

ADAMS

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

Module: adams-access



Peter Reutemann

January 7, 2021

©2015



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato



Except where otherwise noted, this work is licensed under
<http://creativecommons.org/licenses/by-sa/4.0/>

Contents

1	Introduction	7
2	Flow	9
3	Tools	11
	Bibliography	13

List of Figures

2.1	Flow for loading table from MS Access database.	9
2.2	The table loaded from MS Access database.	10
3.1	Viewer for spreadsheet files.	11

Chapter 1

Introduction

The *access* module extends the spreadsheet capabilities of ADAMS by read and write support for Microsoft Access databases. This is possible thanks to the Jackcess library [2].

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 flow¹ and its associated output that loads a table from a MS Access database.

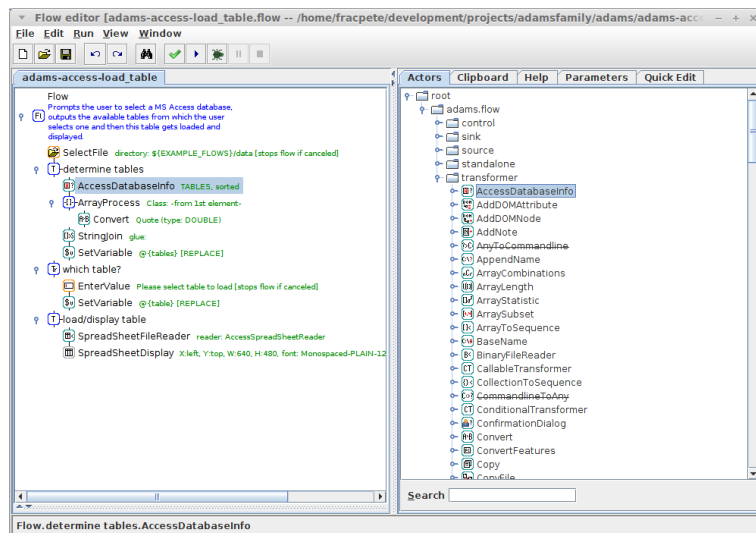
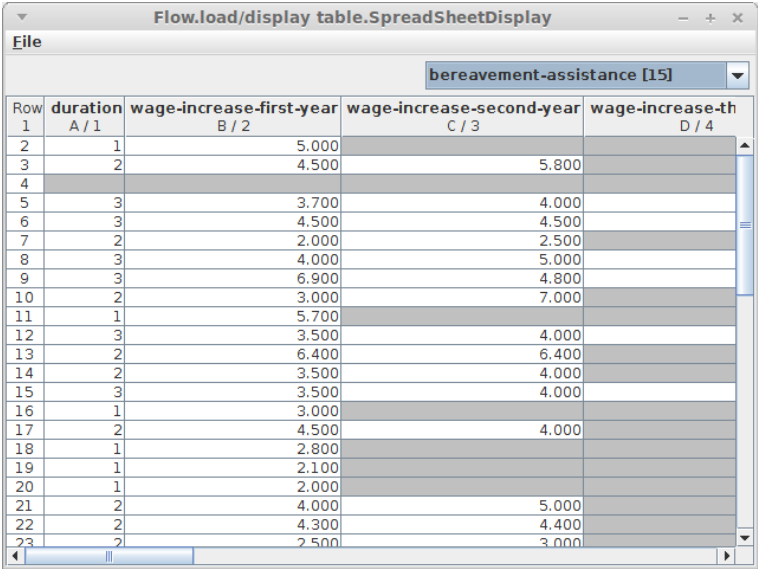


Figure 2.1: Flow for loading table from MS Access database.

