

# iBudget

## Software Configuration Management Plan

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### Revision History

Date	Author	Version	Reason
2/10/12	J. Reimels	1.0	First Draft
2/11/12	V.Velev	1.1	Added "Naming Configuration Items"

The table of contents of this SCMP follows that of IEEE standard 828-1990.

# 1. Introduction

This Software Configuration Management Plan (SCMP) describes how the artifacts for the iBudget project are to be managed.

## 1.1. Acronyms

Acronym	Definition
CI	Configuration Item - an item tracked by the configuration system
CM	Configuration Management - the process of maintaining the relevant versions of the project
SCMP	Software Configuration Management Plan - this document

## 1.2. Terms

Term	Definition
Approved CI	CI signed off by project management
Artifact	A final or interim product of the project (i.e. a document, source code, object code, or test result)
Master File	A particular designated file for this project, defined in section 3.1.2

# 2. SCM Management

## 2.1. Organization

A specific engineer, provided by the QA organization, will be designated as the "configuration leader" for the duration of the project.

A Configuration Control Board consisting of all stakeholders will be provided for the project.

## **2.2. SCM responsibilities**

### **2.2.1. Configuration leader**

The configuration leader shall be responsible for organizing and managing configuration management (CM). Whenever possible, the configuration leader shall discuss CM plans with the development team prior to implementation. He or she will maintain this document (the SCMP). The configuration leader is responsible for the installation and maintenance of the configuration management tool(s) specified in section 2.3.

Additional responsibilities of the configuration leader are slated in sections 3.3, 3.4, 3.5, and 3.6.

### **2.2.2. Project leader**

The project leader will take over the configuration leader's function only under exceptional circumstances. They are responsible for knowing all the relevant means of access to documents throughout the life of the project.

Additional responsibilities of the managers are stated in sections 3.3 and 3.4.

### **2.2.3. Engineers**

It is the responsibility of each engineer to abide by the CM rules which the configuration leader publishes.

Additional responsibilities of the engineers are stated in section 3 below.

## **2.3. Applicable policies, directives and procedures**

- All current and previously released versions of CI's will be retained.
- The master file (defined in section 3.1.2) can be accessed only by the configuration leader and, in his or her absence, the project leader.
- The project leader and department manager are to have complete access to all documents under configuration at all times.
- The iBudget project will use subversion as implemented in Google Project Hosting.

- Commits are to be performed regularly, and all versions of all CI's will be kept in version control.

## 3. SCM Activities

### 3.1. Configuration identification

#### 3.1.1. Identifying configuration items

The project leader shall be responsible for identifying all CI's. Engineers wishing to propose CI's shall secure his or her agreement. E-mail is an acceptable form for this, as this is a small group, everyone should be cc'd.

#### 3.1.2. Naming configuration items

The configuration leader shall have the responsibility for labeling all CI's.

The file convention for documentation (SCMP, SPMP, etc) shall be as follows:

Root directory: svn

Subdirectory: trunk/Documents/SCMP or trunk/Documents/SPMP, etc.

File docName\_N\_N.xxx corresponds to version N.N of the document.

For example, version 2.3 of the SCMP will be on file:

svn/trunk/Documents/SCMP/SCMP\_2\_3.pdf

The text file Master in the root directory states the versions of the CI's that comprise the current and prior states of the project.

For example, Master could include information such as.

The current version of svn is 3.7.1. It comprises version 2.4.8 of the SRS, version 1.4 of the SDD etc.

The previous version of svn was 3.6.11. It comprised version 2.4.8 of the SRS, version 1.3 of the SDD etc.

This information shall be maintained in a table of the following form.

svn release	SRS version	SDD version	

### 3.1.3. Acquiring configuration items

Engineers requiring CI's for modification shall check them out using Google Project's subversion checkout procedure.

## 3.2. Configuration control

### 3.2.1. Requesting changes

Before requesting a change, engineers must obtain an inspection of the proposed change from another member of the team.

### 3.2.2. Evaluating changes

The project leader or his designee will evaluate all proposed changes. The project leader must also specify the required quality standards for incorporation.

### 3.2.3. Approving or disapproving changes

The project leader must approve proposed changes. If the project leader is unavailable for four days following the submission of a proposed change, the configuration leader shall have the authority to approve changes.

### 3.2.4. Implementing changes

Once a CI is approved for incorporation into the baseline, the engineer implementing the change shall be responsible for coordinating the testing and integration of the changed CI.

Version releases must be cleared with the project leader or the configuration manager in his or her absence.

## 3.3. Configuration status accounting

The configuration leader shall update the configuration summary at least once every two weeks on the project's Google Project Wiki page <http://code.google.com/p/cs679-b1-class-project/w/list>.

### **3.4. Configuration audits and reviews**

The project manager shall schedule a review by the CM leader of the configuration at least once every two weeks as an agenda item on the regularly scheduled weekly project meeting. The CM leader shall review CM status, and report on the proposed detailed procedures to be followed at code and integration time.

### **3.5. Interface control**

The CM system interface shall be used as implemented by Google Project.

### **3.6. Subcontractor/vendor control**

As the timeline for this project is 4 months, there is no concern of the discontinuation of any third party applications being used.

## **4. SCM Schedules**

The schedule for configuration management reporting, archiving and upgrading is as follows:

- A configuration management report will be given every other team meeting
- Archiving will not be done, as the project is hosted in Google Project
- There is no plan for upgrading given the length of this project

## **5. SCM Resources**

Configuration leader will require an estimated average of three hours a week to maintain the system configuration for the first half of the project, and six hours a week for the second half. We have chosen not to call out separately the time spent by the other team members on configuration management.

## **6. SCM plan maintenance**

Due to the importance of a stable SCM plan, all changes to this document must be approved by the entire team.