

# Configuration Management Plan

From TeamF::CGT

## Contents

- 1 Abstract
- 2 Introduction
  - 2.1 Purpose
  - 2.2 Document Scope
  - 2.3 References
  - 2.4 Definitions
  - 2.5 Roles and Responsibilities
- 3 Tools and Techniques
  - 3.1 Version Control
  - 3.2 Maintenance and Backup
  - 3.3 Email
- 4 Resources
  - 4.1 Online Resources
  - 4.2 Hardware Resources
  - 4.3 Software Resources
- 5 Policies, Directives and Procedures
  - 5.1 Group Repository Usage
  - 5.2 Individual Workspace Usage
  - 5.3 Team Wiki Usage
  - 5.4 Document Tags in Subversion
    - 5.4.1 Tagging Procedures
- 6 File and Directory Standards
  - 6.1 File and Directory Structure
  - 6.2 Naming Conventions in Subversion
  - 6.3 Naming Conventions in Wiki

## 1 Abstract

---

This document provides solutions to any configuration management issues for the CGT project. It specifies configuration management policies, tools and resources.

## 2 Introduction

---

### 2.1 Purpose

The purpose of this document is to identify and describe solutions for configuration management during lifetime of the CGT project. Contents include both software configuration items and hardware configuration items, and will be updated progressively as the project proceeds or necessity arises. The CMP should be used as a guide for the team, for any actions related to configuration.

### 2.2 Document Scope

The document clarifies issues relating to:

- Identification, definition, and baselining configuration items
- Control of modifications and releases of configuration items
- Reporting and recording status of configuration items and modification requests
- Measures for ensuring completeness, consistency, and correctness of configuration items
- Control of storage, access and delivery of configuration items

### 2.3 References

### 2.4 Definitions

---

## 2.5 Roles and Responsibilities

- Configuration management team:
  - Make managerial decisions about configuration management
  - Update the current policies for configuration management
  - Communicate with rest of the team to ensure that they understand and follow the rules set out in this document
- Team F:
  - Raise any issues related to this document or to configuration management as a whole
  - Understand and follow the rules set out in this document

## 3 Tools and Techniques

### 3.1 Version Control

The team use Subversion for version control of configuration items, including:

- Program code
- Some project documentations
- Meeting agendas and minutes
- Project plan
- Review and audit reports
- Research reports
- Maintenance scripts
- Document templates
- Project website

### 3.2 Maintenance and Backup

Maintenance of the group directory and backup of the group repository and team wiki are mostly done using scripts triggered periodically by cron jobs. The following set of scripts and cron jobs are implemented for their corresponding purposes:

- **Backing up repository locally:** The repository is backed up incrementally at 5am, 12pm and 7pm everyday, using the scripts "svn-fast-backup.py" and "repos\_backup.sh".
- **Backing up repository externally:** The backup folder containing the all the backups are copied to an external computer once per week and burned into a recordable CD once per month.
- **Checking out directories:** The "scripts" and "www\_public" directories under the group directory are checked out from "scripts" and "web" folders of the group repository every 15 minutes. Therefore, manual checkout of items is not needed once they have been checked in to the repository. The script for automatic checkout is "repos\_checkout.sh".
- **Resetting permissions:** Permissions of directories or files under the group directory are resetted using the script "setperms.sh". This script is supposed to be placed under each team member's home directory, along with a modified ".bash\_logout" file that invokes this script every time a team member logs out from bash shell.
- **Backing up wiki software:** The wiki system in use, MediaWiki, and the customised configuration scripts for it, are backed up to a recordable CD permanently. Any change to the wiki system will be backed up accordingly to that CD as well.
- **Backing up wiki data locally:** The wiki database is dumped to the local machine daily.
- **Backing up wiki data externally:** The SQL dump of the wiki database is copied to an external computer once per week.

All the scripts are stored under the "scripts" folder in group repository.

### 3.3 Email

All email sent to the team will be archived to */home/se440/s440gf/Mail* using procmail. The procmail script will be run by sptaitz is located in the scripts folder of the repository.

