

Courses Available

Course	Duration	Private	Public	Remote	WBT
Working with Data Express	5	Y	Y	N	N
AcuConnect® Thin Client	1	Y	Y	Y	N
Application Analyser	2	Y	Y	Y	N
Application Architect	1	Y	Y	Y	N
Business Rule Manager	1	Y	Y	Y	N
Quality Manager Overview	1	Y	Y	Y	N
Quality Manager Administrative Training (101)	3	Y	Y	Y	N
Quality Manager Report Designer (101)	1	Y	Y	Y	N
Quality Manager Report Designer Advanced (102)	1	Y	Y	Y	N
Quality Manager Workflow Configuration (101)	1	Y	Y	Y	N
Optimal Trace (101)	2	Y	Y	Y	N
Optimal Trace QTalk Module	1	Y	Y	Y	N
DevPartner Studio Code Coverage 8.2	.5	Y	Y	Y	N
DevPartner Studio.NET 8.2	2	Y	Y	Y	N
DevPartner Java 4.3 Edition Code Coverage	.5	Y	Y	Y	N
DevPartner Java Edition 4.3 with OptimalAdvisor	2	Y	Y	Y	N
Quality Management Solution 6 Update Training	1	Y	Y	Y	N
QADirector 6.0	4	Y	Y	Y	N
QALoad Introduction 5.7	4	Y	Y	Y	N
TestPartner Comprehensive 6.1	3	Y	Y	Y	N
Graphical Application Development - Part I	2	Y	Y	Y	N
Graphical Application Development - Part II	2	Y	Y	Y	N
ACU Windows API Programming	1	Y	Y	Y	N
ACU Updating Your GUI Screens	2	Y	Y	Y	N
COBOL Programming for Business Success	5	Y	Y	Y	Y
Mainframe Express Assembler Option	1	Y	Y	N	Y
Mainframe Express CICS Option	1	Y	Y	N	Y
Mainframe Express IMS Option	1	Y	Y	N	Y
Mainframe Express XDB Option	1	Y	Y	N	Y
Working with Mainframe Express	4	Y	Y	Y	Y
Micro Focus Server Enterprise Server Fundamentals	2	Y	Y	Y	N
Mainframe Migration Foundation Class	5	Y	Y	N	N
Micro Focus COBOL Eclipse Support Course	1	Y	Y	Y	N

Net Express GUI Dialog System	4	Y	Y	Y	N
Net Express with .NET Workshop	4	Y	Y	Y	N
Working with Net Express	3	Y	Y	Y	N
Micro Focus Studio for Mainframe Migration	2	Y	Y	N	N
Application Analysis Using Revolve	3	Y	Y	N	Y
Applying Revolve Enterprise Edition	3	Y	Y	N	N
REQM Scripting For Revolve Enterprise Edition	5	Y	Y	N	N
Revolve Enterprise Edition - Team Training	3	Y	Y	N	N
Working with Server Express	3	Y	Y	Y	N
Introduction to Agile with Scrum	2	Y	Y	N	N
Agile Product Management	2	Y	Y	N	N
Innovation Games for Agile Teams	1	Y	Y	N	N
Certified Scrum Product Owner	2	Y	Y	N	N
ScrumMaster Certification	2	Y	Y	N	N
SILK Performer Adv BDL Scripting Techniques	2	Y	Y	Y	Y
Developing TeamAnalytics Reports in Xcelsius	1	Y	Y	N	N
CaliberRM Administration	1	Y	Y	Y	Y
StarTeam Essentials	1	Y	Y	Y	Y
Administering TeamAnalytics	1	Y	Y	N	Y
StarTeam Server Administration	1	Y	Y	Y	Y
Demand Management Configuration	2	Y	Y	Y	Y
SILK Performer Foundation Modeling and Implementing Load Tests	4	Y	Y	Y	Y
Capability Maturity Model Integration Basics Workshop	2	Y	Y	N	N
Managing Projects using TeamFocus	2	Y	Y	Y	Y
Capability Maturity Model Integration Overview	1	Y	Y	N	N
CMMI Level 4 Quantitative Techniques Workshop	3	Y	Y	N	Y
Developing TeamAnalytics Reports	1	Y	Y	Y	Y
AppServer Essentials	3	Y	Y	Y	N
Managing Quality with SilkCentral Test Manager	3	Y	Y	Y	Y
Introduction to Capability Maturity Model Integration Version 1.2	3	Y	Y	N	N
CaliberRM Essentials	1	Y	Y	Y	Y
Managing Projects using StarTeam	2	Y	Y	Y	Y

Together UML 2.0 Essentials	2	Y	Y	Y	Y
SILK Performer Adv Results Analysis and Correlation	4	Y	Y	Y	Y
Advanced Testing with SilkTest	4	Y	Y	Y	Y
VisiBroker Essentials	3	Y	Y	Y	N
Verification Testing with SilkTest	4	Y	Y	Y	Y

Working with Data Express

Number of Days: 5

Overview

This course can be run as either a 3-day or a 5-day workshop and will help Data Express users to successfully implement a Date Express solution. The course offers a mix of formal tuition, interspersed with Q&A sessions and practical exercises. The 5 day session offers more practical experiences and exercises.

Students will learn how to install Data Express, how to extract and mask data as well as developing an understanding of how Data Express can utilise an existing referential integrity model to speed up the process of generating the extraction method for creating consistent subsets. This will ensure that application testing will be both complete and rigorous by mirroring relationships that exist in the production environment. We show how Data Express can automatically extract a representative and anonymous subset of the application data and allow for effective control, management and security of the testing environment. The course manual includes additional topics for reading and class discussion. The workshop consists of intensive instruction and hands-on use to gain a working knowledge and degree of proficiency using Data Express to develop a testing environment that supports international regulatory standards, governance and privacy laws such as HIPAA and EU Data Privacy. The workshop consists of three days of intensive instruction and hands-on use.

Prerequisites

A good knowledge of common databases such as DB2, SEQ, VSAM, GDG (DLI and ADABAS are welcome). Knowledge of MVS, JCL, CLIST and COBOL is also required.

Topics

- Requirements and installation procedures for host & client
- Data inventory; DB2 database and flat file
- Manual class assignment and lifecycle
- Data masking, including rules definition, customization of routines and process execution
- Data subset extraction, including reduction methods, filtering and execution
- Ensuring referential integrity
- Automatic reduction method generation
- Sampling and fingerprinting

AcuConnect® Thin Client

Number of Days: 1

Overview

This course offers a comprehensive look at the versatile remote COBOL listener, running in Thin Client mode.

Prerequisites

None

Topics

- Installing and set-up on server and client machines
- Configuration and administration of AcuConnect
- Troubleshooting Thin Client connections
- Set-up, configuration and use of the Auto Update feature
- Programming best practices for developing applications that work effectively within a Thin Client environment

Application Analyser

Number of Days: 2

Overview

This course is structured as a “hands on” Workbench. The training is designed to show you how to prepare your application files for analysis and how to use Application Analyzer to provide comprehensive analysis on your system, ranging from impact analysis on a data item to visually exploring the relationships between legacy objects.

Application Analyzer aids in your understanding, increasing not only knowledge of your system, but also assisting in any redevelopment or enhancement efforts that you may perform.

The workshop consists of two days of intensive instruction and hands-on use.

Prerequisites

A good of your working environment and an appreciation of your application portfolio

Topics

- Understanding the relationships between repositories, workspaces, and projects
- Managing projects
- Resolving issues with source code
- Generating complexity and effort estimation reports that can aid in project planning.
- Diagrammatically show relationships between legacy objects to facilitate legacy understanding.
- Trace the flow of data to and from a data element across a legacy system.
- Establish the potential impact on a system resulting from a change in a data item’s

Application Architect

Number of Days: 1

Overview

Application Architect aids in maintenance and remediation application work, enabling changes to the data elements along with assisting in redevelopment or enhancement of the procedure division. The course cover the **Logical Components** tool used to extract components from existing applicationsource files.

This course is designed to show how to use Application Architect to apply intrusive changes to your system, ranging from removing dead code to the restructuring of the code.

Prerequisites

Completion of the Application Architect course

Topics

- How to produce new programs from original source code
- Reducing complexity of program(s)
- Re-packaging source code using computational, domain based or dead code

Business Rule Manager

Number of Days: 1

Overview

This course is structured as “Hands On” workshop, designed to train you how to use the Modernization Workbench Business Rule Manager to identify the core business logic of your applications. It provides “use cases” that illustrate key Business Rule Manager features.

Prerequisites

Completion of the Application Architect course

Topics

- Creating Business Functions, Rule Sets, and Rules manually
- Editing Business Rules Attributes both manually and in batch mode
- Creating Business Rules using the AutoDetect feature
- Creating Business Rules from Clipper queries
- Searching through Business Rules
- Reporting on the Business Rules project

Quality Manager Overview

Number of Days: 1

Overview

This course is designed to provide an overview of Quality Manager functionality for IT departments. Activities will consist of product demonstrations along with hands-on exercises.

The explanations and exercises primarily take the perspective of end users. This course does not focus on system installation or configuration, but on usage of the system.

The course is broad in scope and introductory in depth. Students will not be able to independently configure Quality Manager as a result of attending this course. It will, however, provide them with an indispensable knowledge base for participation in a Quality Manager implementation team, for further specialization within a Quality Manager module, or for a role in Quality Manager system administration.

Project Team Members, SME, Quality Manager Administrators. Upon completion of this course, participants should know and be able to:

- Exhibit a high level awareness of Quality Manager
- Participate in a team implementing Quality Manager

Prerequisites

None

Topics

- High Level Overview QADirector
- Add a new defect
- View or Modify defects
- Quality Manager entities (terminology)
- User Interface
- CARS Project Mapping
- Knowledge Management
- Team Folder
- Request Management
- Workflow Usage
- Default Reports

Quality Manager Administrative Training (101)

Number of Days: 3

Overview

This course is designed to provide comprehensive education of the administrative functionality of the Quality Management Solution. The training and exercises are focused on the maintenance and customisation of the system not the install.

Upon completion of this course, participants should know and be able to:

- Do daily administration tasks to the Quality Management Solution
- Perform customisation tasks

Prerequisites

Quality Manager Overview

Topics

- High-Level Quality Management Solution Architecture Overview
 - QADirector
 - Quality Manager
 - Optimal Trace
 - TestPartner
 - Compuware Open Server (COS)
 - Compuware User Administrator (CUA)
- License Overview
- User Management
 - Creation Global Workgroups / Workgroups
 - Roles & Responsibilities
- System Access Permissions
- Custom Configuration
 - Custom Fields / Value Configuration
- User Interface
 - Customisation
 - Portlets
- Knowledge Management
 - Category Creation
- Workflow Management
 - Workflow Activation
 - Import Workflow
 - Export Workflow
- Project Setup
 - CARS Project Mapping

Quality Manager Report Designer (101)

Number of Days: 1

Overview

This course is designed to provide a first introduction to the reporting capabilities of the Quality Manager. During the training students will use predefined dataproviders so there is no need for them to understand the underlying datastructure.

Team Leads, Administrators, anyone with an interest in reporting. Upon completion of this course, participants should know and be able to:

- Create reports

Prerequisites

Quality Manager Overview

Topics

- Simple tabular report
- Design and Runtime filters
- Data grouping (summary reports)
- Cross tabulation
- Custom fields
- Charts

Quality Manager Report Designer Advanced (102)

Number of Days: 1

Overview

This course is designed to provide a concentrates on the advanced features of the reporting capabilities of the Quality Manager. Students will learn how to create their own database views to make reports from. SQL Language is not a part of this training so an understanding of SQL is a prerequisite for this training.

Advanced Users, Administrators, anyone with an interest in reporting. Upon completion of this course, participants should know and be able to:

- Create own database views to be used by reports
- Make reports accessible to other users

Prerequisites

Quality Manager Report Designer (101)

SQL Language

Topics

- Drill-through between linked reports
- Multi-language reports
- Conditional formatting
- Custom fields using SQL
- Data model overview
- Creation of custom data providers
- Setting up reports for use by other users

Quality Manager Workflow Configuration (101)

Number of Days: 1

Overview

This course is designed to provide knowledge of the workflow designer which is a part of the Quality Manager. It focuses on the mechanism used to put business processes into application configuration.

