Revolution Trading Pros - Deployment Guide
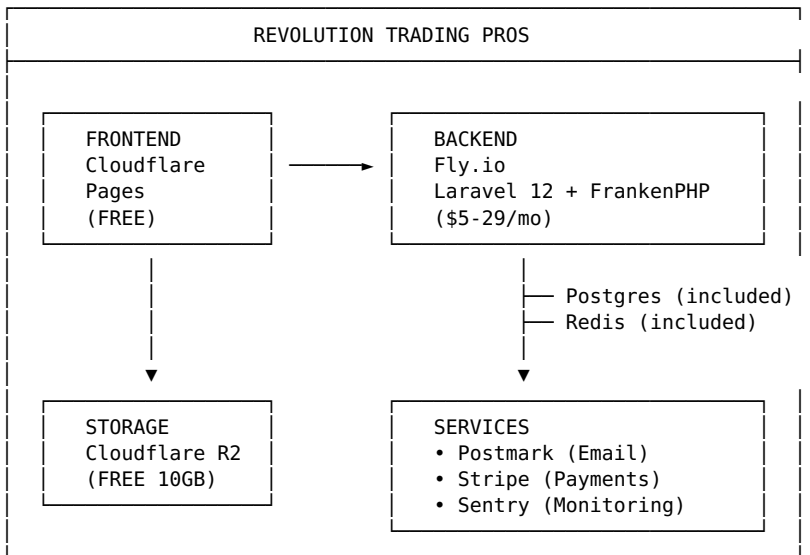
December 2025 Stack Configuration

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Architecture Overview

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│                  REVOLUTION TRADING PROS                     │
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│                                                             │
│   ┌──────────────────┐        ┌──────────────────────┐      │
│   │  FRONTEND        │        │  BACKEND             │      │
│   │  Cloudflare      │───────▶│  Fly.io              │      │
│   │  Pages           │        │  Laravel 12 + FrankenPHP │  │
│   │  (FREE)          │        │  ($5-29/mo)          │      │
│   └──────────────────┘        └──────────────────────┘      │
│            │                            │                    │
│            │                            ├── Postgres (included) │
│            │                            ├── Redis (included)  │
│            │                            │                    │
│            ▼                            ▼                    │
│   ┌──────────────────┐        ┌──────────────────────┐      │
│   │  STORAGE         │        │  SERVICES            │      │
│   │  Cloudflare R2   │        │  • Postmark (Email)  │      │
│   │  (FREE 10GB)     │        │  • Stripe (Payments) │      │
│   │                  │        │  • Sentry (Monitoring) │    │
│   └──────────────────┘        └──────────────────────┘      │
│                                                             │
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```

Monthly Cost Estimate

Service	Free Tier	Starter	Growth
Fly.io	-	$5/mo	$29/mo
Postmark	100 emails	$15/mo (10K)	$50/mo (50K)
Stripe	-	2.9% + $0.30/tx	2.9% + $0.30/tx
Sentry	5K errors	$26/mo	$80/mo
Cloudflare Pages	FREE	FREE	FREE
Cloudflare R2	FREE (10GB)	$0.015/GB	$0.015/GB
TOTAL	**~$0**	**~$46/mo**	**~$159/mo**

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1. Fly.io - Backend Hosting

What It Does

Hosts your Laravel backend with FrankenPHP for sub-millisecond response times. Includes managed Postgres database and Redis cache.

Sign Up

URL: https://fly.io/app/sign-up

Pricing Tiers

Plan	Price	Resources	Best For
Hobby	$5/mo	1 shared CPU, 256MB RAM, 1GB storage	Development/Testing
Launch	$29/mo	1 dedicated CPU, 2GB RAM, 10GB storage	Production
Scale	$79/mo	2 dedicated CPUs, 4GB RAM, 20GB storage	High Traffic

Included with All Plans

- **Postgres Database** - Managed, automatic backups
- **Redis Cache** - For sessions, cache, queues
- **SSL Certificates** - Automatic HTTPS
- **Global Deployment** - 30+ regions
- **Volumes** - Persistent storage

Setup Instructions

Step 1: Install Fly CLI

```
# macOS
brew install flyctl

# Linux
curl -L https://fly.io/install.sh | sh

# Windows
powershell -Command "iwr https://fly.io/install.ps1 -useb | iex"
```

Step 2: Login

```
fly auth login
```

Step 3: Run Setup Script

```
cd backend
chmod +x scripts/fly-deploy.sh
./scripts/fly-deploy.sh setup
```

This creates: - Fly.io app - Postgres database (1GB free tier) - Redis instance (256MB) - Persistent volume for storage

Step 4: Get Database URL

After setup, note these values:

```
fly postgres connect -a revolution-trading-pros-db
# Connection string will be shown
```

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2. Postmark - Transactional Email

What It Does

Sends transactional emails (password resets, notifications, receipts) with 99%+ deliverability.

