3

Introducing Windows CE

- Windows CE Operating System
- Windows CE Services
- Software Applications
- Online Help
Windows CE is the smallest member of the Windows operating system family using the Windows 95 interface. What exactly does smallest mean? It means mobility and portability provided through a reduced code base. This code base is completely 32-bit; it is multithreaded, multitasking and runs on different processors such as the NEC Vr4121 MIPS processor.

Your MobilePro does not have a hard disk drive. The operating system and preloaded applications are deployed on a Read-Only Memory (ROM) module; files that you work on are stored in Random Access Memory (RAM) on a RAM module.

The power of Windows CE is enhanced through its design to easily link with your desktop computer to synchronize your data. For more information about setting up your MobilePro for synchronization, see the section in Chapter 1, “Connecting to Your PC.”

Using Windows CE

Windows CE is similar to Windows 95. However, some actions are executed differently, as indicated in the following sections.

Tapping

Your NEC MobilePro comes with a stylus, a pen-like device that allows you to touch, tap, or double tap objects on the MobilePro touch screen. The touch, tap, and double tap act just like a point, click, and double click of a mouse.

To simulate the click of the right mouse button, hold down the Alt key while you tap or drag the object with the stylus.

Finally, never use a metal object in place of the stylus. Metal objects may scratch the surface of the touch screen.
**Selecting Objects**

You can select objects in Windows CE by tapping the object(s) with the stylus. To select multiple contiguous items, hold down the **Shift** key while tapping the first and last items. To select multiple non-contiguous items, hold down the **Ctrl** key while tapping each item.

To move the blinking cursor while editing text in a program, simply tap the screen at the desired (new) location.

**Dragging and Dropping**

Dragging and dropping works just like Windows 95. To drag an object, tap the object with the stylus and hold the stylus against the screen. Continue to hold as you slide the object across the screen. Lift the stylus from the screen when the object is in the desired location.

To copy an object, simply hold down the **Ctrl** key as you drag the object, as indicated in the previous section.

**Windows CE Desktop**

Windows CE gives you the newest features offered by Microsoft for your NEC MobilePro and is very similar to Windows 95.

Windows CE includes a desktop with built-in pocket applications, a taskbar for quick navigation, online networking functions, and more. Your Windows CE desktop provides the following icons.
- My Handheld PC — Opens Windows CE Explorer to display all the data on your MobilePro, whether stored in RAM or on a storage card in the PC card or Compact Flash card slots. My Handheld PC is much like the My Computer icon on the Windows 95 desktop.

- My Documents — Provides shortcuts to documents most recently worked on, as well as, access to Pocket PowerPoint and Pocket Access.

- Recycle Bin — Gives you a trash container in which to put unwanted files.

- Internet Explorer — Provides web access once you are connected to the Internet via the MobilePro’s built-in modem and an internet service provider.

- Inbox — Allows you to send and receive email messages on your NEC MobilePro. Refer to Chapter 5, “Setting Up a Remote Connection,” for details about configuring your Mobile Pro to send and receive email.

- Calendar — Lets you schedule appointments, meetings, and other events and provides a variety of ways to display the stored information.

- Contacts — Maintains a list of names, both business and personal, for easy access while at home or on the road.

- Tasks — Provides a portable “To do” list for keeping track of all of your tasks.

- Microsoft Pocket Word — Allows you to create and edit documents on your MobilePro.

- Microsoft Pocket Excel — Allows you to view or draft spreadsheets.

- Microsoft Pocket PowerPoint — Lets you quickly and easily deliver a professional online presentation.
- Microsoft Pocket Access — Allows you to access and synchronize information from other databases.

**Pocket Applications**

While Windows CE applications do not have all the features you may expect to see in applications on other Windows systems, these applications provide many powerful features adapted for the mobile environment.

Your MobilePro, with its larger keyboard, highly visible display, and longer battery life, allows you to obtain full advantage of the CE-based applications.

You can write complete, well-formatted reports, take detailed notes, and work on spreadsheet data as you travel.

Microsoft provides a complete suite of applications ready for you to use.

- Microsoft Pocket Word — Provides many features of Microsoft Word including document formatting and spell-checking. Copy documents from your desktop for editing or draft documents on your MobilePro for later completion on your desktop.

- Microsoft Pocket Excel — Provides spreadsheet and database functions for budgeting and other data tasks.

- Microsoft Pocket PowerPoint — Provides an easy, portable solution for desktop presentations.

- Microsoft Pocket Access — Provides a database program for the mobile professional allowing you to update and query data while you are on the road.

For more information about each of the pocket applications, just click the question mark available on the taskbar of each application.
You can also use many other applications with Windows CE for faxing and data transfer. A number of these are on your Bonus CD. See the section later in this chapter, “Software Applications,” for more information.

