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Open Grid Forum Document Process and Requirements

<u>Status</u>

Grid Working Draft (GWD).

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Replaces

This document replaces and obsoletes GFD-C.1 [CATLETT].

<u>Abstract</u>

This document defines the types of OGF documents and the development and review processes for each type. This document obsoletes GFD-C.1 [CATLETT] and replaces it as the description of OGF community practice surrounding the document series. The process reflects several years of experience with OGF document publication, and borrows heavily from the Internet Engineering Task Force Request for Comments document process.

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1. Introduction

The Open Grid Forum (OGF) is a group of individuals and organizations engaged in research, development, deployment, and support activities related to high-capability distributed software systems, or "Grids." The scope of the applications that motivate these activities is quite broad, including for example high performance processing applications, distributed collaborative environments, distributed data analysis, and remote instrument control. A defining characteristic is a perceived need for services beyond those provided by the commodity Internet.

The OGF intends to emulate, as appropriate, the Internet Engineering Task Force (IETF, www.ietf.org) and Internet Research Task Force (IRTF, www.irtf.org), and to support and complement the Internet Standards Process as outlined in [BRADNER2], [WEINRIB] and [POSTEL].

During the years since the OGF first published its process on document publication [CATLETT], many additional documents have completed formal publication and a large number of draft documents have been circulated. There have been a number of places where the previous documentation was found to incompletely describe the process and/or where the process described was found to be unworkable. This document updates and supersedes GFD-C.1 to correct those problem areas, and to add detail and guidance based on experience.

To this end, we describe here a document series with several types of documents, each with a specific purpose and scope, along with a process by which documents are developed and included in the document series. The OGF document series is intended as an authoritative and useful depository of written materials concerning standards, processes and experiences related to Grid computing. The process described here is intended to provide a rigorous, transparent and fair process by which documents can enter the OGF document series.

2. Notational Conventions

The key words 'MUST," "MUST NOT," "REQUIRED," "SHALL," "SHALL NOT," "SHOULD," "SHOULD NOT," "RECOMMENDED," "MAY," and "OPTIONAL" are to be interpreted as described in RFC 2119 [BRADNER1].

3. Types of OGF Documents

One of the important OGF objectives is to produce high-quality documents that contribute to the process of designing, building, operating, or using Grids and Grid technologies. These OGF documents fall into one of the following categories, modeled after the IETF's RFC series (other document categories may become necessary at some point in the future):

Grid Working Drafts (GWD) are draft documents for distribution within the OGF. These are not considered "published," and may not be assumed to be stable or to represent consensus of the sponsoring group. When the working draft obtains

consensus from its sponsoring group, the individual authors or an OGF Working Group, Research Group or Community Group (WG, RG or CG; below referred to as an OGF group), then it is submitted to the OGF Editor to enter into the GFD review process described below.

Grid Forum Documents (GFD) are published OGF documents. Publication occurs following the process outlined in the rest of this document. There are four types of GFD:

Informational Documents inform the community of an interesting and useful Grid-related technology, architecture, framework, or concepts.

Experimental Documents inform the community of the results of Grid-related experiments, implementations, or other operational experience.

Community Practice Documents inform and influence the community regarding an approach or process that is considered or anticipated to be widely accepted by consensus and practice in the Grid community.

Recommendations Documents describe a particular technical specification or a set of guidelines for the application of a technical specification. Recommendations documents are intended to guide interoperability and promote standard approaches.

A Grid Forum document may be designated as *obsolete* if it is superseded by another document. The obsolete designation clearly indicates that the document no longer reflects current thinking, but still recognizes the document's contributions by allowing it to be referenced and consulted. A stronger designation of *historical* can be used, primarily for technical specifications or specific recommendations, to indicate that the specification should no longer be used. In order to change a GFD status to historical, an Informational Document is necessary to explain the reasoning.

3.1 Other Document Types

The OGF may, at its discretion, engage in the publication and distribution of documents of a type not described here. Examples might include a technical reports series, a refereed journal or conference proceedings, or book series. Such documents are out of scope for the process described here, though such documents might opt to utilize some or all of the OGF document process.

4. OGF Document Process

The process by which a document is designated as part of the GFD series consists of multiple levels of review along one of three separate process paths depending upon the type of document.

While a GFD may originate from within or outside of OGF, the review process will require some level of consensus within one or more OGF groups, or within the OGF more broadly. It is recommended, but not required, that all documents be discussed within one or more OGF groups prior to submission to the OGF Editor for publication.

Authors may not participate in the formal review of their own documents. If a member of the prescribed review process is also an author, editor or contributor, the relevant Area Director or OGF Editor will designate an alternate.

The OGF Editor is an *ex officio* member of the GFSG. He or she is responsible for shepherding documents through the process described here, and in the normal course of events will make decisions or seek consensus on specific documents. The OGF Editor is accessible to any member of the OGF community for advice on the document process, and may be called upon by authors/editors for assistance before or after a document is submitted to the document process. The OGF Editor role may be an individual, or a group.

The OGF Editor operates under the guidance and oversight of the GFSG, and seeks input from the GFSG or specific GFSG members (such as Area Directors) as needed. Other than Informational and experimental documents, as described below, the GFSG determines whether a submitted document is ready for publication. This determination may be based on a variety of factors, including technical content and accuracy, expected utility, interoperability, quality and clarity of writing, as well as conformance to document standards. Any GFSG member, including the OGF Editor, may decide to seek additional expert guidance or external review, in order to assist in the document process.

