

How to ...

## Change the Synchronized Files Folder on the PC

When file synchronization is enabled, ActiveSync creates a folder for the synchronized files in the My Documents folder on the PC. The folder name is the combination of the Pocket PC name and My Documents (like this: *PCName MyDocuments*).

Editing the registry on the PC can change the location of the synchronized files on the PC. By following these steps, you can share one Synchronized Files folder on a PC with multiple devices running the same version of the Windows Mobile software. Do not attempt to combine the Synchronized Files folder for Windows Mobile 5 and Windows Mobile 2003SE or older.

Do not make any changes to the registry unless you are familiar with editing the registry. Any error in the registry can have disastrous effects, so it is wise to back up the PC before you make any changes. It's also a good idea to back up the device before you make this change, in case the content of the Synchronized Files folder is deleted.

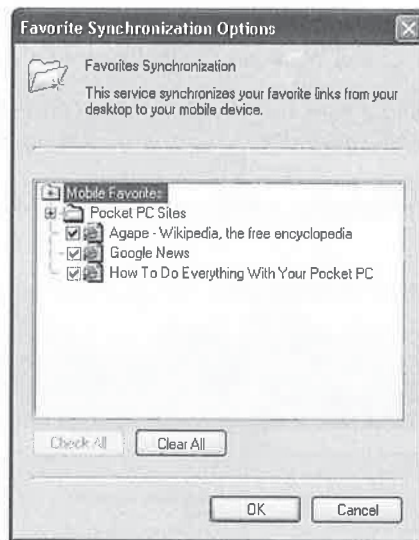
Change the location for synchronized files by performing the following steps:

1. Run `regedit` on Windows 95/98/Me; run `regedt32` on Windows NT/XP/2000.
2. Click `HKEY_CURRENT_USER | Software | Microsoft | Windows CE Services | Partners | [Partner ID] | Services | Synchronization`. The name of the `[Partner ID]` key is different for each device in a partnership with the PC. You'll find the device name in the `DisplayName` value of this key.
3. Double-click the `Briefcase Path` value of the `Synchronization` key and enter a backslash followed by a name for the folder followed by another backslash. For example, `\Synchronized Files\`. It is a good idea to write down the contents of this value before you change it. This must be a subfolder of the My Documents folder for the user currently logged in to the PC.
4. Close the registry editor.

During the next synchronization, the files will be written to the new location on the PC.

click `Tools | Create Mobile Favorite` in Internet Explorer on your desktop computer. If you have enabled the Favorites information type to synchronize with your device, the addresses you add will be added to Internet Explorer on your Pocket PC or Smartphone.

To remove a web site address from your device, clear the check box next to the corresponding page listed in the Favorite Synchronization Options dialog box. To stop synchronizing all addresses, click `Clear All`.

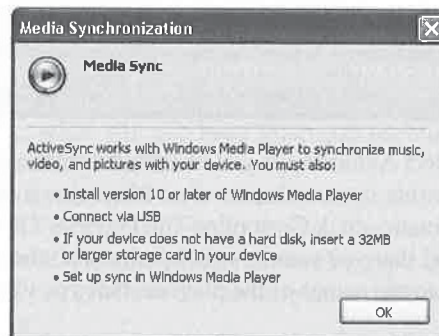


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## Change Media Synchronization Settings

Windows Media Player Version 10 for Windows and Windows Mobile devices includes synchronization of audio files and pictures between devices and desktop computers running the same version of the software. All Windows Mobile Version 5 devices come with Version 10 of Media Player, and some Windows Mobile 2003SE devices also have Version 10.

ActiveSync Version 4.1 has a Media information type, but you actually configure synchronization in Windows Media Player on your desktop computer. When you select Media in ActiveSync, you see the dialog box shown here. Media will only synchronize to a device via a USB connection, and it requires a storage card with at least 32MB of space.



To configure Media synchronization for a Windows Mobile 5 device, first connect the device to a PC, click Tools | Options, click Media, and then click OK. Next to Media, you will

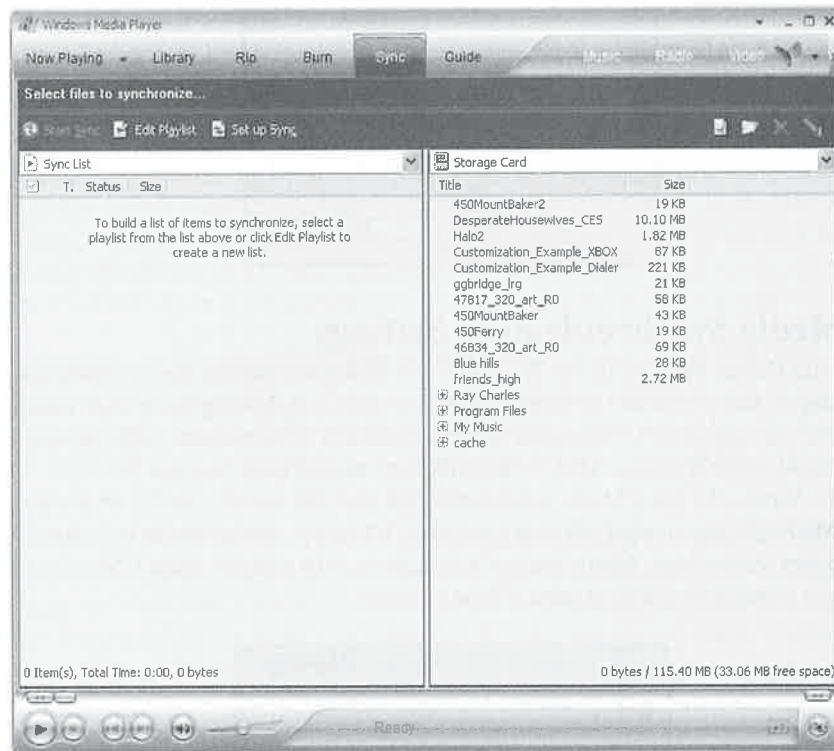
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see a link titled [Setup Must Be Completed](#), which you must click to start the process for setting up a partnership between the device and Windows Media Player on the PC.

### TIP

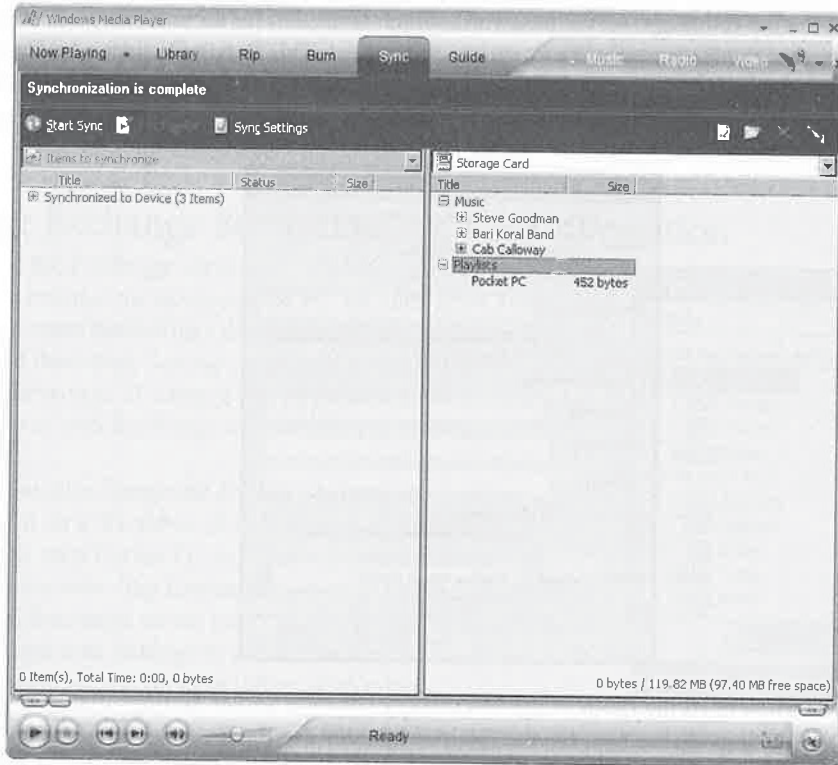
*If you have a device running Windows Mobile 2003SE, start Windows Media Player on the PC and then connect the device.*

Next, click Yes to set up the partnership, which starts Windows Media Player and opens the Sync tab:



Click Set Up Sync, and then select Automatic if you want to automatically synchronize media files with your device each time that it connects, or select Manual to manually select items to synchronize. If you select Automatic, click Customize The Playlists That Will Be Synchronized to select the playlists on your PC that you want to synchronize with the device and then click Next. Click the check box next to the names of the playlists that you want to synchronize and then click Finish.

The files and playlist will then synchronize to the storage card in the device. When synchronization is complete, you will see a list of the music and playlists that have synchronized in the right side of the screen, as shown in the following image.



Chapter 18 includes instructions for managing the playlists and music that synchronize with your Pocket PC or Smartphone.

## Configure Exchange Synchronization Settings

You can synchronize Calendar, Contacts, and Inbox information between your Windows Mobile device and an Exchange server running Exchange Server ActiveSync. Exchange 2003 includes Exchange Server ActiveSync, while you will need Microsoft Mobile Information Server to synchronize a device with Exchange 2002.

ActiveSync 4.1 provides Exchange Synchronization settings so that when you connect a device to the desktop it will synchronize with Exchange. You can configure a device to synchronize with Outlook and Exchange, but an information type can synchronize with only one location. For example, if you synchronize the Calendar with Outlook, you cannot then synchronize it with Exchange.

You can configure Exchange Server synchronization either on the device or from a desktop computer. To use a desktop computer, first connect your device to the computer, and then click Tools | Add Server Source to open the Microsoft Exchange Server Settings dialog box. Enter the server address, username, password, and domain name in the appropriate fields. Check Save

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Password to store the Exchange server password, which is needed for automatic synchronization. If the connection to the Exchange server requires SSL, check This Server Requires An Encrypted (SSL) Connection check box. Finally, specify how you want ActiveSync to resolve conflicts by selecting an option from the If There Is A Conflict drop-down list.



After you complete all the fields in the Microsoft Exchange Server Settings dialog box, click OK to open the Settings dialog box. On the Options tab, you see the Exchange Server settings and the settings of the sync relationship with the PC. To make changes to the Exchange server configuration, click Exchange Server and then click Settings. Select the check boxes next to the information types that you want to synchronize. To configure how the information synchronizes, click Settings. You cannot change the settings for Contacts.

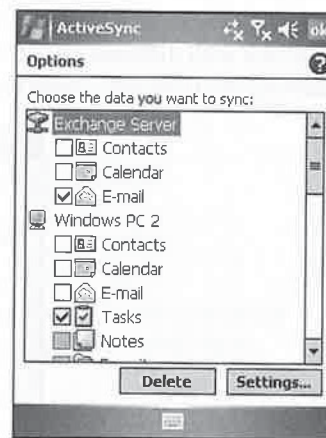


The server synchronization settings are written to the Windows Mobile device—which is why it must be connected before you can make changes. To see the settings in ActiveSync on the device, select Menu | Options and you will see a screen that looks the same as on a desktop computer. To change either the Exchange server configuration or how Calendar or E-mail synchronizes with Exchange, select the appropriate option and then click Settings.

## Change Exchange Server Connection Information

To change the Exchange server information in ActiveSync on a PC, first connect the device to the PC and then click Tools | Options to open the Settings dialog box. Click Exchange Server and then click Settings to change the Exchange server information. To change the way Calendar or E-mail synchronizes with Exchange, click either one and then click Settings.

You can also change the Exchange server connection information on a Windows Mobile device. For example, in ActiveSync on a Pocket PC, tap Menu | Options to open the screen shown here. Tap Exchange Server and then Settings to change the Exchange server information. Likewise, tap Calendar or E-mail and then Settings to change the synchronization settings for either one of these information types.



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### NOTE

*On a Smartphone, click Menu | Options, highlight an option, and click Menu | Settings.*

## How to ...

### Synchronize Windows Mobile Directly with Exchange

Pocket PCs and Smartphones are capable of synchronizing directly with an Exchange server, so you do not need a desktop connection.

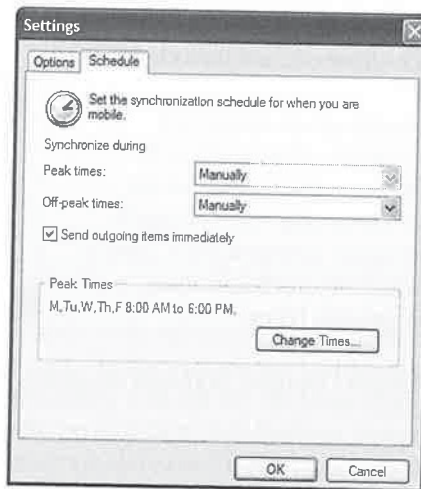
Direct synchronization works with any network connection that provides access to the Exchange server. You can use dial-up modems, Ethernet network connections, wireless Ethernet network connections, or wireless Internet connections. You may need to use virtual private networking (VPN) software to synchronize by using an Internet connection.

To synchronize a device directly with Exchange, start the ActiveSync program on the device and select Sync. You can configure the device to synchronize automatically at specified time intervals, and Exchange can even automatically synchronize (or push) new information with Windows Mobile 5.

To change the synchronization schedule with Exchange on the device, select Menu | Schedule.

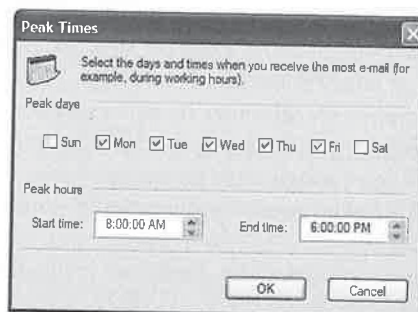
## Change the Synchronization Schedule

If you configure your Windows Mobile device to synchronize with Exchange via a wireless connection, you can schedule the synchronization to occur at regular intervals. To change the synchronization schedule from a desktop computer, first connect the device and then either click Schedule from the ActiveSync program window or choose Tools | Schedule in ActiveSync on the desktop to display the Settings dialog box with the Schedule tab selected, shown here. The changes you make on this screen define how often the Pocket PC or Smartphone directly synchronizes with an Exchange server over a network connection. If you use a wireless connection with different rates for peak and off-peak usage, you may want to control how often synchronization occurs to save money by selecting a time from the drop-down lists.

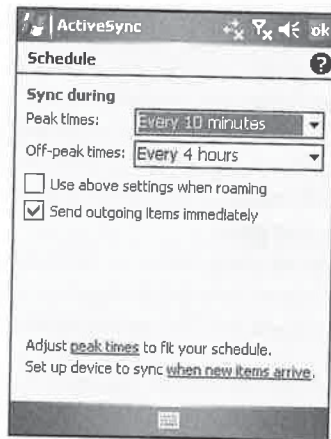


You can also specify whether you want the device to use the same synchronization schedule when you are roaming on another wireless network. Keep in mind that you may pay more for wireless data service when roaming on another network. To have e-mail sent immediately, click Send Outgoing Items Immediately.

To define the hours for peak times, click Change Times, and select the days of the week, start, and end times in this dialog box:



To change the synchronization schedule on your Windows Mobile device, select Menu | Schedule in ActiveSync. On a Pocket PC you will see this screen:

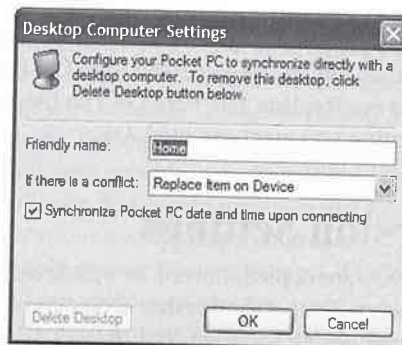


Select the time intervals for peak and off-peak synchronization from the appropriate drop-down lists, and tap Peak Times to change the days of the week, start, and end times for peak hours.

## Resolve Synchronization Conflicts

With Windows Mobile 2003SE or older devices, when a conflict occurs during desktop synchronization, the affected item is marked as unresolved in ActiveSync and on the device, unless you tell ActiveSync how to handle conflicts. For Windows Mobile 5 synchronization, conflict resolution defaults to replacing the item on the device unless you change the conflict resolution setting.

To change the conflict resolution setting from a desktop computer, connect the device and then click Tools | Options, click the name of the sync relationship, and then click Settings to open the dialog box shown here. Select an option from the If There Is A Conflict drop-down list, and then click OK. Follow the same process to change the conflict resolution setting between a device and an Exchange server.





How to ...

## Fix Persistent Conflicts

The approach that Windows Mobile 5 uses for conflict resolution fixes a problem with previous versions of persistent conflicts. Sometimes, one or more ActiveSync information types report conflicts that are not resolved, regardless of how conflict resolution is configured. This problem, along with other synchronization problems, is often caused by problems with the Outlook data file on the desktop computer.

The Inbox Repair Tool, of filename `scanpst.exe`, is installed on all PCs running Microsoft Outlook. If you have problems synchronizing data, you should use this tool to scan the Outlook data file, called `outlook.pst`. To use the repair tool, follow these steps:

1. Disconnect the Pocket PC from the desktop computer and exit Outlook.
2. Search your desktop computer for the filename `outlook.pst`, and make note of the file location.
3. Search your desktop computer for the filename `scanpst.exe`.
4. Start the repair tool by double-clicking `scanpst.exe` in the Search Results window.
5. Click Browse and select `outlook.pst` using the information provided in Step 1.
6. Click Start.

The Inbox Repair Tool will scan through the `outlook.pst` file and fix any problems that it finds. You may want to run the repair a second time if the first scan identified several problems.

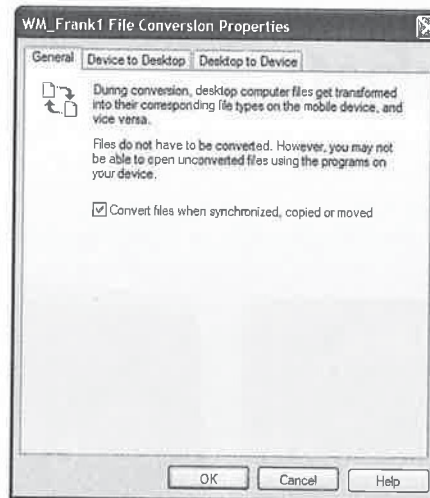
As is the case with all other ActiveSync settings, you can change the conflict resolution setting directly on a Windows Mobile device. In ActiveSync on the device, select Menu | Options, select the name of the sync relationship, and then click Settings. To change the conflict resolution setting for an Exchange server, click Next after opening the Server Settings screen and then click Advanced.

The three settings for desktop synchronization are Leave The Item Unresolved, Always Replace The Item On The Device, or Always Replace The Item On The Computer. The settings for server synchronization are Always Replace The Item On The Device or Always Replace The Item On The Server. Select the setting you want and click OK.

## Configure File Conversion Settings

ActiveSync converts files when they are copied, moved, or synchronized between the Windows Mobile device and desktop computer. To specify whether or not conversion is to take place and how files are converted, connect the device and then click Tools | Advanced Tools | Edit File

Conversion Settings. The File Conversion Properties dialog box, shown here, opens. Turn file conversion on by selecting the check box on the General tab. When the box is unchecked, file conversion is turned off.

**NOTE**

*You cannot change file conversion settings in ActiveSync on a Windows Mobile device.*

Select the Device To Desktop tab of the File Conversion Properties dialog box to change conversion settings for files moved from the device to the PC. To make a change, select a file type from the list and then click Edit.

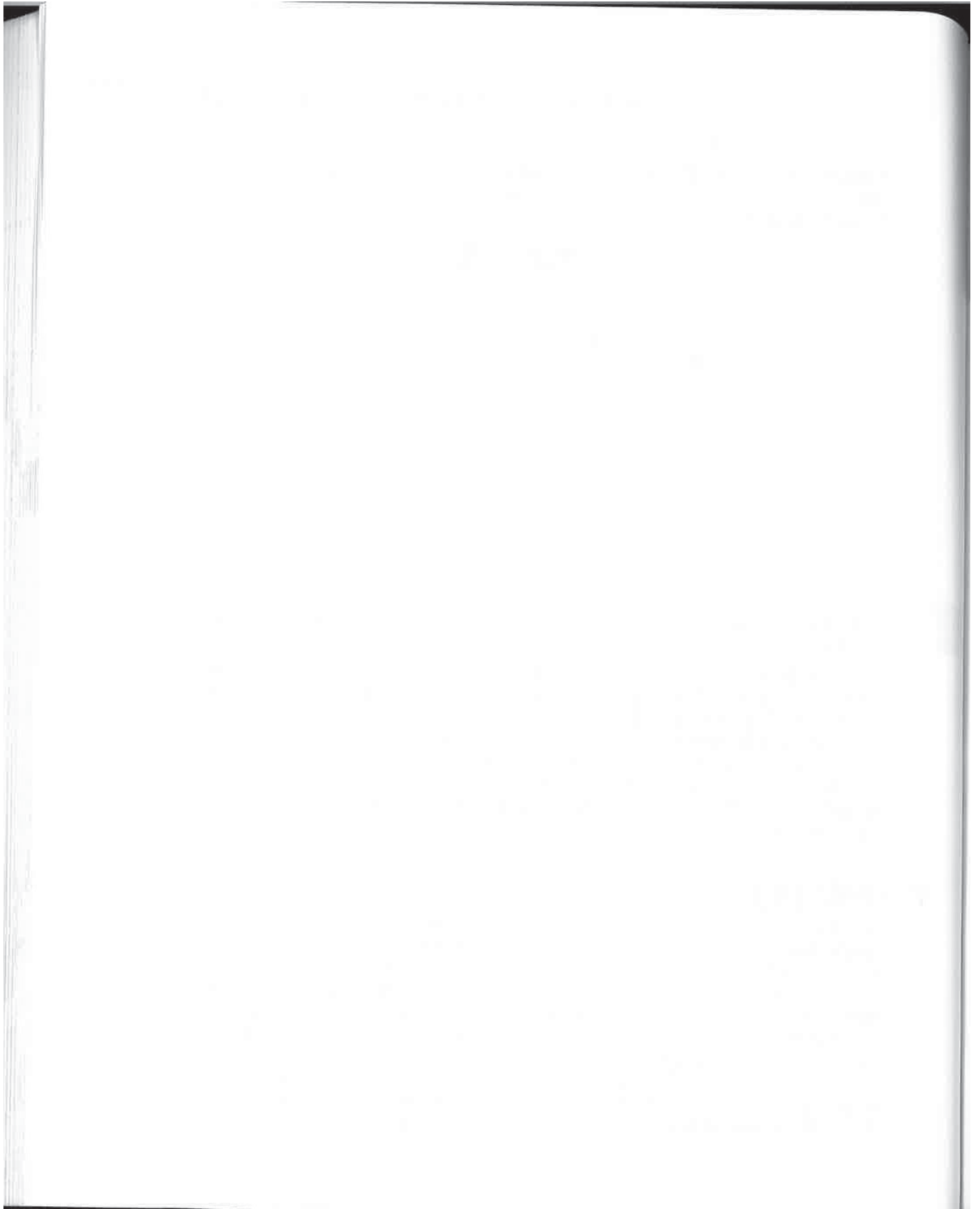
Select the desktop file type from the Type drop-down list in the Edit Conversion Settings dialog box and click OK. Then click OK on the File Conversion Properties dialog box to save the change.

The process for changing the file conversion settings of files moved from the desktop to the device is the same. First, select the Desktop To Device tab, select a file type, click Edit, select a new file type, and then click OK.

## Wrapping Up

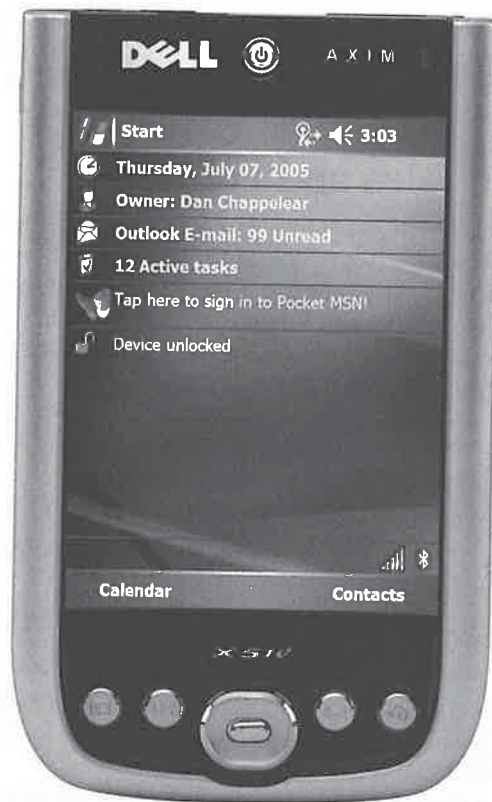
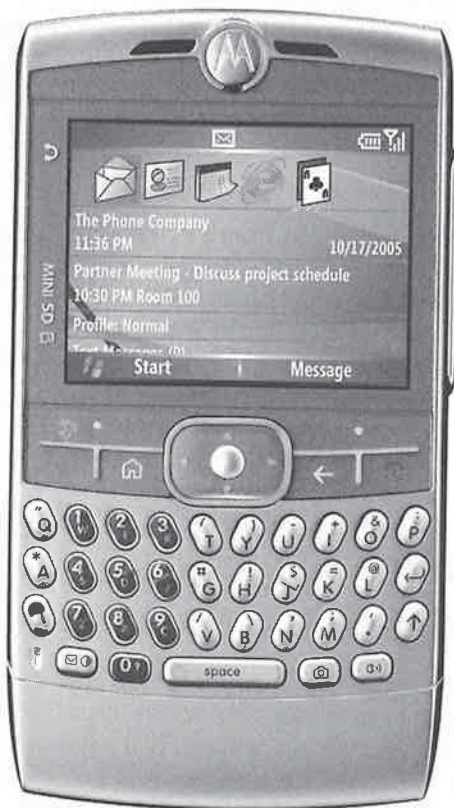
The primary reason for connecting Pocket PCs and Smartphones to desktop computers is to synchronize data with Microsoft Outlook or Microsoft Exchange. ActiveSync synchronizes data between the device's Calendar, Contacts, Tasks, Notes, and Messaging programs with their counterparts in Microsoft Outlook. You can synchronize Calendar, Contacts, and Inbox with Microsoft Exchange. ActiveSync also provides synchronization for Internet Explorer Favorites, as well as Windows Media. Software developers may also use ActiveSync to synchronize data between other Pocket PC applications and desktop counterparts.

Synchronization is not the only reason for connecting a Windows Mobile device to a desktop computer, however. As you will see in the next chapter, you can also use ActiveSync to manage files and folders on the device, to back up and restore data, and to install programs.



# Chapter 8

## Manage Your Windows Mobile Device from Your Desktop



## How to...

- Explore files and folders
- Copy, delete, and rename files and folders
- Install and remove programs
- Use Desktop Pass Through
- Back up and restore a Windows Mobile 2003 device

As you have seen in the previous two chapters, you can connect Windows Mobile devices with desktop computers and synchronize data in a variety of ways. Synchronization is not the only reason for connecting Pocket PCs and Smartphones with desktop computers, however. ActiveSync also provides help in managing devices, such as exploring files and folders, copying, deleting, and renaming files and folders, installing and removing programs, and connecting to networks. In this chapter, you will learn how to use ActiveSync to perform all of these functions.

## Explore Files and Folders

All versions of ActiveSync enable the user to browse files and folders from a PC on a connected device. In fact, ActiveSync is the only way to browse Smartphones and older Palm-size PCs unless third-party software is installed on the device. Browsing with Handheld PC (H/PC) Explorer was done in a separate program window, but since the inclusion of Windows CE Services, device files and folders can be browsed from within Windows Explorer.

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## Protect Your Windows Mobile Device Against Viruses

Few viruses currently affect Pocket PCs or Smartphones, and so far there has been greater concern about devices spreading viruses to desktop computers than virus attacks on devices. If you are concerned about protecting your Pocket PC from viruses, you will find products from Trend Micro and F-Secure.

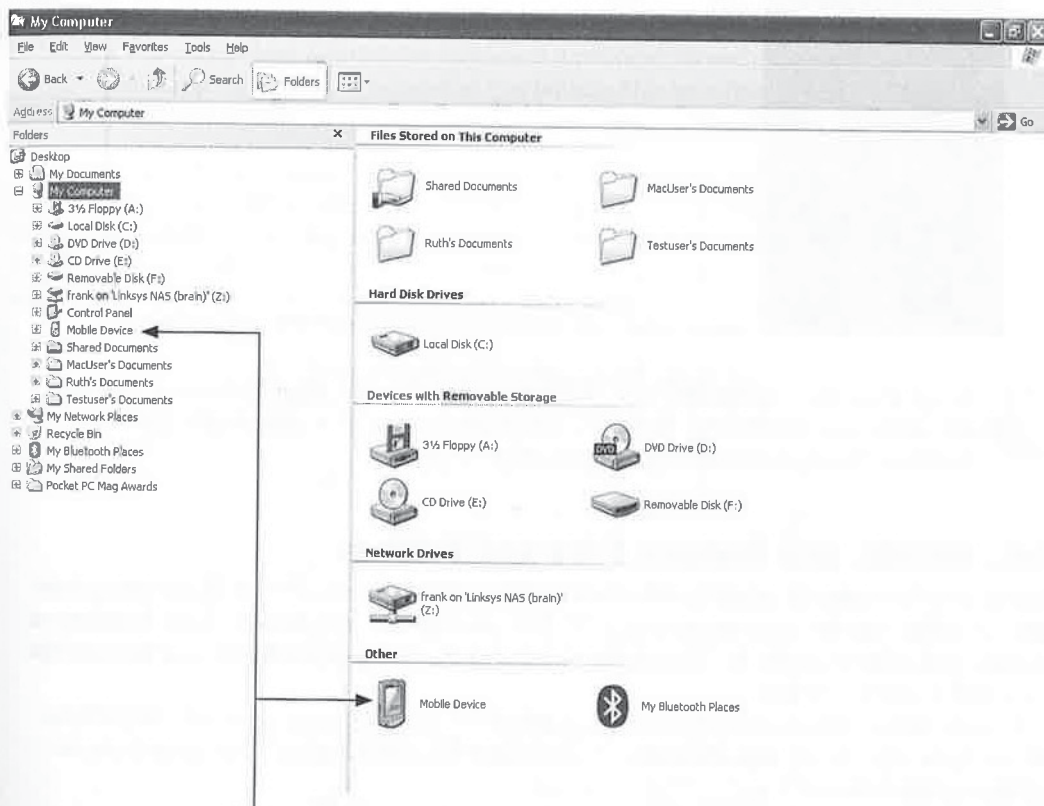
Virus scan programs that run on Pocket PCs include PC-cillin for Wireless from Trend Micro ([www.trendmicro.com/en/products/desktop/pcc-wireless/evaluate/overview.htm](http://www.trendmicro.com/en/products/desktop/pcc-wireless/evaluate/overview.htm)) and F-Secure Mobile Anti-Virus ([www.f-secure.com/products/mobileav/](http://www.f-secure.com/products/mobileav/)). For Pocket PC Phone Editions and Smartphones, there is Trend Micro Mobile Security ([www.trendmicro.com/en/products/mobile/overview.htm](http://www.trendmicro.com/en/products/mobile/overview.htm)).

## Browse Files and Folders

You can browse files and folders on a connected device either within Windows Explorer or by using ActiveSync. As you can see in Figure 8-1, when ActiveSync is installed on the PC, a Mobile Device item is added to Windows Explorer.

If a Pocket PC or Smartphone is connected, double-clicking the Mobile Device icon in Windows Explorer displays the files and folders of the device. The process of browsing files and folders on a device is similar to browsing the hard drive of a PC. You open a folder by double-clicking its icon. But it differs from PCs in that double-clicking a filename opens a Properties dialog box rather than opening the file.

To use ActiveSync to browse a connected device, click the Explorer icon on the ActiveSync toolbar or choose Tools | Explore Pocket PC or Tools | Explore Smartphone. An Explorer

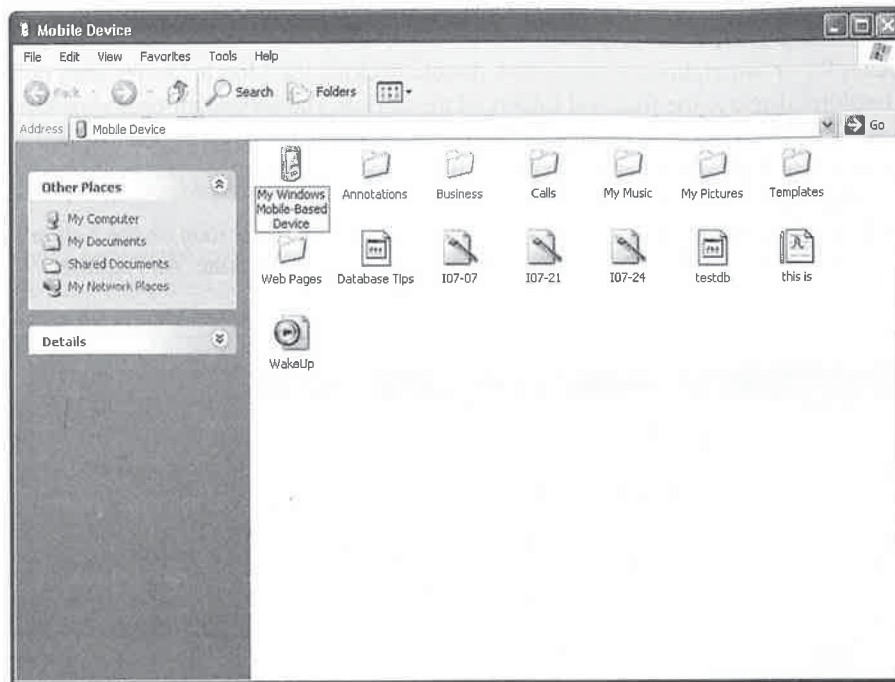


Double-click these to browse folders and files on the device.

**FIGURE 8-1** With ActiveSync installed, a Mobile Device item is added to My Computer.

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window, shown here, will open. To open a folder, double-click its icon. Double-click a filename to open a Properties dialog box.



### NOTE

*You first see the contents of the My Documents folder on the device when you explore the device on your desktop. To browse all the folders on the device, double-click My Windows Mobile-Based Device in the Explorer window.*

## Copy, Delete, and Rename Files and Folders

The processes for copying, deleting, and renaming files and folders on a Pocket PC or Smartphone using ActiveSync are the same as those on a PC. You can copy files and folders within locations on a device, such as between the My Documents folder and the Storage Card folder, and between the device and desktop computer.

To copy files or folders, use either the drag-and-drop method or copy and paste. ActiveSync will automatically convert files if file conversion is enabled. (See Chapter 7 for instructions on configuring file conversion.)

### TIP

*Use file synchronization to copy a file to a Pocket PC or desktop PC while the two are not connected. Move or copy the file to the Synchronized Files folder of either, and the file will be copied at the next synchronization. Unfortunately, Smartphones do not support file synchronization.*

Delete a selected file or folder by simply pressing **DELETE** or by choosing **File | Delete**. Items deleted using ActiveSync are not backed up to a recycle bin prior to deletion. Rename a selected file or folder by choosing **File | Rename** or by right-clicking the item and then choosing **Rename**.

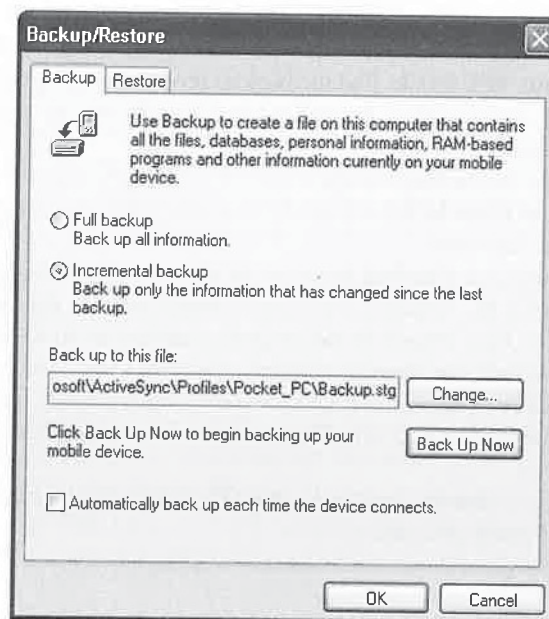
## Back Up and Restore Files

ActiveSync Version 4.1 does not back up or restore files for Pocket PCs and Smartphones running Windows Mobile 5. Because these devices support persistent storage, your data will not be deleted even when the device loses complete power or is hard reset. However, Windows Mobile 2003SE or older devices can lose data when power is lost, and the only way to ensure that you can restore one of these devices to its current state is by running regular backups, which you can do with ActiveSync.

