

ADAMS

Advanced **D**ata mining **A**nd Machine learning **S**ystem

Module: adams-groovy-webservice



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Chapter 1

Introduction

The *adams-groovy-webservice* module is a very light-weight module, which allows you to query webservices using the Groovy[3] scripting language. It is merely aimed at providing client-side support, not for implementing the server-side of webservices. If you want to also implement the server-side, you should take a look at the *adams-webservice* module.

As underlying library it uses the *groovy-wslite*[2] library.

Chapter 2

Flow

In order to use webservices, you can simply use the existing Groovy actors that are available from the *adams-groovy* module. In these actors, you need to import the groovy-wslite classes as follows:

```
import wslite.soap.*
```

And in the `doExecute` method, you instantiate the client and query the web-service.

Below is an example of querying a webservice for US holidays¹, asking for the date of *Mother's Day* in 2016:

```
def client = new SOAPClient('http://www.holidaywebservice.com/Holidays/US/Dates/USHolidayDates.asmx')
def response = client.send(SOAPAction:'http://www.27seconds.com/Holidays/US/Dates/GetMothersDay') {
  body {
    GetMothersDay('xmlns':'http://www.27seconds.com/Holidays/US/Dates/') {
      year(2016)
    }
  }
}
```

This example is also used in the example flow *adams-groovy-webservice_usholidays.flow*.

¹<http://www.holidaywebservice.com/Holidays/US/Dates/USHolidayDates.asmx>

Bibliography

- [1] *ADAMS* – Advanced Data mining and Machine learning System
<https://adams.cms.waikato.ac.nz/>
- [2] *groovy-wslite* – Library for Groovy that provides no-frills SOAP and REST
webservice clients.
<https://github.com/jwagenleitner/groovy-wslite>
- [3] *Groovy* – An agile dynamic language for the Java Platform
<http://www.groovy-lang.org/>