Internal Dashboard Troubleshooting Report

🛠️ Issue Summary
- Users were unable to access `internal.example.com`.
- Error received: "Host not found" / NXDOMAIN.
- Suspected root cause: DNS resolution failure or network misconfiguration.

🔍 Troubleshooting Steps

1. Confirmed DNS Resolution Issue
Command used:
nslookup internal.example.com

Result:
- Error: server can't find internal.example.com: NXDOMAIN
- Confirms that DNS cannot resolve the hostname.

2. Checked Current DNS Settings
Command used:
cat /etc/resolv.conf

Result:
- Found wrong or missing DNS servers.

3. Found Correct Server IP Address
Command used:
nmap -sn 192.168.1.0/24
or
arp -a

Result:
- Found internal server at 192.168.1.50.

4. Temporary Fix by Editing /etc/hosts

Command used:

sudo nano /etc/hosts

Added Entry:

192.168.1.50 internal.example.com

Result:

- Local hostname resolution succeeded via /etc/hosts.

5. Verified Service Reachability

✅ Ping Test
Command used:
ping internal.example.com
Result:
- Successful replies received.

✅ HTTP Service Test
Command used:
curl -I http://internal.example.com
Result:
- Received HTTP 200 OK (or other valid HTTP response).

6. (Bonus) Permanent DNS Configuration Fix

Configured systemd-resolved
Command used:
sudo nano /etc/systemd/resolved.conf
Added:
[Resolve]
DNS=8.8.8.8 1.1.1.1

Restarted DNS service:
sudo systemctl restart systemd-resolved
sudo ln -sf /run/systemd/resolve/resolv.conf /etc/resolv.conf

Confirmed with:
cat /etc/resolv.conf
Result:
- DNS servers now correctly set.

🧠 Root Cause Identified

Cause	Confirmed
Incorrect or missing DNS configuration	✅ Confirmed via nslookup and /etc/resolv.conf
No local /etc/hosts entry for internal.example.com	✅ Confirmed and temporarily fixed
Correct server IP unknown initially	✅ Found using nmap/arp scan

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✅ Solution Applied

- Added correct manual entry to /etc/hosts.
- Updated system DNS configuration to reliable public DNS servers.
- Verified connectivity by ping and curl tests.

📈 Outcome

- internal.example.com now resolves successfully.
- Web dashboard is reachable and operational.
- Network and DNS services restored for users.