

AppHeader User's Guide

Version 1.0

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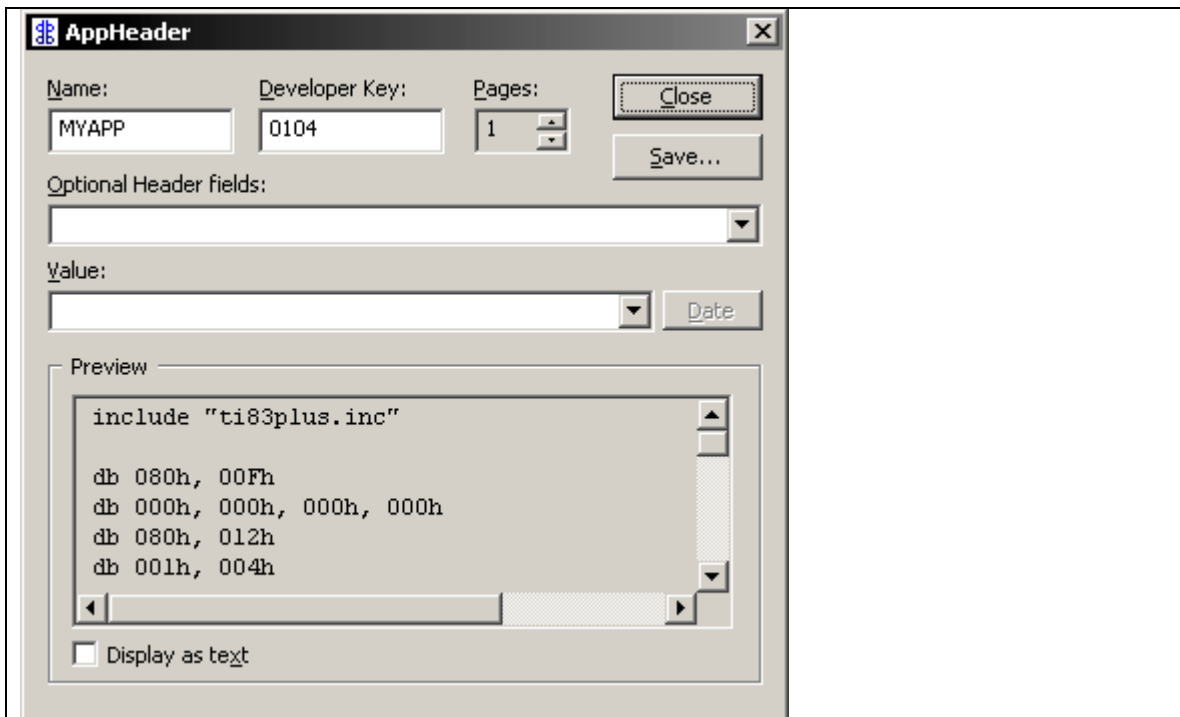
1 Introduction

The AppHeader Utility (AppHeader) is designed to facilitate creating TI-83 Plus and TI-73 application headers. It allows you to add, edit and delete a range of header information while previewing the header “on-the-fly”. AppHeader also supports creating multipage applications.

This manual assumes you understand the basics of Z80 assembly programming *and* the application header itself. If you need more information, please see the TI-83 Plus Developer Guide or the TI-83 Plus SDK Tutorials.

User Interface

The AppHeader interface is very simple. When you start the application, you should see a window like this:



The first three fields in the AppHeader window represent the required information: the application name, the developer key used and the number of Flash ROM pages the application is to use. As an example, enter your developer ID (or the freeware key 0104) and watch AppHeader update the Preview pane automatically.

Editing Information

Editing header information is easy. Simply select the field from the “Optional Header field” list then edit the value in the “Value” edit box. The default, AppHeader assigns values to certain fields:

Program Revision	1
Program Build	1
Disable TI Splash Screen	True
Date Stamp	Date created

When you enter a new value, AppHeader will convert the number into hexadecimal and update the application header accordingly. Note that by changing any value to 0, you will delete the field.