### NOTE

*ActiveSync does not back up files or folders that are on storage cards. If you want to back up data on storage cards, you need to use a third-party program, such as CF2Desktop from Information Appliance Associates, at [www.pocketgear.com/software\\_detail.asp?id=1557](http://www.pocketgear.com/software_detail.asp?id=1557). If you want to synchronize files on a storage card, you can use MightySync, found at [www.mydocsunlimited.com/html/mightysync.html](http://www.mydocsunlimited.com/html/mightysync.html).*

Automatic backups execute if you configure ActiveSync to back up whenever the device connects. To configure this option, connect the device to the desktop computer and then choose **Tools | Backup/Restore** to open the dialog box shown here. Check the **Automatically Back Up Each Time The Device Connects** check box and then click **OK**. The next time the device connects, a backup will run immediately after synchronization.





**NOTE**

*Backups can take a long time to run using older USB connections, so consider how long each backup will take before configuring it to occur every time you connect the device to the PC.*

Automatic backups occur every time you connect a device, extending the time of synchronization. If you do not want backups to occur automatically, you can manually back up a device by connecting the device to the desktop PC and then choosing Tools | Backup/Restore. Click Back Up Now on the Backup tab, and the backup will start showing its progress as it works.

**NOTE**

*Do not use the device until the backup is finished.*

### Define the Backup Type

ActiveSync will run either a full or an incremental backup. An incremental backup backs up only those changes that have occurred since the last backup, while a full backup backs up all information every time. Incremental backups are quicker than full backups and therefore work well with modem connections.

## How to ...

### Run a Local Backup

Most Pocket PCs include a backup program that will back up the program files and data on the device to a storage card. You should find the backup program in the Program Files folder. These programs run faster backups than ActiveSync and are convenient to use while you're traveling away from desktop computers.

If your device provides an internal storage card in Flash ROM, consider storing backups to this area. Files written to Flash ROM will not be deleted even if the device loses power, so it is a safe location for backup files.

If your device does not have a backup program, or if you prefer a more robust program, try Sprite Backup for Pocket PC, which enables you to select specific files and folders to back up and restore. The Plus version of the program enables you to back up files to a desktop computer or network file share in addition to storage cards. You can schedule backups to run automatically at a specific time each day or once a week, and a battery-monitoring feature automatically backs up a Pocket PC or Smartphone when the battery reaches a defined threshold.

You can buy a copy of Sprite Backup for Pocket PC or download a trial version of the program from [www.spritesoftware.com](http://www.spritesoftware.com).

To define the backup type, choose Tools | Backup/Restore, select either the Full Backup or Incremental Backup radio button, and then click Back Up Now.

## Define Where to Store the Backup

ActiveSync backups are written to the PC hard drive. By default, the filename is backup.stg and is stored in a folder with the name of the device stored in a subfolder of Documents and Settings. For example, for a user named Frank, the backup files may be in \Documents and Settings\Frank\Application Data\Microsoft\ActiveSync\Profiles\Pocket\_PC.

### TIP

*Two files that contain partnership information are also stored in the backup folder. These files have the names outstore.dat and repl.dat. If you want to back up the partnership information stored on the PC, back up these two files.*

You may want to change the location of the backup file to a hard drive that has more storage space or to make it easier to back up on the PC. To change the location where the backup file is written, do the following:

1. Choose Tools | Backup/Restore.
2. Click Change.
3. Select a new location in the Select Backup Set dialog box.
4. Click Save to close the Select Backup Set dialog box.
5. Click OK to close the Backup/Restore dialog box.

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### TIP

*You can also use this procedure for renaming backup files to something with the current date so that you can easily see when you ran the backup.*

## Restore from a Backup

ActiveSync restores data from the backup file on the PC to the device. During the process, all of the contents in the device are replaced by the items in the backup, and the recycle bin is emptied. Restore does not overwrite a device's password.

Before you perform a restore, you need to be aware of a few things:

- If you change the country settings on the device prior to the backup, you must make sure the device is set to the same country settings before the restore; otherwise, the restore will not work.
- The restore will replace everything within internal storage on the device. If files have been written on the device since the backup, you should copy them to a storage card or a PC before running Restore; otherwise, the files will be lost.
- While you can back up a Pocket PC using a network connection, you must restore a Pocket PC using either a serial, USB, or infrared connection.

How to ...

## Control Pocket PCs and Smartphones from Desktop Computers

Some people find it awkward to work with Pocket PCs while they are docked in cradles and connected to PCs. Virtual CE from BitBank Software fixes this problem by enabling you to manipulate Pocket PCs from desktop computers while they are attached by cradles or over Ethernet networks. In addition to controlling Pocket PCs remotely, Virtual CE enables you to display Pocket PC screens on projectors and to capture various screen shots. You can download Virtual CE from [www.bitbanksoftware.com/VirtualCE.html](http://www.bitbanksoftware.com/VirtualCE.html).

If you want to control a Smartphone from a desktop computer, you can use Pocket Controller Professional from SOTI Inc., available at [www.soti.net](http://www.soti.net).

To restore from a backup file, follow these steps:

1. Connect the device to the desktop computer. If the Partnership Wizard starts, follow the instructions to create the partnership.
2. Close any programs that may be running on the device.
3. Choose Tools | Backup/Restore and then choose the Restore tab.
4. Click Restore Now. Do not use the device while the restore runs.
5. After the restore completes, soft reset the device.

## Install and Remove Programs

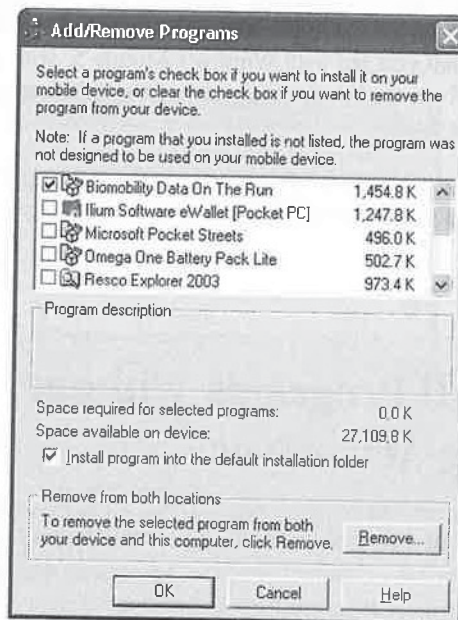
Most Pocket PC and Smartphone software includes a setup program that you run on a PC to install software to the device. Setup programs usually store copies of the device installation files on the PC and then run ActiveSync Add/Remove Programs to install the program on the device. With this process, ActiveSync tracks the software that has been installed, and it can be used to reinstall software without having to rerun the installation program.

To remove a program from a device, use either the Remove Programs setting on the device or the ActiveSync Add/Remove Programs dialog box. Chapter 4 provides the instructions for using the Remove Programs setting.

## Use ActiveSync to Install Programs

To use ActiveSync to install software, you must first connect the Pocket PC or Smartphone to the desktop computer. The connection can be either in a synchronization relationship or as a guest.

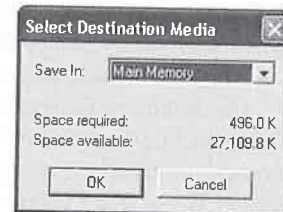
After the connection is made, choose Tools | Add/Remove Programs. ActiveSync determines what programs are installed on the device and then displays the Add/Remove Programs dialog box.

**NOTE**

*If the check box next to a program is grayed out, it means the program was installed on the device using a desktop computer other than the PC you are currently using.*

The checked programs listed in the dialog box are installed on the Pocket PC or Smartphone, and those not checked are available for installation. To install one of these programs, select its check box and then click OK. If you are installing a program to a device running Windows Mobile 5, the setup files are copied to the device and you will then see prompts on the device confirming whether you want to install the program and where you want to install it.

If you are installing a program to a device running Windows Mobile 2003SE or earlier, the Install Program Into The Default Installation Folder check box is available. If the check box is checked, installation starts immediately; otherwise, the dialog box shown here displays, asking whether to install the program in main memory or on the storage card. (You will not see this dialog box when installing software on a Windows Mobile 5 device.) Select the location from the Save In drop-down list and then click OK.



As the software is installed, a dialog box indicates its progress, where you can click Cancel if you want to stop the installation. Once installation is complete, another dialog box displays, asking you to check your device to see if other steps are necessary to complete the installation.

Click OK to close the dialog box, and then check the device to see if instructions are displayed on the screen.

If you install programs to a Pocket PC running Windows Mobile 5 that are designed for previous versions of Windows Mobile, the Command bar menus will be different. Rather than the two-button Command bar that you see with Windows Mobile 5, you see a number of menu options on the Command bar. Even though the menu structure is different, most older programs should run on Windows Mobile 5.

**NOTE**

*Some very old applications were written to run on devices that had SH3 or MIPS processors, and they will not run on Windows Mobile 5 devices.*

**How to ...****Install Programs Without Using ActiveSync**

ActiveSync provides the easiest, but not the only, way to install programs on a Pocket PC or Smartphone. You can install programs onto Windows Mobile devices without using ActiveSync by manually copying a cabinet file to the device and then running it. Cabinet files contain compressed copies of program files and execute directly on the device.

The challenges with installing programs in this way are finding the cabinet file to copy to the device and ensuring that you copy the correct version of the cabinet file. The second challenge is an issue only for Pocket PC 2000 devices, because their processors require different versions of program files. All Pocket PC 2002 and older devices can run the same program files, so this is not an issue for these devices.

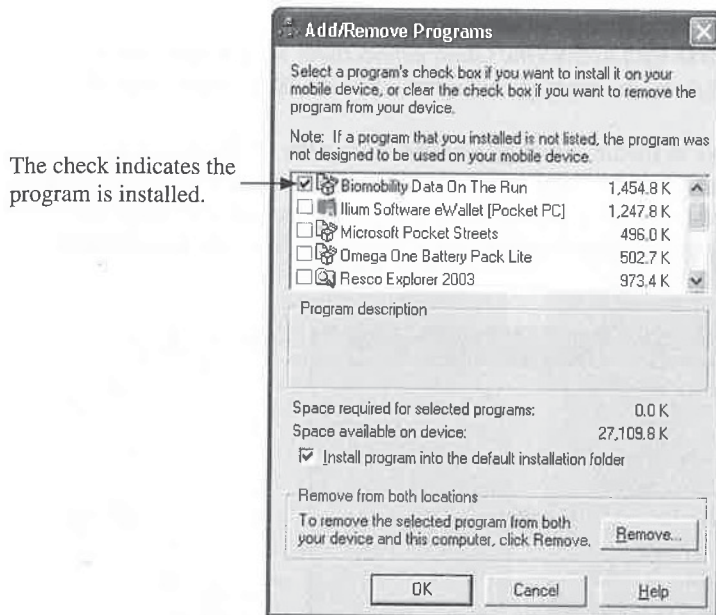
If a program has already been installed from a desktop computer, you will probably find the cabinet files for that program in the \Program Files\Microsoft ActiveSync folder on the desktop computer. Cabinet filenames use the extension *.cab*. The standard installation process that most programs follow creates a subfolder in the Microsoft ActiveSync folder on the PC and copies the device installation files to that folder. ActiveSync then copies those files to the Pocket PC or Smartphone and installs the program. If the installation files are not found in such a subfolder, you may find them elsewhere on the PC's hard drive, or they may be stored in a compressed file that you downloaded from the Internet.

Use Windows Explorer or ActiveSync Explorer to copy the cabinet file to the device. Then, use File Explorer on the device to browse to the file location, and tap the cabinet filename to install the program. Usually, after installation is complete, the cabinet file is deleted. If you don't want the cabinet file to be deleted, use Windows Explorer or ActiveSync Explorer to make the file read-only.

When you install a program by running a cabinet file, you cannot specify where it will install on the device. The freeware program CabInstl, available at [www.freewareppc.com/utilities/cabinstl.shtml](http://www.freewareppc.com/utilities/cabinstl.shtml), enables you to specify the installation directory for programs in cabinet files.

## Use ActiveSync to Remove Programs

To use ActiveSync to remove a program from a Pocket PC or Smartphone, connect it to the PC and then choose Tools | Add/Remove Programs. The Add/Remove Programs dialog box opens with the programs installed on the device checked.



To remove a program from the device, clear the program's check box and then click OK. A message box will display, indicating that the program is being removed. When finished, the Add/Remove Programs dialog box closes.

### TIP

*If ActiveSync cannot uninstall an application because files are open, soft reset the device and then reconnect it to the desktop.*

If you reopen the Add/Remove Programs dialog box, you will see that the removed program is still listed. It remains in the list because the installation files are still on the PC. If you want to remove the program from both the device and the desktop PC, clear the program check box and then click Remove.

## Use Desktop Pass Through

Desktop Pass Through is a feature that enables the Pocket PC or Smartphone to access the Internet while it is connected with desktop computers. The feature works only with ActiveSync 3.5 and newer versions, and it is not available for Pocket PC 2000.

## TIP

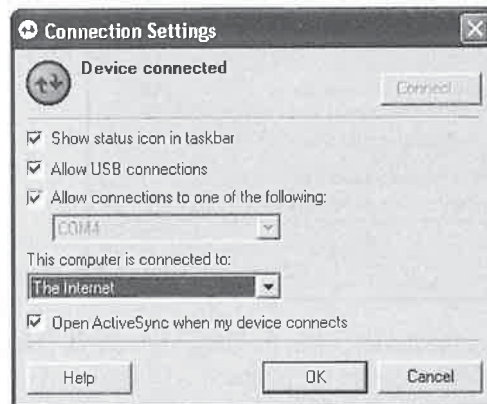
*Any application that works with the Internet will work using Desktop Pass Through.*

Pass Through uses the same Internet connection used by the desktop computer. If you access the Internet on the desktop using a modem, you need to establish a connection to the Internet before using Pass Through.

## TIP

*Desktop Pass Through works with ActiveSync Guest connections, so you can access the Internet via Pass Through from any desktop computer with ActiveSync installed on it.*

Desktop Pass Through is always available, although you can change the configuration to specify whether to connect to the Internet or a LAN. To make this change, choose File | Connection Settings in ActiveSync on the desktop computer to open the dialog box shown here. Change the This Computer Is Connected To drop-down box to either Work Network or The Internet to connect to a LAN or the Internet, respectively.



## Wrapping Up

Pocket PCs and Smartphones are designed to work as an extension of your desktop computer. ActiveSync enables the relationship between Windows Mobile devices and desktop computers by providing for data synchronization and device management. Now that you know how to connect your device with a desktop computer, it's time to learn how to use the Windows Mobile software.

# Part III

## Get Connected with Windows Mobile

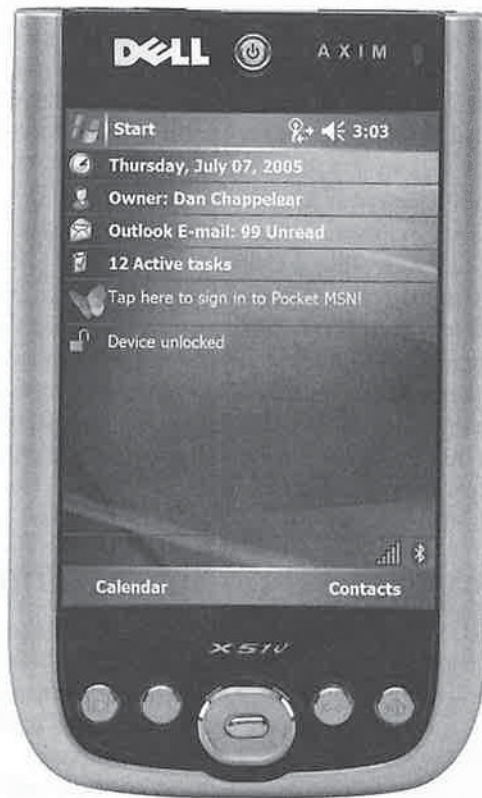
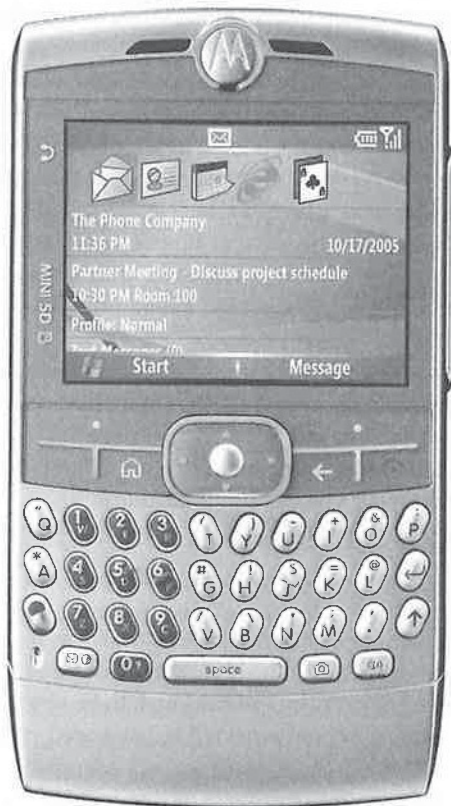






# Chapter 9

## Call a Friend



### How to...

- Purchase a Pocket PC with mobile-phone capabilities
- Make and receive phone calls using Windows Mobile
- Manage phone call information
- Change phone, service, and network settings

Chances are, you own a mobile phone, and had one long before you even considered buying a Pocket PC. Today, a mobile phone is one of a growing number of gadgets that we consider essential and that must be carried with us at all times. A Pocket PC is also in that list of essential gadgets, but for many people, lugging around a mobile phone and a Pocket PC all day is one gadget too many. The answer, according to analysts and hardware manufacturers, is a device that integrates mobile phone and personal digital assistant (PDA) features.

Over the last several years, there has been considerable talk about integrated devices, which are often called *smart phones*. The popular Palm Treo, which works with the mobile services provided by Verizon, Sprint, Cingular, and T-Mobile, is called a smart phone, as are phones from Nokia and Sony-Ericsson. Microsoft Windows Mobile runs on two different types of devices that can be considered smart phones, Pocket PC Phone Editions and Smartphones.

Pocket PC Phone Edition is an extension to the Pocket PC software that supports mobile-phone hardware. Phone Editions are designed primarily to be handheld computers with wireless data communication that also can support voice communications. Pocket PC Phone Editions have touch screens and usually require two hands to operate.

Smartphone is a subset of the Pocket PC software, and is designed for easy one-hand operation of the device. Windows Mobile Smartphones look like mobile phones, and they do not have touch screens. Smartphones do not include the Mobile Office software.

In this chapter you will learn how to make phone calls using a Pocket PC Phone Edition or Smartphone, and how to use Windows Mobile to manage your voice communications.

## Pick a Pocket PC or Smartphone

Several companies sell integrated devices, but the total number sold has not been nearly as high as the number of mobile phones or even handheld computers sold. The challenge is designing a device that is large enough to be useful as a handheld computer yet small enough to be carried around and used as a phone. With the trend of mobile phones becoming smaller, integrated devices feel and look like bricks in comparison.

The Microsoft solution to this dilemma recognizes that no one hardware design will be best for everyone. One part of the Microsoft solution is Windows Mobile software for Pocket PC Phone Edition and its mobile-phone capabilities, which is designed to be the best handheld computer capable of making phone calls. The second part of the Microsoft solution is the Windows Mobile software for Smartphone, which is designed to be the best mobile phone that also has some handheld computing capabilities.

The two Microsoft solutions are targeted at two different types of users. People who frequently use cell phones, or want to carry one small device, will prefer Smartphones because they are small and optimized for use in one hand. Those who do not frequently use cell phones, yet use handheld computers, will prefer Pocket PC Phone Edition because they won't have to carry multiple devices.

Trying to decide which Microsoft solution is right for you? First determine how frequently you make phone calls, and then determine whether you can live with the trade-offs of one solution over another. A Smartphone is smaller than a Pocket PC, but it does not have all of the features available on handheld computers. Pocket PC Phone Edition is larger than most mobile phones and can be awkward to hold up to your ear. You will most likely want to use a hands-free headset with any Pocket PC Phone Edition device.

Most Pocket PC Phone Editions are not sold in the same way as Pocket PCs. Rather than being sold directly by the device manufacturer, mobile service providers sell them. Instead of finding them at computer stores, you will find Pocket PC Phone Editions at mobile-phone stores, unless the computer store has a relationship with a mobile service provider. You will, however, find some Pocket PC Phone Editions from companies such as i-Mate that are sold online rather than directly by mobile service providers.

TIP

*Currently, all of the major mobile service providers in the United States sell Pocket PC Phone Edition devices. If you want to buy a Phone Edition device, first determine which provider provides the best service in your area, and then call them to find out what devices they sell, or go to the provider's web site.*

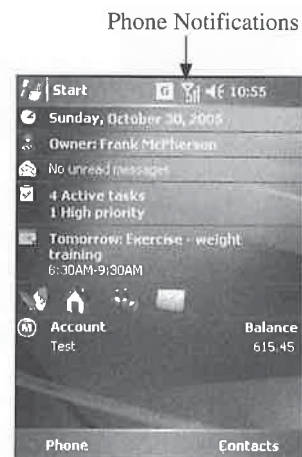
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When you buy a Pocket PC Phone Edition or Smartphone from a mobile service provider, it will be configured to work with that provider's service. In most cases, all you need to do is dial a phone number to make a call or open a web site to connect to the Internet. If you have a problem using your device, you need to call the mobile service provider's support line.

## Make and Receive Phone Calls

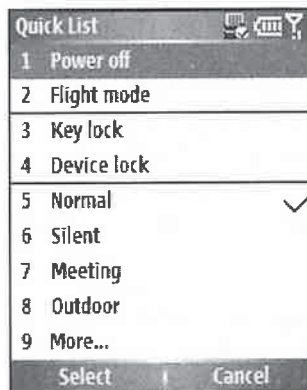
The mobile-phone features in Pocket PC are available only with integrated devices known as Pocket PC Phone Edition. You will not be able to obtain the Microsoft phone application unless you buy a Phone Edition or Smartphone. When you turn on Pocket PC Phone Edition or Smartphone, you will see a Phone Notifications icon. The phone searches for a connection, and when one is found it shows signal strength in the form of bars to the right of the icon.

On a Pocket PC turn the phone on or off by tapping the Phone Notifications icon. By default, the phone is always on, even when you have the Pocket PC turned off. To turn a Smartphone off, press and hold the power button until the device powers off. If you quickly press the power button, the Quick List, shown on the following page, displays. Select Power Off to turn the phone off.



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If you want to turn the radio off but keep the Smartphone powered up so that you can use the other features that are available, select Flight Mode.



### Make Phone Calls

You can make a phone call in one of several ways, depending on the number that you want to dial. One way to make a call is simply to dial a number using the Phone application, which you start on a Pocket PC by tapping Start | Phone. Tap the numbers on the keypad and then tap Talk. The screen here shows call dialing in progress. Tap End to complete the call and hang up.



How to ...

### Turn Off Your Pocket PC Phone Radio

Whenever you take a plane trip, you are instructed to turn off mobile phones, which you cannot use for the duration of the flight. If you have a Pocket PC Phone Edition, you may want to use the other features of Windows Mobile, while complying with the flight attendant's instructions. To do so, you can switch the Pocket PC Phone Edition to Flight Mode. Tap the Phone Notifications icon and then tap Turn On Flight Mode. While the device is in Flight Mode, you cannot send or receive phone calls. To turn the phone back on, tap the Phone Notifications icon and then tap Turn Off Flight Mode.

TIP

*Pocket PC Phone Edition also has dedicated hardware buttons for Talk and End, which are similar to the buttons on mobile phones. Press Talk while any application is open to open the Phone application.*

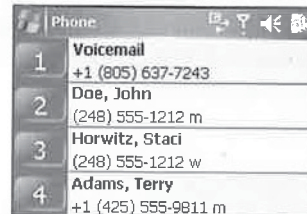
Smartphones do not have a separate Phone application; simply press the numbers on the numeric keypad to dial a number, and then press Talk. As you dial a number, Smartphone searches your contacts and displays the contacts whose phone numbers match the numbers that you have entered so far, as shown here. The display is updated as you enter each number. Use the navigation button to select a contact to call.



NOTE

*Smartphones also attempt to match the name using a best guess based on the alphabetic characters on the keypad buttons. For example, pressing 223 will also match "Abe."*

The Pocket PC Phone application supports speed dialing, which uses phone numbers that you program into storage locations associated with numbers on the keypad. To speed dial a number, tap-and-hold a number on the keypad, and the Phone application will dial the associated number. If the speed-dial location is a two-digit number, tap the first digit and then tap-and-hold the second digit. You can also tap Speed Dial on the keypad and then tap a number from the list that appears. To speed dial with a Smartphone, press and hold the keypad number that has a speed-dial number assigned.



Did you know?

## Mobile-Phone Technologies

GSM is widely used throughout Europe but is used much less in the United States. T-Mobile and Cingular Wireless provide the majority of GSM service in the United States. Verizon Wireless and Sprint use Code Division Multiple Access (CDMA), and these two companies provide the greatest mobile-phone coverage in the United States. You can also buy Pocket PC Phone Edition devices from both of these companies.

GSM and CDMA are voice communications technologies and both have data communications counterparts. General Packet Radio Service (GPRS) and Enhanced Data

*(continued)*

GSM Environment (EDGE) are the data counterparts to GSM, and Single Carrier Radio Transmission Technology (1xRTT) and Evolution Version Data Only (EVDO) are the data counterparts for CDMA. (1xRTT is also referred to as CDMA2000.) EDGE and EVDO provide the highest transmission speeds and are sometimes sold as wireless broadband.

GPRS, EDGE, 1xRTT, and EVDO provide data connectivity that is similar to local area networks (LANs). Rather than dialing a phone number, like a modem, they connect through access points that provide the device with an Internet Protocol (IP) address. Consequently, applications designed to work on IP-based networks will work on GPRS, EDGE, 1xRTT, and EVDO networks. Usually you will be charged for the amount of data that is sent to and received from the device.

While GSM is used throughout the world, it operates on different frequencies, so a device that you buy in the United States may not work in Europe, and vice versa. GSM devices operate on the 850 or 1900 band in North and South America and the 900 or 1800 band in Europe. Some Pocket PC Phone Editions will work on multiple bands.

An advantage for using GSM phones is Subscriber Identity Module (SIM) cards, which are smart cards that store mobile-phone service settings and user preferences. In some cases, SIM cards contain contact information that you can access as speed-dial numbers on Windows Mobile devices. You can also import contacts from SIM cards to Pocket PCs.

If you already subscribe to a GSM service, you should be able to use a Windows Mobile device with that service by simply transferring the SIM card from your phone to your device.

How to ...

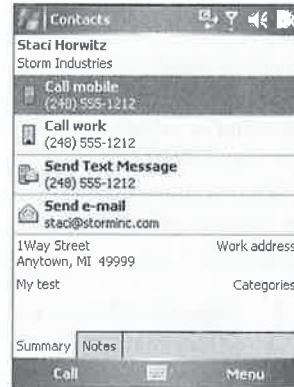
## Import SIM Contacts into a Pocket PC

SIM cards used with GSM mobile service can store more than network information; they can also store contact names and phone numbers. If you use a mobile phone and then switch to a Pocket PC Phone Edition device, you may want to copy the contact information that you have been storing on the phone to the device. Windows Mobile 5 includes a utility called SIM Contacts that imports the contact information on SIM cards into Outlook Mobile Contacts.

Be aware that all of the contact information you import from a SIM card will synchronize with all PCs in a synchronization relationship with the Pocket PC. To start the program, tap Start | Programs | SIM Contacts. When all the contacts on the SIM card display, tap Copy Now to copy the contacts to Outlook Mobile Contacts. If a contact is found on the SIM card that is already on the Pocket PC, it will not be duplicated. Each contact from the SIM card is assigned to the From SIM Card category, which you can filter to display just the contacts obtained from the SIM card.

SIM contacts automatically display in Contacts on Smartphones. You will find SIM contacts at the end of the Contacts list on a Smartphone.

While speed dialing can be handy when making calls, you will most likely store all phone numbers in Contacts. The Contacts program on Smartphones and Pocket Phone Editions is enhanced to support dialing phone numbers. To dial a number from Pocket PC Contacts List view, tap-and-hold on the contact. On the pop-up menu, each contact method that is available will display. For example, if a contact has work and mobile telephone numbers, then Call Work and Call Mobile display in the pop-up menu.



Another enhancement to Contacts is that phone numbers, e-mail addresses, and text messaging addresses display with icons in the Contacts Summary view, shown here. To make a call, simply select any one of the phone numbers in the Summary view.

All the calls that you make or receive are tracked in the Call History. You can review and make calls from the Call History by tapping Call History on the Pocket PC Phone Edition keypad, or pressing Start | Call History on a Smartphone and then selecting a number or name on the list, as shown next. You also can filter the Call History to show missed calls, outgoing calls, incoming calls, or calls sorted by caller name by selecting Menu | Filter.



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## How to ... Take Notes During Calls on Pocket PCs

If you want to take notes during a call, tap Call Status and then tap Note. The Pocket PC Notes application starts for you to write notes. Notes taken during a call are associated with the phone number, and you can open the note from within the Call Log. To take notes during a call, you need to use a hands-free microphone or the speakerphone functionality that may be available with integrated Pocket PCs.



## Make Phone Calls Using Voice Command

One of the functions that you find with many high-end mobile phones is voice dialing, and Microsoft's Voice Command software provides this functionality for Pocket PCs. Voice Command is included in ROM of some Pocket PCs, or otherwise you can purchase it online at [www.windowsmobile.com](http://www.windowsmobile.com).

After you install the software, you will find a Voice Command icon on the Personal Settings tab of the Pocket PC. Tap the icon to enable Voice Command and configure its several options. After you install the software, you should follow these steps to optimize the program's performance:

1. Adjust the Pocket PC's microphone settings. Check to see if your Pocket PC has a Microsoft Automatic Gain Control (AGC) setting by tapping Start | Settings | System. If it does, turn off AGC and set the microphone gain to medium level. You may find specific microphone gain settings for your Pocket PC in the online help.
2. Set the Voice Command button. In order to activate Voice Command you need to press a hardware button. To assign a hardware button, tap Start | Settings | Buttons. Tap the button that you want to assign and select Voice Command in the Assign A Program drop-down list.



To use Voice Command, hold your Pocket PC about nine inches away from your mouth and press the hardware button that you assigned to Voice Command. You will see a *microphone icon* appear on the command bar. Clearly speak the command that you want to perform. For example, to call a person in your Contacts list, say **Call contact**, where *contact* is the first and last name of a contact on your Pocket PC. Voice Command will confirm your selection by repeating the name; if there are multiple phone numbers for the contact, it will ask which number you want to dial.

### TIP

*You can specify which contact number to dial by saying **Call contact at location**. For example, **Call Frank McPherson at work**.*

To call a phone number that is not in your Contacts list, say **Dial number**. Additional commands are **Callback**, to return the last call received, and **Redial**, to repeat the last call made.

## Receive Phone Calls

When the Pocket PC receives a call, a notification bubble appears on the screen with options for Answer and Ignore. Tap Ignore to silence the phone and transfer the call to voice mail, if it is included by the mobile-phone service, or tap Answer to receive the call. If the Phone application is running, you can also tap Talk to answer a call. Finally, if you use an integrated device that includes a Talk hardware button, press the button to receive the call just as you do with mobile phones.

If you receive a call on a Smartphone from someone in Contacts, the contact's name and picture, if it is included in Contacts, displays on the screen. Otherwise, you simply see the

How to ...

## Control Your Pocket PC with Your Voice

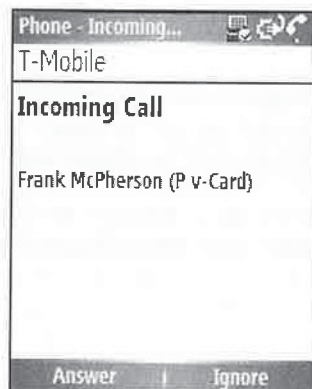
In addition to making phone calls, you can use Voice Command to control your Pocket PC in the following ways:

- **Show contacts** Say **Show *contact*** or **Lookup *contact*** to display a contact.
- **Read appointments** Say **What's my next appointment?** to hear the upcoming appointment. Say **What's my schedule today?** or **What's my schedule tomorrow?** to hear all your appointments for today or tomorrow.
- **Play music** Say **Play music** to have Voice Command guide you to select music. Say **Next track**, **Previous track**, **Play**, **Pause**, or **Stop** to control music playback.
- **Start programs** Say **Start *program*** to start or switch to a program.
- **Get status** Say **What time is it?** to hear the current time, or say **What day is it?** to hear the current day. To turn off all wireless radios on the Pocket PC, say **Turn flight mode on**, and to turn on all wireless radios, say **Turn flight mode off**.
- **Get help** To receive help using Voice Command, say **Help** or **What can I say?**

In addition to enabling you to control your Pocket PC, Voice Command also provides information. Voice Command will announce Calendar reminders, the current song that is playing, and incoming calls. You can turn off these announcements by tapping Start | Settings | Voice Command. For more instructions on using Voice Command, check the Online Help on your Pocket PC.

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incoming phone number, unless the caller has caller ID blocked. Press the left or right softkey to answer or ignore the call. You can also press Talk to answer a call.



## TIP

Many headsets, including some Bluetooth headsets, have buttons that you can press to answer a call.

## Manage Calls

Every call that is made, received, or missed is entered in the Call History. To view the contents of the log, tap Call History on the Pocket PC keypad, or press Start | Call History on a Smartphone. You can filter the items in the Call History by selecting one of the following items from the Filter menu:

- **All Calls** Shows all the calls made, received, or missed in chronological order
- **Missed** Shows only those calls that were not answered
- **Outgoing** Shows only those calls made from the phone
- **Incoming** Shows only those calls made to the phone
- **By Caller** Shows only those calls associated with a single caller

If you create a note for a call, an icon appears next to the call entry in the log; tap-and-hold on the icon and tap View Note to open the note. Tapping within the white space of an entry in the log displays a tooltip showing the date, time, and duration of the call.

To delete all the items in the Call History on a Pocket PC, tap Menu | Delete All Calls. You can also delete individual entries from the Call History by tapping-and-holding on the entry and then tapping Delete. To automatically delete Call History items, tap Menu | Call Timers, and select an option from the Delete Call History Items Older Than drop-down list.

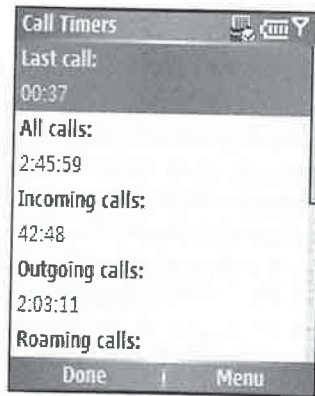
To display call statistics in the Call History screen on a Pocket PC, tap Menu | Call Timers. You can view the total time spent on all calls, the total number of calls, and the total time since the last time the Call History was reset. Tap Reset to reset the call statistics to zero.

There are more options in the Call History on Smartphones. To see the details of a call, use the navigation button to select the entry in the list and then press the navigation button. With the call information open, press Menu | Find Contact to open the contact information of the caller, press Menu | E-Mail to send an e-mail to the caller, press Menu | Delete to remove the information from Call History, or press Menu | Save To Contacts to add the caller name and phone number to Contacts.

## TIP

You can also open a caller's contact information, send an e-mail to the caller, save the caller name and phone number to Contacts, or remove the call information by pressing Menu and selecting an option from the Call History menu.

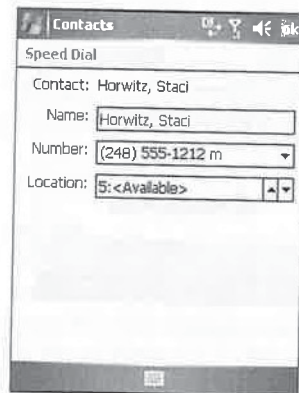
To display all the Smartphone call statistics, such as those shown next, press Menu | View Timers in Call History. To reset the timers, press Menu | Reset Timers.

**TIP**

To delete all of the information, press **Menu | Delete List** in *Call History* on a Smartphone.

