Lync 2013 Depth Support Engineer Course

Duration: 5 Days      Course Code: M55070      Version: A

Overview:
This five-day instructor-led class takes support engineers beyond design and deployment to troubleshooting Microsoft Lync Server 2013. You will review Lync Server architecture from the perspective of a Depth Support Engineer in order to support customers with Lync Server service issues. The course provides a toolkit for the Depth Support Engineer, which includes Microsoft and third-party tools available for troubleshooting Lync Server. You will use a variety of these tools and resources to troubleshoot real-world scenarios related to Enterprise Voice, conferencing, application sharing, IM, and Presence. As part of the hands-on labs, you will derive, articulate, and implement solutions to trouble tickets for common Lync Server issues and practice walking a typical customer through a solution.

Target Audience:
IT support consultants and telecommunication support professionals who provide support services for unified communication solutions. Support professionals who want to attain the troubleshooting skills required to become a Depth Support Engineer Helpdesk personnel and administrators who support a Lync Server 2013 environment and wish to deepen their knowledge and improve their troubleshooting skills.

Objectives:
- Effectively troubleshoot the Lync Server system with an understanding of architectural dependencies
- Troubleshoot Enterprise Voice, including configuration, call setup and teardown, and connection to external telephony systems
- Identify the most effective tool to analyze and troubleshoot a Lync Server 2013 infrastructure in various support scenarios
- Troubleshoot Lync server voice call quality and bandwidth issues
- Troubleshoot Lync Server voice applications
- Troubleshoot Lync authentication, Persistent Chat, Presence, and Address Book issues for internal users
- Troubleshoot integration issues with Exchange and SharePoint
- Troubleshoot Lync Server federated and remote connectivity issues related to firewall, reverse proxy, and Edge Server configurations
- Troubleshoot Lync Server HA / DR issues
- Troubleshoot federation and remote connectivity issues related to firewall, reverse proxy, and Edge Server configurations
- Troubleshoot Lync Server web and A/V conferencing for all users
- Troubleshoot Lync Server HA / DR issues
- Troubleshoot Lync Server HA / DR issues

Prerequisites:
- Attended Core Solutions of Microsoft Lync Server 2013 (20336) and Enterprise Voice and Online Services with Microsoft Lync Server 2013 (20337)
- Core Solutions of Microsoft Lync Server 2013 (exam 70-336) and Enterprise Voice & Online Services with Microsoft Lync Server 2013 (exam 70-337) certifications
- Proficiency in Active Directory Domain Services, Windows Server, data networks, Microsoft Exchange Server, and telecommunication standards that support Lync Server 2013 configurations
- Knowledge of UC endpoints, including Lync 2013 clients and Lync Phone Edition
- Knowledge of SQL Server
- Knowledge of VoIP technologies including SIP
- Knowledge of formal troubleshooting methodology
- Knowledge of DNS, PKI and Digital Certificates
- A minimum two years’ experience with Microsoft Lync technologies and various deployment and configurations
Content:

Module 1: Reviewing Lync Server 2013 Architecture
- Lync Server 2013 Architecture Dependencies
- Microsoft Supported Architectures
- Name Resolution and Certificates
- Database Management and SQL High Availability
- Advanced Role Based Access Control Assignment

Lab: Troubleshooting Lync 2013 Architecture
- Exercise 1A ; 1B: Troubleshooting Edge Connectivity
- Exercise 2: Using PortQry to Troubleshoot Connectivity Issues
- Exercise 3: Troubleshooting Remote Connectivity
- Bonus Exercise: Configuring Federation

Module 2: Developing a Depth Support Toolkit
- Logging
- Network and Media Traffic Analysis
- Lync Server Control Panel
- Lync Server 2013 Resource Kit and Debugging Tools
- Built-in Server Tools
- SIP Primer

Lab: Using Depth Support Tools
- Exercise 1: Tool Tutorial
- Exercise 2: Provisioning User Accounts
- Exercise 3: Tracing Fundamentals
- Exercise 4: Event Logs and Synthetic Transactions
- Bonus Exercise: Exploring Depth Support Tools

Module 3: Troubleshooting Client Authentication, Persistent Chat, and Presence
- Client Issues
- Persistent Chat
- Presence and Address Book Issues
- Archiving Issues
- VDI Issues

Lab: Troubleshooting Lync Client Access
- Exercise 1: Troubleshooting and Resolving Sign-in Issues

