

GT 4.2.0 WS MDS WebMDS: User's Guide

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Introduction

WebMDS is a web-based interface for viewing formatted information about Grid resources. In the simplest instance, a web server administrator creates an HTML link that causes the WebMDS server to collect and format information that is presented to the user. Users can also use web forms to specify parameters that control what information is collected and how it's presented.

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Chapter 1. Visualizing the Index Service with WebMDS

Once you've deployed the WebMDS servlet, simply point your web browser at `http://your-tomcat-host:your-tomcat-port/webmds` and click on the link labelled "A list of resources registered to the local default index service". For more information, see Chapter 2, Graphical User Interface.

For more detailed information about changing the look of WebMDS and more advanced configuration, see the WebMDS Admin Guide.

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Chapter 2. Graphical User Interface

1. Overview of the purpose and functionality of the GUI

The WebMDS GUI is a web-based interface for browsing formatted XML data, such as the results of resource property queries on a grid service.

2. Command and options

WebMDS can be accessed using any web browser. In a default WebMDS installation, the URL `http://host-name:port/webmds` corresponds to the top-level WebMDS web page. This page includes a link to a WebMDS invocation that provides summary information (with links to detailed information) about a locally-running MDS Index server. It also contains a link to a page of sample web forms demonstrating other uses of WebMDS.

3. Customizing the web forms used to access WebMDS

The WebMDS servlet is located at `http://your-tomcat-host:your-tomcat-port/webmds/webmds`. It takes the following arguments:

Table 2.1. Form arguments used by WebMDS

<code>info</code>	The name of the XML source that will be used to collect the raw XML data. XML sources are defined by files in <code>\$GLOBUS_LOCATION/lib/webmds/conf</code> . This argument must be specified.
<code>xsl</code>	The name of the XML source that will provide the XSL transform. XML sources are defined by files in <code>\$GLOBUS_LOCATION/lib/webmds/conf</code> . If this argument is not specified, the WebMDS servlet will display raw, untransformed XML.
<code>xml-Source.info_name.param.source_specific_options</code>	Any additional options recognized by the <code>info_name</code> XML source (<code>info_name</code> must be the value of the <code>info</code> argument for this request). Source-specific options are discussed in the next section.
<code>xml-Source.xsl_name.param.source_specific_options</code>	Any additional options recognized by the <code>xsl_name</code> XML source (<code>xsl_name</code> must be the value of the <code>xsl</code> argument for this request). Source-specific options are discussed in the next section.

4. Limitations

Error conditions (such as typographical errors in resource property names) are presented as stack traces, rather than user-friendly error messages.

Chapter 3. Troubleshooting

The commonly-used WebMDS plugins do resource property queries; the Globus Toolkit `wsrf-query` can be used to determine whether the desired information is available directly from the resource.

For a list of common errors in GT, see [Error Codes](#).

For debugging information, see [Chapter 5, Debugging](#)

1. Error Messages

Error handling in WebMDS is currently done by throwing exceptions, which are displayed by Tomcat as stack traces.

Table 3.1. WS MDS Trigger Service Error Messages

Error Code	Definition
<code>java.net.ConnectException: Connection refused</code>	If you attempt to use WebMDS to collect information from a service that is not running, you will see a stack trace that includes the following: <pre>org.globus.mds.webmds.xmlSources.resourceProperties.ResourcePropertySourceException: java.net.ConnectException: Connection refused</pre>
<code>faultString: org.globus.common.ChainedIOException: Authentication failed [Caused by: Failure unspecified at GSS-API level [Caused by: Unknown CA]]</code>	When WebMDS sends resource property queries to a secure WSRF service instance (such as an WS MDS Index Server), the service instance must have a certificate authority that issued the certificate used by the WSRF service instance. If the WebMDS server does not trust the certificate authority, the queries will produce a stack trace that includes this message.
WebMDS connections to secure Index Servers (or other secure WSRF servers) just hang	If the JVM used by Tomcat is configured to use a blocking random-number source, WebMDS connections to secure WSRF servers can hang. This is the default configuration for many installations.

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