## Program Speed Dial

You can add a speed-dial number in three ways on a Pocket PC. To create a speed-dial number from a contact, tap-and-hold on the item in the **Contacts List** view, and then tap **Add To Speed Dial** to display the screen shown here. Select a phone number and location from the appropriate drop-down lists and then tap **OK**.



You can also create a speed-dial number by tapping **Speed Dial** on the keypad of the **Phone** application and then tapping **Menu | New**, which opens a **Contacts** list from which you can select a contact for a speed dial.

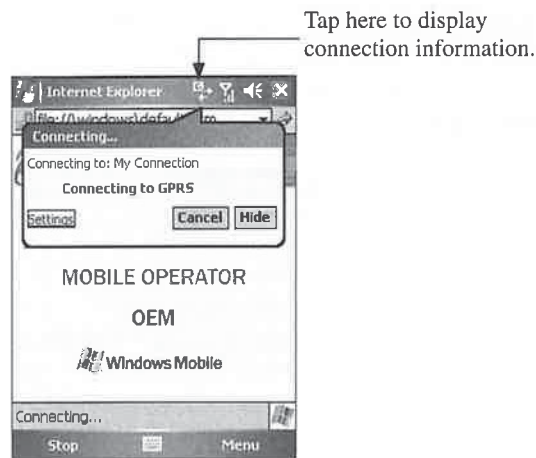
The final way to add a speed-dial number on a Pocket PC is also the only way that you can add a speed-dial number on a Smartphone. Open the **Contact Summary** view of the person for whom you want to create a speed-dial number, select **Menu | Add To Speed Dial**, and select the speed-dial location from the drop-down list.

## Connect to the Internet

While Windows Mobile provides voice communications, it is particularly suited for providing wireless connections to the Internet. This part of the book provides instructions for connecting Windows Mobile devices to networks, sending and receiving e-mail, sending instant messages, and browsing the Web. Everything in this part applies to Pocket PC Phone Edition and Smartphone; however, this chapter covers Internet connectivity issues unique to these devices.

If you buy your Pocket PC Phone Edition or Smartphone from a mobile service provider, it should already be configured for wireless access to the Internet, if your mobile service provider includes wireless data access. Pocket PC's Internet connections are configured using Connection Manager, which is covered in Chapter 10. You use the Smartphone settings, covered in Chapter 5, to configure Internet connections on Smartphones. If you are having problems connecting to the Internet, you should call your mobile service provider for help.

The simplest way to connect to the Internet is to start Internet Explorer and open a web page. When the Pocket PC connects, you see a notification bubble. Tap Hide to close the bubble, and tap Cancel to disconnect from the Internet. You will also notice that the network icon at the top of the screen changes. You do not see this notification bubble on Smartphones. When you want to disconnect, press the End hardware button.



## Manage Your Mobile Data Bill

Most mobile service providers have separate rate plans for data communications that are based on the amount of data transmitted. Typically, these plans provide a set amount of data that you can transmit per month, and you are charged an additional amount per megabyte over your limit.

Unless you have a plan that allows you to transmit an unlimited amount of data for a set fee per month, you will want to monitor your data traffic each month. An application that monitors your data use is Spb Software House's Spb GPRS Monitor, which adds an icon to the top of the Pocket PC screen.

How to ...

## Make Phone Calls over the Internet

A growing number of people are using the Internet to make inexpensive or free phone calls to places all around the world. These people are taking advantage of a technology called Voice over Internet Protocol (VoIP). Skype ([www.skype.com](http://www.skype.com)) is a popular program for making phone calls on the Internet, and you can download a free version of this program that runs on Pocket PCs.

Skype requires a high-speed connection to the Internet, so it works best with wireless LAN connections or 3G data connections from services such as Verizon, Sprint, and Cingular. If you use Skype on a Pocket PC that has built-in wireless networking, the Pocket PC needs at least a 300-MHz processor to run best. If you use an external wireless card, the Pocket PC's processor requirements increase to 400 MHz.

The GPRS icon provides a graphical indication of the data transmission speed, the amount of data transmitted per session, and battery strength. When you tap the icon, a notification bubble displays showing the amount of data transmitted that day and how much data is left in your plan.

TIP

*Spb GPRS Monitor is also available for Smartphone, and it has a Home Screen plug-in to show connection statistics.*

You can download Spb GPRS Monitor from [www.spbsoftwarehouse.com/](http://www.spbsoftwarehouse.com/). Another program that provides the same functionality is Ordina ALL-locations' GPRS Traffic Counter, which you will find at [www.all-locations.com](http://www.all-locations.com).

## Configure the Pocket PC Phone

To change the phone settings, tap Menu | Options in the Phone application. Alternatively, you can choose Start | Settings | Phone on your PC. The Settings screen has at least three tabs: Phone, Services, and Network. Your Pocket PC Phone Edition may have more tabs depending on its features.

NOTE

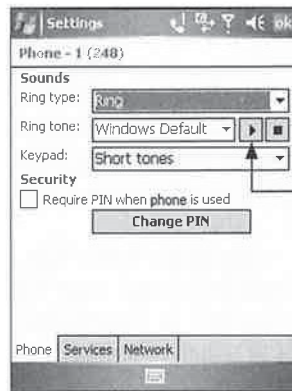
*Chapter 5 provides instructions for configuring settings on Smartphones.*

## Change the Phone Settings

The Phone tab, shown on the next page, displays the phone number, which is read from the SIM card. The Ring Type and Ring Tone settings configure how the Pocket PC reacts to an incoming call. Ring Type specifies the type of notification you receive for an incoming call. If you select a

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Ring Type option, you can sample and select a Ring Tone option. You cannot select a Ring Tone option if you select the Vibrate Only ring type.



TIP

*Windows Mobile 5 ring tone choices are WAV, Windows Media, and MIDI (including Polyphonic MIDI) files. Ring tones are stored in the \Windows\Rings folder.*

The Keypad field specifies what you hear when using the dialer. You can set the Keypad field to Short Tones or to Off so that it doesn't sound in public places. Select the Require PIN When Phone Is Used check box to prevent unauthorized use of the Pocket PC phone by requiring that a PIN be entered to use the phone. Tap Change PIN to change the PIN. Emergency 911 calls can be made at any time without first entering a PIN.

### Change the Services Settings

You use the Services tab, shown here, to access and configure services provided by your mobile service provider. To configure a setting, select the service and then tap Get Settings.



The Caller ID setting controls whether or not your phone number displays to the person you call. You can prevent your number from being displayed by configuring this setting. Call Forwarding configures the service to forward calls made to the phone depending on the status of the phone. You can configure the following Call Forwarding options:

- **Unavailable** Forwards calls if the phone is turned off or unreachable
- **Busy** Forwards calls when the line is busy
- **No Answer** Forwards calls if you do not answer the phone
- **All Incoming Calls** Forwards all incoming calls

**NOTE**

*Forwarding calls from a mobile phone to another phone involves additional charges on each call.*

Call Waiting allows you to receive a second call during a call. To turn call waiting off, tap Do Not Notify Me. Voice Mail And Text Messages configures the voice mail and text messaging access numbers.

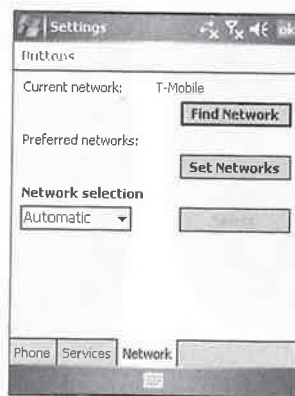
**TIP**

*Speed dial location 1 is automatically configured for accessing voice mail.*

9

## Change the Network Settings

The network settings allow you to select which mobile-phone network the Pocket PC phone will use. The selection remains active until you change it, lose the network signal, or change the SIM card. The currently registered network displays on the Network tab, shown here.



If your phone is not able to find a network, tap Find Network to start the network selection process. The phone will search for a network using the criteria that you specify in the Network



**How to . . .**

- Use the Connection Manager to configure network connections
- Select a wireless modem
- Use ActiveSync Desktop Pass Through to connect to networks using serial cables
- Connect to local area networks

**B**y all accounts, the number of people who use the Internet has grown at a phenomenal rate. The majority of Internet connections are made using personal computers, but a variety of other devices, such as smart phones, TV/set-top boxes, and handheld computers, are starting to be used to connect to the Internet.

When Microsoft originally designed Windows Mobile, the company recognized the importance of connecting to the Internet; as a result, every Pocket PC and Smartphone has the ability to connect in a variety of different ways.

The modem and telephone line combination used to be the most widely used means of connecting to the Internet, but today two alternative methods are more popular. One is *wireless networking*, which provides a connection to the Internet using analog or digital cellular phones, special wireless modems, or wireless Ethernet cards. The second alternative method for Internet access is *broadband*. In the simplest terms, broadband is fast Internet access for consumers. Two implementations of broadband are popular: cable-modem service, using the same cable wire connected to your television set, and Digital Subscriber Line (DSL), which provides high-speed access using regular telephone lines.

**NOTE**

*Because broadband is associated with fast Internet access, some forms of wireless networking, such as 3G services, are marketed as broadband services.*

Many of the latest Pocket PCs, and even some Smartphones, have built-in wireless Ethernet, or Wireless Fidelity (Wi-Fi), radios. For the majority of Pocket PC users, Wi-Fi will be the method used to connect to the Internet, and this chapter provides instructions for making the connection. Growing in popularity is wireless networking with cellular phones and wireless modems to connect to the Internet, and this type of connection is built into Pocket PC Phone Editions and Smartphones.

You'll find instructions for connecting to the Internet using all these forms of wireless connections in this chapter. You'll also learn how to use the device's USB cable and ActiveSync Desktop Pass Through to connect to the Internet.

**NOTE**

*Windows Mobile 5 adds Wi-Fi networking to Smartphones. However, at the time this book is being written, no Smartphones with Wi-Fi are available for purchase. Consequently, this chapter will focus on networking with Pocket PCs.*

**Network with Windows Mobile**

Microsoft has designed Windows Mobile so that it is easy to connect Pocket PCs to computer networks and know the current status of the network connection. At the top of the screen you see a network status icon. Table 10-1 shows how the network status icon indicates the network






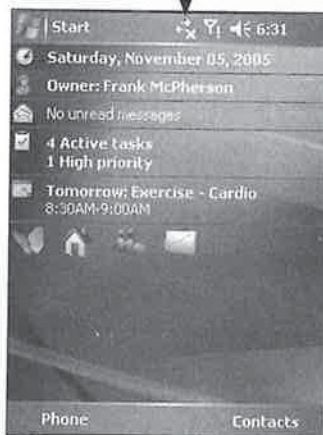
Connection Icon	Explanation
	The Pocket PC is not connected to the network. What appears in the notification bubble depends on what connections are configured. You will always see a Settings link that opens Connection Manager.
	The Pocket PC Phone Edition is connected to a GSM network that has GPRS data service. This icon does not appear on regular Pocket PCs, and may look different on Phone Editions that work with different network types.
	The Pocket PC is connected to a desktop PC.
	The arrows are moving in a circle, indicating that the Pocket PC is synchronizing with a desktop computer or server.
	The Pocket PC is connected to a wireless Ethernet network. When you tap the icon, a notification bubble displays the name of the network and the signal strength. To disconnect from the network, tap Turn Off Wi-Fi.

TABLE 10-1 Windows Mobile Connection Status Icons

connection status. When you tap the icon, a notification bubble displays, providing information about the connection and a link to open Connection Manager, which you use to change connection settings.

Tap here to open the notification bubble.



Windows Mobile includes zero configuration support for Wi-Fi connections. If you have a wireless network card in your Pocket PC and its driver supports zero configuration, or your Pocket PC has built-in Wi-Fi, when the Pocket PC gets into the coverage area of a Wi-Fi network for the first time, a notification bubble appears asking if this network connects to the Internet or a Private/Corporate (Work) network. The selection that you make is stored in Connection Manager so that the next time the Pocket PC detects the same network, it is automatically configured to what you set it to earlier and you are not asked again.

## NOTE

*If the network that you are connecting to uses encryption, you will be prompted to enter a password to connect to the network.*

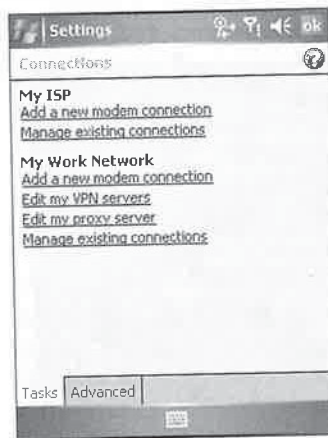
Bluetooth provides wireless connections between devices. For example, instead of using a cable to connect a Pocket PC to a mobile phone, you can connect the two using a wireless Bluetooth connection. Windows Mobile has built-in support for Bluetooth and supports most Bluetooth capabilities, or what are called *profiles*. One of these profiles is dial-up networking, which enables you to use mobile phones with Bluetooth as wireless modems.

## NOTE

*Unfortunately, some mobile service providers do not include the dial-up network profile with their phones, preventing them from being used as modems to connect PCs to the Internet.*

## Manage Connections

Connection Manager controls all network connections for a Pocket PC. To start Connection Manager, tap Start | Settings | Connections | Connections to open the screen shown here. The Connection Manager has two tabs: Tasks and Advanced. On the Tasks tab you create and manage network connections. On the Advanced tab you configure how Connection Manager connects to networks and manages dialing rules.



Connection Manager has two categories for network connections: My ISP and My Work Network. My ISP (or simply “ISP” hereafter) connections connect a Pocket PC to the Internet, and normally that is done by using a modem to connect to an Internet service provider (ISP), which is why Connection Manager lists these types of connections under My ISP.

My Work Network (or simply “Work” hereafter) connections define how a Pocket PC connects to LANs. Most corporations use LANs, which is why Connection Manager labels these as My Work Network connections. The same connection options available for ISP connections are also available for Work connections; however, two additional options are included for Work connections.

One option of Work connections is virtual private network (VPN) server connections. VPNs provide a secure connection to corporate networks by using encryption and public Internet connections. To use a VPN server connection, you first connect to the Internet, and then tap the connection status icon to open the notification bubble that provides a link to connect to the VPN server.

Another option for Work connections is a proxy server. Proxy servers provide a way to share an Internet connection with multiple PCs on a LAN. If your Work network has a proxy server, you must enter the information for the proxy server in Connection Manager or you will not be able to connect to the Internet while connected to the Work network.

Once you configure Connection Manager, it makes connections based on the type of information that you attempt to retrieve and the peripheral attached to the Pocket PC. Table 10-2 lists the applications that use network connections, along with the connection scenarios when using a modem. If a network interface card (NIC) is available instead of a modem, the applications will make a connection based on the NIC setting in Connection Manager.

**NOTE**

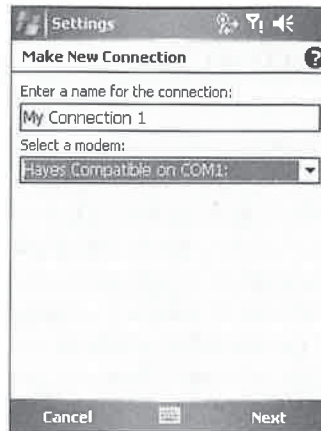
*If you want to synchronize Windows Mobile 2003SE and older Pocket PCs using a NIC, you must configure the card to connect to Work, and you must use ActiveSync 3.8 or older. You cannot synchronize devices with PCs running ActiveSync 4.1 via network connections.*

Your Pocket PC can be connected to networks in a number of ways. It can use modems to connect with ISPs or with corporate remote access servers. The USB cable, infrared port, or Bluetooth radio that you use to connect a Pocket PC with a PC creates a small network between the two and can also be used by the Pocket PC to connect with the Internet.

LANs are common in offices today and are also sometimes installed in homes to enable two or more home computers to share resources and Internet connections. All Pocket PCs include the software necessary to connect to LANs by using either PC Card, CompactFlash, or Secure Digital Ethernet NICs. In the remaining sections of this chapter, you will see how you can use all of these connection types to connect either to the Internet or to Work networks.

Application	Internet	Work
Internet Explorer	Enter a URL in fully qualified domain name (FQDN) form, such as www.pocketpchow2.com.	Enter a one-word URL, such as fmcpherson.
Inbox	All Inbox services connect to the Internet by default.	Configure Inbox services to connect to Work.
MSN Messenger (Pocket MSN)	MSN Messenger is configured to use only a Passport account.	MSN Messenger works only with Internet-based messaging services.
Terminal Server Client	Does not directly make a network connection.	Does not directly make a network connection. If you use a modem, you must use Connection Manager.

**TABLE 10-2** Scenarios for Which the Pocket PC Connects to the Internet or Work Using a Modem



The Bluetooth and Generic IrDA (infrared) options provide wireless connections to mobile phones, which you can use as modems. See the “Connect to Networks with Mobile Phones” section later in this chapter for instructions on using the Bluetooth and Generic IrDA options. You can also connect external modems using a serial ActiveSync cable, in which case you should select the Hayes Compatible On COM1 option.

If you select any modem type other than Cellular Line (GPRS), you enter a phone number for the connection on the second screen. You can enter the area code or extra numbers for outside lines or credit cards directly in the field on this screen. If you frequently change area codes because you’re dialing in from various locations, use Dialing Rules. Dialing Rules store area codes, extra numbers, and instructions for when they should be dialed. Once you create the rules, you don’t have to enter extra numbers for every connection. The “Create Dialing Rules” section later in this chapter provides instructions for creating dialing rules.

**NOTE**

*After you turn on Dialing Rules, the second modem Connections screen changes to display separate fields for Country/Region Code, Area Code, and Phone Number.*

The Cellular Line (GPRS) option specifies the wireless data modem built into some Pocket PCs. If you select the Cellular Line (GPRS) modem type, you enter an Access Point Name (APN) on the second screen. Your mobile service provider should be able to provide you with the APN you need to use to connect to its wireless data network. Normally, the APN looks like a server name, such as apn.mobiledata.com.

**NOTE**

*The names of the wireless data modem may be different depending on the type of wireless data network provided by your mobile service provider. For example, you may see Cellular Line (EDGE) or Cellular Line (EVDO) for data modems that connect to EDGE and EVDO data networks.*

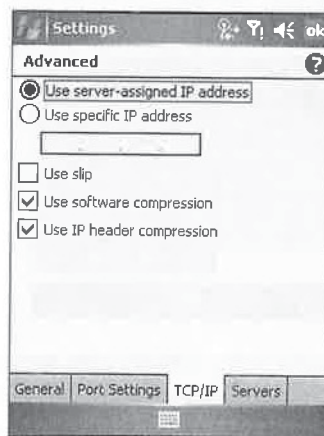
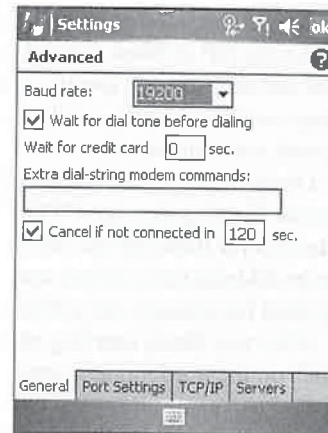
The third screen has fields for entering the username, password, and domain that you provide to connect to the network. If the modem connection is to an ISP, you will probably leave the Domain field blank. If the modem connection is for a Work network, your system administrator can tell you what to enter in this field, or it can be left blank.

Normally, after you enter the information on the third screen, you tap Finish to complete the creation of the modem connection. However, if you need to change the modem baud rate, have a terminal window display, or change network addresses, tap Advanced. As you can see here, the Advanced modem connection Settings screen has four tabs.

You specify on the General tab the speed of the modem connection and how the modem should dial the phone number. The Port Settings tab has fields to change the data bits, parity, stop bits, and flow control of the modem connection. All of these settings control how modems communicate, and you usually do not need to make changes to these fields. On this tab are also three check boxes for displaying a terminal window. The terminal window is a blank window in which you can enter modem commands. If you want to control the modem connection manually, you can select one of these check boxes.

Tap the Use Terminal Before Connecting check box to display the terminal window before the modem dials the phone number. Tap the Use Terminal Window After Connecting check box to display the terminal window after the modem dials the phone number and establishes a connection. You need to use this option if the ISP or Work network requires you to enter your username and password in a terminal window rather than from the information you enter on the third modem connection Settings screen. To enter the commands for the modem to dial the phone number manually, tap the Enter Dialing Commands Manually check box.

On the TCP/IP tab, you can specify how the Pocket PC obtains an Internet Protocol (IP) address and specify how network communication works. Most ISPs and Work networks provide server-assigned IP addresses, in which case you leave the Use Server-Assigned IP Address radio button selected. If you must use a specific IP address, which your ISP or Work network administrator provides, tap the Use Specific IP Address radio button and enter the address in the field.



Serial Line Internet Protocol (SLIP) is an old method of connecting to networks using modems, and if your ISP or Work network requires this method, tap the Use Slip check box. If your ISP or Work network doesn't specify otherwise, leave the Use Software Compression and Use IP Header Compression check boxes selected. Most networks use these compression methods to speed up network communication.

On the Servers tab, you enter IP addresses for Domain Name Service (DNS) and Windows Internet Naming Service (WINS) servers. Normally, the ISP or Work network provides the addresses for these servers automatically, but if you need to specify them, tap the Use Specific Server Address radio button and enter the IP addresses in the fields on the screen. Fields are also provided for primary and alternative DNS and WINS servers.

After you finish entering changes to the Advanced modem settings, tap OK, and then tap Finish on the third modem setup screen. You then return to the Connection Manager Tasks tab.

You can enter more than one modem connection for ISP and Work network connections. When multiple modem connections are available, Connection Manager dials the number that has an area code matching the dialing location's area code, if Dialing Rules exist. The one exception is 800 numbers, which are always used even if local phone numbers are available.

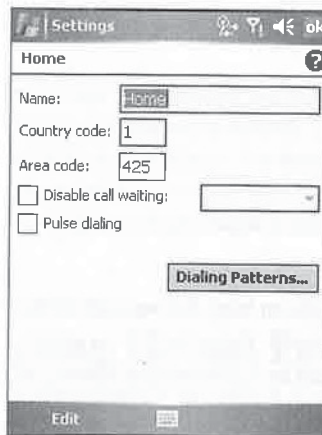
### Create Dialing Rules

Dialing Rules store area codes, extra numbers, and instructions for when they should be dialed. Once you create the rules, you don't have to enter extra numbers for every connection. To create new Dialing Rules, open the Advanced tab of Connection Manager and tap Dialing Rules, which opens the screen shown here. Tap the Use Dialing Rules check box, tap the radio button for either Home, Mobile, or Work to specify the location, and then tap Edit. Tap New to create a new dialing location.

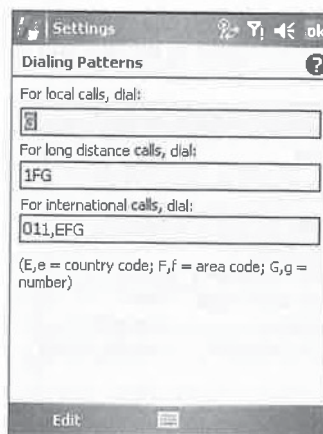


Each specific dialing location screen looks similar to the screen shown next. In this screen, you configure information about the location from which you're dialing, including the local area code, the local country code, whether you use tone or pulse dialing, and whether or not you need

to disable call waiting. You can also control dialing patterns, such as whether a 9 must be dialed to reach an outside line.



Dialing patterns are used to control how the modem will dial a phone number from the location you have selected. When you tap Dialing Patterns, you'll see the following screen. Here, you control how local, long-distance, and international calls are dialed. Placeholders—letters and punctuation marks—are used as a type of shorthand so that parts of the phone number that must be dialed each time can be merged into the dialing pattern. For example, suppose that the location you are dialing from requires that you dial a 9 to place a long-distance phone call. In the field For Long Distance Calls, Dial, you should enter **9,1FG**. If the number you are dialing is 248-555-1212, the modem will dial 9,12485551212 because your device will interpret the 9,1FG as dial 9, wait two seconds, and then dial 1, the area code (F), and the number (G). The characters you can use and their corollary interpretations are shown in Table 10-3.



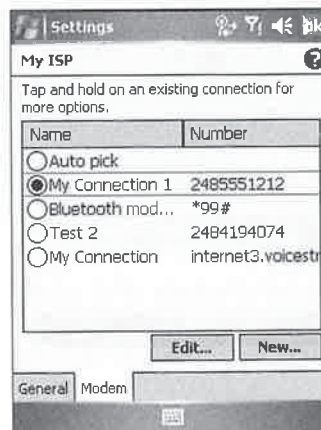


To	Enter
Dial country code	E or e
Dial area code	F or f
Dial local number	G or g
Insert a pause (typically 2 seconds)	, (comma)
Wait for credit card tone	\$
Wait for a second tone	W or w
Tone-dial the following numbers	T or t
Pulse-dial the following numbers	P or p
Transfer to another extension (0.5 seconds on hook, 0.5 seconds off hook, sometimes called <i>hook flash</i> )	!
Wait for <i>quiet answer</i> (typically indicated by 6.5 seconds of silence, followed by a ringing tone)	@
Use special controls on some systems (tone only)	ABCD or * or #

TABLE 10-3 Phone Call Dialing Characters Used by the Pocket PC

### Manage Modem Connections

After you create a modem connection for ISP and Work networks, a Manage Existing Connections link appears on the Connection Manager Tasks tab. Tap the link to make changes to modem connections that you create. The screen shown here appears, listing all of the modem connects that exist. The radio buttons specify which modem connection Connection Manager will use to connect to a network. The Auto Pick option appears only when two or more modem connections are available, and it specifies that Connection Manager is to select automatically which connection to use based on the dialing location or device. You can force Connection Manager to use one of the other connections by tapping the radio button of the one you want to use.



To edit a connection, tap its radio button and then tap Edit. You can then go through each of the modem connection setup screens and make changes. To delete a connection, tap-and-hold on the connection and tap Delete on the pop-up menu. The pop-up menu also has a Connect option, which you can tap to initiate a call to the network manually. Tap New to create a new modem connection.

The screen that appears when you tap the Manage Existing Connections link has two tabs—General and Modem; the Modem tab opens by default. The General tab provides a field for you to change the name of the connection settings. For example, you can change the name from My ISP to Frank's Internet Connections. You may not have a need to change this name, but a company that provides Pocket PCs to its workers might want to change My Work Network to the company name.

## Connect to Networks Using Virtual Private Networking

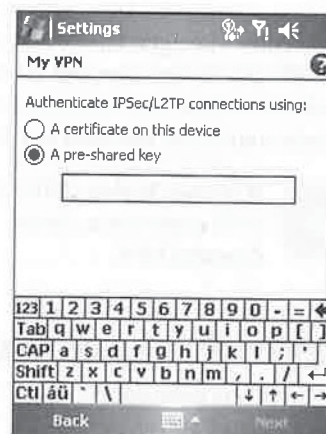
Virtual private networking (VPN) is a method for providing a secure connection to Work networks using the public Internet. All information is encrypted and sent to the VPN server, which then decrypts the information and passes it along to the corporate network.

Various methods can be used for implementing VPN, and Windows Mobile supports Microsoft's Point-to-Point Tunneling Protocol (PPTP) and IP Security Layer 2 Tunneling Protocol (IPSec/L2TP). You need to verify that the VPN server to which you need to connect uses these protocols, or you need a third-party VPN client for your Pocket PC.

To configure Windows Mobile to use VPN, tap Add A New VPN Server Connection under My Work Network. You need to complete two or three screens' worth of information, depending on which VPN type you use. On the first screen, you enter a name for the VPN connection and the host name or IP address of the VPN server, and then select the VPN type: IPSec/L2TP or PPTP. The Host Name (server name) or IP Address field must be completed. Tap Next to move to the next screen.

If you select the IPSec/L2TP VPN type, you see the screen shown here. Here, you specify how to authenticate the IPSec/L2TP connection. If an IPSec/L2TP digital certificate has been installed on your device, usually by your company, select the first option. In most cases, you will select the second option, A Pre-Shared Key. You need to enter the shared key, usually a passphrase and not your VPN server username or password, into the field.

The third screen for the IPSec/L2TP VPN type is the same as the second (and final) screen for the PPTP VPN type. On this screen, you enter a username, password, and domain name for the VPN server in the fields provided. In most cases, after you enter this information, you can tap Finish; however, if you need to specify IP addresses for the VPN connection, DNS server, or WINS server, tap Advanced.



How to ...

## Configure VPN Connections on Smartphones

You can use VPN to connect to corporate networks using Windows Mobile Smartphones. To configure VPN, press Start | Settings | Connections | VPN, and to create a new VPN connection, press Menu | Add. Complete the Description, VPN Type, Server, User Name, Password, and Domain fields as described in this section.

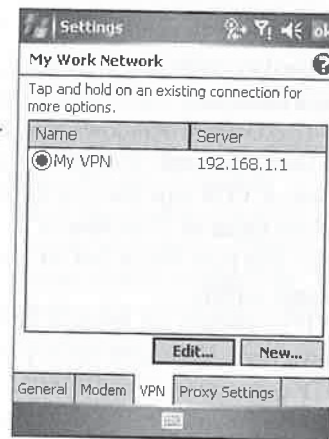
Windows Mobile Smartphones have two additional fields not found on Pocket PCs. In the Connects From field, you select the type of network from which you are originating the VPN connection; in most cases this will be The Internet. The Connects To field specifies the type of network the VPN is connecting to, and in most cases this will be Work.

While Pocket PCs have a field for VPN Type, Smartphones have IPSec Authentication to specify the VPN type, and IPSec Pre-Shared Key for entering the preshared key if you are using preshared key authentication.

After you finish entering the VPN server information, the link under My Work Network changes to Edit My VPN Servers. When you tap this link, the screen shown here appears. To edit a connection, tap the connection's radio button and then tap Edit. Tap-and-hold on a connection to delete it.

Connection Manager automatically uses VPN connections whenever you try to access an item specified in the Work column of Table 10-2. For example, if you try to open a web site using a one-word address like `http://fmcpherson`, Connection Manager initiates the VPN connection to open that site.

To manually initiate a VPN connection, you have to open Connection Manager, tap Edit My VPN Servers, tap-and-hold the VPN connection that you want to use, and then tap Connect. Windows Mobile first connects to the Internet, if it is not already connected, and then initiates the VPN connection.

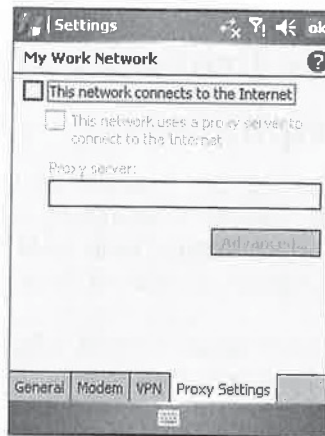


### NOTE

Windows Mobile 2003SE and earlier provides an easier way to manually initiate a VPN connection. Simply tap the network connection notification bubble and then tap Connect VPN.

## Configure Proxy Servers

Proxy servers provide access to the Internet from Work networks. To configure Windows Mobile to use a proxy server, tap Set Up My Proxy Server under My Work Network, which opens the screen shown next. Tap the two check boxes on the screen and enter the hostname or IP address of the proxy server in the Proxy Server field.

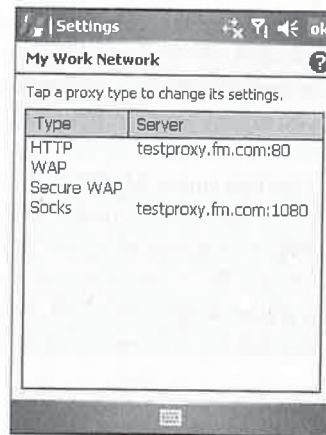


## TIP

*If you create a partnership between the Pocket PC and a desktop computer configured to use a proxy server, ActiveSync will use the information from the desktop to set up a proxy server automatically on your Pocket PC.*

If you need to configure port or Socks settings for the proxy server, tap Advanced on the Proxy Settings tab to open the following screen. The table lists each type of proxy server that the Pocket PC can use. To edit a proxy server configuration, tap an entry in the table. You can specify a server name and port, in addition to username, password, and domain if they are needed to use the proxy server.

10



The HTTP proxy server is used by Internet Explorer when browsing the Web. The default port for HTTP is 80, and this usually shouldn't be changed unless specified by a network administrator.

How to ...

## Configure Proxy Servers on Smartphones

If you connect a Smartphone to a Work network, you may need to configure a proxy server to connect to a web site on the public Internet. To configure your Smartphone to use a proxy server, press Start | Settings | Connections | Proxy | Menu | Add. Enter a name to describe the proxy server, and select the type of network connections the proxy server connects from and to in the appropriate drop-down lists.

In the Proxy field, enter the name of the proxy server, followed by a colon, and then the port number of the proxy server. For example, if you want to connect to an HTTP proxy server named testproxy.test.com, enter **testproxy.test.com:80** in the Proxy field.

Select the proxy server type from the Type drop-down list. If you are connecting to a web proxy server, select HTTP for the type. Finally, enter a username and password for the proxy server, if they are required. To save the proxy server configuration, press Done.

Wireless Access Protocol (WAP) settings are used to specify a proxy or gateway server and port that enable browsers using WAP to browse the Web. These settings are not commonly used and will be blank in most cases.

A Socks proxy server is used by applications that need to access application servers using TCP/IP. If you need to use Socks, enter the proxy server and port number. The default port number for Socks is 1080, and this usually shouldn't be changed unless you're instructed to do so by a network administrator. Two versions of the Socks proxy server protocol exist: Socks 4 and Socks 5. Socks 5 supports authentication, so if you tap the Socks 5 radio button, you must enter a user ID and password.

After you set up the proxy server, the link under My Work Network changes to Edit My Proxy Server, which you can tap to make changes to the proxy server settings. The proxy server is automatically used whenever you retrieve information using HTTP, WAP, or Socks protocols on a Work network. For example, if your Pocket PC is connected to a Work network and you open a page on the public Internet, such as [www.pocketpchow2.com](http://www.pocketpchow2.com), the Pocket PC first connects to the proxy server, and you may be prompted for a username and password unless you already saved that information.

## Connect Using Wireless Modems

Using a wireless modem, you can connect a Pocket PC to the Internet anywhere that the radio of the wireless modem can receive a signal. Wireless modems provide the convenience of not having to locate phone jacks and string phone cable to connect to the Internet.

How to ...

## Exclude Sites from Using a Proxy Server

Table 10-2 shows the various ways in which Windows Mobile determines how to connect to the Internet. One way is based on the format of the URL you open with Internet Explorer. If you enter an FQDN, for example `www.pocketpchow2.com`, Connection Manager determines that you need to connect to the Internet. If you enter a short name, for example `pocketpchow2`, Connection Manager determines you need to connect to a Work network.

This creates a problem for accessing web sites on a Work network that uses FQDNs. Connection Manager connects to the Internet when you want it to connect to a Work network. Windows Mobile offers a simple fix for this problem by providing a way for you to specify URLs that are associated with Work networks.

To enter URLs into the Work URL Exceptions list, open the Advanced tab in Connection Manager and then tap Exceptions. Tap Add New URL in the URL Exceptions list and enter the URL. You can use wildcards in the URL to cover entire domains; for example, enter `*.companyname.com` to add all pages with `companyname.com` in their URL to the URL Exceptions list.

When you enter a URL in Internet Explorer that is in the URL Exceptions list, Connection Manager connects to a Work network rather than to the Internet. The URLs you enter in the list are also not sent to proxy servers.

10

**NOTE**

*Smartphones and Pocket PC Phone Editions have built-in wireless modems that you can use to connect to the Internet. Usually, the connection settings are preconfigured by the mobile service provider that provides the device. If not, you can manually create a modem connection, as described in the earlier section “Create Modem Connections.”*

Two types of wireless modems work with Pocket PCs. Some mobile phones have built-in modems, and these phones are usually classified as *data-capable*. To use the modems in these mobile phones with a Pocket PC, you connect the Pocket PC to the phone by using the infrared port, a serial cable, a CompactFlash card, or Bluetooth. You'll find a list of mobile phones that work with Pocket PCs at Chris De Herrera's Windows CE Website, [www.pocketpcfaq.com/peripherals/cellular.htm](http://www.pocketpcfaq.com/peripherals/cellular.htm).

The second type of wireless modem are PC Cards or CompactFlash cards that connect to Pocket PCs that have PC Card expansion sleeves (such as the Compaq PC Card Expansion Pack) or a CompactFlash slot.

