

SOLARWINDS ORION FULL PLATFORM 5 DAY COURSE



TRAINING OVERVIEW

CONTENTS

INTRODUCTION.....	4
DAY 1.....	5
INTRODUCTION	5
SOLARWINDS PRODUCTS AND RESOURCES.....	5
ARCHITECTURE AND IMPLEMENTATION	5
ORION INSTALLATION	5
SNMP MIBS AND OIDS.....	5
SERVER MONITORING (WMI, AGENT)	5
NODE POPULATION AND NETWORK DISCOVERY.....	6
MANAGING NODES.....	6
SPECIAL DEVICE TYPES.....	6
CUSTOM PROPERTIES.....	6
GROUPING & DEPENDENCIES	6
DAY 2.....	7
UNIVERSAL DEVICE POLLER	7
ALERTING.....	7
REPORTS.....	7
MAPS – NETWORK ATLAS, WIRELESS HEATMAPS AND WORLDWIDE MAPS	7
DAY 3.....	8
SYSLOG AND TRAPS	8
WEB INTERFACE	8
INTERPRETATION OF MONITORING DATA.....	8
APPSTACK	8
PERFSTACK.....	8
ADMINISTRATION AND TROUBLESHOOTING	9
SQL MAINTENANCE AND BACKUPS	9
SOLARWINDS INTEGRATION OVERVIEW	9
QUALITY OF EXPERIENCE	9
NETPATH	9
SAM	9
DAY 4.....	11
NCM.....	11
NTA	11
IPAM	11
UDT	12
DAY 5.....	13
VNQM	13
WPM.....	13
VIRTUALIZATION MANAGER IN ORION	13
SRM.....	13

LEGAL NOTICES 14
 CONFIDENTIALITY 14
 TERMS & CONDITIONS 14
ABOUT US..... 14

1 INTRODUCTION

Prosperon Networks have long term experience in delivering high quality training course on the SolarWinds Orion suite of Systems and Network Monitoring and Management applications.

We run courses within our training room at our offices in Worthing, W. Sussex, which allows attendees to receive training in an environment away from their operational environment, free from interruptions. These courses are scheduled to run every three months (on average) and following completion sufficient knowledge will have been provided to allow delegates to take the SolarWinds Certified Professional Exam.

Prosperon also provide regular training courses onsite, as the customer location, which provides the flexibility and cost effectiveness to include larger numbers. The content is very much in line with our in-house training course, barring some Technical Labs, but we are also more than happy to work with the customer to tailor the training to meet their exact needs. For example, providing training to front line service desk staff is not the same as providing training to Orion administrators, who clearly have a different use and role for the application.

This document outlines the content of the in-house structured training course. This can be used as a guide to determine any tailored training requirements you have.

Please contact your account manager or speak to a sales manager on 01903 340993 for information on how we can provide training on the SolarWinds Orion solution.

2 DAY 1

2.1 Introduction

- Instructor
- Participant introduction
- Overview of course

2.2 SolarWinds Products and resources

- Orion Network Performance Manager
- Orion Modules
- Engineers' Toolset
- Customer Portal
- Support
- Thwack Community Website

2.3 Architecture and implementation

- Architecture Overview
- System Requirements
- Poller Scaling and Additional Web Servers
- Resiliency options
- Database
- Modules
- Planning your Orion Implementation – best practices

2.4 Orion installation

- Pre-installation Requirements
- Installing Orion NPM and Modules

2.5 SNMP MIBs and OIDs

- SNMP – how it works
- MIB structure
- OIDs

2.6 Server monitoring (WMI, Agent)

- WMI
- SolarWinds agent
 - Windows
 - Linux
- Cloud monitoring User Account Control

2.7 User Account Administration

- Controlling feature access
 - Account types
- Integration to Active Directory
- Overview of Account Limitations using the Account Limitation Builder

LAB #0: Add user account

2.8 Node Population and network discovery

- System Manager
- Web Console
- Network Discovery – Bulk population
- Individual node population

Lab # 1: Add a node

2.9 Managing Nodes

- Web Interface - Manage Nodes
- Resource selection
- Node editing
- Polling Intervals
- Bulk editing
- Node Details View
- Data Summarization
- Maintenance mode
- SSH functionality

