Morphus Installer Documentation

# Overview

The Morphus Installer is a Linux-based shell script (`MorphusInstaller.sh`) that simplifies deployment and management of a full-stack File Transfer application using Docker and Docker Compose. It offers guided setup and CLI-based lifecycle control.

# Tech Stack

- Frontend: Angular  
- Backend: API Gateway (Node/Express-based)  
- Workflow Orchestration: Apache Airflow  
- Databases: MySQL (backend) & PostgreSQL (Airflow)  
- In-Memory Store: Redis  
- Containerization: Docker + Docker Compose

# Prerequisites

Operating System: Linux  
  
Required Tools:  
- Docker  
 Install: sudo apt install docker.io  
 Confirm: docker --version  
- Docker Compose V2  
 Install: sudo apt install docker-compose-plugin  
 Confirm: docker compose version  
- lsof: sudo apt install lsof  
- jq: sudo apt install jq  
- mysql-client: sudo apt install mysql-client  
- GitHub Access: <your-repo-access>  
- Admin privileges during script execution

# Installation

1. Clone the repository and run:

git clone https://github.com/<your-org>/<your-repo>.git  
 cd <your-repo>  
 chmod +x FileTransferInstaller.sh  
 ./FileTransferInstaller.sh

2. Start the Service:  
 morphus start

# Directory Structure

/var/filetransfer/  
├── logs/  
│ ├── ui/  
│ ├── backend/  
│ └── airflow/  
├── docker-compose.yaml  
├── .env

# Nginx Reverse Proxy

- Angular UI – http://localhost:4200  
- Backend API – http://localhost:8083  
- Airflow Web UI – http://localhost:8080

# CLI Utility

Global command available: morphus  
Subcommands:  
- start: Launch containers  
- stop: Stop containers  
- update: Upgrade to another version  
- uninstall: Remove all containers and files

# Update

To update to a newer version:  
morphus update

# Troubleshooting

- Docker Not Installed: https://docs.docker.com/get-docker/  
- Docker Not Running: sudo systemctl start docker  
- Port Conflicts: Script prompts for new port  
- DB Connection Fails: Ensure MySQL details are correct  
- Permissions: Script prompts for sudo where needed  
- Compose YAML Errors: Validation blocks deployment

# Uninstall

Run: morphus uninstall

# Log File Locations

- UI Logs: /var/filetransfer/logs/ui/  
- Backend Logs: /var/filetransfer/logs/backend/  
- Airflow Logs: /var/filetransfer/logs/airflow/

# Contact

For issues or questions, contact: <maintainer email or GitHub>