4.1 Grid Working Drafts

A Grid Working Draft (GWD) is used (a) to provide the broad community with a relatively stable document for general review and comment and (b) to indicate that intellectual property considerations have, to the best of the authors' knowledge, been addressed and are noted in the document. A GWD is submitted to the central OGF GWD repository. Documents submitted to the GWD repository may be freely redistributed, though bibliographic citations are strongly encouraged to point back to the GWD repository to get the latest version. GWDs are works in progress and it is inappropriate to reference them in any other manner. They explicitly may not be presumed to reflect consensus of OGF, its working groups or even the full set of authors.

A particular GWD may reside in the OGF GWD repository for a maximum of 12 months, after which, if it has not been submitted to the OGF Editor, it will be removed. GWDs may be updated with later versions (generally, these will supersede and replace earlier versions), and then the 12-month timer restarts. The intention is not to force completion from GWD to GFD within 12 months, but to insure that old, outdated or abandoned GWDs do not remain in the OGF GWD repository. The repository is, fundamentally, for documents actively moving towards GFD status.

The authors of a GWD may choose to leave the document as a GWD and use the repository as a lightweight distribution method to the OGF community for purposes of soliciting interest in the topic, formation of a group to take up the topic, and/or rapid feedback from the community.

The authors of a GWD may choose to submit the document to an OGF group, and this is the usual path for successfully published documents. The group chair(s) will determine whether the group chooses to take up the document for discussion. If the group does, then a document editor is assigned to track issues raised in discussion and edit the document to reflect the group consensus. It is recommended that someone other than the original authors act as editor, though this is not required. Further description of author, editor and contributor roles may be found elsewhere in this document. If major changes are required in order to reach consensus, or no consensus appears to be possible, the GWD may be returned to the authors.

When a working group or research group has reached consensus that a draft should be submitted to become part of the GFD document series, or the authors decide to submit directly, and intellectual property considerations have been addressed, the document is submitted to the OGF Editor to begin the review process. This review process is different for each type of document.

For documents not originating in OGF groups, an author (or group of authors) may submit directly to the OGF Editor. In these cases, depending on the type of document, the OGF Editor may

assign it for review by an existing OGF group, or may require that an OGF group be given responsibility to develop consensus prior to submission to the OGF Editor.

4.1.1 File Naming Conventions for GWDs

To facilitate ease for organizing GWDs in document repositories, the filename of a GWD should follow the following format. Only lower case letters and numbers may be used for the portions within brackets – no spaces, upper case, punctuation or other characters.

draft-<doctype>-<submitter>-<nickname>-<version>.<format>

<doctype> corresponds to the GFD types:

```
gwdi (candidate Informational GFD)
gwde (candidate Experimental GFD)
gwdc (candidate Community Practice GFD)
gwdrp (candidate Recommendations track GFD)
```

<submitter> is either the name of the submitting OGF group or the family name of the submitting document author.

<nickname> is a short, mnemonic version of the document title or content.

<version> is an integer version number proceeded by the letter v, such as v1 or v2

<format> is typically one of the following document formats:

```
"txt" for ASCII text
"pdf" for Portable Document Format
"doc" for MSWord
"rtf" for Rich Text Format
```

Upon submission to the OGF Editor for consideration as a GFD, the GWD version is "frozen" during the subsequent review and comment period, except in response to requests for relatively minor editing or formatting, and as described below for response to public comments. Substantial changes to the GWD may warrant return to the appropriate OGF group to reconfirm the support of the group for the document. The GWD version should be incremented when modifications are made.

A GWD must meet all minimum document format and content requirements outlined below, including copyright and intellectual property notices, prior to submission to the GFD document review process.

4.2 Public Comments

The public has a number of opportunities to comment on a document and participate in its development, however, most members of the Grid community may choose to wait until a document reaches a level of stability before engaging. The OGF document process includes an explicit step for all documents to allow an opportunity for the community to read and comment on Grid Working Drafts. Documents entering Public Comment are announced to the public along with the period for which comments will be accepted. Comments both pro and con are requested. Document authors/editors, the OGF Editor, and relevant Area Directors should invite public comments.

In addition to providing a forum for suggestions, Public Comments offer an opportunity for affirmation. Simple statements from Area Directors, working group members, and others in the Grid community that a document was read and was found useful can help to reinforce notions of the document's readiness for publication. Input from experts who are not active in the Grid community can provide further reinforcement and, in fact, are required for some types of documents.

After the Public Comment period is complete, authors/editors are typically asked by the OGF Editor to respond to comments made. This may include changes to the draft document. If the changes are substantive, the document may be restarted at an earlier phase of the document process, in order for the changes to undergo a complete review and further Public Comment period.

If no comments are received during a public comment period, the OGF Editor may elect to remove the document from the publication process, in order for the submitters to garner community interest. Alternatively, a further round of public comments may be sought. If a large number of comments, or other signs of community support, were received outside of the public comment process, the OGF Editor may instead recommend that a document move forward in spite of the lack of public comments during the formal process.

4.3 Informational or Experimental Documents

Informational or Experimental GFDs may originate from outside the OGF, or they may originate from individuals or a group within the OGF. If the document originates from a OGF group, the group chair(s) will submit the draft to the OGF Editor. The OGF Editor will determine, in consultation with the relevant Area Directors, whether the document is appropriate for the OGF document series and, if so, will make the draft available for public comment and will announce its availability.

