Automation with Windows Powershell

(useful for Azure Admin, Windows Admins,sharepoint, office365,vmware..etc)

Introduction:

Getting to know about Windows PowerShell

Command Line Interface, capabilities of PowerShell

Basic commands and Command design structure

Understanding the get-help in PowerShell

Understanding the basic Syntax for PowerShell

Getting Started with Technical commands:

Understanding the Headers

Working with Pipeline Operators, Where-object and syntax (shortcuts)

Working with Operators:

Arithmetic Operators

+, -, * , / ,%

Comparison Operators

-equality based

-eq

-ne

-le/-lt

-gt/-ge

-matching based

-like

-notlike

-match

-notmatch

-contains:

-contains

-notcontains

-in

-notin

Belongs :   -is

-isnot

Logical Operators

-and

-or

-xor

-not

!

Re-directional Operators

>

>>

Difference b/w cmdlet Vs Operators (out-file,tee-object Vs redirectional Operators)

Assignment Operators

=, +=, -=, *=, ==/, =%

Regular Expression:

Filtration of any property value by Regular Expressions

Starting with^

Ending $

Pattern Matching

$matches(variable)

Real time examples

Working with Multiple Operators:

Designing a single liner(linear) PowerShell commands

Formatting Options: Format-table Vs Select-Objects Vs Format-list

Sort-Object   & Common parameters

Variables:

Why Powershell variable are special?

Types of Variables

Data types:

Implicitly and Explicitly Data types

Int,float,datatime,double,char,xml,array,hashtabel,object etc…

Scripting:

Creating your First Script file/Multiple liner.

Input statements & Output Statements in PowerShell

Understanding variables and Variable Types in PowerShell

Working with Static and Dynamic Variables

Importing contents from a File/Exporting the result to a file

Conditional & LoopingStatements:

If, Elseif, Else statements

MINI-PROJECT BASED ON ABOVE TOPICS-01

MINI-PROJECT -01

If-else

If-elseif-elseif-else

Switch conditional statements

(Real time based examples -→ testing point)

Looping Statements:

-for loop

-while

-do-while

-do-until

-foreach-object cmdlet loop

-foreach loop

Test : foreach-object Vs foreach

Working with Files

CSV

Export-csv

Import-csv

Working with non-csv files

Html

Json

Functions and Parameters

Standard Functions

Understanding the PowerShell Functions

Implementing Functions and calling the Function

Understanding the Parameters

Parameter Attributes and Arguments

Creation of custom cmdlets

Passing parameters while script execution

Using of Parameters in Scheduled Scripts

[cmdletbinding()]

Modules

Creation of Modules

Bringing of creation of modules to Another Script

Remote Management:

Understanding the PowerShell Modules

Understanding the PowerShell PSSession

Importing a PSSession from Remote Server

Finding a Module from Internet

Installing and importing a Module from PSGallery source.

Downloading and Installing PS Modules for Cloud Technologies like Office 365, Azure and   Sharepoint

Connecting to the PowerCLI Module and create simple VMs

Remote command Triggering

Remote script Triggering

Chooco tool

Background jobs*:*

About sync Vs async

Type of Background jobs

How to Schedule jobs from Powershell(Task Scheduler)

Creation of Certificates*:*

How to Create trusted certificate by your server

How to assign to a Script

How to protect passwords?

Storing the data securely cms

Unprotect

Security:

Securing the Passwords

Embedding the Passwords in the Script.

WMI/CIM [Windows Management Instrumentation]

Understanding WMI & WMI Classes

WMI Vs CIM Classes

Scritpting & Windows Remote Management using WMI

Custom Health Report generation using WMI and PSObject

Disk Management

Value conversions

Reporting of the Scripts

Execution on Multiple servers

Real time Scripts

Alerts Creation:

Creation of mail alters(email) when the certain condition has happend

Remedy and mail alters (IMP)

DSC:

Overview and Introduction to Push methods and Pull Methods

PUSH method detail explanation & use in Azure Cloud

Windows Forms(WMF forms)

Working with External Resources

Choco software

Real time using

Azure (on Powershell)

Installation of AZ module

AzurePowershell Installation on windows machines

Working with different Subscriptions

Creation of Resource group and Resources

Virtual Machine creation

Vnet creation from powershell

Creation of Network security group

Creation of Network Security Rules

Creation of Resourcegroup

Subnets creation

Working with Storage Accounts

Linux machine creation from powerShell

Scripts creation

Daily activities

Newly Added Concepts:

>> Encryption/Decryption of a file

>> Workflows*****

foreach

>> Deep Drive in "Modules"

>> Jenkins

>> Active Directory

>> Sql Server

Course Duration : 55+ days (Mon-Sat)

Regular Batch Timings : 8AM IST & 8PM M IST

Mode : online training (Daily 1hr) – (Mon-Sat)

Course Fee: Rs.2500/-

After every online Session we will share Daily Recordings also.

Contact : 8099809099   {Vadlakonda Nagarjuna)