

Configuration Management Fundamentals

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| Objectives <ul style="list-style-type: none"> • Discuss challenges with sustainable development • Introduce configuration management (CM) best practices and patterns • Understand CM roles and responsibilities • Understand elements of effective CM planning • Discuss change request management • Apply CM to measurement and reporting • Discuss branching strategies • Discuss product directory structures and labeling techniques • Discuss environmental promotion methods • Discuss effective build management approaches | | Description <i>Configuration Management Fundamentals</i> teaches the experienced developer how to manage the assets of a software project in an environment of constant change. Beginning with an overview of the characteristics of successful sustainable development, the course describes the relationship of CM to software architecture and iterative development. Then the essential elements of an effective CM plan are discussed as well as project repositories. The course then discusses the change request management process and its relationship to configuration management. Then the course describes how to create an effective directory structure for the project's assets and how to label individual configuration items in the repository. Managing daily work with integration and development workspaces are discussed. The course continues with how to effectively support parallel development with various branching strategies. Discussion around integration and the build processes follows. The course finishes with a discussion of how to perform various audits and capture metrics and provide objective trend reports for measuring development progress. | |
| | | Course Outline (Modules and Topics) <ul style="list-style-type: none"> • Configuration Management Overview <ul style="list-style-type: none"> • Sustainable development • Implementation model • Roles and responsibilities • Iterative development needs • Plan Configuration Environment <ul style="list-style-type: none"> • CM Plan • Project repositories • Manage Change Requests <ul style="list-style-type: none"> • Change request process and state model • Traceability • Configure Product <ul style="list-style-type: none"> • Product directory structure • Labeling configuration items • Manage Daily Work <ul style="list-style-type: none"> • Workspaces • Check-in/check-out • Merge • Support Parallel Development <ul style="list-style-type: none"> • Branching strategies • Promotion methods • Build Product <ul style="list-style-type: none"> • Integration • Build process • Measure Development <ul style="list-style-type: none"> • Physical configuration audit • Functional configuration audit • Metrics • Trend reporting | |
| Duration 1 day | Course # 01-0801 | Prerequisites <ul style="list-style-type: none"> • Software development experience – especially in development / implementation | In partnership with |
| Audience <ul style="list-style-type: none"> • Software architect • System analyst • Designer • Developer • Test designer • User interaction architect • Business architect | | Continuing education <ul style="list-style-type: none"> • IBM Rational SoDA for Word Fundamentals • Introduction to IBM Rational ClearQuest • IBM Rational ClearCase training Classroom requirements <ul style="list-style-type: none"> • No computers required | |

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