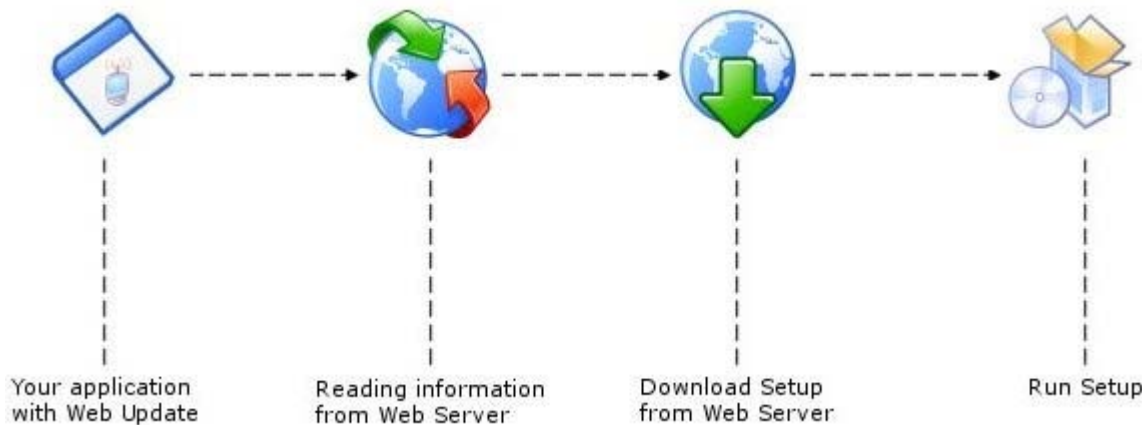SetupBuilder Online Documentation
Web Update

The requirement of needing a user to manually install an update is why rolling out client updates has traditionally been such a huge problem and expense. One solution is to move the responsibility of updating the application from the user to the application itself. Instead of the user obtaining and installing a software update, the client application itself is responsible for downloading and installing updates from a server. The only user interaction necessary is whether or not they want to install the new updates. You can see this type of approach to updating applications in action today with products like Windows XP and Vista or various virus scanner products.

iDeploy Web Update

Web Update provides an easy and royalty-free way for software application developers to simply add live Internet version updating to any program. iDeploy Web Update uses the Internet to make sure users have the most up-to-date versions of programs on their systems. It is an ideal way to automatically manage your software updates over the Internet. You can give your software a more dynamic feel to it by providing real-time download of upgrades and up to date news information to those users who need it most.

Your application with Web Update	Reading information from Web Server	Download Setup from Web Server	Run Setup

The first thing an application needs to be able to do in order to update itself is figure out when a new update is available. In order to do this an application needs to know three things 1) where to check for updates, 2) when to check for updates and 3) how to check for updates.

iDeploy Web Update is a companion technology that lets you install a small **Application Web Updater** client (wupdate.exe) with your application. The wupdate.exe executable is compiled from a native SetupScript script (source code included). Based on your settings, the wupdate.exe program will periodically offer the end user the option to check for updates on the Internet. If an update is found, wupdate.exe downloads and executes it. The wupdate.exe program can handle *traditional installers* and *web installer update packages*.

Both the wupdate.exe program and web installer update package use HTTP for all network communication. This allows you to update applications over the intranet or extranet. The iDeploy technology works using any type of HTTP server to store the installation data. Therefore your server can run on Windows, or it can run on Linux, Unix, Mac OS, or other operating systems. The requirement is that it supports HTTP/1.0, or HTTP/1.1. iDeploy works correctly with a wide variety of firewalls and proxy servers.

Web Installer Update Package

A Web Installer Update Package is essentially an installer that only updates an existing set of files to a new set of files over the Internet. For example, you may want to use a web installer update package to update instances of your application in the field from version 1.0 to 1.1. Web installer update packages are usually distributed free of charge, so even if you require users to purchase your software in shrink-wrapped format rather than by downloading from the Internet, updates can be made available via web distribution.

One essential difference between web installer updates packages and traditional installers is a web installer update package does not contain all of the information needed for a full installation. Rather, it contains the incremental differences between the base version and the revised version, in much the same way as backup utilities generate new backups after the first by adding or modifying only those elements that have changed.

One of the benefits of a web installer update package is to allow users to download only the data necessary for their installation. This means if they are performing a custom install of only part of your software, they should only need to download that part.

To address the when to check for updates, the individual application is responsible for checking for updates by calling the wupdate.exe program.

Check for Updates

iDeploy Web Update uses the **Server Manifest File** method to check for updates. A manifest file on the server includes the version number of the latest available product version and the URL (Uniform Resource Locator) where that version of the application resides. When the administrator wants to update the client applications, they would copy the new version of the app and the new server manifest file up to the Web server. The wupdate.exe program itself will then download the manifest file and compares the version number specified in the manifest with the version number of the installed application. If the server manifest file version is newer, the application knows its time to perform an update.

Downloading Updates

Once the application determines a new update is available, the update needs to be downloaded. By default, when the wupdate.exe program detects that a new update is available it will automatically download the update.

Performing Updates

Once the new update has been downloaded, the last step is to apply the update. This last step is by far the most challenging. The fundamental problem is that the application is trying to update its own files while running. Thus the files are locked. The only way to unlock the files is to stop the application. Force the user to shut down the application and wait in the middle of use was undesirable.

See Also

Configure iDeploy Web Update
Configure the Web Update Client