



Advanced ColdFusion

Advanced ColdFusion is a three-day, hands-on course that provides you with the knowledge and practice to build, maintain, and scale effective web applications. Students will become familiar with developing dynamic web applications utilizing the ColdFusion Application framework and ColdFusion components.

Target Student: This course is designed primarily for web designers who want to build and maintain dynamic and interactive web applications using ColdFusion.

Prerequisites: Fast Track to ColdFusion or equivalent knowledge.

Delivery Method: Instructor-led, classroom-delivery learning model with structured hands-on activities.

Benefits: After completing this course, you will be able to develop an application framework, manipulate complex data, build static and instance-based components and understand caching. In addition, you will be able to set up error handling frameworks and work with pdfs, file manipulation, and images.

What's Next:

Flash Rich Content Creation Add animation and user interaction to your website with graphics, text and sound effects.

Flash ActionScript teaches fundamental programming techniques, by introducing core concepts including instance names, variables, functions, properties, and methods; then proceeds through conditions, loops, event handling, and animating with ActionScript.

Dreamweaver Website Development Build a website that includes text, graphics, style sheets, tables, links, rollovers, navigation bars and forms.

Dreamweaver Dynamic Application Development Create dynamic websites that interact with users and data, and increase productivity using new coding features.

Performance-Based Objectives

Upon successful completion of this course, you will be able to:

- Create ColdFusion components.
- Use Application Framework.
- Manipulate lists and queries.
- Manipulate data with arrays and structures.
- Create instance-based components.
- Restrict access to component methods.
- Use built in components.
- Handle errors and exceptions.
- Customize application error messages.
- Create and nest custom tags.
- Incorporate .NET integration.
- Create web services.
- Work with PDF files and forms.
- Manipulate data and files.
- Manipulate image data.
- Process images.
- Cache page results and recordsets.





Advanced ColdFusion

Debugging and Troubleshooting

- Troubleshooting ColdFusion Applications
- ColdFusion Debugging Output Options
- Using the ColdFusion Log Files
- Preventing Problems
- Part 3: Building ColdFusion Applications

Introducing the Web Application Framework

- Using Application.cfc
- Using Application Variables
- Customizing the Look of Error Messages
- Handling Missing Templates
- Using Locks to Protect Against Race Conditions
- Application Variable Timeouts
- Handling Server Startup

Working with Sessions

- Addressing the Web's Statelessness
- Using Cookies to Remember Preferences
- Using Client Variables
- Using Session Variables
- Working with onSessionStart and onSessionEnd
- Locking Revisited

Interacting with Email

- Introducing the <cfmail> Tag
- Retrieving Email with ColdFusion

Securing Your Applications

- Options for Securing Your Application
- Using ColdFusion to Control Access
- Using Session Variables for Authentication
- Using Operating System Security
- Defending Against Cross-Site Scripting

Building User-Defined Functions

- Thinking About Extending CFML
- Functions Turn Input into Output
- Building Your First UDF
- Creating Libraries of Related UDFs
- Creating General-Purpose UDFs
- Sharing UDF Libraries with Others

Creating Custom Tags

- Easy, Powerful Extensibility
- Introducing CFML Custom Tags
- How to Use Custom Tags
- Writing Custom Tags That Display Information
- Custom Tags That Process Data
- Additional Custom Tag Topics
- Working with <cfimport>
- Advanced Custom Tags

Creating Advanced ColdFusion Components

- Review of ColdFusion Components
- Simple CFCs
- Introspection and HINTS
- Accessing a CFC via a URL
- Type Checking in Components
- Components That Hold Instance Data
- Working with Inheritance
- Defining Interfaces
- Implementing Security
- Using the OnMissingMethod Method

ColdFusion Server Configuration

- The ColdFusion Administrator
- Server Settings
- Data and Services
- Debugging and Logging
- Server Monitoring
- Extensions
- Event Gateways
- Security
- Packaging and Deployment

Managing Threads

- Using the <cfthread> Tag
- Accessing Thread Data
- Monitoring and Administering Threads
- Best Practices

Improving Performance

- Options in the ColdFusion Administrator
- Improving Query Performance with Caching
- Caching Page Output



Advanced ColdFusion

Working with PDF Files

- Using cfpdf
- Using DDX
- Working with PDF Forms
- Creating PDF Files from Microsoft Office Documents

ColdFusion Image Processing

- Introducing <cfimage>
- Manipulating Images with <cfimage>
- Exploring Other ColdFusion Image Manipulation Techniques
- Creating and Drawing Images with ColdFusion

Working with ORM

- Welcome to ORM
- ColdFusion and Hibernate
- Getting Started with ORM
- Working with Persistent CFCs
- Hibernate and Sessions
- Working with Relationships
- Enhancing Your Entities
- Searching with ORM
- Lazy Is Good!
- Digging Deeper into Hibernate

Using Regular Expressions

- Introducing Regular Expressions
- RegEx Support in ColdFusion
- Using Regular Expressions in ColdFusion
- Some Convenient RegEx UDFs
- Using a RegEx Testing Page
- Crafting Your Own Regular Expressions

ColdFusion Scripting

- A New Era in CFML Scripting
- What Is <cfscript>?
- Implementing CFCs in Script
- Replacing Tags with Script
- Defining Functions in Script
- Exception Handling in Script
- Common Problems and Solutions

Working with XML

- XML Document Structure
- Reading and Creating XML Documents
- Using Special Characters in XML
- XML Namespaces
- Validating XML
- More XML Resources

Manipulating XML with XSLT and XPath

- Understanding XPath
- Transforming XML into Content by Using XSLT
- More XPath and XSLT Resources

ColdFusion and Globalization

- Why Go Global?
- What Is Globalization?
- Going Global
- Better G11N Practices

Error Handling

- Catching Errors as They Occur
- What Is an Exception?
- Introducing <cftry> and <cfcatch>
- Basic Exception Handling
- Understanding What Caused the Error
- Writing Templates That Work Around Errors
- Writing Templates That Recover from Errors
- Deciding Not to Handle an Exception
- Throwing and Catching Your Own Errors
- Handling Exceptions with Scripting

Using the Debugger

- Overview
- Configuring ColdFusion and the Debugger
- Exploring the Debugger