**Connecting the VGA Cable**

The VGA cable lets you connect the MobilePro directly to a MultiSync monitor that has VGA output. Use an external monitor to enhance your MobilePro display.

Connect the cable as follows.

1. Go to Start, Settings, Control Panel.
2. Double tap the MobilePro Settings icon and select the VGA Out tab.
3. Tap to place a check mark in the box “Display the same image with LCD,” and tap OK.
4. Back up your data, if possible, and/or synchronize with your desktop or notebook computer.
5. Use the soft reset button to reset the MobilePro and implement the new setting. For instructions about resetting the MobilePro, refer to the section, “Resetting the MobilePro,” in Chapter 4.
6. Power off the MobilePro.
7. Locate the VGA port cover on the left side of the MobilePro and open it.
8. Align and attach the connector on the MobilePro VGA cable to the VGA port on the left side of the MobilePro.

\textit{Connecting the VGA cable}

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{vga_cable}
\caption{A – VGA port B – VGA cable}
\end{figure}

9. Connect the other end of the VGA cable to the monitor cable connector.

\begin{center}
\textbf{CAUTION}
\end{center}

Make sure you properly align the cable connectors and ports. Incorrect connection can damage the MobilePro H/PC and the monitor.

10. Power on the MobilePro and the external monitor.
When the setting, “Display the same image with LCD,” is selected, the MobilePro uses more power than normal. To conserve power, be sure to deselect this setting when not using an external monitor.

Screen Resolution

Your NEC MobilePro 770 provides a display panel with a 640x240 screen resolution. When you connect the VGA cable to an external monitor, and select “Display the same image with LCD,” in the MobilePro settings applet, the external monitor’s image is also set to 640x240. However, some applications like Pocket PowerPoint, allow you to increase the screen resolution on the external monitor to 800x600.

Follow these steps to increase the screen resolution on an external monitor when using Pocket PowerPoint.

1. Double tap the MobilePro Settings icon and select the VGA Out tab.

2. Tap to select “800x600,” and tap OK.

3. Connect the VGA cable as described in the preceding section, “Connecting the VGA Cable.”

4. Launch Microsoft Pocket PowerPoint and open the file that you want to display.

5. Tap Tools, tap Set Up Show, use the dropdown box to set the entry to “External VGA,” and close the window.

6. Tap View and tap View Show to display the PowerPoint presentation in 800x600 resolution.
Printing Features

Windows CE provides printing capability using Hewlett-Packard (HP) PCL Level 3 and compatible printing devices that support serial or infrared connection. Using the serial cable or infrared transfer you can print a variety of high-quality documents directly from MobilePro including:

- Pocket Word and Pocket Excel files
- Contacts and Task lists
- A view of your schedule or agenda in Calendar
- Inbox messages

Follow these steps to print documents using your MobilePro.

1. Open the desired Pocket application.
2. Tap File and tap Print.
   The print dialog box appears.
3. Select the appropriate printer setting, “PCL_Laser” or “PCL_Inkjet.”
4. Select the appropriate port setting, IrDA, COM1 @ 57600, COM1 @ 9600, LPT1, or Network.
5. Select other printing attributes as required.
6. Tap OK.

**Note:** See the Bonus Software CD for installation and use of a wider range of high speed printer drivers.
For additional details about using the IR port for printing and transferring data, refer to the section in Chapter 4, “Using the IR Port.”

**Network Capabilities**

Your MobilePro can take full advantage of the networking capability offered through Windows CE and the PC card port. The operating system supports Ethernet LAN and serial line interface protocol (SLIP) used with Cellular Digital Packet data (CDPD) so you can have cable- or wireless-based network communications using an Ethernet LAN PC card.

**WINDOWS CE SERVICES**

The Windows CE operating system and your MobilePro provide a powerful, portable extension to your desktop PC. This PC-companion capability comes through the Windows CE Services software.

Windows CE Services provides the communication link between your MobilePro and desktop PC. It uses an ActiveSync™ technology that provides synchronization between files you are using on your MobilePro and/or desktop PC. Thus, you can keep up-to-date copies of email and documents.

You can also backup and restore data and files and install new applications using Windows CE Services. For additional information about Microsoft Windows CE Services, refer to appendix D in this user guide.

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3-10 Introducing Windows CE
Find the features and functions of Windows CE Services on your desktop PC under the Mobile Devices icon.

Backing Up and Restoring Data
To prevent data loss you should perform frequent backups of your NEC MobilePro data. You can backup data in two convenient ways:

- Use Windows CE Services to backup all data to your desktop or notebook computer.
- Use the HPC dbExplorer backup application (included with the NEC MobilePro Bonus CD) to back up all Calendar, Task, and Contact (PIM) data bases.

