Roundtable® TSMS: Software Configuration Management for OpenEdge® Development

What is Software Configuration Management?

Software Configuration Management (SCM) is the practice of managing the ongoing development, deployment, and maintenance of an evolving software product. SCM entails four primary activities:

- **Configuration identification**. Identifying each component (program, image, document, etc.) of the software product at a specific stage of its life cycle, including the identification of the configuration that the components belong to, such as a test build, a beta release, a specific production release, or a customized configuration.
- **Configuration control**. Policies and processes to control who can make changes to a configuration, in what areas, and when the changes can be made.
- **Configuration auditing**. Ensures that a software project is on track and building what is actually required. Auditing is facilitated by maintaining a record of changes to a configuration, including when the changes were made, why they were made, and who made them. Configuration status accounting (see below) is a significant contributor to configuration auditing.
- **Configuration status accounting**. Communicating the status of a configuration and its components to the development team. Configuration status includes such things as whether or not a program needs to be compiled, when a development task has been completed, or if a release has been tested.

SCM vs. Version Control

Version control is an essential part of managing software development. Version control tools are typically focused on the individual components that make up a software product, providing a means for checking-out components from a code repository and checking them in, while recording the ancestry, or version history, for each version of a component. SCM recognizes the importance of the whole software product. True SCM includes version control, but goes beyond simple version control to manage the configurations those component versions belong to and to manage the promotion of releases across the development life cycle.

The difference between SCM and version control is illustrated in the following table:

Feature	*SCM*	*Version Control (CVS)*
Source control	√	√
Dependency tracking	√	
Change Policy Control and Standardization	√	
Build system	√	
Auditing and Reporting	√	
Rollback Capability	√	√
Customer installation	√	

Why Roundtable?

Roundtable® TSMS (Total Software Management System) delivers a powerful SCM system to the OpenEdge application development environment. In addition to providing the configuration identification, controls, auditing and status information that is useful to project managers, Roundtable boosts the productivity of the entire development team with such features as impact analysis (showing everywhere a component is referenced in a configuration), automatic check-in, release promotions, and incremental compilation. Roundtable even assists end users by producing automated deployment packages that enable them to install your application with just a few keystrokes or mouse clicks. Roundtable is built using OpenEdge technology, written by OpenEdge developers for OpenEdge developers.