About this Course

In In this course, you will learn how to plan, design, configure, maintain, and troubleshoot an integrated communications solution at an organization using Microsoft Teams. The course will cover Teams Phone with Calling Plans, Direct Routing, Operator Connect, and Teams Phone Mobile, in addition to Teams devices, audio/video conferencing, and voice migration. Students will learn troubleshooting methodologies and how to resolve common telephony and voice problems.

Prerequisites

Before attending this course, students should have intermediate knowledge of the following topics from MS-700: Managing Microsoft Teams:

- Plan and configure a Microsoft Teams environment
- Manage chat, teams, channels, and apps
- Manage calling and meetings
- Monitor and troubleshoot a Microsoft Teams environment

Audience profile

The Microsoft Teams Voice Engineer plans, designs, configures, maintains, and troubleshoots an integrated communications solution at an organization. The Microsoft Teams Voice Engineer must be able to translate business requirements into technical architecture and designs for communication solutions. The Microsoft Teams Voice Engineer is familiar with telecommunication technologies and has experience in Microsoft Teams, Microsoft 365, and PowerShell. They must be able to deploy and configure Microsoft Teams Phone with PSTN connectivity through Direct Routing, Operator Connect, and Teams Calling Plans. The Microsoft Teams Voice Engineer manages Teams-certified devices, audio/video conferencing, and voice migration. The Microsoft Teams Voice Engineer collaborates with telephony providers and third-party vendors to enable advanced voice features in

Microsoft Teams. The Microsoft Teams Voice Engineer also works with administrators for other workloads, including networking, identity, licensing, security, and compliance. To earn the Microsoft Teams Voice Engineer certification, candidates must pass Exam MS-700: Managing Microsoft Teams in addition to the MS-720 exam.

Skills gained

- Plan and Configure Microsoft Teams Phone
- Plan and optimize network performance for Teams Phone
- Configure and deploy Direct Routing
- Configure, deploy, and manage Teams devices
- Monitor and Troubleshoot Teams Phone

Course Outline:

Plan for Teams Phone
Learn about Microsoft Teams Phone and what is needed to make and receive phone calls, plan for Teams Phone devices, features, and cloud voicemail.

Learning objectives
At the end of this module, you'll be able to:
- Plan for a basic Teams Phone deployment.
- Plan for advanced Teams Phone calling options.
- Plan for Teams phones and devices.

Plan and optimize network performance for Teams media
For real-time media in Microsoft Teams, network performance is key to a good user experience. In this module, we cover Teams real-time network requirements and how to optimize your network for Teams real-time media.

Learning objectives
At the end of this module, you will be able to:
- Describe Teams network requirements
- Evaluate organizational bandwidth requirements with the Teams Network planner
- Assess network using the Teams Network Assessment Tool
- Optimize network and WiFi for media flow
- Optimize media flow with QoS

Migrate voice services from Skype for Business Server to Teams
In this module, you'll learn how to plan, configure, and migrate Skype for Business Server Enterprise Voice users and devices to Microsoft Teams while maintaining the ability to call internally and externally during the migration.

Learning objectives
At the end of this module, you'll be able to:
- Understand how Skype and Teams interact
- Plan implementation of Skype for Business Server Hybrid
- Describe the pre-requisites required for migration

- Configure Skype for Business Server Hybrid
- Migrate users and devices to Teams

Configure and deploy Teams Phone
Before Microsoft Teams Phone users can make or receive calls and use advanced features, phone numbers must be assigned and Microsoft Calling plans or Operator Connect must be configured.

Learning objectives
At the end of this module, you'll be able to:
- Configure emergency calling addresses
- Manage Microsoft Calling Plan numbers
- Setup and manage Operator Connect and Teams Phone Mobile
- Understand Teams Phone policies and configuration options
- Configure Audio Conferencing and Communication Credits

Configure auto attendants and call queues
Understand how auto attendants and call queues in Microsoft Teams can interact with callers to ensure they're connected your agents as quickly as possible. You'll also learn how to set up auto attendants and call queues.

Learning objectives
At the end of this module, you'll be able to:
- Describe the differences between auto attendants and call queues.
- Design an auto attendant to gather information from callers.
- Explain how to set up auto attendants to implement your plan.
- Demonstrate how to plan call queues to manage many callers.
- Describe how to configure call queues to alert agents and route calls.
- Explain how to plan licensing for auto attendants and call queues.

Configure and deploy Teams Phone with Direct Routing

In this module, you'll learn how administrators configure Teams Phone with Direct Routing to meet user needs for telephony through a PSTN.

Learning objectives

At the end of this module, you will be able to:

- Explain how to configure and connect a Session Border Controller (SBC).
- Describe the process for configuring simple and advanced voice routing.
- Describe how to provision users, implement number translation, create, and assign dial plans.
- Explain how to configure and connect a Survivable Branch Appliance (SBA).

Extend Teams Phone with additional services

Teams Phone leverages other Microsoft services and can be extended with third-party solutions for policy-based compliance recording, contact center integration, and custom bots.

Learning objectives

At the end of this module, you'll be able to:

- Describe how Teams Phone interacts with other Microsoft services.
- Configure and integrate third-party policy-based compliance recording.
- Configure and integrate third-party contact center solutions.
- Design and register Voice Bots for custom developed solutions.

Configure and manage voice users

Ongoing management is required as new employees start, or if their needs change. Learn how to manage voice user configuration, including enabling voice services and adjusting voice configuration.

Learning objectives

After completing this module, you'll be able to:

- Enable users for Teams Phone using Calling Plans, and Teams Phone Mobile or Operator Connect if it's configured for your tenant.
- Enable users for Direct Routing.
- Manage per-user options for Teams Phone.

Configure, deploy, and manage Teams devices

Teams devices provide a familiar experience and are essential for a hybrid workspace. Learn how to provision and manage devices, and associated device accounts.

Learning objectives

At the end of this module, you'll be able to:

- Understand scenarios for using Teams phones, Teams displays, and Microsoft Teams Rooms with voice services.
- Differentiate between the different options for deployment and management of devices.
- Deploy Teams phones and Teams displays.
- Configure Teams Phone for Microsoft Teams Rooms.
- Manage Teams devices in the Teams admin center and Teams Rooms Pro Management Portal.

Monitor and troubleshoot Teams collaboration communications systems

Troubleshooting is an important task that includes troubleshooting of phone number assignment, call failure and quality issues, client issues, and device issues. Call Analytics, Call Quality Dashboard, and the Teams Rooms Pro portal are also covered for monitoring, reporting, and troubleshooting.

Learning objectives

At the end of this module, you'll be able to:

- Diagnose and troubleshoot phone number assignment
- Diagnose and troubleshoot Microsoft Teams client issues
- Diagnose and troubleshoot call failures and quality issues
- Report on and troubleshoot Teams calls with the Call Quality Dashboard (CQD)
- Diagnose and troubleshoot Direct Routing issues
- Troubleshoot and monitor Teams devices using the Teams Rooms Pro portal