Exam MS-720: Microsoft Teams Voice Engineer – Skills Measured

NOTE: Passing score: 700. Learn more about exam scores here.

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 Microsoft Teams Calling Plans. The Microsoft Teams voice engineer manages devices certified for Microsoft Teams, 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 365 Certified: Teams voice engineer Expert certification, candidates must also earn the Microsoft 365 Certified: Teams Administrator Associate certification.

Skills Measured

NOTE: The bullets that follow each of the skills measured are intended to illustrate how we are assessing that skill. This list is NOT definitive or exhaustive.

NOTE: Most questions cover features that are General Availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Plan and Configure Microsoft Teams Phone (25-30%)

Plan and design a Microsoft Teams PSTN solution

- choose an appropriate PSTN connectivity solution
- identify requirements for Teams Calling Plans, Operator Connect, and Direct Routing
- identify licensing requirements for Microsoft Teams Phone, including users, auto attendants, call queues, meeting room devices, and common area phones

- plan network topology
- plan for integration of Certified Contact Center solutions

Manage phone numbers for Microsoft Teams Calling Plans and Operator Connect

- choose between porting and acquiring numbers for Teams Calling Plans
- acquire phone numbers for Teams Calling Plans from Microsoft
- create a port order for Microsoft service and user numbers
- create a request to convert between Microsoft service and user numbers
- configure Operator Connect

Configure Phone policies

- install Microsoft Teams PowerShell module
- design and configure a tenant dial plan
- configure calling policies
- configure call park policies
- configure caller ID policies
- configure outbound call restrictions
- configure inbound call blocking
- configure compliance recording

Configure auto attendants and call queues

- design call flows for auto attendants and call queues
- configure auto attendants and call queues
- deploy channel-based call queues
- configure resource accounts, including cloud and hybrid environments
- assign licenses to the resource accounts
- assign phone numbers to resource accounts
- assign a resource account to an auto attendant or call queue
- configure Microsoft 365 Groups for voicemail
- configure holidays for auto attendants and call queues
- configure custom Music-on-Hold

Configure audio conferencing

- choose between per-user and per-minute licensing
- set a default audio conferencing bridge
- configure a conference bridge number
- configure a toll-free conference bridge number
- deploy toll-free audio conferencing
- configure communication credits for audio conferencing

- configure Operator conferencing from separate providers

Design and configure emergency calling

- design dynamic emergency calling scenarios
- define emergency locations
- configure client discovery of emergency locations
- configure emergency calling policies

Optimize Network Performance (5-10%)

Design network infrastructure for optimal Microsoft Teams Phone performance

- determine network readiness for Microsoft Teams
- design network requirements by using the Network Planner in Microsoft Teams
- perform a network analysis
- design and validate local internet breakout strategy for client media optimization
- design and validate VPN split tunneling
- design organization QoS requirements and policies
- configure Microsoft Teams QoS policies

Implement network topology

- configure a network topology
- add WAN IPs to a network topology
- add locations to a network topology
- create and assign a Microsoft Teams network roaming policy

Plan and Configure Direct Routing (15-20%)

Design Direct Routing call flows

- plan and design PSTN connectivity by using Direct Routing
- recommend a Session Border Controller (SBC) solution based on PSTN connectivity
- recommend a multiple SBC solution based on requirements

Implement SIP trunking with Direct Routing

- identify configuration requirements between the SBC and Microsoft
- create and configure an online PSTN gateway
- create PSTN usage records
- create and configure voice routes
- create and configure voice routing policies

- validate Direct Routing SBC connectivity
- test Direct Routing connections

Extend a Direct Routing infrastructure

- design and configure Location Based Routing (LBR)
- design and configure Local Media Optimization (LMO)
- configure gateway translation rules
- create a validated emergency address
- configure on-network conferencing for Direct Routing

Deploy and maintain a Survivable Branch Appliance (SBA)

- plan and configure an SBA
- assign SBA policies to users
- test SBA functionality
- plan for SBA and SBC maintenance and updates

Configure and Manage Microsoft Teams Phone for Voice Users (15-20%)

Enable users for Microsoft Teams Phone

- assign Teams Phone license
- assign a Microsoft Teams Calling Plan license
- assign user dial plans
- assign numbers to users
- assigning verified emergency address location
- assign a calling policy to a user
- assign a usage location to a user

Enable users for Direct Routing

- assign a voice routing policy to a user for Direct Routing
- assign a number to a user by using PowerShell
- enable voicemail and Enterprise Voice for a Direct Routing user in PowerShell

Enable per-user calling features

- configure group call pickup
- configure call delegation and call delegates
- configure call forwarding
- configure simultaneous ring

- enable and configure audio conferencing
- assign a dial-out policy

Migrate voice users

- validate Skype for Business hybrid configuration and connectivity
- migrate users between on-premises and cloud
- migrate Skype for Business Common Area Phones to Microsoft Teams
- migrate Skype for Business Meeting Rooms to Microsoft Teams

Plan and Configure Microsoft Teams Clients and Devices (5-10%)

Plan and configure Microsoft Teams Phones and Teams displays

- recommend a Microsoft Teams Phone based on business and security requirements
- recommend a Microsoft Teams display based on business and security requirements
- assign Common Area Phone licenses to common area phones
- deploy Skype for Business phones (3PIP)
- deploy Microsoft Teams phones
- deploy Common Area Phones
- deploy Microsoft Teams displays
- configure remote provisioning and sign-in for Android devices
- update Microsoft Teams devices remotely

Plan and configure Microsoft Teams Rooms on Windows and Teams Rooms on Android

- recommend Microsoft Teams Rooms based on business and security requirements
- manage Microsoft Teams Rooms devices
- assign an audio-conferencing bridge service number to a Microsoft Teams Room
- configure accounts for Microsoft Teams Rooms
- define local Users & Groups on Microsoft Teams Rooms on Windows

Monitor and Troubleshoot Microsoft Teams Phone (15-20%)

Monitor Microsoft Teams Phone

- configure tenant data upload for Call Quality Dashboard (CQD) and reporting labels
- configure Power BI reports for CQD
- monitor SBC health

Monitor and troubleshoot Microsoft Teams clients and devices

- troubleshoot Microsoft Teams client data flows by using debug logs, media logs, browser traces, and desktop logs
- troubleshoot configuration profiles in Microsoft Teams
- configure Notifications & alerts in Microsoft Teams admin center
- monitor Microsoft Teams Rooms
- troubleshoot Azure AD Sign-in issues for Microsoft Teams devices
- troubleshoot user provisioning by using MCOValidationError

Troubleshoot call failure and call quality

- interpret Microsoft Teams media flows
- troubleshoot call failures by using client logs
- troubleshoot a missing dial pad
- troubleshoot call failures by using the Self-help Diagnostics in Microsoft 365 Admin Center
- troubleshoot tenant dial plans by using regular expressions and PowerShell
- troubleshoot dynamic emergency address by using client debug logs
- interpret E.164 Normalization Rules in a tenant dial plan
- analyze reverse number lookup
- troubleshoot Teams client media issues by using Microsoft 365 Connectivity Tool
- troubleshoot calls by using Real-time Telemetry
- troubleshoot calls by using Advanced Call Analytics
- troubleshoot calls by using the CQD
- inspect PSTN usage reports for SIP call failures
- analyze QoS markers by using a network trace

Troubleshoot Direct Routing connectivity

- troubleshoot firewall issues for Direct Routing
- troubleshoot certificate Issues for Direct Routing
- troubleshoot SIP options issues for Direct Routing
- investigate and diagnose calling issues by using an SBC SIP trace