

# ADAMS

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

Module: adams-access



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December 22, 2015

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# 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 flow<sup>1</sup> and its associated output that loads a table from a MS Access database.

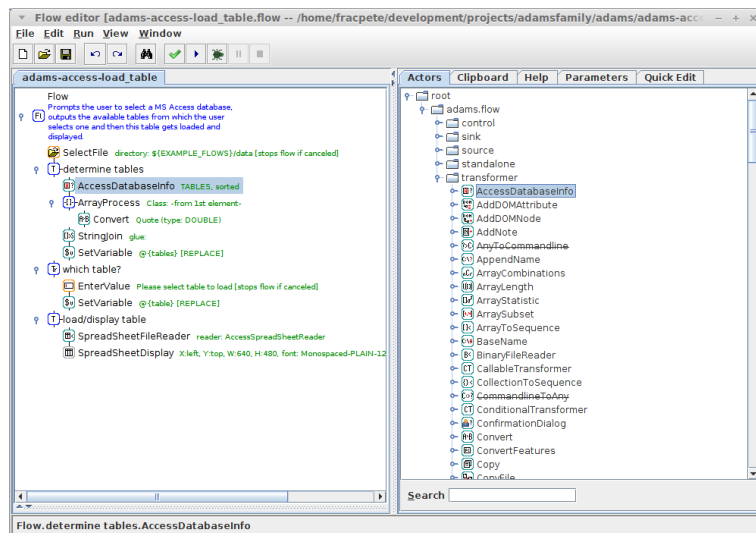
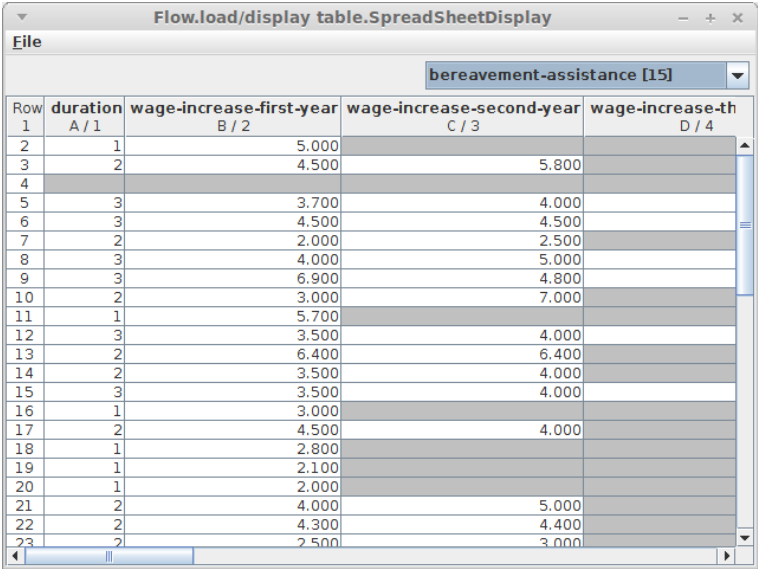


Figure 2.1: Flow for loading table from MS Access database.

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<sup>1</sup>adams-access-load\_table.flow



The screenshot shows a window titled "Flow.load/display table.SpreadSheetDisplay" with a menu bar containing "File". Below the menu bar is a dropdown menu showing "bereavement-assistance [15]". The main area displays a table with the following data:

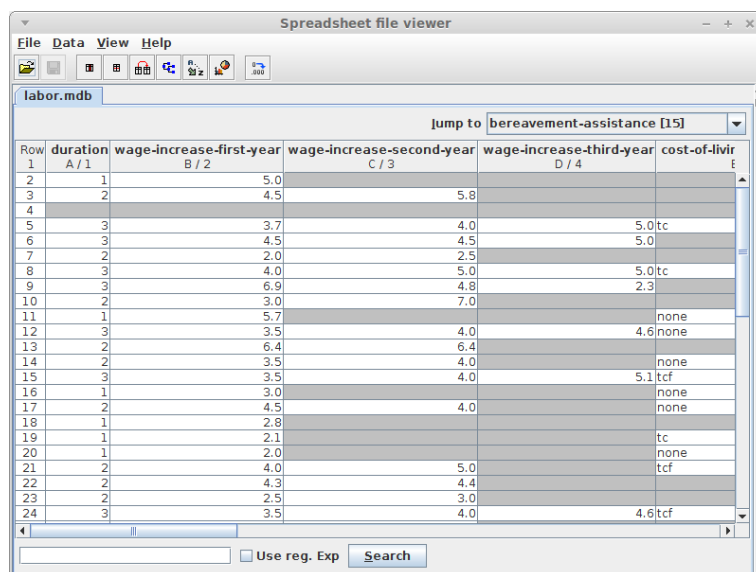
Row	duration	wage-increase-first-year	wage-increase-second-year	wage-increase-th
1	A / 1	B / 2	C / 3	D / 4
2	1	5.000		
3	2	4.500	5.800	
4				
5	3	3.700	4.000	
6	3	4.500	4.500	
7	2	2.000	2.500	
8	3	4.000	5.000	
9	3	6.900	4.800	
10	2	3.000	7.000	
11	1	5.700		
12	3	3.500	4.000	
13	2	6.400	6.400	
14	2	3.500	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 is set to "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/>