

Using LabVIEW to Develop Applications for Windows CE OS Devices

Overview

You can develop applications using the National Instruments LabVIEW PDA Module to run on any Windows Mobile for Pocket PC OS consumer PDA device and on several Windows CE OS industrial devices, including touch panel computers and rugged handhelds. This document discusses the requirements a Windows CE OS device must meet to work with the LabVIEW PDA Module and the basics of configuring such a device.

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Introduction

You can develop applications using the National Instruments LabVIEW PDA Module to run on any Windows Mobile for Pocket PC OS consumer PDA device and on several Windows CE OS industrial devices, including touch panel computers and rugged handhelds. Touch panel computers, such as the NI TPC-2006, are useful for displaying information from a headless device such as a National Instruments Compact FieldPoint, CompactRIO, Compact Vision System, or any other LabVIEW Real-Time target. Using the LabVIEW PDA Module, you can easily create an HMI that communicates with and retrieves and displays data from your embedded hardware systems.

This document describes the device requirements as well as the steps required for using the LabVIEW PDA Module for Pocket PC to build applications for Windows CE OS devices. Windows CE devices can be connected to the host PC through Microsoft ActiveSync and appear to the PC as a Pocket PC device. Using the LabVIEW PDA Module, you can then treat the Windows CE device as a Pocket PC device and interact with it just as you would a Pocket PC connected through ActiveSync. If the device does not connect via ActiveSync, an application can be built for a Pocket PC and then manually transferred to the device.

See Also:
[NI TPC-2006 Touch Panel Computer](#)

System Requirements

LabVIEW PDA Module 7.1 or later

See Also:
[Getting Started with the LabVIEW PDA Module](#)

Device Requirements

- Windows CE 4.2 or higher.
- The device must be based on a StrongARM/XScale or an x86* CPU.
- The Windows CE platform build for the device must have been built with the *Standard SDK* option enabled. The images below show how this option might look like when enabling it.

*Note: Devices with x86 can be used due to the Pocket PC 2003 Emulator being x86 based. You may still treat the device as a Pocket PC device but you must select that processor type to be x86 (Emulator) when building the application.

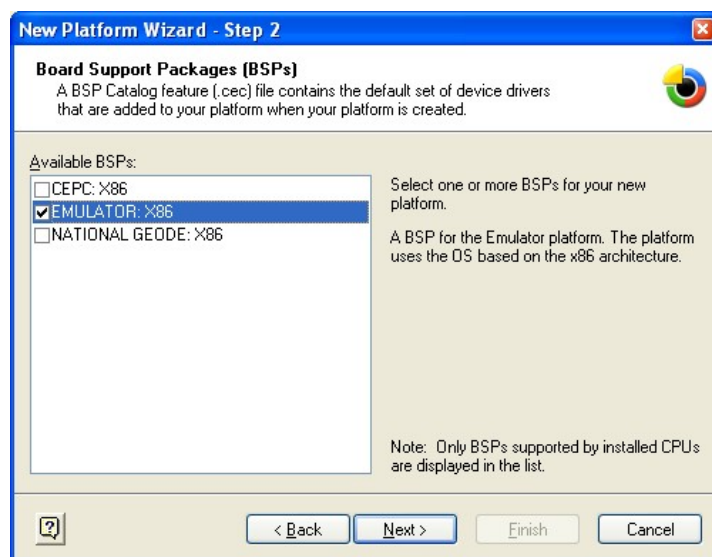


Figure 1. Selecting the BSP (example)

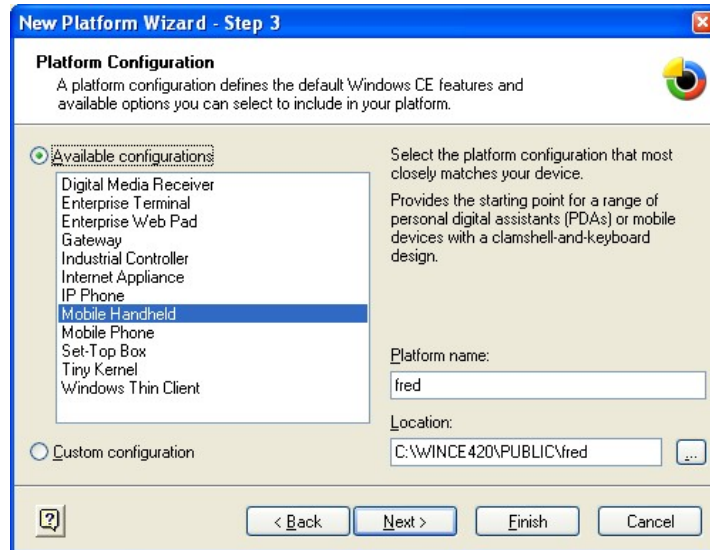


Figure 2. Setting the device (example)

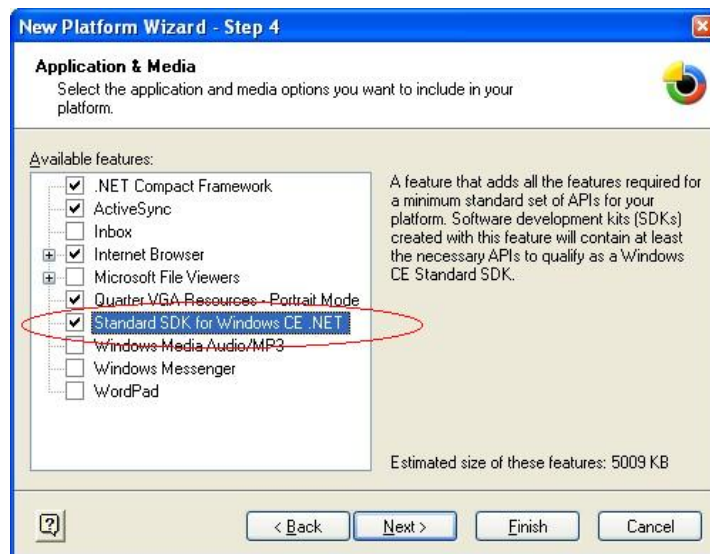


Figure 3. Selecting the Standard SDK option (example)

Tested Devices

All Windows CE devices that meet the previous requirements should work with the LabVIEW PDA Module for Pocket PC. However, for a list of Windows CE devices that have been tested with the LabVIEW PDA Module by National Instruments, please visit the Touch Panel and Industrial Handhelds with LabVIEW PDA website.

Related Links:

[NI-DAQmx Base 2.x Getting Started Guide](#)

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