Troubleshooting, Monitoring and Tracing Windows Infrastructure Agenda

Monday, August 22	Tuesday, August 23	Wednesday, August 24
08.30 – 08.45: Welcome	09.00 – 10.45: module 3 part 1	09.00 – 10.45: module 5 part 1
09.00 – 10.45: module 1 part 1	10.45 – 11.00: break	10.45 – 11.00: break
10.45 – 11.00: break	11.15 – 13.00: module 3 part 2	11.15 – 13.00: module 5 part 2
11.15 – 13.00: modules 1 part 2	13.00 – 13.45: lunch break	13.00 – 13.45: lunch break
13.00 – 13.45: lunch break	13.45 – 15.30: module 4 part 1	13.45 – 15.30: module 5 part 3
13.45 – 15.30: module 2 part 1	15.30 – 15.45: break	15.30 – 15.45: break
15.30 – 15.45: break	15.45 – 17.00: module 4 part 2	15.45 – 17.00: module 5 part 4
15.45 – 17.00: module 2 part 2		
Thursday, August 25	**Friday, August 26**	
09.00 – 10.45: module 6 part 1	09.00 – 10.45: module 7 part 1	
10.45 – 11.00: break	10.45 – 11.00: break	
11.15 – 13.00: module 6 part 2	11.15 – 13.00: module 7 part 2	
13.00 – 13.45: lunch break	13.00 – 13.45: lunch break	
13.45 – 15.30: module 6 part 3	13.45 – 15.30: module 7 part 3	
15.30 – 15.45: break	15.30 – 15.45: break	
15.45 – 17.00: module 6 part 4	15.45 – 17.00: module 7 part 4	

Module description

Module 1: Virtualization performance analysis

This module allows students to understand how virtualization impacts performance. Exercises contain usage of tools and making business related decisions based on the measurements. Training cover optimization techniques for known hypervisors.

Module 2: Operating system monitoring

This module covers generic system monitoring to learn the basics of monitoring. It is a great introduction to go further with detailed monitoring.

Module 3: Advanced Memory Analysis

This module explains to students what is happening in the memory, how it works, how to get into it and how to monitor it. Students except for memory analysis will practice debugging memory dumps.

Module 4: Advanced disk performance analysis

Within this module the students will become familiar with disk performance monitoring – starting with RAIDs, ending up with cluster configuration techniques. For some server roles cluster size really matters, so that administrators can achieve the best performance in specific infrastructure configuration.

Module 5: Xperf and usage scenarios

Several tools allow to get very detailed information about the system performance. This is needed when you have to figure out these delicate problems that slow servers down. Students in this module gain knowledge about how to monitor several operating system components and how to cope with the every-day situations like: processor usage, disk usage, memory usage, network activity, slow booting and other.

Module 6: Kernel Mode and User Mode monitoring techniques

From the continuity perspective blue screen is always an unpleasant experience. From the debugging perspective – we have just been protected from malicious things that could have happen to operating system integrity. Blue screen is positive in its own way – it helps to intricate who caused the problem, it needs to be analyzed though. Within this module the students will become familiar with kernel mode and user mode techniques and tools.

Module 7: Network monitoring

Starting from simple network sniffing, ending up with advanced network monitoring to the size of the buffers written. Several techniques used during the training.