## 4 Resources

### 4.1 Online Resources

- Team website: <http://www.cs.mu.oz.au/SE-projects/s440gf/>
  - Team information
  - Project description
  - Individual timetables
  - Links to documentations in static PDF format
- Team wiki: <http://www.eirikr.net/projects/cgt/wiki/>
  - Project documentations
- Server440: <http://server440.cs.mu.oz.au/~s440gf>
  - dotProject (groupware)
  - Mantis (bug reporting tool)

## 4.2 Hardware Resources

- Computers in the lab:
  - Lab 2.12, 2.13 and 2.11 are computer labs for 440s
  - One computer will be allocated to the team, that has all the software the team needs. It will be labelled as [TEAM F].
  - Other teams also have their allocated computers as servers, or for other purposes. These computers are either labelled or have red sticker on the monitor. Team F should not use, shut down or restart these computers in the lab at all time.
  - The usage for the computers in the lab is under the condition of "first come first serve".
  - If any computer in the lab has no label or sign indicating team allocation, it can be used if it is not currently used by other 440 students.
  - Be carefully before locking any computer in the lab. Please do not lock the computer if any member of the team needs to be away from the PC for more than 15 mins.
  - General CSSE computer usage rules apply.
- Printers:
  - Team F are able to print their documents from the following printers:
    - ug.09, 1.10, 2.11, 2.12, 2.13, 2.14
  - The hard limit of the print quota is 500 per person.
  - Printer 2.13d is for printing document double sided.
  - To check the print quota:
    - Once a print command is sent, a email will be send to your CSSE email account, indicating the pages printed, and the remaining print quota.
    - Team can check out their individual print quota at all time by entering the following command under unix system:  
*prquota lw.PRINTER\_NAME*

## 4.3 Software Resources

- Visual Studio 2005:
  - Copies can be purchased from MUCSA

## 5 Policies, Directives and Procedures

### 5.1 Group Repository Usage

Keeping in mind the importance of the repository for a year-long project such as this, the following rules are composed to ensure the consistency and security of the repository.

- Except members of SA team, no one should use "svnadmin" command directly under the group repository.
- Under no circumstances should a team member access the repository directly, by either adding or modifying files.
- If a mistake is committed to the repository, there are always move and remove facilities in Subversion to help recover. Repository backup also happens three times a day to ensure recoverability.
- Whenever a team member feels lost in Subversion, consult the Subversion guide, man pages or Google. Alternatively, direct any question to the SA team. A team member should not go ahead and fix a problem himself unless he is well aware of what he is doing.

### 5.2 Individual Workspace Usage

Each team member has a personal workspace located at [GROUP]/workspaces/[LOGIN]. The workspaces are for each individual to use and will not be included in the team backup.

### 5.3 Team Wiki Usage

Team wiki policies are outlined on the wiki Help Page at <http://www.eirikr.net/projects/cgt/wiki/index.php?title=Help:Contents>.

## 5.4 Document Tags in Subversion

### 5.4.1 Tagging Procedures

The tagging procedure in Subversion is as follows:

1. Execute "`cd $PATH_TO_WORKSPACE/documents`".
2. If the document *[DOC]* does not currently have a directory under *documents/tags*, execute "`svn mkdir tags/[DOC]`".
3. Execute "`svn cp trunk/[DOC] tags/[DOC]/[TAG]`".
4. Execute "`svn commit`".

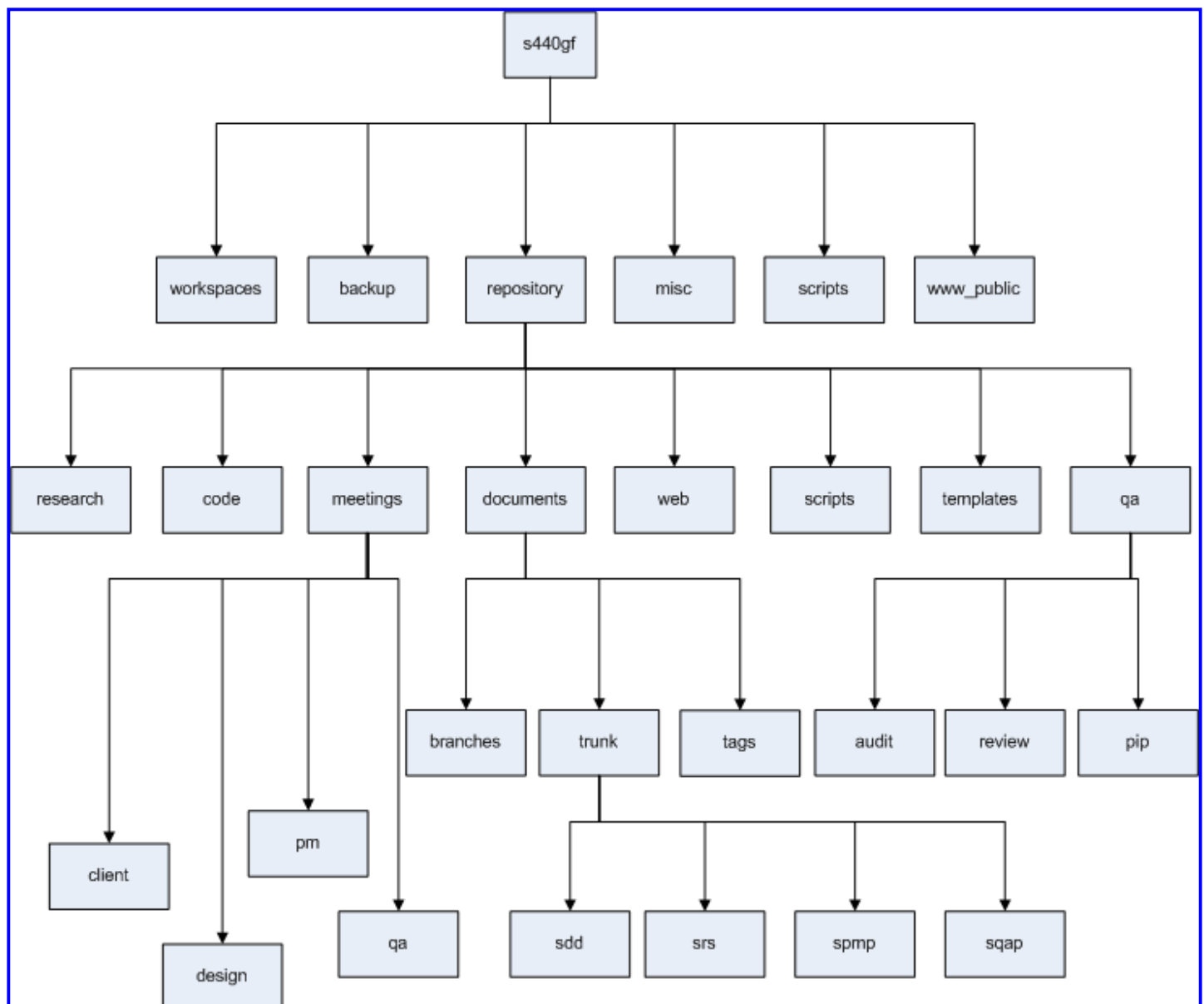
The tags in use are:

