

Software Configuration Management Plan – Sample

1. Introduction

This Software Configuration Management (SCM) Plan defines the configuration management activities for the Passport Automation System project.

It ensures that all software components, documents, and system changes are properly identified, controlled, tracked, and verified throughout the system development life cycle. The goal is to maintain the integrity, consistency, and traceability of the system while enabling controlled evolution of the software.

2. Configuration Identification

Configuration items (CIs) for the Passport Automation System include:

- Requirement documents (SRS, user requirements)
- Design documents (system architecture, UML diagrams)
- Source code (frontend, backend, database scripts)
- Test plans and test cases
- User manuals and deployment files

Each configuration item is assigned:

- A unique identifier
- A version number (e.g., v1.0, v1.1)
- Date and author information

Version control tools such as **Git** will be used to maintain different versions of software and documents to ensure traceability and easy rollback when required.

3. Configuration Control

A formal change control process will be followed to manage modifications to configuration items:

- All change requests must be submitted in written form
- Changes are reviewed by the Project Manager or Change Control Board (CCB)
- Only approved changes are implemented

- Unauthorized changes are strictly prohibited
- Emergency changes follow a fast-track approval process

This ensures system stability, minimizes risks, and prevents uncontrolled changes in the Passport Automation System.

4. Configuration Status Accounting

Configuration status accounting ensures that all changes are properly recorded and reported.

It includes:

- Logging every change request
- Maintaining version history
- Tracking the status of changes (proposed, approved, implemented, rejected)
- Generating reports on current system versions and pending updates

This helps stakeholders know the exact status of each configuration item at any point in time.

5. Configuration Audits

Configuration audits are conducted periodically to verify that:

- Configuration items match their documentation
- Approved changes are correctly implemented
- No unauthorized modifications exist
- The system conforms to its specified requirements

Audits help ensure quality, compliance, and consistency in the Passport Automation System.