¹adams-access-load_table.flow



The screenshot shows a spreadsheet application window titled "Flow.load/display table.SpreadSheetDisplay". The window has a menu bar with "File" and a dropdown menu showing "bereavement-assistance [15]". The spreadsheet contains a table with 5 columns: "duration" (A / 1), "wage-increase-first-year" (B / 2), "wage-increase-second-year" (C / 3), and "wage-increase-th" (D / 4). The table has 23 rows of data, with the first row being a header. The data is as follows:

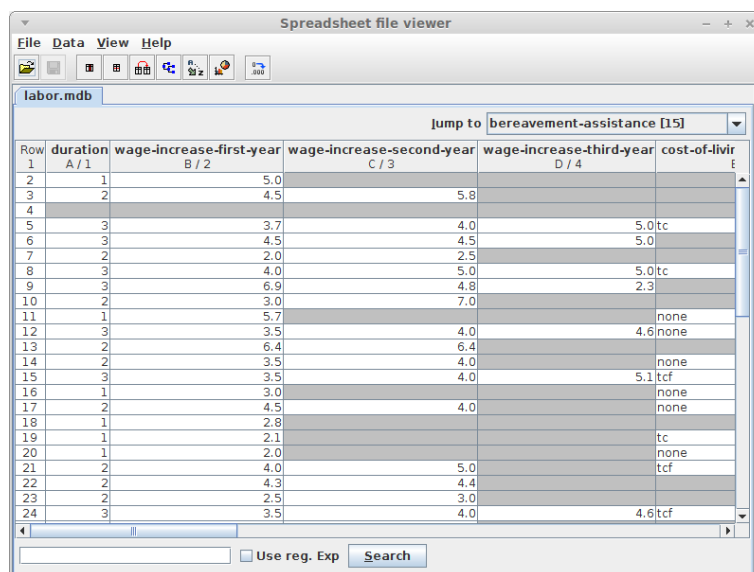
Row	duration A / 1	wage-increase-first-year B / 2	wage-increase-second-year C / 3	wage-increase-th D / 4
1				
2	1	5.000		
3	2	4.500	5.800	
4				
5	3	3.700	4.000	
6	3	4.500	4.500	
7	2	2.000	2.500	
8	3	4.000	5.000	
9	3	6.900	4.800	
10	2	3.000	7.000	
11	1	5.700		
12	3	3.500	4.000	
13	2	6.400	6.400	
14	2	3.500	4.000	
15	3	3.500	4.000	
16	1	3.000		
17	2	4.500	4.000	
18	1	2.800		
19	1	2.100		
20	1	2.000		
21	2	4.000	5.000	
22	2	4.300	4.400	
23	2	2.500	3.000	

Figure 2.2: The table loaded from MS Access database.

Chapter 3

Tools

The *Spreadsheet file viewer* automatically picks up the new file format and allows the user to load tables from MS Access databases. Figure 3.1 shows a screenshot of the viewer with a MS Access table loaded (**NB:** you need to tick the *Edit options* checkbox in the open dialog and enter the name of the table to load).



The screenshot shows a window titled "Spreadsheet file viewer" with a menu bar (File, Data, View, Help) and a toolbar. Below the toolbar, a dropdown menu shows "labor.mdb". A "jump to" dropdown menu shows "bereavement-assistance [15]". The main area displays a table with the following data:

Row	duration A / 1	wage-increase-first-year B / 2	wage-increase-second-year C / 3	wage-increase-third-year D / 4	cost-of-livir E
1					
2	1	5.0			
3	2	4.5	5.8		
4					
5	3	3.7	4.0	5.0	tc
6	3	4.5	4.5	5.0	
7	2	2.0	2.5		
8	3	4.0	5.0	5.0	tc
9	3	6.9	4.8	2.3	
10	2	3.0	7.0		
11	1	5.7			none
12	3	3.5	4.0	4.6	none
13	2	6.4	6.4		
14	2	3.5	4.0		none
15	3	3.5	4.0	5.1	tcf
16	1	3.0			none
17	2	4.5	4.0		none
18	1	2.8			
19	1	2.1			tc
20	1	2.0			none
21	2	4.0	5.0		tcf
22	2	4.3	4.4		
23	2	2.5	3.0		
24	3	3.5	4.0	4.6	tcf

At the bottom, there is a search bar with the text "Use reg. Exp" and a "Search" button.

Figure 3.1: Viewer for spreadsheet files.

Bibliography

- [1] *ADAMS* – Advanced Data mining and Machine learning System
<https://adams.cms.waikato.ac.nz/>
- [2] *Jackcess* – pure Java library for reading/writing MS Access databases
<http://jackcess.sourceforge.net/>