Business Process Analysts, Administrators. Upon completion of this course, participants should know and be able to:

- Create workflows for projects
- Create workflows for requests
- Customise assignment of workflows

Prerequisites

Quality Manager Overview (101)

Topics

- Creation of States
- State definitions
- State layouts
- Workflow process layout
- Workflow maintenance
- Custom Fields
- Reporting
- Best Practice

Optimal Trace (101)

Number of Days: 2

Overview

This course is designed to provide an understanding how to use Optimal Trace to capture business requirements. The training will be focused on the "Structured Requirements" approach, which enables analysts to capture requirements from a user perspective. Business Analysts, Systems Analysts, Project Managers, Test / Quality Assurance Engineers and Software Architects / Designers. Upon completion of this course, participants should know and be able to:

- Use Optimal Trace to capture requirements
- Produce test cases out of existing requirements

Prerequisites

None

Topics

- Project
- Glossary and Actor List
- Application Requirements - Part 1
 - Packages
 - Requirements
 - Requirement Steps
 - Alternative Scenarios
 - Flow Diagram
- Application Requirements - Part 2
 - Branches
 - Requirement Refinements
 - Traceability
 - Non-Functional Requirements
 - Linking to External Documents
 - Requirement Notes
- Project Baselines
 - Baselines
 - History Activity
- Search and Query Techniques
- Document and Test Case Generation
 - Documents
 - Reports
 - Test Case Generation
- Administrative Tool
- Custom Documents & Templates

Optimal Trace QTalk Module

Number of Days: 1

Overview

This course is designed to provide an understanding on how to use the Logica QTalk approach to capture business requirements. The QTalk uses an RRBT (Risk and Requirements Based Testing) approach to prioritise the requirements where the requirements are put into a model called MoSCoW.

- **Must**
- **Should**
- **Could**
- **Won't**

Business Analysts, Systems Analysts, Project Managers, Test / Quality Assurance Engineers and Software Architects / Designers. Upon completion of this course, participants should know and be able to:

- Use the Logica QTalk Framework
- Understand and use the RRBT approach to requirement gathering

Prerequisites

Optimal Trace 101

Topics

- How to add the QTalk implementation to an existing installation
- QTalk OptimalTrace Template
- MoSCoW analysis
- Quality Attributes
- Risk Factors
- Requirement relationship to Quality Attributes and Risk Factors
- QTalk Test Case Generation
- Custom MoSCoW Reporting
- Export of Test Cases for QADirector

DevPartner Studio Code Coverage 8.2

Number of Days: ½

Overview

This course is designed to provide comprehensive education of the basic functionality and usage of the Code Coverage tool included in DevPartner Studio .NET. This course is aimed at Application Programmers, Quality Assurance Practitioners and Managers, and Development Managers. Upon completion of this course, participants should know and be able to:

- Exhibit a high level awareness of the different tools in the DevPartner Studio Suite
- Configure and Execute Coverage Analysis

Prerequisites

Working knowledge of Windows XP or Windows 2003 Server

Familiarity with .Net application development is helpful but not required

Topics

- DevPartner Studio Overview
- Coverage Analysis for Windows Forms
- **Coverage Analysis for ASP.NET**

DevPartner Studio.NET 8.2

Number of Days: 2

Overview

This course is designed to provide comprehensive education of the basic functionality and usage of each of the tools included in DevPartner Studio. This course is aimed at Application Programmers, Quality Assurance Practitioners and Managers, and Development Managers. Upon completion of this course, participants should know and be able to:

- Configure and Execute Coverage Analysis
- Configure and Execute Code Review
- Understand how to use Code Review Rule Manager
- Configure and Execute Error Detection
- Configure and Execute Memory Analysis
- Configure and Execute Performance Analysis
- Configure and Execute Performance Expert
- Understand how to use the System Comparison Facility
- Understand how to use Command Line Execution

Prerequisites

Working knowledge of Windows XP or Windows 2003 Server

Familiarity with .Net application development is helpful but not required

Topics

- DevPartner Studio Overview
- Coverage Analysis for Windows Forms
- Coverage Analysis for ASP.NET
- Code Review
- Code Review Rule Manager
- Error Detection
- Memory Analysis
- Memory Analysis for ASP.NET
- Performance Analysis
- Performance Analysis for ASP.NET
- Performance Expert
- Performance Expert for ASP.NET
- System Comparison Facility
- Command Line/Outside IDE Execution

DevPartner Java 4.3 Edition Code Coverage

Number of Days: ½

Overview

This course is designed to provide education on the basic functionality and usage of the code coverage feature included in DevPartner Java Edition. This course is aimed at Java Application Programmers, Quality Assurance Professionals, and Development and Project Managers

Upon completion of this course, participants should exhibit:

- Knowledge of the content of DevPartner Java Edition
- Ability to configure DevPartner Java
- Ability to perform Coverage Analysis

Prerequisites

Working knowledge of Windows 2000, Windows XP, or Windows 2003 Server

Familiarity with Java application development and terminology is helpful, but not required.

Topics

- Introduction
 - Why use DPJ?
 - When to use DPJ
 - Types of issues addressed
 - Types of analysis available
 - Features of DPJ
 - What is OptimalAdvisor?
- Working with DevPartner Java
 - Client-server applications (J2SE)
 - Web applications (J2EE)
 - Configuring DPJ
 - DPJ Interface
 - Session Control API
- Coverage Analysis
 - Overview
 - Running coverage analysis
 - Analyzing results
 - Using merged session files

DevPartner Java Edition 4.3 with OptimalAdvisor

Number of Days: 2

Overview

This course is designed to provide education on the basic functionality and usage of the features included in DevPartner Java Edition and OptimalAdvisor. This course is aimed at Java Application Programmers, Quality Assurance Professionals, and Development and Project Managers. Upon completion of this course, participants should exhibit:

- Knowledge of the content of DevPartner Java Edition
- Ability to configure DevPartner Java
- Ability to perform:
 - Coverage Analysis
 - Memory Analysis
 - Performance Analysis
- Knowledge of the content of OptimalAdvisor
- Ability to use OptimalAdvisor

Prerequisites

Working knowledge of Windows 2003 Server, Windows2000 or Windows XP
Familiarity with Java application development and terminology is helpful, but not required.

Topics

- Introduction
 - Why use DPJ?
 - When to use DPJ
 - Types of issues addressed
 - Types of analysis available
 - Features of DPJ
 - What is OptimalAdvisor?
- Working with DevPartner Java
 - Client-server applications (J2SE)
 - Web applications (J2EE)
 - Configuring DPJ
 - DPJ Interface
 - Session Control API
- Coverage Analysis
 - Overview
 - Running coverage analysis
 - Analyzing results
 - Using merged session files
- Memory Analysis
 - Overview

- Running memory analysis
- Locating memory leaks
- Identifying retained objects
- Solving scalability problems
- RAM footprint analysis
- Performance Analysis
 - Overview
 - Identifying performance problems
 - Running performance profiling
- OptimalAdvisor
 - Overview
 - Creating a model
- Code Validation
- Design Validation

Quality Management Solution 6 Update Training

Number of Days: 1

Overview

This course is designed to provide those who have used the old solution with an update on what has changed in the new release to ensure a minimal impact of the new release. Focus will be on the management platform as well as on the requirement and test management. After the training the attendees should be able to work confidently with the new user interface.

Existing users of the Quality Management Solution. Upon completion of this course, participants should know and be able to:

- Continue to work effectively with the upgraded solution

Prerequisites

CARS Workbench 5.3.1 101

Topics

- What are the products in the new solution
 - Quality Portal
 - QADirector Web Client
 - Manual Testing Web Client
 - New OptimalTrace integration solution
- Benefits on the new solution
 - Components and Architecture
 - Smart Client technology
 - QADirector vs. Manual Testing
- Overview of the new client / layout
 - Navigation
- Terminology
 - Requirements vs FAs, TRs and classes
 - Tests vs. Tests and Procedures
- End-to-End Walkthrough
 - Clients
 - Manage Users
 - Project
 - Dashboard
 - Requirements
 - Adding Requirements
 - Setting Risks and Cycle
 - Quality Optimizer
 - How to use the Quality Optimizer
 - Creation of Execution Plan
 - Tests

- Manage Tests
- Associate to Requirement / Scripts
- Organize using Test Folders / Search Folders
- Scripts
 - Create/Edit Manual Test Scripts
 - Global Scripts
 - Script Folders
 - Search Folders
- Managing Test Execution
 - Creation of Execution Plan
 - Ordering of test cases
 - Result Propagation
 - Publish Tests
- Manual Test Execution
 - Changing projects / clients
 - Assigning jobs/Running scripts
 - Adding information during test
 - Submitting defects
- Results
 - Review Results and details
 - Search Folders
- Defects
 - Defect Pane
 - Opening defects
- User Options
 - Modifying user options

QADirector 6.0

Number of Days: 4

Overview

QADirector v.6.0 ties together the processes of requirements and test planning, test execution and analysis, defect tracking and reports generation using risk-based testing methodology. This course is aimed at Quality Assurance Practitioners, Testing Coordinators, Testing Designers, Application Programmers, Designers and Testers.

Upon completion of the course, students should be able to do the following:

- Define the focus and features of QADirector
- Define risk analysis
- Explain the benefits of risk-based testing
- Explain how to find out the risk exposures
- Define the QADirector components and architecture
- Explain how QADirector integrates with Compuware's testing, program analysis and requirements QADirector Grand Tour
- List and define the software components which comprise QADirector
- Tour of the application Under Test (AUT)
- Explain the features and functions of the AUT
- Decide which major functions to test
- Organize AUT functions into groups
- Perform user administrative tasks
- Create/modify/delete users
- Modify roles and permissions
- Perform client administrative tasks
- Create clients
- Create/modify/delete client users
- Modify application configuration settings
- Setup tools and tool domain

Prerequisites

Working knowledge of Windows is required

Working knowledge of application testing is helpful

Working knowledge of Optimal Trace Enterprise 5.1 is helpful

Working knowledge of TestPartner is helpful

Topics

- Managing Projects
 - Navigate through the common functionality of the centers
 - Use the List of Projects Center features
 - View the Dashboard

- Manage Projects
 - Use the Project Center features:
 - Create details for the project
 - Modify project properties
 - Perform project related administrative tasks:
 - Manage Users
- User Settings
 - Modify user options:
 - General
 - User information
 - Single sign on
 - Test information
 - Job information
 - Hiperstation options
 - MVS batch options
 - Manual testing options
 - Change user password
 - Modify the workspace colour scheme
- Managing Requirements
 - Explain how requirements fit into the testing process
 - List the methods of adding requirements to a project and discuss the benefits of each method
 - Manage requirements:
 - Create requirements
 - Modify requirement properties
 - Assign risk weights to requirements and calculate risks
 - Organize requirements by using requirement folders
- Managing Tests
 - Define tests and identify where they can be created in QADirector
 - Navigate the Tests center
 - Manage tests by performing the following tasks:
 - Create/modify/delete tests
 - Associate tests with requirements
 - Assign risks, time estimates and cycles to tests
 - Organize tests using test folders
- Using the Quality Optimizer
 - Explain how the Quality Optimizer is used to create test plans
 - Launch the Quality Optimizer from the Requirements and Tests Centers
 - Use the Quality Optimizer to:
 - Examine your tests using the Risk By Time and Risk By Requirement views
 - Use the Statistics, Summary and Coverage views to analyze your chosen plan
 - Create an Execution Plan
 - Create a Requirement Folder

- View and export a scenario-based report
- Managing Scripts
 - Create and manage manual test scripts
 - Manage Global Scripts
 - Add automated and manual test scripts to a project
 - Create and manage manual test script folders
- Managing Test Execution
 - Navigate the Execution Center
 - Define execution plans and execution groups
 - Perform the following tasks:
 - Create/modify/delete execution plan
 - Associate Tests and Requirements to an execution plan using the Associated Tests and associated Requirements panes
 - Order/re-order tests in execution group/plan
 - Publish tests
 - Create automated and manual jobs
- Executing Manual Tests
 - Explain how the Manual Testing is accomplished in QADirector
 - Launch Manual Testing from the Tools menu
 - Use Manual Testing to:
 - Select a project and view manual tests awaiting execution
 - Execute manual test scripts
 - Change job and/or tests assignments using the Assigned To field
- Analyzing Results
 - Perform Results Center related tasks:
 - Reviewing, analyzing and changing job results
 - Viewing job result history
 - Managing Result Folders
 - Discuss submitting and viewing defects
- Reports
 - Identify the built-in reports available in QADirector
 - Explore the report dialog box
 - Manage reports by performing the following tasks:
 - Configure and run reports
 - Create public reports
 - Export reports in formats such as Excel, HTML, RTF, and PDF

QALoad Introduction 5.7

Number of Days: 4

Overview

This course is designed to overview the performance testing process and to cover basic functionality of the QALoad product with a focus on World Wide Web (WWW) session middleware scripts. This course does not cover all other session middlewares. At the end of the class the students will be able to use QALoad to enhance their performance testing. This course is aimed at Quality Assurance Practitioners, Testing Coordinators, Testing Architects, Testing Designers and Testers. Optionally, Application Programmers, Networking Practitioners, System Administrator & Operation Administrator, Project Managers and Business Analysts.

