

REVIEW LESSON

MTA Course: Windows Development Fundamentals

Lesson name: Windows Development Fundamentals 5.1A

Topic: Understand application deployment methods (One 50-minute class period)

File name: WinDevFund_RL_5.1A

Lesson Objective:

5.1: Understand Windows® application deployment methods. *This objective may include but is not limited to:* different methods of deploying Windows applications; choosing the appropriate method for deployment; deploying an application by using ClickOnce.

Preparation Details

Prerequisite student experiences and knowledge

This MTA Certification Exam Review lesson is written for students who have learned about Windows application programming. Students who do not have the prerequisite knowledge and experiences cited in the objective will find additional learning opportunities using resources such as those listed in the Microsoft® resources and Web links at the end of this review lesson.

Instructor preparation activities

- Make copies of Student Activity WinDevFund_SA_5.1A

Resources, software, and additional files needed for this lesson:

- WinDevFund_PPT_5.1A
- WinDevFund_SA_5.1A
- WinDevFund_SA_5.1A_Key

Teaching Guide

Essential vocabulary:

ClickOnce—a deployment technology used to distribute self-updating applications that require minimal user interaction during installation.

deployment—the process of packaging and distributing an application for installation on target computers.

Windows Installer—a deployment technology used to create installer packages that give users a wizard for installing applications.

application manifest—a file authored by the developer, using the manifest generation tool (Mage.exe); this file describes the application itself, including the assemblies, dependencies and files that make up the application, the required permissions, and the location where updates will be available.

deployment manifest—a file authored by the administrator using the manifest generation tool (Mage.exe); this file describes how the application is deployed, including the location of the application manifest, and the version of the application that clients should run.

CAB file—a .NET option for packaging a Windows application; the native compressed Windows archive format, which supports compression and digital signing.

Lesson Sequence

Activating prior knowledge/lesson staging (Anticipatory Set—5–10 minutes)

1. *Discussion prompt (as indicated in the slideshow):* “Explain the process that a user typically goes through to install an application on his or her computer. Give any specific examples you have of applications that featured a particularly easy or difficult installation process.”
2. Call on students to read their responses.
 - There is no “right” answer here—the objective is to get the students thinking about the installation process. Students may mention downloading files from a website or installing from a CD-ROM or DVD-ROM. They may also talk about providing information necessary for the installer to finish, such as file locations, registration information, and anti-piracy keys.

Lesson activity (20 minutes)

1. Review Windows application deployment using the Microsoft PowerPoint® slideshow.

Assessment/lesson reflection (20–25 minutes)

1. Students complete Student Activity 5.1A.
2. Review the worksheet with the class, discussing each problem.

Microsoft resources and Web links

MSDN Library: Deploying .NET Framework Applications

([http://msdn.microsoft.com/en-us/library/6hbb4k3e\(VS.80\).aspx](http://msdn.microsoft.com/en-us/library/6hbb4k3e(VS.80).aspx))

MSDN Library: .NET Framework Deployment Basics

(<http://msdn.microsoft.com/en-us/library/y18k4htb.aspx>)

MSDN Library: Choosing a Deployment Strategy

(<http://msdn.microsoft.com/en-us/library/e2444w33.aspx>)

MSDN Library: Walkthrough: Deploying a Windows-based Application

(<http://msdn.microsoft.com/en-us/library/k3bb4tfd.aspx>)