

# ADAMS

Advanced Data mining And Machine learning System

Module: adams-excel



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# Chapter 1

## Introduction

The *excel* module extends the spreadsheet capabilities of ADAMS by read and write support for Microsoft Excel files. This is possible thanks to the Apache POI library [2] for reading Microsoft Office documents.



## Chapter 2

# Flow

The additional read and write support is immediately available in the *SpreadSheetReader* and *SpreadSheetWriter* actors. Figures 2.1 and 2.2 display a flow<sup>1</sup> and its associated output that loads multiple sheets from a MS Excel file.

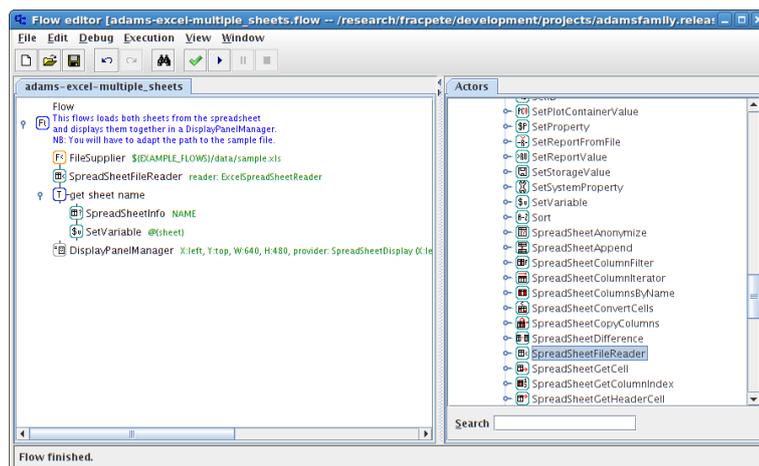
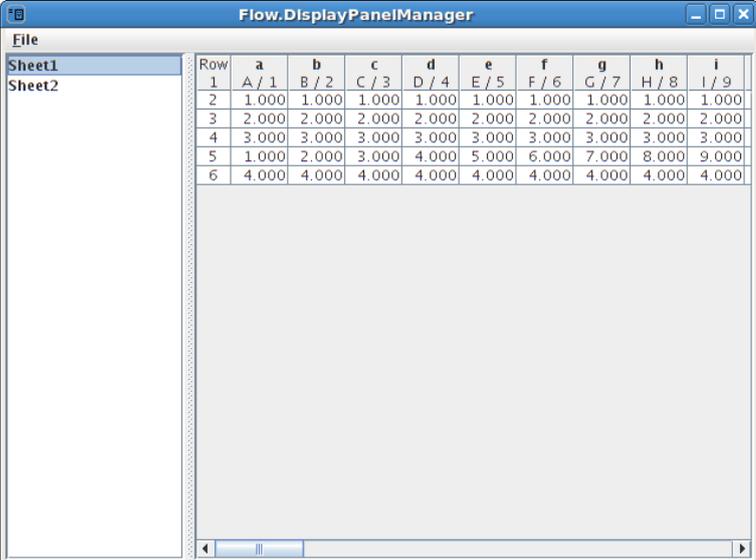


Figure 2.1: Flow for loading multiple sheets of a MS Excel file.

<sup>1</sup>adams-excel-multiple\_sheets.flow



The screenshot shows a window titled "Flow.DisplayPanelManager" with a menu bar containing "File". Below the menu bar, there are two sheet tabs: "Sheet1" (selected) and "Sheet2". The main area displays a spreadsheet grid with the following data:

Row	a	b	c	d	e	f	g	h	i
1	A / 1	B / 2	C / 3	D / 4	E / 5	F / 6	G / 7	H / 8	I / 9
2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000
4	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000
5	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
6	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000

Figure 2.2: The worksheets loaded from the MS Excel file.

# Chapter 3

## Tools

The *Spreadsheet file viewer* automatically picks up the new file format and allows the user to load MS Excel files. Figure 3.1 shows a screenshot of the viewer with a MS Excel file loaded.

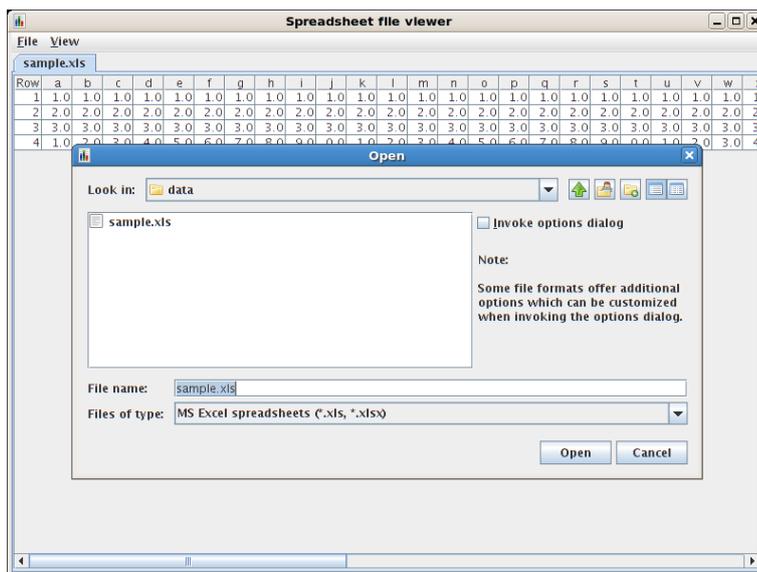


Figure 3.1: Viewer for spreadsheet files.



# Bibliography

- [1] *ADAMS* – Advanced Data mining and Machine learning System  
<https://adams.cms.waikato.ac.nz/>
- [2] *Apache POI* – the Java API for Microsoft Documents  
<http://poi.apache.org/>