Upon completion of the course, participants should be able to do the following:

- Discuss the concepts of and process of performance testing
- Use QALoad Script Development Workbench
 - Develop test scripts and with datapool
- Use QALoad Conductor
 - Use datapool
 - Execute test scripts
- Use QALoad Player
- Use QALoad Analyze
 - Examine test results

Prerequisites

Experience navigating in a Windows environment is required.

Knowledge of application testing is helpful but not required.

The following prerequisites are not mandatory but will better facilitate users of QALoad: C or C++ programming, Basic HTML coding

Topics

- Performance Testing overview
 - Definition, Purpose and Benefit
 - Virtual Users
- Performance Testing Preparation
- QALoad Overview
 - Middlewares and EasyScript
 - Conductor, Player and Analyze
 - Licensing
- QALoad Script Development Workbench
 - Setting up of WWW middleware
 - Recording and playback of scripts
 - Workshops
- QALoad Conductor, Player and Analyze
 - Setting up of QALoad Conductor
 - Loading optional Central/Local Datapool

- Locating Player Workstations
- Starting and ending tests
- Server Analysis Agent and Remote Monitoring Support
- Workshops

TestPartner Comprehensive 6.1

Number of Days: 3

Overview

This course is designed to cover the basic functionality of the TestPartner product. At the end of the class the students will be able to use TestPartner to enhance their software testing through automation. This course is aimed at Quality Assurance Practitioners, Testing Coordinators, Test Leads, Testing Designers, Application Programmers, Testers, Project Managers, and Business Analysts.

Upon completion of the course, participants should be able to do the following:

- Discuss the concepts of and process of software testing
- Develop automated TestPartner scripts
- Examine test results
- Create Checks/Verifications for TestPartner scripts
- Synchronize application under test and TestPartner scripts with Events
- Use variable data within TestPartner scripts
- Insert basic error handling into a TestPartner script
- Manage and update visual tests through screen updates and test logic
- Enhance TestPartner scripts through intelligent data files
- Utilize Modules and UserForms in a TestPartner script

Prerequisites

Experience navigating in a Windows environment is required

Knowledge of application testing techniques is helpful but not required

Knowledge of VBA is not mandatory but will better facilitate users of TestPartner

Topics

- Introduction to Automated Testing
- TestPartner Overview
- Projects and Users
- Start Screen and Asset Browser
- Visual Test
- Results
- Object Recognition
- Application Checks
- Application Synchronization with Events
- ActiveData
- Application Verification
- Test Script Maintenance
- Error Handling

Graphical Application Development - Part I

Number of Days: 2

Overview

This course offers an introduction to AcuBench as the ACUCOBOL-GT graphical integrated development environment.

Prerequisites

None

Topics

- An introduction to the **extend®8** product family, with special emphasis on the ACUCOBOL GT compiler, runtime, and utilities
- An introduction to the AcuBench environment and to the process of creating AcuBench workspaces, projects, and programs
- An overview of the ACUCOBOL-GT development system, including compiler and runtime configurations and debugging processes
- Detailed information about the AcuBench graphical capabilities as well as specifics for using AcuBench in a team environment with version control

Graphical Application Development - Part II

Number of Days: 2

Overview

This course, Part II of *Graphical Application Development with AcuBench and ACUCOBOL-GT*, offers in-depth instruction on AcuBench as a graphical development environment.

Prerequisites

Graphical Application Development with AcuBench and ACUCOBOL-GT – Part I

Topics

- A review of the basics learned in Part I of Graphical Application Development with AcuBench and ACUCOBOL-GT
- Detailed information about windows and thread handling
- An overview of the graphical controls in the AcuBench toolbox, including the properties and events associated with each control; also included is a basic understanding of ActiveX and .NET controls
- An overview of how to use AcuConnect Thin Client as a development tool by integrating it with AcuBench
- Information about the Character-to-GUI wizard, and how it helps you convert character screens to AcuBench-generated GUI screens.

ACU Windows API Programming

Number of Days: 1

Overview

This course features the knowledge necessary to use Windows APIs.

Prerequisites

None

Topics

- Using the online MSDN documentation
- Information about data types and structures, syntax, and memory management
- Use of AcuBench and other development tools needed for API programming
- Interactive labs

ACU Updating Your GUI Screens

Number of Days: 2

Overview

This course provides an overview of the principles of graphical screen design using ACUCOBOL-GT.

Prerequisites

Graphical Application Development with AcuBench and ACUCOBOL-GT – Part I and Part II or equivalent knowledge and experience of AcuBench

Topics

- A discussion identifying the top three GUI mistakes identified by ACUCOBOL-GT customers, and tips on how to avoid them
- An in-depth look at the controls available in the ACUCOBOL-GT toolbox
- Review and further technical information on event-driven programming and how it fits into your ACUCOBOL-GT program
- Review and further technical information about the types of windows and threading
- Information about each type of control and recommendations about when and where to use them in a well-formed GUI screen
- Analysis and redesign of customers' screens (you will be asked to provide a screen shot of a screen to which you would like to apply the techniques learned in this class)

COBOL Programming for Business Success

Number of Days: 5

Overview

This is a hands-on course introducing the programming language COBOL, and then teaching the skills needed to produce different types of application. All modules contain theoretical sessions, where the concepts are explained and discussed, together with example programs and practical exercises. The audience for this course is programmers or analysts who need to learn COBOL, or to revise or build on existing COBOL knowledge.

The full training course will enable a person with no COBOL skills to write and maintain COBOL programs. Alternatively, individuals with some COBOL knowledge can attend some of the modules to revise, or increase their COBOL experience.

Prerequisites

Awareness of PC operating systems, DOS commands, and the behavior of Windows graphical user interfaces.

Topics

- Understand the concepts of COBOL
- Know the structure of a COBOL program, and be aware of the naming and positioning restrictions imposed by the language.
- Understand the different ways in which data can be defined
- Appreciate the elements of effective program design
- Be able to write programs using sequential and indexed file handling
- Know how to make decisions using different formats of IF and EVALUATE
- Know the verbs of arithmetic calculation and character manipulation
- Be able to handle repeating data, using both subscripts and indexes
- Be able to produce report and print programs
- Understand the concepts and mechanics of modular programming

Mainframe Express Assembler Option

Number of Days: 1

Overview

This course conveys a working knowledge of the MF/370 Assembler product to develop and maintain Assembler programs and applications in conjunction with the Micro Focus Workbench. The course combines lecture and hands-on experience in creating Assembler executables on the PC and testing them using ANIMATOR/370. Optionally, the course will cover how to prepare and test Assembler/CICS programs.

Prerequisites

Assembler programming experience or knowledge of the Assembler language. PC Operating system knowledge (DOS or OS/2) is helpful.

Topics

- Introduction to MF/370
- Creating an Assembler Executable
- Debugging: Animator 370 including
- File Handling
- Building a Multi-Program Application including:
- Installation and Configuration
- MFO/370 - MF370 CICS Option (optional)

Mainframe Express CICS Option

Number of Days: 1

Overview

Mainframe application developers, who have practical experience with CICS development on an IBM mainframe, will gain a working knowledge of the Mainframe Express CICS Option for developing and maintaining mainframe CICS programs and applications on the PC. Concepts and functionality of the tool with an emphasis of the development cycle are taught via lecture and hands-on exercises. Students will also learn how to configure MFE CICS resources to support their applications.

Prerequisites

COBOL and CICS application programming experience, 32-bit Microsoft Windows (NT or 95/98) operating system and Mainframe Express knowledge.

Topics

- Product Overview
- Defining Resources
- Development Cycle
- Optional Development Environments

Mainframe Express IMS Option

Number of Days: 1

Overview

Micro Focus MainFrame Express users who need to develop, maintain, and test mainframe IMS programs on the PC Workstation, will learn how to use the Micro Focus IMS Option and how to implement IMS databases on the PC.

Prerequisites

Micro Focus MainFrame Express course. One year of experience as an IMS/DC Application Programmer is also recommended.

Topics

- Product/Process Overview
- Generating IMS Resources
- Loading/Unloading Data Bases
- Program Development

Mainframe Express XDB Option

Number of Days: 1

Overview

Mainframe Express users who need to develop, maintain, and test DB2 applications on the PC will learn to use the XDB:SQL Option for DB2. Topics include setting up, developing, and testing DB2 applications on the PC, testing SQL code interactively on the PC, and adding tested SQL code into the COBOL program. The workshop consists of hands-on exercises using XDB:SQL for DB2 as a tool for offloading mainframe capability for DB2 development on a Micro Focus PC Workstation.

Prerequisites

This course assumes that the student has COBOL programming experience, has PC Operating systems knowledge and some awareness of the behavior of Graphical User Interfaces.

Topics

- Overview of the XDB:SQL for DB2 Option
- Steps in using XDB:SQL for DB2
- Additional features

Working with Mainframe Express

Number of Days: 4

Overview

Uniquely created to run your business, your systems are likely to represent a significant investment in IP specific to your needs and represents key major corporate assets. By allowing you to maintain, develop and extend these assets, while at the same time reducing cost and risk, Micro Focus Mainframe Express® unlocks the value of your coded IP to meet the needs of the future. Mainframe Express is the environment for mainframe application delivery.

Working with Mainframe Express students will learn to successfully develop, test and debug mainframe COBOL applications on the PC. Developers will be able to utilize special-purpose features of Mainframe Express that provide extensive productivity benefits in a distributed environment. New functionality, DataFile Editor and Touchpoint are covered in this course. Guided Walk-throughs, demonstrations, hands-on exercises and lecture are the primary modes of knowledge transfer.

Prerequisites

Graphical User Interface (MS-Windows user) experience, COBOL programming experience, and PC operating systems and file background are required.

Topics

- The Mainframe Express IDE (Integrated Development Environment)
- Projects and Project Folders
- Cataloging Files
- Navigation and use of windows
- Offloading a TSO Application
- Offloading a JCL Jobstream
- Submitting JCL
- Using the outlist facility
- Running programs using CLISTS
- Uploading and Downloading Files
- Accessing Mainframe Files
- Workgrouping
- Source-level Debugging
- Editing source code
- Compiling source code
- Data File Assignment
- Application analysis with MainFrame Express
- Managing and Creating Data Files
- Creating new test data files
- Editing existing test data files
- File Conversion

Micro Focus Server Enterprise Server Fundamentals

Number of Days: 2

Overview

Micro Focus Server™ for COBOL is a high performance execution environment to deploy COBOL applications on all of today's popular Windows, UNIX and Linux platforms. Micro Focus Server™ for COBOL supports a variety of object formats to provide users with the flexibility to balance performance with portability.

This course introduces students to the potential of the product. Students will see how the product can be used with Web Services and J2EE, as well as supporting CICS, JCL and IMS. Guided walkthroughs, demonstrations, hands-on exercises and lecture are the primary modes of knowledge transfer.

Prerequisites

Experience in COBOL programming and an understanding of Windows/PC GUI interfaces is required. A knowledge of mainframe programming would be advantageous.

Topics

- What is Micro Focus Server?
- Micro Focus Server Architecture
- Components of an enterprise server
- Directory Server
- Starting and stopping a server
- Adding a server
- The console daemon
- Enterprise server configuration
- Introduction to Web Services
- The Interface Mapping Toolkit
- Creating and deploying a web service
- Generating a COBOL client
- Creating and deploying a Java interface
- Generating a Java client
- XA resources
- The Mainframe Transaction Option
- Developing a CICS application on Net Express
- Deploying CICS applications to an enterprise server
- Running JCL under Micro Focus Server
- Viewing spooler details
- Viewing the catalogue

Mainframe Migration Foundation Class

Number of Days: 5

Overview

This is a super-intensive workshop to become familiar with the basic Micro Focus tools which will be used during an IBM mainframe migration to Micro Focus Server For Mainframe Migration. The class will consist of topics from the standard Micro Focus classes described below. The workshop will omit all topics which are not directly related to the initial mainframe migration project. The workshop consists of intensive instruction and hands-on use.