## Connect to Networks with Mobile Phones

Before you can use a mobile phone to connect to the Internet, you need to find out whether or not your mobile service provider supports data communications. Normally, you need to sign up for

an additional service for data communications that may or may not use the minutes that are part of your regular plan. Contact your mobile service provider and ask whether you can connect to the Internet using its service.

**TIP**

*You can use Smartphones as a wireless modem for Pocket PCs by following the instructions in this section.*

The method that you use to connect your phone to a Pocket PC will depend on the capabilities of the phone. If the phone has an infrared port, you can create a modem connection that uses the Generic IrDA modem and align the infrared ports. Infrared is nice because it is available with all Pocket PCs, but because infrared ports must be lined up, it can be difficult to use.

Alternatives to infrared connections are serial cables and Bluetooth. Most mobile phones have unique ports that require special serial cables, which you can usually purchase from the phone manufacturer. To connect the cable to a Pocket PC, you need a null modem adapter and a serial ActiveSync cable for the Pocket PC. SupplyNet ([www.thesupplynet.com](http://www.thesupplynet.com)) sells cables that connect some mobile phones directly with the HP iPAQ and Dell Axim Pocket PCs, eliminating the need for a null modem adapter or a serial ActiveSync cable.

Bluetooth is a specification for short-range radio links between PCs, mobile telephones, and other portable devices. Its purpose is to eliminate the need to carry and use cables to connect devices, which can multiply like rabbits when you use a lot of different peripherals. Bluetooth provides a function similar to the infrared ports on Pocket PCs, but it is better because it does not require a line of sight between devices and it promises to be supported by a wider range of devices.

To use Bluetooth to connect to the Internet, you need a mobile phone that has a Bluetooth radio, and the phone must be able to make connections to the Internet. Examples of phones that support Bluetooth are the Sony-Ericsson T68, T39, and R520 phones. Windows Mobile Smartphones, such as the Audiovox SMT5600 and the Motorola MPX220, also support Bluetooth.

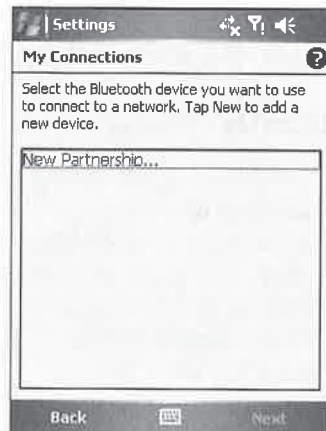
You also need a Bluetooth radio for the Pocket PC. Some Pocket PCs have built-in Bluetooth radios, or you can add one using the CompactFlash or Secure Digital card slot. Socket Communications and Anycom sell Type I CompactFlash Bluetooth cards, and Toshiba and Socket Communications sell Secure Digital Bluetooth cards. The cards come with drivers that provide a Bluetooth modem option when creating modem connections.

**TIP**

*You can also use Bluetooth to connect Pocket PCs to printers and personal computers.*

### Use Bluetooth to Connect to the Internet

Windows Mobile has built-in support for Bluetooth, so you may not need to install additional software to create a wireless connection with mobile phones. The first step to using Bluetooth is to create a modem connection (as described in the “Create Modem Connections” section earlier in this chapter) and select Bluetooth as the modem. You then see the following screen to create a partnership with a Bluetooth phone.



The process of creating a relationship between devices with Bluetooth is called *pairing*. Pairing is a security method for Bluetooth that establishes a relationship between two devices. Paired devices are given permission to communicate with each other, and this prevents any random device from being given access to a mobile phone to establish data connections.

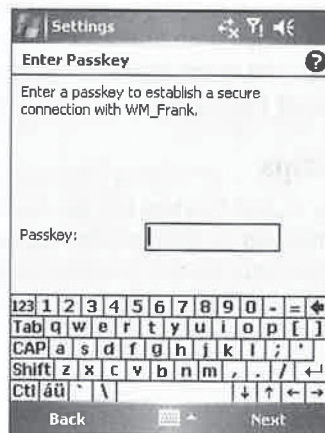
To search for devices that support Bluetooth, tap **New Partnership**. Devices that are in Bluetooth Discoverable mode appear in the list. If the phone that you want to use does not appear, make sure that it is in Bluetooth Discoverable mode. Tap **Refresh** to perform another scan for Bluetooth devices.

TIP

To put Windows Mobile Smartphones into Discoverable mode, press **Start | Settings | Connections | Bluetooth**, select **Discoverable** in the drop-down list, and then press **Done**.

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Tap the name of your mobile phone and then tap **Next**, which opens the screen shown here, where you enter a PIN. The PIN is 1 to 16 characters long, and the same PIN must be entered on the mobile phone and Pocket PC. You first enter the PIN on the Pocket PC, and then you are prompted to enter the PIN on the mobile phone. If both PINs are entered correctly, the pairing completes and the name of the mobile phone is added to the list. Tap the name of the phone you just paired, and then tap **Next**.

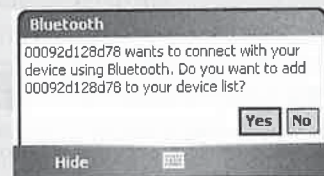




How to ...

## Put Pocket PCs in Bluetooth Discoverable Mode

If you have a problem pairing devices by initiating the pairing from the Pocket PC, try pairing from the mobile phone. First, you need to set up the Pocket PC so that it is discoverable. Tap Start | Settings | Connections | Bluetooth, and then tap the Make This Device Discoverable To Other Devices check box. When the mobile phone discovers the Pocket PC, you see this notification bubble. Tap Yes to continue and add the mobile phone to the Bonded Devices list. You then enter a PIN on both the mobile phone and the Pocket PC, and if the bonding succeeds, the mobile phone is added to the Bonded Devices list. To see the devices that are bonded with your Pocket PC, tap Start | Settings | Connections | Bluetooth and then tap the Devices tab.



The remaining screens are the same as described in the earlier “Create Modem Connections” section, but the information on these screens will be different from what you normally enter for modem connections.

You enter a special connection string on the phone number screen that tells the mobile phone to use GPRS or 1xRTT to connect to the Internet. The connection string is different for each service provider. An example string for connecting to T-Mobile’s GPRS network is \*99#. Your service provider should be able to provide this connection string.

GPRS and 1xRTT networks either don’t require a username or password or use the username and password that you enter on the mobile phone. Therefore, you can leave the username and password fields blank on the third modem connection setup screen. If you do enter something in a field, it will usually be ignored.

After you create the modem connection, specifying Bluetooth as the modem, you can then use that connection to connect to the Internet just as you would via any other modem connection. When the Pocket PC connects to the Internet, it establishes a wireless connection with the mobile phone, which it uses as a modem to connect to the Internet. To use Bluetooth, the mobile phone must be on and within ten meters of your Pocket PC.

### Manage Bluetooth Relationships

To rename or delete a device from the Paired Devices list, tap Start | Settings | Connections | Bluetooth, tap the Devices tab, tap-and-hold on the device name, and then tap Edit or Delete on the pop-up menu. If you delete a device from the list, you have to go through the entire pairing process to add it back to the list.

How to ...

## Pair Smartphones with Other Bluetooth Devices

To initiate Bluetooth pairing from a Windows Mobile Smartphone, press Start | Settings | Connections | Bluetooth | Menu | Devices, which displays a screen showing all of the devices paired to the Smartphone. To scan for discoverable Bluetooth devices, press Menu | New, select the device that you want to pair with, and press Next. Enter the passkeys on both devices, and when the pairing completes, you will see a screen to edit the name of the device. Press Done to save the information to the list of paired devices.

## NOTE

*You might find the Bluetooth icon in the System tab (tap Start | Settings | Connections | System) instead of the Connections tab. A Bluetooth icon in the System tab is associated with different Bluetooth software than the software Microsoft includes with Windows Mobile. An example of this is the HP iPAQ 2215, which uses software provided by Widcomm, Inc. rather than software from Microsoft.*

## Connect Using ActiveSync Desktop Pass Through

Desktop Pass Through, which is available in ActiveSync 4.1, provides network connection sharing between desktop computers and Windows Mobile devices. By using Desktop Pass Through, you can access the Internet or LANs from Pocket PCs while they are connected to desktops using serial, infrared, or USB connections.

Desktop Pass Through is available by default for all Windows Mobile devices, including Smartphones. Once you connect the device to the desktop, you can simply use Internet Explorer or Inbox to browse web sites or retrieve e-mail. Desktop Pass Through is always available, but you can control to what network type the device connects from within ActiveSync.

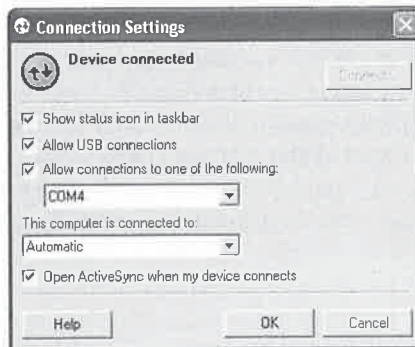
How to ...

## Manage Bluetooth Relationships on Smartphones

To manage Bluetooth relationships on Windows Mobile Smartphones, press Start | Settings | Connections | Bluetooth | Menu | Devices. Select the device you want to edit or delete, and press Menu | Edit or Menu | Delete.

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First connect the device to the PC and, on the PC, click File | Connection Settings to display the screen shown here. Change the option of the This Computer Is Connected To drop-down list to specify whether the Desktop Pass Through connection is to the Internet or Work network.



### NOTE

*Terminal Server Client, File Explorer network access, and VPN do not work with ActiveSync Desktop Pass Through.*

## Connect to Local Area Networks

Once used only by corporations, LANs are being installed in homes, mainly to share a single high-speed Internet connection among two or more computers. The setup works something like this: You subscribe to a broadband service provider, which installs the cable or DSL data service in the home. To use the service with one PC, you install an Ethernet NIC in the PC and plug a cable into the card and either a cable or DSL modem.

### TIP

*You can also purchase for PCs DSL cards that eliminate the need to install an Ethernet NIC.*

Sharing a high-speed connection with other PCs on a LAN requires a cable modem or DSL router, which is sometimes called a *residential gateway*. Several manufacturers sell these devices; I use the Linksys EtherFast Cable/DSL router. You'll find information about the Linksys router at [www.linksys.com](http://www.linksys.com). [PracticallyNetworked.com](http://PracticallyNetworked.com) provides a complete guide to many of the routers that are available, at [www.practicallynetworked.com](http://www.practicallynetworked.com).

Any device that connects to a LAN either at work or home can access the Internet using the shared high-speed connection. The following section explains how to use network adapters with your Pocket PC to connect to LANs and to the Internet.

## Select a Network Adapter

Many Pocket PCs have built-in wireless Ethernet adapters, but if your Pocket PC does not have built-in support for wireless Ethernet, you can add it. You can buy wired Ethernet adapters, which usually come in speeds of 10 Mbps or 100 Mbps, or wireless Ethernet adapters. Wireless Ethernet adapters support one of several wireless communication standards: 802.11b, 802.11g, or 802.11a. You need to take several factors into consideration when deciding which type of card to buy.

Did you know?

## Wireless Ethernet Standards

Several wireless Ethernet standards can seem a bit like alphabet soup. The two key characteristics of the standards are the frequency and their maximum speeds. HomeRF, one of the oldest standards, uses the 2.4-GHz frequency and has a maximum speed of 2 Mbps. It also uses a unique method of transmitting data, so it does not work with any of the other wireless Ethernet standards.

TIP

*Cordless phones and microwave ovens also use the 2.4-GHz frequency, and they may interfere with wireless LANs using the same frequency. If you experience intermittent communication problems on a wireless LAN, check whether these devices are in use near the LAN.*

802.11b is currently the most popular standard; it uses the 2.4-GHz frequency and has a maximum speed of 11 Mbps. The 802.11g standard also uses the 2.4-GHz frequency and has a maximum speed of 54 Mbps. Since 802.11b and 802.11g use the same frequency and method of transmitting data, devices using the two standards can communicate with each other.

802.11a is a newer standard that uses the 5-GHz frequency and has a maximum speed of 54 Mbps. Since it uses a different frequency, it does not work with the other wireless Ethernet standards. Some manufacturers that make 802.11a access points and cards add a 802.11b or 802.11g radio so that they work with both types of wireless networks.

10

The first decision that you need to make is whether you want to buy a wired or wireless Ethernet adapter. Unfortunately, you cannot buy a wired Ethernet adapter in the Secure Digital card format, so if your Pocket PC only has a Secure Digital slot, you can only connect it to wireless Ethernet networks.

TIP

*Socket Communications is the only company that sells a wireless Ethernet card in the Secure Digital format. You will find more information about this card at [www.socketcom.com](http://www.socketcom.com).*

Wireless Ethernet adapters have radios that communicate with access points or other wireless adapters. The type of adapter that you need to buy is dictated by the standard used by the access point or wireless adapter that you want to communicate with. If the access point or adapter uses 802.11b, you must buy an 802.11b card; likewise for 802.11a or HomeRF.

TIP

*If your Pocket PC has a built-in wireless Ethernet adapter, you can turn the radio on or off using a program provided by the Pocket PC manufacturer. Consult the user manual of your Pocket PC to learn how to turn the radio on and off.*

The 802.11g standard is backward compatible with 802.11b, so you can use 802.11g cards with 802.11b access points. 802.11g access points work with 802.11b and 802.11g cards. Some manufacturers are selling cards that have multiple radios to work with various access points. 802.11b is currently the most popular wireless Ethernet standard, but the new 802.11g standard will probably become more popular within a few years because it is faster and backward compatible with 802.11b.

**TIP**

*Most 802.11g access points can be configured to support both 802.11b and 802.11g, just 802.11g, or just 802.11b. If you have an 802.11b card that cannot connect to an 802.11g access point, make sure the access point is configured to support 802.11b.*

To buy a wired Ethernet adapter, you need to know the network speed and the type of network cabling that is being used. You can buy adapters that support only 10 Mbps or 100 Mbps, and you can buy adapters that support both speeds. However, if the network speed is only 10 Mbps, you may want to buy a 10-Mbps adapter because they are cheaper. The most common network cable is Category 5 (CAT5) Unshielded Twisted-Pair (UTP), which has an RJ-45 connector. Most Ethernet adapters work with CAT5 UTP.

**How to ...****Use Wireless Ethernet to Connect to Home Networks**

Wireless networking is becoming a popular way to connect computers to home networks where it is difficult to install network cable. You can use wireless Ethernet adapters to connect a Pocket PC to a home network in two ways. One way is to use access points in what is usually referred to as *Infrastructure mode*. The second way is to create a point-to-point connection between two wireless Ethernet adapters in what is called *Ad Hoc mode*.

Access points support multiple wireless Ethernet adapters and can be easier to set up than point-to-point connections. You connect an access point to an existing LAN by running a network cable from the access point to an Ethernet hub. This connection allows computers connected to the network with cables to communicate with computers connected to the network with wireless Ethernet adapters. If a cable or DSL modem is connected to the hub, you can access the Internet using the wireless Ethernet adapter.

Wireless Ethernet adapters cost less than access points, so if you want to connect a Pocket PC only to one computer, a point-to-point connection may be desirable. If the computer is connected to a wired network and supports network connection sharing, the Pocket PC can access the wired network. The downside of point-to-point connections is that when a wireless Ethernet adapter is configured for Ad Hoc mode, it cannot communicate with access points or other adapters.

Type of Ethernet Adapter	Web Site
Wired PC card	<a href="http://www.pocketpcfaq.com/peripherals/pccardethernet.htm">www.pocketpcfaq.com/peripherals/pccardethernet.htm</a>
Wired CompactFlash card	<a href="http://www.pocketpcfaq.com/peripherals/cfethernet.htm">www.pocketpcfaq.com/peripherals/cfethernet.htm</a>
Wireless PC card	<a href="http://www.pocketpcfaq.com/peripherals/pccardwirelesslan.htm">www.pocketpcfaq.com/peripherals/pccardwirelesslan.htm</a>
Wireless CompactFlash card	<a href="http://www.pocketpcfaq.com/peripherals/cfwirelesslan.htm">www.pocketpcfaq.com/peripherals/cfwirelesslan.htm</a>
Wireless Secure Digital card	<a href="http://www.pocketpcfaq.com/peripherals/sdiowirelesslan.htm">www.pocketpcfaq.com/peripherals/sdiowirelesslan.htm</a>

**TABLE 10-4** Web Sites that List Pocket PC Ethernet Adapters

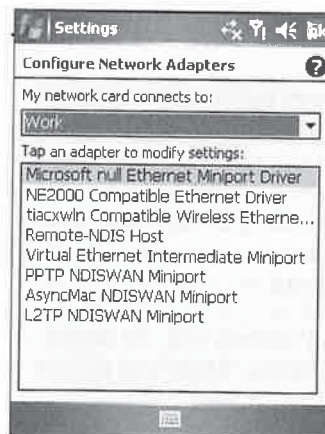
Several companies sell CompactFlash wired Ethernet adapters, and you can find them by using the link in Table 10-4 (above). When buying an Ethernet adapter to use in a Pocket PC, you need to consider whether or not a Pocket PC driver that works with the adapter is available. The card will not work without a driver. Wireless Ethernet adapters require specific Pocket PC drivers, but some wired Ethernet adapters will work with the built-in NE2000 Compatible Ethernet Driver that is available on all Pocket PCs. Table 10-4 provides addresses to web sites that list Pocket PC-compatible Ethernet adapters.

**TIP**

*You can also use CompactFlash Ethernet adapters in laptop computers that have only PC Card slots by inserting the CompactFlash card into a PC Card adapter.*

## Configure Network Interface Adapters

If you purchase a network adapter that has a Pocket PC driver, you must install the driver on your device by following the manufacturer instructions. To see the network drivers installed on your Pocket PC, tap **Start | Settings | Connections | Network Cards**, and the installed network adapter drivers are listed on the following screen.



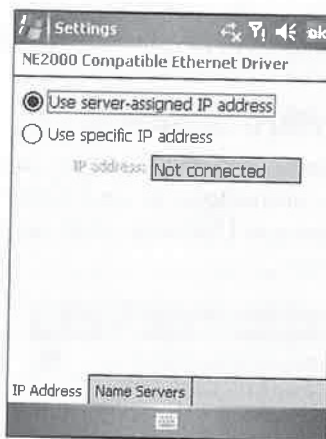
Any number of adapter drivers may be installed on a Pocket PC. Most Pocket PCs include at least the NE2000 Compatible Ethernet Driver, which is a generic driver that can work with any NE2000-compatible card. Beyond that, each Pocket PC vendor may include additional drivers on its device to support a variety of types of network cards.

Regardless of whether you add an adapter or your Pocket PC has a built-in wireless Ethernet adapter, you need to configure it to connect to a LAN. With Windows Mobile, it is easy to set up and use network adapters. Windows Mobile automatically configures the card and, if it detects a network connection, displays a notification bubble. If you plan to access only the Internet, select The Internet and tap OK. If you plan to access files or folders on the LAN or synchronize the Pocket PC with a desktop computer using the network, tap the Work radio button and then tap OK.

If no server on the network provides network addresses, or the network adapter's driver is not designed for Windows Mobile, you need to configure the properties of the driver so that they work in your network environment. The configuration screens and process are the same for every driver type, so the following instructions are the same for every brand of network adapter.

To configure wired network adapters manually in Windows Mobile, do the following:

1. Tap Start | Settings | Connections | Network Cards.
2. Tap the adapter that you want to configure, which opens this screen:



#### NOTE

*The settings that you configure in the IP Address and Name Servers tabs are specific to your network. Many residential gateways and cable or DSL routers automatically assign IP addresses; if that is the case for your network, you can select Use Server-Assigned IP Address and tap OK.*

3. If you need to use a specific IP address with the adapter, select Use Specific IP Address, and complete the IP Address, Subnet Mask, and Default Gateway fields, which appear when you select Use Specific IP Address.

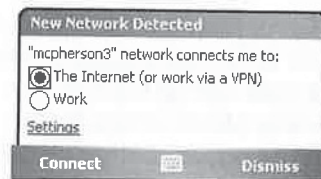
4. If you need to enter addresses for DNS or WINS servers, tap the Name Servers tab and enter the addresses.
5. Tap OK.

### Configure Wireless Ethernet Adapters

Network adapter settings are the same for wired and wireless Ethernet adapters, but wireless adapters have additional settings for the wireless portion of the network. The items that you must configure for all wireless Ethernet adapters are described in Table 10-5.

Some brands of wireless Ethernet adapters have additional settings found only on that adapter. An example of such a setting is a *Power-Saving mode*, which specifies how power is supplied to the adapter to save battery strength. Read the user manual of your adapter to determine how to change any settings that are unique to the adapter.

Like wired adapters, Windows Mobile automatically configures wireless Ethernet adapters if you are within range of an access point. First, install the drivers for the card and then soft reset the Pocket PC. Insert the adapter into the Pocket PC, or turn on Wi-Fi if it is built into your Pocket PC, and a notification bubble displays. All of the available networks are listed, shown by SSID. Tap the radio button of the network to which you want to connect, and tap OK. A second notification bubble, shown here, displays asking to specify whether you are connecting to the Internet or a Work network; tap the appropriate radio button and then tap Connect. If you tap Dismiss, you can tap the radio tower icon at the top of the screen to open the notification bubble.



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Item	Description
Extended Service Set Identifier (ESSID) or Service Set Identifier (SSID)	The ESSID has up to 32 characters and provides a unique identifier for the wireless network. The ESSID assigned to the adapter must be the same as is assigned to all access points or other wireless adapters on the network. Some adapters display this setting as SSID.
Operating Mode	If the wireless adapter communicates with an access point, it must be set to an <i>Infrastructure</i> operating mode. If the wireless adapter communicates with another wireless adapter, the operating mode must be set to <i>Ad Hoc</i> . If you use an Ad Hoc operating mode, you need to specify a channel number, which must be the same for both wireless adapters.
Wireless Equivalent Privacy (WEP) or Encryption	WEP is a special form of encryption designed for wireless Ethernet adapters. The appropriate version of WEP depends on the size of the key that the encryption uses. Most adapters support 40- and 128-bit encryption. Some adapter drivers use ASCII characters for keys, while others use hex characters. The WEP key that you enter for the adapter must match the key used by the access point or wireless adapter that the card communicates with.

TABLE 10-5 Common Wireless Ethernet Adapter Settings

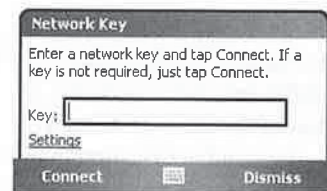


Did you know?

## Wi-Fi Protected Access

WEP's small encryption key and method for sharing keys enable people to break into wireless networks that implement only WEP for security. While corporations have turned to stronger security methods such as VPN, these methods are not practical for home users. Fortunately, a better version of WEP, called Wi-Fi Protected Access (WPA), has been developed and should now be available for all Wi-Fi products. Windows Mobile 5 supports both WEP and WPA security.

If the network you are connecting to uses WEP or WPA security, you see the notification bubble shown here. Enter the key or password that is needed to access the network, or if your device has a digital certificate, you can leave the Key field blank and tap Connect. If you entered the correct key, your Windows Mobile device displays the Wi-Fi connect icon at the top of the screen, as shown in Table 10-1.



If no server on the network provides network addresses, or the adapter's driver is not designed for Windows Mobile, you need to configure the properties of the driver so that they work in your network environment. Use the steps provided in the "Configure Network Interface Adapters" section of this chapter, but include one more step, because additional properties are required for the wireless network. When you tap the Network Cards button on the Connect tab of Settings with a wireless adapter turned on in the Pocket PC, you see the screen shown here. The Wireless tab displays the settings for the wireless network, and the Network Adapters tab, which is the same as described in the "Configure Network Interface Adapters" section, has settings for the Ethernet network.



### NOTE

*You will not see the Wireless tab if a wireless adapter is not in the Pocket PC or if the adapter's driver is not designed for Windows Mobile.*

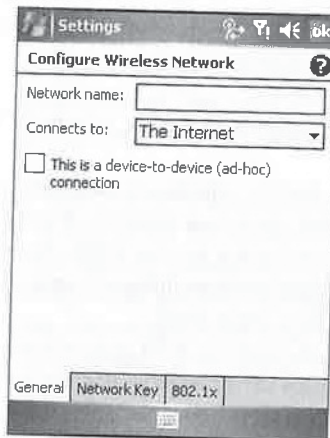
On the screen, you see a list of wireless networks, and a status indicator. You can connect a Pocket PC only to one wireless network at a time, and other networks in range are listed as Available. Unavailable networks are those networks that the Pocket PC previously connected to but now are not within range. Wireless adapters can communicate only with networks that are within 100 meters.

## TIP

To connect manually to an available wireless network, tap-and-hold on the network name and tap *Connect* on the pop-up menu. To remove a network, tap *Remove Settings*.

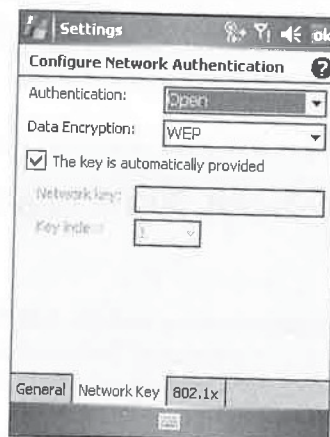
For Connection Manager to configure the adapter for wireless networks automatically, the access points on the network must broadcast its SSID. For security reasons, some networks may be configured not to broadcast the SSID, in which case you must manually enter the information to connect to the wireless network.

To add settings manually for a wireless network, tap *Add New* to open the screen shown next. Enter the SSID or ESSID in the Network Name field. Select which type of network, *The Internet* or *Work*, the network connects to, and then tap the check box if you are connecting directly to a PC instead of to an access point. (See Table 10-5 for an explanation of these settings.)



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Tap the *Network Key* tab to open the following screen, where you configure the adapter for the network's security settings. Select an option in the *Authentication* drop-down list to specify the type of network authentication that is used.



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If you are using WEP, you should leave Authentication to Open, but if you are using WPA, select either WPA or WPA-PSK in the drop-down list. If you are using WPA for a home network, select WPA-PSK for the Authentication type. The PSK portion of WPA-PSK stands for Pre-Shared Key, which means a key is provided by an access point rather than an 802.1X authentication server. When you set up an access point to use WPA on your home network, you enter a key, which is the same key that you must enter on the Pocket PC. WPA authentication requires an 802.1X authentication server, which corporations often use to authenticate devices requesting to connect to their wireless networks.

If the network uses WEP, select it in the Data Encryption drop-down list. If you select WPA or WPA-PSK in the Authentication drop-down list, the Data Encryption options include WEP and TKIP. Temporal Key Integrity Protocol (TKIP) dynamically changes keys as the wireless communication occurs, while WEP uses the same key that can be discovered by network tools after capturing enough network traffic. To take full advantage of the extra security WPA provides, select TKIP for the Data Encryption.

### NOTE

*Some wireless access points, such as Linksys's, require TKIP if WPA is enabled.*

If you use WEP data encryption, and the wireless network provides the encryption key, keep the The Key Is Automatically Provided check box selected. If you use WPA-PSK authentication, or the network does not provide the encryption key for WEP, clear the check box and enter the key in the Network Key field. WEP supports four different network keys, so be sure to select the correct one that you are using in the Key Index field.

Some wireless networks, such as those using WPA authentication, use an enhanced mode of security called IEEE 802.1X, which uses the Extensible Authentication Protocol (EAP). Windows Mobile supports two types of EAP: Transport Layer Security (TLS) and Protected EAP (PEAP). The 802.1X security uses a server to authenticate users on a wireless network, and this is the method used by some companies to secure their networks.

If you are accessing a wireless network that uses 802.1X security, you need to obtain a personal certificate, which is used to identify who you are and enable the security on your Pocket PC. Personal certificates are encrypted files that contain information about you and are stored in the Windows folder on your Pocket PC. You can see what certificates are on a Pocket PC by tapping Start | Settings | System | Certificates.

### How to ...

## Troubleshoot Network Connections

One of the most important network troubleshooting tools for your Pocket PC is a free program called vxUtil from Cambridge Computer Corporation. You can download this program from [www.cam.com/vxutil.html](http://www.cam.com/vxutil.html). If you have problems connecting to a network, use the Info utility in vxUtil to review the IP address settings of the Pocket PC and make sure they are correct. Use the Ping utility to test network communication between the Pocket PC and a destination computer.

To enable 802.1X security, tap the Use IEEE 802.1X Network Access Control check box on the 802.1X tab, and then select the EAP type in use on the network. Tap Properties to see the information associated with your personal certificate.

### Use Zero Configuration Wi-Fi

If you use a wireless Ethernet adapter and connect to many different networks, such as at home, work, and a Wi-Fi hotspot, you will appreciate the Wi-Fi zero configuration feature. Windows Mobile automatically changes the wireless card settings when you move between networks.

**TIP**

*Wi-Fi hotspots are public locations that provide wireless access to the Internet using Wi-Fi. Some hotspots provide free access, while others charge a fee. To find a hotspot in your area, see [www.hotspotlist.com](http://www.hotspotlist.com).*

Because each network may have different SSID settings, you have to specify which settings the adapter should use. In some cases, you have to change the information in several fields each time you want to connect to a different network. The software for some Wi-Fi cards simplifies this by storing all the settings in a profile; you select which profile to use, and all the fields change automatically.

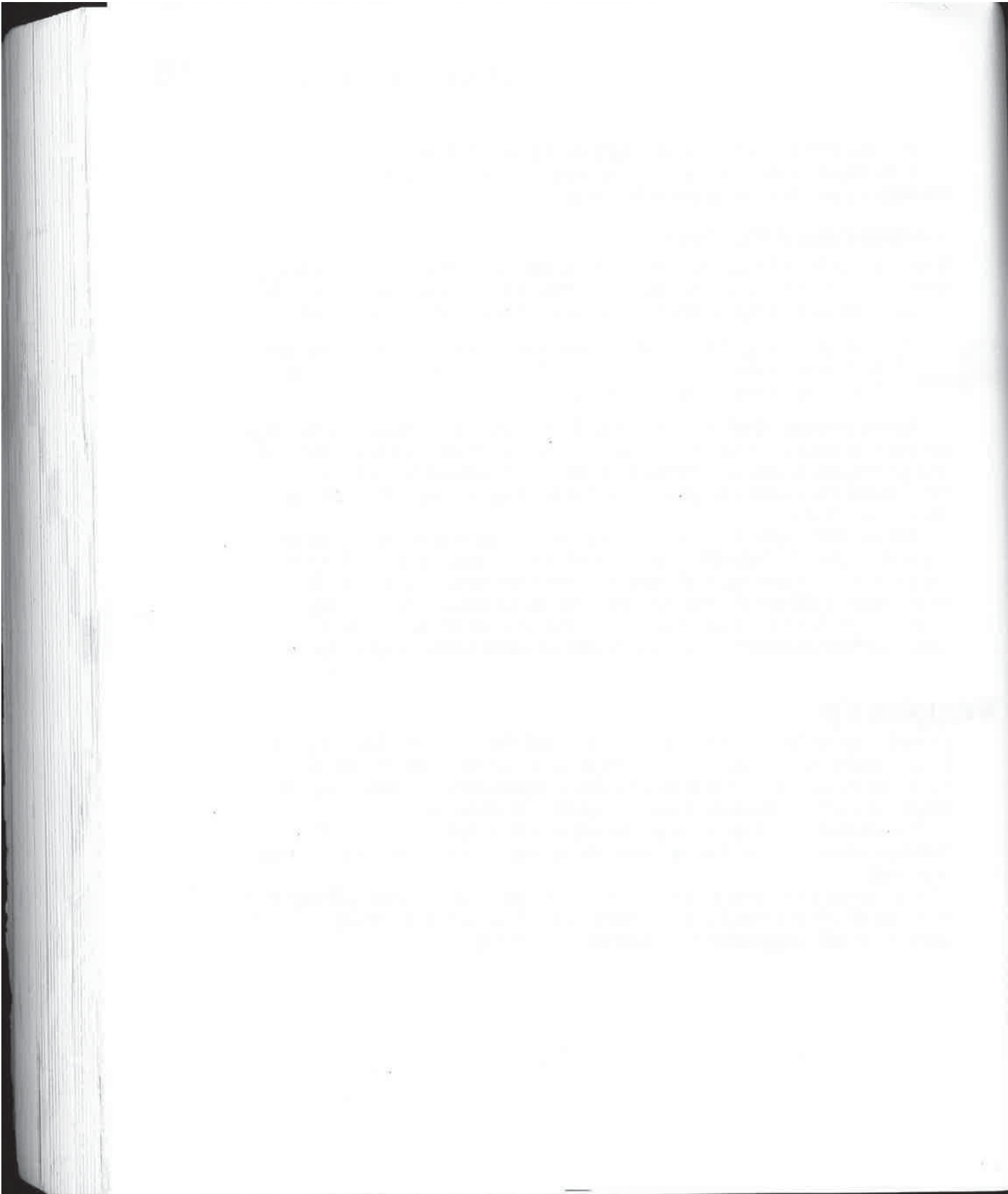
Windows Mobile takes this one step further by automatically switching profiles. All you do is plug the card into the Pocket PC or turn on the Wi-Fi radio if it is built into the Pocket PC, and if you previously connected to the network, Connection Manager automatically selects the network settings. If Connection Manager does not find the network information, it displays a notification bubble for you to provide the settings. After you configure the wireless network settings for Windows Mobile, you may never need to change the wireless settings again.

## Wrapping Up

Pocket PCs are capable of connecting to the Internet and LANs in a variety of ways. You use Connection Manager to configure all modem connections, and it automatically connects to the appropriate network based on the type of information you enter. Connection Manager also specifies whether network cards connect to the Internet or Work networks.

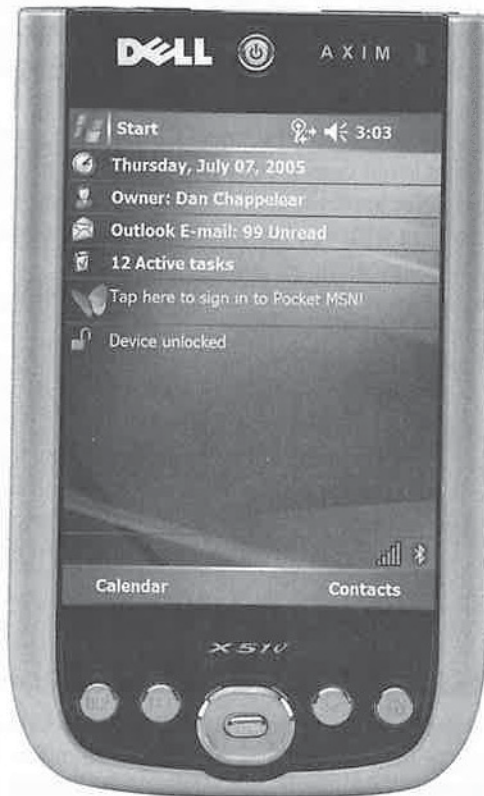
Wireless modems and network adapters are becoming the hottest accessories for Pocket PCs. With these accessories, you can use your Pocket PC to connect to the Internet from any location at any time.

Once you get connected to the Internet, you can send and receive e-mail using Messaging on the Pocket PC or Smartphone. In the next chapter, you will learn how to use Messaging to send and receive e-mail using Internet e-mail servers.



# Chapter 11

## Send and Receive E-mail, Text Messages, and Instant Messages



### How to . . .

- Create e-mail accounts that work with POP3 and IMAP4 servers
- Synchronize e-mail messages with Microsoft Outlook
- Compose, edit, and send new e-mail messages
- Receive e-mail messages and reply to or forward messages
- Manage file attachments
- Send and receive text messages
- Send and receive instant messages

**B**ack in 1992, people did not know much about the Internet unless they were in college, in the military, or computer geeks. My, how things have changed! Today, many people, even people who don't consider themselves "into computers," not only know what the Internet is but use it on a regular basis.

How do you use the Internet? Chances are good that you use e-mail to send messages to friends and loved ones around the world. You probably surf the Web to listen to music, check stock prices or sports scores, buy CDs or books, and follow the news. Perhaps you make friends by interacting with them in an online forum, or you keep in touch with other friends by using instant messaging.

Regardless of how you use it, chances are also good that the Internet is becoming increasingly important to you. E-mail might be the only way you communicate with coworkers, or perhaps you make a living building web sites for companies. As access to the Internet becomes more important, many people are seeking ways to stay connected, wherever they may be.

