Microsoft

Office 365 Networking Foundations

WorkshopPLUS

Target Audience:
This course is focused on networking topics that are relevant to customers that are moving to Office 365 or are planning to move to or already have workloads on Office 365.

Overview

The Office 365 Networking Foundations course provides attendees with knowledge and understanding on different ways of optimizing Network connectivity to Office 365.

Through presentations, discussions, and demos, this two-day WorkshopPLUS covers various topics that focus on optimizing connectivity between clients and the egress points of the customer network and on to the Microsoft datacenter. Considerations around ExpressRoute for Office 365 are also discussed.

Key Features and Benefits

Each module is designed to provide participants with expertise and tools to help understand specific concepts or methods for optimizing network connections.

Technical Highlights

After completing this course, you will be able to:

- Understand the different network connectivity options for Office 365.
- Acquire skills to baseline, troubleshoot and optimize network connectivity to the Office 365.
- Understand the basics of ExpressRoute and current guidance around ExpressRoute for Office 365.

Syllabus

Minimum IT Requirements:

Intel Core-i5 based computer with 4-GB RAM and 128-GB HDD

Windows 7 SP1 or later

Microsoft Office 2013 Professional Plus

Internet access with a minimum speed of 1 Mbps per student

This Workshop*PLUS* runs for **two** full days. Students should anticipate consistent start and end times for each day. Early departure on any day is not recommended.

Module 1: Datacenters and Global Network: This module provides an overview of the Microsoft datacenter infrastructure, peering locations, Edge nodes, CDN and ExpressRoute for Office 365.

Module 2: Bandwidth Planning and Estimation : This module covers bandwidth planning at a very high level.

Module 3: Organization Network infrastructure: This module will help understand the routes to Office 365 and how various networking components such as WAN Optimizers, proxies, firewalls, NAT devices, etc. can affect the connection.

Module 4: Network Troubleshooting: In this module, the learner will get an in-depth understanding of the TCP connection process and how name resolution works for different Office 365 workloads. The module also covers various TCP parameters such as Maximum Segment Size, Windows Scaling, Packet loss and latency and the impact they can have on performance.

Module 5: Application Troubleshooting: This module focuses on the different workloads and connectivity methods for each workload. The learner will get an understanding of parameters that could specifically affect each workload such as Exchange, SharePoint or Skype for Business.

Module 6: Azure ExpressRoute: This module provides an introduction to ExpressRoute for Office 365, the connectivity models and types of peering.

Module 7: ExpressRoute Guidance: In this module, you will learn about the current ExpressRoute guidance for Office 365.

Module 8: ExpressRoute Planning: In this module, you will learn about high-level planning considerations and prerequisites for ExpressRoute.

Module 9: Deployment Scenarios for ExpressRoute: This module covers the connectivity options, locations and ExpressRoute internal routing options.

Module 10: Network Security and High Availability: This module covers the security models and high availability options when using ExpressRoute for Office 365.

Module 11: ExpressRoute Sample Implementation for Office 365 : This module goes over a sample implementation at a very high level.

Module 12: Network and Azure basics: This module starts with the terminology associated with Azure ExpressRoute and goes on to cover the basic configuration steps.

Module 13: Troubleshooting Connectivity: This module will introduce you to the various tools available to help troubleshoot common issues in your environment.

NOTE: This WorkshopPLUS course does not provide the knowledge to do a complete bandwidth requirement analysis. This course is not aimed at determining whether Express Route is required for your deployment.