

Safeguarding digital identities from cybercriminals— with real-time data analytics

ThreatMetrix®, The Digital Identity Company®, is the market-leading cloud solution for authenticating digital personas and transactions on the Internet. Through the ThreatMetrix Digital Identity Network®, it secures businesses and end users against account takeover, payment fraud, and fraudulent account registrations resulting from malware and data breaches. The company serves over 4,000 customers across industries including financial services, e-commerce, payments and lending, media, government, and insurance—verifying more than 20 billion annual transactions across 30,000 websites globally.

INDUSTRY

Security

KEY OUTCOME METRICS

By implementing the DataTorrent RTS platform, ThreatMetrix:



Reduced data ingestion
pipeline latency, from
minutes to seconds



Accelerated time-
to-production, from
months to weeks



Shortened customers' wait for
data to minutes, accelerating
reporting and analytics

CHALLENGE

ThreatMetrix analyzes over 20 billion transactions annually and the volume has grown substantially from prior years. With this growth, ThreatMetrix faced a significant need to better leverage high velocity data to improve real-time analytics, reporting and investigations.

ThreatMetrix needed a powerful platform for data ingestion, one that could scale across multiple pipelines—and one that could handle an enormous volume of data as well as make that data available quickly to clients. In addition to meeting these goals, the solution needed to accelerate current time-to-production—all at lower total cost-of-ownership.

The challenges ThreatMetrix faced included:

- Ingesting high volumes of data in real time with low latency
- Ingesting data to two different data stores: Cassandra and Impala
- Operating a cumbersome, hard-to-maintain database
- Pressure to meet near real-time SLA response times for each client
- Ability to scale in real-time for risk management
- Redirect time and focus to ThreatMetrix's core business function by reducing time necessary for management, monitoring, and improvement of the current platform



SOLUTION

ThreatMetrix had three goals in implementing a new ingestion solution:

Key features of Apache Apex that benefitted the digital industrial company included:

- Use a single framework to ingest data to two different data stores
- Dramatically accelerate the on-demand availability of data to customers, for reporting and analytics, from minutes to seconds
- Drastically reduce the time required to build a new data application

Meeting its goals required implementation of a new ingestion platform. ThreatMetrix's data engineering architecture team evaluated DataTorrent RTS Platform and two other open source streaming platforms—Spark streaming and Storm—to determine which solution would be the best fit for its challenge, operations, and resources.

The key features ThreatMetrix sought included:

- Common platform for data ingestion requirements, one that could ingest high volumes of data and transform it with ease while in motion—and ingest data to both Cassandra and Impala data stores
- Operability on a Java base, for ease of writing new data applications
- Ability to scale for future data needs, without degrading performance or latency requirements
- 99.999% availability 24x7, with zero data loss

After evaluating the three possibilities against its goals and requirements, the ThreatMetrix team felt it was immediately clear which solution would provide the best fit: DataTorrent RTS.

OUTCOME

ThreatMetrix chose DataTorrent RTS, which allowed the company to realize its goals:

- Customers can now access data for reporting and analytics in minutes
- Easy operability has drastically accelerated time-to-market from months to days
- The data engineering team can now focus on the application layer writing analytics applications rather than fighting fires in the data ingestion pipeline

DataTorrent's platform not only helped ThreatMetrix reach its goals, it opened up new opportunities for the company. Those included:

Additionally, DataTorrent RTS allows ThreatMetrix to:

- Easily monitor application performance and dashboards with KPIs, redirecting resources and focusing on core business as a result
- Reduce total cost-of-ownership: DataTorrent runs on Hadoop and scales out on commodity-grade hardware
- Easily add newer applications and features and tap the open-source community, without having to be tied to a vendor road-map

"DataTorrent RTS provided powerful iterative capabilities for our ingestion pipeline and allowed us to leverage existing Java development skillsets on the team."

- Himanshu Bari, Director of Product Management, ThreatMetrix

Imagine what your business could achieve with real-time data-in-motion ingestion and analytics.

[Download](#) the Sandbox, Enterprise, Community, or Cloud version of the DataTorrent platform, and explore our difference today. Learn more about our products and solutions at www.datatorrent.com