

# TUTORIAL 4

## Software Repositories

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A software repository is a special kind of information system maintaining information about one or more software components and supporting a number of control functions. The information may range from software code, to design and requirements specifications, design decisions, test data, software versions and configurations. Control functions may include check-in/check-out facilities, work flow and notification mechanisms and others specifically tailored for software development, evolution, reuse or re-engineering. The purpose of this tutorial is to review the state-of-the-art for software repositories and outline some of the research issues that are currently being addressed in the development and implementation of new software repositories based on ever-more powerful conceptual models and handling efficiently an ever-broader range of control functions.

In particular, the tutorial will cover the following topics:

- Current practice
- Software clearinghouses and libraries
- Repositories for software development
- Information to be included in a software repository
- Modelling features required to represent such information
- Software repository implementation problems
- Examples