NCSA
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Grid Technologies Group

Developing, Supporting, and Deploying Grid Software
http://www.ncsa.uiuc.edu/Divisions/NSM/GST/
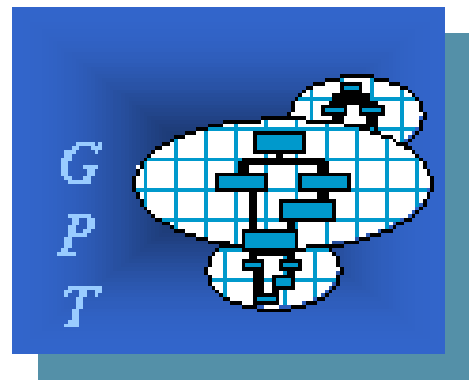
Grid Packaging Technology

GPT is a collection of packaging tools built around an XML based packaging data format. This format provides a straightforward way to define complex dependency and compatibility relationships between packages. The tools provide a means for developers to easily define the packaging data and include it as part of their source code distribution. Binary packages can be automatically generated from this data. The packages defined by GPT are compatible with other packages and can be easily be converted.

The Globus Toolkit^{TM} version 2.0 uses GPT. The toolkit is distributed as GPT based packages and bundles. It has a complex set of deployment requirements as well as an extensive hierarchy of dependencies between the various components.

MyProxy Online Credential Repository
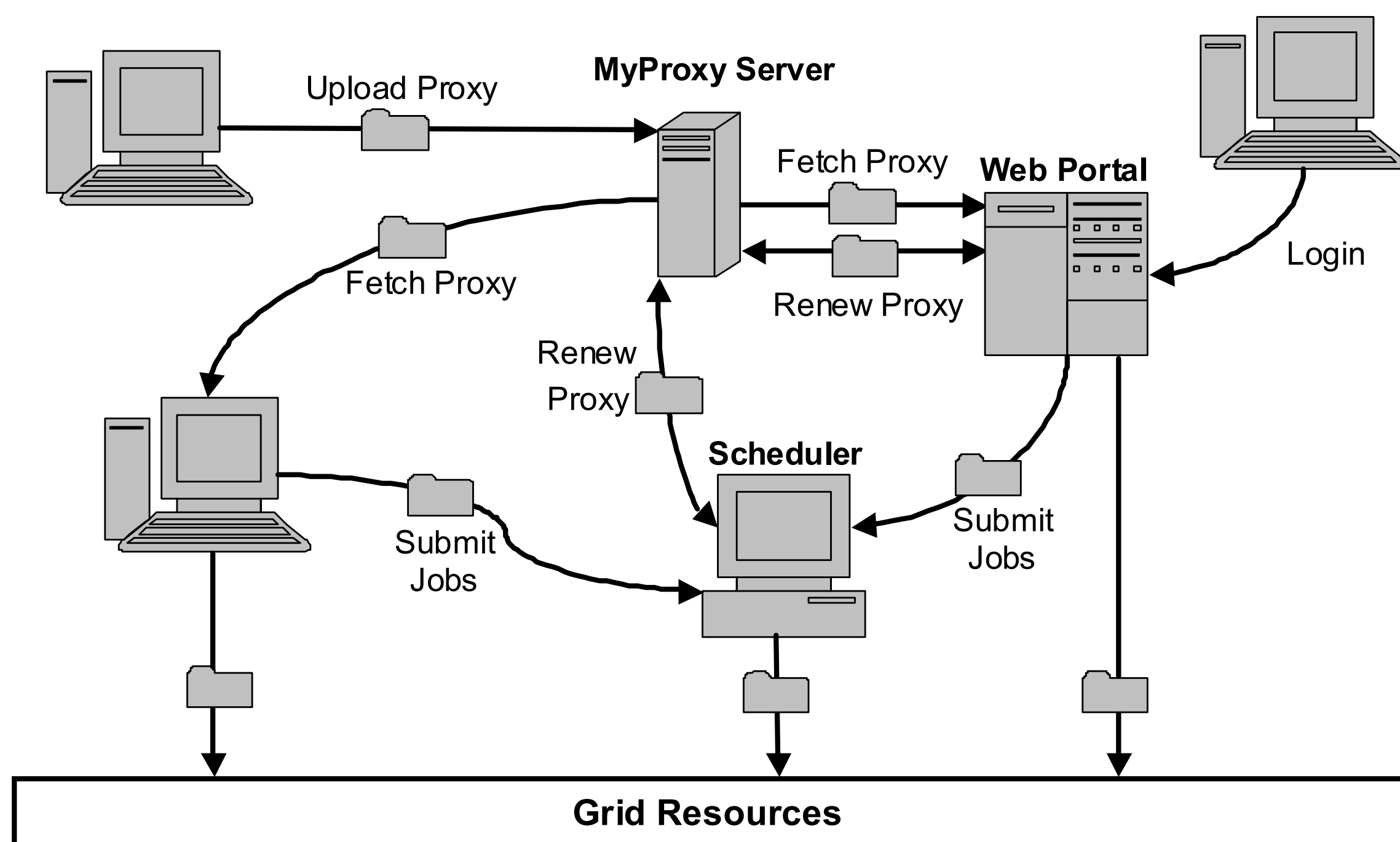
MyProxy provides a repository for Grid credentials. Users can upload Grid proxy credentials to a secure MyProxy server and retrieve their credentials via password from the server when and where they are needed. Users can also allow services such as web portals and job schedulers to obtain credentials from MyProxy so the services can access the Grid on the user's behalf.

