THANK YOU
(timestamp, measurement)

64-bit integer

\([-2^{63}, 2^{63} - 1]\]

Or


64-bit float

\((-1)^{\text{sign}} (1.b_{51}b_{50} \ldots b_0) \times 2^{e - 1023}\)
PingThings PredictiveGrid™ Overview

**Ingest**
- Asynchronous or streaming data ingest from any sensor, historian, file format, and more.

**Storage & Query**
- Horizontally scalable time series database complete with queries based on:
  - Network topology
  - Geospatial information
  - Metadata

**Analytics & ML**
- Integrated support for:
  - Signal processing at scale
  - Deep learning
  - Big data analytics
  - Scalable computing

**Access Control**
- Use the data in any way you can imagine with robust and precise access control in numerous languages.

**Applications**
- Use our expanding suite of applications or build your own.

**Data Visualization**
- Real-time Interactive Data Exploration
- Customizable Real-time Dashboards

**Specialized Use Cases**
- Event Detection
- Bespoke Web and Mobile Applications

**Data Analytics**
- Spreadsheets, CSV
- Ad-hoc Analytics in Python, R, MATLAB, etc.
- Rapid Deployment of Production Analytics

**Period*11/6/2020 9**
Competitive Dominance with Cost Effectiveness

More Scalable

Horizontal Scalability in Data and Analytics

- Scales to
  - petabytes of data
  - millions of streams
  - MHz sampling rates
  - 100’s of millions of points/s

Faster

Blazing Fast Performance

- >10-1000x faster
- Proven 10,000x faster for common operations
- Log(n) aggregations
- Read 15M pts/s/node
- Write 30M pts/s/node

Built for Analytics

Analytics and AI at Scale

- Custom distributed signal processing framework
- Rapidly develop and operationalize use cases
- Integrates with leading big data frameworks

Cost Effective

Designed for ROI

- Scale compute and storage independently
- Leading data compression
- Intelligent storage tiering to optimize cost and performance
- Multiple levels of redundancy
- Fully containerized
- Horizontally scalable
- Intrinsically distributed
- Cloud agnostic
World Class Team – Quadrupled in Size

Sean Patrick Murphy
Chief Executive Officer

- Built million-dollar data consulting firm
- Senior scientist at JHU APL focused on time series analytics and high-performance computing

Dr. Michael Andersen
Chief Technology Officer

PhD, EE and CS, U. of California Berkeley
Dissertation: Practical Decentralized Authorization With Delegation

Described by UCB Dean as a “generational talent”
THANK YOU