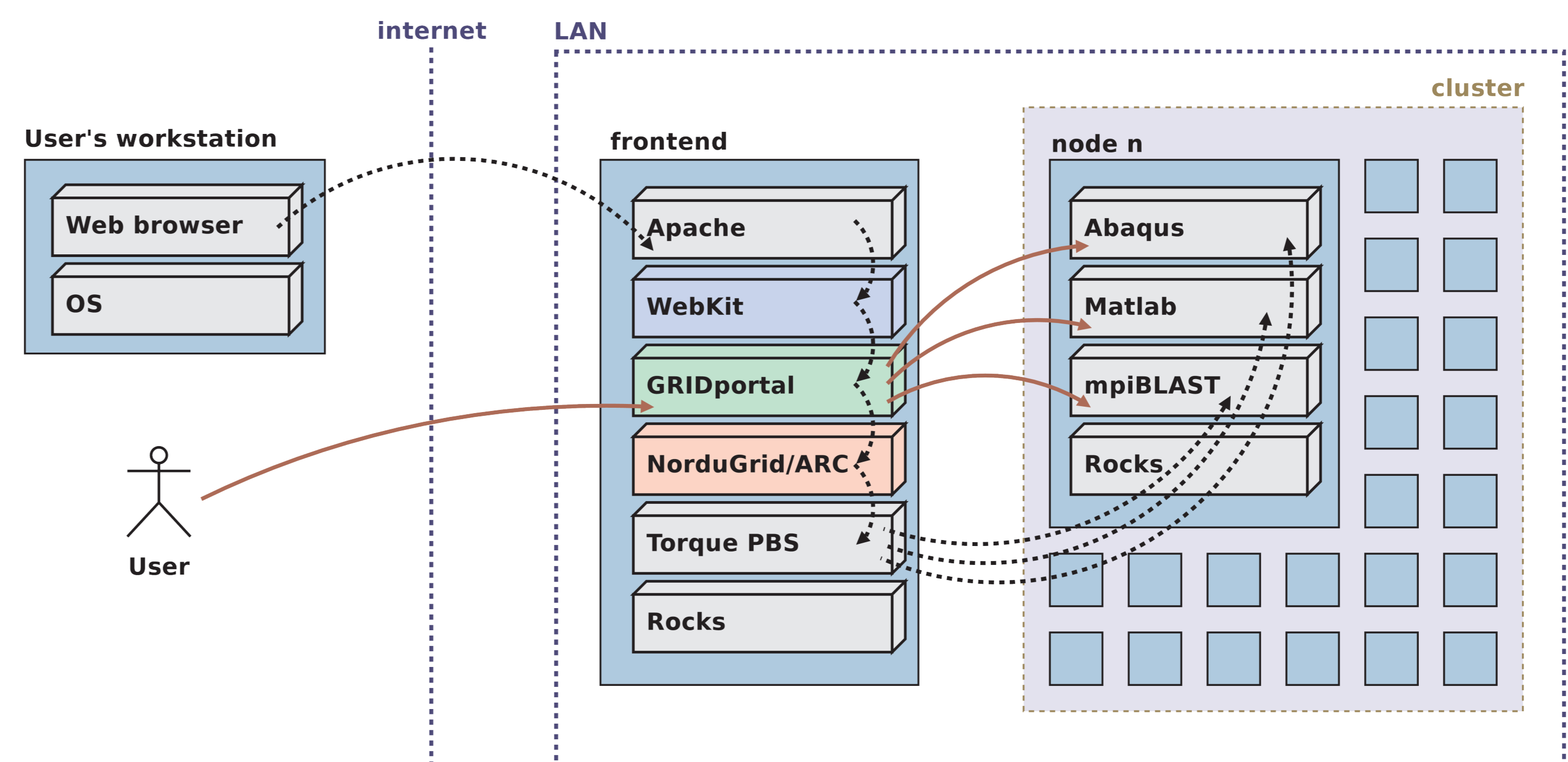
## How it works

GRIDportal is a layer of software between the user and the grid scheduler. It stacks on top of grid middleware, which provides all the essential grid services.

GRIDportal is a web application with a console backend. Through web forms, it allows the user to configure a job description for a specific application. It then translates that description into a command line string. Along with any input files, this is relayed to the NorduGrid/ARC middleware.

Once a job is submitted to the grid, the user can query GRIDportal for updates on job status and ultimately download the job results.

Job submission is not limited to the local grid, it can be used with remote grid resources as well, provided the user has the appropriate credentials.

