# CLOUDERA DATA WAREHOUSE FOR TIME SERIES ANALYTICS

Quality self-service time series analytics for real time insights

#### **Benefits**

\_Up to 1000% increase in sample frequency for more granular visibility of trends in data

- \_Up to 86% reduction in operating costs over traditional data warehousing for time-series data processing and storage
- Onboard thousands of new users for ad-hoc reporting for real-time self-service access to business insights
- \_Execute millions of sub-second time-series queries for fast and iterative exploration and new pattern discovery
- \_Cloudera Data Flow for real-time time-series data ingest at scale
- \_Cloudera Data Science Workbench for new correlation discovery and more, enabled by machine learning at scale

Cloudera data warehouse enabled 86% reduction in operating expenses, 7 times increase in data ingest rates and 29TB data loaded daily while reducing storage costs

T-Mobile Presentation at Strata NY

## High Quality Time Series Business Insights in Real Time

What do automated maintenance and continuous plant up time, targeted and personalized customer service and promotion, automated network utility and cost optimization, real-time fraud prevention and threat detection, quality and yield optimization, and continuous operations dashboards, all have in common?

#### They All Require Analysis of Time Series Data



Time series data is different from traditional statistical analysis. It is highly dimensional, combining hundreds of parameters, like oil yield against temperature and pressure, or network quality combined with weather, traffic, or events. It's not a normal distribution, it is complicated, following multiple simultaneous processes. Also, it is non-stationary, a sliding window of data that is continuously shifting. To gain insights, we need to detect patterns, in real time, over this data that is coming at a changing and rapid pace.

## Do You Have the Power to Harness Time Series Data at Scale?

So the question is, do you have the storage at scale, processing power, and availability of real-time access to handle all the time series insights your business demands?

Cloudera Data Warehouse can support the most demanding time series analytics needs. Cloudera handles everything from real-time data ingestion at scale to enriching the data from the data warehouse to making easily consumable visualizations. Explore Cloudera's time series reference architectures that have created implementations that work at global leading telecommunications, utilities and manufacturing companies.

#### Cloudera Time-Series Data Warehouse for Telecommunications Companies

- \_Increase customer loyalty with location and context aware promotions and pricing optimizations, and with increased network reliability, availability and service coverage
- \_Increase network health and efficiency with stronger event correlations and aggregations analysis to improve overall coverage models and more cost effectively prevent outages with smarter predictive maintenance
- \_Improve safety and security for you and your customers with real time fraud and cyber-threat prevention

## Cloudera Time-Series Data Warehouse for Utilities Companies

- \_Help your customers reduce their energy consumption, with more fine-grained smart meter analytics and enabling conservation voltage reduction technology
- \_Enable better customer self-service with detailed real-time energy use analysis and reporting. Increase your grid health and availability with intelligent load forecasting and better peak use management with higher granularity on meter data
- \_Reduce maintenance costs with smarter predictive maintenance and real-time fraud and cyber-threat prevention

### Cloudera Time-Series Data Warehouse for Manufacturing Companies

- \_Reduce the time, cost and risk associated with production downtime with connected assets and Internet of Things (IoT) analytics for event detection and smarter predictive maintenance
- \_Improve overall manufacturing processes with more granular data in quality monitoring and Process 360, and increase supply chain efficiency with fine grained supply chain 360 analytics
- \_Streamline value chain with more detailed route and logistics optimizations analysis and real time inventory visibility and tracking