2.10 Special device types

- Wireless
- SAN
- F5
- Meraki
- Virtual infrastructure
- Cisco Switch stacks

2.11 Custom properties

- How are Custom Properties used?
 - Grouping
 - Alerting
 - Reporting
- Account Limitations and Access Control
- Web Console View filters and organization
- Examples and common use Custom Properties
- Importing and Exporting Custom Properties

LAB # 2: Custom properties

2.12 Grouping & dependencies

- Grouping Strategies & Options
- Creation of Groups
- Dynamic Query Filters
- Web Display of Groups
- Use of Groups in Alerting
- Creating Dependencies

LAB #3: Groups

LAB #4: Dependencies

3 DAY 2

3.1 Universal device poller

- Overview of Universal Device Poller
- Creating and Assigning Custom Pollers
- Displaying Custom Poller Data in the Web Console
- Transformations
- Thwack - Importing and Exporting Pollers

LAB #5: Custom Poller

3.2 Alerting

- Alert Overview
- Configuring Advanced Alerts
- Viewing and Acknowledging Active Alerts

LAB #5: Alert

3.3 Reports

- Overview of Reports and Report Writer
- Predefined Reports
- Creating and Modifying Reports
- Thwack - Importing New Reports
- Scheduling Reports
- Viewing Reports in the Web Console

LAB #6: Report

3.4 Maps – Network Atlas, Wireless heatmaps and WorldWide Maps

- Maps Overview
- Overview of the Network Atlas application
- Creating a Map
- Map Properties
- Adding and Customizing Map Objects
- Creating a map hierarchy with nested maps
- Advanced Map Features
- Publishing Maps
- WorldWide Maps
- Wireless Maps

LAB #7: Maps

4 DAY 3

4.1 Syslog and traps

- Overview of Syslog and SNMP Trap
- Differences and Benefits of each
- Using the Syslog Viewer
- Syslog Data Retention
- Syslog Alerts
- Using the SNMP Trap Viewer
- SNMP Trap Data Retention
- SNMP Trap Alerts
- Reports

4.2 Web interface

- Structure of web interface and pages
- View types
- Customizing Views
- Managing Menu Bars
- Customizing Resources
- Applying custom presentation to a user account
- NOC views
 - How it works
 - Best practices

LAB #8: Summary view

4.3 Interpretation of monitoring data

- Overview of Web Console
- Workflow within the SolarWinds Orion browser interface
- Information analysis
- How to cross reference the different data sources to give a thorough overview of the network health

4.4 Appstack

- Modules involved
- How to highlight issues

LAB #9: Analyse network issues using SolarWinds dashboards and Appstack

4.5 PerfStack

- Modules involved
- PerfStack projects:
 - Create new projects
 - Retrieve existing projects
- How to analyse data

LAB #10: PerfStack analysis

4.6 Administration and troubleshooting

- Configuration settings for Orion within the browser interface
- Monitoring Orion
- Orion Services Manager
- Using the Configuration Wizard
- Performing Upgrades
- Node Poller Load Balancing

4.7 SQL maintenance and backups

- Solarwinds maintenance task
- Backups – best practices
- How to restore database

4.8 SolarWinds integration overview

- SolarWinds SWIS
 - Query, Invoke, Create, Read, Update, Delete
- SWQL

4.9 Quality of Experience

- Add sensor
 - Network sensor
 - Server sensor
- Define auto discovery settings
- Add applications
 - Predefined applications
 - HTTP applications

LAB #11: Monitor QoE

4.10 Netpath

- Add netpath source
- Configure netpath operation
 - Target
 - Port (Service)
 - Polling frequency implications
- Review netpath information
 - Packet loss, latency and transit likelihood
 - AS path

LAB #12: Netpath Operation

4.11 SAM

- Overview of SAM
- Managing Templates
- Importing Templates from Thwack
- Range of SAM Monitors available and breakdown of each main type
- Appinsight applications
 - IIS
 - SQL
 - Exchange

- Managing Credentials
- Cloud Monitoring (AWS)
- Assigning Templates to Servers
- Group structures for applications
- Editing Templates and Overriding Template Defaults
- Customizing SAM views
- SAM reports

