

# **Training Experts in the Fundamentals: An Experience in Providing Software Engineers with the Basics of Software Process Improvement**

Nestor K. Ovalle  
Los Alamos National Laboratory  
novalle@lanl.gov

Harry W. Egdorf  
Los Alamos National Laboratory  
hwe@lanl.gov

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## **Tutorial Summary**

*This tutorial presents an in-house software engineering training program used within a software development organization at a large, national, U.S. research laboratory. The program is designed to train experienced software engineers in the requirements and methodology of a software process improvement program being implemented within the software development organization. The software process improvement program being implemented utilizes the framework of the Capability Maturity Model, developed by the Software Engineering Institute at Carnegie Mellon University.*

While the software process improvement program within the organization is in an early stage of implementation, the in-house training effort has been underway for a while and is evolving in different stages. The first stage of the training effort focused on introducing and marketing the concepts of software process improvement to the software engineers. The current second stage of training is centered on the implementation of software process improvement within the organization, where the software engineers are introduced to the policies and requirements that have been established for the software process improvement program, their responsibilities for process improvement, and the recommended methods, procedures and guidelines that they can use to effectively implement the process improvement program.

The training program itself has been undergoing process improvement based upon lessons learned from earlier stages of training and based upon the ongoing requirements of the organization's software process improvement program. The presentation will describe the evolution of the training, training content, training methodology, and lessons learned to date. This presentation could provide valuable insight for other organizations undergoing similar training efforts.