

Vessel Management System (VMS) Deployment Checklist

Environment: Local (Laragon) -> Production (DigitalOcean)

Purpose: Safely deploy changes from development to live server

BEFORE DEPLOYING TO PRODUCTION

1. Test All Changes Locally (Laragon)

- Ensure all updated/new PHP, JS, CSS files function as expected
- Validate form functionality and logic
- Confirm SQL queries work without errors
- Ensure no broken tabs on the dashboard
- Test task and ICR generation flows

2. Optional: Commit Changes to Git

`git add .`

`git commit -m "[Describe update or feature]"`

DEPLOY TO DIGITALOCEAN

3. Backup Before Making Changes

- SSH into server:

`ssh root@your_server_ip`

- Backup MySQL:

`mysqldump -u [user] -p vessel_management_system > backup_$(date +%F).sql`

- Optional: Backup site code:

```
cp -r /var/www/html /var/www/html_backup_$(date +%F)
```

4. Upload Files to Server

- Option A: Use FileZilla or SFTP client

- Option B: Use SCP:

```
scp -r /path/to/local/files root@your_server_ip:/var/www/html/
```

- Option C: Pull from Git if applicable:

```
git pull origin main
```

5. Apply SQL Changes (If Needed)

- SSH into MySQL:

```
mysql -u [user] -p
```

```
USE vessel_management_system;
```

```
-- Run ALTER TABLE / CREATE / INSERT as needed
```

6. Clear Cache (if applicable)

- Refresh browser cache or invalidate frontend assets

VERIFY LIVE SITE

- Load live site in browser

- Log in as admin and test new functionality

- Confirm no errors on updated tabs

- Test failed ICR run to check for auto task creation

DOCUMENT & ARCHIVE

- Record what was deployed (files + SQL changes)

- Save a copy of updated files and SQL script

- Optional: Store SQL in a versioned /deploy/sql/ folder

Tools to Remember:

- File uploads: FileZilla / scp
- MySQL dumps: mysqldump
- Code editing (remote): nano, vim, or scp
- Rollback: use backup folder or .sql file

Last Updated: May 2025