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Let's Reach For Excellence!

# Microsoft SharePoint WorkFlow

**Duration:** 04 days

This course is for workflow application development in SharePoint. Power users are introduced to the simplicity of building and integrating workflows using SharePoint Designer, Visio, InfoPath, and Office. Developers will learn to build custom processes and use external data sources. They will learn about state machine workflows, ASP.NET forms, event handlers, and much more.

AUTODESK Authorized Training
Microsoft Silver Learning
amazon web services Partner Network Authorized Training
SOLIDWORKS Authorized Training
Accredited Training Center EC-Council
PEARSON VUE-Authorized Test Center
KRYTERION GLOBAL TESTING SOLUTIONS

## AUDIENCE

This course requires no previous experience with workflow app development.

## COURSE OUTLINE

### Module 0: Workflows

In this module we will review the new workflow features of SharePoint 2013.

After completing this module, students will be able to:

- Build workflows with SharePoint Designer
- How to utilize the new Windows Workflow 4.0 in SharePoint 2013
- Understand how to edit built in workflows
- Implement logging in your workflows
- Understand the difference between 2010 and 2013 workflows
- Learn to use the new Stages to implement state machine workflows

### PART 1 INTRODUCTION TO SHAREPOINT WORKFLOWS

### MODULE 1 SharePoint workflows for your business processes

1.4 Workflow-enabled SharePoint objects

- *List items*
- *InfoPath forms*
- *Content types*
- *SharePoint sites*

1.5 Out-of-the-box SharePoint workflows

- *Three-state workflow*
- *Approval workflow*
- *Collect Feedback workflow*
- *Collect Signatures workflow*
- *Disposition Approval workflow*
- *Translation Management workflow*

1.6 Tools for building custom SharePoint workflows

- *SharePoint Designer 2010/2013*
- *Visual Studio.NET 2010 .2013*
- *Visio 2010 /2013*
- *Forms*
- *Object models*

1.7 New workflow functions

- *Visio 2010/2013 SharePoint workflows*
- *Customizing the out-of-the-box workflows*

- *New actions and conditions in SharePoint Designer*
- *Reusable workflows*
- *Site workflows*
- *Task processing customization*
- *Workflow templates in SharePoint Designer*
- *Viewing workflow status with Visio web access*
- *Importing SharePoint Designer workflows into Visual Studio*
- *Visual Studio 2010 environment improvements*
- *Pluggable workflows*
- *New event handlers*

1.8 Building custom workflow solutions

- *Diagramming business processes*
- *Identifying human interaction and SharePoint objects*
- *Determining the deployment scope*
- *Choosing appropriate workflow authoring tools*

1.9 Real-world examples

## Module 2 Your first workflow

2.1 Planning and preparing for your workflow

- *Identifying your business process*
- *Introducing the Three-state workflow*
- *Preparing a document library for the Three-state workflow*

2.2 Implementing a workflow

- *Adding the Three-state workflow to a document library*
- *Starting a workflow*
- *Testing the workflow*

2.3 Maintaining workflow instances

- *Working with the workflow status screen*
- *Terminating workflows*
- *Deleting workflows*
- *Unauthorized access to workflows*
- *Enabling or disabling SharePoint Designer workflows*
- *Preserving workflow history*

2.4 Additional out-of-the-box workflows

- *Approval workflow*
- *Collect Feedback workflow*
- *Collect Signatures workflow*
- *Disposition Approval workflow*
- *Translation Management workflow*

## PART 2 NO-CODE SHAREPOINT WORKFLOWS

### Module 3 Custom Designer workflows

3.1 Introduction to SharePoint Designer workflows

- *List workflows*
- *Site workflows*
- *Reusable workflows*
- *Globally reusable workflows*
- *Workflow templates*
- *SPD's user interface*

3.2 Components of a SharePoint Designer workflow

- *Steps*
- *Conditions*
- *Actions*
- *Variables*
- *Else-if branches*
- *Workflow forms*

3.3 Creating your first SharePoint Designer workflow

- *Configuring a PTO calendar*
- *Creating a custom workflow that logs to the History List*
- *Adding notifications to the custom PTO Request workflow*
- *Adding calculation logic to the workflow*

### Module 4 Task processing in SharePoint Designer workflows

4.1 SharePoint Designer task actions

- *Assigning To-do items*
- *Using the Assign a Form to a Group action for a survey*
- *Using tasks to collect data from a user*

4.2 Custom task processes in SharePoint Designer workflows

- *Customization box: changing the overall task process*
- *Task Form Fields box: customizing the task edit form*
- *Customization box: changing the behavior of a single Task*
- *Task Outcomes box: defining custom task outcomes*
- *Assignment stages*

### Module 5 Advanced SharePoint Designer workflows

5.1 SharePoint Designer workflow templates

5.2 Customizing the out-of-the-box workflows

5.3 Workflow actions for document sets

- *Creating document sets*
- *Document set workflow actions*
- *Document set and Records Center workflow example*

5.4 Workflow actions and conditions for security

- *Impersonation steps*
- *Security-related conditions and actions*
- *Working with permissions and security in a workflow*

5.5 External data in a SharePoint Designer workflow

- *Configuring a Secure Store Service*
- *Creating an External Content Type*
- *Creating a workflow using the External Content Type*

## Module 6 Custom Visio SharePoint workflows

6.1 Introducing Visio workflows

6.2 Building a Visio workflow

6.3 Importing a Visio workflow into SharePoint Designer

6.4 Publishing and Visio Graphic Services

## Module 7 Custom form fundamentals

7.1 Tools used to build custom forms

- *New and Edit forms*
- *InfoPath 2010/2013/2016 Forms*
- *ASP.NET forms built in Visual Studio*

7.2 Customizing out-of-the-box forms with InfoPath

7.3 Publishing a template to a form library

7.4 Publishing a template to a content type

7.5 Mapping form data to columns

7.6 Forms in SharePoint Designer workflows

# PART 3 CUSTOM-CODED SHAREPOINT WORKFLOWS

## Module 8 Custom Visual Studio workflows

8.1 Introducing Visual Studio workflows

- *Working with the workflow's template*
- *Workflow deployment artifacts*
- *Sequential vs. state machine workflows*

8.2 Building a sequential workflow

8.3 Building a state machine workflow

8.4 Importing an SPD Workflow into Visual Studio

## Module 9 Forms in Visual Studio workflows

9.1 Adding .NET code to an InfoPath form

9.2 Programmatically retrieving form data from within a workflow

9.3 InfoPath forms in Visual Studio workflow

- *Building a custom association form*
- *Building a custom initiation form*
- *Working with the association or initiation form data*
- *Configuring activities for workflow modifications*
- *Building a custom modification form*

9.4 ASP.NET forms in Visual Studio workflows

## Module 10 Workflows and task processes

10.1 Using task-related activities

10.2 Custom task edit forms

## Module 11 Custom workflow activities and conditions

11.1 Building custom leaf activities

- *Custom activity fundamentals*
- *Adding dependency properties and validation*
- *Property validation*
- *Activity toolbox items*
- *Theming your activity*

11.2 Building custom composite activities

11.3 Publishing activities to SharePoint Designer

11.4 Building custom conditions for SharePoint Designer

## Module 12 A bag of workflow developer tricks

12.1 Fault handling and debugging workflows

12.2 Versioning workflows

12.3 Building workflow event receivers

12.4 Pluggable workflow services

12.5 SharePoint workflow object model