

Blockchain Handler Tasks

Setup Tasks

Initial Configuration

- ☐ Install MindsDB HTTP handler for blockchain data
- ☐ Configure blockchain API endpoints
- ☐ Set up request headers and parameters
- ☐ Configure timeout and retry settings
- ☐ Test basic API connectivity

Handler Creation

- ☐ Create blockchain database handler
- ☐ Configure multiple blockchain endpoints
- ☐ Set up data transformation rules
- ☐ Validate handler creation
- ☐ Test handler connectivity

Table Setup

- ☐ Create blocks view
- ☐ Create transactions view
- ☐ Create addresses view
- ☐ Create network stats view
- ☐ Validate all views

Testing Tasks

Connection Tests

- ☐ Test handler connection
- ☐ Validate API endpoints
- ☐ Test network connectivity
- ☐ Verify response formats
- ☐ Test error handling

Data Retrieval Tests

- ☐ Test block data retrieval
- ☐ Test transaction data access
- ☐ Test address information
- ☐ Test network statistics
- ☐ Validate data accuracy

Performance Tests

- ☐ Measure query response times
- ☐ Test large dataset queries

- ☐ Validate data freshness
- ☐ Test concurrent requests
- ☐ Monitor memory usage

Error Handling Tests

- ☐ Test network timeouts
- ☐ Test malformed requests
- ☐ Test API unavailability
- ☐ Test invalid parameters
- ☐ Test rate limiting

Configuration Tasks

API Management

- ☐ Configure multiple blockchain APIs
- ☐ Set up request headers
- ☐ Configure timeout values
- ☐ Set up retry logic
- ☐ Configure error logging

Data Processing

- ☐ Set up data transformation
- ☐ Configure data validation
- ☐ Set up data caching
- ☐ Configure refresh intervals
- ☐ Set up data archiving

Data Validation Tasks

Data Quality

- ☐ Validate block hashes
- ☐ Check transaction integrity
- ☐ Verify address balances
- ☐ Test timestamp accuracy
- ☐ Validate network metrics

Schema Validation

- ☐ Verify data types
- ☐ Check required fields
- ☐ Validate data ranges
- ☐ Test null handling
- ☐ Verify data formats

Optimization Tasks

Performance Optimization

- ☐ Optimize query patterns
- ☐ Implement data caching
- ☐ Configure request batching
- ☐ Set up query optimization
- ☐ Monitor resource usage

Monitoring Setup

- ☐ Set up health checks
- ☐ Configure performance metrics
- ☐ Set up error tracking
- ☐ Create usage dashboards
- ☐ Set up alerting

Documentation Tasks

Technical Documentation

- ☐ Document API endpoints
- ☐ Create query examples
- ☐ Document data schemas
- ☐ Create troubleshooting guide
- ☐ Document best practices

User Documentation

- ☐ Create setup guide
- ☐ Document common queries
- ☐ Create FAQ section
- ☐ Document limitations
- ☐ Create integration guide

Completion Criteria

Functional Requirements

- ☐ Handler connects successfully
- ☐ All views return data
- ☐ Data accuracy validated
- ☐ Error handling robust
- ☐ Performance acceptable

Non-Functional Requirements

- ☐ Response time < 15 seconds
- ☐ 98% uptime achieved
- ☐ Data freshness < 10 minutes
- ☐ Documentation complete

- ☐ Tests pass consistently

Validation Checklist

Pre-Production

- ☐ All tests passing
- ☐ Performance benchmarks met
- ☐ Data quality validated
- ☐ Documentation reviewed
- ☐ Monitoring configured

Production Ready

- ☐ Load testing completed
- ☐ Error handling tested
- ☐ Monitoring alerts configured
- ☐ Support procedures documented
- ☐ Backup procedures tested

Success Metrics

- **Uptime:** > 98%
- **Response Time:** < 15 seconds average
- **Data Accuracy:** > 99%
- **Error Rate:** < 2%
- **Coverage:** Multiple blockchains

Known Issues & Limitations

- No authentication required (public APIs)
- Rate limiting may apply during high usage
- Historical data availability varies
- Some endpoints may have delays
- Network congestion affects response times

Support & Troubleshooting

Common Issues

1. **Slow Response:** Network congestion or API load
2. **Missing Data:** Blockchain sync delays
3. **Stale Data:** Check refresh intervals
4. **Connection Issues:** Verify network access
5. **Format Changes:** API updates

Escalation Path

1. Check blockchain network status
2. Verify API endpoint availability

3. Contact blockchain API providers
4. Check MindsDB HTTP handler docs
5. Create GitHub issue if needed