

# JMeterTesting

-- Main.FabTreb - 15 Jun 2006

Tech env:

Shibboleth 1.3

JMeter 2.1 with java 1.5

You'll find below a JMeter *Workbench* element containing a *Simple Controller* that simulates a login via Shibboleth.

We had to create this after migrating the authentication strategy of several applications from basic auth to Shibboleth.

You can save it in a .jmx file and merge it into your test plans via the JMeter interface.

You will probably have to update the *HTTP Request* urls to match your environment as well as the usr/pwd for authentication at the Identity Provider.

The hosts and ports are configured via the *CSV Data Set Config* element and a file config.txt that you'll need to create.

Here's the format of the config.txt file:

targetResourceHost,targetResourcePort,idpHost,idpPort,spAssertionConsumerHost,spAssertionConsumerPort,targetRelativeUri

This can be used to test the Shibboleth process or to replace basic *HTTP Authorization Managers* in your test plans.

Note that it must be copied into a *Thread Group* element as the first child.

Please feel free to correct/improve this post.

```
<jmeterTestPlan version="1.1" properties="1.7">
  <hashTree>
    <org.apache.jmeter.testelement.WorkBench>
      <stringProp name="TestElement.gui_class">org.apache.jmeter.control.gui.WorkBenchGui<
/stringProp>
      <stringProp name="TestElement.test_class">org.apache.jmeter.testelement.WorkBench</stringProp>
      <stringProp name="TestElement.name">WorkBench</stringProp>
      <boolProp name="TestElement.enabled">true</boolProp>
    </org.apache.jmeter.testelement.WorkBench>
    <hashTree>
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        <stringProp name="TestElement.gui_class">org.apache.jmeter.control.gui.LogicControllerGui<
/stringProp>
        <stringProp name="TestElement.test_class">org.apache.jmeter.control.GenericController<
/stringProp>
        <stringProp name="TestElement.name">Shibboleth</stringProp>
        <boolProp name="TestElement.enabled">true</boolProp>
      </GenericController>
      <hashTree>
        <CSVDataSet>
          <stringProp name="delimiter">,</stringProp>
          <stringProp name="TestElement.gui_class">org.apache.jmeter.testbeans.gui.TestBeanGUI<
/stringProp>
          <stringProp name="TestElement.test_class">org.apache.jmeter.config.CSVDataSet<
/stringProp>
          <stringProp name="variableNames">targetResourceHost,targetResourcePort,idpHost,idpPort,
spAcsHost,spAcsPort,targetRelativeUri</stringProp>

          <stringProp name="TestElement.name">Shibboleth Config</stringProp>
          <boolProp name="TestElement.enabled">true</boolProp>
          <stringProp name="filename">config.txt</stringProp>
        </CSVDataSet>
      </hashTree>
      <org.apache.jmeter.config.Arguments>
        <stringProp name="TestElement.gui_class">org.apache.jmeter.config.gui.ArgumentsPanel<
/stringProp>
        <stringProp name="TestElement.test_class">org.apache.jmeter.config.Arguments<
/stringProp>
        <collectionProp name="Arguments.arguments">
          <elementProp name="SpSecureCxtExists" elementType="org.apache.jmeter.config.
Argument">
            <stringProp name="Argument.metadata">=</stringProp>
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        <stringProp name="Argument.value">false</stringProp>
        <stringProp name="Argument.name">SpSecureCxtExists</stringProp>
    </elementProp>
    <elementProp name="SAMLResponse" elementType="org.apache.jmeter.config.Argument"
>
        <stringProp name="Argument.metadata">=</stringProp>
        <stringProp name="Argument.value">SAMLResponseEmpty</stringProp>
        <stringProp name="Argument.name">SAMLResponse</stringProp>
    </elementProp>
</collectionProp>
<stringProp name="TestElement.name">Shibboleth Temp Variables</stringProp>
<boolProp name="TestElement.enabled">true</boolProp>
</org.apache.jmeter.config.Arguments>
<hashTree/>
<IfController>
    <stringProp name="IfController.condition"> "${SpSecureCxtExists}" == "false" <
/stringProp>
    <stringProp name="TestElement.gui_class">org.apache.jmeter.control.gui.
IfControllerPanel</stringProp>
    <stringProp name="TestElement.test_class">org.apache.jmeter.control.IfController<
/stringProp>
    <stringProp name="TestElement.name">If Not SpSecureCxtExists </stringProp>
    <boolProp name="TestElement.enabled">true</boolProp>
</IfController>
<hashTree>
    <HTTPSampler>
        <stringProp name="HTTPSampler.path">/servlet/Authentication.AuthFedLogin<
/stringProp>
        <stringProp name="TestElement.test_class">org.apache.jmeter.protocol.http.
sampler.HTTPSampler</stringProp>
        <stringProp name="HTTPSampler.method">GET</stringProp>
        <boolProp name="HTTPSampler.use_keepalive">true</boolProp>
        <stringProp name="HTTPSampler.protocol">http</stringProp>
        <boolProp name="TestElement.enabled">true</boolProp>
        <boolProp name="HTTPSampler.follow_redirects">true</boolProp>
        <stringProp name="HTTPSampler.port">${targetResourcePort}</stringProp>
        <elementProp name="HTTPSampler.Arguments" elementType="org.apache.jmeter.config.
Arguments">
            <stringProp name="TestElement.gui_class">org.apache.jmeter.protocol.http.gui.
