System Center Operations Manager 2012 R2 Accelerated

Duration: 5 days
Date: November 3 – 7, 2014 (09:00 -12:00 / 13:00 – 16:30)
Fee: 3’900 CHF (includes lunch and beverages)
Location: act-Academy, Obstgartenstrasse 29 / 8302 Zürich Kloten
Web-Link: http://www.realstuff.ch/services/schulung/scom-2012-r2-training/
Format: Instructor-Led Training / Workshop
Trainer: Kare Rude Andersen, Senior Consultant and MCT Coretech A/S
Language: English
Level: 300

This Training will always use the newest SCOM built. This Training will include many real PowerShell samples

Audience

This course is intended for Enterprise Systems Engineers, Administrators, System Integrators and Management Pack Developers who need to implement Multi Layered Service Monitoring using System Center Operations Manager 2012 (SCOM). The class is continuously updated to cover the latest release of the product, as well to include new tools and SDK’s.

This course syllabus should be used to determine whether the course is appropriate for you, based on your current skills and technical training needs.

After completing this course, students will be able to:

• Describe and understand the logical architecture of an SCOM infrastructure
• Articulate the functions of the components and services in an SCOM infrastructure
• Implement Load Balance and Failover on all levels of you SCOM environment
• Recover any Servers or Services in a secure, fast and effective way.
• Set a Performance goal for SCOM and Baseline your SCOM implementation to ensure availability and Performance.
• Troubleshoot issues with SCOM components and Agent Monitoring
• Design end-to-end monitoring of Services – Multi layered application design
• Working with SCOM in conjunction with other System Center products
• Use the Silverlight Web console
• Present your views in the Console, Web Silverlight console, Sharepoint as IFrames or Web Parts.
• Working with Visio to present Services, Agents and classes you design.
• Create Management Packs with the console, Notepad, Authoring console, MPAuthor and Visual Studio.
• Defining Resource Pools to support the distributed SCOM installation
• Modeling Applications in a way so it will be possible to monitor each layer
• Going through all Monitoring objects with real world samples
• Creating own reports by digging into the data warehouse database and using the aggregated tables
• Creating and Using Web Services to communicate with other Monitoring Targets
• Creating and using your own XML connector to communicate with Helpdesk systems
• Using PowerShell to create scripts and get information about the SCOM environment
• Update Alerts, Create Tasks and perform scripted intelligence in SCOM
• Using PowerShell for all automation in SCOM
• Using Dashboards for presenting your Applications

Prerequisites

Before attending this course, students must have:
• Experience with Windows Server 2008 R2/2012/2012 R2
• Good understanding of Active Directory
• Good understanding of Network communication

Recommended

• An understanding of the System Center Suite is desirable, but not needed.
• Experience with earlier version of SCOM or other Monitoring Tools
• Virtualization Technologies: Hyper-V and Windows Server 2012 R2
• Knowledge of PowerShell

Lessons

• Overview
  o Introduction to the SCOM Sizer
  o How is SCOM used / Purpose of SCOM
  o Architecture
  o Terminology
  o Services
- Naming Conventions
  - Versioning and Good documentation behavior

- Security
  - Service Account Requirements
  - Component Connectivity

- Installation
  - System Requirements
  - Basic Installation
  - Security
  - Installation using PowerShell

- Install and configure HA (High Availability)
  - HA for the Console, Web console, Report Services and PowerShell
  - SQL Always ON technology

- Install The Console
- Install and configure the Web Console e.g. for a large screen display
- Install Report Services
  - Configure Reporting for SMTP, settings and controlling Rendering

- Upgrading from a distributed Operations Manager 2007 R2 Management Group
- Management Group and Server Settings
- Notification, using Notification with PowerShell scripts
- Creating Subscribers and subscriptions
- RMS Emulation – why we need it and controlling it with PowerShell
- Agent Rollout, manually, automatically and the Auto Agent Assignment
- Agents, Gateways and Certificate authentication
- Use Resource Pools to control Management Server responsibility
- Monitoring Unix/Linux Servers with SCOM 2012
- User Interfaces, the new Widgets and presentation with SharePoint and Visio
- Creating MAP View with locations
- Reporting and the Data warehouse database, controlling the purging and logging
- Using SQL Profiler to check the traffic to/from the SQL server
- Creating own reports with Visual Studio
- APM (Application Performance Management), find bottlenecks in .net applications
- ACS (Audit Collector Services), a consolidated event auditor
- Network Monitoring, Discovery rules, views and using advanced port monitoring
- Management Packs, Creating with Visual Studio, Authoring tool, Visio and the console
- Putting it all together, creating a 360 service, multi-level topology monitoring and creating own Service/Distributed Application monitoring
- Monitoring SCVMM with SCOM 2012
- SCOM 2012 and Orchestrator - Interaction in both ways
- SCOM 2012 and Service Manager, creating Incident, Task and Connectors
- Non Microsoft Monitoring – Monitor anything - Check the coffee level

**Management Packs**

We are going through the different kind of objects contained in a Management Pack

- Rules
- Monitors
- Attributes
- Groups
- Tasks
- Views
- Reports

- SCOM Advanced – Management Servers
  - Introduction to the Communication in SCOM
  - Configuring and optimizing the Management servers and agents
  - Optimizing the database and data warehouse
  - Defining and managing Resource Pools
  - Integrate automatically configuration of agents AD Integration

- Implement Intelligence in your Management Group
  - With PowerShell
  - Scripts
  - Monitoring Application/Services

- Management Packs
  - Implement and document your Management Packs
  - Implement Change management on you Management Packs
  - Creating and Authoring own Management Packs
  - Individual Management Packs objects
  - Using Visual Studio to create Management Packs
  - Using Authoring Console to create Management Packs
  - Using Visio to Create Management Packs
• User Interfaces
  o Presenting Dashboards
  o Creating Customize Dashboards
  o Create your own widgets
  o Use the Global Service Monitor
  o Reports

• Connecting Operations Manager
  o Using an XML connector to communicate with SCOM
  o Using Web Services to communicate with SCOM
  o Connecting System Center with SCOM and the other way around
  o Trap it – with mails, snmp or files

• Linux Monitoring
  o Installing Linux clients
  o Creating monitors and rules against Linux
  o Implementing Applications Server Monitoring

• APM
  o Implementing APM
  o Server and Client Side Configuration

• Network Monitoring
  o Scale and implement
  o Creating rules for your Devices and interfaces
  o Creating own SNMP Traps

• ACS (Audit Collector Services), a consolidated event auditor
  o Install and configure ACS

• Agentless Exception Monitoring
  o Collect and present your organizations exceptions