Using Windows CE Services to Back Up Your Data
The Windows CE Services backup feature creates a complete duplicate of all data stored on your NEC MobilePro. If you routinely connect to your desktop or notebook computer, this is the best method of data backup. The backup file is saved on the hard disk of your desktop or notebook computer.

When you restore data from a backup file created by Windows CE Services, all data on your NEC MobilePro is replaced by the data in the backup file. All data on your MobilePro is overwritten including files you created, settings that you changed or programs that you installed since the last backup.

To access the Windows CE Services Backup feature double tap the Mobile Devices icon on your desktop or notebook computer. Tap Tools, then tap Backup/Restore. Follow the on-screen instructions to complete the backup process. For more information about Windows CE Services Backup, see the online Help file.
Using HPC dbExplorer to Back Up Your Data

HPC dbExplorer provides a convenient way for you to back up your MobilePro data while traveling or away from your desktop or notebook computer. Back up data to a PC card or CompactFlash card for secure storage.

To back up data using HPC dbExplorer, simply double tap the HPC dbExplorer icon on your MobilePro desktop. Tap Tools, then Backup, select the desired backup option and follow the on-screen instructions to complete the backup process. For more information about HPC dbExplorer, see the online Help file.

Restoring Data

Use either Windows CE Services or HPC dbExplorer to restore your backup files. Refer to the online help files in Windows CE Services or HPC dbExplorer for more information about restoring your data.

SOFTWARE APPLICATIONS

A variety of software applications are provided on the Bonus CD that ships with your NEC MobilePro 770. These applications let you take full advantage of your MobilePro capabilities.

The software applications on the Bonus CD include the following and are subject to change without notice.

- Puma Intellisync® for Act and Organizer – A powerful software that allows you to synchronize data with these information managers.
- BSQUARE® bFAX® Express– A mobile communication software that allows you to send faxes from your NEC MobilePro.
- ImageExpert™ 30 Day Trial– A truly mobile imaging solution that allows you to view, annotate, or share your digital images through email and IrDA.
- Connect Force™ – An internet setup wizard that simplifies and facilitates your remote connection setup.
- JETCET™ PowerPoint Companion – A versatile print driver that allows you to convert source files from your pocket applications into impressive PowerPoint presentations.
- JETCET™ Print – A collection of printer drivers for a wider range of high speed printers.
- HPC dbExplorer – A management tool that allows you to copy, backup, restore, and transfer files from your NEC MobilePro.

**Using the Bonus CD**

Use the Bonus CD to install the software applications described in the previous section. Your NEC MobilePro does not include a CD-ROM reader. The Bonus CD is designed for use on your desktop or notebook computer. When installing the software applications from the Bonus CD, you must first connect your MobilePro to your desktop or notebook computer, install the application to the desktop/notebook and then install the application from your desktop/notebook computer to the NEC MobilePro.

**Note:** Before using the bonus CD to install additional applications, you must first install Windows CE Services on your desktop or notebook computer.

Follow these steps to install applications from the Bonus CD to your desktop/notebook, then to your NEC MobilePro.

1. Insert the Bonus CD to the CD-ROM reader in your desktop or notebook computer.
If auto insert is enabled on your desktop, the CD automatically plays and the introduction screen appears.

If auto insert is not enabled, go to Start, Run, browse for the CD-ROM drive, and run the setup file.

2. Move your cursor over the application list at the left side of the screen to select an application for installation.

3. Click the selected application title to initiate the installation program.

4. Follow the on-screen instructions to accept the license agreement (appears only on first installation) and to install the software application to your desktop or notebook computer.

When the installation to your desktop/notebook computer is complete, the system prompts you to install the application to your NEC MobilePro.

5. Follow the on-screen instructions to install the application to the MobilePro.

Once installed to your NEC MobilePro, the software application is stored in RAM. Refer to each application’s online help for details about how to use the application.

Note: Be sure to keep your main battery pack charged to maintain all applications stored in RAM. If your main battery pack loses its charge, applications stored in RAM may be lost. Once lost, you must reinstall the desired software applications.
ONLINE HELP

Your NEC MobilePro and Windows CE provide a variety of online help resources. In addition, Windows CE Services on your desktop PC provides its own online help file.

Find your online help resources as follows.

- MobilePro Online Help — Double tap the MobilePro Online Help icon on your MobilePro desktop.

- Windows CE Main Help — Go to Start, Help on the Windows CE taskbar.

- Application-specific Help — Just tap the question mark in the upper right-hand corner of the taskbar in each of the Pocket applications.

- Windows CE Services Help — On your desktop PC, double click the Mobile Devices icon, click Help, and select the Windows CE Services Help Topics.