XplainCrypto Deployment Verification Checklist

Complete Verification Checklist

Use this checklist to systematically verify your XplainCrypto MindsDB deployment. Check off each item as you complete it.

Phase 1: Pre-Deployment Verification

System Requirements

- [ ] MindsDB instance accessible at `http://142.93.49.20:47334/editor`
- [ ] MindsDB version 23.10+ or later
- [ ] PostgreSQL database running and accessible
- [ ] Internet connectivity for external APIs
- [ ] All required API keys obtained and tested

API Keys Verification

- [ ] OpenAI API key valid and has credits
- [ ] Anthropic API key valid and has credits
- [ ] TimeGPT API key valid (free tier OK)
- [ ] CoinMarketCap API key valid (free tier OK)
- [ ] PostgreSQL password for mindsdb user confirmed
- [ ] Dune Analytics API key valid (optional)
- [ ] Whale Alert API key valid (optional)

Phase 2: Health Check Verification

Execute: `deploy/01_health_check.sql`

- [ ] MindsDB version displayed correctly
- [ ] All required handlers available:
- [ ] `openai` handler with `import_success = true`
- [ ] `anthropic` handler with `import_success = true`
- [ ] `timegpt` handler with `import_success = true`
- [ ] `postgres` handler with `import_success = true`
- [ ] `coinmarketcap` handler with `import_success = true`
- [ ] System databases visible (mindsdb, information_schema)
- [ ] Basic SQL functionality working
- [ ] Final health check message: "System operational"

If any items fail: Review troubleshooting guide before proceeding

Phase 3: Database Connections Verification

Execute: `deploy/02_create_databases.sql` (with API keys replaced)

- [ ] All placeholder variables replaced with actual values:
- [ ] `${POSTGRES_PASSWORD}` → actual PostgreSQL password
- [ ] `${COINMARKETCAP_API_KEY}` → actual CoinMarketCap key

- [ ] `${DUNE_API_KEY}` → actual Dune Analytics key
- [ ] Database connections created successfully:
- [ ] `crypto_data_db` (PostgreSQL)
- [ ] `coinmarketcap_db` (CoinMarketCap API)
- [ ] `defillama_db` (DeFiLlama API)
- [ ] `blockchain_db` (Blockchain.info API)
- [ ] `dune_db` (Dune Analytics API)
- [ ] No connection errors in verification queries
- [ ] All databases show in `SHOW DATABASES` output

Execute: `test/test_connections.sql`

- [ ] All connection tests show "PASS" status
- [ ] No "FAIL" status for required connections
- [ ] Connection summary shows expected counts
- [ ] No errors detected in connection health check

If any items fail: Check API keys, network connectivity, service status

Phase 4: AI Engines Verification

Execute: `deploy/03_create_engines.sql` (with API keys replaced)

- [ ] All placeholder variables replaced with actual values:
- [ ] `${OPENAI_API_KEY}` → actual OpenAI key (starts with `sk-`)
- [ ] `${ANTHROPIC_API_KEY}` → actual Anthropic key (starts with `sk-ant-`)
- [ ] `${TIMEGPT_API_KEY}` → actual TimeGPT key
- [ ] AI engines created successfully:
- [ ] `openai_engine`
- [ ] `anthropic_engine`
- [ ] `timegpt_engine`
- [ ] No engine creation errors
- [ ] All engines show in ML engines list

Execute: `test/test_engines.sql`

- [ ] All engine tests show "PASS" status
- [ ] Handler availability shows "AVAILABLE" for all engines
- [ ] No "ERROR DETECTED" in engine status
- [ ] Engine summary shows all 3 engines

If any items fail: Verify API keys have credits and proper permissions

Phase 5: AI Agents Verification

Execute: `deploy/04_create_agents.sql`

- [ ] All AI agents created successfully:
- [ ] `crypto_prediction_agent` (TimeGPT forecasting)
- [ ] `market_analysis_agent` (Claude analysis)
- [ ] `risk_assessment_agent` (GPT-4 risk assessment)
- [ ] `sentiment_analysis_agent` (GPT-4 sentiment)
- [ ] `anomaly_detection_agent` (Claude anomaly detection)
- [ ] `master_intelligence_agent` (Claude Opus orchestration)

