

Software Configuration Management (SCM) Overview

Software Configuration Management (SCM) is a discipline for controlling the evolution of software systems. It involves identifying configuration items, controlling changes, and recording the status of software development artifacts.

Key Activities in SCM

1. **Configuration Identification:** Identifying the items that need to be controlled.
2. **Change Control:** Managing changes to configuration items in a systematic way.
3. **Configuration Status Accounting:** Recording and reporting the status of configuration items.
4. **Configuration Audits:** Verifying that configuration items are correct and that changes are properly implemented.

Benefits of SCM

- Improved product quality
- Easier maintenance
- Better team coordination
- Faster bug tracking and rollback

Version Control Systems (VCS)

Version control systems track changes to files and support collaboration. Popular tools include Git, Subversion (SVN), and Mercurial.