

Working to Verify and Troubleshoot Domain Controller Deployments



Mike Brown

SENIOR CLOUD INSTRUCTOR

@mgbleeds



Summary



Discuss the importance of DNS to Active Directory Domain Services

Resolve DNS SRV record registration issues

Configure a global catalog server

Discuss operation master roles

Manage operation master roles



Active Directory Domain Services and DNS



Why Is DNS Important to Active Directory Domain Service?

DNS resolves names to IP addresses using A and AAAA records

Domain controllers register A and SRV records with DNS

Members of our domain, query DNS to locate domain services

Domain controllers use DNS to locate the IP addresses of their replication partners



What Could Go Wrong?

SRV records not registered

Domain members wouldn't be able to locate domain services

SRV records not updated

Domain members might be using out of date information

Failure of DNS service

Name resolution would fail preventing domain communication



Global Catalog Servers



When Are Global Catalog Servers Used?

Logins

Used during the login process
to obtain a list of universal
groups

Lookups

Used during searches of
Active Directory



What if Global Catalog Servers Fail?



Users using their user principal name to login might be prevented



Universal group membership might not be available at login



Searches and administration tasks performed against Active Directory might fail or provide stale data



Operation Master Roles



Some roles are so specialized that only a single server in the domain or forest performs them. In Active Directory these are known as the operation master roles



Operation Master Roles

Domain naming master

Used during domain registration

Schema master

All edits to the schema are made here

RID Master

Used to make objects SIDs unique

PDC emulator

Password synchronization

Infrastructure master

Lists objects for other domains in our groups



Summary



You have learned about the importance of DNS to Active Directory Domain Services

You have seen how to configure global catalog servers and learned how important they are to our domains

You have learned how to identify and the transfer the domains operation master roles

In our next module

- Domain controller cloning
- Install from media
- Read only domain controllers