Sign Up

URL: https://postmarkapp.com/sign-up

Pricing Tiers

Plan	Price	Emails/Month	Features
Free	$0	100	Testing only, Postmark branding
Starter	$15/mo	10,000	No branding, dedicated IP optional
Standard	$50/mo	50,000	Priority support
Plus	$115/mo	125,000	Dedicated IP included
Enterprise	Custom	Unlimited	SLA, dedicated support

Setup Instructions

Step 1: Create Account

1. Go to https://postmarkapp.com/sign-up
2. Verify your email address
3. Complete account setup

Step 2: Create Server

1. Click "Create Server"
2. Name it: `Revolution Trading Pros`
3. Select "Live" for production (or "Test" for development)

Step 3: Get API Token

1. Go to Server → API Tokens
2. Click "Create Token"
3. Copy the token (starts with `xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx`)

Step 4: Verify Sender Domain

1. Go to Sender Signatures → Add Domain
2. Add your domain: `revolutiontradingpros.com`
3. Add DNS records as shown:
   - DKIM record (TXT)
   - Return-Path record (CNAME)
4. Click "Verify"

Step 5: Set Environment Variable

```
fly secrets set POSTMARK_TOKEN="your-token-here"
```

Configuration (Already Done)

File: `backend/config/mail.php`

```
'default' => env('MAIL_MAILER', 'postmark'),
```

File: `backend/config/services.php`

```
'postmark' => [
    'token' => env('POSTMARK_TOKEN'),
],
```

---

3. Stripe - Payment Processing

What It Does

Processes credit card payments, subscriptions, and invoicing for your trading platform.

Sign Up

URL: https://dashboard.stripe.com/register

Pricing

Type	Fee	Notes
Card Payments	2.9% + $0.30	Per successful transaction
International Cards	+1.5%	Additional fee
Currency Conversion	+1%	If converting currencies
Disputes	$15	Per chargeback (refunded if won)
Payouts	FREE	To your bank account

No monthly fees. No setup fees. No minimums.

Setup Instructions

Step 1: Create Account

1. Go to https://dashboard.stripe.com/register
2. Enter email and create password
3. Verify email address

Step 2: Complete Business Profile

1. Go to Settings → Business Settings
2. Add:
   - Business name
   - Business address
   - Tax ID (EIN/SSN)
   - Bank account for payouts

Step 3: Get API Keys

1. Go to Developers → API Keys
2. Copy these keys:

Key Type	Format	Usage
Publishable Key	`pk_live_xxx`	Frontend (public)
Secret Key	`sk_live_xxx`	Backend (secret)

For Testing: Use `pk_test_xxx` and `sk_test_xxx` keys first.

Step 4: Create Webhook

1. Go to Developers → Webhooks
2. Click "Add endpoint"
3. URL: `https://revolution-trading-pros.fly.dev/api/webhooks/stripe`
4. Select events:
   - `payment_intent.succeeded`
   - `payment_intent.payment_failed`
   - `customer.subscription.created`
   - `customer.subscription.updated`
   - `customer.subscription.deleted`
   - `invoice.paid`
   - `invoice.payment_failed`
5. Click "Add endpoint"
6. Copy the Webhook Signing Secret (`whsec_xxx`)

Step 5: Set Environment Variables

```
fly secrets set \
  STRIPE_KEY="pk_live_xxxxxxxxxxxx" \
  STRIPE_SECRET="sk_live_xxxxxxxxxxxx" \
  STRIPE_WEBHOOK_SECRET="whsec_xxxxxxxxxxxx"
```

Configuration (Already Done)

File: `backend/config/services.php`

```
'stripe' => [
    'key' => env('STRIPE_KEY'),
    'secret' => env('STRIPE_SECRET'),
    'webhook_secret' => env('STRIPE_WEBHOOK_SECRET'),
],
```

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4. Sentry - Error Tracking

What It Does

Captures errors, exceptions, and performance issues in real-time. Shows stack traces, user context, and trends.

