

Double Feature: WCF & WF

We are excited to invite you for the 4-day DOUBLE FEATURE workshop for WCF and WF together.

This event is designed for developers and architects and would enable them to rapidly create connected applications. This is a 4 day course and first two days would be spent in learning WCF (Windows Communication Foundation) and next two days would be spent in learning WF (Windows Workflow Foundation). This course is completely designed on .Net Framework 3.5 and by virtue of that the latest and greatest features of WCF and WF in .Net Framework 3.5 and SP1 would also be covered which would include features like RESTful Services, Workflow Services. For full details about the topics please check the table of contents below.

Mode of delivery: For each topic feature details/ rich demos will be presented followed by instructor led rich Hands-on labs to be completed by the attendees. Labs will be completely interactive and instructor led.

Prerequisites:

Attendee should have the basic knowledge on:

- Visual Studio 2005/.Net Framework 2.0/ 3.0
- Application Development

Contents:

Windows Communication Foundation

Review Service-Oriented and Importance of SOA

- What are services
- Service-oriented architecture
- Service-oriented applications
- Service-oriented programming

WCF Essentials

- Addresses
- Service contracts
- Hosting
- Binding

- Endpoints
- Client-side programming
- WCF architecture
- Transport session
- Reliability

Service Contracts

- Contract overloading
- Contract inheritance
- Contract queries and dynamic metadata exchange

Data Contracts

- Service parameters and serialization
- Data contracts
- Data sets and tables conversion
- Data contract hierarchy
- Versioning
- Generic type parameters

Service Instance Management

- Design for scalability
- Per-call services
- Service behaviors
- Session-full services
- Session termination
- Singleton service
- Demarcating operations
- Durable Services
- Throttling

Operations

- Duplex calls and callbacks
- Streaming
- Asynchronous operations

WCF Management

- Configuration,
- Performance Monitoring,
- Tracing – Focus on practical aspects.

Hosting

- WCF hosting concepts
- Self-hosting techniques
- Hosting in Windows Services
- Hosting in IIS 6
- Using .svc files
- ServiceHostFactory
- Hosting in IIS 7 using WAS

Security

- The "CIA" of security
- WCF security choices
- Declaring a protection level
- Configuring security in WCF bindings
- Transport vs. message-based security
- Credentials and authentication

Building Connected Applications (WCF features in .Net framework 3.5)

- Introduction to WCF, WF (technological positioning and application architecture impact)
- Introduction to Service Orientation.
- Connected Application Foundations using WCF, WF
- Web Programming with WCF
- JSON using the Windows Communication Foundation and ASP.NET AJAX
- Syndication(RSS/ATOM) support in WCF

Windows Workflow Foundation (Day 2 onwards)

Introducing Windows Workflow Foundation

- Building reactive systems
- Components of Windows Workflow Foundation
- Understanding workflows and activities

Activity Fundamentals

- Creating simple activities
- Using dependency properties and activity binding
- Creating validation logic for custom activities
- Activity lifecycle

Workflow Runtime and Services

- Hosting the workflow runtime
- Creating and managing workflow instances
- Using runtime services
- Creating custom runtime services
- Workflow runtime events

Composite Activities

- Creating activities that control other activities
- Managing child activities
- Working with the ActivityExecutionContext
- Activity Conditions and attached dependency properties
- Building simple composite activities to reuse control flow logic

Programming WF with Visual Studio

- Understanding workflow projects and the build process in Visual Studio
- Activities included in the base activity library such as While, Replicator, EventHandlingScope, and Listen
- Workflow debugging
- Synchronization issues and concurrent processing

State Machines

- State machine concepts
- State machine specific activities
- Design patterns supported by state machine workflows

Persistence and Tracking Services

- Workflow and activity serialization
- Persistence service basics
- Using the SQL Server persistence service
- Tracking services architecture
- Creating tracking profiles
- Using the SQL Tracking Service
- Creating custom tracking services

Workflow and (Web) Services

- ASMX / .NET 2.0 web service support
- Using the Send and Receive activity to model service communications with WCF
- Hosting workflow as services
- Consuming and aggregating services from workflows
- Hosting workflow services in IIS and Windows Process Activation Services

Business Rules and Dynamic Update

- Creating business rule policies
- Using the Policy activity
- Consuming business rules from .NET code; outside of a workflow
- Applying dynamic updates to running workflow instances
- Combining dynamic update with business rules

Workflow Services in .Net framework 3.5

- Utilize the new WCF and WF integration to expose workflows as WCF services and consume services from a workflow.

Round up of what is new in .Net framework 3.5 SP1 for WCF and WF

End of Toc

Registration Details:

Price: 17,000.00/ Participant (ex. Taxes). This cost includes hardware/ software being provided at the venue. Also lunch and snacks will be provided.

How to Register

For registering for this event/ any queries please send an email to phani@brainscale.com or call Phani on +91 98862 36940.

This event is being held at the following venues:

Bangalore*



10-Dec to 13-Dec 2008

* Complete details of venue will be sent to the nominated attendees