For that task, Windows Mobile devices are well suited. The combination of their small size, software, and communications hardware makes it easy to get connected. Included with every device is Messaging, a program that works with Internet e-mail servers, and Microsoft Outlook. If you have a Pocket PC Phone Edition or Smartphone, you can also use Messaging to send and receive text messages. In this chapter, you learn how to use Messaging to send and receive e-mail and text messages.

## Use Messaging to Work with E-mail

One of the first acts of the new United States Congress in 1789 was to authorize a postal service, creating 75 local post offices covering 1875 miles. The fact that one of the first acts of a new nation was the establishment of a postal service highlights the importance of mail delivery at that time. As the nation grew, mail became more important for communication. For example, the Pony Express is credited with keeping California in the Union by providing rapid communication between the two coasts.

In 1861, the Pony Express gave way to the telegraph, introducing technology as a means of speeding communication. Ever since then, technology—from telephones to satellites—has been

used to speed communication around the world. In the 1990s, e-mail came into widespread use, reducing the time it took to deliver messages around the world from days to seconds. Today we are accustomed to writing a message, clicking a button, and expecting it to end up around the world as soon as the button is released.

As e-mail becomes more important, methods for sending and receiving e-mail, no matter where we may be, also become more important. Combined with the right communications equipment, small Pocket PCs and Smartphones can be used to send and receive e-mail from your living room or the back seat of a taxi.

One of the reasons why you bought your device might have been to send and receive e-mail. In this chapter, I show you how to use Messaging to work with your e-mail. You will learn how to set up Messaging to access Internet mail servers and then retrieve e-mail from those servers. You'll also learn how to compose and send a message and how to handle file attachments.

Messaging has multiple roles: as a client to Microsoft Outlook, as an Internet e-mail client, and as a tool to send and receive text messages. Unfortunately, while these roles provide flexibility, they also add complexity. I will clarify these roles so that you can choose the best method for working with your e-mail.

**NOTE**

*Your device may also include Multimedia Messaging Service (MMS) support, which works the same way as text messaging and is described in this chapter.*

E-mail and traditional mail share a few common aspects. To receive mail, the post office needs to know your address. When someone sends you a card, he or she writes your address, which includes a postal code, on the envelope. In the United States, the postal, or ZIP, code on the card is used to route it to your state, city, and, finally, post office. Once at the post office, a person determines its final location by using the street address or post office box number.

The equivalent of a post office for e-mail is a mail server, which has a name that looks something like this: mail.acme.com. Just as you must register your address with the post office to receive mail, you need a mailbox registered at a mail server to receive e-mail. Usually, a mailbox is associated with a user ID, such as frank.

Internet e-mail addresses have a defined format, interpreted the same way by all mail servers. The address starts with the user ID, followed by the *at* (@) sign, and then followed by a domain name—for example, frank@acme.com. Each of these parts is used by mail servers to send and receive e-mail.

**NOTE**

*Conceptually, corporate e-mail addresses are similar to Internet e-mail addresses, but they may use a different format.*

Most post offices have a front and back entrance, with the front being where mail enters the office and the back being where mail leaves the office. E-mail is similar because two servers are involved in the process: one receives e-mail and the other sends e-mail.

The servers that receive e-mail are called POP3 (Post Office Protocol 3) or IMAP4 (Internet Message Access Protocol 4) hosts because of the protocols that they use. Because mailboxes reside on these servers, they are often simply referred to as mail servers. Servers that send e-mail are called SMTP (Simple Mail Transfer Protocol) hosts—because they use the SMTP protocol.



E-mail clients, such as Windows Mobile Messaging, are designed to work with both servers. When you send an e-mail message using Messaging, it transfers the message to an SMTP host. The SMTP host first uses the domain name portion of the e-mail address to contact a Domain Name System (DNS) server and obtain the TCP/IP address of the mail server. Once the SMTP host has the TCP/IP address, it contacts the mail server and tells it that it has a message for the user ID. The mail server determines whether a mailbox exists for the user ID, and if it does, it then accepts the message. If a mailbox does not exist, the SMTP server returns the message to the sender's mail server.

Messaging receives e-mail by logging in to the mail server and downloading the messages to the device. As you will see later in this section, Messaging can be configured to download only message headers or entire messages. Downloading message headers provides you with enough information to determine whether you want to download the entire message to your device. With that information, you can decide to skip certain messages that you don't want to read, saving the time it would otherwise take to download the entire contents of that message.

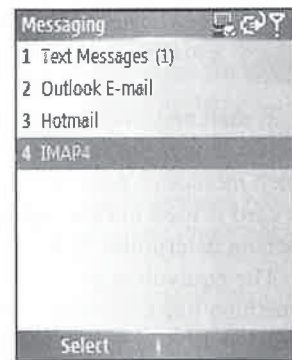
### Start Messaging

The process for starting Messaging on a Pocket PC depends on how the Start menu is configured. By default, you start Messaging by tapping Start | Messaging. However, if the menu has been changed, Messaging may be under Programs, in which case you tap Start | Programs | Messaging. To start Messaging on a Smartphone, press Start | Messaging, which shows a list of the accounts, as shown here. Select one of the accounts to display the messaging window.

When Messaging starts on a Pocket PC, you see a message list such as shown below.

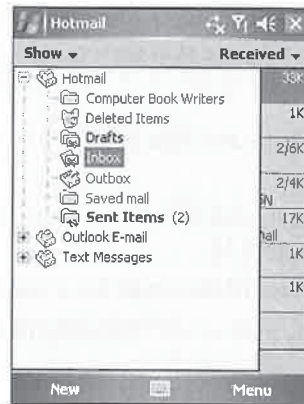


Name of the current account



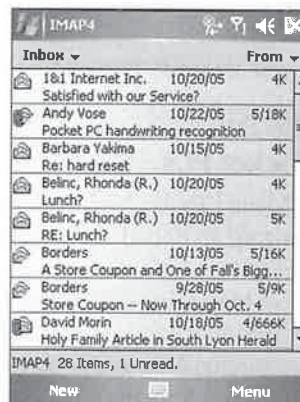
A similar screen appears on Smartphones after you select an account. At the bottom of the window is the Command bar, with two options associated to the left and right softkeys. Above the Command bar on Pocket PCs is a status bar that displays the name of the account, the total number of items in the folder, and the number of unread items in the folder.

In the middle of the screen is the list of messages stored in a folder. Use the Show drop-down list in the upper-left corner of Pocket PCs, shown next, to select the account and folder that you want to display. The name of the open folder displays at the top. To change accounts on a Smartphone, press Menu | Switch Accounts, and to select a different folder, press Menu | Folders and then select the folder that you want to view.

**TIP**

*One of the new features of Windows Mobile 5 is support for Microsoft Hotmail.*

To change the order of the message list on a Pocket PC, expand the drop-down list in the upper-right corner. The items can be sorted on From, Received Date, or Subject, and the field currently used for the sort is displayed at the top. To switch between ascending and descending order, repeat the selection of the sort field. For example, the message list shown here is sorted by From in descending order. To sort the message list in ascending order, select From in the Sort drop-down list a second time.



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**NOTE**

*You cannot change the order of the message list on Smartphones.*

## Add Internet E-mail Accounts

To send and receive e-mail, Messaging must communicate with POP3 or IMAP4 servers and SMTP servers, and to do that you must provide Messaging with information about those servers. That information is stored in an *account*.

## 210 How to Do Everything with Windows Mobile

One of the first things that you need to do to use Messaging is add an account. To do that, you need the following information about your mail servers, which your Internet service provider (ISP) can provide:

- **Account type** The type of mail server that you use to receive e-mail, either IMAP4 or POP3.
- **Connection** Used to connect to your ISP. The process for creating a connection on Pocket PCs is explained in Chapter 10.
- **Host or server name** The name of the server from which you receive e-mail.
- **User ID** Used to log in to the mail server. Typically, this is the same user ID that you use to connect to your ISP.
- **Password** Also used to log in to the mail server. This may also be the same password that you use to connect to your ISP.
- **Domain** Necessary only if you are connecting to a network that uses Windows 2000/2003 domain security. You do not need this for most Internet accounts.
- **SMTP host or server name** The name of the server used to send e-mail. You may also need a username and password for your SMTP host if it uses SMTP authentication.
- **Your e-mail address** Looks similar to this: taz@acme.com.

### TIP

*Another source for information about mail servers is Chris De Herrera's ISP Settings page at [www.pocketpcfaq.com/wce/isp.htm](http://www.pocketpcfaq.com/wce/isp.htm).*

After you gather this information, you are ready to start Messaging, create an account, and start sending and receiving e-mail.

### Add Messaging Accounts to Pocket PCs

To add an account on a Pocket PC, tap Menu | Tools | New Account. The first E-mail Setup screen displays. You use five screens for setting up an e-mail account. On the first screen, enter your e-mail address and tap Next.

On the next screen, you see a feature of Messaging called Auto configuration. Auto configuration connects to the Internet and then uses the e-mail address you enter to try to retrieve mail server names. The Pocket PC first checks a database on Microsoft's servers for the information; if there is no match, it attempts to retrieve the information from the e-mail service provider.

### NOTE

*Your Pocket PC needs to connect to the Internet for Auto configuration to work. Therefore, if you connect by modem, plug in the modem before executing this step. If you forget to attach the modem before accessing this screen, you can tap Back to return to the previous screen, attach the modem, and then tap Next.*

When Auto configuration completes, the status changes to Completed, and you can tap Next to go to the next step. On the third E-mail Setup screen, shown next, enter the name you want displayed on the messages you send, along with your mail server user ID and password.

How to ...

## Connect to Multiple E-mail Services with One Call

When you connect to an ISP from within Messaging, you can connect with only one mail server at a time. If you have multiple e-mail accounts and want to check e-mail on all of them using Messaging, you must disconnect and end the call before connecting to another account, even if the second account is configured to use the same dial-up connection.

This can be expensive when you are charged for each call that you make. Fortunately, there is a workaround for this problem. The trick is not to use Messaging to connect with the ISP, and instead connect using Connection Manager. Chapter 10 has instructions for creating modem connections in Connection Manager.

After the connection is established, switch to Messaging and tap Menu | Send And Receive to connect to the mail server and retrieve e-mail. Select the second e-mail account and then tap Menu | Send And Receive. If you see a dialog box asking if you can access the mail server using the current connection, tap Yes, and Messaging will then connect to the account and retrieve the e-mail.

While this process works for receiving e-mail, you may experience problems sending e-mail. Some ISPs do not allow you to use their SMTP servers unless you connect to their service. If that is the case, you will need to connect to the ISP to send e-mail, or find an SMTP server that can be accessed from any ISP.

11

Outlook E-mail

E-mail Setup (3/5)

User information

Your name: Frank McPherson

User name:

Password:

Save password

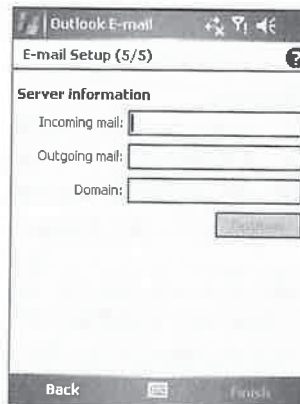
Back Next

Tap the Save Password check box if you want Messaging not to prompt you to enter your password each time you retrieve e-mail. Be careful with this feature; if you save the password, anyone who has access to your Pocket PC may be able to send and receive your e-mail. If you choose to save the password, you might consider password-protecting the Pocket PC by using the Password setting, as described in Chapter 3.

## 212 How to Do Everything with Windows Mobile

On the fourth E-mail Setup screen, select the type of mail server that you will use to receive e-mail in the Account Type drop-down list. The options are POP3 or IMAP4. Enter a name in the Name field and tap Next.

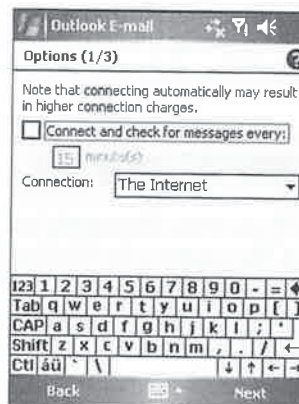
The fifth and final E-mail Setup screen, shown here, provides fields for entering the names of the incoming (POP3 or IMAP4) mail server and outgoing (SMTP) mail server. These fields may already be populated if Auto configuration found a match when it connected to the Internet. Otherwise, enter the names for the mail servers in the fields on the screen. If you are connecting to a network that uses Windows 2000/2003 domain security, enter the domain name in the Domain field. Normally you will leave this field blank.



### TIP

*If you are using MSN's e-mail servers, you must enter MSN in the Domain field.*

Tap the Options button to configure additional settings that control how the e-mail service communicates with the mail server. Three Options screens appear. On the first Options screen, shown here, you can specify how often Messaging checks for new mail and whether the account connects to the Internet or a Work network. You should leave the Connection field set to The Internet, unless the e-mail account is for a corporate e-mail server, in which case you want to change the field to Work.



## TIP

If you are using MSN's e-mail servers, you must check the *Outgoing E-mail Server Requires Authentication* check box in the second Options screen.

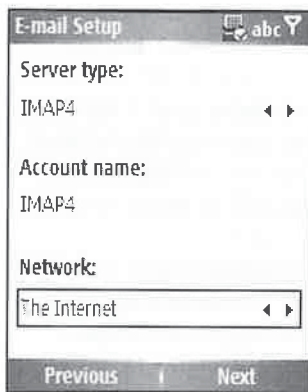
On the second Options screen, you can specify whether the outgoing (SMTP) e-mail server requires authentication, whether a Secure Sockets Layer (SSL) connection is required, and how many days of messages Messaging should display. While several different methods of SMTP authentication are available, Messaging uses only the POP server username and password. If your SMTP server requires a different username and password, you need to use a third-party e-mail program.

On the third and final Options screen, you specify whether Messaging retrieves only message headers or entire messages. If you select message headers, you can specify how much of the message the service retrieves along with the headers. If you are creating an IMAP4 e-mail account, you see an additional setting on this screen to specify whether the service downloads attachments when getting full copies of messages. You can specify the maximum-size attachment the service will download. Tap Finish to save the e-mail service.

### Add Messaging Accounts on Smartphones

To add a new Messaging account on Smartphones, press Menu | Options | New Account to begin the new account wizard, the first screen of which is shown here. Enter the name you want displayed in your messages and the return e-mail address and then press Next.

The wizard attempts to automatically find information about your e-mail servers based on the e-mail address, and then displays a screen for entering your username and password. After you enter this information press Next.

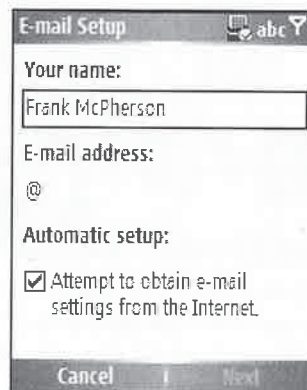


Select the e-mail server type from the Server Type drop-down list, enter an account name, and select the type of connection to use to retrieve your e-mail in the Network drop-down list. Normally, you select The Internet for the Network option, to retrieve e-mail from servers on the Internet.

Press Next and enter the incoming and outgoing e-mail server names. If the servers require SSL or authentication, select the appropriate check boxes and then click Next to move to the next wizard screen.

On the next screen, you specify the number of days' worth of messages to download, and how much of each message to download. Because of the limited storage space on Smartphones, you want to limit the number of messages you download.

Press Next to open the next wizard screen and specify whether you want Messaging to automatically connect and retrieve your e-mail at set time intervals, or to never automatically connect. If you select Never, you have to press Menu | Send/Receive in Messaging to retrieve e-mail. This is the last screen of the new account wizard; press Finish to save the information that you entered. You are asked whether you want to download e-mail to the new account; press Yes or No.



## Edit and Remove Accounts

To change an account on a Pocket PC that has already been created, tap Menu | Tools | Options to display the Options dialog box, shown here. Tap a name in the Accounts list to open the E-mail Setup screen. To delete an account, tap-and-hold a name in the Accounts list and select Delete from the pop-up menu.



### NOTE

To change an account on a Smartphone, press Menu | Options | Account Options, and select a name in the Accounts list.

## Synchronize E-mail with Outlook

You may have noticed that one of the Messaging accounts is Outlook E-mail. It is not listed as an account when you tap Menu | Tools | Options, but it is visible in the Accounts drop-down list of the Messaging List view. This account is built into Messaging and cannot be removed, but you can control whether it is used.

One of the purposes of the Outlook E-mail account is to synchronize e-mail messages between the Inbox folder in Outlook and Windows Mobile Messaging. With this feature, you can download e-mail to your device and then take it with you to read. You can reply to messages offline or create new messages, which will then synchronize to Outlook during the next ActiveSync session. Once in Outlook, the messages are sent using Outlook's e-mail connectivity.

Another purpose of the Outlook E-mail account is to synchronize e-mail messages with a Microsoft Exchange server. If you set up e-mail synchronization with an Exchange server, you cannot synchronize the Outlook E-mail account on a Windows Mobile device with Outlook running on a PC. See the "Configure Exchange Synchronization Settings" section of Chapter 7 for instructions on setting up synchronization with Microsoft Exchange.

E-mail synchronization with PCs has one significant limitation: you can synchronize e-mail only with the first synchronization relationship you create with the Pocket PC. If you have already created a relationship between the Pocket PC and a desktop computer, and you want to synchronize e-mail with a different desktop, you have to delete the first relationship.

## How to ... Use Hotmail

Windows Mobile 5 includes Pocket MSN with Hotmail and MSN Messenger. This is the first time that Microsoft has included support for its Hotmail e-mail service in Windows Mobile. The Pocket PC Today screen for Windows Mobile 5 includes a Pocket MSN option that initially says Tap Here To Sign In To Pocket MSN. When you tap the option, a wizard prompts you to enter your MSN account information, which is used to set up Hotmail and MSN Messenger.

After you configure Pocket MSN, the Today screen displays four icons. Tap the envelope icon to open the Hotmail account in Messaging. Alternately, you can start Pocket MSN by tapping Start | Programs | Pocket MSN. You can tap Menu | Send/Receive to download your Hotmail e-mail to the Pocket PC. While you can perform all of the e-mail functions described in this chapter, you cannot make changes to the Hotmail e-mail account by tapping Menu | Tools | Options. To change the Hotmail account information, tap Start | Settings | MSN Options, select the Switch User tab, and tap the Switch User button.

To run Pocket MSN on a Smartphone, press Start | More | Pocket MSN, and then select MSN Hotmail to open your Hotmail e-mail.



Messaging synchronization works with any ActiveSync connection. See the “Change Outlook E-mail Synchronization Settings” section of Chapter 7 for instructions on setting up e-mail synchronization in ActiveSync.

Messaging synchronization works the same way it does for Calendar, Contacts, and Tasks. When you connect a Pocket PC or Smartphone to the desktop computer, as described in Chapter 7, ActiveSync compares the contents of the device and PC and synchronizes the changes. In the end, both have the same items. Of course, if you configure ActiveSync to synchronize only a limited number of messages, Messaging will not contain everything in Outlook.

Only Outlook’s Inbox root folder and subfolders synchronize. E-mail messages that you write and send before synchronizing appear in the Outbox but are moved to Outlook during synchronization and then removed from the Outbox. Deleted items work in the same way. During synchronization, messages are removed from the Deleted Items folder on the device and the message is deleted from Outlook. The contents of the Drafts and Sent Items folders on the device do not synchronize with Outlook.



## How to ... Synchronize with Outlook Express

Many people have asked me how to synchronize their Pocket PC or Smartphone with Microsoft Outlook Express. Most are amazed to learn that ActiveSync does not support this Microsoft product. If you want to synchronize Messaging with Outlook Express, you need SyncExpress from Syncdata, which you can find at [www.syncdata.it](http://www.syncdata.it). SyncExpress adds an Outlook Express information type to ActiveSync and synchronizes e-mail and addresses. Outlook Express's Address Book synchronizes with Contacts on the device.

### NOTE

*Messaging synchronization does not control the number of messages that appear in subfolders. All messages in Outlook Inbox subfolders synchronize with the device, regardless of the setting for the root Inbox folder.*

All Outlook Messaging subfolders appear on the device, but you must specify which of those folders synchronize by configuring the ActiveSync options on the desktop computer. Messages that you move to synchronizing subfolders appear on both the device and the desktop computer. However, if you move a message on the device to a subfolder that is not synchronizing, the message will be moved to the subfolder on the desktop computer but will not appear in that subfolder on the device.

The process of composing, reading, and responding to e-mail is the same for the ActiveSync service as it is for Internet mail services, which is described in the rest of this section.

### Send and Receive E-mail

While you can send and receive e-mail using Messaging synchronization, the only way to update your e-mail is to connect the device with a desktop computer, unless you synchronize with an Exchange server. Although synchronization works, it may not be very functional. On the other hand, you can use an Internet e-mail service anywhere by using a modem or wireless connection.

Before you send and receive e-mail, you must create an Internet e-mail account, as described earlier in this chapter. If you have more than one Internet e-mail account, select the one you want to use from the Accounts drop-down list on a Pocket PC, or the Accounts list when you start Messaging on Smartphones.

You can send and receive e-mail by using any Internet connection. If you are using a modem connection on a Pocket PC, connect the device to the modem and plug in a phone line. For a network connection, insert a wired or wireless Ethernet adapter. Next, start Messaging and tap Menu | Send/Receive.

If you are using a modem connection on a Pocket PC, Messaging displays the Network Logon dialog box for the connection that you assigned to the service. Enter a username and password if they are not already provided, and tap OK. The modem then dials the number of the connection

How to ...

## Have E-mail Pushed to Your Pocket PC or Smartphone

The feature that makes Research In Motion's Blackberry devices popular is push e-mail, which sends e-mail to the devices nearly the instant that it is received on an e-mail server. The e-mail synchronization that you read about in this chapter is based on Windows Mobile exchanging e-mail with servers at a time interval. In this case, e-mail may wait on a server for a period of time before it appears on a device.

Microsoft is making changes to its Exchange e-mail server software and Windows Mobile 5 to provide push e-mail capability to Pocket PCs and Smartphones. To get push e-mail, you will need Windows Mobile 5 and the Messaging and Security Feature Pack (MSFP) installed on the device. The Exchange server you use must run Exchange 2003 Service Pack 2. Microsoft has released Exchange 2003 Service Pack 2 and will provide MSFP to mobile service providers. Unfortunately, not all providers have committed to providing MSFP.

and logs on to the network. The Network Logon dialog box will close and you will start to see messages displayed on the status bar.

**TIP**

*If you use a wired or wireless network connection, Messaging uses it to communicate with the mail servers and does not open the Network Logon dialog box.*

First, Messaging opens a transmit port with the SMTP host to send e-mail, and then it opens a receive port with the POP3 or IMAP4 host to receive e-mail. Once these ports are established, Messaging sends any e-mail waiting to be sent, and then starts downloading messages.

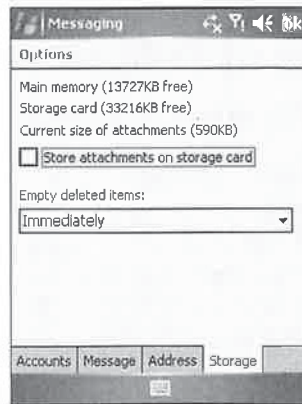
While the messages download, the status bar shows how many messages are on the server and how many have download to the device. In a process similar to ActiveSync, Messaging synchronizes messages with the mail server so that they both contain the same items. If a message has already been downloaded, it will not be downloaded again; if a message on the device is no longer on the server, it is removed on the device.

By default, Messaging does not automatically delete e-mail from the server. When you delete a message in Messaging, the message moves to the Deleted Items folder. You can open the Deleted Items folder, select the messages, and delete them again, and the messages will then be deleted from the server.

**NOTE**

*When you delete e-mail from POP3 or IMAP4 accounts on Smartphones, they are not deleted from the server.*

You can simplify this manual deletion process by configuring Messaging to delete messages automatically. On Pocket PCs, tap Menu | Tools | Options and then tap the Storage tab, shown next. Change the selection of the Empty Deleted Items field to On Connect/Disconnect or Immediately.



You can download a fresh copy of all messages from a server by clearing them from the Pocket PC. To do so, tap Menu | Tools | Clear *account name* (where *account name* is the account name on the status bar) and then tap the Send And Receive button.

**NOTE**

*Smartphones do not provide a way to clear all messages from an account.*

After all of the messages download, the status bar displays the folder name (Messaging) and the total number of items and unread items. If you are using a modem connection, Messaging disconnects the call if you configured the service to do so; otherwise, it remains connected.

**How to ...**

## Send and Receive E-mail Using Other Programs

Messaging is a functional e-mail program, but you may find that it does not meet your needs—or maybe you would prefer to use a different program. Two other e-mail programs work with POP mail servers and run on Pocket PCs. One is nPOP by Tomoaki Nakashima and the other is FlexMail 2006 from Web Information Solutions, Inc.

Unlike Messaging, nPOP supports multiple e-mail accounts on a single Internet connection, and it supports signatures. Messaging on Pocket PC 2002 and Windows Mobile 2003 does not support SMTP authentication, so nPOP is a workaround because it supports SMTP authentication and POP after SMTP. Unfortunately, nPOP does not work with Contacts, so you have to enter e-mail addresses in a separate address book. You can download English and Japanese versions of this program at [www.nakka.com/soft/npop/index\\_eng.html](http://www.nakka.com/soft/npop/index_eng.html).

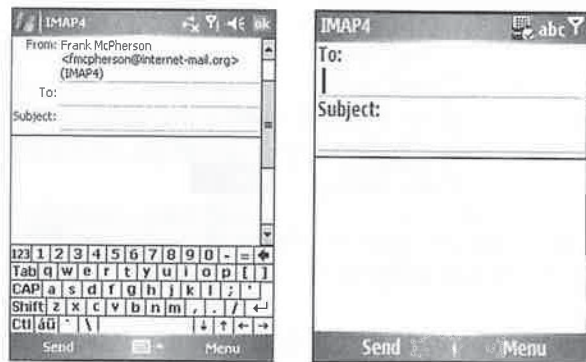
Web Information Solutions' FlexMail 2006 can display HTML e-mail, provides e-mail signatures for each account, and supports SMTP authentication. If you use Pocket PC 2002 or Windows Mobile 2003, you will find that FlexMail adds many of the features of Windows Mobile 5 messaging. You can download FlexMail 2006 from [www.pocketinformant.com](http://www.pocketinformant.com).

If a new message arrives while the device is connected, Messaging notifies you. You see a notification bubble or hear a sound, unless notification sounds are turned off. If while connected you want to force Messaging to check for messages, tap the Send And Receive button.

## Compose a New E-mail Message

An e-mail message can be written at any time, even if the device is not connected to the Internet. When the device is not online, the message is stored in the Outbox folder—where it will stay until the next time you connect with a mail server. Messaging retrieves the e-mail addresses that are stored in Contacts and makes them available for use when creating a message.

To create a new message on a Windows Mobile device, select New to open the following screen on a Pocket PC (shown at left). On a Smartphone the screen looks like the one shown at right.



The cursor is in the To field, ready for you to enter the e-mail address of the person receiving the message. E-mail addresses stored in Contacts can be retrieved for use in this field either by selecting the address or by searching for the address.

### TIP

*You can also create new e-mail messages directly from Contacts. On a Pocket PC, tap-and-hold an item in the Contacts List view and then tap Send E-mail on the pop-up menu. You can also select a contact's e-mail address in the Contact Summary view on either a Pocket PC or Smartphone.*

To select an address from Contacts, select Menu | Add Recipient to display a list of all contacts with e-mail addresses. To search for an address, enter the first few letters of the person's name in the search box. As you enter letters, the list is filtered to display only the contacts containing the letters you type. Select the address you want, and it will be entered in the To field. If you select multiple addresses, each will be entered in the field, separated by a semicolon.

### NOTE

*Windows Mobile allows only semicolons as separators in e-mail addresses. Pocket PC 2002 allows both semicolons and commas.*

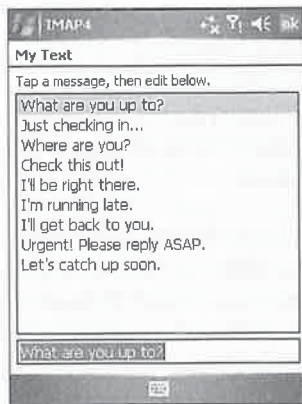
Enter a subject for the message in the Subject field. To send a carbon copy or a blind carbon copy to another person, scroll the message up to display the BCC and CC fields. Enter an e-mail address in either the CC or BCC field by using one of the methods described previously in this section.

The body of the message is immediately below the Subject line. To compose the message, tap the empty middle pane of the window and begin entering text. The My Text menu provides a way to insert text quickly into a message. When you select Menu | My Text, a menu displays with nine messages. Select a message to insert the text into the e-mail.

**NOTE**

*The My Text menu contains the same entries for Messaging and MSN Messenger. If you change a My Text menu item in Messaging, that change is available in MSN Messenger.*

You can change the phrases that are in the My Text menu on a Pocket PC by tapping Menu | My Text | Edit My Text Messages, to open the screen shown here. Tap a message in the list and edit it in the field at the bottom of the screen.

**NOTE**

*To edit My Text phrases in Messaging on a Smartphone, press Menu | My Text | Menu | Edit My Text.*

## How to ... Use E-mail Signatures

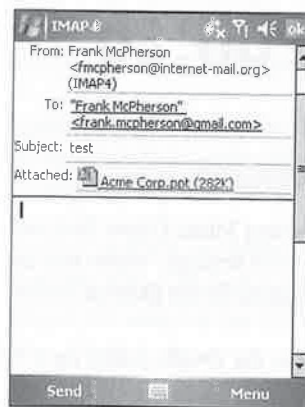
Windows Mobile 5 Messaging supports e-mail signatures, which are predefined lines of text, such as your name, that are automatically inserted at the end of each e-mail that you write. To create a signature, tap Menu | Tools | Options on a Pocket PC and then tap the Signatures button. On a Smartphone, press Menu | Options | Signatures. You can create different signatures for each account. First, select the account from the drop-down list, tap the Use Signature With This Account check box, and then enter the signature text.

Signatures will be inserted only in new e-mail messages unless you select the Use When Replying And Forwarding check box.

To copy, cut, paste, clear, and select all text in a message on a Pocket PC, tap-and-hold on the text of a message and select an option in the pop-up menu. To check the spelling of an e-mail message on a Pocket PC, tap Menu | Spell Check. These options are not available on Smartphones.

To confirm e-mail addresses, select Menu | Check Names. Check Names will verify e-mail addresses using Contacts and the mail servers that you specify when creating accounts. You can specify additional servers for verifying addresses on Pocket PCs by tapping Menu | Tools | Options | Address when the message list displays.

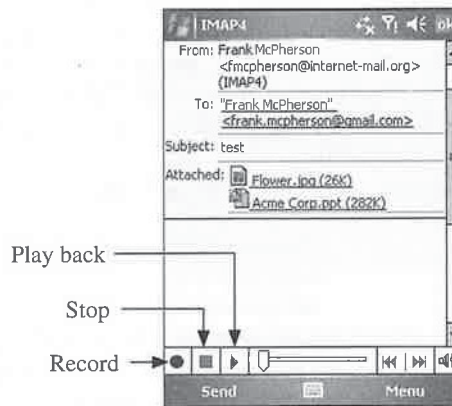
If you want to add an attachment to the message, select Menu | Insert, which displays a menu on Pocket PCs containing Picture, Voice Note, and File options. On Smartphones the menu does not have a File option. Tap File to open the Open dialog box. Listed in the dialog box are all the files stored in the My Documents folder. Use the Folder drop-down list to switch to a different folder. While the Type drop-down list is shown in the dialog box, you cannot select anything but All Files. Tap the name of the file to attach and it will be added to the message, as shown here:



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When you select Insert | Picture, an Insert Picture screen appears, showing thumbnails of all the pictures on the device.

You might find it quicker to send a voice message than to type or write a reply. To add a voice recording to an e-mail, tap Menu | Insert | Voice Note, which displays the recording toolbar on Pocket PCs:



Tap the Record button on the toolbar and begin speaking, and tap the Stop button when you are finished. The recording file appears as a file attachment, and the message recipient will be able to play back the recording using a media player on their desktop computer.

When you press Menu | Insert | Voice Note on Smartphones, you see a screen with Record assigned to the left softkey. Press the left softkey to start recording a message, and a screen like the following appears, with a timer showing the length of the recording:



If you want to save the message, select Menu | Save To Drafts. If you want to cancel and delete the message, select Menu | Cancel Message. When you are ready to send the message, select Send, and the message will be placed in the Outbox folder.

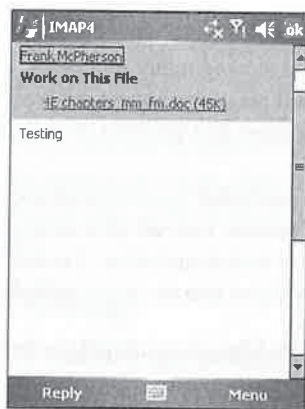
### TIP

*You can also save a message in the Drafts folder on a Pocket PC by tapping OK.*

To send a message, select Send, and the message will be sent and removed from the Outbox folder the next time you use the account to send and receive e-mail. If the message is composed for the ActiveSync service, during the next synchronization it will be moved from the Outbox folder on the device to the Outbox folder in Outlook. From there, how the message will be sent depends on how Outlook is configured.

## Read and Respond to E-mail

New mail is written to the account's Inbox folder and appears in the message list. Messages that have not been read are in boldface, and messages that have been read are in a normal typeface. To open a message, select its entry in the message list, and the message will open, as shown here.



Windows Mobile 5 Messaging displays a sender's picture when an e-mail address matches a contact that has a picture. Select the sender's name to display the contact information for that contact. If you tap the name of a sender that is not in your Contacts list, Windows Mobile will ask you if you wish to create a new contact.

To move to the preceding message in the list, press the Navigation button to the left; press the Navigation button to the right to move to the next message. If the current message is at the top or bottom of the list, you return to the message list. Select Menu | Delete to delete the message that is currently open, and the next message will display. Other options under Menu include Reply, Reply All, Forward, and Mark As Unread.

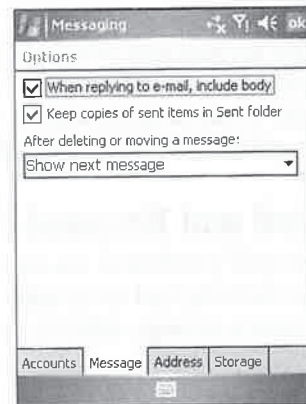
When you tap Reply, a new message is created with the To field already filled with the e-mail address of the person who sent you the original message. The contents of the original message are inserted into the new message and the cursor is placed at the top. Enter the text of the reply and tap the Send button.

Reply All also creates a new message and fills the To field with the e-mail address of the person who sent the original message. However, if the original message contained any carbon copies or other recipients, the additional addresses are added to the CC line of the reply.



You can configure Messaging so that it does not insert the original message in replies. On a Pocket PC, tap Menu | Tools | Options, and then open the Message tab. To stop inserting the text, clear the When Replying To E-mail, Include Body check box. This option does not affect message forwarding, which always includes the contents of the original message.

To configure Messaging on Smartphones to not insert the original message in replies, press Menu | Options | Sending, and then clear the Include Copy Of Original Message When Replying To E-mail check box.



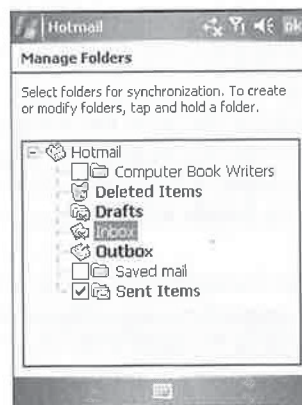
## Manage Messages

Folders are valuable for organizing and storing many messages, and you can create folders for all e-mail accounts except ActiveSync. Unfortunately, Messaging does not have the message filter capabilities that you find in Outlook, but you can create folders and manually store messages in them.

While Windows Mobile supports subfolder synchronization, it does not allow you to create subfolders for Outlook E-mail on the device. Instead, you have to create subfolders on a desktop computer and then set up that folder for synchronization. Pocket PC 2000 does not support subfolder synchronization, but it does allow you to create subfolders for the ActiveSync service.

## Create, Rename, and Delete Folders on Pocket PCs

To create, rename, or delete folders on Pocket PCs, tap Menu | Tools | Manage Folders to open this screen:



### NOTE

*You can only create, rename, and delete folders for POP3 or IMAP4 accounts on Pocket PCs.*

To create a folder, tap-and-hold a location within the folder hierarchy on the screen and then tap New Folder. Enter a name for the new folder and tap OK.

