Course code: GOC179

This five-days course builds on the basic scripting knowledge that students receive on the official GOC216 and extends their skills in advanced scripting concepts. Students will learn deep details about the PowerShell language syntax, constructs and its internal parsing mechanisms. They will obtain hands on experience developping complex administrative scripts combining various technologies such as ADSI, WMI, .NET Framework and few PowerShell extensions of different application platforms such as Exchange, SharePoint, System Center or those included with Windows Server 2012 and higher.

Who is the course for

The course is primarily designed for IT administrators who already use PowerShell or who have gained its working knowledge (e.g. at MOC10325 course). It is designed for those who want to learn advanced techniques of programming in PowerShell and learn the possibilities of Windows operating system administration both via the interface of PowerShell command line and Power Shell language scripts into the details.

What we teach you

The participants in this course will be able to administer Windows operating systems using modern techniques via a command line and related scripting technologies. They will learn basic principles of working in PowerShell environment and familiarize themselves with other tools for setting the automatic administrator's tasks. The students will get besides other things the total overview of up to date possibilities of administration outsider a graphical user interface.

Required skills

The knowledge of courses listed in Previous Courses and Related Courses section Good knowledge of TCP/IP and DNS technologies

Course outline

Possibilities of scripting in Windows overview

Traditional command line External extension WSH and WMI

Basic operation in PowerShell environment

Starting up and initial setting Commandlets Saving and starting up your own scripts Use of Help

Data flow in a script

The principle and using of pipeline Data entry Formatting of data output Managing variables and operators

GOPAS Praha Kodaňská 1441/46 101 00 Praha 10 Tel.: +420 234 064 900-3 info@gopas.cz GOPAS Brno Nové sady 996/25 602 00 Brno Tel.: +420 542 422 111 info@gopas.cz GOPAS Bratislava

Dr. Vladimíra Clementisa 10 Bratislava, 821 02 Tel.: +421 248 282 701-2 info@gopas.sk



Copyright © 2020 GOPAS, a.s., All rights reserved

Advanced Scripting with PowerShell for Administrators

Basic structure of the language

Conditions Cycles

Blocks

Function

Objects and .NET platform

Advanced features of objects .NET Framework thoroughly Text processing Object pipeline

Advanced techniques

Regular expressions and their use Processing of fault states Work with XML format

Operation system administration

Log reading, sorting them out and recording Interactive handling of operating system Real time tracking

Work with PS objects

File system Registry database Certificate repository

Use of traditional interfaces and technologies

Establishing COM cooperation Coexistence with WSH word WMI technology in PowerShell environment

Advanced administration

Operating the remote devices

GOPAS Praha Kodaňská 1441/46 101 00 Praha 10 Tel.: +420 234 064 900-3 info@gopas.cz 60PAS Brno Nové sady 996/25 602 00 Brno Tel.: +420 542 422 111 info@gopas.cz GOPAS Bratislava Dr. Vladimíra Clementisa 10 Bratislava, 821 02 Tel.: +421 248 282 701-2

info@gopas.sk



Copyright © 2020 GOPAS, a.s., All rights reserved

Advanced Scripting with PowerShell for Administrators

Planned and automated tasks MS Exchange 2007 server administration

Other Windows technologies

Windows Remote Management WMIC console WSH and Perl,Python and Ruby languages LogParser

GOPAS Praha

Kodaňská 1441/46 101 00 Praha 10 Tel.: +420 234 064 900-3 info@gopas.cz GOPAS Brno Nové sady 996/25 602 00 Brno Tel.: +420 542 422 111 info@gopas.cz GOPAS Bratislava

Dr. Vladimíra Clementisa 10 Bratislava, 821 02 Tel.: +421 248 282 701-2 info@gopas.sk



Copyright © 2020 GOPAS, a.s., All rights reserved