

# DataWorx

## User Guide

**Putting Knowledge To Work™**



**X-ACT! SOFTWARE**

# DataWorx 4 User Guide

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# Using DataWorx

## Overview

DataWorx is a component of KnowledgeWorx. It consists of an spreadsheet Add-in that loads information captured by HandiWorx or HandiWorx WebExpress into supported spreadsheets. If you wish to use DataWorx, you must have MS Excel 2000 (or greater), OpenOffice Calc (version 2.0.1 or greater) or IBM Lotus Symphony Sheets. OpenOffice and Symphony are free (no cost) solutions that may be downloaded from their respective sites. If you do have access to any of the supported spreadsheets, you can use any tool that reads Comma Separated Value (CSV) files to manipulate the data captured by HandiWorx. The primary benefit of using DataWorx is that it automates some of the tasks you would manually have to perform yourself, and it is designed to work with the internal file format of the Answer Sets generated by HandiWorx.

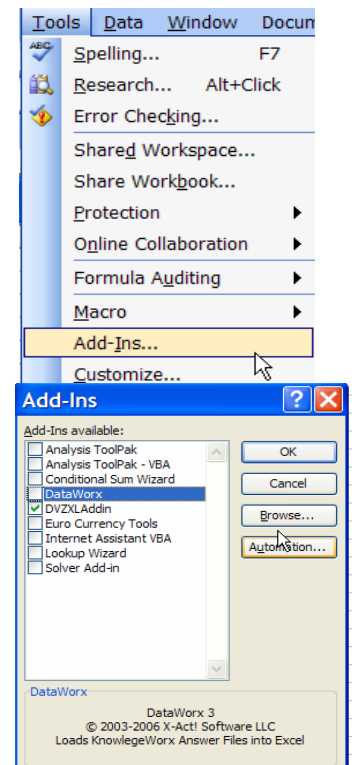
DataWorx functions as a “data loader” and filtering tool. While you are still responsible for performing data analysis yourself, DataWorx facilitates the data analysis phase by automatically loading and filtering the data captured by HandiWorx. By using DataWorx, you can concentrate on the details of data analysis, rather than spending time trying to extract and format your data appropriately. After using DataWorx, you will be well positioned to begin your analysis phase.

## Installing DataWorx (Excel)

DataWorx is a spreadsheet Add-in. Before you can use DataWorx, you must “Add it in”. To do so:

1. Start Excel
2. From the Tools menu, select Add-Ins...
3. If the DataWorx add-in is listed, click the checkmark next to it to install it into Excel. If the DataWorx add-in is not listed in the dialog box, select Browse to find it. Navigate to the directory containing DataWorx\_AddIn.xla, and select it.
4. Press Okay

📌 Note: You can also run DataWorx by double-clicking it from the Windows desktop, if Excel is installed. If you access DataWorx in this way, be sure to **Enable Macros** when prompted by Excel.

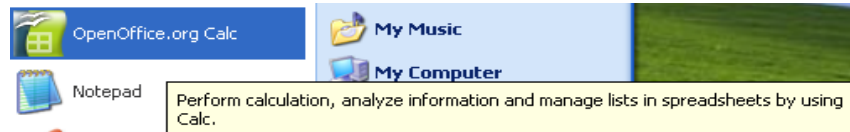


After installing DataWorx, a DataWorx menu appears just to the left of the Help menu on the menubar.

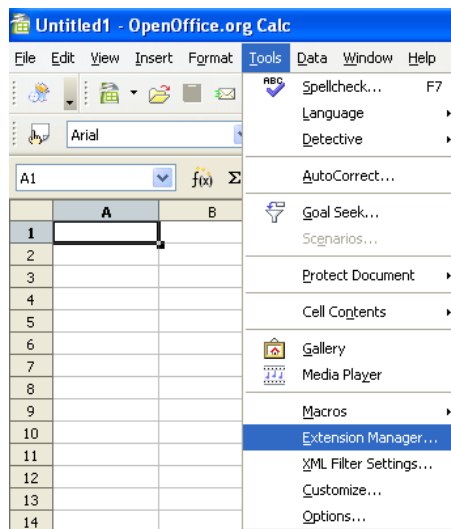
### Installing DataWorx (OpenOffice Edition)