**NOTE**

The folders that you see on the Manage Folders screen are for the active e-mail account.

To rename a folder, tap-and-hold it in the folder hierarchy, tap Rename, and then enter a new name in the Rename Folder dialog box. Delete a selected folder by tapping the Delete option on the tap-and-hold pop-up menu. The folder and its contents will be deleted.

**NOTE**

You cannot create, rename, or delete folders on Smartphones.

### Move and Copy Messages

Because Messaging does not provide filtering capabilities, you must manually move or copy messages from the main message list to a folder. When you move a message to a subfolder in the Outlook E-mail account, the message appears in the destination subfolder in Outlook. If the destination subfolder is set up for synchronization, you see the message at both locations. However, if the subfolder does not synchronize, it appears only on the desktop computer. When you move messages associated with Internet services, they are not deleted from mail servers.

To move a message that is in the message list or while a message is open, select Menu | Move and then select the destination folder.

### Download a Full Copy of a Message

One of the Messaging preferences is to download only message headers and a specified number of lines. You may decide while reading a truncated message that you want to retrieve a full copy. You can tell Messaging to download a full copy of the message during the next connection with the mail server.

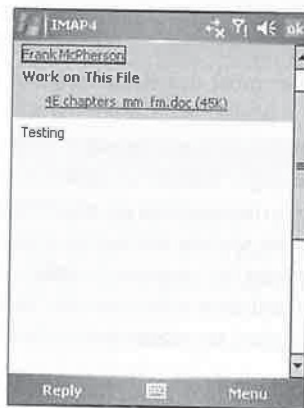
To download a full copy of an open message, select Menu | Download Message. On a Pocket PC you can also tap-and-hold on a message, and then tap Download Message on the pop-up menu.

**TIP**

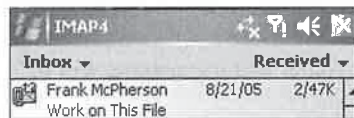
If you later decide not to download the entire message, select Menu | Do Not Download.

### Manage Attachments

Attachments are listed in the message header, as shown here:



Select the filename of the attachment to have the device download it the next time it connects to the Internet and receives e-mail. E-mail messages that have attachments pending to download appear in the message list with the following icon:



After a message's attachments download, you see an icon display next to the filename in the message header. Tap the filename, and the attachment will open using the appropriate program, or you will be prompted to save the file to your device.

**TIP**

*Messaging automatically converts Word, Excel, and PowerPoint documents to the mobile formats for display on Pocket PCs. You can purchase Westtek's ClearVue Office, which is available from [www.westtek.com/smartphone/](http://www.westtek.com/smartphone/), to open Word, Excel, and PowerPoint attachments on Smartphones.*

One of the problems with file attachments is their size, and if you download many messages with attachments, the internal storage space on your Pocket PC can be quickly used up. Fortunately, you can configure Messaging to put attachments on a storage card. To configure a Pocket PC to write attachments to a storage card, tap Menu | Tools | Options, tap the Storage tab, and select the Store Attachments On Storage Card check box.

**NOTE**

*While Smartphones support storage cards, you cannot configure Messaging to automatically store attachments on them.*

## Receive Meeting Requests

Outlook Mobile treats appointments, meetings, and events differently. Appointments are activities that you schedule in Calendar that don't involve inviting people. A meeting is an appointment to which you invite someone, and an event is an activity that lasts 24 hours or longer. Sending and receiving meeting requests involves integration between the Calendar and Messaging programs. The process for sending a meeting request is covered in "Schedule Appointments Using Calendar" in Chapter 13.

If you synchronize messages with Outlook, you automatically receive meeting requests. To receive meeting requests using an Internet service, the mail server must be running Microsoft Exchange Server. The Exchange server must use Rich Text Format and Transport Neutral Encapsulation Format (TNEF).

TNEF is a Microsoft proprietary method for packaging information to send across the Internet. If it is enabled, you will not receive messages that are included in other messages as attachments, and you will not be able to tell whether a message has an attachment until you get the full copy.

Meeting requests appear on Windows Mobile devices as attachments, and therefore you must either manually or automatically download full copies of e-mail to open them. When you receive a meeting request, select Appointment and then select Accept, Tentative, or Decline. The response will be sent during the next synchronization, or connection with mail servers, and the appointment is added to Calendar.

## Find Messages

As described earlier, Messaging folders are useful for separating and storing e-mail messages. Unfortunately, Messaging does not provide a way to move messages to folders automatically, which would make the process for finding messages easier. However, you can search for messages, and if you search on the same sending address, they all appear in one list.

To search for a message on a Pocket PC, use the Search utility, which is used to search for any information on the device. Tap Start | Programs | Search; enter a name, e-mail address, or phrase in the Find field; select Messaging from the Type drop-down list; and then tap Search. The results are displayed in the dialog box. To open a message, tap it in the list.

### NOTE

*Smartphone does not have search capabilities built-in, but you can find third-party programs that add search capabilities at [www.smartphone.net](http://www.smartphone.net).*

## Send and Receive Text Messages

Text messaging provides a simple way to send and receive messages on mobile phones. It works like e-mail but does not require an Internet connection. Text messaging on GSM networks is called Short Message Service (SMS). The maximum size of an SMS message is 160 characters. On CDMA networks, this feature is called text messaging.

Pocket PC Phone Editions and Smartphones can send and receive text messages at any time while connected to the mobile network. When you receive a text message, a notification bubble displays on Pocket PCs. Tap the message to open it in Messaging, tap Reply to reply to the message, or tap Menu to delete or save the message, dismiss the notification bubble, or place a phone call to the sender.



### NOTE

*When you receive a text message on Smartphones, you may hear a notification, depending on which profile you are using. If you are using the Windows default Home Screen, you also see the number of unread text messages on the Home Screen.*

You use Messaging to read, reply to, write, and send text messages. To read and write text messages, select the Text Messages account when you start Messaging on Smartphones, or tap Menu | Switch Accounts | Text Messages on Pocket PCs.

**NOTE**

*Some mobile service providers include customized applications for working with text messages. Check the user manual of your device for instructions on how to use this application.*

All you need to send a text message is a person's mobile-phone number. Simply enter the phone number in the To field of the message. To send a message to someone in your Contacts list, begin entering the contact's name and then select it from the pop-up list that appears.

You can also send a message from Contacts. Tap-and-hold on a contact name in the Contacts List view on Pocket PCs and then tap Send Text Message. From the Contact Summary view, select Send Text Message. Messaging starts with a new Inbox message that has the contact's mobile phone number in the To field.

**TIP**

*SMS was originally designed for sending messages between phones. However, many wireless services provide SMS-to-e-mail gateways so that you can send messages to e-mail addresses. Usually, you can also receive e-mail messages. Check with your service provider to find out whether it provides an e-mail gateway and instructions for how to use it.*

## Send and Receive Instant Messages

The Microsoft Network (MSN) Instant Messenger client is included with Pocket MSN that comes with Windows Mobile 5. In prior versions of Windows Mobile, the client appears as a separate program. When you first use Pocket MSN, you are prompted to provide your account information, for which you can either use a Hotmail or Passport account. To create a new Hotmail account, go to [www.hotmail.com](http://www.hotmail.com); to create a new Passport account, go to [www.passport.com](http://www.passport.com).

To use MSN Messenger, you must connect your device to the Internet. On Pocket PCs, MSN Messenger automatically uses the default Internet connection that you set up in Connection Manager, or it uses a network card if one is available. Chapter 10 provides the instructions for creating connections in Connection Manager.

**TIP**

*MSN Messenger also works with ActiveSync Desktop Pass Through, which is described in Chapter 10.*

Tap the MSN Messenger icon on the Pocket PC Today screen, or tap Start | Programs | Pocket MSN | MSN Messenger. On a Smartphone, select Start | More | Pocket MSN. When you start MSN Messenger, you see the opening screen. Select Sign In to sign in to the MSN Messenger server.

How to ...

## Add a MSN Messenger Icon to Programs on Pocket PCs

Pocket PCs running Windows Mobile 2003SE or older have an MSN Messenger icon in Programs, so you tap Start | Programs | MSN Messenger to run the program. Windows Mobile 5 does not have this icon by default, but you can add it by following these steps on your Pocket PC:

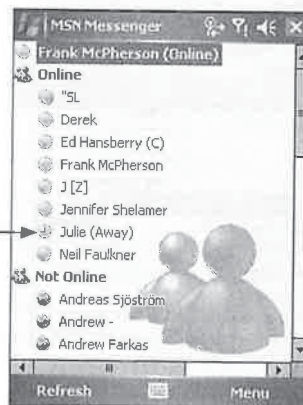
1. Start File Explorer.
2. Use File Explorer to open the Windows folder.
3. Scroll through the Windows folder until you find instmsgr.
4. Tap-and-hold on instmsgr and tap Copy.
5. Scroll to the top of the Windows folder, tap the Start Menu folder, and then tap the Programs folder.
6. Tap Menu | Edit | Paste Shortcut.
7. Tap-and-hold on the icon named Shortcut To Instmsgr and then tap Rename.
8. Enter **MSN Messenger**.

To confirm that you successfully added the icon, tap Start | Programs and scroll the program window until you find the icon.

11

All of your MSN Messenger contacts are stored on the Messenger server, and you see all of your contacts that are online or not online in the main program window, as shown here:

This contact is away from her desk.



## 230 How to Do Everything with Windows Mobile

To send a message to a contact that is online, tap the contact name, enter a message, and tap Send. The message that you enter moves to the top of the screen, which is where you also see any replies from the person you are chatting with.

### TIP

You can also tap-and-hold on the contact name and then tap *Send An Instant Message* on the pop-up list. To send an e-mail message, tap-and-hold on the contact name and tap *Send Mail* on the pop-up list. You can send e-mail to online and offline contacts.

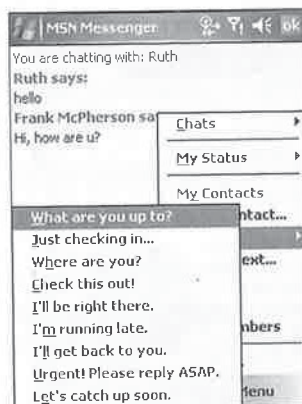
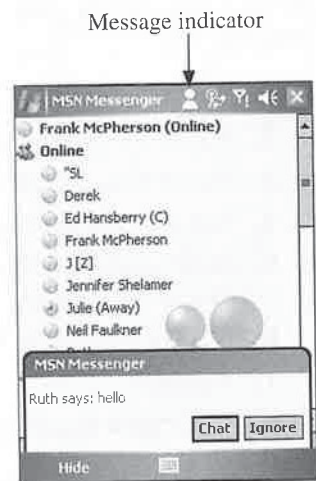
You can chat with more than one person by selecting *Menu | Chats* to switch among people. However, each chat is in a separate window, and you cannot participate in conference chats. If you receive a message from a person with whom you are not chatting, or for whom you don't have the chat window open, the message appears in a notification bubble. The notification bubble displays for about 30 seconds, and if it closes before being acknowledged, an indicator appears at the top of the Pocket PC screen.

The notification bubble and indicator also appear if you have another program open on your Pocket PC while MSN Messenger is running. When you tap *Chat* on the notification bubble while another program is running, the Pocket PC switches programs so that you can enter a response.

### TIP

If you do not want to chat, tap *Ignore* on the notification bubble. To change your status to indicate that you do not want to chat, select *Menu | My Status*.

Writing long messages can be tedious, so MSN Messenger provides a way to send predefined messages, which are listed in the *My Text* menu. Tap the text that you want inserted in the message, and then either add more text or tap *Send*.



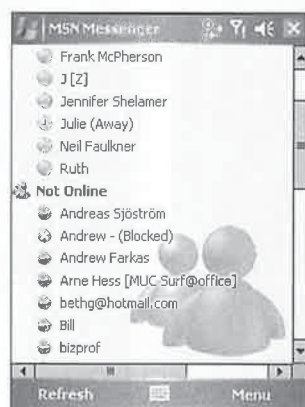
## Manage Contacts

MSN Messenger Contacts is not the same as Pocket Outlook Contacts; MSN Messenger Contacts is stored on the MSN Messenger server. Because the contacts in MSN Messenger are on the server, the same contacts appear in versions of MSN Messenger running on desktop PCs or Windows Mobile devices. Before you can add a contact, you must be online with the MSN Messenger server.

To add a contact using a Pocket PC, tap Menu | Add A Contact, and enter the contact's MSN Messenger sign-in name in the Sign-in Name field. Tap Next, and if the sign-in name is found on the server, you see a message indicating that the contact has been added to your list. If the sign-in name is not found, you see a message saying that the operation has failed, and you return to the Add A Contact screen.

To delete a contact, tap-and-hold on its entry on the MSN Messenger screen and tap Delete Contact on the pop-up list. A message box appears in which you confirm whether or not you want to delete the contact. Tap Yes to delete or No to cancel.

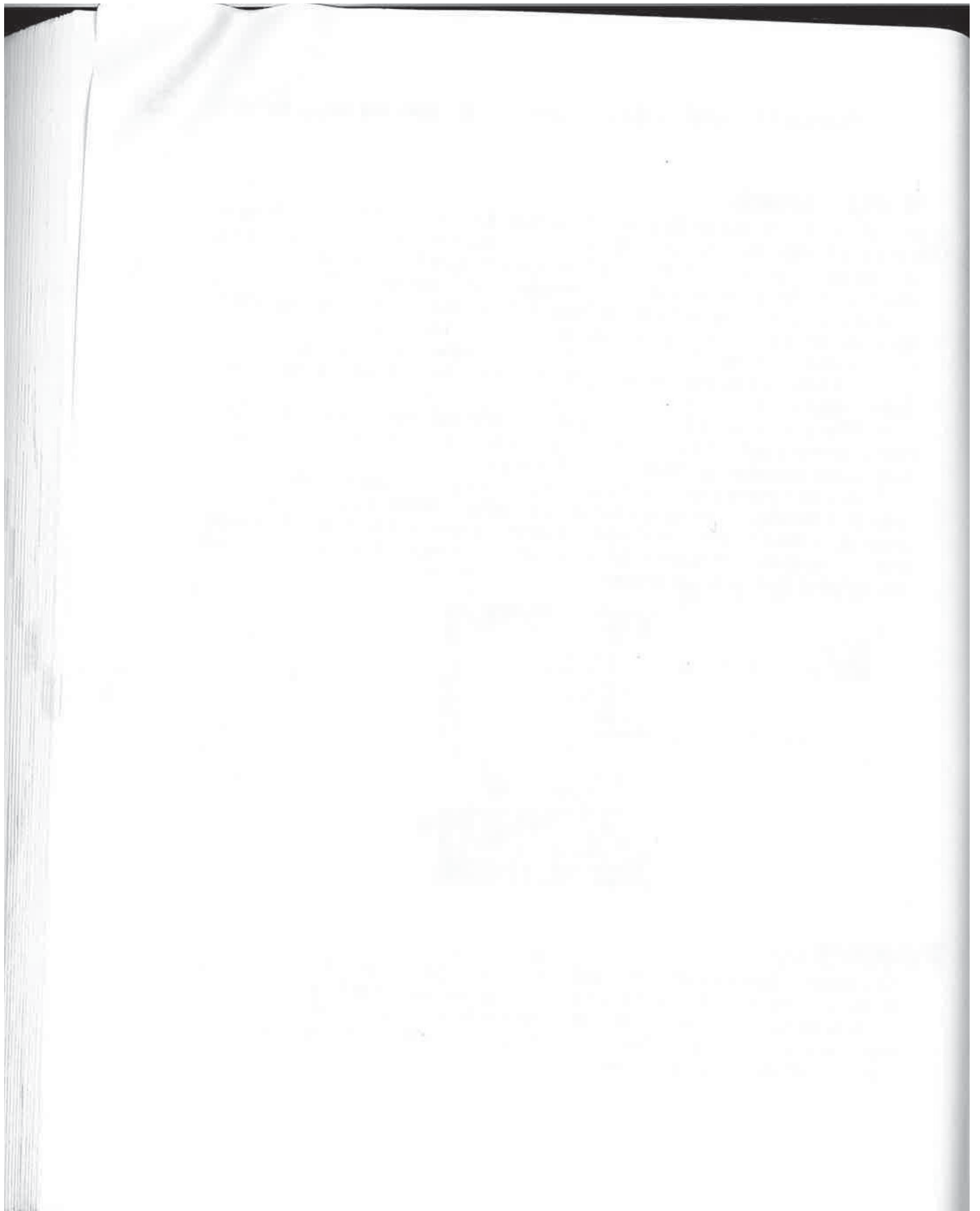
If you want to prevent a contact from ever sending a message to you, tap-and-hold on its entry on the MSN Messenger screen and tap Block on the pop-up menu. When you block a contact, you'll always appear offline to that person. Blocked contacts show a cross-out indicator in the button next to the name on the MSN Messenger screen, as shown here. To unblock a contact, tap-and-hold on its entry and tap Unblock on the pop-up menu.



## Wrapping Up

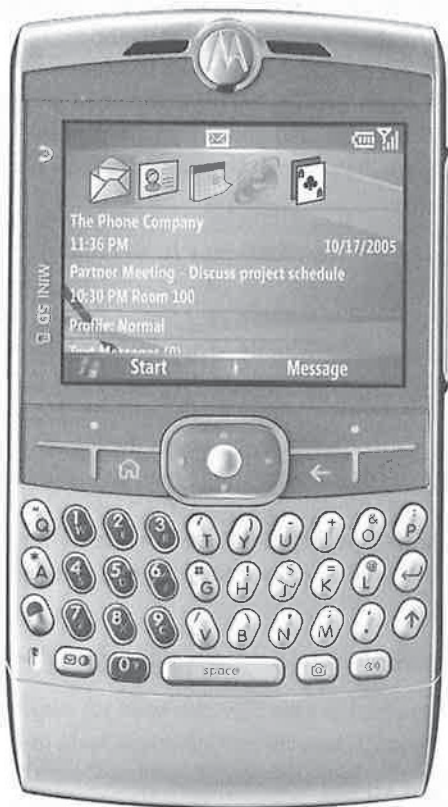
Your Windows Mobile device has all the tools you need for sending and receiving e-mail to family, friends, and coworkers. Messaging works with standard POP3 and IMAP4 e-mail servers and synchronizes with Microsoft Outlook. Perhaps the second most popular use of the Internet is to browse web sites, which you can do using Internet Explorer on your Pocket PC. In the next chapter you will learn how to use Internet Explorer.





# Chapter 12

## Browse the Web



## How to...

- Browse web sites using Internet Explorer Mobile
- Save shortcuts to your favorite web sites
- Download RSS feeds to your Windows Mobile device

In 1989, the World Wide Web was nothing more than a project for British physicist and computer scientist Timothy Berners-Lee. In 1993, when the first major browser, Mosaic, was developed, the Web was still not used for much more than research. All of that has changed dramatically, to the point where today numerous companies exist with nothing more than a web page as their storefront.

The Web has become the graphical user interface for the Internet—the method by which the majority of people use it. When you access the Internet to check stock quotes, buy a book, find a phone number, or read a magazine, you probably do so on the Web with a web browser.

Because of the importance of the Web, a web browser is now perhaps the most important program on your computer. Go to any computer store, look at any computer, and you'll find a web browser installed. Windows Mobile devices are no different; they, too, have a web browser installed, called Internet Explorer Mobile.

### NOTE

*Previous versions of Internet Explorer on Pocket PCs were known as Pocket Internet Explorer.*

Like all the Windows Mobile applications, Internet Explorer Mobile is not designed to be your full-time browser. However, it provides enough functionality to perform the majority of tasks necessary when you don't have access to a browser on a desktop computer. In fact, the combination of a Smartphone, Internet Explorer Mobile, and wireless networking may represent the future of the Internet, a future in which the Internet is used for communication wherever one may be—at home, at the grocery store, or traveling.

The version of Internet Explorer Mobile with Windows Mobile 5 is based on the desktop version of Internet Explorer but does not support all of its features. The following is a summary of the features that are *not* supported:

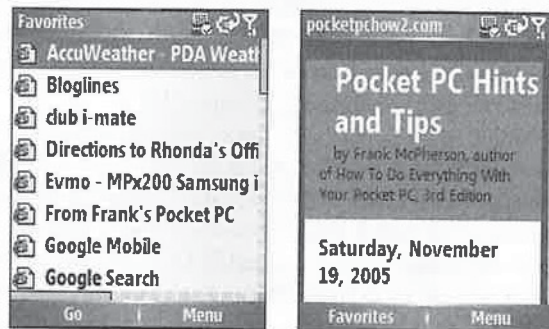
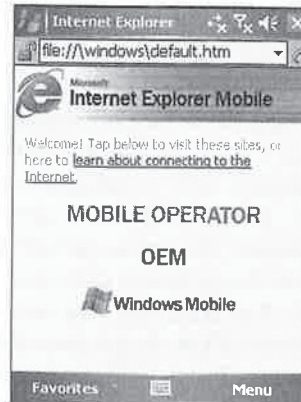
- Java applets designed to run within a web browser
- Asynchronous JavaScript and XML (AJAX)
- Microsoft Visual Basic Script (VBScript)
- Several multimedia file formats, such as AVI and MPEG
- The HTML tags `APPLET`, `BLINK`, `ISINDEX`, `LINK`, `MARQUEE`, and `OBJECT`

Internet Explorer Mobile supports all the basic security types, including the 128-bit encryption used by some web sites.

## Start Internet Explorer Mobile

To start Internet Explorer Mobile on a Pocket PC, tap Start | Internet Explorer or tap Start | Programs | Internet Explorer, depending on how the Start menu is configured. The program window looks like the image shown here. The Address bar is at the top of the program window, and the Command bar menu options and buttons are at the bottom. A new feature of Internet Explorer Mobile is a download progress bar at the bottom of the screen that shows how much of the page has been downloaded to the Pocket PC.

To start Internet Explorer Mobile on a Smartphone, press Start | Internet Explorer, which displays your favorite web sites, as shown in the following image (left). Use the navigation button to scroll to the favorite that you want to open and then press the Go button to select. The web site will appear in the browser, as shown (right).



### NOTE

*If Internet Explorer is already running on a Smartphone, you will see the last web site that you opened when switching to the program rather than Favorites.*

## Browse Web Sites

The process for browsing web sites in Internet Explorer Mobile is the same as with Internet Explorer. First, you must connect to the Internet; Chapter 10 provides the instructions for configuring Internet connections. Windows Mobile automatically connects to the Internet based on how it is configured and the URL (Uniform Resource Locator—the web site address) you request in Internet Explorer.

### TIP

*You can also browse web sites while your Windows Mobile device is in its cradle by using ActiveSync Desktop Pass Through. You will find more information about Desktop Pass Through in Chapter 10.*

## How to ... Use a Proxy Server

Proxy servers are often used when connecting to the Internet through a LAN, such as that used by a corporate network. They allow multiple users to share the same connection to the Internet and provide added security by masking the TCP/IP address of the client PC.

On Pocket PC 2000 devices, Pocket Internet Explorer must be configured to access the Internet via a proxy server. Tap Tools | Options and then open the Connections tab. Select Use Proxy Server, and enter an address in the Proxy Server HTTP field and a number in the Port field. Ask your network administrator for the address and port number of the proxy server, if you do not know them. If you also access an intranet web site, you must select Bypass Proxy For Local Addresses so that the browser does not try to use the proxy server to access intranet sites.

Pocket PC 2002 moves the proxy server settings from Pocket Internet Explorer to the Work Settings portion of Connection Manager. To configure the proxy server, start Connection Manager by tapping Start | Settings | Connections | Connections. Tap Modify in the Work Settings portion of the screen, and then tap the Proxy Settings tab. Tap the two check boxes on the screen and enter the hostname or IP address of the proxy server on the screen. You will find more instructions for using Connection Manager in Chapter 10.

Windows Mobile 2003 and later changes the proxy server settings slightly and adds an Exceptions list. To configure proxy server settings on Pocket PCs, tap Start | Settings | Connections | Connections, and then tap Set Up My Proxy Server under My Work Network. To add items to the Exceptions list, which lists web site addresses that are not to be retrieved by a proxy server, open the Advanced tab in Connection Manager and tap Exceptions.

You will probably not use a proxy server with Smartphones, because they normally connect to the Internet using your mobile-phone service, which does not use proxy servers. However, you can configure Smartphones to use a proxy server by pressing Start | Settings | Connections | Proxy. To add proxy server information, press Menu | Add, enter the proxy server information, and then press Done.

## Use the Address Bar and History



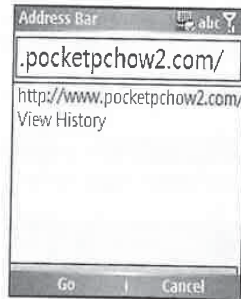
Access a web site by using the Address bar or Favorites. To use the Address bar on a Pocket PC, enter an address in the bar, and then tap the button with the curved arrow to the right of the Address bar.

The Pocket PC Address bar keeps a history of the web sites that you visit. The most recent sites are available from the drop-down list, as shown here.

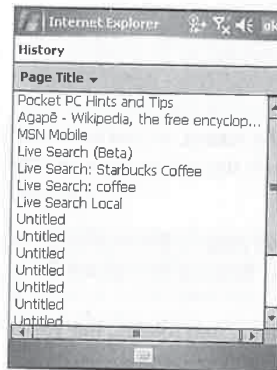
To open one of these web sites, select the address, and Internet Explorer Mobile will load the page.



The Address bar does not display on Smartphones, so to enter an address for a web site, press Menu | Address Bar and the address of the current web site displays. Use the Back button to delete the contents of the Address bar, and then enter the address of the site that you want to open.



Internet Explorer Mobile also keeps a history of each web page that you visit, which you can use later to return to a page. To view the web page history, tap Menu | History to open the following Pocket PC screen. Tap the arrow next to Page Title to display the page titles or addresses. A similar screen appears on Smartphones, and you open a page by selecting an entry in the list.



### Use Favorites

The second way to access a web page is by selecting a shortcut in Favorites. To access a web page by using its Favorites shortcut, select Menu | Favorites and then select a shortcut listed in the Favorites dialog box.

#### TIP

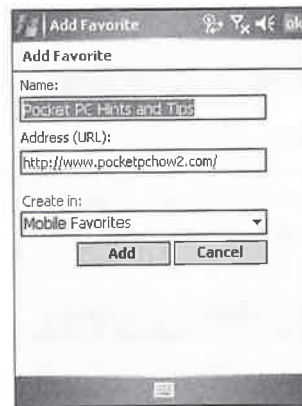
*On Smartphones the left softkey is assigned to Favorites, so to open a web site, you can simply press Favorites and then select the shortcut of the site you want to open.*

## Keep Track of Your Favorite Pages

Web addresses can be difficult to remember and tedious to enter, particularly on a Windows Mobile device. Internet Explorer Mobile solves these problems by providing a place to store the addresses of your favorite web sites. Whenever you want to return to a site, all you need to do is select the site name from the Favorites menu, as described in the preceding section.

### Add to Favorites

The first step to store a favorite site on either device is to open the web site in Internet Explorer Mobile. To store a favorite web site, select Menu | Add To Favorites to open this screen:



The web site's information is on the screen, so you can simply select Add to store the site. If you want to change the name of the web site, delete the contents of the Name field and enter the new name before selecting Add.

#### TIP

*A quick way to add the current page to Favorites on Pocket PCs is to tap-and-hold on the page and then tap the Add To Favorites option in the pop-up list.*

You can group your favorite shortcuts into folders, but you must create the folders first. To create a folder, follow these steps:

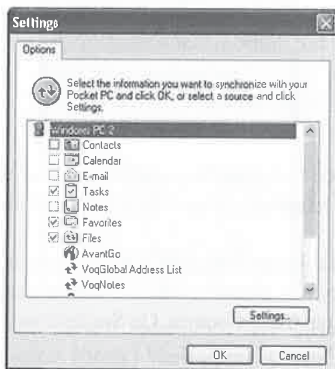
1. Select Menu | Favorites.
2. Tap the Add/Delete tab and then New Folder on Pocket PCs; press Menu | Add Folder on Smartphones.
3. Enter a name for the folder.
4. Select Add.

Shortcuts cannot be moved to folders, but if you synchronize Favorites, you can move the shortcuts into folders on a desktop PC and then synchronize those changes back to the device.

### Synchronize Favorites

If Microsoft Internet Explorer 4 or later is installed on your desktop computer, you can synchronize favorite links. When you install ActiveSync on your PC, it will add a Mobile Favorites folder to Favorites in Internet Explorer.

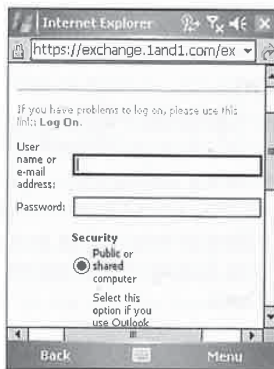
To synchronize the links, you must enable the Favorites information type in ActiveSync. Start ActiveSync, connect your device, choose Tools | Options, and then select the box next to Favorites in the list of information types on the Options tab.



During the next synchronization, the contents of the Mobile Favorites folder in Internet Explorer will synchronize with Favorites on the Pocket PC. You can then add a link to either the desktop computer or the device; when you synchronize, the link will appear on both.

### Configure Security Options

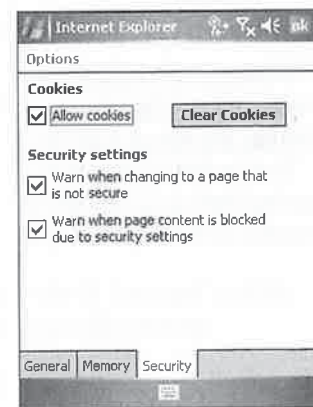
Internet Explorer Mobile supports the security protocols used by secure sites. To determine whether a web page is secure on Pocket PCs, look for the padlock icon to the left of the Address bar. An open padlock indicates that the page is not secure; a closed padlock, as shown in this image, indicates that the page is secure. The padlock displays at the top of the screen on Smartphones.





The Internet Explorer Mobile security settings are not sophisticated. It supports all of the standard security protocols, but does not provide you with the option for turning them on or off. A warning message will display when Internet Explorer Mobile moves from a secure page to an insecure page. To turn on or off that message on Pocket PCs, tap Menu | Tools | Options, select the Security tab, and check the box adjacent to Warn When Changing To A Page That Is Not Secure.

To turn off the security message on Smartphones, press Menu | Tools | Options | General and clear the Warn When Changing To An Unsecure Page check box.



## Control Cookies

*Cookies* are files stored on the device that contain information about your identity and preferences. They are written by a web page and retrieved the next time you open the web page so that information can be tailored to your needs.

To prevent Internet Explorer Mobile on Pocket PCs from accepting cookies, tap Menu | Tools | Options, and then select the Security tab; clear the Allow Cookies check box and tap OK. To clear the cookies already on a Pocket PC, tap Clear Cookies. On Smartphones, press Menu | Tools | Options | General and then clear the Allow Cookies check box.

## Change the Display

Unfortunately, the small screen size of Windows Mobile devices affects the way Internet Explorer Mobile displays a web page. Another problem is that the browser does not support as many colors as desktop computers; therefore, graphics may not look the same. Fortunately, you can make changes to help compensate for these problems.

### TIP

*While Internet Explorer Mobile does a good job of displaying web pages so that they are visible on the small Pocket PC and Smartphone screens, it is not perfect. Because of this, you may want to view only sites that are designed for display on the small screen. Todd Ogasawara maintains a directory of such sites at <http://ogasawalrus.com/mobileviews/mobileaware/HomePage>.*

## Control How Pages Display

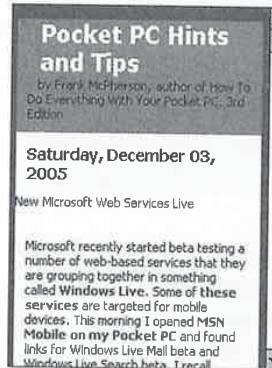
Changing the font size of text on a web page enables more text to appear in the program window. To change the font size, select Menu | Zoom and select a size.

Web pages designed for higher-resolution screens may require horizontal scrolling unless Internet Explorer Mobile changes the display so that it fits completely in the program window. The default view for Internet Explorer Mobile does its best to make the page fit to the screen, but to force all of the web page content to display in one column so that there is no horizontal scrolling, select Menu | View | One Column.

**TIP**

If you need to see a web page as it displays on a desktop computer, select **Menu | View | Desktop**.

A new feature in Internet Explorer Mobile is Full Screen, which removes most of the components of Internet Explorer so that all you see is the web page, as shown here:



To turn on Full Screen mode, select **Menu | View | Full Screen**, and to turn off Full Screen mode, press the right softkey and then select **Menu | View | Full Screen**.

**TIP**

To quickly turn Full Screen mode on or off on a Pocket PC, tap-and-hold on the web page and then tap **Full Screen**.

While graphics make web pages visually appealing, they can take a long time to download to your device. Often, the words on the web page are all you need. To prevent Internet Explorer Mobile from downloading graphics, select **Menu | View | Show Pictures**. Pocket PC 2002 has a Command bar button that you can tap to turn images on and off.

**TIP**

When graphics are turned off, you see the locations on the page where they would appear. To select individual images for display, tap-and-hold on the location and tap **Show Picture** in the pop-up menu.

People all around the world create web pages, and some use alphabets other than the Roman alphabet (which Internet Explorer Mobile calls the Western Alphabet) used in many countries around the world. To display characters of other alphabets, tap **Menu | Tools | Options** and select an alphabet from the Default Character Set drop-down list on Pocket PCs. On Smartphones, press **Menu | Tools | Options | General** and then select an alphabet from the Encoding drop-down list.

## Change the Home Page

The home page is the web page that opens whenever you start Internet Explorer Mobile on Pocket PCs. At first, this will be set to the default page, which is stored on the device. You may prefer a different home page to open whenever you start the browser.

How to ...

## Add Tabbed Browsing to Internet Explorer Mobile

Tabbed browsing makes it easy to move between open web pages and is available in desktop web browsers such as Firefox, but it is not available for Internet Explorer Mobile. If you would like to be able to keep multiple web pages open on your Pocket PC, you can install either Spb Pocket Plus ([www.spbsoftwarehouse.com](http://www.spbsoftwarehouse.com)) or MultiIE ([www.southwaycorp.net](http://www.southwaycorp.net)). Both programs enhance Internet Explorer Mobile by providing ways to keep multiple web pages open at the same time.

### NOTE

*Internet Explorer Mobile on Smartphones does not have a home page.*

To change the home page, open the new page in Internet Explorer Mobile, tap Menu | Tools | Options, and then tap Use Current to set the new home page. If you later decide to reset the home page to the default, open the Options screen and tap Use Default.

### TIP

*As you open web pages on your Pocket PC, they are written to internal storage, and over time they can take up a significant amount of storage space. You can free-up space by tapping Delete Files on the Memory tab of Internet Explorer Mobile options.*

Did you know?

## Use Alternative Web Browsers

Internet Explorer Mobile is not the only web browser you can use on your Pocket PC. Several third-party developers have written browsers to provide better performance or more features on Pocket PCs than Internet Explorer Mobile provides. One of these browsers is NetFront from ACCESS, available at [www.access-us-inc.com](http://www.access-us-inc.com). NetFront has built-in multiwindow browsing and zoom capabilities. Bitstream's ThunderHawk browser ([www.bitstream.com](http://www.bitstream.com)) displays web pages in landscape view, so pages appear as originally designed. Finally, ftxPBrowser also provides multiwindow browsing and is free to download from <http://park15.wakwak.com/~ftx/ftxp3e/>.

Two popular desktop browsers have Windows Mobile counterparts under development. One is Minimo, which is a port of the Mozilla browser to Pocket PCs. You can find Minimo at [www.mozilla.org/projects/minimo/](http://www.mozilla.org/projects/minimo/). Another is Opera, which you can find information about at [www.opera.com](http://www.opera.com).

## Read Web Content Offline

Back in 1996 when Microsoft first released software for handheld computers, it was not easy or inexpensive to connect to the Internet. To enable users to read web content on their devices while disconnected from the Internet, Microsoft created Mobile Channels to synchronize web pages to devices for reading offline.

While it is easier and cheaper today to keep a Pocket PC connected to the Internet, there may still be times when you prefer to read web content offline, such as when you are flying in an airplane. *Really Simple Syndication (RSS)* is a file format that has emerged as a popular way to distribute web content. Since RSS only contains the information you see on a web page, and nothing about how the information appears on the screen, it is easy for programs to legibly display RSS on smaller screens.

How to ...

