



Issue Date: FoxTalk September 1996

Create DBF-Style Help with HELPX, a GENSCRNX Driver

Jeff Baker
jbb@iname.com

Creating an online Help system is usually the last part of the development process, like avoiding the dentist until the last possible moment. HELPX, a GENSCRNX driver, allows you to quickly and easily add DBF style Help to any screen in current or existing projects.

You've just spent the last six months building the ultimate application for a client. The result far exceeds their expectations. The client asks when it can be installed. You hesitate for a moment then you say that it'll be another two months because you still need to write the Help system!

Writing a Help system can be about as much fun as having wisdom teeth pulled.

Most of my applications consist of data entry screens hanging off menus or called from other screens. Consequently, a large portion of the Help file will consist of topics associated with screen objects. Doesn't it make sense to add your Help directly into the screen through the Screen Builder as you're creating and adding the objects similar to commenting source code as you're writing it?

HELPX, a GENSCRNX Help driver

I took advantage of Ken Levy's GENSCRNX to create a simple but time saving solution for creating Help tables. In my opinion, the best feature of GENSCRNX is being able to write your own driver that "hooks" into GENSCRNX during screen generation. A GENSCRNX driver is perfect for generating DBF-style Help directly from your screens.

HELPX allows you to add Help to the Comment field for any object on a screen. The generated DBF-style Help table is identical to FoxPro's own Help table. The topic is surrounded by a single line box, a summary for the topic can be added below the topic, the main text of the Help can be followed by an example, and one or more See Also topics can be included. All of this is accomplished by adding the appropriate HELPX screen directives in the Comment fields of screen objects.

Help table structure

The basic structure of a DBF-style Help table consists of three fields: Topic, Details, and Class. Topic contains a short topic description. Details is a memo field in which all information about the topic is placed, including the summary, examples, and see also topics. The Class field can contain any characters up to a total of 20. It can be used to filter out certain Help topics.

As long as the three basic fields are included in a Help table, other fields may be added to incorporate additional features for a custom Help system. HELPX uses the three basic fields plus one additional field to Help during the Help table creation.

HELPX directives

To enable the HELPX driver, add the following command to each platform's CONFIG file:

```
_SCXDRV5=helpx.prg
```

This will automatically create Help for the current application's screens when the project is rebuilt.

HELPX incorporates nine simple directives for the actual Help text. Add *:ADDHELP to the setup code snippet for every screen in which you wish to add Help. Add one or more of the following directives to the comment field for each object you want included in the Help table. The only required comment directive is *:HELPTOPIC. A Help record won't be created if the topic directive is missing.

You'll need to take a few considerations into account. The text associated with the summary, main Help text, and example directives *must* start on the line following the directive. Any text on the same line as the directive will be ignored. New paragraphs in each of these sections can be created by pressing the enter key to move to the next line. MEMOWIDTH is set to 256, but you should limit the width of any one line to the Help window size depending up which platform you're using; otherwise, you may run into strange looking results. [Table 1](#) contains the directives you can use.

Table 1. Help text directives and their purposes.

*:HELPTOPIC	Defines the topic for the current object.
	Defines the beginning of a

*:HELPDESCSTART	summary section, which must start on the next line.
*:HELPDESCEND	Defines the ending of a summary section.
*:HELPTXTSTART	Defines the beginning of the main Help text, which must start on the next line.
*:HELPTXTEND	Defines the ending of the main Help text.
*:HELPEXSTART	Defines the beginning of the example text, which must start on the next line.
*:HELPEXEND	Defines the ending of the example text.
*:HELPSEEALSO	A comma delimited list of See Also topics.
*:HELPCLASS	The class or classes for the Help topic, which are space delimited.

The following is an example of Help being added to a comment field. The topic, summary, Help text, see also, and class are shown:

```
*:HELPTOPIC Client Name
*:HELPDESCSTART
  The client name field contains the first and
  last name of the client.
*:HELPDESCEND
*:HELPTXTSTART
  This would be the main section of Help for the
  client name. If you wish to start a new line
  without word wrapping, press ENTER at the end
  of the line instead of letting the line wrap.
```

Here could be the second paragraph of the main Help text:

```
*:HELPTXTEND
*:HELPSEEALSO CLIENT ID, ADDRESS, PHONE
*:HELPCLASS General Client
```

If you already have an existing DBF-style Help table based upon the FoxPro Help structure for the rest of your application, append HELPX.DBF to incorporate your screen Help

HELPER, a HELPX helper application

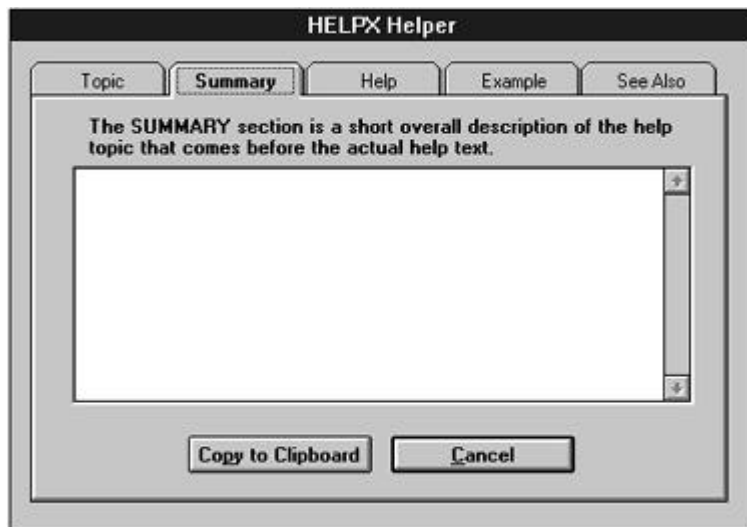
A helper utility has been included to make adding Help directives and text to comment fields easier. It isn't required for HELPX, but it can make your life easier when developing a screen and adding Help.

The Helper utility uses another great GENSCRNX driver, TABS, written by Steven Black. Helper consists of one screen with five tabs. The five tabs are Topic, where the topic and class are entered, Summary, Help, Example, and See Also (see [Figure 1](#) and [Figure 2](#)). Open one of your screens and select the desired comment field of an object.

Figure 1: The Helper utility TABS i.e Topics.



Figure 2: The Helper utility TABS i.e Summary.



Helper is designed to use the right mouse button to call it with an ON KEY LABEL in DOS, UNIX, or Windows. Ctrl-Z is used on the Mac since the Mac doesn't have a right mouse button. This key combination can be changed to whatever you desire.

Once Helper has been brought up, enter only the information that will actually appear in the Help file, not the directives. Once all desired information has been entered, click on the Copy to Clipboard button and then Cancel. Then in the comment field, paste from the Clipboard by Ctrl-V. That's it! Directives and associated Help text will be placed in the comment field.

Conclusion

HELPIX can't entirely automate your Help system, only the Help for your screens. All other Help must still be entered by hand. Since data entry applications tend to be screen oriented, you'll still save a considerable amount of time by using HELPIX to create your Help files. If you have a custom Help table with additional fields, HELPIX can be modified easily to incorporate new directives. HELPIX takes what once might have been a chore, creating Help, and turned it into another indispensable tool.