Prerequisites

An understanding of mainframe application development and PC GUI interfaces is helpful. Students are expected to have COBOL programming experience and have awareness of PC operating systems, DOS commands, and the behavior of Windows graphical user interfaces.

Important: this course should be attended only by those then attending the Mainframe Migration Workshop. It contains highly condensed material from other training courses offered by Micro Focus, but is not intended to be a substitute for them.

Part 1: Introduction To the 10 Step Migration Guide (¼ day)

This short introduction will set the context for the balance of the training. By understanding the 10 Step Guide, the students will have a clearer understanding of which Micro Focus tool is used at the various points of the migration process.

Part 2: Application Analysis Using Revolve (¾ day)

Students will gain a working knowledge and degree of proficiency using Micro Focus Revolve to analyze and understand complex application systems that include COBOL, JCL, DB2, CICS, and other systems software. The Revolve Course will help programmers, managers/project leaders, programmer/analysts and system analysts to use Revolve on production support, maintenance and development projects, to visualize and research entire applications, do system-wide and program level analysis; perform electronic-assisted impact analysis and electronic-assisted documentation.

Topics

- Introduction
- Basic Administration
- Understanding Projects and the Revolve Interface
- Analyzing Systems
- Revolve and SQL Applications
- Revolve and CICS Applications

Part 3: Applying Revolve Enterprise Edition (½ day)

Revolve Enterprise Edition provides added functionality to Micro Focus Revolve. This hands-on course teaches you how to apply Revolve Enterprise Edition to analyze and understand an application. The course follows the Analysis Life Cycle process and demonstrates the use of the product during each phase.

Students will gain knowledge to use Revolve Enterprise Edition on production support, maintenance and development projects, to visualize and research entire applications, do system-wide and program level analysis, produce reports, provide effort and cost estimations, and work in groups.

Topics

- Introduction to Revolve Enterprise Edition
- Preparing the Application
- Defining the Points of Interest
- Using Analysis Tools
- Working with Sets
- Creating Composite Tools
- Refining the Process
- Reporting Information

Part 4: Working with Mainframe Express (1½ days)

Users of the Micro Focus Mainframe Express will learn to successfully develop, test, and debug mainframe COBOL applications on the PC.

Micro Focus COBOL Eclipse Support Course

Number of Days: 1

Overview

COBOL support for Eclipse complements existing support for COBOL development in Microsoft Visual Studio and tailored Micro Focus COBOL IDEs, such as those in Net Express. The Micro Focus Eclipse plugin enables rapid development of COBOL applications within the Eclipse framework. This provides a unified Eclipse-based environment that will standardize the development of traditional workloads and facilitate the move to Service Oriented Architectures (SOA).

Prerequisites

Experience in COBOL programming and an understanding of Windows/PC GUI interfaces is required. Knowledge of Net Express or Server Express would be advantageous for the CTF Viewer topic. No knowledge of Eclipse is assumed.

Topics

- What is Eclipse?
- The Micro Focus COBOL plugin
- Installing and configuring Eclipse
- Starting Eclipse
- Defining a workspace
- Creating a project
- Creating, editing and running programs
- Configuration files
- Build configurations
- Simple debugging
- Variables
- Breakpoints
- Project settings
- Runtime settings
- General settings
- Custom content type support
- COBOL help
- Cheat sheets
- The Consolidated Tracing Facility (CTF) Viewer

Net Express GUI Dialog System

Number of Days: 4

Overview

This course will provide programmers and programmer/analysts with a working knowledge and degree of proficiency using the NetExpress Dialog System toolset for the development and maintenance of client-server-based COBOL applications. Students will learn to use NetExpress' project-based Dialog System Development Tools to create interactive applications using GUI screens, write application programs, design windows and objects, test interactive applications, and prepare applications for deployment.

The workshop consists of four days of intensive instruction and hands-on use.

Prerequisites

Students will be expected to know COBOL, how to use a graphical interface, how to use MS Windows™ and have experience developing COBOL applications.

Topics

- Overview
- Introduction to Dialog System
- Overview of Data Validation and Dialog
- Building the User Interface
- Defining a window's properties
- Text fields, Entry Field definition
- Introduction to Dialog
- Global Dialog and Object Dialog, specifying Dialog
- Data Validation
- Validation steps, types of validation
- Error Message file
- Dialog to apply validation
- Expanding the Screenset
- Dialog Box versus window
- Radio buttons, push buttons, and check boxes
- Group Box definition
- The Screenset Animator
- Executing the screenset
- Programming
- Two Copy Members: Screenset Data Block and Control Block
- Calling Dialog System: the simplest Dialog System program
- Procedures
- Invoking procedures in Dialog
- Menu Definition
- Menu Bar definition, Context menus
- Additional Objects

- Selection Boxes, Font Support, List Box
- Tab Controls, Tab Control Pages
- Utilities
- Export

Net Express with .NET Workshop

Number of Days: 4

Overview

This course will provide developers with a working knowledge and degree of proficiency using Visual Studio .NET to migrate, develop, maintain and deploy COBOL applications to the .NET framework. Micro Focus has taken advantage of Microsoft's .NET architecture as a language-independent programming model to allow COBOL users to leverage the full features and functionality of Visual Studio .NET for development and deployment within Microsoft's .NET framework. Composite COBOL/C#/VB.NET application development and deployment is now made easy because any programs written for the .NET framework can interact with each other regardless of the programming language in which each program was written. The workshop consists of three days of intensive instruction and hands-on use.

Target Audience

Developers experienced in writing and maintaining COBOL applications who have a need to start to develop and deploy COBOL programs within the highly flexible, multi functional, multi-language .NET framework thereby enhancing systems and expertise.

Training Objectives

- To introduce COBOL developers to Visual Studio .NET and Microsoft's .NET framework and its benefits
- To migrate existing COBOL applications to the .NET framework
- To create, extend, and deploy COBOL applications under the .NET framework
- To build and extend COBOL applications utilizing ASP.NET and ADO .NET
- To consume, create, and deploy COBOL Web Services from existing routines

Topics

- .NET Framework overview and benefits for the developer
- Familiarization with Visual Studio .Net
- Overview of Object Oriented program
- Steps to migrate procedural COBOL programs into .NET
- Editing, compiling, debugging and deploying programs in a multiple language environment
- Creating new user interfaces - WinForms and WebForms
- Handling business logic - n tier design to harness existing systems for the future
- Data access with ADO.NET to provide more choices
- Create and develop XML in COBOL applications under .NET
- Convert existing COBOL subroutines into WEB Services in .NET
- Demonstrate COBOL/Microsoft Object Connectivity and future enhancements

Working with Net Express

Number of Days: 3

Course Code: TRN-NX100-U0600R1-S

Overview

This course will provide programmers and programmer/analysts with a working knowledge and degree of proficiency using the NetExpress Integrated Development Environment for the development and maintenance of COBOL applications. Students will learn to use NetExpress' project-based Integrated Development Environment (IDE) to create projects in support of program development and to edit COBOL programs including working with embedded COBOL copyfiles. Students will perform structured browsing and analysis of project components, compile COBOL programs, perform interactive source level debugging, and create, edit, and convert a variety of data files. In addition, students will build entire COBOL projects for debugging and production release. The course concludes with cross-platform (UNIX) publishing and animation as well as an introduction to COM.

The workshop consists of three days of intensive instruction and hands-on use.

Prerequisites

Students will be expected to know COBOL, how to use a graphical interface, how to use a recent release of Windows, and have experience developing COBOL applications.

Topics

- Introduction to Net Express
- Working with Net Express Projects
- Integrated Development Environment
- Working with NetExpress Projects
- Editing COBOL Source
- Compiling COBOL Programs
- External Files
- Data Tools
- Testing Your Application
- Structured Browsing and Exploring Programs
- Building Applications for Release
- OpenESQL Assistant
- UNIX Option
- Introduction to COM and DCOM
- Additional Topics

Micro Focus Studio for Mainframe Migration

Number of Days: 2

Course Code: TR-MTOW100

Overview

In this hands-on workshop, you will gain a working knowledge and degree of proficiency using the **Micro Focus Studio™ for Mainframe Migration** for the maintenance and development of COBOL based applications that have been migrated from an IBM Mainframe for deployment on Windows, UNIX and Linux.

Upon successful completion of this workshop, you will be able to use the **Micro Focus Studio™ for Mainframe Migration** to:

- Create Net Express projects to support development and maintenance of migrated applications.
- Configure Enterprise Server to use CICS, JCL and SQL
- Extend the migrated application to use Web Services using the Interface Mapping Toolkit.

Prerequisites

To get the maximum benefit from this workshop, you must have experience in COBOL programming, IBM CICS™, IBM JCL™, SQL and completed the **Working with Net Express** course.

Audience

The audience for this workshop is COBOL / CICS / JCL / SQL application developers.

Topics

- Creating and configuring the Net Express Project
- Adding database capabilities to the project
- Setting up Enterprise Server
- CICS configuration
- XA setup
- JCL configuration
- Working with JCL
- Dynamic Debugging
- Extending existing CICS applications

Application Analysis Using Revolve

Number of Days: 3

Overview

Students will gain a working knowledge and degree of proficiency using Micro Focus Revolve to analyze and understand complex application systems that include COBOL, JCL, DB2, CICS, IMS DB/DC and other systems software.

The Revolve Course will help programmers, managers/project leaders, programmer/analysts and system analysts to use Revolve on production support, maintenance and development projects, to visualize and research entire applications, do system-wide and program level analysis; perform electronic-assisted impact analysis and electronic-assisted documentation.

Prerequisites

An understanding of mainframe application development and PC GUI interfaces is helpful.

Topics

- Introduction
- Basic Administration
- Understanding Projects and the Revolve Interface
- Analyzing Systems
- Revolve and SQL Applications
- Revolve and IMS DB/DC Applications
- Revolve and CICS Applications
- Implementing Changes
- Application Documentation
- Task Creation and Project Management

Applying Revolve Enterprise Edition

Number of Days: 3

Overview

Revolve Enterprise Edition provides added functionality to Micro Focus Revolve. This hands-on course teaches you how to apply Revolve Enterprise Edition to analyze and understand an application. The course follows the Analysis Life Cycle process and demonstrates the use of the product during each phase.

Students will gain knowledge to use Revolve Enterprise Edition on production support, maintenance and development projects, to visualize and research entire applications, do system-wide and program level analysis, produce reports, provide effort and cost estimations, and work in groups.

Prerequisites

Students are expected to have COBOL programming experience and have awareness of PC operating systems, DOS commands, and the behavior of Windows graphical user interfaces. Additionally, the student is expected to have completed the Application Analysis Using Revolve class or similar experience.

Topics

- Introduction to Revolve Enterprise Edition
- Preparing the Application
- Defining the Points of Interest
- Using Analysis Tools
- Working with Sets
- Creating Composite Tools
- Refining the Process
- Reporting Information

REQL Scripting For Revolve Enterprise Edition

Number of Days: 5

Overview

Students will gain a working knowledge of Revolve's query language and the ability to create custom scripting in the form of reports, analysis tools, post-processors, and browsers. This will allow the participant to automate scripting to precisely meet their reporting requirements.

Understanding REQL will benefit advanced users working with Revolve Enterprise Edition by providing an in-depth knowledge of the database Revolve is based on and the skills necessary to customize Revolve to a customer's needs. The student will learn how to create customized reports, browsers, analysis tools, and post-processors, as well as, how information is extracted from the Revolve database and made available in other forms such as XML and HTML.

Prerequisites

Class participants should be experienced Revolve users and have some programming background.