HTTPArgumentsPanel</stringProp>
            <stringProp name="TestElement.test_class">org.apache.jmeter.config.Arguments<
/stringProp>
            <collectionProp name="Arguments.arguments">
                <elementProp name="" elementType="org.apache.jmeter.protocol.http.util.
HTTPArgument">
                    <stringProp name="Argument.metadata">=</stringProp>
                    <stringProp name="Argument.value"
>http://${targetResourceHost}:${targetResourcePort}${targetUrl}</stringProp>
                    <boolProp name="HTTPArgument.use_equals">true</boolProp>
                    <stringProp name="Argument.name">nextUrl</stringProp>
                    <boolProp name="HTTPArgument.always_encode">true</boolProp>
                </elementProp>
            </collectionProp>
            <stringProp name="TestElement.name">Argument List</stringProp>
            <boolProp name="TestElement.enabled">true</boolProp>
        </elementProp>
        <stringProp name="HTTPSampler.mimetype"></stringProp>
        <stringProp name="TestElement.gui_class">org.apache.jmeter.protocol.http.
control.gui.HttpTestSampleGui</stringProp>
        <stringProp name="HTTPSampler.FILE_FIELD"></stringProp>
        <stringProp name="TestElement.name">/servlet/Authentication.AuthFedLogin<
/stringProp>
        <stringProp name="HTTPSampler.monitor">>false</stringProp>
        <stringProp name="HTTPSampler.domain">${targetResourceHost}</stringProp>
        <stringProp name="HTTPSampler.FILE_NAME"></stringProp>
        <boolProp name="HTTPSampler.auto_redirects">>false</boolProp>
    </HTTPSampler>
<hashTree>

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        <RegexExtractor>
          <stringProp name="RegexExtractor.default">false</stringProp>
          <stringProp name="TestElement.gui_class">org.apache.jmeter.extractor.gui.
RegexExtractorGui</stringProp>
          <stringProp name="TestElement.test_class">org.apache.jmeter.extractor.
RegexExtractor</stringProp>
          <stringProp name="RegexExtractor.regex">(${targetUrl})</stringProp>
          <stringProp name="TestElement.name">SpSecureCxtExists</stringProp>
          <boolProp name="TestElement.enabled">true</boolProp>
          <stringProp name="RegexExtractor.useHeaders">>false</stringProp>
          <stringProp name="RegexExtractor.match_number">1</stringProp>
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        </RegexExtractor>
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      </hashTree>
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"SAMLResponseEmpty"</stringProp>
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IfControllerPanel</stringProp>
        <stringProp name="TestElement.test_class">org.apache.jmeter.control.
IfController</stringProp>
        <stringProp name="TestElement.name">If Not IdpSecureCxtExists </stringProp>
        <boolProp name="TestElement.enabled">true</boolProp>
      </IfController>
      <hashTree>
        <HTTPSampler>
          <stringProp name="HTTPSampler.path">/idp/authenticate</stringProp>
          <stringProp name="TestElement.test_class">org.apache.jmeter.protocol.http.
sampler.HTTPSampler</stringProp>
          <stringProp name="HTTPSampler.method">POST</stringProp>
          <boolProp name="HTTPSampler.use_keepalive">true</boolProp>
          <stringProp name="HTTPSampler.protocol">https</stringProp>
          <boolProp name="TestElement.enabled">true</boolProp>
          <boolProp name="HTTPSampler.follow_redirects">>false</boolProp>
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config.Arguments">
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http.gui.HTTPArgumentsPanel</stringProp>
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Arguments</stringProp>
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http.util.HTTPArgument">
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                <stringProp name="Argument.value">testA</stringProp>
                <boolProp name="HTTPArgument.use_equals">true</boolProp>
                <stringProp name="Argument.name">j_username</stringProp>
                <stringProp name="HTTPArgument.encoded_name">j_username<
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                <stringProp name="HTTPArgument.always_encode">true<
/stringProp>
                <stringProp name="HTTPArgument.encoded_value">DieuxM1<
/stringProp>
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http.util.HTTPArgument">
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                <stringProp name="Argument.name">j_password</stringProp>
                <stringProp name="HTTPArgument.encoded_name">j_password<
/stringProp>
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/stringProp>
                <stringProp name="HTTPArgument.encoded_value">aaaaaa<

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/stringProp>
    </elementProp>
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http.util.HTTPArgument">
        <stringProp name="Argument.metadata">=</stringProp>
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        <stringProp name="HTTPArgument.always_encode">true<
/stringProp>
