Implementing DNS

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Lab Summary 4

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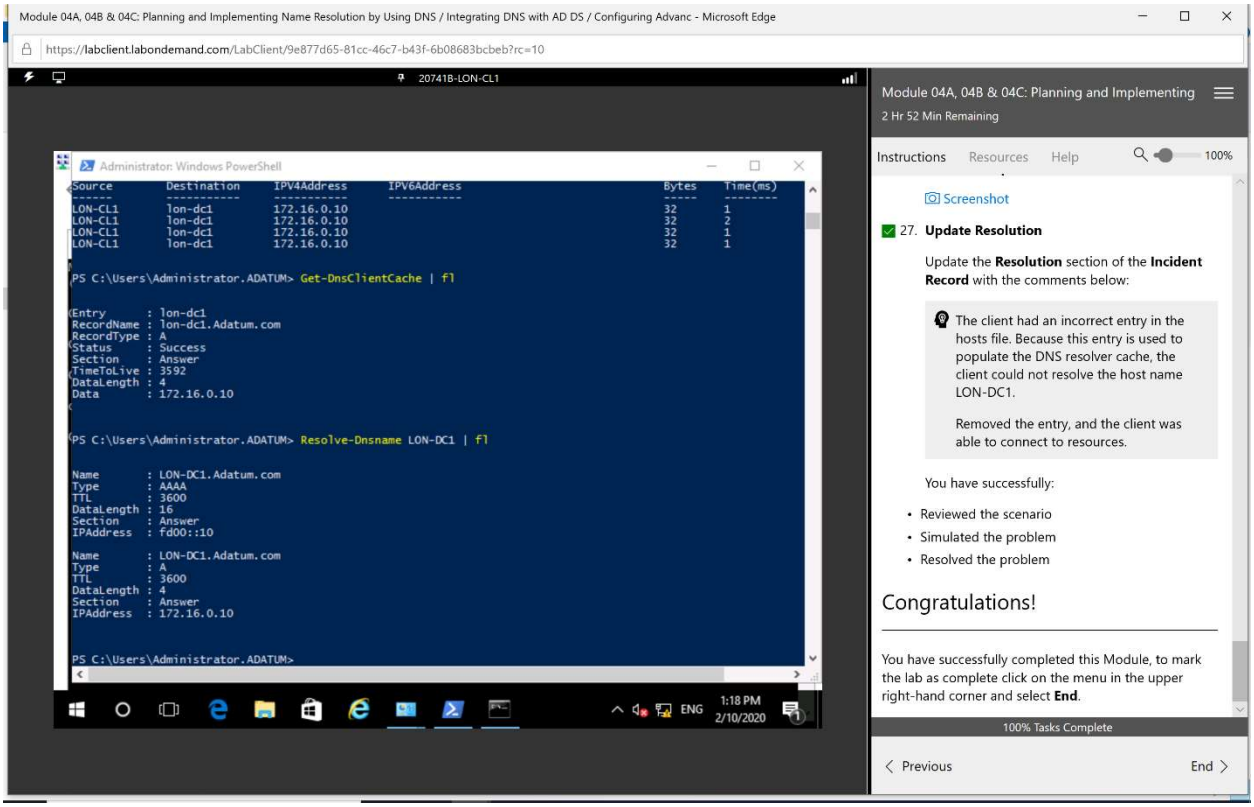
DNS is a decentralized naming system that contains information on public IP addresses and hostnames to resolve and translate the names to IP addresses. The DNS server is in the London head office, and the branch office in Sydney complains about slowness and errors. The administrators should implement DNS infrastructure in Sydney to enable more efficient name resolution for the clients. After implementing it, the DNS should be integrated with AD DS to make additional improvements. Lastly, the admin configures advanced DNS settings such as DNS zone management and DNS policies in Windows Server 2016.

The primary DNS server is in LON-SVR1, and the DNS server in Sydney is SYD-SVR1. During the installation of the Sydney DNS server, the forwarding server IP address is 131.107.0.100, which means it is for ISP's DNS server for configuring forwarding for Internet and external queries. Also, conditional forwarders are configured in the names of Adatum.com and Contoso.com. The conditional forwarders allow only forward queries for the specific domain name. In this case, Adatum.com and Contoso.com are the specific domain names.

Once the DNS server is implemented in SYD-SVR1, the server should be a domain controller to integrate DNS with the AD DS database. If the server has a role as a domain controller with AD DS, it would be able to have directory data storage and make the storage available to network users and administrators. It can provide improvements to the WAN connection between London and Sydney. Also, it can create multi-master replication and redundancy for DNS. If the DNS server is primary, it means the DNS server is the primary source for the zone and stores the master copy of zone data in AD DS. The TreyResearch.net domain is configured as a secondary zone, which means it is a Read-only copy of a DNS

database. Unlike the primary zone, the secondary zone cannot be stored in AD DS. It is useful when replicating data only.

Another scenario is given that an end-user of a laptop device, LON-CL1, will travel to the Sydney office for a few months. The DNS server address is assigned to the LON-DC1 address (172.16.0.10). The DNS server can be found in the Internet Protocol Version 4 Properties. The reason to assign the DNS server address is to have better connections with internal and external websites and servers.


Module 04A, 04B & 04C: Planning and Implementing Name Resolution by Using DNS / Integrating DNS with AD DS / Configuring Advanc - Microsoft Edge
https://labclient.labondemand.com/LabClient/9e877d65-81cc-46c7-b43f-6b08683bcbeb?rc=10
20741B-LON-CL1
Administrator: Windows PowerShell
Source Destination IPV4Address IPV6Address Bytes Time(ms)
LON-CL1 lon-dc1 172.16.0.10 32 1
LON-CL1 lon-dc1 172.16.0.10 32 2
LON-CL1 lon-dc1 172.16.0.10 32 1
LON-CL1 lon-dc1 172.16.0.10 32 1
PS C:\Users\Administrator.ADATUM> Get-DnsClientCache | fl
Entry : lon-dc1
RecordName : lon-dc1.Adatum.com
RecordType : A
Status : Success
Section : Answer
TimeToLive : 3592
DataLength : 4
Data : 172.16.0.10
PS C:\Users\Administrator.ADATUM> Resolve-Dnsname LON-DC1 | fl
Name : LON-DC1.Adatum.com
Type : AAAA
TTL : 3600
DataLength : 16
Section : Answer
IPAddress : fd00::10
Name : LON-DC1.Adatum.com
Type : A
TTL : 3600
DataLength : 4
Section : Answer
IPAddress : 172.16.0.10
PS C:\Users\Administrator.ADATUM>
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Module 04A, 04B & 04C: Planning and Implementing
2 Hr 52 Min Remaining
Instructions Resources Help 100%
Screenshot
27. Update Resolution
Update the Resolution section of the Incident Record with the comments below:
The client had an incorrect entry in the hosts file. Because this entry is used to populate the DNS resolver cache, the client could not resolve the host name LON-DC1.
Removed the entry, and the client was able to connect to resources.
You have successfully:
• Reviewed the scenario
• Simulated the problem
• Resolved the problem
Congratulations!
You have successfully completed this Module, to mark the lab as complete click on the menu in the upper right-hand corner and select End.
100% Tasks Complete
Previous
End