Topics

- Why REQL exists and when/how it should be used
- The Revolve database design
- The core programming language
- REQL functions provided with Revolve
- User interaction - REQL to make everyday working with Revolve more productive
- The Revolve messaging system
- Alternatives to REQL
- Creation of Analysis Tools
- User written functions
- Creation of customized reports and adding of these to the Revolve UI
- Creation of REQL based browsers
- Creation of post-processors to support customer specific coding requirements
- Field Developed REQL solutions (over 1000 custom analysis tools have been written)
- Leveraging the RSP (REQL Server Pages) interface
- Exporting Revolve information for consumption by external applications via - CSV, tilde delimited files, XML, HTML
- Extracting information from multiple projects to provide enterprise wide information

Revolve Enterprise Edition - Team Training

Number of Days: 3

Overview

This hands-on course follows the Analysis Life Cycle process and demonstrates the use of the product during each phase. Students will learn how to use Revolve Enterprise Edition on production support, maintenance and development projects, to visualize and research entire applications, do system-wide and program level analysis, produce reports, provide effort and cost estimations, and work in groups.

Revolve Enterprise Edition (EE) helps Analysis teams to lead mass change initiatives and deliver new IT capabilities faster, at dramatically less cost. High-performing teams have documented their ability to:

- Accelerate delivery time of new core system functionality by 65 percent
- Reduce the rate of new defects by 50 percent
- Generate core systems documentation in minutes

Our Micro Focus Training and SupportLine Customer Care teams have introduced a unique session to help your Analysis team achieve its own best results. This innovative offering includes:

- Three days of intensive instruction and hands-on exercises with a veteran trainer-consultant.
- Distribution and demonstration of Administrator scripts developed by our Customer Care team, with demonstrations on how and when to use them.
- Class Q&A with senior technical managers on overcoming challenges in your specific environment.
- Follow-up conference call one month after the session to reinforce training and check progress.

Prerequisites

Students are expected to have completed the Application Analysis Using Revolve class or have similar practical experience.

Topics

- Preparing Applications
- Defining Points of Interest
- Using Analysis Tools
- Working with Sets
- Creating Composite Tools
- Refining the Process
- Reporting Information
- Administrator and User Scripts

Working with Server Express

Number of Days: 3

Overview

This course will help programmers and programmer/analysts learn how to use Server Express to develop and test UNIX-based applications. Students will edit, compile, debug, and test COBOL applications in the UNIX environment. In addition, students will learn how to build applications for deployment. The course manual includes additional topics for reading and class discussion. The workshop consists of three days of intensive instruction and hands-on use to gain a working knowledge and degree of proficiency using Server Express to develop and maintain UNIX COBOL applications.

Prerequisites

Students will be expected to know COBOL and have some UNIX experience.

Topics

- The Server Express Integrated Development Environment
- Getting started with Server Express
- Editing source files
- Compiling
- Animator facilities
- Advanced debugging
- COBOL Source Information (CSI)
- File assignment
- File support
- Generating and running
- Profiler features and operation
- Delivering applications
- Consolidated Tracing Facility (CTF)
- Documentation and setup
- Optimization issues
- Session Recorder features and invocation
- Interfacing to UNIX
- ADIS features
- TERMINFO Q&A

Application Analysis using Revolve

Overview

Students will gain a working knowledge and degree of proficiency using Micro Focus Revolve to analyze and understand complex application systems that include COBOL, JCL, DB2, CICS, IMS DB/DC and other systems software.

The Revolve Course will help programmers, managers/project leaders, programmer/analysts and system analysts to use Revolve on production support, maintenance and development projects, to visualize and research entire applications, do system-wide and program level analysis; perform electronic-assisted impact analysis and electronic-assisted documentation. Version 6.2.

Prerequisites

An understanding of mainframe application development and PC GUI interfaces is helpful.

Topics

- Introduction
- Basic Administration
- Understanding Projects and the Revolve Interface
- Analyzing Systems
- Revolve and SQL Applications
- Revolve and IMS DB/DC Applications
- Revolve and CICS Applications
- Implementing Changes
- Application Documentation
- Task Creation and Project Management

Introduction to Agile with Scrum

Number of Days: 1 or 2

Overview

A one-day session, this Introduction to Agile course utilizes a combination of lecture, discussion and hands-on exercises to help those who are new to Agile and anyone involved in the managing of agile projects gain a better understanding of key Agile concepts. At the conclusion of the course, the participants will be able to: understand Agile at a high level; understand the benefits Agile provides; understand Scrum at a high level; appreciate the pace, mechanics and rigor of Agile; appreciate being part of an Agile team; and finally be prepared and interested in learning more about Agile development and management (1 day) or participants should be prepared to effectively participate on an Agile team (2 day).

Prerequisites

Working knowledge of software development and/or management practices

Topics

- Agile History and Background
- Common Business Goals & Benefits
- Agile Values, Principles & Practices
- Agile Planning
 - Chartering & Visioning
 - Product Roadmaps
 - Release Planning
- Scrum Overview
 - Sprint Planning
 - Execution
 - Demonstrations & Retrospectives
- Agile Metrics (2 day)
- Open Discussion

Agile Product Management

Number of Days: 2

Overview

A two-day session, this Agile Product Management course utilizes a combination of lecture, discussion and hands-on exercises to help those who are new to Agile and anyone involved in the managing of agile projects gain a better understanding of their unique role on an Agile team. At the conclusion of the course, the participants will be able to: Understand how to leverage the Agile principles and practices to achieve business goals; effectively build Agile friendly product roadmaps; work with their team members to plan a release; write, develop, prioritize and manage a product backlog; understand how to write, split and apply User Stories in concert with other non-functional requirements; and how to handle tough questions like “when will we launch and with what?”. Finally, participants should be prepared to effectively participate on an Agile team throughout an entire release.

Prerequisites

Working knowledge of software development and/or management practices

Topics

- Agile History and Background
- Common Business Goals & Benefits
- Agile Values, Principles & Practices
- Agile Team Roles & Responsibilities
- Agile Planning
 - Chartering & Visioning
 - Product Roadmaps
 - Release Planning
- Agile Requirements Definition & Management
- Scrum Overview
 - Sprint Planning
 - Execution
 - Demonstrations & Retrospectives
- Communicating with Stakeholders
- Integrating User Centered Design into the Process
- Customer Collaboration
- Agile Metrics
- Open Discussion

Innovation Games for Agile Teams

Number of Days: 1

Overview

This course introduces you to Innovation Games techniques and how to use them in an Agile setting. A one-day session, this course utilizes a combination of lecture, discussion and hands-on exercises to help you gain a better understanding of how to apply Innovation Games within the context of an Agile development process.

In this course, we will show how the games described in the book *Innovation Games: Creating Breakthrough Products Through Collaborative Play* can be used to improve many of the practices that are common in Agile teams. Beginning with an overview of Innovation Games, you will learn how to:

- Identify customer requirements for an ideal product through the Product Box game
- Improve retrospectives through the Speed Boat game
- Prioritize your backlog through the online game Buy a Feature online
- Plan a successful project through the game Remember the Future
- Develop better release plans through the game Prune the Product Tree
- Understand product usage through the games Me and My Shadow and Start Your Day

Prerequisites

Working knowledge of software development and/or management practices

Topics

- Overview of Innovation Games
- Effective Customer Collaboration Programs
- Continuous Product Planning at all Levels
- Portfolio Prioritization
- Product Backlog Prioritization
- Strategic Planning
- Release Planning
- Agile Retrospectives
- Primary market research & ethnography

Certified Scrum Product Owner

Number of Days: 2

Overview

A two-day session, this Certified Scrum Product Owner course utilizes a combination of lecture, discussion and hands-on exercises to help those who are involved in managing and leading agile projects gain a better understanding of this unique role on an Agile team. Beginning with the history of agile development and moving through the disciplines promoted by Scrum, participants will gain a comprehensive understanding of how to prioritize new features in the backlog based on stakeholder value, collaborate with the development team, accept or rejecting backlog items and constantly re-evaluate release plans to achieve business goals. Following successful completion of the course, each participant will be designated a Certified Scrum Product Owner. This certification includes a one-year membership of the Scrum Alliance, where additional member-only materials and information are available.

Prerequisites

Working knowledge of software development and/or management practices

Topics

- Product Owner responsibilities
- Communicating & collaborating with stakeholders
- Agile requirements management including:
 - User stories
 - Acceptance criteria and
 - Just-in-time elaboration
- Agile planning-including:
 - Vision
 - Roadmap
 - Release planning
 - Iteration planning and
 - Daily planning
- Backlog planning, prioritization and sequencing
- Using acceptance criteria to understand when an item is “done”
- How to inspect and adapt the product and processes

ScrumMaster Certification

Number of Days: 2

Overview

A two-day session, this ScrumMaster course utilizes a combination of lecture, discussion and hands-on exercises to help those who are involved in managing and leading agile projects gain a better understanding of this unique role on an Agile team. Beginning with the history of agile development and moving through the disciplines promoted by Scrum, participants will gain a comprehensive understanding of the Scrum methodology while specifically reviewing the behaviors expected of a ScrumMaster. Certified ScrumMasters will be able to initiate and execute a sprint. Successful completion of this course results in certification as a ScrumMaster with the Scrum Alliance. This certification includes a one-year membership of the Scrum Alliance, where additional member-only material and information are available.

Prerequisites

Working knowledge of software development and/or management practices

Topics

- Introduction to Agile
- Introduction to Scrum
 - History
 - Values
 - Terminology
 - Scrum Core Elements
- 59-Minute Scrum Experience
 - Estimate Tasks
 - Commit
- Sprint!
 - Daily Scrum Meeting
 - Burndown Charts and Project Reporting
- Sprint Review
 - Sprint Demo
 - Sprint Retrospective
- Scrum Roles and Responsibilities
- Scrum Process Details
 - Planning the Sprint
 - Product Backlog
 - Sprint Planning Meeting
 - Review user stories
 - Estimate Capacity
- Scrum and Architecture
- Scaling Scrum
- Getting Started with Scrum
- Scrum Rules

BDL Scripting Techniques

Number of Days: 2

Overview

As a Software Quality Optimization engineer you must ensure that your scripts trap known errors to be able to have the root-cause information at your fingertips; Implement the necessary content verification to ensure the functionality of the application under high load conditions; Properly design data driven and page driven load tests; Share data across agent machines; And manage dynamic forms and file uploads.

Prerequisites

- Three or more months experience with SilkPerformer
- Familiarity with script randomization
- Experience in defining custom functions
- Three or more months experience with SilkPerformer
- Basic knowledge related to verification and parsing functions

Developing TeamAnalytics Reports in Xcelsius

Number of Days: 1

Overview

This course teaches basic skills required to develop simple Xcelsius reports that retrieve and visualize data from the TeamAnalytics data warehouse. The essence of the course is a 4-hour workshop, during which students will develop a report from start to finish. Upon the completion of this course, Report Authors and BI Specialists will be able to develop simple Xcelsius reports presenting TeamAnalytics data. Please note that developing queries retrieving report data is out of scope of this class and is covered in a separate course.

Prerequisites

Some BI report development experience

Topics

- Welcome
 - Course overview
 - Introductions
- Introduction to Report Development in Xcelsius
 - Understanding How Xcelsius Reports Interact with TeamAnalytics
 - Introducing the Report Template
- Developing a Simple Report
 - Workshop
- Summary
 - Course Summary
 - Next Steps

CaliberRM Administration

Number of Days: 1

Overview

CaliberRM Administration is a tools-oriented course that provides hands-on training for anyone involved in the maintenance and customization of CaliberRM projects, the installation and configuration of the CaliberRM software, or administering CaliberRM projects and servers. The focus will be on the project and server tasks necessary to administer the product software and repository. To accomplish these tasks, you will use the CaliberRM Requirements Management module and the CaliberRM Administrator module.

During the course, you will learn the underlying CaliberRM product architecture and be able to develop a comprehensive security strategy for groups and users. You will also learn how to define reliable repository backup and recovery procedures and how to create custom, reusable objects for use in CaliberRM projects. In addition, you will learn how to migrate data in or out of CaliberRM with the import and export functionality.

All concepts are taught through a combination of instructor-led discussion and self-paced exercises. After completing this course, you will be able to effectively administer your CaliberRM software installation.