If the draft originates from an individual or non-OGF group, the OGF Editor will either assign the document to an appropriate OGF group for review or will ask the GFSG to review the document. Based on the results of these reviews, the document either will be made available for a 30-day public comment period or will be returned to the author(s) within a reasonable period of time.

At the end of the 30-day public comment period, based on recommendations from the GFSG, issues raised during the comment period, and any actions taken by the authors to address issues, the OGF Editor will determine whether the document should be published as a GFD. Depending on the extent of the changes, the OGF Editor may return the document without action, require a restart of the 30-day comment period, or determine that the changes are minor enough to proceed with publication immediately.

If any point the GWD is not recommended for publication as a GFD, the document will be returned to the submitters with a statement describing the decision.

4.3.1 Summary of Document Processing for Informational and Experimental Documents

A document may be returned to an earlier phase of the document process, if deemed necessary.

- 1. *Pre-submission check*: includes consensus within the OGF group, adherence to intellectual property guidelines, assignment of one or more document editors, and group mailing list last call. At this point, OGF group chairs and the appropriate Area Directors (ADs) should be informed of the intention for submission.
- 2. *Submission*: Suitably formatted document, with attention to required elements and intellectual property issues, is submitted to the OGF Editor.

3. *Initial Editor review*: The OGF Editor reviews the document for completeness, general content, formatting, etc. The OGF Editor will typically confirm the pre-submission check with the AD.

- 4. *Public comment*: The document enters a 30-day public comment, with notification to the OGF community and general public (e.g., through the OGF's Web site and mailing lists).
- 5. Review of comments: Authors/editors are asked to respond to public comments, and may elect to prepare a new version of the document. If substantial revisions are made, a further public comment will be sought.
- 6. Final Editor review: The OGF Editor will confirm the document is ready for publication.
- 7. GFSG last call: The OGF Editor will inform the GFSG of impending publication, and allow 7 days for any concerns to be raised. The OGF Editor will determine, in cooperation with GFSG members, OGF group members, and the document authors/editors, how to address any concerns.
- 8. *Publication*: The OGF Editor will assign a GFD-I or GFD-E document number and inform the OGF community of the new document.

4.4 Community Practice Documents

A Community Practice document is intended to represent broad consensus across the Grid Community regarding a particular subject. As such, a rigorous review is necessary to ensure that such consensus exists. Community Practice documents are not requirements specifications, but might go into detail on existing practices. Their role is to codify existing practices, adding specificity and formality to processes that might otherwise be informal, poorly documented, or communicated mainly by word of mouth. Documents intended to form a basis for the Requirements track should probably not be Community Practice documents – instead, they more likely belong as Informational or Experimental documents. Occasionally, Community Practice documents may be used to shape emerging or anticipated community practice (as was the case with GFD-C.1). In such cases, broad community consensus must still be sought, as described here.

The chair(s) from the OGF group will submit the GWD to the OGF Editor to begin the review and comment process for publication as a Community Practice GFD. The OGF Editor will submit the GWD to the Grid Forum Steering Group (GFSG) for a 15-day internal review period. Typically, the relevant council within the GFSG (Standards Council, Community Council or Research Council) will undertake the review, inviting participation from any other interested GFSG member. The OGF Editor will identify a relevant Area Director to present the document to the GFSG, fairly identifying the benefits and shortcomings of the document.

If the draft originates from an individual or non-OGF group, the OGF Editor will either assign the draft to an appropriate OGF group for review or will ask one or more GFSG members to review the draft. Based on the results of these reviews, the draft will either be submitted to the GFSG for a 15-day internal review as above, or returned to the author(s) within a reasonable period of time

At the end of the GFSG review period the OGF Editor will determine, based on consensus of the GFSG, whether the draft should proceed to a 60-day public comment period or be returned without further action.

If the consensus of the GFSG is that the GWD is a reasonable candidate for consideration as a GFD, the OGF Editor will make the GWD available for a 60-day public comment period and will announce its availability. During the 60-day public comment period the OGF Editor may additionally request that the relevant Area Director(s) obtain one or more invited reviews of the document.

At the end of the 60-day public comment period, based on issues raised during the comment period and any actions taken by the authors to address issues raised, the relevant Area

Director(s) will make a recommendation to the OGF Editor and GFSG regarding the publication of the document as a GFD. The recommendation will include an overview of issues raised and the results of the invited review(s) if they were requested. This review will focus on technical and intellectual quality of the document as well as the extent to which the work truly reflects community-wide practice and support.

Depending on the extent of the changes made as a result of the 60-day public comment period and GFSG review, the OGF Editor may return the document for further work, require a restart of the 60-day comment period, or determine that the changes are minor enough to proceed with designation as a GFD immediately.

If at any point the GWD is not recommended for publication as a GFD, the document is returned to the submitters with a statement describing the decision. The group and/or authors may elect to continue working on the draft to address issues raised in the 60-day comment period and/or GFSG review. If, after 12 months, the GFSG has not advanced the GWD to the 60-day public comment period, the GWD is removed from the central GWD area.

In some cases (e.g., because of evolution in thinking or technology), a GFD-C may be replaced or updated. In these cases, the original GFD will be given obsolete status, and this will be noted in the status field of the title page of the document. Updated documents will go through the same document process as is described here.

