# ADAMS

**A**dvanced **D**ata mining **A**nd **M**achine learning **S**ystem

Module: adams-twitter



Peter Reutemann

December 24, 2014

# Contents

# List of Figures

# Chapter 1

# Introduction

ADAMS is a great environment for processing data streams. Using the excellent Java library *twitter4j* [2], you can tap into Twitter's stream of tweets or query for tweets that meet certain criteria.

# Chapter 2

# Flow

The flow comes with a range of actors for accessing the Twitter API.
The following standalone actors are available:

- *TwitterConnection* - here you set up your parameters, like consumer key/secret. It uses the globally defined preferences as default parameters (see chapter 3).

The following sources are available:

- *TwitterListener* - listens to the *sample* stream of tweets.[1]
- *TwitterQuery* - retrieves tweets that match your query.[2]

The following transformers are available:

- *TwitterConverter* - turns the tweets into a different format using the specified converter (e.g., text or spreadsheets).
- *TwitterFilter* - allows you to filter the stream of tweets coming through using a filter expression. Useful when generating several datasets with different subsets (in sub-branches) from the same stream of tweets.[3]

The following sinks are available:

- *Tweet* - updates your status with the incoming string.

The following boolean conditions are available (can be used in *IfThenElse* or *Switch* control actors):

- *TwitterFilterExpression* - allows to perform checks on the status object passing through.[4]

---

[1]adams-twitter_listener1.flow, adams-twitter_listener2.flow
[2]adams-twitter_query1.flow, adams-twitter_query2.flow, adams-twitter_query3.flow
[3]adams-twitter_query4.flow
[4]adams-twitter_query4.flow, adams-twitter_query5.flow

# Chapter 3

# Preferences

The *TwitterConnection* standalone actor uses the globally defined twitter setup for its default settings. If you don't want to hand out your keys and secrets, you can simply configure your keys/secrets in the global settings and just use the default *TwitterConnection* configuration. Figure 3.1 shows the preferences tab for Twitter.
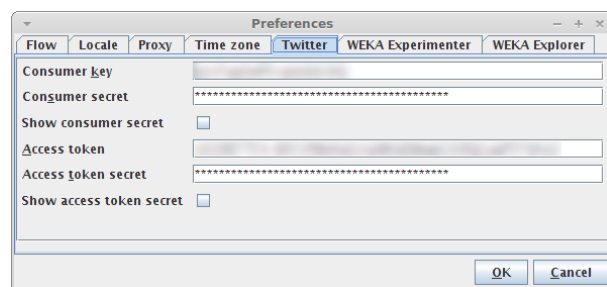


Figure 3.1: Twitter preferences

# Bibliography

[1] *ADAMS* – Advanced Data mining and Machine learning System
https://adams.cms.waikato.ac.nz/

[2] *twitter4j* – An unofficial Java library for the Twitter API
http://twitter4j.org/