        <stringProp name="HTTPArgument.encoded_value">Login<
/stringProp>
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    </collectionProp>
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<stringProp name="TestElement.gui_class">org.apache.jmeter.protocol.http.
control.gui.HttpTestSampleGui</stringProp>
    <stringProp name="HTTPSampler.FILE_FIELD"></stringProp>
    <stringProp name="TestElement.name">/idp/authenticate</stringProp>
    <stringProp name="HTTPSampler.monitor">false</stringProp>
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    <stringProp name="HTTPSampler.FILE_NAME"></stringProp>
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    <stringProp name="HTTPSampler.method">GET</stringProp>
    <boolProp name="HTTPSampler.use_keepalive">true</boolProp>
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    <boolProp name="TestElement.enabled">true</boolProp>
    <boolProp name="HTTPSampler.follow_redirects">false</boolProp>
    <stringProp name="HTTPSampler.port">${idpPort}</stringProp>
    <elementProp name="HTTPSampler.Arguments" elementType="org.apache.jmeter.
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http.gui.HTTPArgumentsPanel</stringProp>
        <stringProp name="TestElement.test_class">org.apache.jmeter.config.
Arguments</stringProp>
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                <boolProp name="HTTPArgument.use_equals">true</boolProp>
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                <stringProp name="HTTPArgument.always_encode">true<
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                <stringProp name="HTTPArgument.encoded_name">target<
/stringProp>
                <stringProp name="HTTPArgument.encoded_value">cookie<
/stringProp>
            </elementProp>
            <elementProp name="" elementType="org.apache.jmeter.protocol.
http.util.HTTPArgument">
                <stringProp name="Argument.metadata">=</stringProp>
                <stringProp name="Argument.value">
>http://${spAcsHost}:${spAcsPort}/Shibboleth.sso/SAML/POST</stringProp>
                <boolProp name="HTTPArgument.use_equals">true</boolProp>
                <stringProp name="Argument.name">shire</stringProp>

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        </hashTree>
        <HTTPSampler>
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sampler.HTTPSampler</stringProp>
            <stringProp name="HTTPSampler.method">POST</stringProp>
            <boolProp name="HTTPSampler.use_keepalive">true</boolProp>
            <stringProp name="HTTPSampler.protocol">http</stringProp>
            <boolProp name="TestElement.enabled">true</boolProp>
            <boolProp name="HTTPSampler.follow_redirects">true</boolProp>
            <stringProp name="HTTPSampler.port">${spAcsPort}</stringProp>
            <elementProp name="HTTPSampler.Arguments" elementType="org.apache.jmeter.config.
Arguments">
                <stringProp name="TestElement.gui_class">org.apache.jmeter.protocol.http.gui.
HTTPArgumentsPanel</stringProp>
                <stringProp name="TestElement.test_class">org.apache.jmeter.config.Arguments<
/stringProp>
                <collectionProp name="Arguments.arguments">
                    <elementProp name="" elementType="org.apache.jmeter.protocol.http.util.
HTTPArgument">
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                        <stringProp name="Argument.value">cookie</stringProp>
                        <boolProp name="HTTPArgument.use_equals">true</boolProp>
                        <stringProp name="Argument.name">TARGET</stringProp>
                        <boolProp name="HTTPArgument.always_encode">true</boolProp>
                        <stringProp name="HTTPArgument.encoded_name">TARGET<
/stringProp>
                        <stringProp name="HTTPArgument.encoded_value">cookie<
/stringProp>
                    </elementProp>
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HTTPArgument">
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                        <stringProp name="Argument.value">${SAMLResponse}</stringProp>
                        <boolProp name="HTTPArgument.use_equals">true</boolProp>
                        <stringProp name="Argument.name">SAMLResponse</stringProp>
                        <boolProp name="HTTPArgument.always_encode">true</boolProp>
                    </elementProp>
                </collectionProp>
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                <boolProp name="TestElement.enabled">true</boolProp>
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            <stringProp name="HTTPSampler.mimetype"></stringProp>
            <stringProp name="TestElement.gui_class">org.apache.jmeter.protocol.http.
control.gui.HttpTestSampleGui</stringProp>
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            <stringProp name="TestElement.name">/Shibboleth.sso/SAML/POST</stringProp>
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            <stringProp name="HTTPSampler.domain">${spAcsHost}</stringProp>
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</hashTree>
</hashTree>
</hashTree>
</jmeterTestPlan>

```