

Chapter IV-6 — Interacting with the User

flag in most cases but can use /T or both /T and /F. Procedures that must run with Igor Pro 6.0x and earlier must use the /T flag.

Using the /T=typeStr flag, you specify acceptable Macintosh-style file types represented by four-character codes (e.g., "TEXT") or acceptable three-character file name extensions (e.g., ".txt"). The pattern "???" means "any type of file" and is represented by "All Files" in the filter menu.

typeStr may contain multiple file types or extensions (e.g., "TEXTEPSF???" or ".txt.eps???"). Each file type or extension must be exactly four characters in length. Consequently the /T flag can accommodate only three-character file name extensions. Each file type or extension creates one entry in the Open File dialog filter menu.

If you use the /T flag, the Open operation automatically adds a filter for All Files ("???") if you do not add one explicitly.

Igor maps Macintosh file types to extensions. For example, if you specify /T="TEXT", you can open files with the extension ".txt" as well as any file whose Macintosh file type property is "TEXT". Igor does similar mappings for other extensions. See **File Types and Extensions** on page III-455 for details.

Using the /F=fileFilterStr flag, you specify a filter menu string plus acceptable file name extensions for each filter. fileFilterStr specifies one or more filters in a semicolon-separated list. For example, this specifies three filters:

```
String fileFilters = "Data Files (*.txt,*.dat,*.csv):.txt,.dat,.csv;"
fileFilters += "HTML Files (*.htm,*.html):.htm,.html;"
fileFilters += "All Files:.*;"
Open /F=fileFilters . . .
```

Each file filter consists of a filter menu string (e.g., "Data Files") followed by a colon, followed by one or more file name extensions (e.g., ".txt,.dat,.csv") followed by a semicolon. The syntax is rigid - no extra characters are allowed and the semicolons shown above are required. In this example the filter menu would contain "Data Files" and would accept any file with a ".txt", ".dat", or ".csv" extension. ".*" creates a filter that accepts any file.

If you use the /F flag, it is up to you to add a filter for All Files as shown above. It is recommended that you do this.

Displaying a Save File Dialog

You can display a Save File dialog to allow the user to choose a file to be created or overwritten by a subsequent command. For example, the user can choose a file which you will then create or overwrite via a Save command. The Save File dialog is displayed using an **Open/D** command. Here is an example:

```
Function/S DoSaveFileDialog()
    Variable refNum
    String message = "Save a file"
    String outputPath
    String fileFilters = "Data Files (*.txt):.txt;"
    fileFilters += "All Files:.*;"

    Open /D /F=fileFilters /M=message refNum
    outputPath = S_fileName

    return outputPath    // Will be empty if user canceled
End
```

Here the Open operation does not actually open a file but instead displays a Save File dialog. If the user chooses a file and clicks the Save button, the Open operation returns the full path to the file in the S_fileName output string variable. If the user cancels, Open sets S_fileName to "".