4.4.1 Summary of Document Processing for Community Practice Documents

A document may be returned to an earlier phase of the document process, if deemed necessary.

- Pre-submission check: includes consensus within the OGF group, adherence to
 intellectual property guidelines, assignment of one or more document editors, and group
 mailing list last call. At this point, OGF group chairs and the appropriate Area Directors
 (ADs) should be informed of the intention for submission.
- 2. *Submission*: Suitably formatted document, with attention to required elements and intellectual property issues, is submitted to the OGF Editor.
- 3. *Initial Editor review*: The OGF Editor reviews the document for completeness, general content, formatting, etc. The OGF Editor will typically confirm the pre-submission check with the AD.
- 4. *Initial GFSG review*: Through the appropriate GFSG council (Standards, Research or Community), the GFSG will be given 15 days to read and comment on the document. At the end of that period, the AD will gain consensus from the GFSG as to whether the document is acceptable for advancement to public comment.
- 5. *Public comment*: The document enters a 60-day public comment, with notification to the OGF community and general public (i.e., through the OGF's Web site and mailing lists).
- 6. Review of comments: Authors/editors are asked to respond to public comments, and may elect to prepare a new version of the document. If substantial revisions are made, a further public comment will be sought.
- 7. *Final GFSG review*: The same process as the initial GFSG review, with attention to public comments and any further changes to the document.
- 8. Final Editor review: The OGF Editor will confirm the document is ready for publication.
- 9. *Publication*: The OGF Editor will assign a GFD-C document number and inform the OGF community of the new document.

4.5 Recommendations Track Documents

Recommendations documents are first published in the OGF document series as *Proposed Recommendations*. Then, after sufficient experience and community guidance is received, Proposed Recommendations can become *Grid Recommendation*.

A "Proposed Recommendation" is analogous to a "Proposed Standard" in the Internet Standards Process:

A Proposed Standard specification is generally stable, has resolved known design choices, is believed to be well-understood, has received significant community review, and appears to enjoy enough community interest to be considered valuable. However, further experience might result in a change or even retraction of the specification before it advances.

Usually, neither implementation nor operational experience is required for the designation of a specification as a Proposed Standard. However, such experience is highly desirable, and will usually represent a strong argument in favor of a Proposed Standard designation." [BRADNER1] Section 4.1.1, p. 12.

Recommendations track GFDs give specific guidance regarding a particular subject, such as a technical specification or guidance regarding the application of technical specifications. These documents represent not only intellectual consensus within the Grid community but also reasonable assurance that the recommended approach is valid and useful.

Recommendations track GFDs will generally originate from within OGF working groups.

The recommendations track contains two status levels: *Proposed Recommendation* and *Grid Recommendation*. An *obsolete* designation is assigned a recommendation that has been superseded by a more recent recommendation or that is no longer under consideration as a Grid Recommendation. An *historical* designation is assigned to a recommendation to indicate that, because of current practice or technology, implementation is discouraged.

4.5.1 Proposed Recommendation

With consensus from the chair(s) from the originating OGF group, the document editor(s) will submit the Proposed Recommendation to the OGF Editor to begin the review and comment process for publication as a GFD. The OGF Editor will submit the GWD to the Grid Forum Steering Group (GFSG) for a 15-day internal review period. Typically, the relevant council within the GFSG (Standards Council, Community Council or Research Council) will undertake the review. The OGF Editor will identify a relevant Area Director to present the document to the GFSG, fairly identifying the benefits and shortcomings of the document.

If the draft originates from an individual or non-OGF group, the OGF Editor will either assign the draft to an appropriate OGF group for review or will ask one or more GFSG members to review the draft. Based on the results of these reviews, the draft will either be submitted to the GFSG for a 15-day internal review as above, or returned to the author(s) within a reasonable period of time

If, based on the technical and intellectual quality of the draft, the consensus of the GFSG is that the GWD is a reasonable candidate for consideration as a GFD Proposed Recommendation, the OGF Editor will make the GWD available for a 60-day public comment period and will announce its availability. The OGF Editor may also request that the relevant Area Director(s) obtain one or more invited reviews of the document.

At the end of the 60-day public comment period, based on issues raised during the comment period and any actions taken by the authors to address issues raised, the relevant Area Director(s) will make a recommendation to the OGF Editor and GFSG regarding the publication of the document as a GFD. The recommendation will include an overview of issues raised and the results of the invited review(s) if they were requested. This review will focus on technical and intellectual quality of the document as well as the extent to which the work truly reflects community-wide practice and support.

Depending on the extent of the changes made as a result of the 60-day public comment period and GFSG review, the OGF Editor may return the document for further work, require a restart of the 60-day comment period, or determine that the changes are minor enough to proceed with designation as a GFD immediately.

If the GWD is not recommended for publication as a GFD, the document returned to the submitters with a statement describing the decision. The group and/or authors may elect to continue working on the draft to address issues raised in the 60-day comment period and/or GFSG review. If, after 12 months, the GFSG has not advanced the GWD to the 60-day public comment period, the GWD is removed from the central GWD area.

4.5.2 Summary of Document Processing for Proposed Recommendation Documents

A document may be returned to an earlier phase of the document process, if deemed necessary.

