The purpose of this document is to highlight what I’ve learned about application development and implementation throughout the creation of my script, Alarm Acknowledger (AA). I would like to clarify that I may use examples from my AA White Paper but this page will not dive into AA specific functions or features. The outline of this document is highlighted bellow:

* Initial process
* Problems encountered
* Ideal process

In order to give you a better understanding of the process improvements I’ve learned in regards to deploying a new program I will go over how AA was initially implemented within Amazon Corporate Security (ACS). AA is a script that runs off of a program named Auto Hot Keys (AHK). Once I discovered that AHK had the capacity to interact with Lenel I developed a script to assist operators with managing alarms. After the creation of AA I gathered metrics in order to develop a white paper and get approval to implement my script within ACS. Once approval was obtained there was a single testing phase then the program was distributed to all operators as a non-mandatory tool. Multiple updates were implemented and approximately five months later the program was redistributed as a mandatory tool. Multiple updates were implemented after this.

Though AA was a successful program there was a lot that can be learned from how it was implemented. The first issue that I would like to highlight was the fact that the program was created in full prior to receiving approval. This may not seem like a major issue but if there was a separate program already in development then there’s a possibility that the time spent creating AA could go to waste. Another issue I feel is important to highlight would be that there was only one testing phase. Because of this there were multiple updates that needed to be created in order to address all the issues. These updates were pushed out as soon as the issues were discovered meaning operators were updating very frequently which became a nuisance. The last remaining issue with the original implementation of AA was that there was a single point of failure, if I were to move to another department or leave the company ACS would be left without the ability to implement updates or changes to AA.

Now that we’ve gone over how AA was implemented I would like to explain what I would consider to be the ideal process.

1. Idea: An individual sees a way to improve a process or create a program that would benefit a team or person.
2. White paper: A white paper is drafted that outlines the benefit of the process improvement / program and lists all possible problems that may be encountered during development.
3. Approval: The white paper is submitted to leadership and gains funding / approval to move forward to the Beta stage.
4. Documentation: develop a method to document all steps taken regarding the program. Update this documentation method with everything you can think of.
5. Beta: If the white paper is approved a beta version is developed
   * Program: Try to develop the program so it would be ready for use.
   * Process improvement: If possible create a model for your process improvement that could be implemented to a few people.
6. Testing: select three to five people you believe will be able to find flaws with your program / process and will provide helpful feedback.
   * Repeat steps four and five until you can confirm there are no issues with the program / process
7. Alpha: Take all the user feedback generated by the testing phase and develop an Alpha version of the program / process.
8. Testing: Select three to five people (Not the same people from the original testing phase) people you believe will be able to find flaws with your program / process and will provide helpful feedback.
   * If there are issues with the program / process encountered during this phase move back to phase four.
9. Training: Develop a training that will explain how the end user is going to utilize the program / process improvement
10. Release: once all the steps have been completed distribute your program to the end user along with the created training / documentation.
11. Maintenance: Once the program has been released there may be requested changes / bugs found. This will require assigning an individual or group of individuals to maintain the program/ process improvement.

When you compare the “Ideal process“ outlined above with how I implemented AA you will notice multiple differences that, if done correctly, could have saved time and created a more efficient implementation of the program.