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Grid support

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Grids represent a new approach to computing, using high-speed networks to let researchers collaborate and gain access to the computing and data resources they require. Grids should reduce two of the constraints on current research: the requirement for researchers to be physically close and the need for researchers to have either physical possession or prior allocation of all the computing resources they will need. Grids should therefore improve the efficiency of both researchers and computers.

This will only be achieved once researchers can simply use a Grid as a research tool, without having to think about the computers, networks and software that comprise it. In other words Grids and their users need to move from an ad hoc approach, where Grids are constructed as technology experiments, to a service approach where the behaviour of a Grid is predictable and defined, and its availability can be relied upon. This change is much more about people and processes than about technologies.

This document therefore identifies the major areas that need to be considered by any organisation that wishes to provide or use Grid technologies as a service, and gives some examples of how these challenges have been addressed. A companion document, Deploying Grids, covers the technology issues that are likely to be encountered in using Grid technologies.

Whether an organisation wishes to provide its own Grid services, or just to enable its own users to use Grid services provided by others, it is likely to have to develop policies and processes in four main areas:

- Defining Grid services, or understanding and complying with definitions of Grid services provided by others.
- Developing processes to ensure that network resources required by Grids are available, without disrupting other uses of the organisation's networks.
- Developing processes to ensure that computing, storage and workstation systems are available for Grid use, while retaining appropriate security for these and other applications.
- Supporting users of Grid services and their applications.

These discussions should include both Grid users and IT service providers, and should start as early as possible to give the greatest likelihood of success.

This guide reviews the types of Grid service that exist or are in development. It then considers each of the support areas in turn. A checklist of the areas likely to require action can be found in <u>Appendix A: Checklist of Support Activities</u> [1]. Examples of how organisations have approached these issues are in <u>Appendix B: Good Practice Ideas and Examples</u> [2].

Source URL: https://community-stg.jisc.ac.uk/library/janet-services-documentation/grid-support

Links

[1] http://community.ja.net/library/janet-services-documentation/appendix-checklist-support-activities [2] http://community.ja.net/library/janet-services-documentation/appendix-b-good-practice-ideas-andexamples