DataWorx is an OpenOffice extension for products based on OpenOffice (this includes OpenOffice.org Calc and IBM Lotus Symphony). Before you can use DataWorx, you must install it using the Extension Manager. To do so:

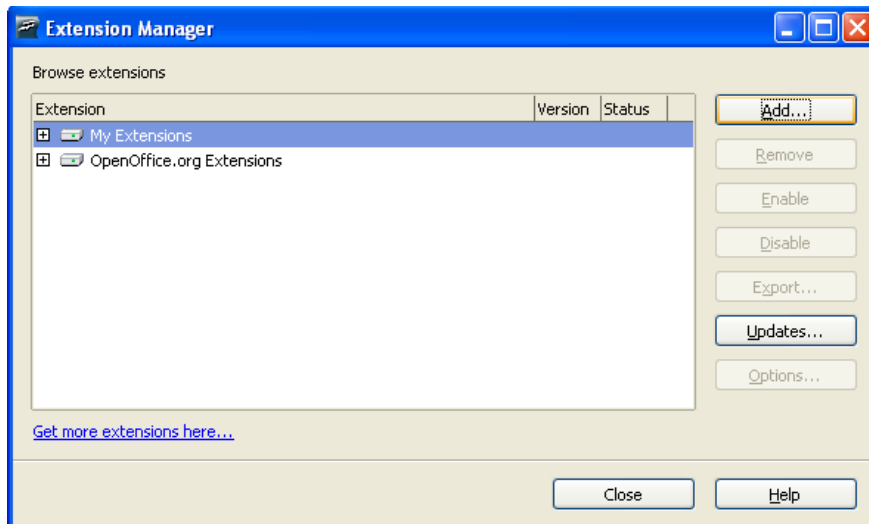
1. Start OpenOffice Calc (or Lotus Sheets, or whatever OpenOffice-compatible spreadsheet you are using)



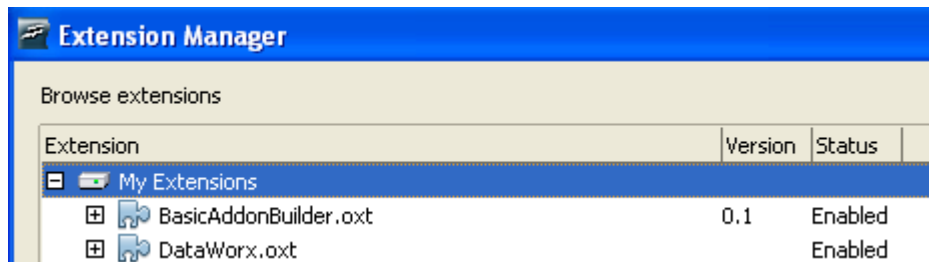
2. From the Tools menu, select Extension Manager. The Extension Manager dialog will appear



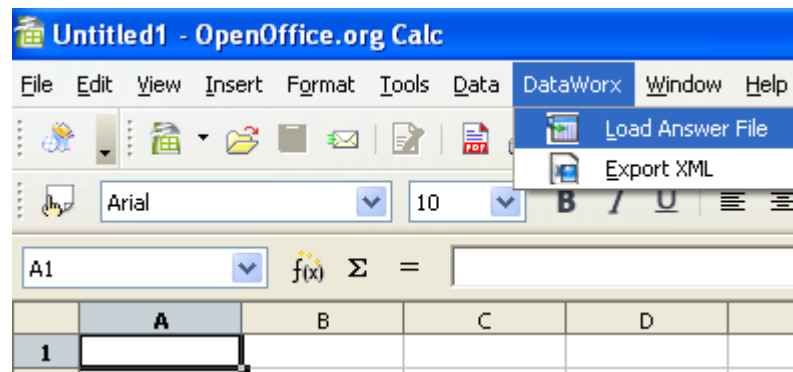
3. On the Extension Manager, select “My Extensions”, then press the “Add” button. A File Selection dialog will appear. Select the DataWorx Extension (DataWorx.oxt), and press Okay.