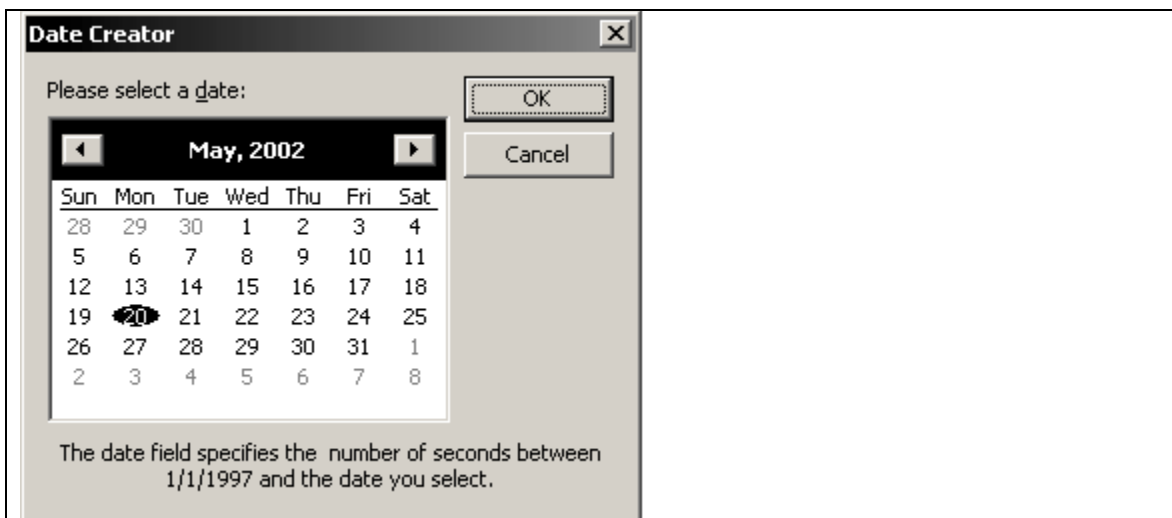
2 Using AppHeader

Optional Header Fields

There are a number of optional fields that you can include in the application header. Here is a table explaining the different fields, their meaning and the number of bytes they occupy:

Program Revision	The version of the application.	1
Build Number	Often used a sub-version. For example: v1.0 Build 10	1
Program Expiration Date	Date the application is valid until. Specified in number of seconds since 1/1/1997.	4
Overuse Count	How many times the application can be run. Can be coupled with the expiry date. Must be at least 16.	1
Disable TI Splash Screen	Ensures the TI splash screen isn't displayed.	0
Maximum Hardware Revision	Maximum hardware revision the application is valid on.	1
Lowest Basecode	The lowest basecode that the application can run on.	1

Since the program expiration date translates into a very large number, it is easier to use the automatic date stamp generator. When the "Program Expiration Date" field is selected, the "Date" button is enabled. Clicking on it will pop up this dialog box:

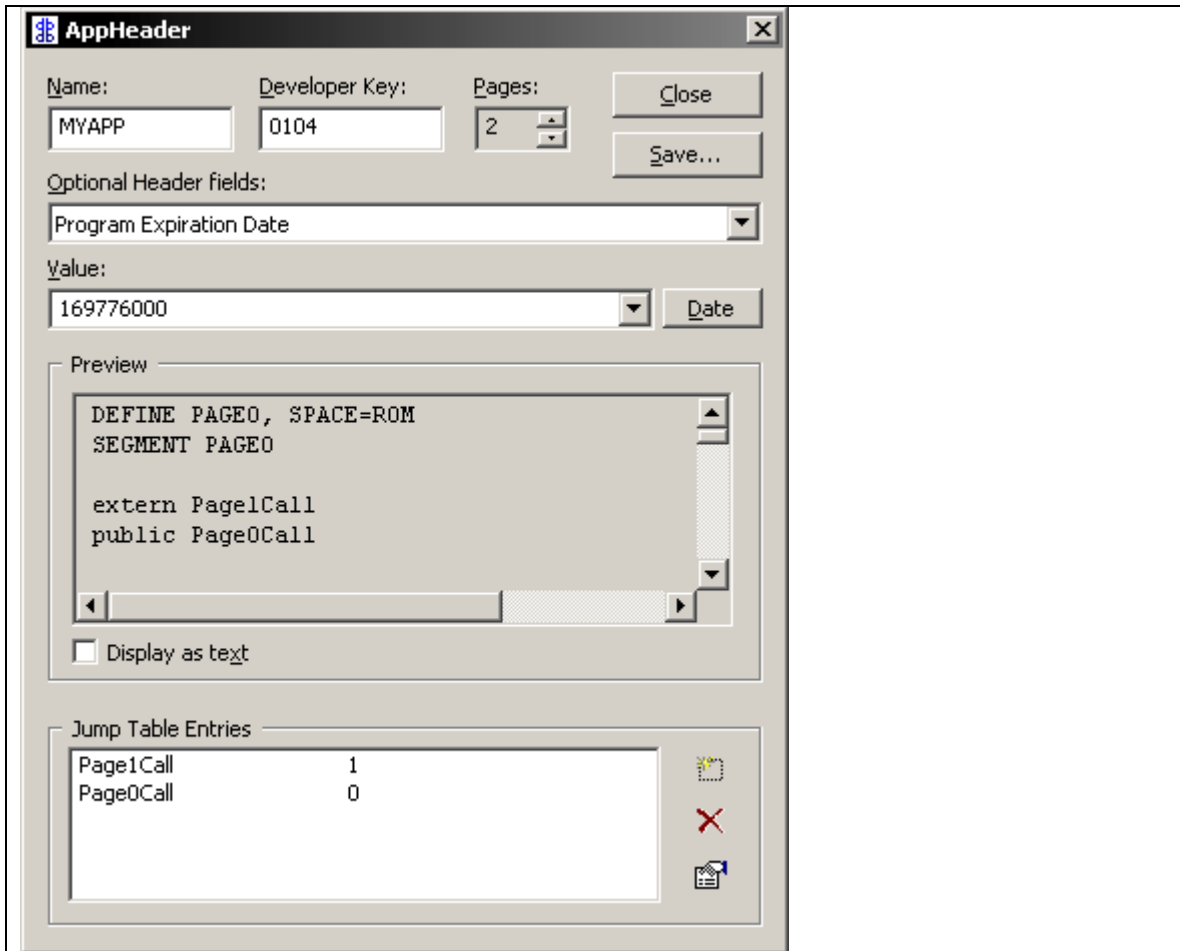


Simply select the date and the program will generate the necessary number. Note you cannot select a past date since the compiled application would never run!

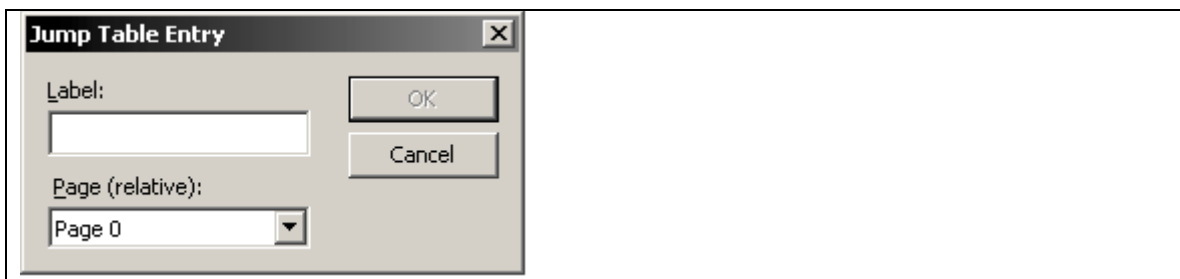
Multipage Applications

AppHeader has limited support for multipage applications. Once you have set up your application header, AppHeader will generate the source files for *all* pages – including the segmentation information, include files and all public and extern directives. On the first page, it will ensure the application header is properly padded and create the jump table after it. It will generate an additional include that contains the jump table information.

When you want to create a multipage application, select the number of pages the app will run on. You will notice that when you increase the number of pages beyond one, the application expands to include jump table information:



The three buttons allow you to add, delete and edit the jump table entries. You can also double-click on the jump table preview. If you double-click on an item you will edit its properties. Double-click anywhere else and the “new jump table entry” dialog box will open:



This allows you to enter a label name and the relative page. Again, any changes you make will continually update the preview pane.

Saving or Copying

Once you've finished building your application header you can either export it to a text file or copy it to the clipboard. To save it, click on the "Save..." button. Select the directory and filename and hit "Save". Note for multipage applications, AppHeader will *not* warn if any of the additional files already exist – it will just overwrite them. To copy the header file, just select all the text, right-click and use the "Copy" command.

Miscellaneous

To display a short summary the header information, select the "Display as text" option. AppHeader will abbreviate the header and display all the important information — therefore some fields will be missed out for brevity.

AppHeader will save the last developer key you used in the registry and reuse it the next time you create a header (unless you exit the program using the Esc key).

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