Contents

[Training Content for Advanced PowerShell 1](#_Toc450234452)

[PowerShell 1](#_Toc450234453)

[Day 1 1](#_Toc450234454)

[Module 1: Introduction 1](#_Toc450234455)

[Module 2:Variables 2](#_Toc450234456)

[Module 3: Pipeline 2](#_Toc450234457)

[Module 4:Loops and conditions 2](#_Toc450234458)

[Day 2: 2](#_Toc450234459)

[Module 5:Functions 2](#_Toc450234460)

[Module 6:Exception handling 2](#_Toc450234461)

[Module 7:Regular expressions 3](#_Toc450234462)

[Module 8:Introduction to WMI 3](#_Toc450234463)

[Day 3: 3](#_Toc450234464)

[Module 9: Graphics 3](#_Toc450234465)

[Module 11: Workflow 3](#_Toc450234466)

[Day 4: 3](#_Toc450234467)

[Module 12: External System Administration 3](#_Toc450234468)

[Module 13: DSC 4](#_Toc450234469)

[Module 14: Best Practices & Tips and Tricks 4](#_Toc450234470)

[Module 15: Case Study 4](#_Toc450234471)

# Training Content for Advanced PowerShell

## PowerShell

## Day 1

### Module 1: Introduction

* Introduction to PowerShell
* System Commands
* History
* Installation
* ISE
* Security- Execution Policy

### Module 2:Variables

* Keyword Variables
* Arrays
* HashTable
* Enum and structures

### Module 3: Pipeline

* By Value
* By Property
* New Column Name

### Module 4:Loops and conditions

* If then
* for
* foreach
* switch
* do
* while

## Day 2:

### Module 5:Functions

System Functions

Parameters

Call By Value and Call by Reference

Math Functions

.NET Functions

Nuget Packages

### Module 6:Exception handling

Exception Types

ErrorAction

try catch

throw

### Module 7:Regular expressions

Pattern Match

Substitution

Validation

### Module 8:Introduction to WMI

WMIObject

Remoting

Querying

Monitoring/Events

## Day 3:

### Module 9: Graphics

View Results in HTML format

Show Dialog from Windows Form

PowerShell and WPF

.NET Windows Form in PowerShell

### Module 11: Workflow

Functions vs Workflow

Parameters

Parallel Workflow

### Module 12: External System Administration

SQL -

Introduction to SQL Server 2016

Installation of SQL modules and Assemblies

PowerShell from SQL Management Studio

Database Command-lets to Run SQL scripts

SQL Server Identifiers

SQL Server Agent Jobs

SharePoint

AD

Azure

### Module 13: DSC

Architechture

Configuration Script and Pull Server

Automate Business Process

### Module 14: WQL

Introduction

Tools

Query Types

WQL Keywords and Operators

WQL Data Queries

WQL Event Queries

WQL Schema Queries

### Module 15: Best Practices & Tips and Tricks

Comments

Error Handling

Coding Standards

### Module 15: Case Study

Project