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IEEE Standard for Software Configuration Management Plans

IEEE Standards Board

Approved September 28, 1990

Sponsor

**Software Engineering Standards Subcommittee of the
Technical Committee on Software Engineering
of the
IEEE Computer Society**

Abstract: IEEE Std 828-1990, IEEE Standard for Software Configuration Management Plans, establishes the minimum required contents of a Software Configuration Management Plan and defines the specific activities to be addressed and their requirements for any portion of a software product's life cycle.

Keywords: configuration control board, configuration items, software configuration management, software configuration management activities.

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Foreword

(This Foreword is not part of IEEE Std 828-1990, IEEE Standard for Software Configuration Management Plans.)

This standard is concerned with the activity of planning for software configuration management (SCM). SCM activities, whether planned or not, are performed on all software development projects; planning makes these activities more effective. Good planning results in a document that captures the planning information, makes the information the property of the project, communicates to all who are affected, and provides a basis for ongoing planning.

SCM is a formal engineering discipline that, as part of overall system configuration management, provides the methods and tools to identify and control the software throughout its development and use. SCM activities include the identification and establishment of baselines; the review, approval, and control of changes; the tracking and reporting of such changes; the audits and reviews of the evolving software product; and the control of interface documentation and project supplier SCM.

SCM is the means through which the integrity and traceability of the software system are recorded, communicated, and controlled during both development and maintenance. SCM also supports reduction of overall software life cycle cost by providing a foundation for product and project measurement.

SCM constitutes good engineering practice for all software projects, whether phased development, rapid prototyping, or ongoing maintenance. It enhances the reliability and quality of software by

- Providing a structure for identifying and controlling documentation, code, interfaces, and databases to support all life cycle phases
- Supporting a chosen development/maintenance methodology that fits the requirements, standards, policies, organization, and management philosophy
- Producing management and product information concerning the status of baselines, change control, tests, releases, audits, etc.

IEEE Std 828-1983 was originally prepared by a Working Group of the Software Engineering Standards Subcommittee of the Technical Committee on Software Engineering of the IEEE Computer Society and approved in June, 1983, by the IEEE Standards Board. This current standard is the first revision and has been completely rewritten to

- Update the standard to recognize current software engineering practices
- Be consistent with IEEE Std 1042-1987, IEEE Guide to Software Configuration Management, which is anticipated to be reviewed and revised as Std 828.1 to maintain this consistency
- Be more flexible and easier to use for all levels of expertise

Introduction

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