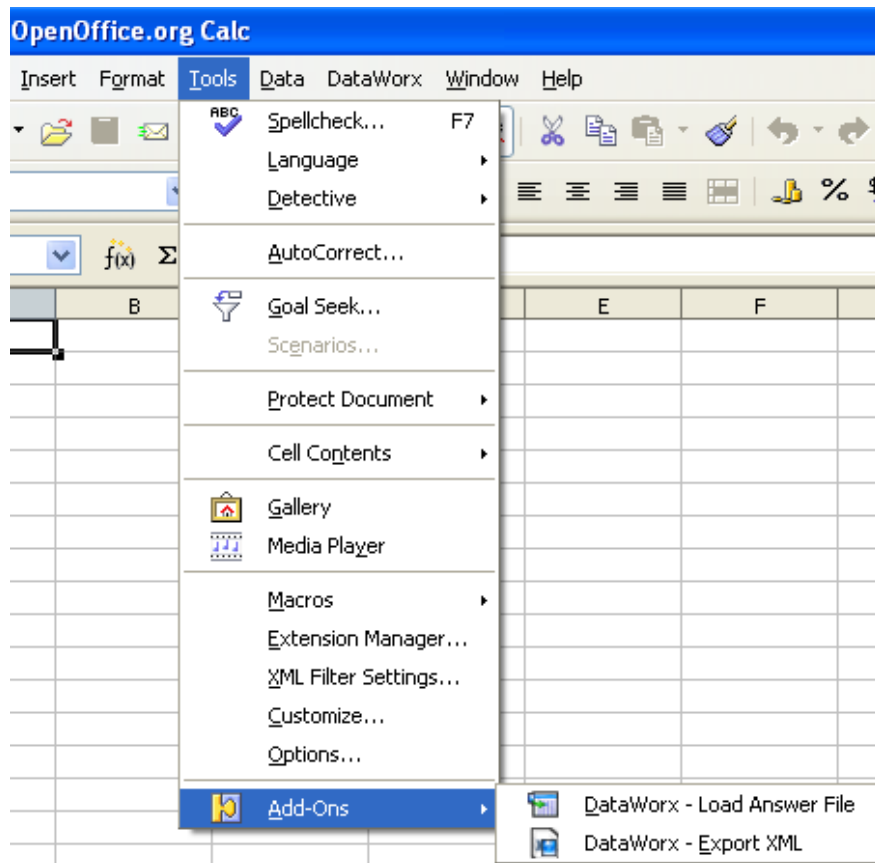
OpenOffice will load the DataWorx extension into your system. You can verify the extension has been properly loaded by clicking on the small “+” symbol to the left of “My Extensions” to expand the list of extensions loaded. DataWorx should be listed.



4. Close the Extension Manager, and then restart Calc. When the program restarts, a new DataWorx menu will be visible



Additionally, DataWorx is now accessible through the Tools – Add-Ons Menu:



After installing DataWorx, a DataWorx menu appears just to the left of the Window menu on the menubar.

♫ Note: As of this writing, IBM Lotus Symphony Sheets is in beta, and does not have the Extension Manager activated. We expect IBM to fully support the OpenOffice Extension Manager in their final release, but until they do, we suggest using DataWorx with the common OpenOffice release from OpenOffice.org. Although there are other ways to install the DataWorx extension, use of the Extension Manager is the only way officially supported by X-Act! Software

