GridGain

Built On Apache Ignite

INDUSTRY BRIEF

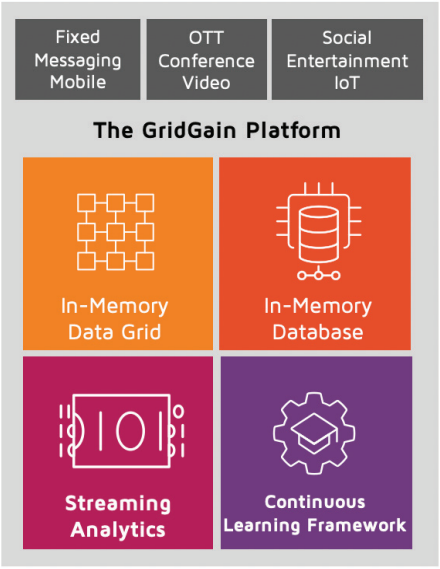
BECOMING A DIGITAL PROVIDER OF COMMUNICATIONS AND MEDIA WITH IN-MEMORY COMPUTING

Communications and Media companies are going through unprecedented change. Over the last decade, the average revenue per user (ARPU) in telecommunications has shrunk by roughly a third. This is not being driven by commoditization of existing services. It's mostly the result of new digital entrants. According to McKinsey, new OTT (Over-The-Top) entrants – such as Apple, Google, Tencent and RingCentral, Vonage, WhatsApp – could grab as much as 60%, 50% and 25% of messaging, fixed voice and mobile voice respectively.

The opportunity for communications and media companies is to transform into more modern, digital providers. This will help drive renewed growth from new OTT services over IP, as well as from services for security and the Internet of Things (IoT). But becoming a digital provider requires unprecedented performance and scalability. Customers require real-time 360° visibility into their information, services and billing status across previously isolated silos of data. They demand the quality of service and responsiveness they're used to from older POTS, cable or mobile services. Also, new OTT services such as IoT can involve real-time data ingestion of petabytes of streaming data. Many telecommunications companies have turned to in-memory computing as their foundation for digital transformation and OTT services.

GridGain is the leading in-memory computing platform for real-time business. It is built on Apache® Ignite™, one of the top five Apache open source projects. GridGain Systems contributed the code that became Ignite to the Apache Software Foundation and continues to be a leading contributor to the project.

Leading communications and media companies rely on GridGain to help them deliver an integrated, real-time OTT service experience globally. By using GridGain, companies have not only been able to rapidly deliver new offerings. They've been able to deliver real-time speed with unlimited horizontal scale at a significantly lower cost of ownership. GridGain not only helped these providers add speed and scale to existing services without major architectural changes. It also helped them open up and combine their data in new digital data stores to achieve 360° customer visibility, deliver new services, add real-time analytics, and leverage machine and deep learning to help improve the end-to-end service experience.



BUILDING AN OTT BUSINESS WITH IN MEMORY COMPUTING

A leading OTT communication and collaboration provider that offers millions of end users unified voice, messaging, video and other OTT services was struggling to find low latency, scalable and cost-effective data infrastructure for capturing and responding to communication data and commands across services. Part of the challenge was delivering a high quality of service with real-time responsiveness globally across geographically distant datacenters.

With GridGain, this OTT provider was able to deliver a real-time, distributed global network for all their services with in-memory computing clusters in each datacenter running on low cost infrastructure and connecting together to support all of their traffic globally. While each user connects to a single cluster in one datacenter, the clusters share information in real-time to complete connections, load balance and coordinate to ensure responsiveness and high availability. Using GridGain, the provider is now able to handle all underlying data queries globally within 2 milliseconds to deliver a consistently real-time user experience at a significantly lower compared to the database-centric alternative.

ADD IN-MEMORY SPEED AND UNLIMITED HORIZONTAL SCALABILITY TO EXISTING APPLICATIONS AND APIS

GridGain is the only in-memory computing platform that slides in-between existing applications and databases as an in-memory data grid (IMDG) that moves data into memory for up to 1000x lower latency, and scale out horizontally with unlimited linear scale, all with no rip-and-replace of the existing systems. GridGain is able to accomplish this without major architectural changes because it supports ANSI-99 SQL and distributed ACID transactions. GridGain can sit on top of leading RDBMSs including IBM DB2®, Microsoft SQL Server®, MySQL®, Oracle® and Postgres® as well as NoSQL databases such as Apache Cassandra™ and MongoDB®, and natively host new APIs.

DELIVER CLIENT 360 AND NEW GLOBAL OTT SERVICES WITH REAL-TIME RESPONSIVENESS AND RELIABILITY

Several OTT providers rely on GridGain and Apache ignite to create a 360° client view, and deliver voice, messaging, data and streaming services. Once GridGain is used as an IMDG for an application or database, any of the data accessed by GridGain is immediately available for any other use. This allows data across applications and datacenters to be merged and accessed using SQL, GridGain's built-in features, or custom code running in GridGain's Compute Grid as though they were in the same database for consistent, real-time performance. GridGain's unlimited horizontal scalability enables new services to be added without impacting existing systems.

IMPROVE THE END-TO-END COMMUNICATIONS, MEDIA AND IOT EXPERIENCE WITH IN-PROCESS HTAP

It is no longer enough to run faster, add new channels or provide more self-service. Customers expect a better end-to-end experience. This requires communications companies to adopt new approaches such as executing real-time analytics during interactions. Gartner calls this hybrid transactional/analytical processing (HTAP). Real-time, in-process HTAP helps companies identify issues or opportunities and take action during each interaction to help improve the customer experience and customer satisfaction.

GridGain provides the broadest in-process HTAP support that is used by companies worldwide to improve the end-to-end customer experience. You can leverage GridGain's built-in streaming and messaging capabilities, GridGain's broad support for Apache Spark™, the GridGain Continuous Learning Framework for machine and deep learning, or the GridGain Compute Grid to run any SQL, Java, .NET, or C++. GridGain sends code across the cluster to the data and executes it locally using massively parallel processing (MPP) to achieve in-memory speed and unlimited linear horizontal scale.

By using GridGain's in-process HTAP support, telecommunications, media, cloud and IoT providers have been able to deliver new services, and improve the end-to-end service experience and security.

Learn More

Introducing the GridGain In-Memory Computing Platform

Contact GridGain Systems

Please contact us at sales@gridgain.com, call us at +1 (650) 241-2281 (US) or +44 (0)208 610 0666 (Europe), or complete our contact form.

About GridGain Systems

GridGain Systems is revolutionizing real-time data access and processing by offering an in-memory computing platform built on Apache Ignite. GridGain solutions are used by global enterprises in financial, software, e-commerce, retail, online business services, healthcare, telecom and other major sectors, with a client list that includes ING, Sberbank, Finastra, IHS Markit, Workday, and Huawei. GridGain delivers unprecedented speed and massive scalability to both legacy and greenfield applications. Deployed on a distributed cluster of commodity servers, GridGain software can reside between the application and data layers (RDBMS, NoSQL and Apache® Hadoop®), requiring no rip-and-replace of the existing databases, or it can be deployed as an in-memory transactional SQL database. GridGain is the most comprehensive in-memory computing platform for high-volume ACID transactions, real-time analytics, web-scale applications, continuous learning and HTAP. For more information, visit gridgain.com.