- 1. *Pre-submission check*: includes consensus within the OGF group, adherence to intellectual property guidelines, assignment of one or more document editors, and group mailing list last call. At this point, OGF group chairs and the appropriate Area Directors (ADs) should be informed of the intention for submission.
- 2. *Submission*: Suitably formatted document, with attention to required elements and intellectual property issues, is submitted to the OGF Editor.
- 3. *Initial Editor review*: The OGF Editor reviews the document for completeness, general content, formatting, etc. The OGF Editor will typically confirm the pre-submission check with the AD.
- 4. Area Director review: The OGF Editor assigns the document to a relevant Area Director, who will present the document to the GFSG.
- 5. Initial GFSG review: Through the appropriate GFSG council (Standards, Research or Community), the GFSG will be given 15 days to read and comment on the document. At the end of that period, the AD will gain consensus from the GFSG as to whether the document is acceptable for advancement to public comment.
- 6. *Public comment*: The document enters a 60-day public comment, with notification to the OGF community and general public (i.e., through the OGF's Web site and mailing lists).
- 7. Review of comments: Authors/editors are asked to respond to public comments, and may elect to prepare a new version of the document. If substantial revisions are made, a further public comment will be sought.
- 8. Final GFSG review: The same process as the initial GFSG review, with attention to public comments and any further changes to the document.
- 9. Final Editor review: The OGF Editor will confirm the document is ready for publication.
- 10. *Publication*: The OGF Editor will assign a GFD-R-P document number and inform the OGF community of the new document.

4.5.3 Grid Recommendation

Once a document is published as a Proposed Recommendation, a 24-month timer will begin during which period it is expected that operational experience will be gained. Typically, this will mean that at least two interoperable implementations (from different code bases and, in the case

of licensed code, from two separate license agreements) must be demonstrated (if appropriate). The entire protocol or specification must be implemented in the interoperable implementations. The GFSG will determine whether interoperable implementations (or implementations in software at all) are necessary or whether operational experience can be gained in a different fashion.

A document must remain at the GFD Proposed Recommendation level for a minimum of 6 months before it is eligible for advancement to a Grid Recommendation.

Within the 24-month period that begins with publication as a Proposed Recommendation, operational experience must be documented in the form of published documents, preferably one or more Experimental documents. When the working group chairs determine that sufficient operational experience has been achieved and documented, they will submit a request, along with a summary of the Proposed Recommendation and the associated documents, to the OGF Editor for an initial review. The OGF Editor will then enlist the GFSG council and Area Directors to confirm readiness of the document to move to a Grid Recommendation. The review will focus on the operational experience as it relates to verifying feasibility and utility of the Proposed Recommendation.

If the GFSG determines that the Proposed Recommendation has achieved sufficient operational experience to verify its feasibility and utility, a formal review will be conducted by the relevant Area Directors in cooperation with the OGF Editor. This review may include experts in the subject matter and context of the work, chosen from both within and outside of the OGF community. Depending on the subject matter, the OGF Editor or OGF chair may also solicit formal review from relevant standards bodies (such as the W3C or IETF).

This review will be conducted over at most a 4-month period during which the formal review will take place and further public comment will be invited and encouraged. While a formal solicitation for public comments will not typically be made, the OGF will advertise the document's status, so that interested parties can provide input.

The review will provide input to the GFSG in determining whether the Proposed Recommendation should (a) become a Grid Recommendation, (b) remain at the same status level, or (c) be moved to obsolete or historical status. In any case, the relevant Area Director(s) will briefly summarize the reasoning of the GFSG, providing this summary to the GFSG and group chairs and/or authors.

Small changes (as described in the Errata section below) may be applied from the Proposed Recommendation to the Grid Recommendation, but these should be used with caution, and no changes that would impact interoperability are permissible. If substantive changes are needed, a new Proposed Recommendation must be developed.

When a Proposed Recommendation document has not reached the Grid Recommendation level after twenty-four months, and every twelve months thereafter until the status is changed, the GFSG will review the viability of the effort responsible for that specification and the usefulness of the technology. Following each such review, the GFSG will approve termination or continuation of the development effort. At the same time the GFSG will decide to maintain the specification at the same maturity level or to move it to obsolete or historical status (thereby removing the Proposed Recommendation from further consideration to advance). This decision will be communicated to the OGF to allow the OGF community an opportunity to comment. This provision is not intended to threaten a legitimate and active working group effort, but rather to provide an administrative mechanism for terminating a moribund effort.

4.5.4 Summary of Document Processing for Grid Recommendation Documents

A document may be returned to an earlier phase of the document process, if deemed necessary.

- 1. Passage of time: At least 6 months since publication as a GFD-R-P must pass.
- 2. Alert the OGF Editor. Inform the OGF Editor of the intent to move the document to Grid Recommendation status. The Editor will check that requirements are met.
- 3. Assignment of Area Director: An AD will be assigned to conduct the formal review.
- 4. *Formal review*: Up to 4 months for internal and external review of the document's readiness to move to a Grid Recommendation.
- 5. *Final document preparation*: if small changes are sought to the final document, the submitters must propose them.
- 6. Final GFSG review: The AD will present the result of the review and all other evidence (such as Experimental documents) to the appropriate GFSG council (Standards, Research or Community), with a recommendation for whether to change the status to a Grid Recommendation. The GFSG will be given 15 days to read and comment on the document. At the end of that period, the AD will gain consensus from the GFSG as to whether the document is acceptable for advancement.
- 7. Republication: The OGF Editor will replace GFD-R-P with GFD-R in the document, and apply any other needed changes. The Editor will inform the OGF community of the new document.

