

Course 55070A:

Microsoft Lync 2013 Depth Support Engineer

Course Outline

Module 1: Reviewing Lync Server 2013 Architecture

This module explains how to analyze the Lync Server 2013 infrastructure to assist in troubleshooting configuration and installation issues. It also describes how to recognize DNS and certificate configuration issues. Additionally, it explores SQL database troubleshooting.

Lessons

- 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 : Introduction to Contoso's Environment

Lab : Troubleshooting Lync 2013 Dependencies

After completing module 1, students will be able to:

- Troubleshoot the installation process
- Identify deviations from supported architectures
- Troubleshoot advanced enterprise DNS issues
- Analyze and troubleshoot certificate issues
- Troubleshoot SQL database issues
- Analyze the state of an SQL mirror and perform failover and failback

Module 2: Developing a Depth Support Toolkit

This module explains how to use the tools that Microsoft has provided to analyze and troubleshoot a Lync Server 2013 infrastructure.

Lessons

- 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

After completing module 2, students will be able to:

- Use the built-in logging tools for Lync Server 2013, including Centralized Logging Service
- Identify the correct CLS scenario related to a problem
- Analyze logging data using Snooper
- Analyze and evaluate network traffic using Microsoft Network Monitor
- Troubleshoot failing media establishment between endpoints
- Identify tools included with Lync Server 2013 Resource Kit and Lync 2013 Debugging Tools
- Analyze Lync Server 2013 and Lync 2013 event logs
- Identify problems using Event Viewer

Module 3: Troubleshooting Client Authentication, Persistent Chat, and Presence

This module explains how to troubleshoot Lync authentication. It also describes how to analyze and resolve issues with Persistent Chat, Presence, and Address Book related issues.

Lessons

- Client Issues
- Persistent Chat
- Presence and Address Book Issues
- Archiving Issues
- VDI Issues

Lab : Troubleshooting Lync Client Access

Lab : Troubleshooting Client-Related Issues

After completing module 3, students will be able to:

- Troubleshoot sign in and client authentication
- Troubleshoot client policy
- Troubleshoot Persistent Chat clients and services
- Resolve unexpected presence states and Address Book issues
- Understand and troubleshoot the VDI plugin

Module 4: Troubleshooting Remote Connectivity

This module explains how to troubleshoot federation, including XMPP, Skype, and Public IM Connectivity. It also describes appropriate external port configurations and how to analyze and troubleshoot external connection issues, as well as common Edge and reverse proxy misconfigurations.

Lessons

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

Lab : Troubleshooting Edge Connectivity

Lab : Troubleshooting Reverse Proxy

After completing module 4, students will be able to:

- Troubleshoot Edge configuration and remote connectivity problems
- Troubleshoot open, direct, and enhanced federation
- Troubleshoot reverse proxy
- Troubleshoot mobile device settings
- Configure and troubleshoot firewall port issues
- Describe and use remote connectivity tools

Module 5: Troubleshooting Conferencing

This module explains how to troubleshoot the conferencing life cycle, including MCU health, the join launcher, and Lync Web App. It also describes troubleshooting external conferencing data problems.

Lessons

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

Lab : Troubleshooting Conferencing

After completing module 5, students will be able to:

- Describe core conferencing modalities
- Troubleshoot Office Web Apps issues
- Troubleshoot application sharing issues
- Analyze bandwidth requirements
- Describe Lync Room System and potential issues

Module 6: Troubleshooting Enterprise Voice Configuration Issues

This module explains how to analyze dial plans, routes, PSTN usages, session management, and media bypass in order to resolve call issues. Additionally, problems with call setup and teardown will be analyzed and resolved.

Lessons

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

Lab : Troubleshooting Dial Plans, Routing and Trunks

After completing module 6, students will be able to:

- Troubleshoot Voice configuration
- Troubleshoot call setup and teardown
- Troubleshoot gateway and trunk configurations, including PBX integration and PSTN

Module 7: Analyzing and Troubleshooting Enterprise Voice Call Quality

This module explains how to review quality of experience logs and analyze call flow and network bandwidth to evaluate and resolve call quality issues. Additionally this module will provide detail on troubleshooting the Lync Features that facilitate bandwidth management such as CAC and QoE.

Lessons

- Voice Quality Issues
- UC Devices and Peripherals

Lab : Troubleshooting Voice Quality and Network Traffic Issues

After completing module 7, students will be able to:

- Troubleshoot Voice quality issues
- Identify key thresholds for call quality
- Troubleshoot CAC policy misconfigurations
- Troubleshoot QoS misconfigurations
- Troubleshoot UC devices and peripherals
- Configure SCOM to work with Lync Server

Module 8: Analyzing and Troubleshooting Enterprise Voice Applications

This module explains how to troubleshoot each of the Voice applications used with Lync Server 2013.

Lessons

- Call Park Service
- Troubleshooting Response Groups
- Announcement Service

Lab : Troubleshooting Enterprise Voice Applications

After completing module 8, students will be able to:

- Describe supported configurations for Call Park Service
- Troubleshoot Response Group issues
- Configure Announcement Service and unassigned numbers

Module 9: Troubleshooting High Availability, Disaster Recovery, and Voice Resiliency

This module explains how to troubleshoot High Availability, Disaster Recovery and Voice Resilience features in Lync Server 2013.

Lessons

- 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

After completing module 9, students will be able to:

- Identify supported HA and DR topologies
- Describe supported topology for HLB
- Troubleshoot HLB configurations

Module 10: Troubleshooting Exchange and SharePoint Integration

This module explains how to troubleshoot Lync Server 2013 integration with Exchange Server 2013. Additionally, it describes how to troubleshoot integration with SharePoint Server 2013.

Lessons

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

Lab : Troubleshoot Lync Server Integration Issues

After completing module 10, students will be able to:

- Identify Exchange UM problems
- Troubleshoot integration issues with Exchange
- Troubleshoot integration issues with SharePoint