Background

Our Windows Visual Studio application needs to be deployed to over 10,000 employees and vendors. The target systems are Windows PCs, Laptops, and Tablets. Some of these end-users will be telecommuters and may be offline at times. All end-users will be using the application on a weekly basis.

Option 1 – Manual Copy of Application Files

The application files could be posted on a corporate network share. The end-user would then copy the files to a local folder on their Windows computer. The user would start the application by double-clicking the executable file. Application updates would be communicated through a post on corporate website or through global email messages.

Option 2 – ClickOnce Deployment

A Visual Studio ‘ClickOnce’ deployment could be published to a corporate network share or a corporate web server. The end-user would install using a setup.exe file from the network share. This would install the application files to the user’s local PC or tablet. Application updates could be communicated automatically through the ClickOnce update mechanism. The ClickOnce update mechanism automatically polls the published location to see if updates are available. The end-user is then given the option whether to update. The ClickOnce install method also allows for creation of Windows shortcuts. ClickOnce would also maintain a more uniform deployed environment across the many users.

Option 3 – InstallShield Deployment

A InstallShield deployment method could be created to produce a Windows Setup installer. The end-user would install from a corporate network share. Updates would need to be communicated through email or some other means since automatic detection of update availability is not possible as it is with ClickOnce. The InstallShield installer would allow for more granular options like Windows registry modifications.

Option 4 – Execute from Network Share

The application could be run by an end-user directly from network share. Maintenance periods would need to be communicated to users to allow developer updates to application files. A file opened by an end-user could prevent posting updated application files to the network share.

Deployment Choice

We recommend implementing the ClickOnce deployment option since it would allow for a more uniform and seamless update process. This deployment option would allow end-users to have their own user preferences stored in configuration files on their PC which would not be possible with the ‘Execute from Network Share’ option. The ClickOnce deployment would be scalable in case a network or local database was to be utilized by the application. The ClickOnce option would also allow for offline usage by telecommuters who may not always be connected to the virtual private network (VPN). InstallShield deployment option provides additional features like Windows registry modifications but there is no requirement to have application registry storage. InstallShield also lacks the automated update mechanism that ClickOnce possesses. Therefore, ClickOnce is the preferred choice.