

Step-by-step:

1. Discover the IP:

Use VPN/provided info (or nmap).

2. Discover the hostname (if not given):

- Check in the CTF question description
- Or use:

bash

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```
gobuster vhost -u http://<IP> -w /usr/share/wordlists/SecLists/Discovery/DNS/subdomains-top1million-110000.txt
```

3. Map IP to hostname locally:

Edit /etc/hosts:

bash

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```
sudo nano /etc/hosts
```

Add line like:

lua

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```
10.10.10.42 vuln-web.local
```

4. Use the hostname in browser or curl:

bash

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```
curl http://vuln-web.local/../../../../etc/passwd
```

Tip to Detect Virtual Hostnames:

- If accessing http://<ip> shows "default Apache page" or "Not Found"
- If curl to IP gives 404, but ports like 80/443 are open
- If nmap or nikto shows ServerName in response headers

That's usually a sign that it expects **Host header / virtual host.**

Add to Notes:

bash

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```
# Hostname not working in browser? Add to /etc/hosts  
echo "10.10.10.42 vuln-web.local" | sudo tee -a /etc/hosts
```

```
# Access site using hostname  
curl http://vuln-web.local
```

```
# Virtual host fuzzing (if hostname unknown)  
gobuster vhost -u http://<IP> -w /usr/share/seclists/Discovery/DNS/namelist.txt
```