Configuration Plan

C-TALK

Version 1.0

Author:
Sachin Jangid(201452060)
Sunny Sankhlecha(201452061)

Indian Institute of Information Technology Vadodara

Team members :

TEAM MEMBER	ID
Bhoopendra Singh	201452020
Shikhar Dhing	201452021
Venkata Sandeep	201452037
Anjali Kumari	201452042
Vipin Sahu	201452051
Prahlad	201452052
Sachin Jangid	201452060
Sunny Sankhlecha	201452061
Kenneth Tenny	201452066

Revision History

Version	Description	Authors	Reviewers
1.0	Configuration Plan	Sunny, Sachin	Kenneth

Contents

1 Introduction

Software configuration management (SCM) is a software engineering discipline consisting of standard processes and techniques often used by organizations to manage the changes introduced to its software products. SCM helps in identifying individual elements and configurations, tracking changes, and version selection, control, and baselining.

SCM is also known as software control management. SCM aims to control changes introduced to large complex software systems through reliable version selection and version control.

SCM activities include:

- Identifying configurations, configuration items and baselines.
- Review, approval and control of changes.
- Tracking and reporting of such changes.
- Facilitate team interactions related to the process.
- Control of Interface documentation.

2 Management

SCM management gives a brief idea regarding the allocation of responsibilities and authorities and their management to both the organisation and the user as well.

2.1 Roles and Responsibility

Project Manager	The Project Manager is charged with the responsibility of keeping a record of each document and what state the document is in.	Kiran and Shrikanth
Configuration Manager	The main function of the ConfigurationManager is to organise the configuration management activities andkeep a track of every change going on.	Karra Sandeep
Developers	All the members of our team .They work according toconfiguration management plan	IT-2

3 SCM Activities

SCM activities information identifies all functions and tasks required to manage the configuration of the software system as specified.

3.1 Configuration Itemisation

DESCRIPTION :
The main purpose of Configuration Identification activity is to determine the Configuration Items. Identification is one of the most important parts of Configuration Management, as it is impossible to control something whose identity you don't know.
Thus, appropiate document can be reffered whenever needed. **Configuration Item** :
It is the most fundamental unit of a Configuration Management Plan. E.g. requirements, documentation, models, plans.

3.2 Configuration Control

Description:
Software engineers will submit a change request to the Software configuration management leader. The SCM leader will then analyze the request. Once his decision has been made, he must submit the change to the software engineer of his choice, as well as updating the SCI document to accommodate the

change.
Description of Configuration Control task :

- Request Analysis:

  The SCM leader will then analyze the request, using the SCI document, the project design document, and the current prototype of the software. He will base his decision on how severely the change will impact the entire system and, more importantly, on the corresponding subsystem .

- Request Disapproval:

  If the SCM leader deems the change unnecessary , he will contact the software engineer who made the request and explain the reason the request was denied . The software engineer may discuss this decision with the SCM leader at this time, and submit a modified change request if a different understanding is reached .

- Request Approval:

  If the SCM leader deems the change necessary , he will update the SCI document to reflect the change . This may include changes with the corresponding subsystem , and any impact it may have on the entire system. Once the SCI document has been amended, it will returned to the software engineer and he will be notified of all possible affected subsystem for surveillance after the change has been introduced .

4 Version Control

Whenever the system or a subsystem is updated, the program build number (version number) will be updated to reflect the change.

- Minor version control:

  When a minor bug is fixed in the software, the hundredths place digit will increase. This change reflects a singular error being corrected, or

a minor design change that has little or no impact on the surrounding subsystem.

- Substantial version control:

  When a more substantial change is made to the software, the tenths place digit will increase. This change reflects the correction of many minor bugs simultaneously, or design changes that are substantial enough to affect the way the software operates internally.

- Severe Version Control:

  When a severe change is made to the software, the ones place digit will increase. This change reflects any design decisions that will affect the significant portion of the subsystems interact with each other, a major change in the functionality of the software.

5 Resources

Software:
No special software is required but access to a central database containing the SQA(software quality assurance) would be preferable in communicating between the SQA team and software engineers.

6 Plan Maintenance

The Configuration manager monitors the Software Configuration Management plan. If new guidelines are suggested then Configuration manager needs to change the Software Configuration Plan accordingly. While the review team reviews the changes made to the existing Software Configuration Management Plan, even modifies it wherever required and then informs the team about the changes made in the Software Configuration Management plan. This Plan is referred during the starting of every phase. Appropriate changes are made if necessary and then the Plan is distributed to the team.