### **INTRODUCTION TO GRIDFORGE TOOLS & BEST PRACTICES**

This paper is intended to be an introduction to Gridforge tools and GGF best practices for managing a working group or research group. The document is divided into seven sections: projects, membership, front page, trackers, document manager, file publisher, and forums. In each of these sections, one will learn about the GridForge tools and "best practices" of organizing group artifacts using Gridforge tools. Additionally, a section has been provided introducing other Gridforge tools that are in the experimental phase, and for which best practices have yet to be determined. Please note that GGF best practices are not meant to be comprehensive or limiting in any way. Groups can use Gridforge tools in many ways to accomplish many other goals not listed in this document. At the end of this paper, FAQ lists are provided for GridForge Project Administrators and GridForge Users as well as General GGF Processes.

#### Projects

The basic building block of the GridForge infrastructure is a project. Projects are containers into which artifacts may be stored and managed. Each project has membership and a set of active tools (e.g., document manager) that can be used to submit and manage the artifacts. Projects have a short name, which is normally the GGF assigned short name (e.g., ogsi-wg). Projects reside in one or more categories. GGF has categorized projects in three ways, by type (e.g., WG, RG, BOF), by process (e.g., community, management), and by area (e.g., Data, Security). When a new group is formed or an existing group wants to start using the GridForge infrastructure, a request is made to the GGF office (office@ggf.org) for a GridForge project. Typically, a draft or approved charter along and approval from an Area Director are needed to build a new project. GGF will create a project using a standard template, whose features are discussed in subsequent sections. This template can be updated according to the needs of the group; however, GGF encourages consistency to the template where possible so that users of multiple projects do not get lost attempting to find artifacts. Once the project is created, one of the group chairs or a delegate is given project administrator privileges and the group can begin using the project. The following sections provide an overview of how to use the project to manage the business and artifacts of the group.

### Membership

Essential to group management with GridForge is the creation of a membership list. GridForge has four basic user types: administrator, group member, GridForge user (but not a member of a group), and site visitor (not authenticated). Normally, one of the first steps taken after a project is created is to add the project membership. Project members can have an additional level of authorization to work with GridForge tools as well as access project artifacts managed within GridForge.

Adding membership is a three step process. First, group participants must register with GridForge and obtain a login. The project administrator, then, adds the individual participants to the project membership. Finally, the administrator assigns a role to each

project member, enabling them to have the level of access that is appropriate for their participation.

For example, a chairperson may wish to assign an administrator role to the group secretary. Thus, the secretary can update and manage the group's web presence through the tools provided by GridForge. Other group members may only have the role of project member, which would enable them to have access to various artifacts and, in some cases, edit and manage them.

# Front Page

As with any web presence, the front page can make or break its usefulness. GGF has created a simple template to be used as the basis for the front page of your Gridforge project. This front page can be altered to meet preferences and goals of the group, but GGF suggests that the core items of the template be represented in some way on the front page.

The GGF provided template presents the following information:

- Group Name (including short name)
- Group Chairs and Secretary (including mailto links)
- Email list (link and subscribe link)
- Email list archive (link)
- Group Charter (can be an abbreviated version to communicate group purpose)
- GGF area in which the group resides
- Type of group (working, research, BoF, administrative)
- Summary list of trackers, documents, file releases, and forums
- List of members of the Gridforge Project (authenticated members of the Gridforge project maintained by the project administrator).

This template is manageable or replaceable (using simple html in admin mode) by the project administrator, who is either one of the group chair(s) or a delegate of his/her choice. Some groups have chosen to insert a link to the group's existing website (if they have one) as an interim step of getting the group membership into Gridforge. Care must be taken that Gridforge eventually becomes the single point of document submission so that there is no chance for synchronization problems between the Gridforge project and the group's site.

The main purposes of the home page are to provide a brief overview of the group's purpose, provide contact information, and to be a channel to other relevant portions of the project. GGF believes that the template contents listed above facilitate these purposes. If, however, you choose to update or replace the template, GGF asks that you consider leaving many of the core items listed above somewhere on your home page.

