GT 4.2.1 WS MDS WebMDS: User's Guide
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.
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://hostname: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>
<thead>
<tr>
<th>Table 2.1. Form arguments used by WebMDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>info</td>
</tr>
<tr>
<td>xsl</td>
</tr>
<tr>
<td>xml-Source.info_name.param.source_specific_options</td>
</tr>
<tr>
<td>xml-Source.xsl_name.param.source_specific_options</td>
</tr>
</tbody>
</table>

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

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