5. Automation Systems, Communication and Document Formats

Email is the preferred method for most communication during the document process described here. OGF groups, as well as individual authors, might choose OGF meetings, telephone calls, etc., but once a document enters the formal review process email is relied upon extensively.

The OGF may provide online automation systems to assist in the document flow. The use of such systems may be required, in order to provide a standard centralized process and permanent online archive of events. Authors/editors are urged to seek guidance from the OGF Editor or others in the use of available systems, in order to become proficient.

When a document enters public comment, and again when it is published at a GFD, the OGF Editor will announce the document action via email. At that time, a persistent link will be added to the document in the OGF document series Web page, and other announcements may be made.

In order to facilitate adding a final GFD number when published, as well as to handle errata (as described below), documents must be made available to the OGF Editor in an editable format. Typical formats are MS-Word, RTF, LaTeX, nroff, and plain text. Typically, a fixed format such as PDF is used to publish the final document, but the editable format is stored for possible future use.

6. Required and Optional Sections in an OGF Document

This section contains detail on some of the structural requirements of an OGF document. The OGF Editor makes a document template available to authors, with explanation and examples. Document sections, and a brief description for each, are:

- 1. First page masthead identifying editors, authors (optional), date, origin (WG/CG/RG, etc.), and type of document.
- 2. Front matter: document status, copyright statement, trademark recognition (if appropriate).
- 3. Abstract, providing a brief overview of the document.

- Table of Contents.
- 5. Introduction, providing a detailed overview of the document, typically listing the sections to follow.
- 6. Notational conventions, if required, for key words such as "MUST" and "NOT."
- 7. The main body of the work.
- 8. Security considerations, described below.
- 9. Glossary, if desired.
- 10. Authors, Editors, Contributors, described below.
- 11. Acknowledgements, if desired
- 12. OGF Intellectual Property Statement, Disclaimer, and Copyright Statement per [MARTIN] or as updated.
- 13. References, described below.

6.1 OGF Document Formatting

The first page of the document must contain a header as follows, where items in <angle brackets> are required and items in [square brackets] are required only when applicable:

Document Title

<Status: Grid Working Draft (GWD)>
[Replaces: <document(s)> (used for documents that supercede historical or obsolete documents)]

Document type is one of the following:

GWD-I (candidate Informational GFD)
GWD-E (candidate Experimental GFD)
GWD-C (candidate Community Practice GFD)
GWD-R-P (candidate Recommendations track GFD)

All pages after the first must have an email address for the group, or for an author or editor, in the lower left. The page number appears in the lower right. All pages after the first page must have <document name> in the upper left and the most recent revision date in the upper right.

The document must begin with a status statement, a copyright statement, and a 1-2 paragraph abstract followed by a table of contents. The copyright statement on the cover page should be simply "Copyright © Open Grid Forum (applicable years). All Rights Reserved." The full copyright statement per [MARTIN] or as revised must be included at the end of the document.

Sections in the body of the document must be outline numbered (1, 1.1, 1.1.1, etc.).

A glossary is recommended, particularly where many acronyms are used.

Once approved for publication as a OGF document, the document will be changed by the OGF Editor as follows:

The document type will be updated from GWD to GFD and a GFD sequence number assigned.

The Status field will be updated from "Grid Working Draft (GWD)" to "Current."

The Document date will be set to the date of first publication; any prior dates will be removed.

The revision date will be set to the date(s) of any change allowed here after first publication (described below under Errata). The revision type field will briefly describe the change made.

7. Authorship, Editorship and Contributing Authors

Two categories of contribution to a document are recognized in the OGF document series. They are authors and contributors. Documents may also identify editors, who are considered types of authors but might have somewhat different roles during the writing process. The OGF does not have a specific policy on the number of authors or contributors who are listed in a document, but requires at least one corresponding author. The corresponding author must be indicated in the header or, preferably, in a Contributor section. The presence of additional authors or contributors is recognized as a valid approach to demonstrate widespread support for a document.

Document authors are named individuals (not organizations) who contributed substantially to a document. This might include writing some of all of the document, providing feedback or recommendations for the document, helping with examples, and so forth. Authors may be listed on the first page of an OGF document, followed by their principal affiliation. For example:

Charlie Catlett, Argonne National Laboratory

Alternatively, if there are a large number of authors, they may be indicated in an Authors section of the main text, or indicated as Authors in a Contributors section.

Corresponding authors are authors who take permanent responsibility for a document. Corresponding authors will be sought to process any error reports (as described in the next section). At least one corresponding author must be identified, but no more than three. This is to provide a simple means for readers to determine who has ongoing stewardship for a document. Corresponding authors are typically listed along with other authors on the first page of a document, and must be indicated as part of the Contributors or Authors section.

Contributors are individuals who assisted with a document's preparation, and who are recognized in the document. The distinction between an author and a contributor might not always be clear, so document editors and their associated groups are encouraged to form guidelines about who will be listed as an author, and who will be listed as a contributor. Generally, contributors are those who provided substantial assistance with a portion of a document, but without as much attention to the document as a whole. For example, a contributor might submit a graphic, or a use case, or an example, but did not work on the overall document wording and structuring.

The OGF prefers the use of full first names (not initials). Complete contact information for authors must be included in a later section in the main text (typically just before the complete copyright statement). Contributors are listed after authors, and do not need to have complete contact information. The nature of the contribution may be recognized.

