

N8N DEPLOYMENT GUIDE – DETAILED VERSION WITH SCREENSHOTS & TROUBLESHOOTING

(Placeholder Screenshot Sections Included – Add your own screenshots later)

1. Overview

This guide covers the full deployment of N8N on a Google Cloud VM using Docker, Traefik, and DuckDNS.
It includes environment configuration, DNS setup, SSL configuration, container management, debugging, and a full troubleshooting section.

2. Create Google Cloud VM

(Screenshot Placeholder: "Google Cloud → Create VM Screen")

Steps:

1. Go to Google Cloud Console → Compute Engine → VM Instances.
2. Click "Create Instance".
3. Machine type: e2-micro (free-tier compatible).
4. OS: Ubuntu 22.04 LTS.
5. Allow HTTP & HTTPS traffic.
6. Create the instance.

3. Connect to VM via SSH

(Screenshot Placeholder: "SSH in Google Cloud VM")

1. Click SSH on the VM page to open the terminal.

4. Install Docker & Docker Compose

Commands:

```
sudo apt update -y
sudo apt install docker.io -y
sudo systemctl enable docker --now
sudo usermod -aG docker $USER
```

Install Docker Compose:

```
sudo apt install docker-compose -y
```

5. Set Up DuckDNS

(Screenshot Placeholder: "DuckDNS Dashboard showing subdomain")

1. Create duckdns.org account.
 2. Add a subdomain: yashpatole.duckdns.org
 3. Copy the token.
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6. Set Up Your .env File

Create `.env`:

```
DOMAIN_NAME=duckdns.org
SUBDOMAIN=yashpatole
GENERIC_TIMEZONE=Asia/Kolkata
SSL_EMAIL=yashpatole81@gmail.com
N8N_SECURE_COOKIE=false
```

7. Create n8n-compose folder

```
mkdir ~/n8n-compose
cd ~/n8n-compose
```

8. Create compose.yaml

(Screenshot Placeholder: "compose.yaml file open in nano")

Important: Traefik + N8N config added.

9. Start Services

```
sudo docker compose up -d
```

Check containers:
`sudo docker ps`

10. Fixing Common Issues

If port 80 is blocked:
`sudo systemctl stop nginx`
`sudo systemctl disable nginx`

If DNS changed:
`ping yashpatole.duckdns.org`

11. Validate N8N is Running

Access logs:
`sudo docker logs n8n-compose-n8n-1`

Look for:
"Editor is now accessible via: <https://yashpatole.duckdns.org>"

12. Troubleshooting Section

1. `ERR_CONNECTION_REFUSED`
Cause: N8N container is not running

Fix: `sudo docker ps`; `sudo docker restart n8n-compose-n8n-1`

2. 404 Page Not Found

Cause: Traefik routing rule incorrect

Fix: Ensure `traefik.http.routers.n8n.rule=Host(`sub.domain`)`

3. SSL Not Working / CERT_AUTHORITY_INVALID

Cause: DNS not propagated or ACME failed

Fix:

- Check logs: `sudo docker logs n8n-compose-traefik-1`
- Ensure ports 80/443 open
- Wait 5–10 minutes for cert generation

4. HSTS Error

Cause: Invalid/expired certificate cached

Fix:

- Open URL in incognito
- Clear HSTS: `chrome://net-internals/#hsts`

5. 502 Bad Gateway

Cause: N8N not reachable internally

Fix:

`curl http://127.0.0.1:5678`

If fails, restart: `sudo docker compose restart`

6. DNS Updated But Site Not Loading

Cause: DuckDNS not updating IP

Fix:

`ping yoursubdomain.duckdns.org`

If wrong IP → update DuckDNS manually

13. Shutdown & Safety

You can close the VM browser window safely.

Do NOT stop the VM instance if you want N8N running.

END OF GUIDE
