Introduction

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1. Introduction

Anteater is a testing framework designed around Ant, from the Apache Jakarta Project. It provides an easy way to write tests for checking the functionality of a Web application or of an XML Web service.

The type of tests you can write using Anteater are:

- Send a HTTP/HTTPS request to a Web server. When the response comes back, test that it meets certain criteria. You can check for HTTP headers and response codes, and validate the response body with regexp, XPath, Relax NG, or contentEquals tests, plus some binary formats. New tests can be easily added.
- Listen for incoming HTTP requests at an given URL on the local machine. When a request comes on that URL, you can check its parameters and/or content, and send a response accordingly.

The ability to wait for incoming HTTP messages is something unique to Anteater, which makes it especially useful when building tests for applications that use high level SOAP-based communication, like ebXML or BizTalk. Applications written using these protocols usually receive SOAP messages, and send back a meaningless response. It is only later when they inform the client, using an HTTP request on the client, about the results of the processing. These are the so-called *asynchronous SOAP messages*, and are the heart of many high-level protocols based on SOAP or XML messages.

Here is a simple example written using Anteater:

```
<target name="simple">
  <soapRequest description="Post a simple SOAP request"
               href="http://services.xmethods.net:80/soap"
               content="test/requests/get-quote">
    <namespace prefix="soap" uri="http://schemas.xmlsoap.org/soap/envelope/"/>
    <namespace prefix="n" uri="urn:xmethods-delayed-quotes"/>
    <match>
      <responseCode value="200"/>
      <xpath select="/soap:Envelope/soap:Body/n:getQuoteResponse/Result"/>
    </match>
  </soapRequest>
</target>
```

Anteater provides XML and text logging support, and the ability to render the logs into HTML reports.