

MemSQL for Energy Solutions

Unlock the Power of Real-Time Insights with MemSQL



Energy companies require fast and flexible data processing infrastructure that enables continuous monitoring, analysis, and response to complex systems that power our modern world. For the most part, energy companies are often categorized based on how the energy that they produce is sourced and will typically fall into one-of-two categories: (i) non-renewable energy (such as petroleum, natural gas, oil, nuclear etc.) and (ii) renewable energy (such as hydroelectric, biofuel, solar, wind power etc.).

Many energy companies have geographically dispersed capital-intensive assets that require continuous monitoring and maintenance to maximize profits for optimal delivery. Hence the data infrastructure powering these energy applications requires a high performing and easy-to-access platform to support immediate responses to changing conditions. Modern energy solution platforms can predict and avoid costly maintenance events at scale using a database platform that cost effectively streams, scores, and responds to data events in real time.

MemSQL is built for Energy Solutions:



Real-Time Dashboards

Deliver up-to-date dashboards with live data analysis for drill downs and aggregations



Machine Learning Enabled

Run sophisticated algorithms in SQL or use third party ML frameworks like TensorFlow



Drop-in Compatibility

Leverage existing tools and skills using standard SQL, connectivity, and hardware

Asset Performance Management (APM)

APM encompasses the capabilities of data capture, integration, visualization, and analytics tied together for the explicit purpose of improving the reliability and availability of physical assets.

Supply Chain Analytics

Optimizing the energy supply chain yields improved demand forecast accuracy and reduces product delivery lead times. Supply chain analytics improves energy margins and revenue with minimal technology investment.

Real-time Grid Management

Energy and utility companies manage a diverse set of equipment that is responsible for efficient operations for energy production and delivery. The collection of data can identify costly outages or support new product packaging for innovative revenue programs.

- **Stream Ingestion:** Ingest fast changing data without impacting updates or query performance
 - **Drop-in Compatibility:** Broad tool support through standard SQL and APIs
 - **Predictive Analytics at Low Latency:** Sub-second query response time for complex ML based predictive analytics
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- **Real-time Dashboards:** Deliver up-to-date dashboards with live data analysis for drill downs and aggregations
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- **Scalable Analytics:** Analyze over raw data from millions of smart meters and understand the usage trends with real-time performance
 - **Predictive Analytic Stack:** Deliver scalable SQL against terabytes of data for data science discovery
 - **Machine Learning Enabled:** Run sophisticated algorithms in SQL or use third party ML frameworks such as TensorFlow

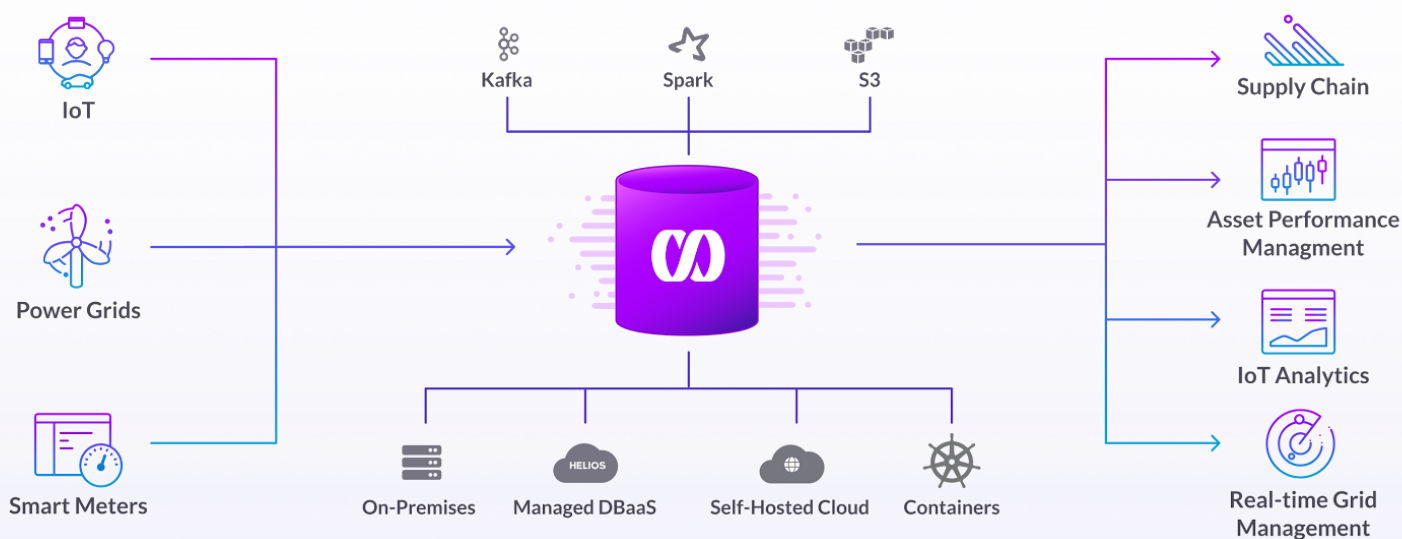
IoT Analytics

Application having data analysis tools and procedures to realize value from the huge volumes of data generated by connected Internet of Things devices. Through the use of complex scoring, they can track dozens of readings in real time to adjust drill operations to maximize performance and availability.

- **Real-time Insights:** Ability to turn real-time data into actionable insights
- **Low latency Analytics:** Sub-second query response time for complex analytics
- **Performance at Scale:** Deliver reliable performance as you scale-out

Fastest Event-to-Insight Performance

Deliver against the toughest service level agreements using distributed, lock-free ingestion and real-time query processing



Infiswift has chosen MemSQL as the real-time insights engine of its platform to deliver fast, reliable analytics, and to power constantly updated machine learning (ML) models.

[Read Case Study >](#)

LEADING ELECTRIC & NATURAL GAS UTILITY

Leading electric and natural gas utility company uses MemSQL to ingest and analyze smart grid data to enable real-time visibility for energy delivery while immediately identifying energy usage patterns to help customers lower power consumption.

[Read Case Study >](#)

MAJOR OIL & GAS COMPANY

A major Oil and Gas company leverages MemSQL to build an IoT solution that predicts drill bit failure before costly outages occur. Through the use of complex scoring, they can track dozens of readings in real time to adjust drill operations to maximize performance and availability.

[Read Case Study >](#)

Ready to Get Started? Try MemSQL for Free Today >>>