

# Configuring and Managing Windows Media Services

## Course Outline

### Module 1: Configuring Live Streaming Solutions

This module explains how to configure Live Streaming solutions.

#### Lessons

- Overview of Windows Media Server
- Implementing Windows Media Server
- Implementing Live Content Streaming

#### Lab: Configuring Live Streaming Solutions

- Exercise 1: Configuring the Encoder Connection
- Exercise 2: Configuring the Broadcasting Points
- Exercise 3: Testing the Live Streaming Solution

After completing this module, students will be able to:

- Identify considerations for using unicast versus multicast distribution methodologies.
- Describe the steps for configuring a publishing point for live streaming media that will distribute content to an Edge server using a unicast publishing point on an Origin server
- Describe the steps for connecting a WMS Origin server to a live encoder.
- Describe the steps for connecting a WMS Origin server publishing point to an Edge server publishing point using unicast.
- Describe the steps for configuring a publishing point for live streaming media that will distribute content to clients using multicast publishing points on an Edge server

### Module 2: Configuring On-Demand Streaming Solutions

This module explains how to configure On-Demand Streaming solutions.

#### Lessons

- Configuring Data Sources for On Demand Streaming
- Implementing On Demand Streaming Solutions
- Implementing Distribution Servers

#### Lab: Configuring On-Demand Streaming Solutions

- Exercise 1: Preparing the Content for Publishing
- Exercise 2: configuring the On Demand Publishing Points
- Exercise 3: Configuring a Distribution Server

After completing this module, students will be able to:

- Configure an on demand publishing point that distributes both unicast and multicast traffic.
- Copy a media file to the on demand publishing point.
- Validate the client is able to connect to the on demand publishing point to view content.

### Module 3: Configuring Service Roles

This module explains how to configure service roles.

#### Lessons

- Installing Service Roles
- Configuring Protocols and Limits
- Troubleshooting Connectivity

#### Lab: Configuring Service Roles

- Exercise 1: Modifying Service Roles
- Exercise 2: Configuring the Multicast and Advertisement Logging Agent
- Exercise 2: Configuring Protocols and Limits

After completing this module, students will be able to:

- Configure multicast logging service roles to enable WMS logging.
- Configure WMS web administration service role to support protocols.
- Configure connection limits from the origin server to the edge server.
- Configure connection limits from the edge server to the client.
- Validate client to server connectivity for an on demand stream.

#### Module 4: Configuring Logging and Plug-Ins

This module explains how to configure logging and plug-ins.

##### **Lessons**

- Configuring Client Logging
- Configuring Event Notification
- Configuring Caching and Proxy
- Configuring Bandwidth Limits

##### **Lab: Configuring WMS Logging**

- Exercise 1: Configuring Logging and Bandwidth Limitations
- Exercise 2: Configuring On Demand Caching

After completing this module, students will be able to:

- Enable WMS client logging and event notification to receive alerts for each publishing point.
- Configure event notification for the WMS Server
- Configure on demand publishing point bandwidth limitations.
- Configure on demand caching rules.
- Identify the benefits of using 3rd party custom plug-ins for WMS.

#### Module 5: Configuring Advanced Streaming Solutions

This module explains how to configure advanced streaming solutions.

##### **Lessons**

- Overview of Playlists
- Creating and Editing Playlists
- Configuring Advertising

##### **Lab: Configuring Advanced Streaming Solutions**

- Exercise 1: Configuring Advertisements
- Exercise 2: Configuring Playlists

After completing this module, students will be able to:

- Configure publishing point properties to add advertisements.
- Create an advertisement playlist for use in a publishing point.
- Add Synchronized Multimedia Integration Language (SMIL) based playlists to a publishing point.
- Edit an existing playlist to add an advertisement.
- Edit an existing playlist to replace an advertisement.

#### Module 6: Configuring WMS Availability Solutions

This module explains how to configure WMS availability solutions.

##### **Lessons**

- Overview of High Availability
- Server to Server Publishing Points
- Configuring Authentication
- Configuring Content Access
- Digital Rights Management

##### **Lab: Configuring WMS Availability Solutions**

- Exercise 1: Configuring WMS Security Settings
- Exercise 2: Designing a Migration Strategy

After completing this module, students will be able to:

- Explain the performance impact when using on demand replication from an origin to an edge server versus from an edge to an edge server.
- Identify the steps for configuring on demand replication between servers.
- Explain why you would use rollover publishing points to improve service levels in the event of a server failure.
- Identify best practices for configuring server to server publishing points for on demand or live streaming.
- Identify troubleshooting considerations for resolving server to server connectivity.
- Configure authentication to the publishing point based on domain.
- Configure content restrictions based on domain.
- Configure content expiration based on content retention policy.