

Dune Analytics Handler Tasks

Setup Tasks

Initial Configuration

- ☐ Install MindsDB HTTP handler for Dune Analytics
- ☐ Configure Dune API key and authentication
- ☐ Set up API endpoints and parameters
- ☐ Configure timeout and retry settings
- ☐ Test basic API connectivity

Handler Creation

- ☐ Create Dune Analytics database handler
- ☐ Configure API authentication headers
- ☐ Set up query execution endpoints
- ☐ Validate handler creation
- ☐ Test handler connectivity

Table Setup

- ☐ Create query results view
- ☐ Create executions view
- ☐ Create queries metadata view
- ☐ Create dashboards view (if available)
- ☐ Validate all views

Testing Tasks

Connection Tests

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

Data Retrieval Tests

- ☐ Test query execution
- ☐ Test results retrieval
- ☐ Test query metadata access
- ☐ Test execution status tracking
- ☐ Validate data accuracy

Performance Tests

- ☐ Measure query response times
- ☐ Test large result set handling

- ☐ Validate query execution limits
- ☐ Test concurrent requests
- ☐ Monitor memory usage

Error Handling Tests

- ☐ Test invalid API key
- ☐ Test query execution failures
- ☐ Test network timeouts
- ☐ Test rate limit exceeded
- ☐ Test malformed requests

Configuration Tasks

API Management

- ☐ Set up API key rotation
- ☐ Configure rate limiting
- ☐ Set up monitoring alerts
- ☐ Configure retry logic
- ☐ Set up error logging

Query Management

- ☐ Set up query templates
- ☐ Configure execution parameters
- ☐ Set up result caching
- ☐ Configure data refresh intervals
- ☐ Set up query optimization

Data Validation Tasks

Data Quality

- ☐ Validate query results accuracy
- ☐ Check execution status consistency
- ☐ Verify timestamp accuracy
- ☐ Test data completeness
- ☐ Validate result formatting

Schema Validation

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

Optimization Tasks

Performance Optimization

- ☐ Optimize query patterns
- ☐ Implement result caching
- ☐ Configure query batching
- ☐ Set up execution 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 execution workflows
- ☐ 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
- ☐ Query execution works
- ☐ Results retrieval functional
- ☐ Error handling robust
- ☐ Performance acceptable

Non-Functional Requirements

- ☐ Response time < 60 seconds
- ☐ 95% uptime achieved
- ☐ Data accuracy validated
- ☐ 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:** > 95%
- **Query Success Rate:** > 90%
- **Response Time:** < 60 seconds average
- **Error Rate:** < 5%
- **Data Accuracy:** > 95%

Known Issues & Limitations

- API key required for access
- Rate limiting applies (varies by plan)
- Query execution time limits
- Result size limitations
- Credit consumption per query

Support & Troubleshooting

Common Issues

1. **API Key Invalid:** Check key format and permissions
2. **Query Timeout:** Optimize query or increase timeout
3. **Rate Limit Exceeded:** Implement proper throttling
4. **Execution Failed:** Check query syntax and data
5. **Results Empty:** Verify query logic and data availability

Escalation Path

1. Check Dune Analytics status page
2. Verify API key and permissions

3. Contact Dune Analytics support
4. Check MindsDB HTTP handler docs
5. Create GitHub issue if needed