8. Errata

Published OGF documents in the GFD series may have errors. Errors may be quite small (such as a spelling mistake), or quite large (such as a perceived shortcoming in a protocol). The OGF welcomes reports of document errata. Errata reports may be submitted via email to the OGF Editor, the document editor(s) or Area Directors, or via Web page submission at www.ogf.org.

Errata reports will be reviewed by the OGF Editor, then communicated to the document editor(s) for their recommendation concerning the errata disposition.

Errata reports should not be made anonymously, so that the editor(s) can have discussion with whoever reports the potential errors, to insure the nature of the error is understood.

Because every OGF document goes through a complete review process prior to publication, the errata process should not be used as a substitute for thorough document review prior to publication. For example, suggestions about useful additional sections, interesting references to related work, and criticism of the depth of examples used, would probably not result in changes to a published document. Instead, errata reports should be directed at either relatively minor editorial problems (spelling, punctuation, layout...) or at technical omissions or lack of clarity in a recommendation.

We reinforce that the editor or editors of a document, as described above, have ongoing permanent responsibility for the document. They are the first point of contact for any errata reports, and any errata reports should be confirmed with them before being acted upon.

We further note that the editors listed on the first page of a document are considered interchangeable for the purposes of the errata process -- that is, decisions communicated by one editor will be considered authoritative. This puts the responsibility on the document editors to communicate among themselves, as well as with group members and others as needed, to make decisions concerning their document.

Three types of fixes are envisioned:

- 1. Editorial fixes: updates to a document which are not widely announced or publicized. This category might include headers/footers, spelling, formatting, or simple wording changes for clarity.
- 2. Minor technical fixes: updates to a document which are not simply editorial. For example, an update to an XML schema or addition to a protocol, to bring the document into agreement with current practice. All such changes will be confirmed with the editors.
- 3. Major technical Fixes. Such fixes will often require additional technical review and result in an updated or replaced document. For example, if a proposed recommendation has elements that do not work in practice, or are otherwise found insufficient, there will need to be a decision whether to fix the document, or instead seek to write an updated document that will obsolete the old document. This decision will be made in cooperation with editors, the OGF Editor, the relevant Area Directors, and GFSG (others as needed).

The OGF Editor will oversee the errata process, but can ask editors, Area Directors, external reviewers, or others for assistance.

Editorial fixes should be reported within the first six months after a document is published by the OGF. Beyond that timeframe, the OGF Editor might reject changes, instead leaving the document in place as-is. The basis for the decision is whether minor changes justify the possibility of multiple different versions of a document being used by different people, who might have obtained the document from the OGF before it was updated.

Editorial fixes applied within the first month after publication will generally not be publicly announced to the OGF community. Any other changes to a document, whether major or minor, will be announced using the same mechanism as for a newly published document (i.e., email to the OGF community, posting to the OGF Web site, etc.).

Whenever a document is updated, even for minor editorial updates, the document header will be adjusted to reflect the date the document was updated. The date of the update should appear in the upper right side of the document's first page, beneath any prior date. For very minor updates, especially those within the first month after publication, no additional information needs to be added to the document. A publicly accessible archive of all old versions of the document is maintained, and accessible through the same means as current documents.

For all other updates, minor and major technical fixes, an errata report must be added to the document itself. Recommended practice is to put an errata report labeled as "Document Change History" on the first page of the document, directly under the copyright statement and before the abstract. A brief report on what was changed is sufficient, along with the date. If a more discussion is desired, the Document Change History can refer to a later section where the update is discussed in detail.

This errata process is not intended to be a mechanism for obsoleting prior versions of a document. If substantial updates are needed, a new document should be created and brought through the complete editorial review process. When a new document obsoletes an old document, that old document will be edited (header only) to indicate it has been obsoleted by a new document.

To summarize the decision path for the errata process,

- These guidelines apply to all types of published OGF documents described here (informational, experimental, community practice, and recommendation).
- If there are only minor spelling, typographical changes, etc., reports should go to the document editors, then to the OGF Editor for approval and implementation. If reports are delivered to other parties first, they should be passed to the OGF Editor who will make a reasonable effort to contact the editors of the document.
- If there are changes to the document that do not affect conformance (that is, the changes will not impact any implementations based on the document), the editors must approve the specific change, which will be put in place by the OGF Editor. Minimally, the WG/RG/CG chair and a relevant Area Director will be consulted before putting the change into place.
- If there are changes to the document that might affect conformance, they will be discussed among the editors, the OGF Editor, and others as appropriate including the WG/RG/CG chair, Area Director, and GFSG. A decision as to whether to update the document will be based on the length of time since the current document was published, the scope of the proposed change, and any other factors deemed appropriate by the OGF Editor. Changes deemed too substantial for this errata process will instead require submission of a new document, to obsolete the old.

Authority to accept or reject proposed changes to a document is placed first with the document's editors, who must make a timely decision concerning any errata reports (by responding in writing within 30 days). Email is typically used for this communication.

Authority on how to handle proposed changes approved by the document's editors rests with the OGF Editor, who will consult with group chairs, Area Directors and others at his/her discretion.

Conflict or disagreement concerning the handling of errata will be resolved following the same procedures as other disagreements within the OGF, as described below. Any reasonable effort will be made to accommodate errata reports, and to seek mutually agreeable resolution to the handling of document errata.

