



About WinCE

Microsoft Windows CE is a scaled-down operating system designed specifically for what Microsoft terms 'information appliances'. In Microsoft's vision, these appliances range from handheld computing devices to mobile phones to automobiles to industrial equipment.

Who is it for?

This course is aimed at those wishing to gain a complete overview of the Windows CE operating system. In addition, the course will appeal to technical managers, analysts and strategists wishing to increase their technical understanding of the subject areas.

Software Requirements

- Windows CE Utilities for Visual Studio .NET 2003 Add-on Pack 1.1 (must be installed before Platform builder)
- Microsoft Embedded Visual C++ V4.0 with SP4
- Microsoft Windows CE with Platform Builder V5.0

Duration : 5 Days

Course Contents

Operating System Development through Windows CE

- Windows CE Architecture
- Windows CE Features
- Windows CE Platform Development Cycle Session 1 – NT OS Architecture - I

Configuring & Building with Platform Builder

- Configuring a Windows CE Platform
- Building a Windows CE Platform Image
- Downloading a Windows CE Image to Emulation/Hardware



- Configuring Connectivity Options

Windows CE Debugging Process

- Overview of the Debug Process
- Release Builds & Debug Builds
- Introduction to the Kernel Debugger
- Understanding Windows CE Remote Tools
- Using Breakpoints
- IDE Debug Commands

Kernel Features

- Real Time features
- Windows CE Kernel Features
- Handling Processes, Threads, & Fibers
- Protecting Applications
- Synchronization Objects
- Memory Model

Boot Loader & OEM Adaptation Layer

- Operating System Boot Sequence
- Role of the Boot Loader
- Boot Options
- OAL Architecture
- Required OAL Functions
- Optional OAL Functions
- Arrangement of Driver Libraries

Device Driver Architecture

- Architecture
- Built-In Vs. Installable Drivers
- Device Manager
- ActivateDeviceEx
- Interrupt Model
- Interrupt Service Routines (ISRs)
- Stream Drivers



- DMA

Device Drivers – advanced trails

- Mouse/Keyboard Device Drivers
- USB architecture
- USB function and host drivers