### Loading Data

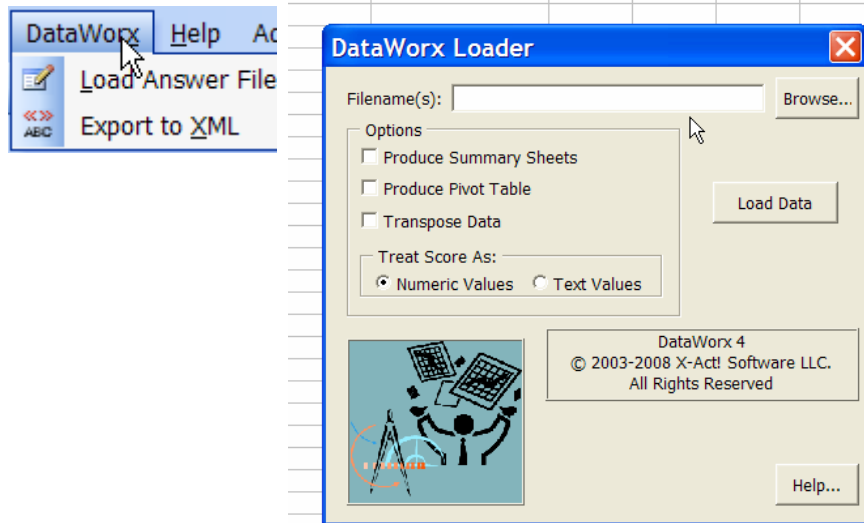
DataWorx is very easy to use since it does only two things: 1) It loads Answer Set files into a supporting spreadsheet, and 2) It optionally exports Answer Set data from the spreadsheet to an XML file.

After you have captured information using HandiWorx or HandiWorx WebExpress, transfer the data to your desktop. If you are unsure of how to transfer Answer data, consult the HandiWorx User Guide for instructions.

To load Answer Sets into your spreadsheet using DataWorx:

1. Select *Load Answer File* from the DataWorx menu. The DataWorx Loader window appears
2. Specify files to load in the Filename field. You will need to specify the full-path name for the file here. If you are unsure of the filename or the path, or if you wish to specify more than one file, press the Browse button to use a File Open dialog to find the correct file(s). *Note: you can select multiple files by holding the control or shift keys while selecting your files.*

Answer files have **\_ansx** at the end of their name, and have a .cdb file extension.



3. Select any Options, if you wish:
  - Produce Summary Sheets -- Extracts each individual Answer Session and places it on its own Worksheet. This allows you to easily analyze individual Session data without having to scan through a potentially large data set.



- Produce Pivot Table – Creates an MS Excel “Pivot Table” using the Answer Set data. Pivot Tables are useful in analysis by allowing multiple dimensions to vary independently. For instance, you can easily isolate all Questions across Sessions that have an answer of ‘1776’ by using a Pivot Table. If you are unfamiliar with Pivot Tables, please refer to your MS Excel documentation for more detail.

*Note: Pivot table creation is **not** supported in the DataWorx OpenOffice Edition.*

- Treat Score As – You can chose to have score data imported as an Excel numerical values (the default) or as text. If you want DataWorx to import score data as text, select Text Values. If you want DataWorx to import score data as numerical values, select Numeric Values.

*Note: this option is **not** supported in the DataWorx OpenOffice Edition. All score data is treated as numeric.*

- Transpose Data – DataWorx produces a summary sheet in a vertical, top-to-bottom format. You can opt to “transpose” the data in a horizontal (more database-friendly) style by selecting this option button.

4. Press *Load Data*. The file is opened (in read-only mode) with the data filtered and presented as you specified in step 3.
5. Save your worksheet. To prevent data corruption, DataWorx opens all Answer Set files in read-only mode. After importing the data, you must save it as an Excel Workbook using the *File-SaveAs* command.