- [ ] No agent creation errors
- [ ] All agents show in models list

Wait 2-3 minutes, then execute: `test/test_agents.sql`

- [ ] All agent tests show "PASS" status
- [ ] Agent training status shows "READY" for all agents
- [ ] Engine dependencies show "ENGINE AVAILABLE" for all
- [ ] No "ERROR DETECTED" in agent status
- [ ] Agent capabilities summary shows all as "READY"

If any items fail: Wait longer for training, check engine dependencies

Phase 6: PostgreSQL Schema Verification

Execute: `deploy/05_create_tables.sql`

- [ ] All database tables created successfully:
- [ ] `crypto_data.prices`
- [ ] `crypto_data.whale_transactions`
- [ ] `crypto_data.social_sentiment`
- [ ] `crypto_data.defi_yields`
- [ ] `crypto_data.cross_chain_prices`
- [ ] `crypto_data.agent_predictions`
- [ ] `crypto_data.sync_status`
- [ ] `crypto_data.agent_communications`
- [ ] `crypto_data.market_alerts`
- [ ] All indexes created successfully
- [ ] Schema verification shows all tables
- [ ] Table status check shows 0 rows (new installation)

If any items fail: Check PostgreSQL permissions and connectivity

Phase 7: Complete System Verification

Execute: `test/test_complete.sql`

- [ ] System overview shows correct MindsDB version
- [ ] Database connections summary shows expected counts:
- [ ] 4+ total databases
- [ ] 1+ PostgreSQL connections
- [ ] 3+ API connections
- [ ] AI engines summary shows:
- [ ] 3 total engines
- [ ] OpenAI available
- [ ] Anthropic available
- [ ] TimeGPT available
- [ ] AI agents summary shows:
- [ ] 6 total agents
- [ ] 5+ ready agents
- [ ] 0 error agents
- [ ] Critical components check shows all "PASS"

- [ ] Data pipeline readiness shows all "READY"
- [ ] System capabilities inventory shows all "AVAILABLE"
- [ ] Error detection scan shows "NO ERRORS" for all components
- [ ] Deployment completeness score: 90%+ (EXCELLENT)
- [ ] Production readiness assessment: "PRODUCTION READY"
- [ ] Overall status: " DEPLOYMENT SUCCESSFUL"

Phase 8: Functional Testing (Optional)

Test Individual Agent Functionality

Uncomment and test these queries in the test scripts:

- [ ] Market Analysis Agent responds correctly
- [ ] Risk Assessment Agent provides analysis
- [ ] Sentiment Analysis Agent returns scores
- [ ] Prediction Agent (if time-series data available)

Test Database Connectivity

- [ ] PostgreSQL queries work
- [ ] CoinMarketCap API returns data
- [ ] DeFiLlama API returns data
- [ ] Other API connections functional

Phase 9: Documentation and Handoff

Documentation Complete

- [ ] All API keys documented securely
- [ ] Deployment process documented
- [ ] Test results recorded
- [ ] Known issues documented
- [ ] Troubleshooting guide reviewed

System Ready for Automation

- [ ] Manual deployment 100% successful
- [ ] All components verified and working
- [ ] Performance acceptable
- [ ] No critical errors or warnings
- [ ] Ready to proceed with automation phase

Success Criteria Summary

Minimum Success (Development Ready)

- [ ] 3+ database connections working
- [ ] 2+ AI engines functional
- [ ] 4+ AI agents ready
- [ ] PostgreSQL schema created
- [ ] Basic functionality verified

Full Success (Production Ready)

- [ ] 4+ database connections working
- [ ] 3 AI engines functional
- [ ] 6 AI agents ready
- [ ] All capabilities available
- [ ] Complete system test passes
- [ ] No errors or warnings

Automation Ready

- [ ] Full success criteria met
- [ ] All test scripts pass
- [ ] Performance is acceptable
- [ ] Documentation complete
- [ ] System stable for 24+ hours

Verification Results Summary

Deployment Date: __
MindsDB Version: __
Completion Score: __
Overall Status: __

Component Status

- Database Connections: Pass   Fail
- AI Engines: Pass   Fail
- AI Agents: Pass   Fail
- PostgreSQL Schema: Pass   Fail
- System Integration: Pass   Fail

Ready for Automation?

Yes - All criteria met, proceed with automation
No - Address issues before automation

Notes:

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Next Steps:

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Verification completed by: __

Date: __

Signature: ___