



## Enterprise Voice and Online Services with Microsoft® Lync® Server 2013 20337B

**Delivery Type:** Instructor-led (classroom)  
**Duration:** 5 days

### Overview:

This five-day instructor-led course teaches how to design and configure enterprise voice in Microsoft Lync Server 2013 and Lync Online services. This course will provide you with the knowledge and skills to configure and manage a Lync Server 2013 on premises, Lync Online in the cloud or in a mixed deployment. In addition, it will provide the skills needed by IT or telephony consultants to deliver a Lync based enterprise voice solution. This course will teach you how to configure Lync Server 2013, as well as provide guidelines, best practices, and considerations that will help you optimize your enterprise voice deployment. This course helps the student prepare for Exam 70-337.

### Audience profile:

This course is intended for IT Consultants and Telecommunications consulting professionals with at least three months experience designing, planning, deploying, and maintaining solutions for unified communications (UC) with particular

emphasis on enterprise voice over Internet protocol (VOIP). The student should be able to translate business requirements into technical architecture and design for a UC solution. The student should also have basic Windows Server 2012 navigation skills.

### At course completion

After completing this course, students will be able to:

- ✓ Design a resilient enterprise voice solution
- ✓ Design and configure network services for Lync 2013
- ✓ Configure Lync Server 2013 voice features
- ✓ Implement emergency voice services
- ✓ Plan and configure a Lync Online or hybrid solution

### Course Outline:

- ✓ Module 1: Voice Architecture

This module introduces Enterprise Voice features of Lync Server 2013 and discusses all components required for implementation. A high level architectural design is provided and all relevant components such as mediation servers, gateways, SIP trunks, and PBX are

discussed. This module provides students with the technical foundation to plan and deploy the Enterprise Voice workload.

✓ Module 2: Configuring Basic Enterprise Voice Functionality

Basic enterprise voice functionality provides a seamless ability for employees to make and receive phone calls from legacy phones, IP phones, Lync clients, and even mobile devices. A caller just needs to know one number for calling employee or if integrated with Active Directory, just the name. This module discuss configuration items relevant to Enterprise Voice. At the end of the module, students will have an in-depth understanding of configuration items such as trunks, routes, voice policies, and dial plans. Students will be able to configure Enterprise voice, implement routing and normalization and enable users for Enterprise Voice functionality.

✓ Module 3: Designing Exchange Server 2013 Unified Messaging Integration with Lync Server 2013

This module discusses the process for integrating Exchange Server 2013 Unified Messaging (UM) with Lync Server 2013. Students also learn about UM dial plan requirements and how to create and configure a UM dial plan. Students learn how to enable a user for UM integration with Lync Server 2013.

✓ Module 4: Voice Applications

Basic enterprise voice functionality provides a seamless ability for employees to make and receive phone calls from legacy phones, IP phones, Lync clients, and even mobile devices. A caller just needs to know one number for calling employee or if integrated with Active Directory, just the name. This module discuss configuration items relevant to Enterprise Voice. At the end of the module, students will have an in-depth understanding of configuration items such as trunks, routes, voice policies, and dial plans. Students will be able to configure Enterprise voice, implement routing and normalization and enable users for Enterprise Voice functionality.

✓ Module 5: Configuring and Deploying Emergency Calling

This module covers the Location Information Server (LIS) and how to implement Emergency dialing and Enhanced 911 (E9-1-1) where appropriate. The module discusses the implementation and configuration of Emergency Services for a Lync infrastructure and explores various configuration aspects of Emergency Services, such as location services, call routing and E9-1-1.

✓ Module 6: PSTN Integration

This module discusses how to connect Microsoft Lync Server 2013 to a public switched telephone network (PSTN) using an existing Public Branch Exchange (PBX), gateway or Internet Telephone Service Provider (ITSP). Connection to the PSTN allows enterprise users to make calls to and receive calls from outside external numbers using the same Lync client used for internal calls. Later lessons will cover Lync 2013 features to improve managing and interacting with external users connected through the PSTN.

✓ Module 7: Lync Server 2013 and Networking

This module focuses on network requirements planning, including Quality of Service (QoS), capacity, conferencing traffic, Edge placement, and bandwidth management. The module also discusses how to plan and deploy Call Admission Control (CAC). Students will learn about Lync networking dependencies, design guidelines, and best practices. The module also provides background information on CAC and QoS, and design and configuration information. At the end of the module, students will understand the networking requirements for Lync Enterprise Voice, and know how to successfully design, implement and configure Lync for both QoS and CAC.

✓ Module 8: Phones and Devices

This module discusses selecting, deploying and configuring phones and devices to use with Lync. At the end of the module the student will be able to deploy and configure Lync phones and devices.

✓ Module 9: Lync Online Configuration and Migration

This module introduces Lync Online and hybrid scenarios as well as explaining how to migrate users to Office 365. The different Lync online deployment architectures and the differences in feature set and functionality are discussed.

✓ Module 10: Quality of Experience

This module explains the requirements for quality of experience (QoE) monitoring. Students learn to interpret and use QoE reports to better manage and deliver the Lync Server 2013 user experience.

✓ Module 11: Voice Resiliency

This module examines the capabilities of Lync Server 2013 for providing voice resiliency across the enterprise. The module explores multiple failure scenarios, such as central site, branch, and WAN failover.

**Prerequisites:**

- ✓ Minimum of two years of experience with Microsoft Lync technologies or similar telephony systems.
- ✓ Completed Course 20336, Core Solutions of Microsoft Lync Server 2013 or equivalent knowledge of deploying Lync Server 2013 or Lync Online.
- ✓ Experience deploying Lync clients, including end user and common area devices.
- ✓ Familiarity with security, networking and high availability concepts.
- ✓ Experience with monitoring and troubleshooting on Windows Server.
- ✓ Understanding of Active Directory Domain Services (AD DS).
- ✓ Experience managing an application remotely using Windows PowerShell 2.0 or newer.