



Thingstream Brings Real-time IoT Data to the Enterprise

Turning IoT data into real business value

“With TIBCO, we’re adding value. We’re allowing customers to create a new opportunity from the data that we capture, and that’s a perfect example of how IoT changes what we can do and how you can build a business.”

—Bruce Jackson, Chief Technology Officer, Thingstream

CHALLENGE

DELIVER USEFUL IOT DATA TO THE ENTERPRISE

The IoT is made up of an enormous diversity of hardware with mixed communication capabilities and networks. It’s a complex architecture to administer and manage, and especially for processing transactions. Thingstream is in the business of connecting to and collecting data from multiple IoT devices and making it available for processing and analyzing in order to take actions or make business decisions.

In some cases, devices remain in the field for as long as a decade, enduring sometimes brutal conditions—and they need power to consistently send and receive messages over that time. Thingstream required a solution that could provide computations with minimal use of computing hardware.

“Where there is a need for an intelligent network, passing data from one place to another is only part of the solution,” said Bruce Jackson, Thingstream CTO.

SOLUTION

LIGHTWEIGHT INTEGRATION AND MESSAGING

“When we were thinking about how to get data from Internet of Things devices into the enterprise to make it useful for business decisions, TIBCO seemed an obvious choice, and the relationship has been great,” said Jackson.

ABOUT

Thingstream helps simplify Internet of Things connectivity, reducing costs and operational overheads in the delivery of an intelligent network of connected things. The secure, easy to configure, cost effective solution leverages the global telecom network to offer immediate IoT connectivity. Thingstream's IoT connectivity hub provides real-time bi-directional communication to and from devices used in asset tracking, logistics, supply chain, environmental condition monitoring, and retail services.

RESULTS

- Anytime, anywhere connectivity across a variety of cellular networks
- Real-time access to data for proactive decisions
- Bi-directional, secure communication for devices that can automatically act on data

Using the TIBCO Flogo® lightweight integration engine and TIBCO® Messaging, Thingstream built a platform-independent, end-to-end IoT architecture that worked out-of-the-box and without additional dependencies. With TIBCO, Thingstream attained proven, easy to implement technology and a rich set of integration capabilities that complement the Thingstream platform. The solution makes it easy for customers to bridge the gap between devices deployed on the edge and their other resources.

BENEFITS

FAST, NO-CODE DEVELOPMENT

TIBCO lets Thingstream offer a fast way to network IoT devices of all types. “Without ever having to develop code, you can literally click, drag, configure, and have a complete flow of data direct from Flogo® straight into the enterprise,” said Jackson.

Thingstream's bi-directional IoT platform receives messages and also sends real-time messages back to edge devices. Via TIBCO Messaging and its support of the Eclipse Mosquito MQTT protocol, the platform either accepts or ignores messages—depending on the need to react.

SMALL, OPEN, LOW POWER

The lightweight Flogo deployment model aligns with Thingstream's requirements for low energy consumption of IoT devices.

“There's a tradeoff between processing power on a device and battery life. You really want something that will compile down into something that's small and efficient but platform independent at the same time, and that's really the goal of Flogo. So for us, it was a great match,” said Jackson.

BUSINESS VALUE FROM THE IOT

“We have a lot of customers who are moving product across national borders or oceans, and they're tracking not just position but vibration, temperature, and humidity to describe environmental conditions for their customers,” said Jackson.

With Thingstream devices in refrigerated shipping containers, shippers can give their customers real-time access to conditions as proof of appropriate handling.

“You can't sell the ability to move goods from A to B at a certain temperature with a minimum vibration and low humidity if you can't track and measure those things for the duration of the journey.

“You're allowing them to create a new business opportunity from the data that you can capture, and that's a perfect example of how IoT changes what you can do and changes how you can build your business,” said Jackson.



Global Headquarters
3307 Hillview Avenue
Palo Alto, CA 94304
+1 650-846-1000 TEL
+1 800-420-8450
+1 650-846-1005 FAX
www.tibco.com

TIBCO fuels digital business by enabling better decisions and faster, smarter actions through the TIBCO Connected Intelligence Cloud. From APIs and systems to devices and people, we interconnect everything, capture data in real time wherever it is, and augment the intelligence of your business through analytical insights. Thousands of customers around the globe rely on us to build compelling experiences, energize operations, and propel innovation. Learn how TIBCO makes digital smarter at www.tibco.com.

©2019, TIBCO Software Inc. All rights reserved. TIBCO, the TIBCO logo, Flogo, and TIBCO Cloud are trademarks or registered trademarks of TIBCO Software Inc. or its subsidiaries in the United States and/or other countries. All other product and company names and marks in this document are the property of their respective owners and mentioned for identification purposes only.
01/07/19