

Standalone Workflow Foundation Rules Engine

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Pre-requisites for this presentation:

- 1) Windows Workflow Foundation

Level: Intermediate



Using the Windows Workflow Rules Engine outside of a Windows Workflow

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Windows Workflow Rules Example

Simple Rules Engine Example

Editing Rules

Further Problems

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Financial Recommendations Workflow Rules Demo



Rules

Chaining / Explicit Update / Sequential

Priority

Revaluation

Rule Read / Rule Write

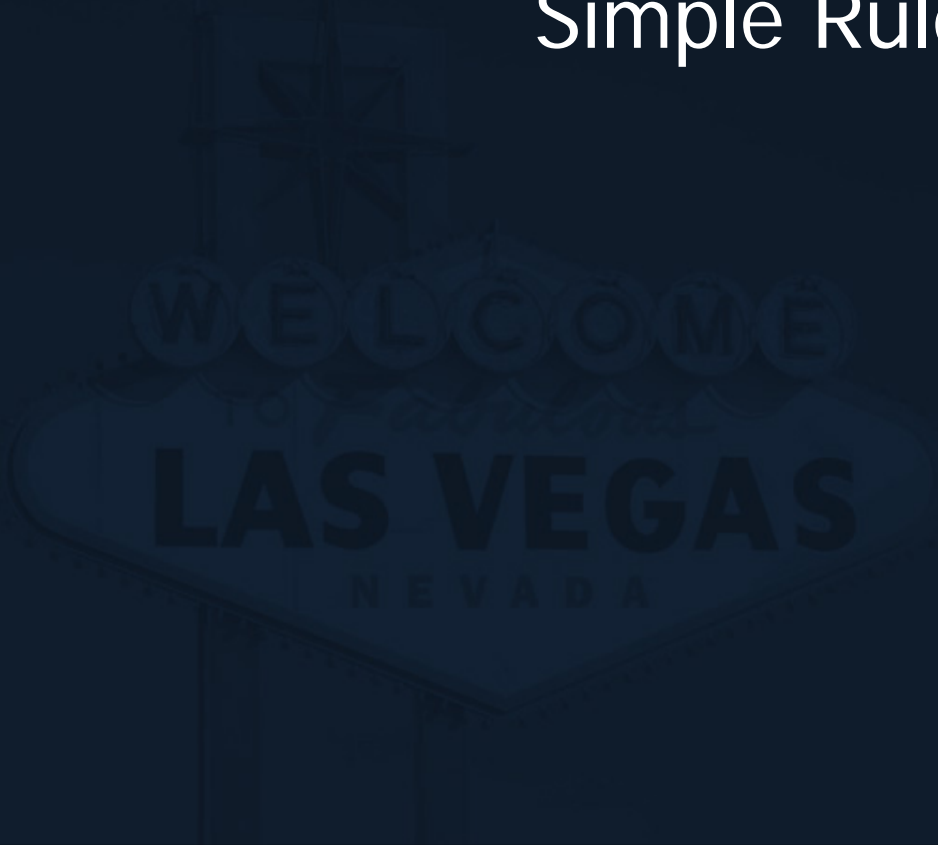
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Modifying Rules Modifies Business Logic

Dynamically? No Compilation?

A faded, dark blue graphic of a classic 'Welcome to Las Vegas' sign. The sign is rectangular with rounded corners and features the word 'WELCOME' in a curved banner at the top, 'LAS VEGAS' in large, bold, block letters in the center, and 'NEVADA' in smaller letters at the bottom. The sign is set against a dark background.

Simple Rules Demo



Set of Rules

```
RuleSet ruleSet = serializer.Deserialize(reader) as RuleSet;
```

Object to Apply Rules

```
TravelPlanner planner = new TravelPlanner("United", 500);
```

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Execution Engine

```
RuleValidation validation = new  
    RuleValidation(planner.GetType(), null);  
ruleSet.Validate(validation);  
RuleExecution execution = new RuleExecution(validation,  
    planner);  
ruleSet.Execute(execution);
```

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How to Generate Rules?



Rules are Code Dom Expressions



Workflow Rules Editor Demo



```
RuleSetDialog ruleSetDialog = new  
    RuleSetDialog(type, null, ruleSet);  
ruleSet = ruleSetDialog.RuleSet;
```



Subset of Code Dom expressions

Programmer Tool

Rules Storage and Versioning

Understand Application Domain

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Summary

Rules Engine is independent of
Windows Workflow Foundation
Can Be Used to Build Rules Driven
Applications

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