

New Project Live Deployment Guide

Ubuntu VPS • Git • Node.js/Express • Next.js • PM2 • Nginx • SSL

Example: vEdtech / TutorOnWay | Frontend 3007 | Backend 5007

1. Connect to VPS

```
ssh root@46.202.162.26
hostname
pwd
```

2. Go to /var/www

```
cd /var/www
ls -la
```

3. Clone project

```
git clone YOUR_GITHUB_REPOSITORY_URL vEdtech
cd /var/www/vEdtech
ls
```

4. Install backend

```
cd /var/www/vEdtech/backend
npm install
cat package.json
```

5. Backend environment

```
nano /var/www/vEdtech/backend/.env
NODE_ENV=production
PORT=5007
MONGODB_URI=mongodb://USERNAME:PASSWORD@localhost:27017/vedtech?authSource=admin
JWT_ACCESS_SECRET=YOUR_ACCESS_SECRET
JWT_REFRESH_SECRET=YOUR_REFRESH_SECRET
FRONTEND_URL=https://tutoronway.vcentrixservices.com
```

6. Generate JWT secrets

```
openssl rand -hex 32
openssl rand -hex 32
```

7. Check backend requirements

```
cd /var/www/vEdtech/backend
grep -n -A20 "const required" src/config/env.js
grep -R "process.env" src --exclude-dir=node_modules
```

8. Confirm API prefix

```
grep -R "app.use" src
```

9. Test backend

```
cd /var/www/vEdtech/backend
npm start
# From another SSH terminal:
curl http://localhost:5007
# If successful: Ctrl + C
```

10. Install frontend

```
cd /var/www/vEdtech/frontend
npm install
cat package.json
```

11. Find frontend API variables

```
grep -R "NEXT_PUBLIC\|API_URL\|BASE_URL" . --exclude-dir=node_modules --exclude-dir=.next --exclude-dir=dist
```

12. Frontend production env

```
nano /var/www/vEdtech/frontend/.env.production
NEXT_PUBLIC_API_URL=https://apitutor.vcentrixservices.com/api/v1
NEXT_PUBLIC_SITE_URL=https://tutoronway.vcentrixservices.com
```

13. Build frontend

```
cd /var/www/vEdtech/frontend
npm run build
```

14. Test frontend locally

```
npm start -- -p 3007
# From another SSH terminal:
curl -I http://localhost:3007
# If successful: Ctrl + C
```

15. Start backend with PM2

```
cd /var/www/vEdtech/backend
pm2 start npm --name tutoronway-backend -- start
```

16. Start frontend with PM2

```
cd /var/www/vEdtech/frontend
pm2 start npm --name tutoronway-frontend -- start -- -p 3007
```

17. Save PM2

```
pm2 status
pm2 save
```

18. Verify ports

```
sudo lsof -i :5007
sudo lsof -i :3007
```

19. DNS records

```
A tutoronway 46.202.162.26
A apitutor 46.202.162.26
```

20. Create Nginx config

```
sudo nano /etc/nginx/sites-available/tutoronway.vcentrixservices.com
server {
    listen 80;
    server_name tutoronway.vcentrixservices.com;
    location / {
        proxy_pass http://localhost:3007;
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection "upgrade";
    }
}
```

```

        proxy_set_header Host $host;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header X-Forwarded-Proto $scheme;
    }
}

server {
    listen 80;
    server_name apitutor.vcentrixservices.com;
    location / {
        proxy_pass http://localhost:5007;
        proxy_http_version 1.1;
        proxy_set_header Host $host;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header X-Forwarded-Proto $scheme;
    }
}

```

21. Enable Nginx

```

sudo ln -s /etc/nginx/sites-available/tutoronway.vcentrixservices.com /etc/nginx/sites-enabled/tutoronway.vcentrixservices.com
sudo nginx -t
sudo systemctl reload nginx

```

22. SSL

```

sudo certbot --nginx -d tutoronway.vcentrixservices.com -d apitutor.vcentrixservices.com

```

23. Final URLs

```

Frontend: https://tutoronway.vcentrixservices.com
Backend: https://apitutor.vcentrixservices.com
API: https://apitutor.vcentrixservices.com/api/v1

```

24. Final verification

```

curl -I https://tutoronway.vcentrixservices.com
curl -I https://apitutor.vcentrixservices.com
pm2 status
pm2 logs tutoronway-backend --lines 50
pm2 logs tutoronway-frontend --lines 50
sudo nginx -t

```

25. Future updates

```

cd /var/www/vEdtech/backend
git pull
npm install
pm2 restart tutoronway-backend --update-env
cd /var/www/vEdtech/frontend
git pull
npm install
npm run build
pm2 restart tutoronway-frontend
pm2 save

```

Port Allocation Reference

Project	Frontend	Backend
Deltron	3000	5000
VCentrix	3001	5001
Whiteboard	3002	5002
Ebook	3003	5003
VCentrix360	3004	5004
Nodiant	Removed	—
SylanTech	3006	5006
TutorOnWay / vEdtech	3007	5007

Reusable flow

Git clone → npm install → Backend .env → Frontend .env → Test backend → Build frontend → Test frontend → PM2 → DNS

Important: never leave placeholder credentials in production. Test locally before PM2/Nginx. After changing NEXT_PUBLIC_* variables, rebuild Next.js. After changing backend env values, restart PM2 with --update-env.