

Workgroup Extensions for Microsoft FoxPro for Windows

With the Workgroup Extensions for Microsoft FoxPro, you can develop workgroup solutions that integrate Microsoft FoxPro for Windows with Microsoft Mail and Microsoft Schedule+. The Workgroup Extensions require Microsoft FoxPro for Windows version 2.5 or later.

Before you begin using the Workgroup Extensions, read the README.TXT file for updated information. Also review closely the “FoxPro Environmental Considerations” in the Help files.

The WorkGroup Extensions for FoxPro include four components:

□ FOXMAPI.FLL

This Fox Link Library (FLL) serves as an interface between FoxPro for Windows and three workgroup dynamic link libraries (DLLs). By using this FLL, you can tap into the functions provided by these DLLs.

□ Workgroup Libraries

These libraries consist of the MAPI.DLL and SPLUS.DLL files, which provide functions to integrate applications with Microsoft Mail and Schedule+ respectively. Install these two files in your Windows System directory. The Workgroup Libraries also include files and instructions on how to use these libraries in conjunction with the FoxPro Distribution Kit for Windows so that you can distribute FoxPro applications that use these libraries.

□ Help Files

The WorkGroup Extension for FoxPro includes one help file: FOXMAPI.HLP that provides a technical reference for the the WorkGroup Extensions. The Help file includes information on using every function available in each DLL. You can print any topic in a Help file by choosing the Print Topic command from the File menu. The WorkGroup Extensions for FoxPro also include an RTF file: TO_PRINT.RTF that makes it easy to print out the entire help file from most Windows word processors.

□ Sample Applications

The sample applications serve to get you started quickly with the WorkGroup Extensions. Most of the sample applications are simple and straightforward, so that you can quickly find code that accomplishes a particular task. The sample applications are described later in this appendix. Check the README.TXT file for information about additional sample code that was added after this document was printed.

Important

The FoxPro MAPI sample files are distributed solely to provide examples and guidelines for using the FOXMAPI.FLL library functions. Microsoft is not responsible for the code contained in any of the sample files and does not provide support for these files. See the included Help file for further details and assistance regarding technical support.

Installing the Workgroup Extensions

Install MAPI.DLL, SPLUS.DLL, and MEFLIB.DLL in your Windows System directory. Install the other files such as FOXMAPI.FLL, the Help files, and MAPILIB.PRG and MAPIERR.PRG in any working directory you choose.

Update the Microsoft Mail names and addresses in the sample database files to match the users of your Mail system. The sample database files contain Mail names and addresses that were used for developing the sample applications. Running these applications without modifying these names and addresses will cause name resolution problems.

Using the Sample Applications with MAPI

The included sample applications illustrate all 12 MAPI functions included in the FOXMAPI.FLL library. Most of the function calls are made through a generic program file called MAPILIB.PRG, which you can use as a starting point for your applications based on the FOXMAPI library. You can modify this file to suit your needs. A MAPIERR.PRG file is also included, which you can use to handle all errors.

Following are general guidelines for using these functions:

- Various functions in the MAPI library return different types of values. For example some function return true/false values, while others return strings.
- The sample applications use a common logon routine. A global variable **mailsession** is checked to see if it exists and it is an active session (not equal to 0). You can start multiple mail sessions, but the sample applications use a single session and join an existing session if one exists.

What the Sample Applications Do

The descriptions in this section summarize what each sample application does. You should review the sample code more closely to learn specific details about how the workgroup functions are called.

Mail Menu

A simple Mail menu can be added to any FoxPro application by running the MAILMENU.APP program. The menu has commands to send and read Mail messages. In addition, a command for the FoxPro MAPI Help file is included so that you can reference the MAPI functions as you browse through the source code. The MAILMENU.PRG program is code generated from the MAILMENU.MNX menu file.

All 12 MAPI functions are included in the two main programs used in this sample application, READMAIL.PRG and SENDMAIL.PRG. The majority of the function calls are contained in the READMAIL program which reads messages in your Mail Inbox. Review this code closely, since it contains several tricks for successfully handling Mail messages in FoxPro.

Bulk Mailing

The bulk mailing program shows a common use of FoxPro and MAPI. You can create a message that is sent to a list of people contained in a database. This application allows the user to construct two types of mailings:

- The user can send the same message to multiple recipients at once.
- The user can send the same message to each recipient individually so that each recipient receives a personal message. This mailing takes more time since a separate message is sent to each recipient. You can set flags in the code to suppress the Mail Send Note dialog box which appears.

You can add conditional code to this application so that each recipient receives a different message based on data in your database.

Project File Updater

The Project File Updater is a simple multi-user project management application. FoxPro developers, each working on specific files of a common project, can update each other's local projects with current files through a Mail message. In

addition, a developer can check for new files sent by another developer. The developer names and files they are developing are located in two databases.

This sample program illustrates two uses for Mail. First, it shows how to send files through Mail from FoxPro. Second, it shows to send inter-process communication (IPC) messages that do not appear in the Mail Inbox.

Following are the general steps for using the application:

1. The program displays a pop-up dialog box that lists all the developers working on the project.
2. Choose your name from the list.

When a name is selected, the names of all files assigned to that person are displayed in a list box.

3. Choose the Move button to select files to update.
4. Choose the Mail Files button to create a message with only the updated files.

No text is added to the message. To identify these mail messages, the subject is "Project Files" and the message type is "IPC". IPC messages do not appear in the Mail Inbox.

5. Choose the Receive Files button to search your Mail Inbox for updated files sent to you. The program searches for files where the message type is "IPC" and the subject is "Project Files", and it creates a cursor database that lists these files.

Note

Files are not actually updated or overwritten in the sample program.