9. Writing the Security Considerations Section

Please refer to RFC 3552 [RESCORLA] for guidance on writing a security considerations section. This section is required in all documents, and should not just say "there are no security considerations." Quoting from the RFC:

"Most people speak of security as if it were a single monolithic property of a protocol or system, however, upon reflection, one realizes that it is clearly not true. Rather, security is a series of related but somewhat independent properties. Not all of these properties are required for every application.

We can loosely divide security goals into those related to protecting communications (COMMUNICATION SECURITY, also known as COMSEC) and those relating to protecting systems (ADMINISTRATIVE SECURITY or SYSTEM SECURITY). Since communications are carried out by systems and access to systems is through communications channels, these goals obviously interlock, but they can also be independently provided."

10. Using References, Inline Citations and Footnotes

The References section of an OGF document is intended to give the reader a complete set of pointers to documents that informed, guided, or otherwise had an important influence on the new document. Some document editors choose to separate references into one section for Normative References, and another for Informative References. The difference is described in [BUSH]. The OGF does not require using two types of references, but for Recommendation Track documents especially they may be useful.

Only permanent documents should be cited as references. Other items, such as Web pages, organizations or working groups, should be cited inline (sample: see the Open Grid Forum, http://www.ogf.org) or as a footnote. Hyperlinks to transient documents should be avoided (for example, a link to a current draft of a document should not be used, if the document is likely to be replaced in the near future). Instead, in-text citations can refer to work in progress. To refer to a current working draft, an inline citation might simply read, (the XYZ working group has a draft in progress to address this topic. It may be found via the WG's Web page at www.xyz-wg.org). The purpose of references is to provide a means for a future reader to access important documents that helped shape the current document. This purpose cannot be achieved by incomplete references or links to drafts or Web sites that will change or be removed by the time the reader tries to access them.

References should conform to a standard such as used by IEEE/ACM, MLA, Chicago or similar. Include an author, year, title, publisher, and place of publication. For online materials, also add a URL and an access date. References should be complete and in a consistent format. Elements of references typically include:

- Authors or editors, possibly corporate authors
- A year of publication (month & day if needed for an unambiguous reference)
- A location of publication. For electronic publishers, this should be the publisher's organizational location

- An item title (for example, the title of a standard document, or a journal article)

- A journal series or book title, if applicable
- Specific volume, issue and page numbers, if applicable

A canonical URL and access date

11. Document Numbering

The OGF document series uses a three-part designator as a shorthand name for each published document. The letters GFD are followed by the type of document (I, E, etc.), then a sequence number. It is the intent of the OGF that the sequence number have no gaps, so that the highest numbered document is an accurate count of the number of documents the OGF has released in the series.

Occasionally it may be desirable to pre-allocate a number in the sequence. This is done at the request of document authors, and is at the discretion of the OGF Editor and relevant Area Directors. Pre-allocation of a document series number may occur when the document number is needed for citation by another document, and publication of both documents is imminent (i.e., the documents are at or beyond "final call" within the group).

12. Variance and Appeals Processes

Because different documents have different needs, and also because the OGF is a relatively new organization, there may be times when the process described here does not fit the needs of a document, or the expectations of document authors/editors. The GFSG will work with the OGF chair and OGF Editor to determine whether at any point it is necessary to modify the process in general or vary the process for a particular case in order to make necessary progress.

If an individual wishes to appeal the decision of a working group or research group chair, the appeal should be made to the relevant Area Director. If this does not resolve the problem, an appeal should be made to the OGF Chair.

If an individual wishes to appeal the decision of the OGF Steering Group or OGF Editor, the appeal should be made to the OGF Chair.

If an individual wishes to appeal the decision of the OGF Chair, the appeal should be made to any Area Director. The Area Director will first attempt to resolve the problem via communication with the OGF Chair, and if necessary the Area Director may call for a vote of the GFSG and/or intervention by the OGF Board of Directors.

13. Security Considerations

This document includes a description of the requirement of a Security Considerations section for OGF documents. There are few security issues that are addressed directly, but the essence of the OGF document process described here is to define a formal yet flexible method for the Grid computing community to share information through the OGF document series. Among other things, this process is intended to enhance security by lessening ambiguity, increasing accountability, providing a thorough review process, and mandating structure and components to documents to make them clearer and more useful.

Glossary

Area Director: Individual with management responsibilities for a set of OGF groups

organized as an "area."

Author: The person(s) providing an initial version of the document and performing

major rewrite(s). Author(s) are listed on the first page of a OGF document.

Contributor: Someone who contributes text, concepts or expertise to the authorship of a document, but whose contributions are not substantial enough to be listed as

document, but whose contributions are not substantial enough to be listed as an author. Contributors are listed in section of the documents, after contact

information for authors and editors.

GFD: Grid Forum Document. GFDs are persistent.

GFSG: Open Grid Forum Steering Group, consisting of the OGF Chair, OGF Editor,

Area Directors, at large members, and other leaders from the OGF

community.

GWD: Grid Working Draft. GWDs are not persistent but exist as drafts for

discussion.

OGF: Open Grid Forum (see www.ogf.org)

OGF Chair: The OGF chair is responsible for overall management of the OGF, in

cooperation with the GFSG and Board of Directors

OGF Editor: The OGF Editor is responsible for management of the GFD process. The

OGF Editor role may consist of more than one person, if needed. The OGF Editor position is filled through the GFSG nominating process (NomCom).

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Intellectual Property Statement

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