

## Episode Title: Troubleshoot on-premises Active Directory

### Objectives:

At the end of this episode, I will be able to:

1. Use CLI tools to troubleshoot AD DS
2. Explain the AD DS FSMO roles
3. Troubleshoot AD DS

### Key Points:

#### Key Point 1

There are a few CLI tools in AD DS that can be helpful in troubleshooting and identifying errors in Active Directory Domain Services (AD DS). These tools include dcdiag, repadmin, and netdiag.

#### Key Point 2

AD DS uses Flexible Single Master Operations (FSMO) roles to determine which DCs are responsible for critical domain operations.

#### Key Point 3

Troubleshooting AD DS can include topology, replication, Group Policy, trust relationships, and more.

- If additional resources are used during the episode, they can be obtained using the download link on the overview episode (e.g. diagrams, no powerpoints)

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### External Resources:

If external resources were used during this episode, you can reference the following external resources for supplementary tools and information, if none were used, then this section will be blank:

- AD DS Troubleshooting  
: <https://learn.microsoft.com/en-us/windows-server/identity/ad-ds/manage/ad-ds-troubleshooting>