BlackBelt – Troubleshooting the Windows OS

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Let a world class presenter and troubleshooter teach you all tricks up his sleaves. Sami's BlackBelt Troubleshooting session has been selected as the Best Session in TechEd North America 2014, TechEd Europe 2014 and TechEd Australia 2013 so you be sure to learn a lot in the most entertaining and effective way!

This course is delivered in English

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BlackBelt – Troubleshooting the Windows OS

This course teaches you how the OS really works and how to troubleshoot it effectively. It is applicable to every OS from NT 4 to Windows 10 – both servers and clients. Learn to troubleshoot the hardest errors and raise your abilities above others! Let a world class presenter and troubleshooter teach you all tricks up his sleaves. Sami's BlackBelt Troubleshooting session has been selected as the Best Session in TechEd North America 2014, TechEd Europe 2014 and TechEd Australia 2013 so you be sure to learn a lot in the most entertaining and effective way!

Level:
400

Target audience:
This training is meant for all administrators who want to deepen their knowledge and troubleshooting skills in Windows. It is also suitable for people who think they know everything about the Windows OS… It's a deep dive course and surely in no way suitable for only the beginners but for seasoned administrators as well (I guarantee you won't be disappointed!). If someone want's to become a true BlackBelt troubleshooter you should first take this course which is more Tools-oriented and then continue to take the BlackBelt – Advanced Troubleshooting the Windows OS -course which is more Content-oriented.

Prerequisites:
Basic experience with Windows Administration, Basic understanding of Active Directory, Basic understanding of networking infrastructure.

Course goals:
This four day course trains you how to become a better troubleshooter of any environment that runs on Windows. The best way to become a great troubleshooter is to learn from the ground up. The biggest flaws people do while troubleshooting are that they believe that Administrator account should be used for troubleshooting or that in Windows processes can execute code – Both are incorrect. So usually people troubleshoot the wrong objects with too few permissions. How could that work? It can't and there's a good reason for you to join this training.

Material:
Labmanual and slides.

The course will cover the following modules:

Troubleshooting methodology

- What are we against?
- How to isolate the error
- How to document the error

Tools and procedures for troubleshooting Windows

- Most important tools for troubleshooting
- Appropriate permissions

OS Internals

- Windows modes
- Processes and threads
- Services and programs

Registry Internals

- Registry structure
- How to manage the registry

Troubleshooting of the SLOW

- Slow startup/logon
- Slow operations
- Memory/Disk/CPU bottlenecks

Troubleshooting security related issues

- Security internals of Windows
- How to troubleshoot issues related to permissions
- How to troubleshoot issues related to domains

Troubleshooting network issues

- Best practises to troubleshooting network issues
- Monitoring network activity

Troubleshooting device drivers

- How Windows uses its Driver Store
- How to troubleshoot device drivers

Unbootable machine troubleshooting

- Safe modes and other advanced startup modes
- Windows PE/RE internals
- Tools for fixing an unbootable OS

Basics of debugging and debuggers

- How to debug a machine
- When to debug a machine with an actual debugger

BSOD internals

- How BDOD works and how to make one
- How to analyze memory dumps