Session Name/Question Label				
1	Session Name/Question Label	Question	Answer	Score
2	CASLsampleQuiz..32-54-15-17-1-2003_start	Hil Ready to take the quiz? Hope so....What's your name?	reedy	
3	CASLsampleQuiz..32-54-15-17-1-2003_1	What year did the United States claim it's independence?	1776	10
4	CASLsampleQuiz..32-54-15-17-1-2003_4	How many sides does a Triangle have?	3	10
5	CASLsampleQuiz..32-54-15-17-1-2003_5	What is HIV?		
6	CASLsampleQuiz..32-54-15-17-1-2003_6	Earth has 7 continents	TRUE	

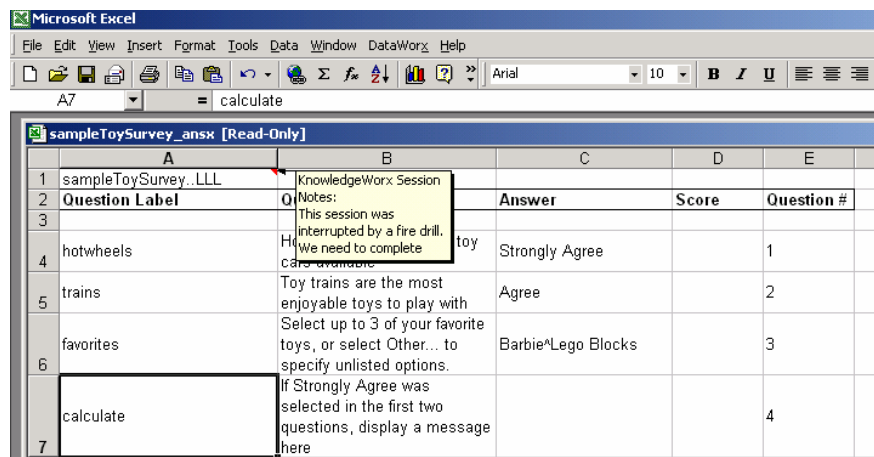
Summary View

What year did the United States claim it's independence?							
1	Session Name/Question Label	(All)					
2							
3	Count of Answer	Answer	Score				
4		2	2 Total	3	3 Total	10	10 Total 1776
5	Question	10	10				10
6	Earth has 7 continents						
7	Hil Ready to take the quiz? Hope so....What's your name?						
8	How many sides does a Triangle have?	1	1	3	3		
9	Thanks for taking the quiz. Press the forward button to see your stats					4	4
10	What is HIV?						
11	What year did the United States claim it's independence?						3
12	Grand Total	1	1	3	3	4	4 3

Pivot Table

Transposed Summary						
	A	B	C	D	E	F
1	Session Name					
2		Gender	Smoke	Commute	Allergies	Age
3	insurance..16-57-12-6-6	Female	No, non-smoker	5 to 15 miles	No	31 - 45 years
4						
5		Smoke	Commute	Allergies	Age	
6	insurance..35-41-10-22	No, non-smoker	16 miles or more	No	31 - 45 years	
7						
8		Smoke	Commute	Allergies	Allergy_Deta	Age
9	insurance..52-57-16-6-6	Yes, smoker	5 to 15 miles	Yes	ragweed	Less than 18 years
10						
11		Smoke	Commute	Allergies	Allergy_Deta	Age
12	insurance..JOE	No, non-smoker	5 to 15 miles	Yes	Ragweed, du	31 - 45 years
13						
14		Smoke	Commute	Allergies	Age	
15	insurance..MARY	Yes, smoker	Less than 5 miles	No	18 - 30 years	
16						
17		Smoke	Commute	Allergies	Age	
18	insurance..PETER	Yes, smoker	Less than 5 miles	No	18 - 30 years	

While running HandiWorx, if you've added any comments for your Answer Sets or Sessions, they will appear on the appropriate worksheet, using standard your spreadsheet's comment (or note) feature. In Microsoft Excel and OpenOffice Calc, the existence of comments (notes) is indicated by a small red triangle. Session Notes and Answer Set Comments – if present – are located in the cell A1 (the uppermost left-most cell on the spreadsheet). You can hide/show these comments by using the View menu (Excel) or the “Show Notes” context menu for the cell (Calc). If you are unsure of how to use this feature, please refer to your spreadsheet's User Guide.

