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Advanced Topics in WF

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Pre-requisites for this presentation:

- 1) Understand WF
- 2) Understand Visual Studio.NET

Level: **Intermediate**





Understand how to use some of the advanced features of Workflow Foundation

Workflow is the automated part of a Business Process



Reusable Business Activities

Separate Workflow from Activity

Topics

Scheduling

Fault Handling and Continuing Execution

Cancellation

Passivation

Workflow Scope: Transactions and Compensation

Synchronization

Scheduling

Activities are the unit of scheduling

Workflows are single threaded

Run till finished or yield

Error Handling

Different from try/catch semantics

Throwing Exceptions

Exceptions and Continuing Execution

Local Error Handling

Fault Handlers are scheduled

Cancellation

Cancellation of previously scheduled activities
Cancellation occurs before exception handling

Passivation

Save / restore workflow

Workflow is just a data structure

Persistence service

Transactions

ACID Transactions

Compensating Transactions

Synchronization

Synchronization Scope

Workflow Runtime ensures only one method of an activity executes at a time due to shared state

Summary

Non-preemptive scheduling on a single thread
Fault Handling and recovery is different from
try/catch semantics

Workflow is a data structure that can be saved
and restored from a data store

Workflows can be scoped if necessary