

REVIEW LESSON

MTA Course: Windows Development Fundamentals

Lesson name: Windows Development Fundamentals 5.1B

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

File name: WinDevFund_RL_5.1B

Lesson Objective:

2.5: 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.

It is recommended that students complete Lesson 5.1A, including the Student Activity Worksheet (WinDevFund_SA_5.1A).

Instructor preparation activities

- Consider modifying the Anticipatory Set to fit your class, as explained in the Microsoft PowerPoint[®] slideshow.
- If you have a network share or Web server, add that information to the PowerPoint slide titled “Deploying with ClickOnce.” Be sure to test deployment to the share or server before the lesson. Depending on the security architecture of the network, you may need to obtain the assistance of the network administrator to create a server, create permissions, or modify permissions, to accomplish this lesson’s objectives.

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

- WinDevFund_PPT_5.1B
- A Web server or network share. If this is not available, students can still deploy their project to local or removable storage.
 - See <http://msdn.microsoft.com/en-us/library/ms228998.aspx> for help configuring a Web server for ClickOnce deployment.

Teaching Guide**Essential vocabulary:**

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

ClickOnce Application—any Windows Forms, Windows Presentation Foundation (WPF), or console application published using ClickOnce technology.

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

Lesson Sequence**Activating prior knowledge/lesson staging (Anticipatory Set—10 minutes)**

1. *Student Prompt (as indicated in the slideshow):* “Use Microsoft Visual Studio® to create a simple “greeting” application: Prompt the user for his or her full name. When the user clicks a button, the application greets them by first name only. For example, typing “John Smith” and clicking the button would result in “Good morning, John” (in either a *Label* or a *MessageBox*).”
 - This Anticipatory Set can be modified to suit your class. Students could use an application they have already created, or they can create a simple application that uses a topic or skill recently studied.
 - If students have completed a major project, or simply a project that they might wish to deploy on target computers, consider using that for this activity.

Lesson activity (30 minutes)

1. Review the different options for ClickOnce deployment using the slideshow.

2. As indicated in the slideshow, allow students to try the different deployment strategies.
 - Note that even if students do not have access to a Web server or network share, they should still read through the “how to” information for those processes.

Assessment/lesson reflection (10 minutes)

1. *Student prompts (as indicated in the slideshow):* “Summarize the various ways ClickOnce applications can be deployed. Explain the different update-checking options available with ClickOnce.”
2. Discuss student responses to each prompt.

Microsoft resources and Web links

ClickOnce Deployment Overview

(<http://msdn.microsoft.com/en-us/library/142dbbz4.aspx>)

How to: Publish a ClickOnce Application

(<http://msdn.microsoft.com/en-us/library/31kztyey.aspx>)