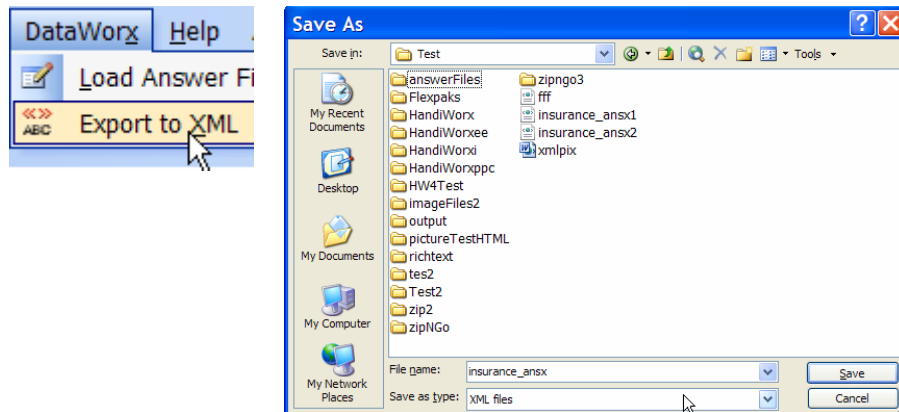


After loading and saving your data file, you may apply whatever data transformations, statistical analysis, or formulas you require.

### Exporting XML Data

After answer data is loaded into your spreadsheet, you can export the data as XML. DataWorx allows you to export the entire answer set, or individual session data if you wish. To export answer data:

1. Select and click on either the summary sheet (to export the entire answer set) or a session sheet (to export a subset of the answers).
2. Select *Export to XML* from the DataWorx menu in Excel. A File Save dialog appears. Enter the filename for the XML data you are exporting

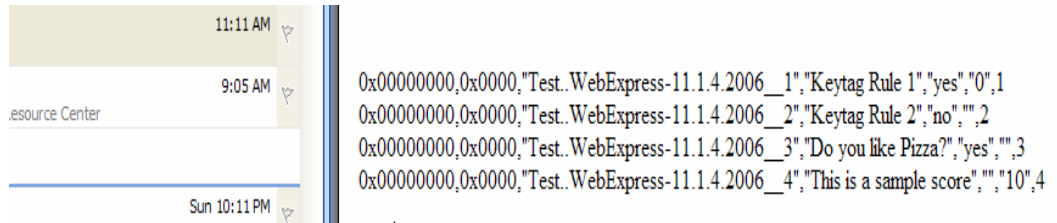


3. Press the Save button. Your data will be exported as XML and available to you or other programs using that data format.

## Processing Data from HandiWorx WebExpress

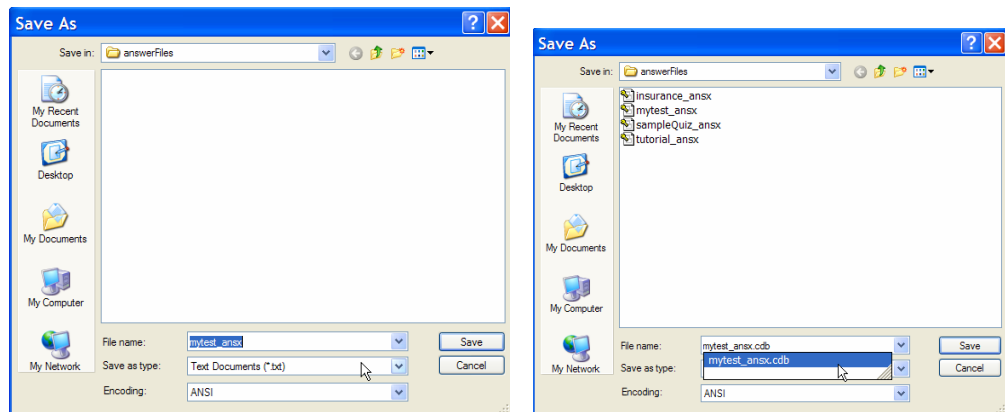
These instructions assume you are receiving the flexpak data via email; if you are using a server host that does not send email, consult your system administrator for help.