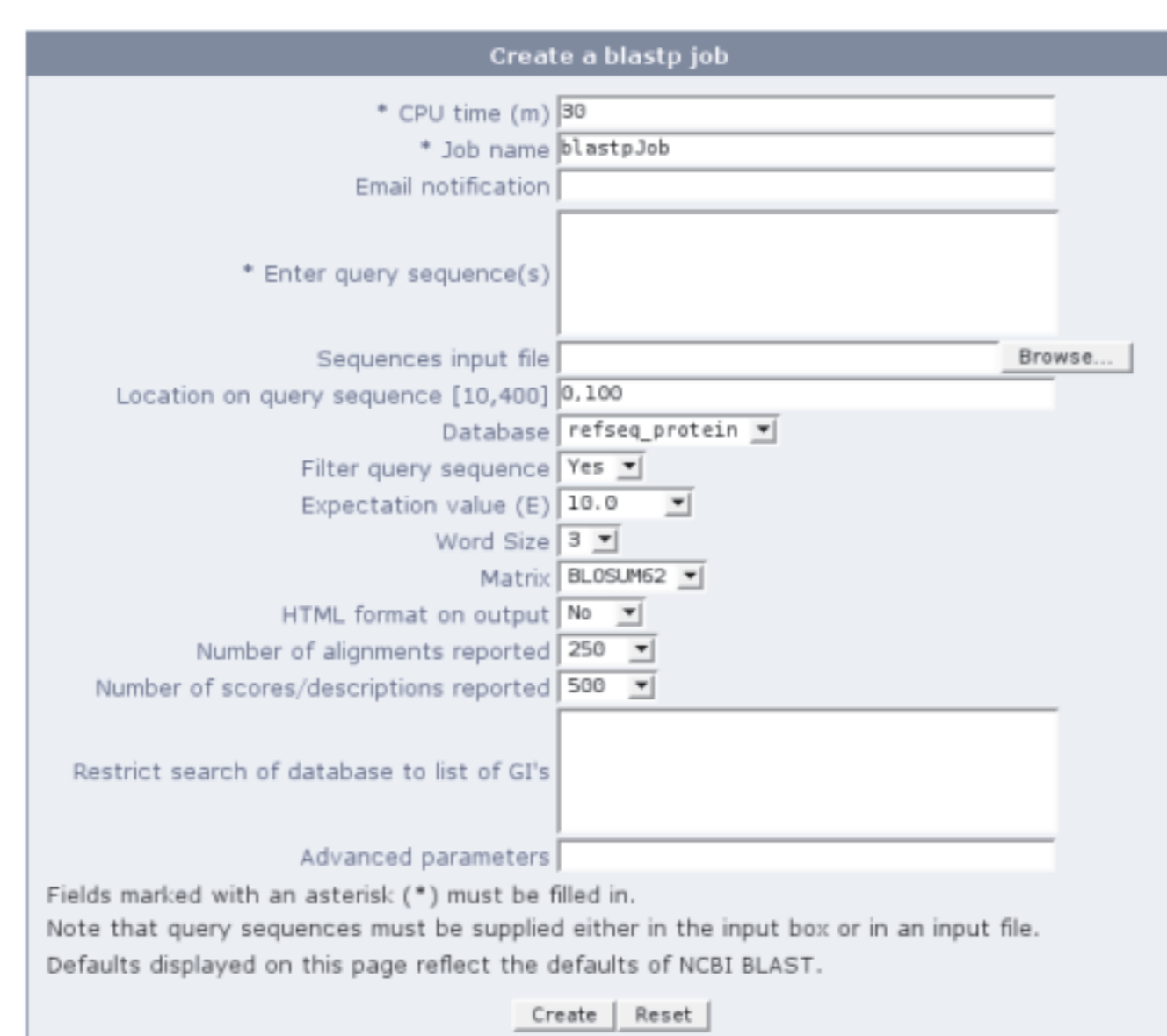


## Project progress

GRIDportal was launched as a student project in January of 2005. It is expected to enter production use by August.

GRIDportal is currently being deployed at ITEA, NTNU. At the moment, the portal is partially functional and has undergone alpha stage testing.

project website: <http://gridportal.dynalias.org>  
 deployment site: <http://norgrid.ntnu.no/gridportal>



GRIDportal is courtesy of:

- + the High Performance Computing Project, ITEA, Norwegian University of Science and Technology
- + the Department of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology
- + the Faculty of Informatics and e-Learning, Sør-Trøndelag University College

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