GSI-enabled OpenSSH

GSI-enabled OpenSSH adds Grid certificate-based authentication to the OpenSSH secure remote login and file transfer services.

Grid in a Box

the globus project™ www.globus.org

Condor High Throughput Computing

The Alliance Grid-in-a-Box (GiB) project is a cooperative effort led by the Globus team at Argonne National Laboratory, the Condor team at the University of Wisconsin-Madison, and the Grid Technologies group at NCSA. The GiB team has developed client and server Grid software packages, built a GiB Research Grid across seven Partners for Advance Computational Services (PACS) sites, and worked with application developers to port applications to the Grid environment.

Building the National Virtual Collaboratory for Earthquake Engineering Research
NEESgrid
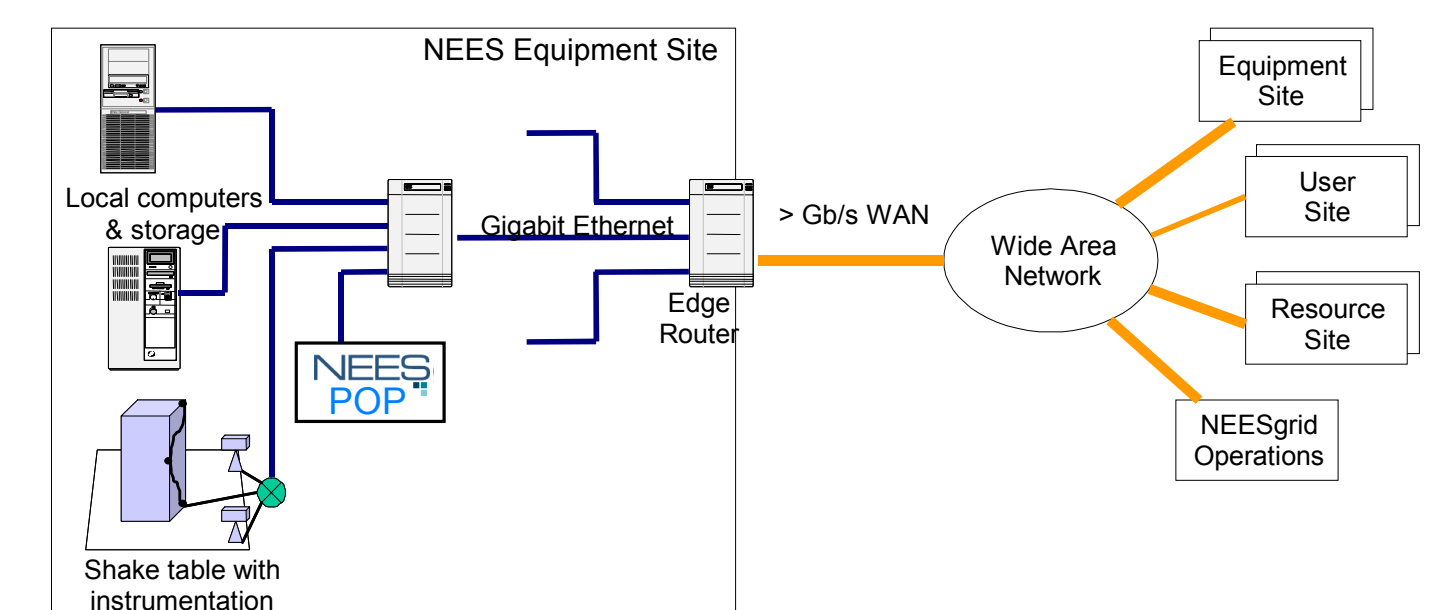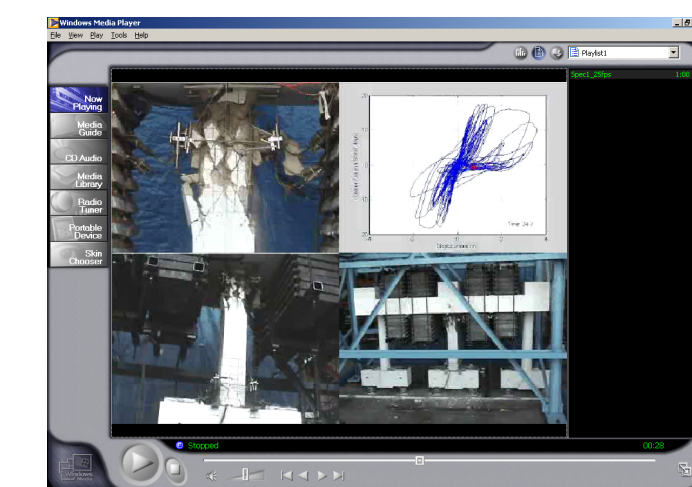
NEESgrid is an integrated network that will link earthquake engineering research sites across the country, provide data storage facilities and repositories, and offer remote access to the latest research tools. The NCSA Grid Technologies group is responsible for Grid software deployment for the NEESgrid project.

NMI GRIDS
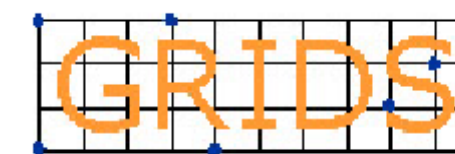
NSF Middleware Initiative

As part of the NSF Middleware Initiative GRIDS Center team, members of the Grid Technologies group are working to define, package, and deploy an integrated, production-quality Grid software distribution.

GGF Global Grid Forum

Group members have submitted draft documents to the Grid Security Infrastructure and Grid Certificate Policy Design working groups of the Global Grid Forum.