

SNS COLLEGE OF TECHNOLOGY



Coimbatore-37. An Autonomous Institution

COURSE NAME: 19CST201-Agile Software Engineering

II YEAR/ III SEMESTER

Topic: Software Configuration Management

Mrs.G.Swathi
Assistant Professor
Department of Computer Science and Engineering



Introduction



- In Software Engineering, **Software Configuration Management(SCM)** is a process to systematically manage, organize, and control the changes in the documents, codes, and other entities during the Software Development Life Cycle.
- The primary goal is to increase productivity with minimal mistakes.
- SCM is part of cross-disciplinary field of configuration management and it can accurately determine who made which revision.



Task



- Configuration Identification
- Baselines
- Change Control
- Configuration Status Accounting
- Configuration Audits and Reviews





Configuration identification:

- Configuration identification is a method of determining the scope of the software system.
- With the help of this step, you can manage or control something even if you don't know what it is.
- It is a description that contains the CSCI type (Computer Software Configuration Item), a project identifier and version information.

BaseLine:

- A baseline is a formally accepted version of a software configuration item.
- It is designated and fixed at a specific time while conducting the SCM process.
- It can only be changed through formal change control procedures.





Change control is a procedural method which ensures quality and consistency when changes are made in the configuration object.

Configuration status accounting tracks each release during the SCM process.

Software Configuration audits verify that all the software product satisfies the baseline needs. It ensures that what is built is what is delivered.







Configuration Manager

- Configuration Manager is the head who is Responsible for identifying configuration items.
- CM ensures team follows the SCM process
- He/She needs to approve or reject change requests

Developer

- The developer needs to change the code as per standard development activities or change requests. He is responsible for maintaining configuration of code.
- The developer should check the changes and resolves conflicts

Auditor

- The auditor is responsible for SCM audits and reviews.
- Need to ensure the consistency and completeness of release.





Project Manager

- Ensure that the product is developed within a certain time frame
- Monitors the progress of development and recognizes issues in the SCM process
- Generate reports about the status of the software system
- Make sure that processes and policies are followed for creating, changing, and testing

User:

The end user should understand the key SCM terms to ensure he has the latest version of the software



References



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- Mike Cohn, "User Stories Applied: for Agile Software", Addison Wesley, 2nd Edition, 2015.





