1. Component Overview

The Trigger Service collects data from resources on the grid and, if administrator defined rules match, can perform various actions. An example use is to send email when queue length on a compute resource goes over a threshold value.

2. Feature summary

The Trigger Service has been rewritten and restructured for the most recent 4.2.1 version to allow for a number of improvements including the following new features:

- Individual triggers may be created without restarting the container.
- Once created, triggers can be enabled/activated or disabled/deactivated without restarting the container.
- The parameters which define the trigger can be edited individually, in real-time, without restarting the container.

Other Supported Features

- Uses the Aggregator Framework to monitor XML data for matching trigger conditions
- When a trigger condition matches, fires a customizable action: for example, sends email to an administrator.
- Monitored services are managed through service group-based registration API, allowing use of many of the same clients that can be used in the Index Service.

Deprecated Features

- Not applicable
3. Summary of Changes in WS MDS Trigger Service

No new changes in this release

4. Bug Fixes

- Not applicable.

5. Known Problems

The following problems and limitations are known to exist for WS MDS Trigger at the time of the 4.2.1 release:

5.1. Limitations

- None known

5.2. Outstanding bugs

- None known.

6. Technology dependencies

The Trigger Service depends on the following GT components:

- Java WS Core
- Aggregator Framework

The Trigger Service depends on the following 3rd party software:

- None

7. Tested platforms

Tested Platforms for WS MDS Trigger Service

- Linux on i386

Tested containers for WS MDS Trigger Service:

- Java WS Core container

8. Backward compatibility summary

The Trigger Service interfaces and underlying protocols are fully backward compatible with the GT 4.0.x version.
The Trigger Service interfaces and underlying protocols have changed since the GT 4.0 version. The Trigger Service will not interoperate with GT 4.0 servers or clients; however, trigger action programs written for previous versions of the Trigger Service should continue to work with this one.

9. Associated Standards

- WS-ResourceProperties (WSRF-RP)
- WS-ResourceLifetime (WSRF-RL)
- WS-ServiceGroup (WSRF-SG)
- WS-BaseFaults (WSRF-BF)
- WS-BaseNotification
- WS-Topics

10. For More Information

See Trigger Service for more information about this component.

Glossary

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Aggregator Framework A software framework used to build services that collect and aggregate data. WS MDS Services (such as the Index and Trigger services) are built on the Aggregator Framework, and are sometimes called Aggregator Services.