Software Configuration Management

• Definitions
  – The discipline of identifying the configuration of a system at distinct points in time for the purpose of systematically controlling changes to the configuration and maintaining the integrity and traceability
  – IEEE610.12-90
    • A discipline applying technical and administrative direction and surveillance to: identify and document the functional and physical characteristics of a configuration item, control changes to those characteristics, record and report change processing and implementation status, and verify compliance with specified requirements.
What are configuration items?

- Artifacts
  - Requirements documents
  - Source code
  - Test code
  - Meeting notes
  - Configuration files
  - Build scripts
SCM Plan

• What configuration items will be under revision control?
• How will items be organized?
• Who has what responsibilities?
• Where will configuration items be stored?
• What tools will be used?
• How will changes be approved/rejected?
Software Release Management

• Software development environment
  – Can we ensure everyone is using the same development environment?

• Software builds
  – How much can be automated?

• Software releases
  – Identifying, packaging, delivering the product