### Write a Weblog Using a Pocket PC

Today RSS is used to distribute all different types of web content created by professionals, but RSS gained most of its popularity from hobbyists who use it to distribute their content written in weblogs. *Weblogs*, often called *blogs*, are web sites that contain frequently updated information in a reverse chronological order, with the most recent entry appearing at the top of the page. Weblog software makes it easy to publish writing to the Internet, and therefore weblogs have become very popular for personal web sites.

Several different web sites such as Blogger ([www.blogger.com](http://www.blogger.com)) and TypePad ([www.typepad.com](http://www.typepad.com)) provide the software and storage so that you can write and maintain your own weblog. While most weblogs are written from desktop computers, it has become popular to upload pictures and articles from mobile devices and publish them directly on weblogs.

Most weblog sites provide a way to use e-mail to publish articles and pictures to a weblog. Typically, that involves using a special e-mail address that you send the information to, and the software monitors the address and publishes anything that it receives directly to the weblog. In most cases, you can provide a keyword in the subject or body of a message that the software looks for to prevent spam from being published.

A few programs are available for Pocket PCs that you can use to write articles and publish them to a weblog. These programs can only communicate with certain weblog sites that provide ways for programs to communicate with the site. Therefore, before you can use one of these programs with your weblog, you need to find out whether it supports your site's weblog software.

Diarist is a Pocket PC blogging program that works with the .Text, Community Server, Blogger, Blogosphere, dasBlog, and BlogX weblogging software programs. You can download Diarist from [www.kevdaly.co.nz/Software/Blogging/Diarist.aspx](http://www.kevdaly.co.nz/Software/Blogging/Diarist.aspx). Pocket SharpMT works with MovableType and TypePad and is available at [www.randyrants.com/sharpm/](http://www.randyrants.com/sharpm/).

The programs you use to view an RSS file are called *RSS readers*, and they are also called *news readers* or *RSS aggregators*. RSS includes a date and time stamp for each item that is added to the file, and RSS readers use that information to display only new items that you have not yet read. By displaying only new information, RSS readers act in a manner similar to newspapers. The files are called RSS feeds, analogous to the wire feeds newspapers use to receive articles from around the world, and you subscribe to an RSS feed by adding the feed's URL to an RSS reader.

You will find two types of RSS readers: web sites and programs. Both are available for desktop computers and Windows Mobile devices. When you use RSS reader web sites, servers retrieve the RSS feed and display it on a web page, and you use Internet Explorer Mobile to view the page on a Pocket PC or Smartphone. To use an RSS reader web site, you need to connect to the Internet, which appears to defeat the purpose of using RSS. However, you can use the same RSS reader web site on desktop computers and Windows Mobile devices, making it easier to keep track of the feeds that you have already read.

Bloglines ([www.bloglines.com](http://www.bloglines.com)) is a very popular web site RSS reader that works well on desktop computers and devices. Another web site that works well in Internet Explorer Mobile is NewsMob (<http://mobile.newsmob.com>).

RSS reader programs install on Windows Mobile devices and download subscriptions so that you can read them while not connected to the Internet. To download the subscriptions, the device needs to connect to the Internet, either via an ActiveSync connection or a direct connection to the Internet. One RSS reader program, RSS Sync, adds an information type to ActiveSync so that it synchronizes RSS subscriptions to Pocket PCs in the same way that Contacts and Calendar synchronize. Table 12-1 lists the RSS reader programs that you can download and install on your Pocket PC or Smartphone.

**XML**

Many web sites display an orange XML icon indicating that they provide an RSS feed. Normally, when you click the icon, the RSS feed loads in the web browser, and while the feed doesn't appear to provide useful information, you need the URL of the feed to add it to the subscriptions in an RSS reader. Typically, all you need to do is copy the URL from the browser Address bar and paste it into the RSS reader.

Name	URL
BeetzStream SmartRss	<a href="http://www.beetzstream.com">www.beetzstream.com</a>
A4Pocket Newsreader	<a href="http://www.a4pocket.com">www.a4pocket.com</a>
pRSSreader	<a href="http://pda.jasnapaka.com/prssr/">http://pda.jasnapaka.com/prssr/</a>
RSS Sync	<a href="http://www.viksoe.dk/code/rsssync.htm">www.viksoe.dk/code/rsssync.htm</a>
NewsBreak	<a href="http://www.iliumsoft.com/site/nw/newsbreak.htm">www.iliumsoft.com/site/nw/newsbreak.htm</a>
PocketFeed	<a href="http://www.furrygoat.com/Misc/Software.html">www.furrygoat.com/Misc/Software.html</a>
Egress	<a href="http://www.garishkernels.net">www.garishkernels.net</a>

**TABLE 12-1** RSS Reader Programs for Windows Mobile

How to ...

## Download Podcasts to Your Windows Mobile Device

*Podcasts* are audio file recordings distributed to computers using RSS. People who listen to podcasts normally use software called a *podcatcher* that automatically downloads podcasts to a PC and then synchronizes them to media players such as the Apple iPod. You can then listen to the podcast at your leisure.

There are several methods for downloading podcasts to a device. You can use Doppler to download podcasts, and import them into Windows Media Player. Once the podcasts are in Windows Media Player, you can synchronize them to a device by following the instructions in Chapter 7. You can download Doppler from [www.dopplerradio.net/](http://www.dopplerradio.net/).

BeetzStream SmartRss, available at [www.beetzstream.com](http://www.beetzstream.com), is an RSS reader program that can also automatically download podcasts. Smartfeed is a podcatcher designed specifically for the Windows Mobile platform. It runs on Pocket PCs and Smartphones, and you can download it from [www.smartfeed.org](http://www.smartfeed.org).

Since podcasts are distributed using RSS, the method of subscribing to podcasts is similar to subscribing to RSS feeds. If you are interested in listening to podcasts, you will find a large directory of them at [www.ipodder.org](http://www.ipodder.org).

Some RSS reader programs provide a wizard that makes it easy to subscribe to feeds. You will also find some web sites that provide lists of RSS feeds that you can subscribe to, such as Syndic8 at [www.syndic8.com](http://www.syndic8.com).

### Wrapping Up

Internet Explorer Mobile enables you to access web sites when you are away from a desktop computer. It has most of the features that you use to view web pages while connected to the Internet, and you can download RSS feeds to a Windows Mobile device to read when it is not connected to the Internet.

Now that you have seen how you can connect your Windows Mobile Pocket PC or Smartphone to networks to send and receive e-mail and browse web sites, it's time for you to learn how Windows Mobile can help you stay organized. In the next chapter, you will learn how to use Outlook Mobile to keep track of appointments, addresses, and tasks.



# Part IV

## Make the Most Out of Windows Mobile





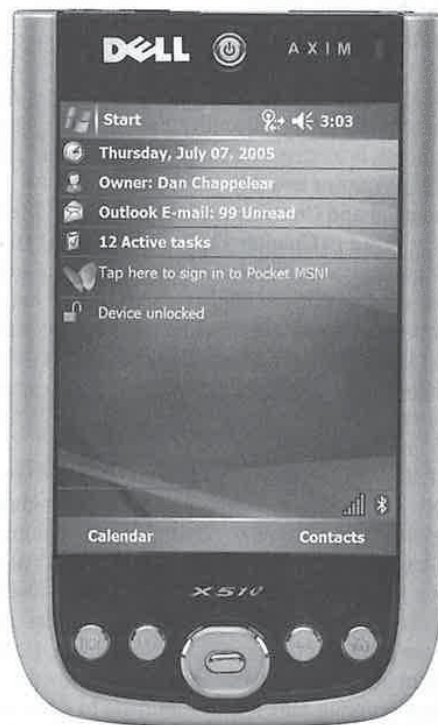
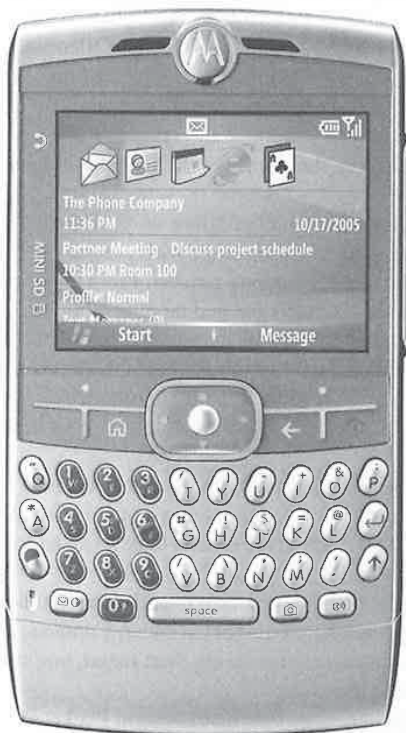
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# Chapter 13

## Get Organized



## How to...

- Schedule appointments
- Store addresses
- Track tasks
- Search for appointments, addresses, and tasks

Today's fast pace and hectic schedules have made time management an important skill. The fundamental tools of managing time include a calendar for appointments, an address book for contact information, and a task list to keep track of what needs to be done. Despite all of the capabilities that Windows Mobile provides, you probably bought your device primarily to help manage these three things.

In this chapter, you learn how to use the programs included in Outlook Mobile: Calendar, Contacts, and Tasks on Pocket PCs and Smartphones. You will probably use each of these programs frequently throughout the day to enter and look up information. With Calendar's recurrence scheduling capability, creating an appointment that occurs on the same day and time every month is as easy as completing one screen, eliminating the need to write the appointment on multiple entries in a day planner.

Calendar and Contacts are integrated with Messaging, the e-mail program on your device that is covered in Chapter 11. From Calendar, you can schedule a meeting with people by retrieving their e-mail addresses from Contacts and e-mailing a meeting request. From Contacts, you can send an e-mail simply by selecting an entry in the Contacts list and tapping a button.

Appointments, addresses, and tasks can be sent to other devices by using the infrared port, making it easy to share information with other people. Perhaps even more important, as you read in Chapter 7, the information in these three programs can be synchronized with your desktop computer, enabling you to work with the same information whether you are sitting at your desk or in a taxi cab.

Of all the programs on your Windows Mobile device, Calendar, Contacts, and Tasks may be the ones that you use most frequently. Each program contains information that you use constantly throughout the day. Need to schedule an appointment? Start Calendar. Need to look up an address? Start Contacts. Been given another assignment? Start Tasks.

You will want to retrieve the information stored in these three programs quickly, and Windows Mobile is designed to help you achieve that goal. By default, shortcuts for Calendar, Contacts, and Tasks are placed in the Pocket PC Start menu. If the shortcuts are not in the Start menu, you will find them in Programs, which you open by tapping Start | Programs.

Each program may also be assigned to a Pocket PC hardware button, except on Pocket PC Phone Editions, which typically assign just Calendar and Contacts to hardware buttons, with two other buttons assigned to operate the phone. You can use the button settings program on the Pocket PC to change the assignment of all the hardware buttons.

**TIP**

*If you assign Calendar, Contacts, and Tasks to hardware buttons, consider removing these programs' shortcuts from the Start menu. By doing so, you make space to add other programs to the Start menu for quicker access.*

The instructions for starting Calendar, Contacts, and Tasks in this section use the Start menu.

## Schedule Appointments Using Calendar

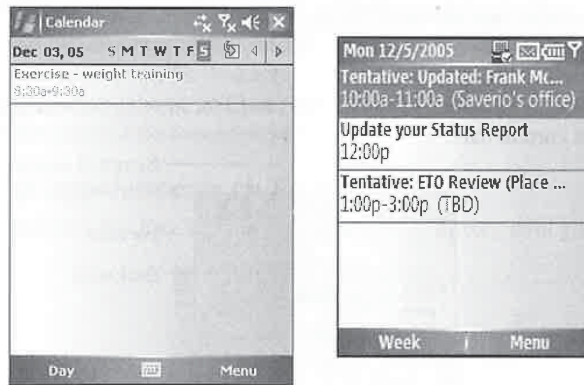
The Calendar program in Outlook Mobile is the Windows Mobile companion to the Calendar folder in Microsoft Outlook. ActiveSync synchronizes appointments that you enter in Calendar on Windows Mobile devices with the Calendar folder in Outlook or Exchange, as explained in Chapter 7. To enter an appointment, first start Calendar by tapping Start | Calendar, which opens the program window shown in Figure 13-1.

### View Your Schedule in Calendar

You can view your schedule by day, week, month, and year. Calendar also provides an Agenda view that summarizes your appointments for each day.

**NOTE**

*Smartphones do not have a Day view, so you must use the Agenda view to see one day's worth of appointments.*



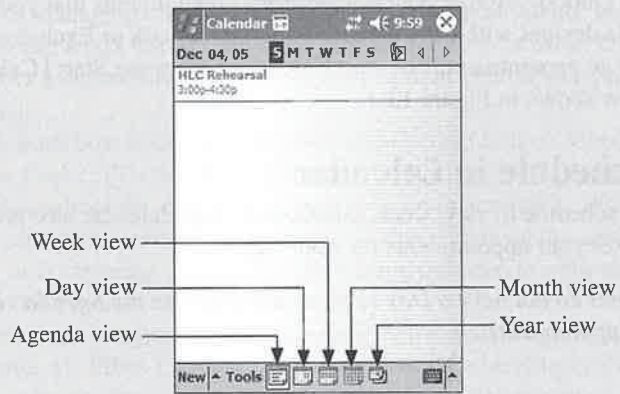
**FIGURE 13-1** Calendar on a Pocket PC (left) and on a Smartphone (right)

13

Did you know?

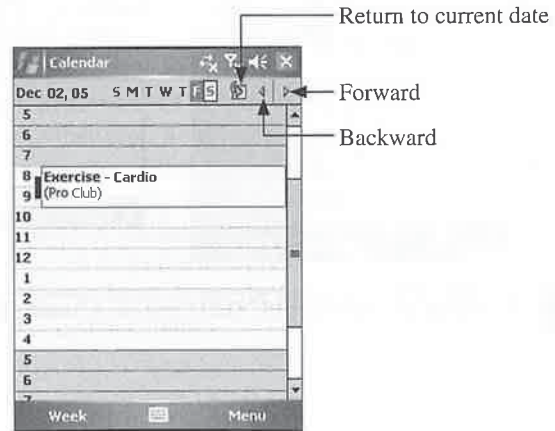
### Switching Views

The method for switching among Calendar views is different for Windows Mobile 2003 and Windows Mobile 5. In each release, pressing the Calendar hardware button cycles through views, but Windows Mobile 2003 also has the following five buttons on the Command bar:



The left softkey is assigned to the different Calendar views in Windows Mobile 5. Press or tap the left softkey button to switch between views. The button name changes to show the name of the next Calendar view that will display when you press the button.

Each Pocket PC view has buttons, as shown here, used for moving forward and backward and for returning to the current date:



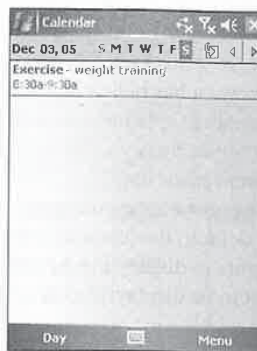
**NOTE**

You will not find these buttons on Smartphones. Instead, press the navigation button left or right to move forward and backward by a day through the calendar.

You can press the navigation button left or right to move forward and backward by a day through the calendar in the Day and Week view. Press the navigation button up or down to scroll the screen up and down.

### View a Daily Agenda

The Agenda view lists all of the appointments that you have for the day in a list, and it is the only view that shows a day's worth of appointments on Smartphones. To display the Agenda view, press or tap the left softkey until you see the following:

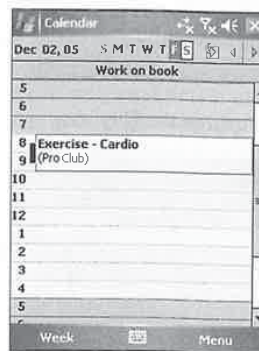


On Pocket PCs, you can switch directly to the Agenda view by tapping Menu | View | Agenda. When the Agenda view is showing, the left softkey on Pocket PCs shows that the Day view will display when you press the button. On Smartphones, it shows that the Week view will display.

The subject, start and end times, and location of each appointment appear in the list. Select an appointment to view more of the appointment details.

### View One Day of Appointments on Pocket PCs

To display your schedule in the Day view, press or tap the left softkey until you see the following:



## 254 How to Do Everything with Windows Mobile

You can switch directly to the Day view by tapping Menu | View | Day. When the Day view is showing, the left softkey shows that the Week view will display when you press the button.

All-day events, which are items that you associate with a day but are not scheduled for a time, appear at the top of the screen. An example of an all-day event is an anniversary or holiday, or as shown in the previous illustration, Work on book.

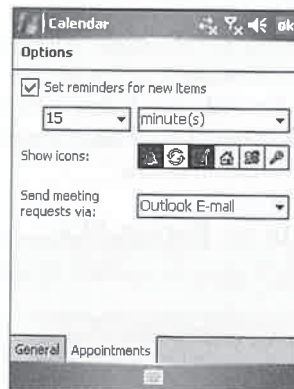
Appointments are displayed in the middle of the screen, and by default are listed in one-hour slots. The slot sizes can be changed to 30-minute increments by tapping Menu | Options and then tapping the Show Half Hour Slots check box. More space is taken up on the screen when you use half-hour slots. Tap the date at the top of the screen to display a date picker, which you can use to select a different date to be displayed.

### NOTE

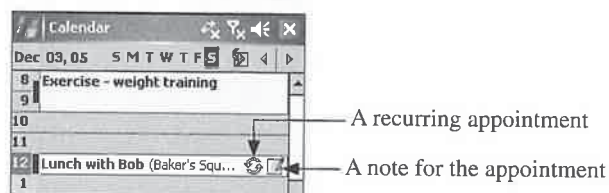
*Remember that you can use the buttons on the screen to return to the current date or move backward and forward through the dates.*

The left edge of the appointment shows a bar indicating its status. An appointment shown as free time by a white bar means that another appointment could be scheduled in that time slot. Appointments can be labeled Free, Tentative, Busy, or Out Of Office, as explained later in the chapter, and each is shown with a different color bar.

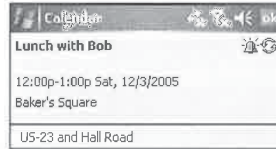
Icons are used to provide information about an appointment, such as whether a reminder is set or whether the appointment recurs. By default, the icons are turned off, and they can be turned on by tapping Menu | Options | Appointments to display the Appointments tab of the Options dialog box. Tap each of the icons that you want to be displayed so that the icon turns dark, as shown here, and then tap OK.



The icons then appear with the appointment in the Day view:



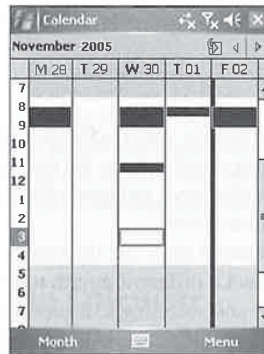
Each appointment can include more information than is displayed in the Day view. To see more details, tap the appointment to open it in Summary view, as shown here:



Summary view provides all the information about the appointment on one easy-to-read screen. Tap OK to close the Summary view.

### View a Week of Appointments

The Week view displays appointments for the workweek, with each day displayed as a column:



To switch to this view, tap Menu | View | Week, or press the left softkey until the Week view displays. Appointments appear as blocks in different colors, indicating statuses of Free, Busy, Tentative, and Out Of Office. All-day events are indicated by a bar running down the column. To display the appointment information, tap a block to show the information at the top of the screen.

You can change the number of days displayed in the Week view by tapping Menu | Options and then selecting either 5-Day Week, 6-Day Week, or 7-Day Week in the Week View drop-down list. Tap OK to save the changes and close the Options dialog box.

To move to a different week in the year on a Pocket PC, tap the month at the top of the screen to display a date picker, which you use to select a different date to be displayed. Switch years by tapping the year at the top of the screen, and select a year from the drop-down list that is displayed. Tap the column head of a day in the Week view to switch to the Day view for that day.

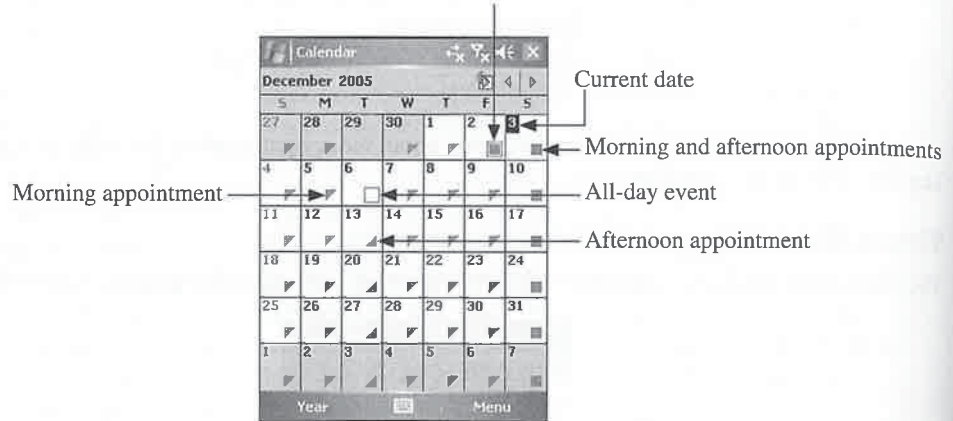
To move to a different week in the year on a Smartphone, press Menu | Go To Date, enter a date, and press Done. Use the navigation button to move to a date in the week, and press the navigation button to display the appointments for that day.



### View a Month of Appointments

To display the calendar one month at a time, tap **Menu | View | Month** or press the left softkey until the Month view displays:

Morning and afternoon appointments and an all-day event



Appointments are displayed as filled blocks, with a solid block indicating morning and afternoon appointments. If a day has only a morning appointment, the upper-left corner of the filled block is displayed. A filled-in lower-right corner of a block indicates afternoon appointments. All-day events are indicated by an empty block with a blue border.

A black box on a date indicates the current date. Tap the month at the top of the screen to display a drop-down list that you can use to select a different month to be displayed. Change the year by tapping the year at the top of the screen and selecting a different year from the drop-down list. To switch the display to the Day view for a specific date in a month, tap the date on the calendar. On a Smartphone, use the navigation button to select a date that you want to view.

## How to ...

### Display Week Numbers in Month View

Windows Mobile has the ability to display week numbers in the Month view. To turn on week numbers, tap **Menu | Options**, tap the **Show Week Numbers** check box, and tap **OK**. In Week view, the number displays at the top right of the screen, and in Month view, the week numbers are displayed along the left edge of the screen.

European users who use a Julian-type week number scheme will notice a bug in the week numbers that causes the last week of the year to use the wrong numbers. For example, the last week of 2008 shows as week 1, while the last week of 2004 shows as week 53.

### View a Year of Appointments on Pocket PCs

The Year view displays every month of a year. To switch to the Year view, tap Menu | View | Year or press the left softkey until the display changes to look like the following:



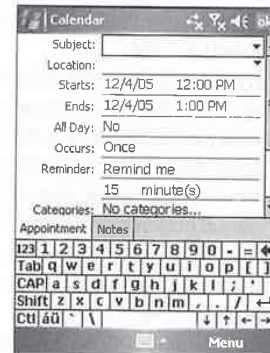
Indicates multiple dates →

The current day is indicated by a black square. Each month in the Year view is limited to five lines, so a sixth line of dates is indicated by a slash (/).

To display a different year, tap the year at the top of the screen and select another year in the drop-down list. To switch the display to the Month view for a specific month in the calendar, tap the name of the month. You can switch to the Day view for a specific date by tapping a date in the Year view.

### Create an Appointment in Calendar

To create an appointment in Calendar, select Menu | New Appointment, or on a Pocket PC, tap-and-hold anywhere on the screen and then tap New Appointment to open the Appointment dialog box, shown here. When the dialog box opens, the Subject field is selected, and the Pocket PC Software Input Panel is open and ready for you to enter a description for the appointment. Select each field on the dialog box that you want to complete, and enter information where appropriate.



**NOTE**

Although you can create appointments on Smartphones, a faster way to add appointments to Smartphones is by synchronization with a desktop PC or Exchange server.

Enter a description of the appointment in the Subject field, and enter a location for the appointment in the Location field. On Pocket PCs, the Location drop-down list contains locations that were previously entered. If the new appointment is at a location that you already entered, you can select it from this list.

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TIP

The Subject field is also a drop-down list that contains words commonly used in appointments. Unfortunately, the list doesn't change, and there is no way to add words to the drop-down list. Press the navigation button in the Subject field on Smartphones to open the list of words.

On Pocket PCs, dates are entered in the Starts and Ends fields by tapping the date that is displayed to open the date picker, shown here. Tap a date on the calendar to select it for either field. You can use the arrows at the top of the calendar to move backward and forward a month at a time, or tap the month to jump to another month that appears in a pop-up menu. The starting date that you select automatically appears in the Ends field, though you can change the date by tapping the field.

Starting and ending times are displayed in drop-down lists on Pocket PCs, which contain times in half-hour increments. Tap the values in the drop-down lists to set the starting and ending times for the appointment. If you opened the dialog box from within the Day view, the Starts and Ends fields contain the date and time selected in the Day view.



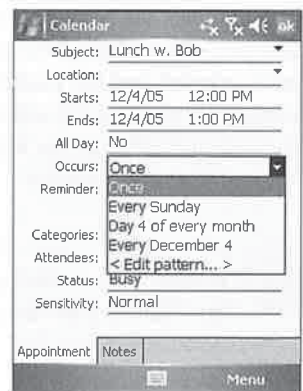
TIP

A quick way to enter the starting and ending times from the Day view is to select a group of time slots and then tap New. The dialog box opens with the Starts and Ends fields populated with the starting and ending times that you selected in the Day view.

On Smartphones, appointment dates and times are entered directly in each field. Use the navigation button to move to each field. When you enter a date field, it contains the current date, which you change by simply entering numbers from the keypad. Press the navigation button left or right to move the cursor in the date field, and press the navigation button up or down to move from field to field.

By default, Calendar creates appointments that have starting and ending times, but all-day events do not have these times. To create an all-day event on Pocket PCs, tap the All Day field and select Yes from the drop-down list that appears. The times in the Starts and Ends fields will be removed. On Smartphones, simply press the navigation button to put a check in the All Day Event checkbox.

You can schedule an appointment for multiple dates by selecting a recurrence pattern. The default setting is for each appointment to occur once, as indicated by the value in the Occurs field. To schedule the appointment for multiple dates, select the Occurs field to display the items shown here. (The items that appear in this menu vary according to the day of the week, day of the month, and date that you select.)



The appointment shown in the preceding illustration is being scheduled for Sunday, December 4, 2005. Select Every Sunday to schedule the appointment at the same time on

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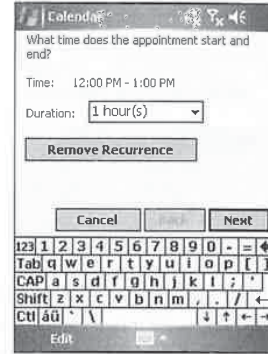
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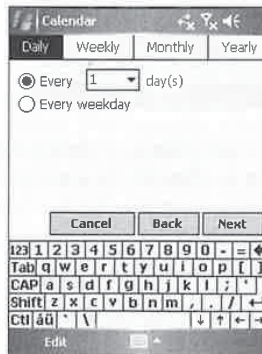
every Sunday. Select Day 4 Of Every Month to schedule the appointment for the fourth day of each month. If you want to schedule the appointment for that specific date—in this case, December 4—every year, select Every December 4.

If none of the items in the drop-down list meets your requirements, tap <Edit Pattern...> to start the Recurrence wizard. The <Edit Pattern...> option is not available on Smartphones. The Recurrence wizard has three dialog boxes, the first of which is shown here. In this dialog box, you set the starting and ending times for the appointment. Typically, the times that you originally set appear here, and they are the times you likely want to use. If the starting time is correct, you can change the ending time by expanding the Duration drop-down list and tapping a value in the list. Tap Remove Recurrence to close the dialog box and delete the recurrence.



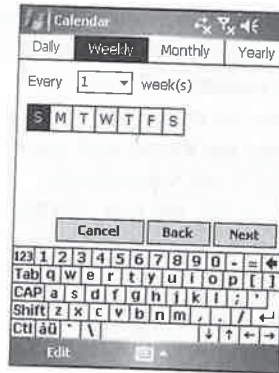
You can change the times in the dialog box by tapping them to open another dialog box; clocks and times on the left side show the starting time, and the clock and time on the right is the ending time. You can change the times by tapping the clock faces to move the hands or tapping the up and down arrows on the digital display. Tap OK to save the times that you select.

Tap Next to open the second dialog box of the Recurrence wizard, and tap the buttons along the top of the dialog box to define a recurrence time. When you tap Daily, two radio buttons appear. Tap the Every Weekday radio button to schedule the appointment on every weekday. To schedule the appointment for multiple days, tap Every and then select a number from the Day(s) drop-down list.

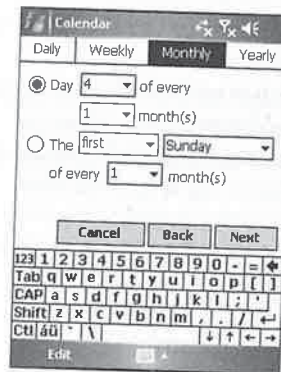


Tapping Weekly changes the dialog box, as shown next. Tap the days in the week that you want to schedule the appointment; you can select more than one day. Choose a value from the Week(s) drop-down list to schedule the appointment for several weeks on the days that you select.

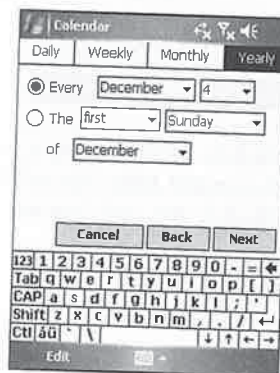
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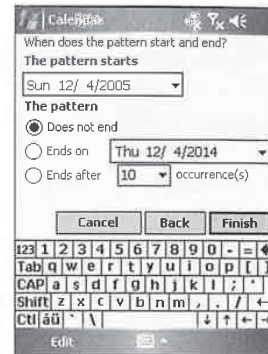
Tap **Monthly** to define a monthly recurrence pattern, as shown next. The pattern can be defined for a specific date in a month (such as the twenty-first), for a select number of months, or for a day in a week (such as the third Monday) for a select number of months. Tap the radio button of the option you want, and select the values from the drop-down lists.



Tap **Yearly** to define a yearly recurrence pattern, as shown next. The yearly pattern is similar to the monthly pattern. Your options are to schedule the appointment for the same date each year, or for the day in a week of the month that you select. Tap the radio button of the option that you want, and select the values from the drop-down lists.

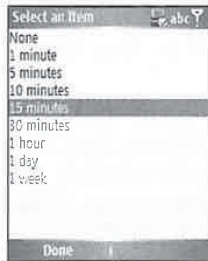


Tap Next to define the starting and ending dates of the recurrence pattern. Select the starting date by using the The Pattern Starts drop-down list. Three options are available for defining the end date: the recurrence pattern does not end, it ends on a date that you select, or it ends after a select number of occurrences. Tap the radio button of the option that you want and select the appropriate values from the drop-down lists.



After you select the starting and ending dates of the recurring appointment, tap Finish to return to the Appointment dialog box. The Occurs field will contain <Edit Pattern...> to indicate that a customized recurrence pattern has been created for the appointment.

The Reminder field on the dialog box sets the time when you will be notified about the upcoming appointment. Turn the reminder notification on or off by tapping the field and selecting either None or Remind Me from the drop-down list. The Reminder field on Smartphones contains one line; press the navigation button to open a screen of reminder options, shown here. Select None to turn off the reminder, or select one of the times in the list and then press Done.



On Pocket PCs, the second line of the Reminder field shows the amount of time prior to the appointment that notification occurs. For example, a reminder can be set for one day or 15 minutes before the appointment. Tap the number in the field to set the amount of time, and tap the minutes portion to select either minutes, hours, days, or weeks.

**TIP**

To change the default time for reminders, tap Menu | Options | Appointments and select values from the Set Reminders drop-down lists.

Appointments assigned to categories can be filtered in any of Calendar's views by tapping Menu | Filter. To filter appointments, you must first assign them to a category, which you do by setting a value for the Categories field in the Appointment dialog box. Tap the field to display a list of categories, and then tap the check box next to each category that you want assigned to the appointment.

**NOTE**

Smartphones do not have Categories or Attendees fields.

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## Time Zones Affect Appointments

If you change the time zone on your Windows Mobile device, you also change the times for appointments, because every appointment time considers the current time zone setting. For example, if you are creating an appointment in the Eastern time zone for 10 A.M., changing the Clock to the Central time zone causes the appointment time to change to 9 A.M.

Unfortunately, the way Windows Mobile treats time zones means that you have to keep in mind where you will be on the day of your appointment. If, for example, you are in New York today, and you are going to be in Chicago tomorrow for a 10 A.M. appointment, you can choose to not change the clock when you are in Chicago or you can create the appointment for 11 A.M. Eastern Time.

As you can tell, appointment times can become difficult to manage for those who travel. Web Information Solutions provides a Pocket PC program called WebIS Toolbox, which resets appointments to their original times after you change the Pocket PC Clock. WebIS Toolbox can be downloaded from [www.webis.net](http://www.webis.net).

The Attendees field is used to create a meeting and is explained in the next section. The Status field is a drop-down list containing Free, Tentative, Busy, or Out Of Office. The item that you select from the list changes the color of the bar on the left side of the appointment in the Day view, and it is used to indicate how the time should be treated when scheduling other appointments.

Selecting the Sensitivity field displays a drop-down list containing Normal, Personal, Private, and Confidential. If you select Private, the appointment will be private in Outlook and Exchange after it is synchronized with a desktop computer. Other Outlook and Exchange users may view Normal appointments.

## Enter Notes for Appointments

Appointment notes can contain text, drawings, recordings, or writing in digital ink. To enter a note, tap the Notes tab on Pocket PCs or press the Notes field on Smartphones to display the portion of the Appointment dialog box that functions in a manner similar to the Notes program explained in Chapter 14.

To make a recording, press and hold the Hardware Record button. Your device will beep and begin recording. Stop the recording by releasing the button. Once the recording is finished, an icon is inserted into the note, which you tap to play back the recording.

### NOTE

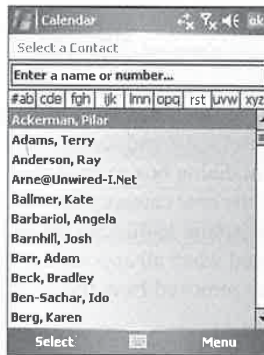
*You cannot attach recordings to appointments on Smartphones.*

## Schedule a Meeting Using Calendar

In Calendar, meetings are appointments that include people. When you create a meeting in Calendar, an e-mail containing the meeting request is sent to the people that you select in the Appointment dialog box. To send the e-mail, Messaging must be configured with an e-mail account, as outlined in Chapter 11.

**NOTE** You cannot schedule meetings on Smartphones.

The process of creating a meeting is the same as creating an appointment, but with one additional step: you select participants in the Attendees field. Create a new appointment and complete the fields in the dialog box as needed. Tap the Attendees field to display the following dialog box, which lists names and e-mail addresses:



The names listed in the dialog box are entries in Contacts that contain an e-mail address. A name may appear in the list more than once if it has more than one e-mail address. Tap the name of the person to select him or her as a meeting participant. To add another name, tap Add and then tap the name of the second person to attend the meeting. When you are done adding names, tap OK.

Complete the fields on the Appointment dialog box and tap OK to create the meeting. The meeting is displayed in the Calendar Day view just like an appointment, but it contains a graphic to indicate that it is a meeting, as shown here:





**TIP**

If you do not see the icon, tap **Menu | Options | Appointments** and check to see that the meeting icon is selected.

An e-mail message of the meeting request is placed in the Outbox of the e-mail service that you select in Calendar. To select the e-mail service in Calendar, tap **Menu | Options | Appointments** and select the service in the **Send Meeting Requests Via** field. The e-mail message will be sent the next time you use Inbox to send and receive e-mail, unless you select ActiveSync for the e-mail service. If ActiveSync is selected, the request will move to Outlook during the next synchronization.

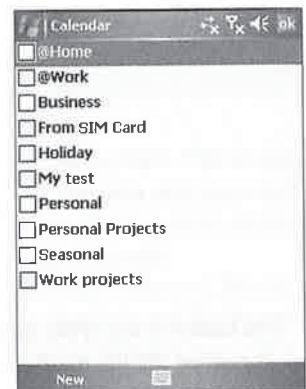
## Edit the Appointment Category List

Appointments can be filtered on categories so that only appointments belonging to a category are displayed. You assign categories in the Appointment dialog box while creating the appointment. The Category list contains several default items and is shared by Calendar, Contacts, and Tasks.