Sign Up

URL: https://sentry.io/signup/

Pricing Tiers

Plan	Price	Errors/Month	Features
Developer	FREE	5,000	1 user, 30-day retention
Team	$26/mo	50,000	Unlimited users, 90-day retention
Business	$80/mo	100,000	SSO, custom retention
Enterprise	Custom	Unlimited	SLA, dedicated support

Setup Instructions

Step 1: Create Account

1. Go to https://sentry.io/signup/
2. Sign up with email or GitHub
3. Verify email

Step 2: Create Project

1. Click "Create Project"
2. Select platform: **Laravel**
3. Name: `revolution-trading-pros`
4. Click "Create Project"

Step 3: Get DSN

1. Go to Settings → Projects → revolution-trading-pros
2. Click "Client Keys (DSN)"
3. Copy the DSN (format: `https://xxx@xxx.ingest.sentry.io/xxx`)

Step 4: Set Environment Variable

```
fly secrets set SENTRY_LARAVEL_DSN="https://xxx@xxx.ingest.sentry.io/xxx"
```

Step 5: Configure Alerts (Optional)

1. Go to Alerts → Create Alert
```

2. Set up alerts for:
   - New errors
   - Error spike (>10 in 1 hour)
   - Performance degradation

## Configuration (Already Done)

File: `backend/config/sentry.php`

```php
return [
    'dsn' => env('SENTRY_LARAVEL_DSN'),
    'traces_sample_rate' => 0.1,
    'profiles_sample_rate' => 0.1,
];
```

5. Already Configured Services

These services are already set up and working:

Cloudflare Pages (Frontend)

- **URL:** https://revolution-trading-pros.pages.dev
- **Status:** Deployed and working
- **Cost:** FREE

Cloudflare R2 (Storage)

- **URL:** https://pub-a6d59af18a9645e6a7b38dca4d53f2af.r2.dev
- **Status:** Created and working
- **Cost:** FREE (first 10GB)

6. Deployment Steps

Complete Deployment Checklist

```
[ ] 1. Sign up for Fly.io
[ ] 2. Sign up for Postmark
[ ] 3. Sign up for Stripe
[ ] 4. Sign up for Sentry
[ ] 5. Install Fly CLI
[ ] 6. Run setup script
[ ] 7. Set all secrets
[ ] 8. Deploy
[ ] 9. Verify health endpoint
[ ] 10. Test email sending
[ ] 11. Test payment processing
[ ] 12. Verify error tracking
```

Step-by-Step Commands

```bash
# 1. Install Fly CLI
curl -L https://fly.io/install.sh | sh

# 2. Login to Fly.io
fly auth login

# 3. Navigate to backend
cd backend

# 4. Run setup (creates Postgres, Redis, volumes)
./scripts/fly-deploy.sh setup

# 5. Set all secrets at once
fly secrets set \
  APP_KEY="base64:$(openssl rand -base64 32)" \
```

```
POSTMARK_TOKEN="your-postmark-token" \
STRIPE_KEY="pk_live_xxx" \
STRIPE_SECRET="sk_live_xxx" \
STRIPE_WEBHOOK_SECRET="whsec_xxx" \
SENTRY_LARAVEL_DSN="https://xxx@xxx.ingest.sentry.io/xxx" \
CLOUDFLARE_R2_ACCESS_KEY_ID="your-r2-key" \
CLOUDFLARE_R2_SECRET_ACCESS_KEY="your-r2-secret" \
CLOUDFLARE_R2_ENDPOINT="https://YOUR_ACCOUNT_ID.r2.cloudflarestorage.com" \
CLOUDFLARE_R2_BUCKET="revolution-trading-media"

# 6. Deploy
./scripts/fly-deploy.sh deploy

# 7. Verify deployment
curl https://revolution-trading-pros.fly.dev/health
```

7. Environment Variables Reference

Required Variables

Variable	Service	How to Get
APP_KEY	Laravel	`openssl rand -base64 32`
POSTMARK_TOKEN	Postmark	Server → API Tokens
STRIPE_KEY	Stripe	Developers → API Keys
STRIPE_SECRET	Stripe	Developers → API Keys
STRIPE_WEBHOOK_SECRET	Stripe	Developers → Webhooks
SENTRY_LARAVEL_DSN	Sentry	Settings → Client Keys

R2 Storage Variables (Already Have)

Variable	Value
CLOUDFLARE_R2_ACCESS_KEY_ID	From R2 dashboard
CLOUDFLARE_R2_SECRET_ACCESS_KEY	From R2 dashboard
CLOUDFLARE_R2_BUCKET	`revolution-trading-media`
CLOUDFLARE_R2_URL	`https://pub-a6d59af18a9645e6a7b38dca4d53f2af.r2.dev`

Auto-Set by Fly.io

Variable	Description
DATABASE_URL	Postgres connection string
REDIS_URL	Redis connection string

Support Links

Service	Documentation	Support
Fly.io	https://fly.io/docs	https://community.fly.io
Postmark	https://postmarkapp.com/developer	support@postmarkapp.com
Stripe	https://stripe.com/docs	https://support.stripe.com
Sentry	https://docs.sentry.io	https://sentry.io/support

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