Software Product Lines: Essential Practices for Success

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Abstract

A software product line is a set of software-intensive systems sharing a common, managed set of features that satisfy the specific needs of a particular market segment or mission and that are developed from a common set of core assets in a prescribed way. Companies of all sizes and domains are using the software product line approach to achieve astonishing improvements in time to market, productivity, cost, and quality. This tutorial will introduce the essential activities and practices for success. We will discuss what product lines are (and are not), and the three essential activities for achieving a software product line: core asset development, product development, and management. The tutorial will cover some of the essential practices unique to software product line development, and present some major industrial product line success stories.