Troubleshooting uDNS
systematic approach - part A

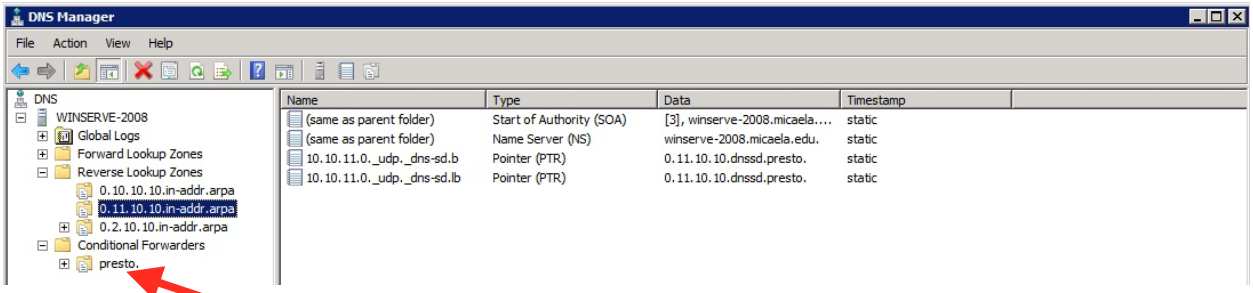
- This document is intended to be used in conjunction with the **Troubleshooting - TEST DNS Configuration** guide.
- Use a **command prompt** window with **elevated privileges** from all servers/computers when running queries.
- There must be NO "RULES" other than default rules. If you have created rules, DELETE all, except for the default.
- Confirm all Presto DNS records have replicated across ALL redundant DNS servers.
- Running nslookup's from any network connected computer should return the exact same result. We are looking to see if different results are returned from different computers/servers. If this happens, it is a network issue, not Presto. The test plan below will attempt to guide you toward isolating where a network problem may exist.

PART 1
CAN"T SEE SERVICES

Test plan Overview:
Clients using the Presto App use only the conditional forwarding record for printer discovery. As such we will break part 1 into two sections. Clients with the Presto App and clients without.

PART 1A:
CAN"T SEE SERVICES - Clients WITH Presto App

Top reasons you are unable to see services:
I - The device is not properly connected to the network.
II - Conditional Fowarder is not pointed at the Presto Primary IP address.
II - Presto print service plugin is not enabled. (Android)
III - App not deployed via MDM or G Suite. See Chrome supplemental for G Suite deployments.
IV - Networking hardware is configured to block certain traffic to mobile devices.
V - DHCP is handing out a different DNS server than expected to the client.
VI- *.collobos.net is not whitelisted / DNS rebinding prevention.



Conditional Forwarder: Point to Presto Primary IP Address

Step 1 - Open DNS Manager

A. Conditional Forwarding
   - Confirm Conditional Forwarding Record is in place and pointing to Presto server IP address.
   - Confirm replication across redundant DNS servers.

Step 2 - Initial test of Presto Server

A. On the server where Presto is installed Run **Queries A & B**.
   Success: You should be able to see printers on your device.

Fail: Delete Presto Conditional Forwarding records. Flush DNS, re-add Conditional Forwarder. Force replication across redundant DNS servers.

Step 3 - Move to testing at DNS Server

A. Re-Run **Queries A & B**.

Success: You should be able to see printers on your device.
Fail: Confirm replication across redundant DNS server/s. As applicable, **Check I, II, III, IV, V, VI**.

Step 4 - Move to testing from a PC Laptop Connected Wirelessly to the VLAN where you wish to see printers.

A. Re-Run **Queries A & B**.

Success: You should be able to see printers on your device.
Fail: Something is filtering/blocking this traffic to the VLAN. As applicable, **Check VI, VII**.

Step 5 - Move to testing from a Mac Laptop Connected Wirelessly to the VLAN.

A. Re-Run **Queries A & B** as **dig commands** from the Mac terminal window. This can provide additional insight as to how the network settings are handling traffic with different device types. iOS & OS X devices are essentially the same. We have see have seen where a PC will return the correct results and an OS X running the same command will fail, due to network settings.

dig server.presto. ns
dig _ipp._tcp.dnssd.presto. ptr

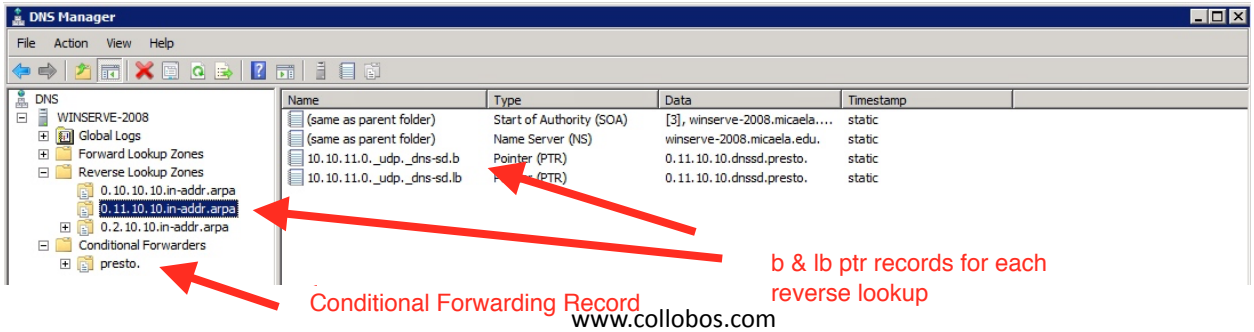
Success: Again, at this point you should be able to see printers on your device.
Fail: Something is filtering/blocking this traffic to the VLAN.

PART 1B:
CAN"T SEE SERVICES - iOS / OS X

Top reasons you are unable to see services:
I - The device is not properly connected to the network.
II - Conditional Fowarder is not pointed at the Presto Primary IP address.
III - PTR Records and/or Reverse Lookup Zone does not exist
IV - Replication has not occurred across redundant DNS servers
V - The client is sending requests to DNS server where records do not exist.
V - Networking hardware is configured to block certain traffic to mobile devices.
VI- *.collobos.net is not whitelisted / DNS rebinding prevention.

Step 1 - Open DNS Manager

B. Conditional Forwarding - Confirm that the Conditional Forwarding Record is in place and pointing to Presto server IP address.
C. Reverse Lookups - Confirm that the Reverse Lookups are in place and have presto "b" & "lb" records.



Step 2 - Initial testing at Presto Server

A. On the server where Presto is installed Run **Queries A & B**.

Success: You should be able to see printers on your device.

Fail: Delete Presto DNS records. Flush DNS and re-attempt auto configuration of DNS from Presto. Re-enter DNS records if auto-config fails.

Step 3 - Move to testing at DNS Server

A. Re-Run **Queries A & B**.

Success: You should be able to see printers on your device.

Fail: Confirm replication across redundant DNS server/s. As applicable, **Check I, II, III, IV, V**.

Step 4 - Move to testing from a PC Laptop Connected Wirelessly to the VLAN where you wish to see printers.

A. Re-Run **Queries A & B**.

Success: You should be able to see printers on your device.

Fail: Something is filtering/blocking this traffic to the VLAN. As applicable, **Check VI, VII**.

Step 5 - Move to testing from a Mac Laptop Connected Wirelessly to the VLAN.

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