

Lync 2013 Depth Support Engineer Course

Duration: 5 Days **Course Code: M55070**

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

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 0: Introduction to Contoso's Environment

- Exercise 1: Connecting to the Labs
- Exercise 2: Reviewing Contoso's Environment
- Exercise 3: Performing Active Directory Health Checks
- Exercise 4: Verifying Lync Service Availability

Lab 1: Troubleshooting Lync 2013 Dependencies

- Exercise 1: Troubleshooting Lync 2013 Dependencies
- Exercise 2: Troubleshooting SQL Back End Server Dependencies
- Exercise 3: Performing SQL Mirror Failovers
- Bonus Exercise: Performing Lync Server 2013 Updates

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 2: 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 3a: Troubleshooting Lync Client Access

Module 4: Troubleshooting Remote Connectivity

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

Lab 4a: Troubleshooting Edge Connectivity

- Exercises 1A ; 1B: Troubleshooting Edge Configuration
- Exercise 2: Using PortQry to Troubleshoot Connectivity Issues
- Exercise 3: Troubleshooting Remote Connectivity
- Bonus Exercise: Configuring Federation

Lab 4b: Troubleshooting Reverse Proxy

- Exercise 1: Deploying ARR as a Reverse Proxy for Lync and Exchange
- Exercise 2: Troubleshooting Remote Connectivity
- Exercise 3: Validating Mobile Client Connectivity with Lync Connectivity Analyzer

Module 5: Troubleshooting Conferencing

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

Lab 5: 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 6: Troubleshooting Enterprise Voice Configuration Issues

- Enterprise Voice Configuration
- Call Setup and Teardown
- Connection to External Telephony Systems

Lab 6: Troubleshooting Dial Plans, Routing and Trunks

Lab 7: 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

Module 8: Analyzing and Troubleshooting Enterprise Voice Applications

- Call Park Service
- Troubleshooting Response Groups
- Announcement Service

Lab 8: Troubleshooting Enterprise Voice Applications

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

Module 9: 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 9: 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 10: Troubleshooting Exchange and SharePoint Integration

- Exchange 2013 Unified Messaging
- Unified Contacts Store
- Archiving and Compliance
- SharePoint 2013 Site Mailboxes
- SharePoint 2013 eDiscovery

Lab 10: Troubleshoot Lync Server Integration Issues

- Exercise 1A, 1B, and 1C: Troubleshooting Voice Mail

- Exercise 1: Troubleshooting and Resolving Sign-in Issues
- Exercise 2: Troubleshooting Presence Issues
- Bonus Exercise 1: Extending the Lync 2013 Namespace
- Bonus Exercise 2: Deploying Persistent Chat

Lab 3b: 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

- 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: Analyzing and Troubleshooting Enterprise Voice Call Quality

- Voice Quality Issues
- UC Devices and Peripherals

- 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

Additional Information:

To help you prepare for this class, review the following resources TechNet articles on Exchange, SQL, SharePoint, and Lync Server 2013 and References on SIP.

Further Information:

For More information, or to book your course, please call us on +91 40 23222555

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