

Glotrade Platform - Monthly Hosting Cost Breakdown

Prepared for Client Review
Production-Ready Infrastructure Estimates

Executive Summary

This document provides detailed monthly hosting costs for the Glotrade International Platform across two growth phases. All estimates are based on current market rates and include production-grade services with proper redundancy, backups, and monitoring.

Quick Overview

User Range	Monthly Cost	Cost Per User	Status
500-1,000 users	\$245-285/month	\$0.29-0.49	Launch Phase
1,000-5,000 users	\$340-420/month	\$0.07-0.42	Growth Phase

Phase 1: Launch (500-1,000 Users)

- Total Monthly Cost: \$245-285/month**

Detailed Breakdown

1. Backend Server (Render.com) - \$85/month

- **Plan:** Pro (4GB RAM, 2 CPU cores)
- **What it includes:**
 - Hosts your 325+ API endpoints
 - Runs GDIP automated cron jobs (daily cycles)
 - Handles wallet transactions and payments
 - 24/7 uptime (no sleeping)
 - Automatic SSL certificates
 - Custom domain support
- **Why this tier:**
 - Handles 500-1,000 concurrent users comfortably
 - Sufficient memory for your 31 database models
 - Runs background jobs without performance issues

2. Database (MongoDB Atlas) - \$57/month

- **Plan:** M10 Shared Cluster
- **Specifications:**
 - 10GB storage (expandable)
 - 2GB RAM
 - Dedicated cluster resources
- **What it includes:**
 - Automated daily backups (retain 2 days)
 - Point-in-time recovery
 - 99.95% uptime SLA
 - Monitoring and alerting
 - Supports all 31 data models

- **Why this tier:**

- Production-grade reliability
- Automated backups protect your data
- Can handle 1,000+ users easily
- Professional support included

3. **Frontend Hosting (Vercel) - \$20/month**

- **Plan:** Pro

- **What it includes:**

- Hosts all 68 frontend pages
- Global CDN (Content Delivery Network)
- 1TB bandwidth/month
- Automatic HTTPS
- Analytics dashboard
- Preview deployments
- Password protection

- **Why this tier:**

- Free tier lacks production features
- Pro tier required for custom domains
- Better performance globally

4. **Redis Cache (Upstash) - \$15-20/month**

- **Plan:** Pay-as-you-go

- **What it includes:**

- Session management
- Rate limiting data
- Temporary data caching
- 99.99% uptime

- **Usage estimate:** ~1-2 million commands/month

- **Why needed:**

- Speeds up frequent database queries
- Manages user sessions efficiently
- Enables rate limiting (300 requests/minute)

5. **File Storage (Cloudflare R2) - \$10-15/month**

- **What's stored:**

- Product images
- User avatars
- Business documents
- Insurance certificates
- KYC documents

- **Pricing:**

- First 10GB free
- \$0.015/GB thereafter
- \$0.36 per million reads

- **Estimated usage:** 15-25GB with 500-1,000 users

- **Why Cloudflare R2:**

- No egress fees (bandwidth is free)
- Fast global delivery
- Cost-effective vs AWS S3

6. **Email Service (SendGrid) - \$15/month**

- **Plan:** Essentials (40,000 emails/month)

- **What it handles:**

- Order confirmations
- Password resets
- GDIP investment notifications
- Commission alerts
- Marketing emails

- **Average usage:** ~20-30 emails per user/month = 15,000-30,000 emails
- **Why NOT Gmail:**
 - Gmail has 500/day limit (15,000/month max)
 - Poor deliverability for bulk emails
 - Account suspension risk
 - No analytics or tracking

7. Domain & DNS - \$12/year (~\$1/month)

- Domain registration (e.g., [glotrade.com](#))
- Cloudflare DNS (free tier)
- SSL certificates (free via Render/Vercel)

8. Monitoring & Error Tracking - \$0-30/month

- **Sentry (Error Tracking):** Free tier (5,000 errors/month)
- **Render Metrics:** Included free
- **Uptime monitoring:** Free (UptimeRobot)
- **Optional:** Datadog/New Relic (\$30/month) for advanced monitoring

9. Buffer for Overages - \$30-40/month

- Traffic spikes during promotions
- Unexpected email volume
- Additional storage needs
- Payment webhook retries

Phase 1 Cost Summary Table

Service	Provider	Plan	Monthly Cost
Backend Server	Render	Pro (4GB)	\$85
Database	MongoDB Atlas	M10	\$57
Frontend	Vercel	Pro	\$20
Redis Cache	Upstash	Pay-as-you-go	\$15-20
File Storage	Cloudflare R2	Usage-based	\$10-15
Email Service	SendGrid	Essentials	\$15
Domain & DNS	Various	Annual	\$1
Monitoring	Sentry	Free tier	\$0-30
Buffer	-	-	\$30-40
TOTAL			\$245-285

What This Supports

- ◻ 500-1,000 active users
- ◻ All 325+ API endpoints
- ◻ All 68 frontend pages
- ◻ GDIP automated cycles
- ◻ Wallet transactions
- ◻ Payment processing
- ◻ Real-time notifications
- ◻ Email delivery
- ◻ Daily backups
- ◻ 99.9%+ uptime

Phase 2: Growth (1,000 - 5,000 Users)