**NOTE**

Smartphones do not support appointment categories.

You add items to the Category list, shown here, when you are creating an appointment or editing an existing appointment. Tap the **Categories** field on the Appointment dialog box to open the **Categories** dialog box. Tap **New**, enter the new category item in the box, and tap **Done**. While there isn't an option to directly delete a category, they are automatically deleted when all appointments, contacts, and tasks assigned to them are removed from the device.



## Filter Appointments by Categories

Filters help you focus on specific groups of appointments by displaying only those entries that belong to a particular category that you select. To use filters, you must have assigned appointments to categories.

**NOTE**

Smartphones do not support appointment filters.

To filter appointments on a category, tap **Menu | Filter** and then tap the name of the category that you want to display. If you want to display more than one category, tap **Menu | Filter | More**, tap the check boxes of the categories you want, and then tap **Done**.

**NOTE**

A category does not appear in the **Filter** menu if no appointments are assigned to the category.

Clear the filter and display all appointments by tapping **Menu | Filter | All Appointments**.

## Edit and Delete Appointments

Select appointments listed in the Day and Agenda views to display the appointment in Summary view. You can also open the Summary view from the Week view by selecting the appointment block.

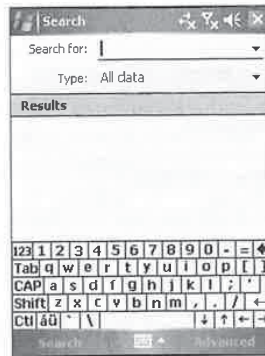
To edit the appointment, select the Edit command at the bottom of the screen. The Appointment dialog box opens for you to make any changes by either selecting the fields or tapping the Notes tab on Pocket PCs. Tap OK or press Done to save the changes.

Appointments listed in Day, Week, or Agenda view on Pocket PCs can be copied, moved, or deleted by tapping-and-holding. Tap-and-hold the stylus on the appointment that you want to edit, and then tap Cut, Copy, or Delete Appointment from the pop-up menu. When you tap Delete Appointment, a confirmation dialog box asks whether you want to delete the appointment.

To paste an appointment that you cut or copied, tap-and-hold the stylus on an open time slot in either Day, Week, or Agenda view, and then tap Paste in the pop-up menu that appears.

## Find Appointments in Calendar

To search for appointments in Calendar on Pocket PCs, tap Start | Programs | Search to open the following dialog box:



Enter the word or phrase that you are searching for in the Search For field, expand the Type field drop-down list, tap Calendar, and then tap Search.

Search will search through all appointments and list the entries containing the word or phrase in the Results portion of the dialog box. Tap an entry in the list to open the Summary view of the appointment; when you tap OK on the Summary View dialog box, you return to the Search dialog box.

You can search for entries in other Outlook Mobile programs by tapping their entry in the Type drop-down list or by tapping the Outlook Mobile entry to search across all the programs. The procedure for searching and viewing each type is the same.

## TIP

Smartphones do not have a built-in ability to search for items, but you can add this functionality by installing *SmartphoneFind*, available from Syncdata at [www.syncdata.it](http://www.syncdata.it).

## Send and Receive Appointments via Infrared

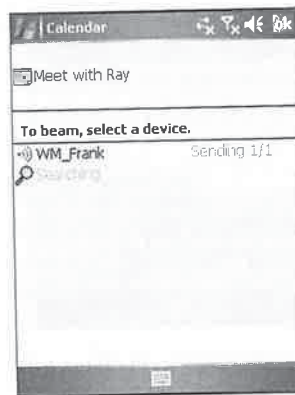
Any appointment in Calendar can be sent to another Pocket PC or Smartphone using the infrared port on the device. To send and receive appointments with infrared, follow these steps:

1. Start Calendar and select the appointment that you want to send, and then select Menu | Beam or Menu | Beam Appointment on Smartphones.
2. Line up the infrared ports of the two devices.

## TIP

If for some reason the receiving device is not receiving the appointment, tap Start | Settings | Connections | Beam and make sure the Pocket PC is set to receive incoming beams. If you use an external keyboard, it may also interfere with receiving infrared beams, so check the keyboard software.

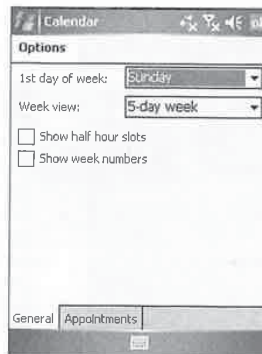
Once the connection is established, the appointment is transferred and the sending device displays the following dialog box:



The receiving device displays a notification that a device is sending you an appointment and asks you whether you want to add it to Calendar. Select Yes to add the appointment to Calendar or No to not add the appointment.

## Configure Calendar Options

Several Calendar options can be set by tapping Menu | Options to open the Options dialog box.



By default, the first day of the week is Sunday, but you can change the default by selecting a day from the 1st Day Of Week drop-down list. To set the default number of weeks in the Week view, expand the drop-down list and tap 5-Day Week, 6-Day Week, or 7-Day Week.

To have Calendar show half-hour slots or week numbers, tap the check boxes for each in the dialog box. To have Calendar automatically set reminders for new appointments, tap the Set Reminders For New Items check box on the Appointments tab. Select the default time for the reminder notification by tapping the appropriate drop-down lists.

Tap the information icons on the Appointments tab that you want to be displayed on appointments in the Day view. The dark icons will be displayed on the appointment. Meeting announcements are sent using the Inbox e-mail service that you select in the Send Meeting Requests Via drop-down list on the Appointments tab.

#### NOTE

*The Options screen on Smartphones does not have an Appointments tab, nor do Smartphones support Category icons or the ability to send meeting requests.*

## Store and Retrieve Addresses Using Contacts

13

The Contacts program is the Windows Mobile companion to the Contacts folder in Microsoft Outlook. ActiveSync synchronizes addresses that you enter in Contacts on the device with the Contacts folder in Outlook or Exchange, as explained in Chapter 7. To enter an address, first start Contacts by tapping Start | Contacts, which opens the program window shown in Figure 13-2.

If you are at the Pocket PC Today screen or the Home Screen on a Smartphone, the right softkey is assigned to Contacts, which you can press to start the Contacts program.

### View Addresses in Contacts

Your contacts are listed in alphabetical order by last name in the program window. At the top of the Pocket PC program window shown in Figure 13-2 are the alphabetical tabs, which you tap to move through the list. Tapping a tab multiple times moves through contacts by jumping to entries that start with each letter on a tab. Smartphones do not have these alphabetical tabs.

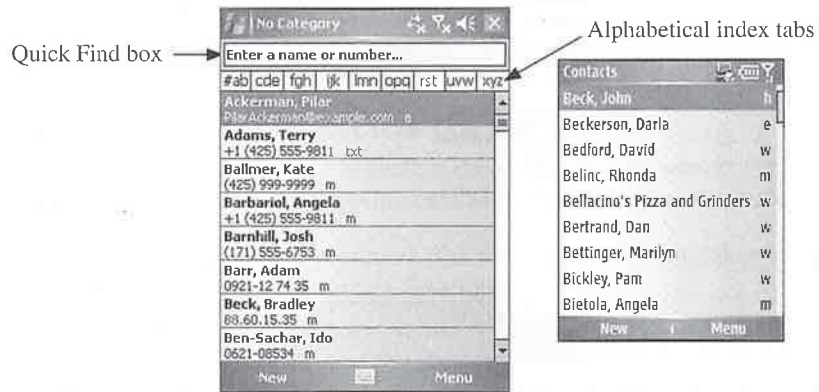
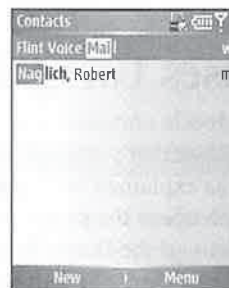


FIGURE 13-2 Contacts List view on a Pocket PC (left) and on a Smartphone (right)

**TIP**

*Press-and-hold the navigation button, and after a brief pause the alphabet will scroll in large letters. Release the button to scroll to the first contact matching the letter displayed on the screen.*

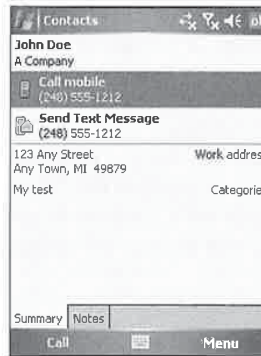
The Quick Find box above the alphabetical tabs on Pocket PCs is used to find names in the list. Tap the box and start entering a name. As you enter letters, the display scrolls and eventually shows the name that you are entering. A similar function exists on Smartphones; start pressing the numeric keys containing the letters of a contact's name and, as you do, contacts containing those letters display, as shown here:



Each contact in the list is displayed with the last name and first name, unless it is a business, in which case the business name is displayed. Also included with each contact on Pocket PCs is a phone number or e-mail address, indicated by a letter to the right of the contact information.

If a contact has multiple telephone numbers and e-mail addresses, the work telephone number is displayed by default. To change what is included with the contact in the list, press the navigation button left or right until the desired phone number or e-mail address displays.

To view the address information for a contact, tap its entry in the Contacts list to display the Contacts Summary view:



Tap OK to close the Summary view and return to the Contacts list. The Summary view displays only information that has been entered for a contact.

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## New Features in Contacts for Windows Mobile 5

Outlook Mobile Contacts has some of the most notable new features in Windows Mobile 5. It supports the Picture field available in Outlook 2003, and ActiveSync will synchronize pictures that you assign to a contact in Outlook 2003 to Pocket PCs and Smartphones. Pocket PC Phone Editions and Smartphones display a contact's picture when you receive a call from the contact, and the picture displays in the Phone application when you make a call to the contact.

You can assign unique ring tones to your contacts by selecting an option in a contact's Ring Tone field. When a Pocket PC Phone Edition or Smartphone receives a call from the contact, it plays the ring tone that you assigned to the contact, which helps you determine who is calling.

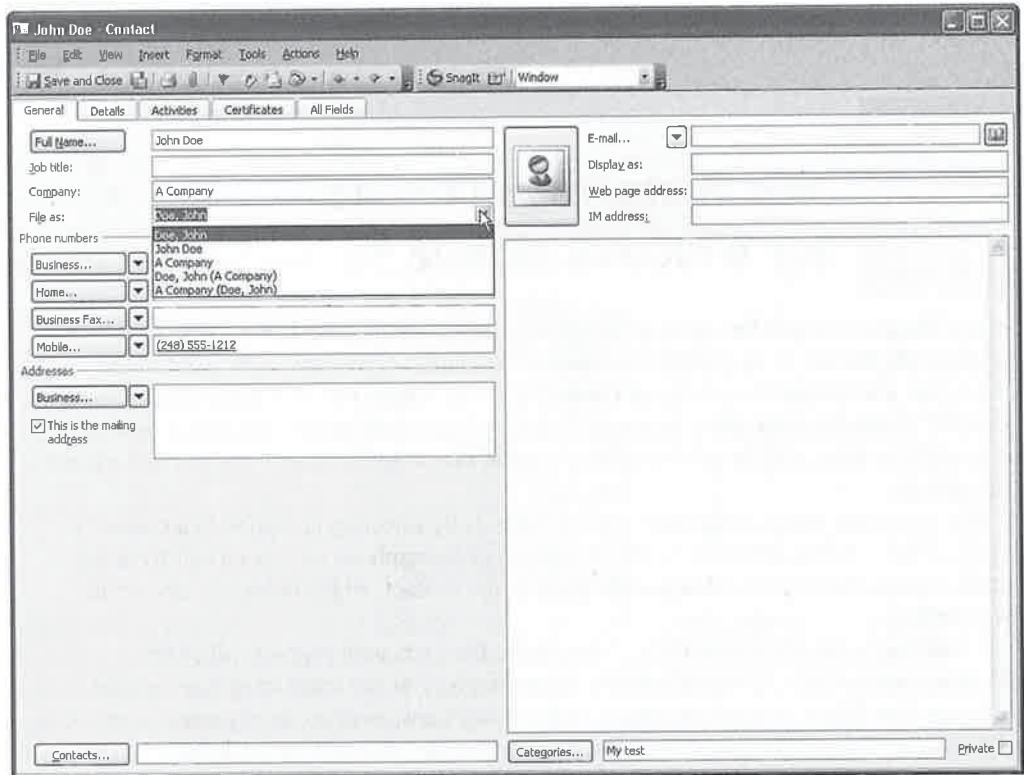
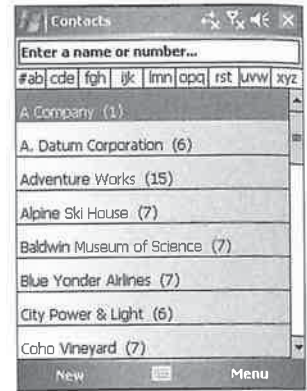
In addition to the Picture and Ring Tone fields, Contacts now supports all of the fields available to Outlook 2003 Contacts. For example, you can enter up to three instant messaging IDs. When you view a contact in Summary view, each mode of contact, such as mobile phone or home phone, has a different icon to easily differentiate each one.

### Change the Contact List View

To view your contacts by company, select Menu | View By | Company to change the List view, as shown here. Each company name is listed alphabetically with a number to the right indicating the number of contacts you have included for that company. Tap the company name to display the contacts. Tap the company name a second time to collapse the Contacts List view.

Tapping Menu | View By | Name switches the List view back to the default listing. Outlook's File As setting defines the default listing. Unfortunately, to change the default view, you have to edit each of your contacts in Outlook. If you wish to make this change in Outlook, do the following:

1. Start Outlook.
2. Open the contact that you want to change.
3. Click the File As drop-down field:



4. Select the option that you want, and click the Save And Close button. The next time you synchronize your device, the contact will be listed using the option you selected.

## How to ... Have More Power over Contacts

While some will find By Company view in Contacts useful, others will find that it still does not provide the power they want over how contacts are listed. Fortunately, third-party programs address this shortcoming.

Pocket Informant by Web Information Solutions is a popular Pocket PC alternative to all the Outlook Mobile programs. It can display contacts by first name, last name, and company name. This program also provides an Agenda view that lists appointments and tasks for each day, and more informative week and month views. You can also link appointments, contacts, and tasks to each other and to files on your Pocket PC. More information and a trial version of the program are available at [www.pocketinformant.com](http://www.pocketinformant.com).

Another popular Pocket PC program is Agenda Fusion from Developer One. It also can display contacts by first name, last name, or company name. You can find out more about Agenda Fusion at [www.developerone.com](http://www.developerone.com).

### Create New Contacts

To create a new contact, select New to open the Contacts dialog box:

As you can see, the Pocket PC dialog box has two tabs: Details and Notes. The Details tab contains all of the fields available for a contact. Tap each field that you want to complete and then enter the information. The Notes field can contain text, drawings, recordings, or writing in digital ink.

#### NOTE

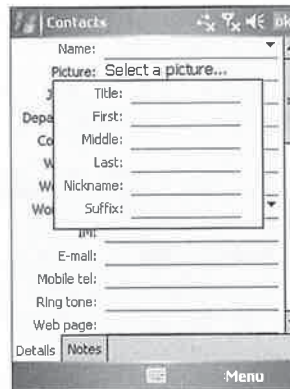
*All Contacts fields display in one screen on Smartphones. The fields are also ordered differently, with Phone Number fields immediately following the Name field.*

The Name and Address fields in the Details tab each have a details indicator (a black triangle at the end of the field) that you can tap to display the different parts of the field. You can enter the



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information directly in the field, or tap the details indicator and enter the various parts of the field separately, as shown here:



The Name field on Smartphones is slightly different and provides separate fields for First and Last names. Likewise, separate fields are provided on Smartphones for the different parts of an address.

Telephone numbers on the dialog box automatically include the area code that you define in the Contacts Options dialog box. To change the area code, tap Menu | Options, enter the number in the Area Code field, and tap OK.

### NOTE

*Contacts on Smartphones does not have an Options menu item.*

Tap the Categories field on Pocket PCs to display the Category list. Assign the contact to one or more categories by tapping the check box next to the items in the list. If the category that you want to use is not available in the list, tap New, enter a category in the empty box, and tap Done.

To enter a contact note, tap the Notes tab to display the portion of the Contacts dialog box that functions in a manner similar to the Notes program explained in Chapter 14.

### NOTE

*Windows Mobile 2003SE and earlier supported the ability to attach voice recordings to contacts, but this is no longer supported in Windows Mobile 5. If you have an older device, press and hold the Hardware Record button. Your device will beep and begin recording. Stop the recording by releasing the button. Once the recording is finished, an icon is inserted into the note.*

When you have finished entering all the information for the contact, tap OK and the contact will be added to the Contacts list.

## Edit and Delete Contacts

To edit a contact, first select its entry in the Contacts list to open the Summary view. Then select Edit. Tap the Notes tab on Pocket PCs to edit the contact's notes.

## TIP

When you tap some fields on Pocket PCs, such as the contact name or address, in the Summary view, the Edit view opens with the field highlighted.

To copy or delete a selected contact, select Menu | Copy Contact or Menu | Delete Contact. When you create a copy of a contact that you selected, it is inserted into the Contacts list. You can then edit the entry that was added to the Contacts list.

## TIP

Entries in the Contacts list on Pocket PCs can be copied or deleted by tapping-and-holding. Tap-and-hold the stylus on the contact that you want to edit, and then tap Copy Contact or Delete Contact from the pop-up menu.

## Filter Contacts by Categories

Filters help you focus on specific groups of contacts by displaying only entries belonging to a category that you select. For filters to be useful, you must assign contacts to categories.

To filter contacts on a category, tap Menu | Filter and then select the category that you want to display. If the category is not in the menu, select More, select the check box next to the

## How to ...

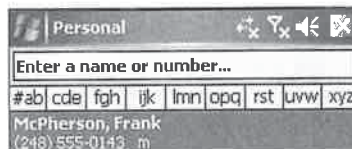
### Create a Contact Template

You might find yourself creating many contacts with the same information, such as contacts for people who work for the same company. One trick you can use to help speed up entering these types of contacts is to create a template that contains all of the duplicate information. By using the template, you save yourself the time spent entering the same information repeatedly. Here is what you do:

1. Select New to create a new contact.
2. Enter the company name as the first name of the contact, and enter **\_Template** for the last name. By using an underscore for the first character of the last name, you ensure that the template appears at the top of the Contacts list.
3. Complete the remaining details, such as the work address and category that are shared by all the contacts.
4. Tap OK to add the template to the Contacts list.

The template contact appears at the top of the list. To create a new contact using the template, copy the template. Select the new copy that was added to the list, and edit the fields as needed for the new contact you are creating.

categories that you want to display, and then select Done. The name of the filter displays on the Navigation bar, such as Personal shown in the image here:



Clear the filter and display all contacts by tapping Menu | Filter | All Contacts, and the category name on the Navigation bar changes to Contacts.

**TIP**

*Tap the Recently Viewed entry in the Filter menu to display the contacts you have recently added, edited, or viewed.*

## Find Contacts

To search for entries in Contacts, tap Start | Programs | Search to open the Search dialog box. Enter the word or phrase that you are searching for in the Search For field, expand the Type field drop-down list, tap Contacts, and then tap Search.

**TIP**

*Unlike other Mobile Office applications, you can search directly within Contacts on Pocket PCs. As you enter characters in the Search box in Contacts, items that contain those letters display on the screen.*

Search will search through all contacts and list the entries containing the word or phrase in the Results portion of the dialog box. Tap an entry in the list to open the contact, and tap OK in the Contacts dialog box to return to the Search dialog box.

You can search for an entry in other Outlook Mobile programs by tapping it in the Type drop-down list, and the procedure for searching and viewing each type is the same.

## How to ...

### Display Contacts Not Assigned to a Category

A problem on Pocket PC 2000 devices is that you cannot display contacts that are not assigned to a category, which means that if you use categories, you might not find an uncategorized contact because it won't display. A No Categories option is available in the Windows Mobile Filter menu. When you select this option, only the contacts that have not been assigned to a category display.

Smartphones do not have a built-in way to search for contacts. However, if you are at the Smartphone Home Screen, press the number keys containing the letters of a name, and the names corresponding to those letters appear:



Once the name you want appears, use the navigation button to select the name, and the contact information will display.

### Send E-mail to a Contact

To send e-mail to a person from Contacts, open the contact and select Send E-mail. Messaging will start, ask which e-mail account you want to use, and then create a new e-mail message using the contact's e-mail address.

On Pocket PCs, tap-and-hold on the person's entry in the Contacts list, and then tap Send E-mail on the pop-up menu. On Pocket PC Phone Editions, the tap-and-hold menu also provides options for calling work, home, and mobile phone numbers and sending text messages if they are available for a contact.

Complete the message, select Send, and you will return to Messaging. Return to Contacts by pressing the hardware button or tapping Start | Contacts.

### Send and Receive Contacts via Infrared

Any entry in Contacts can be sent to another Windows Mobile device using the infrared port on the device. To send and receive contacts with infrared, follow these steps:

1. Start Contacts on the device sending the contact, select the contact that you want to send, and then select Menu | Beam Contact.
2. Line up the infrared ports of the two devices.

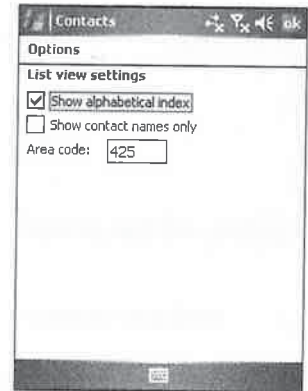
Once the connection is established, the contact transfers and the sending device indicates that the contact has been received. A notification appears on the receiving device asking whether you want to add what it received to Contacts. Select Yes to add the contact, or No to not add the contact.

#### TIP

*On Pocket PCs you can beam a contact from the Contacts List view by tapping-and-holding on a contact and then tapping Beam Contact on the pop-up menu.*

### Configure Contact Options

You can set several options in Contacts by tapping Menu | Options to open the Options dialog box. Tap the check box next to Show Alphabetical Index or Show Contact Names Only to change how the Contacts list is displayed. Enter the default area code for new contacts by entering a value in the Area Code field. Tap OK to save the changes that you make and close the dialog box.



**NOTE**

*Smartphones do not have Contact Options.*

### Manage Your Tasks

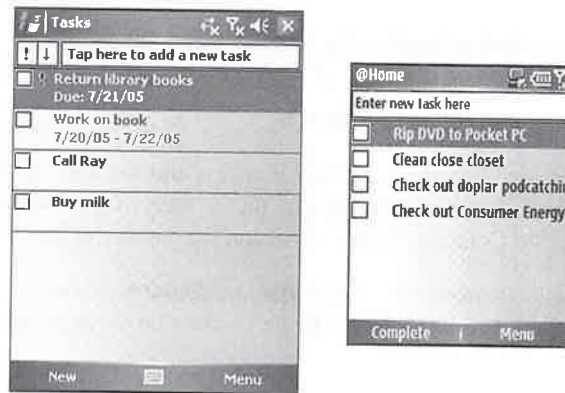
The Tasks program is the Windows Mobile companion to the Tasks folder in Microsoft Outlook. ActiveSync synchronizes tasks that you enter in Tasks on the device with the Tasks folder in Outlook, as explained in Chapter 7. To enter a task, select Start | Tasks, which opens the program window shown in Figure 13-3.

**NOTE**

*Tasks may not be on the Start menu, in which case you can tap Start | Programs | Tasks to launch the program.*

### View Your Tasks

Tasks are displayed in the main program window in one complete list. To the left of each task is a check box that you tap to mark a task complete. Immediately to the right of the check box is the Priority column, which displays exclamation marks for high-priority tasks, an arrow pointing down for low-priority tasks, and nothing for normal tasks. The description of the task takes up the remaining space for each item.

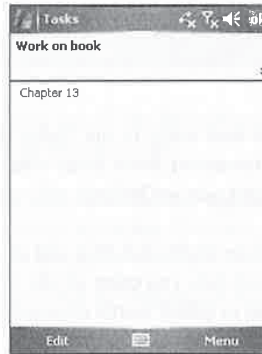


**FIGURE 13-3** Tasks on a Pocket PC (left) and on a Smartphone (right)

You can sort the Tasks list by Status, Priority, Subject, Start Date, and Due Date. A task has either an active or a complete status, and when the list is sorted by Status, active tasks appear before complete tasks. To change the sort order of the Tasks list, select Menu | Sort By and then select an option on the menu.

Task start and due dates do not appear in the Tasks list unless you enable them on a Pocket PC. To display start and due dates, tap Menu | Options and then tap the Show Start And Due Dates check box. When the dates are enabled, each task occupies two lines in the Tasks list, as shown in Figure 13-3. Past-due tasks are displayed in red in the Tasks list. You cannot display start and due dates in the Tasks list on Smartphones.

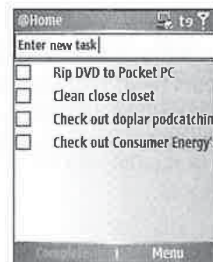
Each task can include more information than is displayed in the Tasks list. To see the details, tap the task to open it in Summary view:



Summary view provides all the information about the task on one easy-to-read screen. By default the top part of the screen displays the task description and if more details are available you will see down arrows. Tapping the down arrows displays the task's start and due dates and category assignments. The bottom part of the screen displays notes. Tap the OK button in the upper right corner to close Summary view.

## Create New Tasks

To create a new task on Smartphones, use the navigation button to move the cursor to the field at the top of the screen:



## How to ... Beef Up Tasks on Smartphones

The Tasks program on Smartphones is noticeably under-powered in comparison to the same program on Pocket PCs. Fortunately, several third-party programs are available that provide more functionality than the Tasks program that comes with Smartphones.

Oxios's ToDo List adds all the basic functionality to Smartphones that you find on Pocket PCs, and more. For example, you can add call history and contact information to tasks. You will find this program at [www.oxios.com](http://www.oxios.com).

You will find other tasks programs for Smartphones at [www.smartphone.net](http://www.smartphone.net) by searching on tasks.

Press the navigation button to save the new entry to the Tasks list. Unlike on Pocket PCs, you cannot enter due dates or other information about tasks other than the subject. However, additional information that you enter for tasks in Outlook will synchronize to Smartphones and display in the Tasks Summary view.

Tap New to open the Tasks dialog box on Pocket PCs and create a new task. The dialog box has two tabs: Task and Notes. On the Task tab, you enter all the details about the task. The Subject field is a drop-down list that you can use to select words commonly used in task subjects. By using the drop-down list, you can speed up data entry, but unfortunately the list does not change and you cannot add words.

You enter dates in the Starts and Due fields by tapping the field to open the date picker. Tap a date on the calendar to select it for either field. You can use the arrows at the top of the calendar to move backward and forward one month at a time, or tap the month to jump to another month that appears in a pop-up menu. The Starts date that you select automatically appears in the Due field.

### NOTE

*A task cannot be assigned a start date without a corresponding due date, but a due date can be assigned without a corresponding start date.*

You can schedule a task for multiple dates by selecting a recurrence pattern. The default setting is for each task to occur once, as indicated by the value of the Occurs field. To make the task appear multiple times, tap the Occurs field to display the items shown next. (The items will vary depending on the day of the week, day of the month, and date on which the task is to be created.)



The task shown in the illustration is being created on Sunday, December 4, 2005. Select Every Sunday to add the task to the Tasks list on every Sunday. Select Day 4 Of Every Month to add the task on the fourth of each month. If you want to add the task on the specific date—in this case, December 4—every year, select Every December 4.

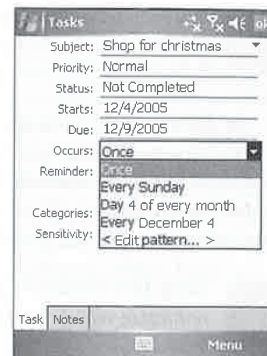
If none of the items in the drop-down list meets your requirements, tap <Edit Pattern...> to start the Recurrence wizard. The Recurrence wizard has three dialog boxes. In the first dialog box, you set the start and due dates for the task. Typically, these have been entered already prior to creating the recurrence pattern. If the start date is correct, you can change the due date by expanding the Duration drop-down list and tapping a value in the list. Tapping Remove Recurrence closes the dialog box and deletes the recurrence.

Tap Next to open the second dialog box of the Recurrence wizard. Tap these buttons along the top of the dialog box to define a recurrence time:

- **Daily** When you tap Daily, two radio buttons appear. Tap the Every Weekday radio button to create the task on every weekday. To create the task on multiple days, tap the Every radio button and select a number from the Day(s) drop-down list.
- **Weekly** Tap the days in the week for which you want to create the task; you can select more than one day. Select a value from the Week(s) drop-down list to create the task for several weeks on the days that you select.
- **Monthly** The monthly recurrence pattern can be defined for a specific date in a month (such as the nineteenth), for a select number of months, or for a day in a week (such as the third Saturday) for a select number of months. Tap the radio button of the option you want, and select the values from the drop-down lists.
- **Yearly** The yearly recurrence pattern is similar to the monthly pattern. Your options are to create the task on the same date and month each year or for the day in a week of the month that you select. Tap the radio button of the option that you want, and select the values from the drop-down lists.

Tap Next to define the starting and ending dates of the recurrence pattern in the third dialog box of the wizard. Select the starting date by using the The Pattern Starts drop-down list. Three options are available for defining the end date: the recurrence pattern does not end, it ends on a date that you select, or it ends after a select number of occurrences. Tap the radio button of the option that you want and select the appropriate values from the drop-down lists.

After you select the start and end dates of the recurring task, tap Finish to return to the Tasks dialog box. The Occurs field contains <Edit Pattern...> to indicate that a customized recurrence pattern has been created for the task.





**TIP**

*You may have problems synchronizing recurring tasks between your Pocket PC and Outlook. If you create a recurring task, edit it only on the Pocket PC; otherwise, the task may not be re-created for each occurrence.*

The Reminder field on the Tasks dialog box sets the date on which you will be notified about the upcoming task. Turn the reminder notification on or off by tapping the field and selecting either None or Remind Me from the drop-down list. The second line of the Reminder field defines the date for the notification. Tap the date on the second line to display the date picker, and tap the date on the calendar on which you want the reminder notification to occur.

**NOTE**

*Long-time Pocket PC users will be happy to see that you can now assign a time for a task reminder, which has not been possible prior to Windows Mobile 5.*

Tasks assigned to categories can be filtered in the Tasks list by using the Filter menu. To filter tasks, you must first assign them to a category, which you do by setting a value for the Categories field. Tap the field to display a list of categories, and then tap the check box next to each category that you want assigned to the task.

### Enter Notes for Tasks

Task notes can contain text, drawings, recordings, or writing in digital ink. To enter a note, tap the Notes tab to display the portion of the Tasks dialog box that functions in a manner similar to the Notes program, explained in Chapter 14.

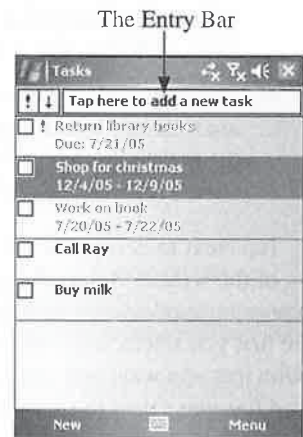
To make a recording, press and hold the Hardware Record button. Your device will beep and begin recording. Stop the recording by releasing the button. Once the recording is finished, an icon is inserted into the note, which you tap to play back the record.

### Use the Tasks Entry Bar

The Entry Bar, which is the only way you can enter tasks on Smartphones, provides a quick way to enter tasks. If the Entry Bar is not displaying on your Pocket PC, tap Menu | Options, tap the Show Tasks Entry Bar check box, and then tap OK. When the Entry Bar is enabled, an extra line is added beneath the Categories and Sort drop-down lists.

The Entry Bar includes two priority buttons and the task subject. Set the task priority to either high or low by tapping the exclamation mark or arrow. Create the subject by tapping Tap Here To Add A New Task on the bar and entering the task subject.

When you have finished entering values on the Entry Bar, tap ENTER on the Software Input Panel to add the new task to the Tasks list.



## Edit and Delete Tasks

Select an item in the Tasks list to display the Tasks Summary view, and then tap Edit on Pocket PCs to open the task information. Edit the task notes by tapping the Notes tab. Make any necessary changes to the fields in the dialog box, and then tap OK to save the changes.

Tasks can be copied or deleted by tapping-and-holding. Tap-and-hold the stylus on the task that you want to edit, and then tap either Create Copy or Delete Task on the pop-up menu that appears. When you tap Delete, a confirmation dialog box asks whether you want to delete the appointment.

To delete tasks on Smartphones, first select the task and then press Menu | Delete Task.

## Filter Tasks by Categories

Filters help you focus on specific groups of tasks by displaying only entries belonging to a category that you select. As usual, for filters to be useful, you must assign tasks to categories. You use the Filter menu to filter items quickly by the category that you select.

The title on the Navigation bar changes to indicate the category currently being displayed. To filter tasks on a category, select Menu | Filter and select the category that you want to display. If the category is not in the drop-down list, select More, press the check box next to the categories that you want to display, and then select Done.

Clear the filter and display all contacts by tapping Menu | Filter | All Tasks.

### TIP

*Tap the Recent entry in the Categories drop-down list to display the tasks that you have recently added, edited, or viewed.*

The Filter menu has two items that are useful for looking at tasks. Select Active Tasks to list all tasks with a start date before and on the current date. Tasks not assigned a start date are always active. Select Completed Tasks to list all tasks marked complete.

### TIP

*You can select a category and Active Tasks or Completed Tasks to display the active or completed tasks for a category.*

## Find Tasks

To search for entries in Tasks, tap Start | Programs | Search to open the Search dialog box. Enter the word or phrase that you are searching for in the Search For field, expand the Type field drop-down list, tap Tasks, and then tap Search.

### NOTE

*Smartphones do not have a search function.*

Search will search through all tasks and list the entries containing the word or phrase in the Results portion of the dialog box. Tap an entry in the list to open the task, and tap OK in the Tasks dialog box to return to the Search dialog box.

How to ...

## Display Tasks Not Assigned to a Category

On Pocket PC 2000 devices, you cannot display tasks that are not assigned to a category, which means that if you use categories, you might miss an uncategorized task because it won't display. A No Categories option is available in the Filter menu of Windows Mobile 5. When you select this option, only the tasks that have not been assigned to a category will display.

You can search for entries in other Outlook Mobile programs by tapping their entry in the Type drop-down list, and the procedure for searching and viewing each type is the same.

### Send and Receive Tasks via Infrared

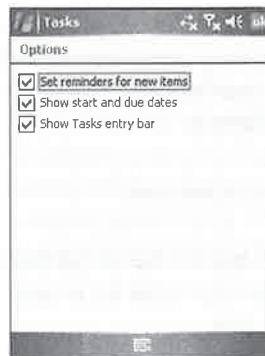
Any entry in Tasks can be sent to another Windows Mobile device using the infrared port on the device. To send and receive tasks with infrared, follow these steps:

1. Start Tasks on the device sending the task, select the task that you want to send, and then select Menu | Beam Task.
2. Line up the infrared ports of the two devices.

Once the connection is established, the task transfers and the sending device indicates that the task has been received. A notification appears on the receiving device asking you whether you want to save the item to Tasks. Select Yes to add the item to the Tasks list, or No to not add the item.

### Configure Task Options

Three options can be set by tapping Menu | Options on Pocket PCs to open the dialog box shown here:



Tap the Set Reminders For New Items check box to have reminders automatically created for new tasks. Add the start and due dates to the Tasks list by tapping the Show Start And Due Dates check box. Tap the Show Tasks Entry Bar check box to display the Tasks Entry Bar at the top of the Task List view.

Tap OK to save the changes that you make and close the Options dialog box.

**NOTE**

*There are no options to configure in Tasks on Smartphones.*

## Wrapping Up

Outlook Mobile provides the tools that help you manage your time. Recurring appointments are easy to schedule in Calendar because you have to enter the appointment information only once, and your Pocket PC automatically enters that appointment on all the other days.

The Tasks program provides the same functionality, reminding you of tasks that you must complete at regular intervals. All of your addresses are stored in Contacts, which makes it easy to retrieve a phone number or e-mail address.

Now that you have learned how to use your Windows Mobile device to stay organized, it's time for you to learn how you can use a Pocket PC to write letters or reports. In Chapter 14 you will learn how to use Word Mobile to create and edit documents on a Pocket PC.



# Chapter 14

## Create Documents and Take Notes