**Step 1:** Open the email message sent to you from HandiWorx WebExpress. This email contains all the captured data.



**Step 2:** Copy the email data to notepad. Each line of data starts with 0x00000000,0x0000; ensure that each data entry starting with 0x00000000,0x0000 begins on a separate line.

**Step 3:** Save the data as an answer file. HandiWorx answer files end in ‘\_ansx.cdb’. For example, if your flexpak was called ‘test’, the answer file would be called ‘test\_ansx.cdb’. To save the file using notepad, make sure the file type is set to “all files” (not text) before pressing the save button.



**Step 4:** Press the save button.

**Step 5:** Open DataWorx, and process the file you saved in step 4 as normal.

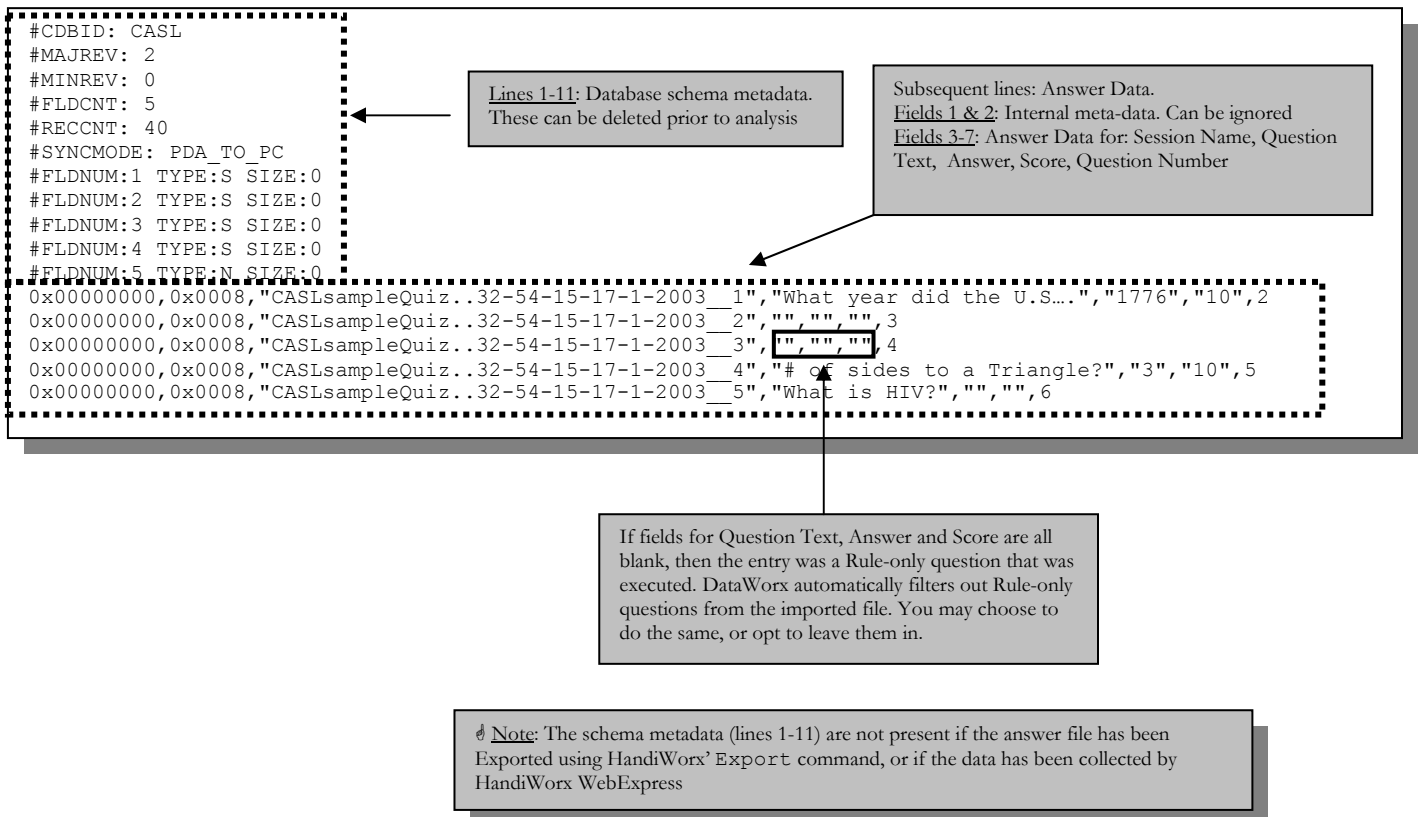
## Q & A

1. *What type of files does DataWorx work with?*

DataWorx manipulates Comma Separated Value (CSV) Answer Set files that are .cdb (CASL database) files. DataWorx is specially tuned for Answer Set .cdb files, and does not guarantee compatibility with any other CSV or .cdb files.

2. *I use Lotus 1-2-3 (or <another spreadsheet>...). What do I do?*

Various version of DataWorx currently support MS Excel and OpenOffice Calc (and various OpenOffice-compatible spreadsheets like IBM Lotus Symphony Sheets). However, Answer Files are standard Comma Separated Value (CSV) files, which can be read/imported by most spreadsheet applications. Therefore, you can use any tool that manipulates CSVs to work with Answer Sets generated by HandiWorx. All the data filtering and manipulation is quite manageable, even if you have to do it manually. The following diagram outlines the data file format. To re-emphasize: Data Extraction and Analysis can be performed using **any** tool that supports CSV files, so use of DataWorx is **not** required for full functionality with KnowledgeWorx. In fact, you may prefer not to use DataWorx, in deference to your favorite CSV/spreadsheet tool.



3. *I don't own any spreadsheets. Do you have a suggestion for one?*

There are many good products on the market. You might wish to try the **free** product – *Calc* – part of the *OpenOffice* suite. It has very good MS Excel compatibility, reads MS Office files, and runs DataWorx. *IBM Lotus Symphony* is another free office product, and is based on OpenOffice. You can download them at: <http://www.openoffice.org> and <http://www.ibm.com>

