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Call for Community Testing: XIO in GT 3.2 Beta

What is a "Call for Community Testing"?

A Call for Community Testing is a mechanism to notify our users that new code is available for testing in the field. By exposing our code to a wider variety of usage scenarios earlier in the development process, we intend to catch bugs that historically have been found only after the final release.

Participating in a Testing Call is Easy!

1. *Optional:* Consider sending mail to testing@globus.org to let us know that you're helping out and describing what you intend to test
2. Install the software in a non-production environment: http://www-unix.globus.org/toolkit/3.2beta/download.html
3. Use the toolkit as you normally would, simulating production job runs, etc.
4. Report problems in our bugzilla: http://bugzilla.globus.org/globus/
5. *Optional:* Consider sending descriptions of your tests to testing@globus.org so that we might use them to build standard tests in the future

If you have any questions or comments about the process, feel free to contact Lisa Childers at childers@mcs.anl.gov.

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The testing period for this call: 16 February – 18 March 2004

About XIO

Globus XIO is an extensible input/output library for the Globus Toolkit. For GT 3.2 and beyond, the `globus_xio` library will provide all input and output functionality for the C code in the toolkit. In GT 3.2 Beta, Globus XIO completely replaces the `globus_io` library. However, backward compatibility for existing applications written to globus_io is maintained through an adaptive layer that mimics the old api. For more information about XIO, please see http://www-unix.globus.org/developer/xio/.

Reasons to focus on testing XIO

3.2 Beta marks the first appearance of Globus XIO in the toolkit. Because this component completely replaces Globus IO under the covers, every pre-WS library and application using globus_io will be affected. While we are testing our own technology thoroughly, we need the community's help to identify problems from a diversity of user perspectives.

Further, we know from earlier internal testing that the symptoms of XIO-related problems can be quite subtle. The XIO event model is a bit different than Globus IO's. Some of these differences prevent the Globus IO compatibility layer from perfectly mimicking the original Globus IO semantics. While we do not expect these differences to be a problem, further tests are warranted.

Components affected by XIO

1. Applications which make use of the Globus IO api
2. Pre-WS GRAM (formerly known as GT2 GRAM)
3. GridFTP
4. RFT (indirectly, via the GridFTP backend)
5. OGSI MMJFS (through GASS)
6. OGSI C Bindings

Environment/build parameters and other special conditions to test

1. Non-threaded builds
2. Threaded
3. Applications which only use the asynchronous apis
4. Applications which only use the blocking apis
5. Applications that use a mix of the two

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