Prerequisites

CaliberRM Essentials

Topics

- CaliberRM Administrator Overview
 - Launching, Logging On and Logging Off
 - CaliberRM Administrator Views and Menus
- Getting Started with Framework Administrator
 - Understanding CaliberRM User Roles
 - Understanding Project Setup and Configuration
 - Understanding User Setup and Configuration
 - Understanding Group Setup and Configuration
- CaliberRM Project Administrators Tasks
 - Assigning CaliberRM Project Administrators
 - Mapping and Sharing Requirements
 - Glossary Maintenance
- Maintaining Requirements Types and Attributes
 - Creating a Requirement Type
 - Maintaining a Requirement Type
 - Defining Requirement Attributes
 - Deleting Requirement Types and Attributes
- Database Administration and CaliberRM Diagnostics
 - Backing up and Restoring CaliberRM Database
 - Troubleshooting with CaliberRM Diagnostic Tool

- Maintaining Requirement Baselines
 - Assigning Baseline Administrators
 - Creating and Initializing Baselines
 - Modifying and Locking Baselines
 - Maintaining Baseline Signatures
 - Comparing Baselines
- Import / Export Utilities
 - CaliberRM Import Utility
 - CaliberRM Export Utility
 - Exporting to MS Access

StarTeam Essentials

Number of Days: 2

Overview

StarTeam Essentials introduces the basics of managing software configuration with StarTeam; the necessary skills to easily and safely version files, manage change requests, and actively collaborate with coworkers through requirements, tasks and discussion threads related to development. A tools-oriented course, StarTeam Essentials is for new users of StarTeam, anyone involved with the management and versioning of files, change requests, requirements or tasks. The focus is on using StarTeam in the context of daily development activities, ranging from managing files to satisfying new product requirements to resolving reported software defects. Throughout the course, you will use the StarTeam interface to accomplish these tasks and learn how to integrate this into your existing development processes.

Upon completing this course, you will:

- Understand the problems Configuration Management solves, CM purpose, CM roles, StarTeam benefits and StarTeam architecture (client and server)
- Understand the StarTeam project structure and be able to navigate StarTeam projects
- Be able to access and update Configuration Items
- Be able to customize the way StarTeam displays Item Data
- Know how to access previous CI revisions
- Be able to participate in Change Management processes
- Communicate with other team members using Topics

Prerequisites

Working knowledge of the Windows operating system

Topics

- Welcome and Introduction
 - Configuration Management and StarTeam
- Navigating StarTeam Projects
 - Open and explore StarTeam projects and views
- Working with Files
 - Access files, add new files, and update existing files, including related tasks, such as creating links to Change Requests or attaching a revision label
- Customizing StarTeam Display
 - Customizing the way item data are displayed in the view window
- Identifying and Accessing Item Revisions
 - Access and work with individual item revisions, including checking/opening a specific file revision, accessing item revisions by revision number, date, label, and promotion stat
- Participating in a Change Management Process

- StarTeam-specific skills required to participate in a Change Management process, including creating and updating Change Requests
- Using Topics
 - Communicating with other team members
- Course Wrap-Up
 - This module summarizes the acquired skills and suggests the next steps.

Administering TeamAnalytics

Number of Days: 1

Overview

This course teaches IT Administrators the skills required to install, configure and maintain the TeamAnalytics data warehouse. The course includes numerous hands-on demonstrations and exercises to reinforce the topics covered in lecture-style presentations. Upon the completion of this course, you will be able to deploy and maintain TeamAnalytics.

Prerequisites

Experience in administering software systems on Windows platforms and some database administration experience

Topics

- Welcome
 - Course overview
 - Introductions
- Introducing TeamAnalytics
 - TeamAnalytics as a Component of Open ALM and **Borland Management Suite**
 - TeamAnalytics Architecture
 - User Roles
- Deploying TeamAnalytics
 - Planning a TeamAnalytics Installation
 - Installation Process
 - Initial Product Configuration
- Operating TeamAnalytics
 - Configuring Source Systems for TeamAnalytics
 - Running ETL Jobs
 - Configuring a Web Server for Standard Reports
- Summary
 - Course Summary
 - Next Steps

StarTeam Server Administration

Number of Days: 1

Overview

StarTeam Advanced: Server Administration introduces the configuration manager to the advanced skills of configuring a StarTeam server environment. A tools-oriented course, StarTeam Server Administration provides hands-on, advanced training for System administrators responsible for installing and managing StarTeam servers. The focus is on configuration options, repository reliability, and security strategies and you will practice configuring new StarTeam installations, upgrading existing ones, and managing repository growth.

During this course, you will learn the essential components in the StarTeam product architecture and their basic administrative management methods and techniques. You will also learn how to define a reliable backup and recovery procedure and how to configure primary and secondary repository security strategies. Discussions and examples of how to alter the StarTeam database schema and then apply those changes to new custom forms using the layout designer. In addition, you will learn how to set up the StarTeam multi-casting facility, MPX and, if applicable, how to use the file/object caching available on the StarTeam Advantage release.

Prerequisites

Experience as a system administrator

Topics

- Welcome and Introduction
 - Configuration Management and StarTeam
- StarTeam Architecture
 - System architecture
 - Clients
- Server Installation
 - Server installation
 - Configure the StarTeam server
- Repository structure
 - Understand Hive options
 - Storage of attachments
- Backup and Restore
 - Suggested backup techniques
- Other Server Settings
 - Remote administration
- User Manager
 - Using Users and Groups
 - Granting Privileges
- Security
 - Determining Access Rights
 - Security Levels

- Using Groups to Manage Privileges
- Field Customization
 - Defining Custom Fields
 - Using Custom Fields
- Form Customization
 - Using StarFlow Extensions for custom forms
 - Creating Custom forms with the Layout Designer
- StarTeam® MPX Server
 - MPX Architecture
 - Installing the MPX Server
 - Configuring the MPX Server
 - Cache agents and Object caching
 - Installing Cache Agents (Advantage users only)
 - Configuring Cache Agents (Advantage users only)

Demand Management Configuration

Number of Days: 2

Overview

The Demand Management Configuration course provides hands-on training for anyone interested in using **Borland Management Suite** and, specifically, TeamDemand, to implement demand management processes. This course is an ideal way to launch your demand management implementation, and will create a solid foundation for your implementation decisions. Through interactive discussions and hands-on exercises, this course will guide participants in designing and configuring the fundamental components of a demand request process.

Prerequisites

Working knowledge of the Windows operating system

Topics

- Introduction
 - Introducing **Borland® Management Suite™**
 - Demand Management Support in **BMS**
 - Getting Started with **BMS** GUI
- Implementing Light Weight Demand Management Processes
 - Characteristics of Demand Management Processes Based on Demand Request Items
 - Designing a Demand Management Workflow Using Demand Request Items
 - Defining an ALM Demand Request Type
 - Defining ALM Demand Status Values
 - Defining ALM Association Types
 - Creating Questions and Forms
 - Configuring User Accounts
 - Testing the Workflow
 - Breaking Demand Requests into Artifacts
- Implementing Light Weight Demand Management Processes
 - Characteristics of Demand Management Processes Based on Managed Items
 - Defining a Request Type as a Managed Item Type category
 - Configuring Workflow Statuses
 - Configuring Roles
 - Creating Questions and Forms
 - Creating Workflow Action Buttons
 - Creating Workflow Instructions
 - Creating and Configuring Users
 - Setting Automated Association Rules
 - Configuring Threshold Alerts
 - Reviewing the Workflow Matrix
 - Configuring Request Portfolios
 - Testing the Workflow
 - Modifying a Workflow

- Reporting and Monitoring for Demand Management

Modeling and Implementing Load Tests

Number of Days: 4

Overview

The course is for QA project leaders, testers, and engineers who need to develop a working knowledge of a load testing methodology and SilkPerformer. When this course is successfully completed, the student will be able to:

- Identify components of an Internet infrastructure
- Create a load/performance test plan
- Use SilkPerformer to configure and record a test script
- Use SilkPerformer to compile and try a script
- Use the SilkPerformer TrueLog Explorer to troubleshoot scripts
- Randomize data to create realistic loads
- Modularize code through user-defined functions and transactions
- Create profiles to vary connection speeds and browser types
- Establish and confirm a baseline
- Explain and execute all six workload models
- Monitor agents
- Explore tests results

Prerequisites

Familiarity with a Windows environment

Ability to navigate in an Internet or intranet environment

Familiarity with scripting or structured programming

Knowledge about basic concepts related to load testing, Web architecture and protocols

Experience testing Web applications (manually)

Topics

- Load Testing Fundamentals
 - Internet Architecture
 - Load Testing Environment
 - Types of Load Testing
 - Load Test Variations
 - Workload Models
 - Load Testing Methodology
- Project Plan, Test Plan, and Project Outline
 - The Test Plan
 - Determining the Workload Configuration
 - Outlining the Project in SilkPerformer
- Modeling the Scripts
 - Recording Modes
 - The Recorder

- The Browser and Cookies
- Log Files
- Trying the Script
- The Script
- The Monitor
- The True Log Explorer
- Customizing the Test
 - The True Log Explorer
- Finding and Confirming Baseline
 - Finding the Baseline
 - Confirming the Baseline
- Adjust Workload and Run Test
 - Adjusting the Workload
 - Workload Configuration
 - Other Test Models
 - True Log on Error
- Introduction to BDL Scripting
 - General Syntax
 - Understanding Transactions
- SilkPerformer Overview
 - SilkPerformer Features
 - Supported Protocols and Interfaces
 - SilkPerformer Infrastructure
 - Installation Requirements and Options
 - Graphical User Interface
 - Workbench Settings
 - Recorder Settings
 - Profile Settings
- Data Types, Variables, and Randomizing
 - Data Types
 - Functions for Debugging
 - Randomizing
- Profile Settings
 - Changing Profile Settings
 - Parsing Responses

Capability Maturity Model Integration Basics Workshop

Number of Days: 2

Overview

A two-day, on-site engagement, the CMMI Basics Workshop is ideal for systems and software engineering personnel interested in understanding CMMI for Development (CMMI-DEV).

This seminar is based on the current version of CMMI from the Software Engineering Institute (SEI). Through instructor-led discussion, you learn the importance of having defined processes within a development organization and the rationale behind process improvement. In addition, instructors understand how to use the CMMI framework and its embedded model for organizational improvement to improve system and software-related processes. This includes explaining the architecture of the CMMI models—maturity levels, capability levels, process areas, goals, and specific and generic practices.

You also learn how to support the application of CMMI principles to meet the development needs of your organization, and how to identify issues that should be addressed before undertaking a process improvement effort. After completing this workshop, you will understand how the material in the CMMI framework relates to your organization's system and software-related processes.

Prerequisites

Knowledge of systems engineering, and/or software engineering, as well as project management
Familiarity with quality assurance, configuration management, and basic management principles

Topics

- CMMI Overview
- Staged Representation of CMMI
- Process Areas in Each Maturity Level
- Continuous Representation of CMMI

Managing Projects using TeamFocus

Number of Days: 2

Overview

Managing Projects using TeamFocus introduces the Project Manager or the ScrumMaster and team members to the fundamental skills of managing projects using TeamFocus. Managing Projects using TeamFocus is a course that provides hands-on training for anyone using TeamFocus. This course will address the management of both agile projects and traditional projects using TeamFocus. Each key aspect of agile and traditional project management and execution will be explained and reinforced through hands-on group exercises.

During the course, you will learn not only the TeamFocus product features but also how to utilize them to manage projects throughout their lifecycle. In the traditional project management sections, you will learn how to develop a work breakdown structure, assign and forecast resources, track project status, and track time using timesheets. In the agile project management sections, you will learn how to build and manage a product backlog of user stories, plan releases and sprints, prepare for the daily stand-up, and track progress during a sprint. All concepts are taught through a combination of instructor-led discussion, group exercises, and self-paced exercises using TeamFocus.

Prerequisites

Working knowledge of the Windows operating system

Topics

- Introduction
 - Introducing TeamFocus as a component of Borland® Management Suite™ (BMS)
 - Traditional vs. Agile Project Management
 - Starting with the BMS GUI
 - Creating a Project
- Basics of Agile Project Management in TeamFocus
 - Introducing SCRUM
 - How Scrum roles apply to your organization
 - Building a product backlog of user stories
 - Establishing an external repository connection for a backlog
- Managing Sprints and Releases
 - Creating a release and a sprint
 - Adding user stories from the product backlog to the sprint
 - Creating a sprint backlog of tasks
 - Updating sprint tasks based on the results from a Daily Scrum
 - Adding an obstacle to a task in a sprint
 - Using a Burndown chart to track sprint status
- Planning Traditional Projects
 - Creating a Work Breakdown Structure (WBS)
 - Managing task and project dependencies
 - Assigning resources and costs to tasks
 - Using the Resource view to analyze resource availability

- Tracking Projects
 - Updating project status
 - Tracking tasks with timesheets
 - Using the Reporting and Monitoring view to track project status

Capability Maturity Model Integration Overview

Number of Days: 1 or ½

Overview

The Capability Maturity Model Integration (CMMI) Overview introduces the CMMI model and the fundamental concepts of both the staged and continuous representations of the model.

