Software Configuration Management (SCM) Course

It worked yesterday, what happened?

By Dr. Leah Goldin

Introduction:

Software configuration management (SCM) procedures define how to record and process proposed software system changes, how to relate these to system components, and the methods used to identify different versions of the system software.

This course introduces the concepts and methods required for effective and efficient software configuration management and the key problems that can arise from configuration management failures. It aims to develop a broad understanding of SCM application, of standards and procedures, for managing an evolving software system product, and complements this with a detailed knowledge of techniques in an appropriate engineering and management context.

Objectives:

At the end of this course attendees will be able to:

- Understand configuration management and version control
- Identify software configuration items
- Control software changes and bugs
- Understand SCM planning

Audience:

Project Managers, System and Software Engineers, R&D Managers, SQA & V&V Managers

Challenges & Methods:

- SCM concepts and principles

  Evolving systems involve the creation of many different versions of the software. There may be several versions under development and in use at the same time.

- Change Control and Bug Tracking

  Different versions incorporate request for change, corrections of faults, and adaptation for different hardware and operating system.

- SCM planning, Builds and Continuous integration

  We will show alternatives for models and tools and establish the modus operandi for SCM planning

Agenda:

- Software Products and Software Production (development)
- Software Life Cycle Models
- Software Version control and product tree
- Software change control and CCB (Change Control Board)
- Software Bug Tracking
- Software Baselines and Release
- SCM tools and infrastructure

About the Instructor:

Leah Goldin, CEO of Golden Solutions http://thegoldensolution.com/

Dr. Goldin is an independent consultant specializing in Requirements Engineering, System Engineering and Software Engineering, Process and Quality.

In her career, Dr. Leah Goldin developed embedded systems, and filled various management and technical roles, including development, verification and integration, SQA and process improvement. The companies she has worked for include Rafael, IAI, MBT, Comverse, NICE Systems, NDS, Sapiens, Mercury/HP, Given Imaging, Orbotech, etc.

Dr. Goldin divides her time between consulting to high-tech companies and teaching; she is a senior lecturer in Afeka College at the Software Engineering and System Engineering departments, and was the Head of the Software Engineering Department at Shenkar College.

Dr. Goldin received her Ph.D. from the Technion Computer Science department, where her research focused on Requirements Engineering. She is a senior member of IEEE, and currently serves as the Chair of the Israeli Chapter of the IEEE Computer Society