STP Tool Development Plan

# Introduction & Justification

This project will automate software test plans. This will allow Sensit to (1) automatically document test results, (2) increase productivity by automating manual labor for testing, and (3) decrease time-to-market for new products by providing thorough, accurate test results to developers.

Requirements

The first iteration of the project will be a desktop app which automates most of the paperwork of manual test execution. The deliverable is a desktop application with the following abilities:

* Present manual tests to a tester.
* Record test results in a database (preferably integrated with Jira).
* Email stakeholders a report detailing test results, and steps to reproduce a bug.
* Import existing tests from Excel or CSV.
* Export tests and test results from the database to Excel or CSV.

After the initial application is delivered, test plans will be gradually automated by adding support for hardware such as the calibration station, datalogger, multimeter, etc. to the SDK. As automation tools are added to the SDK, those tools may also be used to streamline production of the G3.

# Development Plan

The application will be organized into three projects:

* A Software Development Kit (SDK) which contains utilities for each of the deliverables and can be reused in future desktop applications.
* An STP application which utilizes the SDK to present the deliverables to the user.
* A collection of unit-tests for the SDK to aid development and maintenance.

To facilitate code reuse, the SDK, its unit-tests, and the STP application will be stored in one or more version-controlled repositories.

The STP tools will be developed in C# using Visual Studio. Softronics and Sensit USA are familiar with these technologies and can easily support them. The project is intended to be useful company wide, so Sensit USA will provide regular updates to Softronics and Sensit EMEA teams.

Development will begin without waiting for the purchase of Visual Studio licenses. Therefore, deliverables that do not require intellectual protection (i.e. code to read or write to an Excel file or send an email), will be released under an open-source license. Any proprietary code will be developed last.

# Revision History

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| **Date** | **By** | **Change Description** |
| 4/25/2018 | Adam Johnson | Initial revision. |