

Using REST API in Java

Introduction

From Elixir Repertoire Server 7.x onwards, all resources (*.rml, *.ds, *.job) are accessible using the REST API. When accessing a resource for the first time, you are prompted to enter a valid username and password. This ensures that all resources are secure and not easily accessible from the web.

REST Calls in Repertoire Server

Q: How can I call a resource (i.e. rml/ds/pml) directly to render a report / load data and show a dashboard?

A: In order to issue direct REST calls from Java, you will need to know how to create a HTTP Request to be sent to Repertoire Server.

Creating HTTP Request in Java

A suitable package to use in Java for easy creation of a HTTP Request is:

<http://hc.apache.org/httpclient-3.x/index.html>

Once you make the necessary packages available to HTTPClient, you can then construct HTTP Requests.

For example:

```
...  
  
HttpClient client = new HttpClient();  
PostMethod post = new PostMethod(url+ "login.html");  
post.addParameter("username",username);  
post.addParameter("password",password);  
int ret = client.executeMethod(post);  
if (ret==200 || ret==302)  
  
...
```

Refer to the official documentation of the HTTPClient Package for further usage details.

Adding Credentials on HTTP Requests

Since all resources within the Repertoire Server are protected, a set of credentials needs to be sent together with the HTTP Request. This can be done by inserting the credentials directly into the HTTP Header Information.

```
...
HttpClient client = new HttpClient();
Credentials defaultCreds = new UsernamePasswordCredentials("admin","sa");
client.getState().setCredentials(new AuthScope(host,port,AuthScope.ANY_REALM),
defaultCreds);
HttpClientParams params = client.getParams();
params.setCredentialCharset(CredentialCharset);
params.setAuthenticationPreemptive(true);
...
```

In this approach, a single HTTP REST call will be able to gain access to the Repertoire Server Resources to render a report / load data and load a dashboard.

[Here is a sample Java source file](#) to illustrate the above approach.