

WiX 101: Windows Installer XML

COURSE DESCRIPTION

This class is designed for application developers and application installation engineers responsible for creating Windows Installer installations for internally developed applications by utilizing WiX toolset. It starts with an overview of Microsoft® Windows® Installer technology, continues with an explanation of Windows Installer XML and the details of building MSI files by using WiX toolset. You will learn the benefits of using WiX in your application build environment and create significant number of sample MSI packages during the class. A basic knowledge of Windows Installer and understanding of XML is beneficial but not required.

Duration

2 days

Delivery Method

Instructor lecture and demonstration, followed by student practice through hands-on exercise.

Course Objectives

- Understand the fundamentals of Microsoft® Windows® Installer technology.
- Build basic installer packages by using ORCA.
- Learn why you should push installation tasks down to the developer level.
- Understand the basics and benefits of using WiX instead of 3rd party installation development tools to build Windows Installer packages.
- Build many sample installer packages by using WiX toolset.
- Learn and practice using WiX Extensions.

COURSE OUTLINE

Introduction to Windows Installer

- What is Windows Installer?
- What is different in Windows Installer?
- Advantages of Windows Installer
- Logo Certification

Installation Mechanism and Package

- Windows Installer Package
- General Installation Authoring Process
- Windows Installer File Extensions
- Installation Mechanism
- MSI Execution
- Components and Features
- How does Self-Repair work?

Installation Modes and MSIEXEC

- Installation Modes
- Command Line Options
- Windows Installer Logging
- Per-User versus Per-Machine installation

Identifying Products, Upgrades, Packages and Components

- What is a GUID?
- Windows Installer GUIDs

Properties

- Types of Properties
- Formatted Data Type
- Property Reference

Windows Installer Database

- Installer Database Tables

Windows Installer Actions

- How are actions executed?
- Standard Actions Reference
- Custom Actions
- System Reboots



Windows Installer User Interface

- User Interface Schema
- Dialogs
- Controls and Control Events

Patching and Upgrades

- Small Updates
- Minor Upgrades
- Major Upgrades
- Patching

Transforms and Merge Modules

- Transforms
- Merge Modules

Assemblies

Windows Installer Development Utilities

Setup Authoring Exercises with ORCA (3 Exercises)

Windows Installer XML

- What is WiX?
- Who built WiX?
- Advantages of Using WiX Toolset
- What are common WiX extensions?
- What are WiX Tools?
- What are .wxs & .wixobj files?

- Structure of .wxs files
- Symbols and references
- Structure of the .wixobj file
- What are WiX Tools?
- candle - Windows Installer XML Compiler
- light - Windows Installer XML Linker
- lit - Library Tool
- Dark – Decompiler
- Heat – Code generation tool
- Melt – Merge Module Converter
- Pyro – Patch Creation Tool
- Torch – Transform Tool
- Smoke – Validation Tool
- WiXCop – Migration Tool
- Setupbld – Setup Bootstrapper
- Wix Schema
- Windows Installer XML Standard custom actions
- What are Fragments?
- What are Include Files?
- Preprocessor

Windows Installer XML Exercises (26 Exercises) References and Additional Resources