AT&T speeds up test data delivery and time to market

We’re on a journey to modernize our apps and to realize the benefits of embracing a DevOps methodology. But while implementing a DevOps methodology and moving to agile is great in theory, you hit a roadblock if you don’t have realistic data to test against. K2view test data management provides a self-service approach for our teams to provision test data on demand – without impacting production source systems.

Ward Chewning
Vice President of Network Services and Shared Platform, AT&T

Background

AT&T Communications is the world’s largest telecommunications company, the largest provider of mobile telephone services, and the largest provider of fixed telephone services in the United States.

As part of providing these services and an exceptional customer experience, the company is continuously developing and improving applications for both customers and internal operational support. However, despite its adoption of DevOps and agile methodologies, its lack of fast, on-demand access to realistic test data prevented the rapid time to market it needed.
Telcos, including wireless carriers, cable, and media companies, keep enormous amounts of data on their customers, networks, devices, plans, and more. Providing access to the right data, at the right time, to the right person, can transform customer experience. That’s true whether it’s via the web or mobile apps. It’s about providing your support team with the insights it needs to provide fast, knowledgeable service. DevOps let you quickly develop, test, and deploy customer and operational systems that keep customers happy.

Traditional test data management involves manual requests, multiple teams, time-consuming database backups, and restores. This means provisioning test data alone can take days or even weeks. Despite the agility of data pipeline tools, such long test data delivery cycles extend time to market by 3 to 6 months, at best. In addition to negatively impacting time to market, traditional dependence on manual test data management processes means data experts are tasked with repetitive busywork, instead of value-added work. That means the cost to support testing, not to mention masking data to keep it secure, continues to rise over time.

Key goals

- Cut the time to provision test data from weeks to minutes
- Improve time to market by eliminating test data bottlenecks throughout all software release cycles
- Reduce overall test data management operational costs
- Ensure test data integrity and compliance

To realize these goals, AT&T adopted K2view test data management tools across all its business and consumer applications, providing the company with high-quality test data to drive agile development, while remaining compliant with data privacy regulations.

The business impact for AT&T

With K2view Test Data Management, AT&T was able to:

- Provision test data in minutes, not weeks
- Accelerate software delivery cycles
- Reduce manual testing resources and costs

Key challenges

Telcos, including wireless carriers, cable, and media companies, keep enormous amounts of data on their customers, networks, devices, plans, and more. Providing access to the right data, at the right time, to the right person, can transform customer experience. That’s true whether it’s via the web or mobile apps. It’s about providing your support team with the insights it needs to provide fast, knowledgeable service. DevOps let you quickly develop, test, and deploy customer and operational systems that keep customers happy.

Testing these apps is where most DevOps and agile development pipelines slow to a crawl. That’s because the data needed to adequately test and re-test each app is trapped in siloed systems and databases.
Solution and results

Unique approach to test data management delivers measurable business outcomes
What AT&T needed was the ability to rapidly access the data it needed for testing, then organize it, and deliver on demand. With K2View test data management tools, AT&T can now provision fresh data, scrub and mask it in-flight, reducing test data creation to a self-service task that takes just minutes, not days or weeks. The solution also eliminates redundant test environments, saving costs on software, hardware and administration, while having zero impact on current operational systems.

Provisioning test data by business entities
K2view takes a business entity approach to test data management. It enables testing teams to model business entities – such as customers, locations, or devices – to provision trusted test data with referential integrity. Testing teams can access the data on demand, via a web portal, or using APIs, accelerating test data preparation and delivery significantly.

Continuous data sourcing, from ANY source
The K2view test data management solution is based on patented Micro-Database™ technology, which allows any data source – traditional RDBMS, legacy systems, data warehouses/lakes, flat files, data services, cloud apps, and more – to be integrated and organized into business entities, and continuously updated to the test data warehouse.

Central, dynamic masking, modification, and generation of data
Entity-based test data management can automatically subset data, without massive bulk copying. Embedded data anonymization functionality makes use of inflight data masking tools, data tokenization tools, and synthetic data generation tools. That means that your test data is always current, compliant, and in the structure needed for the test systems. Finally, test data automation is achieved by integrating the test data provisioning process with the CI/CD pipeline through APIs.

About K2view
K2view provides an operational data fabric dedicated to making every customer experience personalized and profitable.

The K2view platform continually ingests all customer data from all systems, enriches it with real-time insights, and transforms it into a patented Micro-Database™ – one for every customer. To maximize performance, scale, and security, every micro-DB is compressed and individually encrypted. It is then delivered in milliseconds to fuel quick, effective, and pleasing customer interactions.

Global 2000 companies – including Vodafone, Sky, and Hertz – deploy K2view in weeks to deliver outstanding multi-channel customer service, minimize churn, achieve hyper-segmentation, and assure data compliance.