

# Phase 2 Deployment Guide

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**Status:** Ready for production deployment 







**Version:** v2.0.0-phase2

**Date:** November 17, 2025

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## Pre-Deployment Checklist

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-  PostgreSQL integration complete
  -  All analytics endpoints working
  -  UI updated with session history & trust indicators
  -  All tests passing (9/9)
  -  Documentation updated
  -  Git commits tagged (v2.0.0-phase2)
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## Deployment Instructions

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### Option 1: Deploy via Platform UI (Recommended)

#### Backend Deployment

##### Using the Platform Checkpoint System:

1. **Save Checkpoint** (if not already done):
  - The assistant will create a checkpoint using `build_and_save_nodejs_service_checkpoint`
  - Checkpoint name: "Phase 2 PostgreSQL Analytics Complete"
2. **Deploy via UI:**
  - Go to your platform dashboard
  - Navigate to the service checkpoints
  - Select the "Phase 2 PostgreSQL Analytics Complete" checkpoint
  - Click "Deploy to Production"
  - The platform will automatically:
    - Build the service
    - Set up PostgreSQL database
    - Configure environment variables
    - Deploy to a public URL

##### Environment Variables Needed:

```
OPENAI_API_KEY=sk-your-key-here
DATABASE_URL=postgresql://... (auto-configured by platform)
PORT=8000 (optional, defaults to 8000)
```

## UI Deployment

### Using Vercel (Current Setup):

1. Go to <https://vercel.com/dashboard>
2. Import the `vcitt_agi_ui` repository
3. Configure build settings:
  - Framework: Vite
  - Build Command: `yarn build`
  - Output Directory: `dist`
4. Set environment variable:  
`VITE_API_URL=https://your-backend-url.com`
5. Deploy

### OR Deploy via CLI:

```
cd /home/ubuntu/vcitt_agi_ui
vercel --prod
```

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## Option 2: Manual Deployment (Alternative)

### Backend to Render.com

1. Connect GitHub repository to Render
2. Create new Web Service:
  - Name: `vcitt-agi-backend`
  - Environment: Node
  - Build Command: `cd nodejs_space && yarn install && yarn build`
  - Start Command: `cd nodejs_space && yarn start:prod`
3. Add PostgreSQL database (included in plan)
4. Set environment variables:  
`OPENAI_API_KEY=sk-...`  
`DATABASE_URL=<auto-populated by Render>`
5. Deploy

### UI to Vercel

(Same as Option 1 above)



## URLs After Deployment

### Backend

- Production URL: `https://your-backend-service.onrender.com`
- API Docs: `https://your-backend-service.onrender.com/api`
- Health: `https://your-backend-service.onrender.com/health`

### Frontend

- Production URL: `https://vcittagiui.vercel.app` (or your custom domain)
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## ✓ Post-Deployment Verification

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### 1. Test Backend Health

```
curl https://your-backend-url.com/health
# Should return: {"status":"healthy"...}
```

### 2. Test Analytics Endpoints

```
# List sessions
curl https://your-backend-url.com/analytics/sessions

# Trust metrics
curl https://your-backend-url.com/analytics/trust-metrics

# Aggregate stats
curl https://your-backend-url.com/analytics/aggregate
```

### 3. Test Session Creation

```
curl -X POST https://your-backend-url.com/api/v1/session/start \
-H "Content-Type: application/json" \
-d '{"user_id":"prod_test","input":"Hello from production!"}'
```

### 4. Test UI

1. Open `https://vcttagiui.vercel.app`
2. Verify “Analytics” button is visible
3. Click “Analytics” - should show dashboard
4. Create new chat - verify trust indicator displays
5. Check session list shows trust scores



## Troubleshooting

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### Backend Issues

**Problem:** Database connection error

- **Solution:** Verify `DATABASE_URL` environment variable is set
- Check PostgreSQL database is running

**Problem:** OpenAI API errors

- **Solution:** Verify `OPENAI_API_KEY` is correct
- Check API quota/billing

**Problem:** 500 errors on analytics endpoints

- **Solution:** Check database has data (create test sessions first)
- Review server logs

## UI Issues

**Problem:** “Failed to fetch sessions”

- **Solution:** Verify `VITE_API_URL` points to correct backend
- Check CORS is enabled on backend

**Problem:** Analytics dashboard empty

- **Solution:** Create some sessions first
- Backend must have PostgreSQL data

**Problem:** Trust indicator not showing

- **Solution:** Ensure backend returns `trust_tau` in responses
- Check console for errors



## Expected Performance

### Backend

- **Response Time:** < 100ms for analytics
- **Database Queries:** < 50ms
- **Session Creation:** < 2s (includes OpenAI API call)
- **Concurrent Users:** 1000+

### UI

- **Load Time:** < 2s
- **Time to Interactive:** < 3s
- **Analytics Dashboard:** < 1s to load



## Security Checklist

- ☒ Environment variables used for secrets
- ☒ Database credentials not in code
- ☒ CORS configured for production domains
- ☒ Input validation on all endpoints
- ☐ Add rate limiting (Phase 3)
- ☐ Add authentication (Phase 3)



## Monitoring

### Key Metrics to Watch

1. **Database Size:** Should grow steadily
2. **Session Count:** Track user engagement
3. **Average Trust Score:** Should be > 0.85
4. **Error Rate:** Should be < 1%
5. **Response Time:** Should be < 100ms

## Recommended Tools

- Render dashboard for backend metrics
  - Vercel analytics for UI metrics
  - PostgreSQL monitoring (via Render)
  - OpenAI API usage dashboard
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## Rolling Back

If deployment issues occur:

### Backend

1. In platform UI, select previous checkpoint
2. Redeploy

### UI

1. In Vercel dashboard, go to Deployments
  2. Select previous successful deployment
  3. Click “Promote to Production”
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## Database Migrations

For future schema changes:









```
# Generate migration
cd /home/ubuntu/vctt_agi_engine/nodejs_space
yarn typeorm migration:generate -n MigrationName

# Run migrations
yarn typeorm migration:run
```

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## Success Criteria

Phase 2 deployment is successful when:

-  Backend accessible at production URL
  -  All 9 tests passing in production
  -  Analytics endpoints returning data
  -  UI loading with backend data
  -  Trust indicators visible in UI
  -  Analytics dashboard functional
  -  Sessions persisting across restarts
  -  No errors in production logs
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## Support

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If issues persist:

1. Check server logs (Render dashboard)
  2. Check browser console (for UI issues)
  3. Review `test-phase2.sh` results
  4. Verify environment variables are set
  5. Check database connections
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## Next Steps After Deployment

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1. Monitor for 24 hours
  2. Verify user sessions are being created
  3. Check analytics data is accumulating
  4. Review trust metric trends
  5. Plan Phase 3 features
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**Deployment Prepared By:** VCTT-AGI Development Team

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