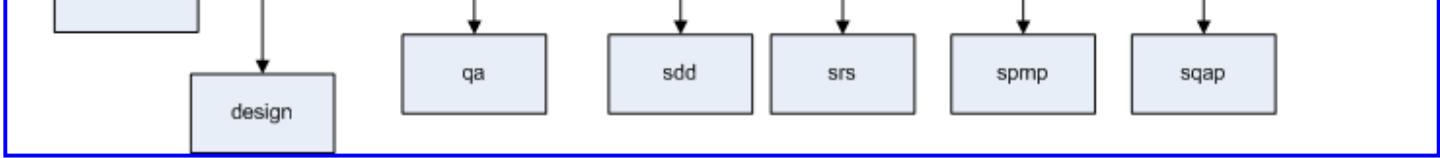
- **DRAFT**: Initial document creation. This is not when you first start writing, but when you first have a version of the document.
- **REVIEW#**: After it has been updated from the #th review.
- **BASELINE**: After all updates has been done, no more information needs to go into the document.
- **INC**: After the document has been baselined, any changes made to the document will need to be tagged as **INC**.

## 6 File and Directory Standards

### 6.1 File and Directory Structure

The group directory is located at `"/home/se440/s440gf/"` on the Computer Science servers at the University of Melbourne.





Team Directory Structure

## 6.2 Naming Conventions in Subversion

File type	Naming template
<b>Audit report</b>	audit_type_YYMMDD_login.txt
<b>Audit response</b>	audit_type_YYMMDD_response_login.txt
<b>Review report</b>	review_doc_YYMMDD_login.txt
<b>Review response</b>	review_doc_YYMMDD_response_login.txt
<b>Agenda</b>	YYMMDD_agenda.txt
<b>Minutes</b>	YYMMDD_minutes.txt
<b>PIP</b>	pip_YYMMDD.txt

where

- *YYMMDD* is the year, month, and date of:
  - The meeting
  - The start date of the review
  - The start date of the audit
  - The start date of the response
- *login* is the CS login for the person who authored the file
- *doc* is the acronym of the relevant document that was reviewed (sqap, srs, sdd, etc.)
- *type* is the audit type that has taken place (managerial, coding, documentation etc.)

## 6.3 Naming Conventions in Wiki

Team wiki naming conventions are outlined on the wiki Help Page at <http://www.eirikr.net/projects/cgt/wiki/index.php?title=Help:Contents>.

---

Retrieved from "[http://www.eirikr.net/projects/cgt/wiki/index.php?title=Configuration\\_Management\\_Plan](http://www.eirikr.net/projects/cgt/wiki/index.php?title=Configuration_Management_Plan)"

This page has been accessed 114 times.  
This page was last modified 2006-04-28 13:34:39.  
Content is available under Attribution-NonCommercial-ShareAlike 2.5.