4. *Can I select more than one Answer file to process at a time?*

Yes. This is accomplished by holding the control or shift keys when selecting your answer files in the File Open dialog. This feature is useful if you have more than one answer file with related information that you want to analyze as a group. For instance, you may have 3 caseworkers, each using a separate device, collecting data on various clients. After performing a hotsync or activesync you will have 3 or more answer files from the 3 separate devices. However, the data is related, and you probably want to analyze all of it as one set of information. By processing all 3 files at once, the information is merged into one file for analysis, thus easing your data management tasks.

5. *Does DataWorx work with answers collected from HandiWorx WebExpress?*

Yes. Collect the data as directed by HandiWorx WebExpress, and then load the answer data as you normally would, using DataWorx. Note that if you've selected "email" as your data capture mechanism from HandiWorx WebExpress, you will have to manually save the data files. Make sure each file ends with **\_ansx.cdb**

6. *Why doesn't DataWorx do more than load and filter Answer Sets?*

With the wide variety of data that can be generated from Flexpaks, it would be extremely difficult provide a useful set of analysis tools, beyond what is readily available through Excel (and other spreadsheets). For instance, if you're using Quiz Flexpak, scores may be significant. If you use a Diagnostic Tool Flexpak, Scores may be insignificant, but certain answers may be extremely significant. Only the Flexpak designer and users really know what type of data analysis is useful for their objectives. Therefore, we opted to provide a useful, general-purpose starting point for your data analysis, without making any assumptions as to how you use your data. By using DataWorx, you are well positioned to perform detailed data analysis without having to worry about extracting data manually, or creating basic views of the data.

In some cases, the basic views provided (through Sessions Sheets) and Pivot Tables might be all you need. Feel free to use the Answer File schema described above, and write an analysis package that does what you want.