

The Fox Hunt

Provide menu choices selectively without abandoning the Menu Builder

By Whil Hentzen

A common request in many applications is to provide certain menu options to a subset of the users who are allowed to use the system. It's easy to disable a menu bar by placing an expression in the Skip For edit region under Options. For example, suppose each user that logs on to the system has a record in a "USERS" table and each record contains a "permission level" field:

cUserName	cPermLevel
Arnold	B
Jamie Lee	C
Tia	A
Tom	B

In order to disable a menu bar for users with permission levels B and C, you could use the expression

```
cPermLevel >= "B"
```

in the Skip For edit region. When Tia logged onto the system, the menu bar would be enabled, but all others would be prevented from executing that menu option.

However, there are occasions when it's a better decision to completely remove the menu bar from the menu popup. A menu choice that's disabled but visible tends to beckon to the user "Find a way to get to me." Furthermore, some users may be confused, thinking they are doing something wrong because they can't access the menu, resulting in increased support costs.

The way to remove this menu bar is to let the Menu Builder create it during generation, but then remove it in the cleanup of the MPR. This code might look something like this:

```
IF cPermLevel >= "B"  
    RELEASE BAR 2 OF UTILITIES  
ENDIF
```

However, you probably know that manually modifying the .MPR code is never a good idea. (For the uninitiated, the reason is that each successive regeneration of the menu will wipe out your hand-crafted modifications. You'll end up with additional work, making changes to the regenerated code each time.)

The preferred method is to use the public domain program GENMENUX. This program can be thought of as a "WHEN" and a "VALID" to FoxPro's GENMENU.PRG. When run in place of GENMENU, GENMENUX processes the MNX/MNT files created by the Menu Builder, turns control over the GENMENU to do the actual generation of the MPR file, and then processes the MPR again.

One of the functions that can be performed during the post-processing of the MPR file is adding code to release selected menu bars. Here are the steps required to install GENMENUX and mark a menu bar for selective removal.

1. Place GENMENUX.PRG in the root directory of FoxPro (the same place that GENMENU.PRG resides.)
2. Place the following line in your CONFIG.FP/W file:

```
_GENMENU = "C:\FOXPRO26\GENMENU.FXP"
```

modifying the path to suit your particular situation. Don't delete GENMENU.PRG - since GENMENUX calls GENMENU.PRG.

3. Place an expression in the Comment snippet of the menu bar you wish to selectively remove. GENMENUX will use the expression

```
*:IF cPermLevel < "B"
```

to create the following code snippet in the menu's cleanup

```
IF NOT (cPermLevel < "B")  
    RELEASE BAR 2 OF UTILITIES  
ENDIF
```

The result will be for this menu bar to be released when the permission level of the user is B, C, or higher.

4. Generate the menu as usual. (You'll have to quit FoxPro and load it again in order for the `_GENMENU` directive to take effect.)

You can use this same functionality to selectively remove menu bars from applications depending on a wide range of conditions. You might eliminate a menu bar that changes the display type when the application is running under Windows or the Macintosh, or provide expanded searching abilities for certain types or sizes of tables.

There are a number of other directives like the `*:IF` syntax we used this month; they are explained in more detail in the documentation that accompanies the program.

`GENMENUX.PRG` can be found on this month's Resource Disk, or in the Third Party Libraries of `FOXFORUM` on CompuServe. As of August 5, the Third Party Libraries are found in the `FOXUSER` Forum. It is public domain, so there aren't any registration fees.