Module 4: Troubleshooting Conferencing
- Core Conferencing Modalities
- Configuration of Office Web Apps Server
- Conferencing Life Cycle
- Conferencing Data
- Lync Room System

Lab: Troubleshooting Conferencing
- Exercise 1: Troubleshooting Internal Conference Issues
- Exercise 2: Identifying Root Causes of Conferencing Issues with Performance Monitor
- Exercise 3: Using Lync Monitoring Reports to Troubleshoot Conferencing Problems
- Exercise 4: Testing Conferencing Call Flow
- Bonus Exercise: Analyzing Bandwidth Requirements

Module 5: Troubleshooting Lync 2013 Updates
- Exercise 1: Troubleshooting Lync Update Downloader Issues
- Exercise 2: Troubleshooting SQL Back End Dependencies
- Exercise 3: Troubleshooting SQL Mirror Failovers
- Bonus Exercise: Performing Lync Server 2013 Updates

Module 6: Troubleshooting Enterprise Voice Configuration Issues
- Enterprise Voice Configuration
- Call Setup and Teardown
- Connection to External Telephony Systems

Lab: Troubleshooting Dial Plans, Routing and Trunks
- Exercise 1A ; 1B: Identifying Dial Plan Misconfiguration
- Exercise 2: Troubleshooting Voice Routing Issues
- Exercise 3: Troubleshooting Lync 2013 Trunk Settings for Media Gateways or IP PBXs
- Exercise 4: Troubleshooting Inbound/Outbound Call Flow Issues from PSTN

Module 7: Troubleshooting Enterprise Voice Applications
- Call Park Service
- Troubleshooting Response Groups
- Announcement Service

Lab: Troubleshooting Enterprise Voice Applications
- Exercise 1A ; 1B: Troubleshooting Response Groups
- Exercise 2: Troubleshooting Dial-in Conferencing
- Bonus Exercise: Advanced Unassigned Numbers Configuration

Module 8: Analyzing and Troubleshooting High Availability, Disaster Recovery, and Voice Resiliency
- Supported Lync Server 2013 High Availability Configurations
- Load Balancing Web Services
- Setting Appropriate Disaster Recovery Expectations

Lab: Deploying HA and DR and Troubleshooting Voice Resiliency
- Exercise 1: Configuring Lync HA and DR
- Exercise 2: Troubleshooting Load Balanced Configurations
- Exercise 3: Troubleshooting Voice Resiliency
- Bonus Exercise: Using Bandwidth Management for Voice Resiliency

Module 9: Troubleshooting Exchange and SharePoint Integration
- Exchange 2013 Unified Messaging
- Unified Contacts Store
- Archiving and Compliance
- SharePoint 2013 Site Mailboxes
- SharePoint 2013 eDiscovery

Lab: Troubleshoot Lync Server Integration Issues
- Exercise 1A, 1B, and 1C: Troubleshooting Voice Mail
- Exercise 2: Troubleshooting Auto Attendant
- Exercise 3: Implementing an Integrated Lync and Exchange Solution
- Bonus Exercise: Extending Contoso’s eDiscovery Solution with SharePoint 2013 Integration
Exercise 2: Troubleshooting Presence Issues

Bonus Exercise 1: Extending the Lync 2013 Namespace

Bonus Exercise 2: Deploying Persistent Chat

Lab: Troubleshooting Client-Related Issues

Exercise 1: Resolving Address Book Issues

Exercise 2: Resolving Persistent Chat Issues

Exercise 3: Troubleshooting Client Version Policy

Bonus Exercise 2: Deploying Edge Server Role

Module 4: Troubleshooting Remote Connectivity

- Edge Remote Connectivity
- Federation
- Reverse Proxy
- Mobile Devices
- Port Configuration
- Remote Connectivity Testing

Module 7: Analyzing and Troubleshooting Enterprise Voice Call Quality

- Voice Quality Issues
- UC Devices and Peripherals

Lab: Troubleshooting Voice Quality and Network Traffic Issues

- Exercise 1: Configuring SCOM to Monitor Lync
- Exercise 2: Troubleshooting Call Quality Issues
- Exercise 3: Analyzing DSCP Values and Port Ranges for Prioritizing Network Traffic
- Exercise 4: Configuring GPOs and Lync Policy for QoS

Further Information:

For more information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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