A one-day or half-day, on-site engagement, the CMMI Overview is ideal for systems and software engineering managers interested in understanding CMMI-DEV.

This seminar is based on the current version of CMMI-DEV from the Software Engineering Institute (SEI). Through instructor-led discussion, you learn the importance of having defined processes within a development organization and the rationale behind process improvement. In addition, instructors understand how to use the CMMI framework and its embedded model for organizational improvement to improve system and software-related processes. This includes explaining the architecture of the CMMI models—maturity levels, capability levels, process areas, goals, and specific and generic practices.

You also learn how to support the application of CMMI principles to meet the development needs of your organization, and how to identify issues that should be addressed before undertaking a process improvement effort. After completing this seminar, you will understand how to use the CMMI framework to improve your organization's system and software-related process areas.

Prerequisites

Systems and software engineering managers

Topics

- CMMI Overview
- Maturity Levels and Process Areas of the Staged Representation of the CMMI
- Capability Levels and Related Generic Practices of the Continuous Representation of the CMMI
- (optional) Business Value of Process Improvement
- (optional) CMMI Appraisal Overview

Level 4 Quantitative Techniques Workshop

Number of Days: 3

Overview

The Capability Maturity Model Integration (CMMI) Basics Workshop introduces the CMMI model and the fundamental concepts of both the staged and continuous representations of the model. A three-day, on-site engagement, the Level 4 Quantitative Techniques Workshop is intended for members of process groups, measurement groups, project managers, and project team members who are implementing Level 4 practices.

Instructor-led lectures and discussions, based on the concepts embodied in the Capability Maturity Model Integration® for Development (CMMI-DEV) framework, provide you with an understanding of the theory underlying quantitative management practices, along with practical examples of how to apply those practices.

In the hands-on workshop, you learn how to interpret and use basic quantitative management practices of the Level 4 process areas. Small team exercises enable you to use the material from the lectures, with automated support, to select processes to control, establish process capability baselines, and use performance measures to gain insight into typical data. As a final exercise, you map out a strategy for implementing high-maturity practices in your own organization. After completing this workshop, you will understand the different techniques used to establish performance measures, quantitatively manage projects, and establish process capability baselines.

Prerequisites

None

Topics

- Overview of Level 4
- Overview of Level 5
- Case Studies of High-Maturity Organizations
- Understanding Process Variation
- Developing Process Capability Baselines
- Organizational Setup for Quantitative Management
- Quantitative Project Planning
- Quantitative Process Management
- Quantitative Quality Management

Developing TeamAnalytics Reports

Number of Days: 1

Overview

This course teaches skills required to develop reports presenting data stored in the TeamAnalytics ALM (Application Lifecycle Management) data warehouse. The main topic of the course is the dimensional model the ALM data warehouse employs. The course includes numerous hands-on demonstrations and exercises, which involve developing SQL queries answering common business questions, to reinforce the understanding of the model. The course does not address topics specific to any report authoring tool: the emphasis is placed on the understanding of the data model and its schemas, rather than on developing report UIs (which is inherently specific to the report authoring tool being used). The course consists of the core modules (Welcome, Introducing TeamAnalytics, Understanding TeamAnalytics Data Warehouse Model Basics, Summary) as well as optional modules for particular ALM process areas (Requirement Definition Management or RDM, Software Configuration Management or SCM) and cross-process area reporting. Thus, the course can be customized to meet specific learning needs and reflect the set of tools customer's organization uses. (Note that at least one of the process-area specific module should be selected.)

Upon the completion of this course, you will understand the dimensional model of the TeamAnalytics data warehouse. This knowledge will allow you to develop queries answering business questions commonly addressed in ALM reports. You will be able to harness the acquired skills while developing reports in any Business Intelligence authoring tool. (Please note that skills required to use specific report authoring tools are not covered in this course.)

Prerequisites

Working knowledge of SQL

Experience using at least one ALM tool in each process area to be covered in the course (RDM or/and SCM, depending on the selected optional modules), for example CaliberRM or/and StarTeam

Some BI report development experience

Topics

- Welcome
 - Course overview
 - Introductions
- Introducing TeamAnalytics
 - TeamAnalytics as a Component of Open ALM and **Borland Management Suite**
 - TeamAnalytics Architecture
 - User Roles
- Understanding TeamAnalytics Data Warehouse Model Basics
 - Types of Star Schemas (Fact Tables)
 - Common Dimension Tables
 - Understanding Bridge Tables
 - User-Defined Attributes
- Developing Queries for the Requirement Definition Management (RDM) Process Area (Optional)

- Understanding RDM Dimension Tables
 - Using RDM Star Schemas
- Developing Queries for the Software Configuration Management (SCM) Process Area (Optional)
 - Understanding SCM Dimension Tables
 - Using SCM Star Schemas
- Developing Cross-Process Area Queries (Optional)
 - Using Cross-Process Area Link Star Schemas
 - Using ALM Projects
- Summary
 - Course Summary
 - Next Steps

AppServer Essentials

Number of Days: 3

Overview

If you are a member of a software development team developing and deploying J2EE application, this course is for you. The course will introduce you to the main functionalities of AppServer. You will learn how to write a J2EE 1.4 compliant application and deploy it into the AppServer. You will also learn how to manage the health of your application through the **Borland Management Console** and troubleshoot your application using the in-built tool in the console. The course contains numerous hands-on exercises and demonstrations to enforce the presented topics.

Upon the completion of the AppServer Essential course, the student will be able to use AppServer to create, deploy and manage J2EE application:

- Understand the design and architecture of the AppServer
- Create Java Server Face web application
- Expose existing J2EE session bean as web service
- Create asynchronous application using Java Message Service & Message Driven Bean
- Manage the health of the J2EE applications using **Borland Management Console**

Prerequisites

A basic understanding on how to create J2EE applications

Topics

The course consists of 9 modules. The modular course structure supports the following delivery sequences:

- Modules 1, 2, 3 & 9: provide understanding of the features and architecture of AppServer.
- Modules 4, 5, 7 & 8: for students interested in creating web-based application
- Module 6 & 7: for students interested in creating asynchronous J2EE application and exposing existing J2EE application as web-service

Managing Quality with SilkCentral Test Manager

Number of Days: 3

Overview

A not-to-be-missed session for Business Managers, Quality Assurance Project Leaders, and Engineers, who need to develop a working knowledge of SCTM user and project management, requirement creation and test case definition, execute tests and results interpretation. You will uncover new ways to manage user accounts and execution server locations; configure projects; manage test requirements; create test and execution definitions. Through hands on exercises, you will schedule tests for manual and unattended testing, and you will also review the different reports available within SCTM.

Prerequisites

Familiarity with a Windows environment

Ability to navigate in an Internet or intranet environment

Have a basic knowledge of software quality or test management

Working knowledge of SilkTest and/or SilkPerformer

Topics

- Introduction to SilkCentral Test Manager (SCTM)
 - SCTM Architecture
 - SCTM's Interface
- Setting the Stage
 - What are Requirements?
- Defining Requirements
 - Defining Requirements
 - Developing Requirements Hierarchies
 - Microsoft Office Import Tool
 - CaliberRM Integration Overview
- Creating a Test Plan
 - Generating a Test Plan
 - Assigning Test Definitions to Requirements
- The Execution Unit
 - Defining Test Executions
 - Assigning Test Definitions to Test Executions
 - Configuring Deployment Environments
 - Scheduling Test Executions
 - Configuring Execution Dependencies
- Creating Manual Tests
 - Creating Test Definitions
 - Using the Manual Testing Client
 - Synchronize Test-Case Definitions
- Executing Manual Tests
 - Execution Definitions

- Creating Execution Definitions
 - Executing Manual Test Definitions
 - Stopping an Execution Definition
- Issue Manager
 - Understanding Inboxes
 - Entering New Issues
 - Taking Action on Issues
 - Generating Reports for Issues Queries and Reports
- Test Monitoring and Reporting
 - Understanding the Projects Unit and Reports Unit
 - Understanding the Overview and Activities Tab
- Global Filters and Custom Attributes
 - Creating Custom Attributes
 - Creating Global Filters
 - Using Filters to Display Information
- Project Management
 - Understanding the Project Settings Tab
 - Creating Custom Requirement Properties
 - Creating Custom Step Properties
 - Change Notification Tab
- System Administration
 - The Administration Pages
 - Adding Users, Groups, and Roles
 - Understanding Projects and Execution Servers
 - Administrative Reports
 - Source Control Profiles
 - Products and Platforms
 - Global Schedules and File Storage
- Bringing It All Together
 - SCTM and the **Borland Quality Maturity Curve™**
- Appendix A – SilkCentral Reporting with BIRT
 - BIRT Installation
 - Intro to BIRT
 - Using the BIRT Designer
 - SCTM and BIRT by Example
 - Introduction to SCTM Database Model

Introduction to Capability Maturity Model Integration Version 1.2

Number of Days: 3

Overview

The Capability Maturity Model Integration (CMMI) Version 1.2 course provides an introduction to process improvement using maturity models and the fundamental concepts of CMMI-DEV.

A three-day, on-site engagement, the Introduction to CMMI Version 1.2 course is designed for systems and software engineering managers and practitioners interested in understanding the model, and for assessment and process team members that will use the model for assessments or process improvement. The completion of this course is a prerequisite for CMMI-based Appraisal training.

This seminar is based on the current version of CMMI-DEV from the Software Engineering Institute (SEI). Instructors focus the course discussion on the use of appropriate model components to instill successful process change in an organization, and review in detail each of the groupings of industry best practices, known as the process areas (PAs). During the sessions, you learn how to make valid judgments regarding an organization's implementation of the process areas, including identifying issues that should be addressed in performing process improvement as structured by CMMI. After completing this course, you will understand how to describe the process management and improvement principles that underpin the CMMI model and how to apply the CMMI principles to meet the needs of systems and software development organizations.

Prerequisites

Knowledge of systems engineering, software engineering, and management

Topics

- Introduction
- Process Improvement Concepts and CMMI
- Overview of CMMI Models and Components
- Model Representations and Institutionalization
- Product Development 1
- Managing the Project
- Project and Organizational Support
- Product Development 2
- Improvement Infrastructure
- Managing Quantitatively
- Supporting Complex Environments
- Tying it All Together
- Next Steps
- Summary

CaliberRM Essentials

Number of Days: 1

Overview

CaliberRM Essentials introduces the requirements analyst or reviewer to the fundamental skill of managing requirement definitions using CaliberRM.

CaliberRM Essentials is a tools-oriented course that provides hands-on training for are new to CaliberRM and anyone involved in the definition, review, or approval of requirement specifications. The focus will be on using CaliberRM in the context of daily requirements analysis, including creating requirements, collaborating with other interested parties, and publishing approved requirement baselines. Throughout the course, you will use the CaliberRM user interface to accomplish these tasks and will discuss how to adapt the interface itself so that each analyst may have a personal view of the requirements information.

During the course, you will learn not only the CaliberRM product features but also how to utilize them to manage evolving requirement definitions. For example, you will learn how to extend requirement definitions with custom attributes and, if desired, reuse these customizations as part of a project or enterprise standard. You will also learn how to define dependency relationships between requirements and across development technologies as well as reporting capabilities so that you can extract critical development metrics from your requirements repository.

All concepts are taught through a combination of instructor-led discussion and self-paced exercises. After completing this course, you will be able to effectively use CaliberRM for any requirement specification activity.