Trackers

Simply put, trackers provide Gridforge users the opportunity to manage or delegate a group issue. Historically used in the software world to track and resolve bugs, GGF uses trackers in a variety of ways ranging from help desk requests to requests for revisions on draft documents. Tracker items can be grouped according to the need, represented by the tracker name. For example, the GGF template provides a tracker called "Site Suggestions" into which ideas for project improvement can be created, delegated and resolved. Tracker items have attributes that facilitate delegation and management including:

- Description, submitted by and submit date
- Priority (1-5)
- Assigned to (items may be delegated to any member of the project)
- Status (open, pending, closed)
- Category (admin defined list).

As mentioned above, trackers can be used for a variety of reasons. Each group will need to identify a base set of trackers they wish to create and use. Some suggestions include:

- submission of use cases
- submission and resolution of document revision issues
- tracking of items for future reference (e.g., out of scope of current activity)
- submission and resolution of site/project support issues.

### Document Manager

Most groups generate a number of artifacts in the course of its lifetime. These may be generated by chairs or by any number of group participants. Gridforge provides a document manager tool that allows for the submission and management of these artifacts. As with an operating system, Gridforge has a manageable folder structure into which artifacts may be placed. This file structure can be extended and maintained by any project administrator.

By way of the GGF template, we suggest a minimum of the following folders:

- Charter
- Meeting Minutes and Materials
- Working Drafts.

These three folders will help project visitors quickly find key artifacts generated by the group. Obviously, other folders and subfolders may be created according to the needs of the group.

Document submission can be accomplished by anyone who has a Gridforge logon. During the process of submission, the submitter is given the opportunity to indicate whether the document should be available to the public (site visitor), private to the project (authenticated project members only), or available to anyone with a Gridforge sign-on (authenticated Gridforge users regardless of project membership). Additionally, the submitter may indicate whether the document should be locked. GGF recommends that approved documents such as charters or specifications be locked.

### File Publisher

At first glance, the functions of file publisher and document management may seem similar. File publisher, however, is intended to be a repository for code or documents that are "baselined" and stored. For example, a working group that has submitted a final GGF document that has been published by the Editor may wish to keep a copy of the final document in their repository. This baselined document may be placed in the file publisher for more permanent archival.

Like document manager, file publisher has its concept of a folder/subfolder structure called packages. In each package, one or more files (e.g., documents) may be published. Each time a revision of an existing file is published to the package, the file is given a revision number. It is assumed that the latest version is the public version when the file is requested by a project user. However, file publishing administrators may choose to use version 4 as the public version while keeping version 5 private for further revision. Likewise, they can always change the public version to any previous version if they so choose. Unlike document manager, files that have been published may also be monitored. That means that if a new version of a document is published, anyone with an active monitor on the file release will be notified on their Gridforge "My Page" that the file has been updated.

### Forums

Forums are discussion threads that allow for distributed comment over a particular subject, document, or issue. As with other discussion software, Gridforge allows for the administration of forums including disallowing anonymous posting, providing a mailto address for all postings, and making the forum private or public.

GGF has found it to be useful to post meeting agendas and minutes through a forum. When individuals are unable to make a meeting, they can simply view the forum and see not only the original agenda, but also any discussions including the meeting minutes. Forums may also be helpful to resolve any issue that involves feedback from a variety of members such as resolving scheduling conflicts or determining document scope.

## Future GridForge Project Tools

GGF has concentrated on introducing a limited number of the tools available within Gridforge. GGF believes that the above tools will make group management efficient and that once the learning curve is over, group members will be excited about the options available through Gridforge.

Gridforge does have two other features that GGF hopes to introduce in the near future: mailing lists and task manager. In a distributed community like GGF, mailing lists are vital to group communication. Currently, GGF manages the mailing lists via majordomo. However, Gridforge has mailing list capabilities, which GGF plans to use in the near future. The task manager tool is another Gridforge option that, while available for use, is still in experimental phase. Task manager essentially allows the group to manage project plans, milestones, and progress toward project completion. Historically, groups have documented their milestones in the group charter or a related document. Task manager will provide MS Project-like capabilities that will enable group chairs to update and report progress to Area Directors and other steering groups. GGF will introduce the best practices of task manager at the end of the experimental phase, due to be completed in fall of 2003.