# 8x8 Powers Real-Time Contact Center Analytics with Confluent

# 8x8

**Headquarters**
Campbell, CA, USA

**Industry**
Tech

**Challenge**
Deliver real-time analytics for cloudbased communications services in a mission-critical, multi-tenant environment.

**Solution**
Use Confluent Platform to create a reliable, secure, and scalable event streaming platform that collects and analyzes calls and other events, generating billions of metrics that fuel real-time dashboards for 8x8's customers.

**Confluent Features Used**
Confluent Replicator, Confluent Control Center

**Results**
• Lower costs and faster service delivery

• Highly resilient platform for mission-critical services

• Rock-solid security for sensitive customer data

• Enables innovation

As a leading cloud communications platform provider, 8x8 enables more than a million business users to collaborate faster and work smarter. The company provides voice, video, chat, and contact center solutions on a unified global platform, complemented by real-time analytics that help enterprises delight their customers and accelerate their businesses.

Advanced analytics are critical in a contact center environment, where supervisors utilize real-time dashboards with hundreds of metrics. These dashboards provide insight into key customer experience metrics such as customer wait time and first-call resolution rates. Supervisors are also provided insight into which agents are successfully resolving inquiries and around what topics, so that they can make staffing decisions as well as predict their future staffing needs.

Dashboards are created through the collection of data at each contact center, which can result in billions of data points every day.

As a fast-growing, multi-tenant SaaS contact center solution, 8x8 needed a way to rapidly and cost-effectively add new customers. To support this, the company decided it wanted a single event streaming platform for all of its customers—one that could scale quickly and easily as new customers joined. The platform needed to be multi-tenant, providing strict data separation—a key customer requirement—and it had to be highly resilient given its mission-critical nature. Robust security was also a must, since 8x8 handles sensitive caller information.

To meet this need, 8x8 chose Apache Kafka® and Confluent Platform. Manu Mukerji, 8x8's Senior Director of ML, AI, and Analytics, says, "Kafka is the right solution for us. It's the de facto standard for streaming analytics, and it gives us massive horizontal scalability in a multi-tenanted environment. Kafka enables us to translate all of an organization's real-time communications into actionable insights that allow organizations to grow and ultimately transform their businesses. Most of all, 8x8 is a security-first organization and Confluent Platform meets our standards for compliance, security, and resiliency. This was critical in selecting Kafka to help us address our customers' requirements."

*"Kafka is the right solution for us. It's the de facto standard for streaming analytics, and it gives us massive horizontal scalability in a multi-tenanted environment. Confluent Platform meets our high standards for compliance, security, and resiliency. We confidently selected Kafka to address our mission-critical customer requirements."*

*— Manu Mukerji, Senior Director of ML, AI, and Analytics at 8x8*

In 8x8's target architecture, Confluent Platform is installed in a high-availability configuration in each of the company's 16 datacenters. Datacenters are then paired for disaster recovery, using Confluent Replicator to mirror data. Confluent collects and analyzes events from 8x8's contact center software, generating metrics that are fed to real-time dashboards and stored in Apache HBase. The company also uses Confluent Control Center to monitor and manage its Kafka infrastructure.

Network performance monitoring is another valuable use case. Mukerji says, "We have retail customers with thousands of locations. We use Kafka to collect quality data from our endpoints in these locations. This enables us to give customers proactive alerts when there's a problem—for example, an issue with a local ISP. Our customers appreciate these alerts greatly."

Mukerji sums it up by saying, "As our company grows and people become familiar with Kafka, it makes more and more sense to use it. That's why we're leveraging Kafka so broadly in different places. We promise our customers a unified experience across all of our communications services. It sets us apart from our competitors. Kafka helps us tie it all together."

## Business Results

**Lower costs and faster service delivery.** "We're talking billions of data points every day for a single contact center," Mukerji says. "With Confluent, we have a massively scalable, multi-tenanted, cloud-based solution that fully supports our own cloud architecture and enables us to quickly add another node to support new customers when needed."

**Highly resilient platform for mission-critical services.** "Our customers rely on our analytics and expect them to work 24x7," says Mukerji. "Confluent gives us that reliability, with high availability within a datacenter and automated disaster recovery across datacenters."

**Rock-solid security for sensitive customer data.** "Security is particularly important for us. We have to comply with GDPR, and we also have a lot of customers in the healthcare industry," Mukerji explains. "These customers want their "Kafka is the right solution for us. It's the de facto standard for streaming analytics, and it gives us massive horizontal scalability in a multi-tenanted environment.

**Enables innovation.** "Our customers expect us to deliver value through innovation—it's one of the reasons they come to us," Mukerji says. "By bringing our data into Kafka, we're able to unlock its potential. For example, we have AI models that predict contact center call volumes for the next 12 hours based on current and historical data. Confluent helps make this possible."

[Learn More About 8x8](#)