LAB #13 SAM Template Creation and Assignment

5 DAY 4

5.1 NCM

- Initial configuration of the application settings
- Global Variables
- Application settings
- User management & Security
- Adding Nodes
 - Manual
 - Discovery
- Configuration Backup
- Configuration changes
- Execute Scripts
- Snippets
- Bulk changes and change Scheduling
- Device Templates
- Firmware upgrade
- Reports
- Configuration Change templates
- Real-time Change Detection
- Compliance Policies

LAB #14: NCM

5.2 NTA

- What is Netflow and what are the Benefits
- Differences between Netflow, IP FIX, sFlow, jFlow and appFlow
- Configuring Netflow and Orion NTA
- Device support and configuration
- NBAR2
- Managing Netflow sources
- Selecting IP Address Groups
- Configuring Netflow Module Options
- Data Retention Tuning
- QoS analysis
- Viewing & Analysing Netflow Data
- Customizing Netflow Views
- Netflow Reports

LAB #15: Analysing Netflow data

5.3 IPAM

- Overview of the IP Address Management module
- Importing IP Address Structures and Data
- Adding subnets / supernets
- Creating and managing groups
- DHCP Server integration and management
- DNS Server integration and management
- Integration with the User Device Tracker Module data
- IPAM specific reporting

LAB #16: Import subnets

5.4 UDT

- Overview of the UDT module
- Adding ports for monitoring
- Integrating to Active Directory for User and Host tracking
- Searching for end points
- Creating Watch Lists and white lists
- Integration with the IP Address Management data
- UDT specific reporting

LAB #17: UDT lab

6 DAY 5

6.1 VNQM

- Overview of what IP SLA is and Provider
- Integration requirements and configuration for Cisco and Avaya Call Manager
- Supported Devices and versions
- Overview of Operation Types
- Adding IP SLA nodes
- Configuring IP SLA Operations
- Analysing response data
- IP SLA Reporting

LAB #18: IP SLA

6.2 WPM

- Overview of the WPM module
- Use of the Players and Recorders
- Creating a transactional web monitor
- Configuring for monitoring and associating with the player/s
- Analysis of monitoring data
- Summary
- Page Details
- Waterfall Charts
- Error analysis
- WPM specific reporting

6.3 Virtualization Manager in Orion

- Overview of VMan
- Navigating VMan data
- VMAN recommendations
- Appstack data integration

6.4 SRM

- Overview of SRM
- Introduction to Storage Devices (SAN, NAS, DAS)
- Adding devices
 - API device
 - SMI-S provider
 - Mixed mode
- App Stack functionality
- Hardware health information
- Interpreting data

7 LEGAL NOTICES

7.1 Confidentiality

This document contains confidential and potential sensitive security related information. Neither Prosperon Networks nor the Customer for which this document has been created may disclose the confidential information contained herein to any third party without the written consent of Prosperon Networks, save that the Customer may disclose the contents of this document to those of its agents, principles, representatives, consultants or employees who need to know its contents for the purpose of the use of the solution.

7.2 Terms & Conditions

This document is subject to the standard Prosperon Networks Terms & Conditions which are maintained on the corporate website: <http://www.prosperon.co.uk>.

Prosperon Networks does not assume liability for any errors or omissions in the content of this document or any referenced or associated third party document, including, but not limited to, typographical errors, inaccuracies or outdated information. This document and all information within it are provided on an "as is" basis without any warranties of any kind, express or implied.

8 ABOUT US

We are a leading IT Solutions provider specialising in IT Management solutions for small/medium and enterprise networks. Prosperon Networks; founded in 2006 provide a range of Professional Services to support its portfolio and is a recognised an authority within the UK for designing and installing SolarWinds monitoring solutions across the UK and Europe in all major verticals.

Our SolarWinds Certified Professional Engineers have overseen some of the largest SolarWinds installations in Europe, over time we have gathered a wealth of experience and best practice skills that will ensure your deployment is working at the levels required. Prosperon Networks also provide structured and informal training courses for SolarWinds solutions and assist candidates in becoming vendor accredited engineers.



Prosperon Networks Limited
15 Liverpool Gardens
Worthing, West Sussex
BN11 1RY
Tel: 01903 340 993
<http://www.prosperon.co.uk>
info@prosperon.co.uk