Prerequisites

Working knowledge of the Windows operating system

Topics

- Overview of Requirements Management
 - Conceptual overview of Requirements Management
 - Requirements Management terms and definitions
- Getting Started with CaliberRM
 - Technical Architecture
 - Logging-On to CaliberRM
 - Structure of CaliberRM
 - Changing user options
 - Accessing CaliberRM's Help
- Traceability
 - Requirements Traceability
 - Understanding Traces (benefits and cautions)
 - References (and comparisons to traceability)
 - Traceability and CMMI compliance
 - Requirement Types and Traceability
 - Tracing to external artifacts and requirements in other projects

- Baselines and Impact Analysis
 - Impact Analysis overview and tools
 - Traceability and Impact Analysis
 - Creating, initializing, maintaining, and deleting baselines
 - Mapping a baseline to Design, Build and QA (test coverage)
 - Comparing Baselines for Impact Analysis
 - Locking Baselines
 - Digital Signatures and Signatories
- Entering Requirements in CaliberRM
 - Creating Requirements
 - Editing and Saving Requirements
 - Moving Requirements
 - Deleting Requirements
 - Creating Requirements from MS Word Importing Requirements from MS Word
- Collaboration
 - Threaded discussions
 - Requirements owners and assigning responsibility
 - Notification and status
 - Sharing requirements across projects
- Integrations with CaliberRM
 - Review of integrations with products such as DefineIT, LDAP/Active Directory, StarTeam, SilkCentral
- Working with CaliberRM
 - Creating References
 - File References
 - Web References
 - Text References
 - Key references
 - Requirement Grid Features
 - Requirements Verification
 - Identifying and Searching Requirements
- Reporting
 - Existing reports in Caliber: Detail, Status, Responsibility
 - Individual Requirement Reporting
 - Document Factory fundamentals
 - Datamart fundamentals

Managing Projects using StarTeam

Number of Days: 2

Overview

Managing Projects Using StarTeam provides a process and tool-oriented approach to planning a new StarTeam configuration or optimizing an existing configuration to support and enhance your software configuration management processes.

A process and tool-oriented course, Managing StarTeam Projects is for individuals tasked with defining the organization's configuration management processes and deciding how StarTeam will be implemented in the organization, anyone involved with the creation and management of projects and configurations in StarTeam. The course examines the activities and processes required for effective software configuration management, and focuses on the use of StarTeam to create and manage projects and product configurations, implement a change control process, and generate reports and charts to support configuration status accounting. The course includes discussions on how to configure StarTeam to support an organization's configuration management processes. Upon completing this course, you will:

- Understand the activities required for effective software configuration management.
- Be able to create and set up a StarTeam project.
- Know how to create and use standard views to manage product releases and configurations.
- Know how to use labels and promotion states for revision identification.
- Know how enhanced process tasks are used in the new process model
- Be able to promote files by process items (CRs, Tasks or Requirements) using the new View Compare Merge tool
- Be able to configure security policies for projects, views, folders and items.
- Be able to define a change control process.
- Understand the automatic linking capabilities of enhanced process links
- Be able to produce reports when performing tasks like auditing or baseline verification.

Prerequisites

StarTeam Essentials and working knowledge of the Windows operating system

Topics

- Welcome and Introduction
 - Configuration Management and StarTeam
- Configuring Projects and Folders
 - Create and configure StarTeam projects and folder structures
- Managing Configurations with Views and Labels
 - Use views, labels and enhanced process tasks to manage parallel development and multiple releases
- Configuring Security Policies
 - Configure access rights for users and groups
- Defining a Change Management Process

- Define an effective change management process using Change Requests and workflow
 - Automate the collection of work related to the process items for ease of reporting and/or promotion
- SCM Auditing and Reporting
 - Define and generate measures and configuration status audits using reports and graphs
- Course Wrap-Up
 - This module summarizes the acquired skills and suggests the next steps

UML 2.0 Essentials

Number of Days: 2

Overview

This workshop is a thorough presentation of the Unified Modeling Language (UML 2.0) and includes practical advice on effective usage in development projects and is suitable for Business and Systems Analysts, Software Architects, Software Designers. The UML Essentials workshop is a fast-paced mixture of hands-on modeling exercises and lecture. The workshop is designed to give participants a thorough grounding in the fundamentals of building UML models - developing and analyzing diagrams as well as learning to use UML to maximize communication.

The instructor walks you through the process of building UML models using Together for Eclipse.

While the workshop is not process-specific, it includes examples of how the diagrams are used with different processes. The workshop consists of lecture presentations supplemented with practical sessions in which delegates will use Together for Eclipse which will enable delegates to apply the skills being taught.

Prerequisites

None

Topics

- Background of UML
 - Includes a brief history of UML important background information
 - Overview of general diagram elements
- Introduction to Together for Eclipse
 - Workspaces, perspectives, views and projects
 - Creating a diagram
 - Adding elements
 - Diagram and element properties
- Diagrams for Analysis Use Case Diagrams
 - Learn how to conduct effective analysis using Use Case Modeling
 - Understand the rationale behind the creation of repositories for Actors and Use Cases
 - Learn how to describe Use Cases in Together™ and optionally explore its integration with CaliberRM™
- State Machine Diagrams
 - Learn how to model interactive and capture state information using State Machine
- Diagrams for Implementation Component Diagrams
 - Learn how to represent systems using “pluggable” components which fit together via defined interfaces
- Deployment Diagrams
 - Learn how to represent the distribution of system components to their respective execution environments using a Deployment Diagram
- Enhancing the System Model

- UML profiles ~ customized extensions to UML which can add specific meaning to the system model
- Object Constraint Language ~ a formal specification language for defining constraints for operations within class diagrams.
- Activity Diagrams
 - Learn how to expand upon the Use Case model by adding logical behavior expressed in Activity Diagrams
 - Explore the various ways in which Activity diagrams can be linked to their corresponding Use Cases in Together™
- Diagrams for Design Class Diagrams
 - Learn how to create effective class diagrams which represent the business domain
 - Introduce QVT/MDA transformations in Together™
- Sequence Diagrams
 - Learn how to model process and logic flow using Sequence Diagrams
 - Explore the various ways in which Sequence diagrams can be linked to their corresponding Use Cases in Together™

Results Analysis and Correlation

Number of Days: 4

Overview

This course is valuable instruction for QA project leaders, testers, and engineers who need to build or improve their skills related to load test results analysis and interpretation. Results Analysis and Correlation (RAC) is the second course in a two-part series. The first course, Modeling and Implementing Load Tests (MIL), explains how to design, implement, and run load tests. RAC explains how to interpret load test results.

Leverage Performance Explorer's functionality to your load testing advantage. Identify reliability and functionality risks. Interpret quantified data types. Analyze workload model results and pinpoint bottlenecks that can hamper your system infrastructure. Don't miss this excellent opportunity to master your use of the Performance Explorer and the Server Analysis modules. When you successfully complete this course, you should be able to:

- Use Performance Explorer and the Server Analysis Module (SAM)
- Determine whether a specific test meets the workload and bandwidth requirements stated in the business requirements and test plan
- Add custom reports to the overview report
- Apply the concepts of range and standard deviation to analyze the average
- Use the candles with sticks series type to confirm the consistency of the average
- Validate test results
- Combine and correlate client-side measures for effective results interpretation
- Remerge and interpret data from load tests using distributed agents
- Combine and correlate server-side measures for monitoring, graphing, and reporting
- Identify possible bottlenecks and performance issues of an e-business infrastructure
- Determine the root cause of a server failure during load test executions
- Review overview of SilkCentral Test Manager (SCTM) results integration

Prerequisites

Successful completion of the MIL course (or 3+ months SilkPerformer working experience)

Knowledge of basic concepts related to statistics

Experience of implementing load tests using the current or previous versions of SilkPerformer

Topics

- Reviewing the Basics
- Using Performer Explorer
- Understanding Quantified Data
- Analyzing Client-Side Data
- Analyzing Scenarios
- Analyzing Server Side Data
- Other Client-Side Measures

Advanced Testing with SilkTest

Number of Days: 4

Overview

For the serious SilkTest user who needs to tackle the object-oriented benefits of the 4Test language, QA developers and project leaders who want to maximize their automated testing abilities.

In this course, you'll receive step-by-step instruction on how to: declare new window classes; store test data within object declarations; write new methods and verification properties; test non-standard (custom) objects; develop an API for supporting custom objects; access unseen objects using low-level events; and test Java and Visual Basic objects. Attend this course to maximize your use of the 4Test language.

Prerequisites

Experience with all standard SilkTest functionality covered within the Verification Testing with SilkTest course

Ability to build a SilkTest frame including Windows Declarations, Application States and Invoke Methods

Ability to manage test case logic flow through looping and branching constructs

Ability to create 4Test functions that take arguments and return values

Topics

- Introduction
 - Advanced Object Oriented 4Test
 - Reviewing Fundamental Features
- Object-Oriented Techniques
 - Storing Common Routines as Methods
 - Storing Data as Data Members
 - Applying Object-Oriented Techniques to Classes
 - Creating Methods for Classes
- Redefining Built-In Methods
 - Adding Properties
 - Redundant Declarations
- Introduction to Custom Objects
 - Supporting Custom Objects
- Defining a Custom Test API
 - Determining When to Define a Custom Class
 - Adding Properties to a Custom API
 - Defining an API at the Object Level
- Evaluating Available Resources
 - Understanding the Custom Object
- Developing the Test API
 - Strategies for SubClasses of Standard Objects
 - Strategies for Non- Standard Custom Objects
 - Graphical Custom Objects

VisiBroker Essentials

Number of Days: 3

Overview

If you are a member of a software development team developing distributed application using CORBA technology, this course is for you. The course will introduce you to the standard defined by CORBA and how you can create a distributed application using VisiBroker. You will learn how to define the interface between 2 components using Interface Definition Language (IDL). You will also learn how to configure the behaviour of your distributed object using the Portable Object Adapter (POA) policies. The course contains numerous hands-on exercises and demonstrations to enforce the presented topics. Upon the completion of the VisiBroker Essential course, the student will be able to use VisiBroker to create distributed application using CORBA technology:

- CORBA and VisiBroker to speed up the integration of heterogeneous application written in multiple programming languages
- Define interface using IDL
- Configure and understand the behaviour of the distributed object using the POA policies
- Create a CORBA-based compliant application

Prerequisites

Have a basic understanding on deploying application using client-server architecture in a distributed network

Topics

The course consists of 10 modules. The modular course structure supports the following delivery sequences:

- Modules 1, 2, 5 & 7: create a CORBA application based on proprietary osagent lookup
- Modules 1, 2, 6 & 7: create a CORBA application using naming service lookup
- Module 7: Configure and understand the behaviour of the distributed object using the POA policies. Create a portable application using POA.
- Module 8 & 9: create large and scalable application using dynamic activation of the servant.
- Module 10: enable the debug setting in VisiBroker and thread dump to troubleshoot the application.

Verification Testing with SilkTest

Number of Days: 4

Overview

A great introduction to the true power of SilkTest designed for QA project leaders and testers, analysts, engineers and supervisors who need to develop a working knowledge of our testing methodology and want to capitalize on the benefits of utilizing the 4Test scripting language in their tests. Learn how to organize and manage your verification tests using the test planning tool. Use SilkTest recorders to transition from manual to automatic testing. Utilize SilkTest's 4Test scripting language for verification testing and enhance your test case functionality using branching and looping statements. In just four days, you'll be able to plan and validate tests against your application and report your test results to upper management.

Prerequisites

Navigate a GUI environment

Use a web browser

Test web or GUI applications (manually)

Use structured programming and scripting techniques

Topics

- SilkTest and the Testing Process
 - The SilkTest Architecture
 - The Testing Process
- Projects and Plans
 - Understanding SilkTest Projects
 - Creating Test Plans
 - Using Attributes in Test Plans
 - Creating a Master Plan
 - Working with Sub Plans
- Capturing the Application
 - SilkTest Object Recognition
 - The Basic Workflow Bar
 - Capturing State of an Application
 - Capturing Window Declarations
- Application Verification
 - Understanding Multiple Property Verification Techniques
 - Testcase Failure
 - Linking Tests to the TestPlan
 - Understanding Alternate Verification Techniques
- Reporting and Test Results
 - Marking and Unmarking Tests
 - Progress Reporting
 - Results Management
- Beyond the Recorder

- The Scripting Process
- Object Identification and Action Settings
- Using the Library Browser
- Overview of Help Topics
- Auto complete
- Adding Information to the Results File
- Print Functions
- Data Types and Variables
- Concatenation and List Structures
- Using the Records Data Type
- Looping and Branching Techniques
 - Using various 4Test language statements
- Creating and Using Functions
 - Understanding Functions and Methods
 - Calling Functions and Creating Functions
- Data Driven Testcases
 - Understanding Data Driven Testcases
 - Retrieving Data from a Relational Database
- Other Web Topics
 - Browser Include Files
 - Running Standard Testcases
 - Using Browser Specifiers
- Error Handling
 - Recovery System Control Flow
 - Using SilkTest Exception Handling Functions