

Vitria VIA Analytic DataFlow

The “Team Accelerator” for IoT Analytics

www.vitria.com

INTRODUCTION

The excitement around IoT and Analytics on IoT data is real and justified. After a period of hype and false starts in the market, customers are beginning to implement systems that generate tangible and substantial business value. Vitria has a unique vantage point on the IoT and Analytics marketplaces as a result of our history of several years’ work building our VIA IoT Analytics Platform. We have witnessed the increasing sophistication that customers and prospects are bringing to the table for discussion. Nevertheless, despite this progress, some of our customers and prospects have demanded more from us. Specifically, they have asked us to simplify the development and collaboration work of the less technical members of their teams. Building high value IoT applications is not easy and often requires the use of highly complex tools that are beyond the reach of all but the most technical staff members. Based on this feedback, Vitria has added a number of critical capabilities to VIA to make the platform more accessible and efficient for solutions developers and business analysts. The most important of these innovations is our Analytic DataFlow (ADF) capability.

Existing Big Data Tools – The Challenge

To put ADF in its proper perspective, it is useful to start with the current state of Big Data and IoT tools. There is no question that there has been significant innovation across several technology domains in recent years – including Hadoop, Cassandra, Kafka, and Spark. They have all played important roles in advancing the practice for Big Data generally and IoT specifically. Nevertheless, while all positive, generally these tools are very technical and are only accessible to developers with deep skillsets in each of them. This requirement limits the capacity of non-technical experts to contribute to projects and in general slows down progress. In our work with various customers and use cases in IoT over the last several years, a clear pattern has emerged. Companies are constrained by both the availability of developers with these specific technical skills, and even when they have those developers, it is very difficult for staff members with business solution knowledge to work with them. Our experience with visual development tools helped us conceive of a new approach to this challenge that is unique in the IoT Analytics platform space.

Analytic DataFlow – Single Modeling Paradigm for All IoT Analytics

As we reflected on the challenge and how we could enhance our platform to address it, several key things became clear to us quickly:



- We needed to design a visual approach that worked primarily for non-programmers first – ideally solution developers and business analysts who know the business issues and challenges the best
- The solution also needed to not only complement, but take full advantage of our powerful and unified analytics core. Our advanced analytics processes all types of analytics – real-time streaming, historical, predictive, and prescriptive – and then drives intelligent actions based on that analysis. Our new visual analytics approach needed to leverage that to the maximum.
- The visual approach needs to include some form of a building block approach to both jumpstart analytics application development as well as the ability to customize new building blocks that can be leveraged by others members of the team or perhaps even more broadly in the organization.
- The analytics created in ADF also need to operate inside a larger framework that has the mission-critical capabilities robust enough to handle the processing and volume demands of IoT Analytics. Creating an accessible modeling environment to attract more users is great, but it needs to operate at run time inside a mission critical platform. VIA's Foundation provides elastic scalability, end-to-end reliability, and holistic lifecycle management. The combination of ADF and the VIA Foundation delivers production-grade analytics processing for the most demanding IoT use cases.

ADF – Democratizing IoT Analytics Development – Empowering Citizen Developers

We have mentioned that one of our goals with ADF was to enlist a broader group of developers and collaborators on IoT Analytics development projects. Achieving this requires the empowerment of solution developers and analysts that have the highest degree of domain knowledge – but who may not have the deep technical skills of Big Data specialists. Key staff members who are not software engineers need to become integral to IoT Analytics projects in a way that has not been the case to date. The most innovative and valuable IoT solutions will typically be a collaboration among three groups: Data Scientists, Big Data technical specialists, and most importantly – solution developers. . ADF was built with this last group in mind and is focused on transforming them into 'citizen developers' and enable their business knowledge to flow into the solutions.

Summary: ADF – The IoT Analytics Business Value Accelerator for your Company

Overall, Vitria's Analytic DataFlow capability provides a way for organizations to accelerate the creation of business value for their IoT Analytics projects. By democratizing IoT Analytics development and simplifying the building of analytics logic, it enables much broader teams to discover and implement their most valuable IoT use cases. In addition, ADF benefits greatly by being part of the large VIA IoT Analytics Platform and taking advantage of the advanced analytics and mission critical capabilities needed to move IoT Analytics solutions into production.

To learn more about ADF, go to the web site here, or contact Vitria at iotanalytics@vitria.com

About Vitria Technology

Vitria is a leading player in the rapidly growing IoT analytics market. Customers include Fortune 500 companies and enterprises across a wide range of industries, including finance, manufacturing, telecommunications, utilities, retail and more. For more information visit www.vitria.com and download the VIA IoT Analytics Platform brochure.

