SnapLogic extends beyond cloud and big-data integration into the Internet of Things

Analyst: Carl Lehmann

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SnapLogic recently announced the Spring 2015 release of its SnapLogic Elastic Integration Platform. Several updates were included, such as improvements to its user interface and API monitoring, and of course, no new SnapLogic integration PaaS release would be the same without new and improved connectors, called Snaps, for cloud and big-data integration. The most notable capability of the new iPaaS release is its support for Message Queuing Telemetry Transport (MQTT), a machine-to-machine connectivity protocol. This represents a stepping stone for SnapLogic that it will use to extend its cloud and big-data integration capabilities to the Internet of Things (IoT), and in so doing, exposes the firm to a new set of IoT middleware and API management rivals.

The 451 Take

SnapLogic entered the big-data integration market just as enterprises broadly began to awaken to the need for new ways to manage, query and analyze big data. Relational databases and SQL queries have served enterprises well, but now the architecture needed for data and application integration is migrating toward emerging Hadoop, Spark, NoSQL and 'data lake' technologies. Recent releases to SnapLogic's iPaaS helped edge the vendor into these markets. Meanwhile, IoT promises to deliver a flood of big data, and SnapLogic hopes to capitalize on this with a stepping-stone approach – the first stone is support for MQTT. But SnapLogic is not alone. Established IoT middleware specialists and various iPaaS and API management vendors are extending their respective platforms to similarly serve the integration and big-data management challenges of IoT. This may herald a coming IoT market 'land grab,' and SnapLogic has signed up to play.

Context

In our last report on SnapLogic, we discussed the enhancements in the vendor's Fall 2014 and Winter releases of its Elastic Integration Platform. They included productivity, performance and scalability updates, along with new capabilities for big-data acquisition, preparation and delivery. The Winter 2015 release was launched to harden the platform, making it more secure and adaptive – capabilities necessary for SnapLogic to appeal to its target market of large enterprises. In between those rereleases, SnapLogic secured a $20m funding round to grow its sales, marketing and operations efforts, and to continue to build out its connectivity platform for big data. Revving the engines for an aggressive start going into 2015, SnapLogic's goal was to capture more than its fair share of what it believes to be a $500bn market opportunity for large enterprise hybrid IT and big-data integration, and now, the big data generated from IoT.

Strategy and products

With the Spring 2015 release, SnapLogic is preparing for the future with hopes to expand its total addressable market opportunity. Support for IoT protocols is a natural extension to various integration technology platforms, and makes sense for iPaaS vendors to pursue. Doing so means that a flood of IoT-generated big data will require iPaaS vendors to harden their underlying platforms. SnapLogic has followed suit in prior releases, and continues to do so.

Its most recent iPaaS improvements include low-latency Ultra Pipelines, used to continuously consume documents from external sources that require low-latency processing of their inputs for real-time application integration; Public Monitoring API, enabling users to proactively query pipeline status and take advantage of their in-place monitoring tools to track the health of SnapLogic integrations; and Lifecycle Management Updates, enabling users to better manage pipeline development and testing. Improvement to its big-data integration capabilities include Multi-Instance Kerberos Authentication, which supports multiple instances authenticated with different Kerberos users on a single Hadoop cluster, and Hadoop for Humans, a cloud-based design tool enabling users to create SnapReduce pipelines and advanced expressions for more complex processing and analytics use cases. New end-user capabilities include Pipeline Execution Statistics, displaying CPU and memory consumption for each Snap in real time, and Message of the Day, whereby administrators can send custom messages to users that help with change management practices. Of course, there are several new and improved Snaps for Anaplan, Google BigQuery, SAP HANA and Splunk, among others.

The Spring 2015 release also readies the firm to enter the IoT market. Its support for MQTT is a

fundamental step in being able to communicate and exchange data between devices and the servers used to monitor and analyze operational execution. But, as we mentioned, MQTT is a stepping stone.

In the world of IoT, several protocols have been developed for specific purposes. For example, IoT devices or machines must communicate with each other (D2D or M2M); device data must be collected and sent to servers (D2S); and servers have to share device data (S2S), possibly providing it back to devices, analysis programs or people. The protocols that enable these exchanges include MQTT, a protocol for collecting device data and communicating it to servers (D2S); Extensible Messaging and Presence Protocol (XMPP) for connecting devices to people, an adaptation of D2S (i.e., people are connected to servers); Data Distribution Service (DDS), a fast bus for integrating intelligent machines (D2D); Advanced Message Queuing Protocol (AMQP), a queuing system designed to connect servers (S2S); and Constrained Application Protocol (CoAP), a Web transfer protocol used with constrained nodes and networks, designed for M2M applications (e.g., smart energy and building automation). SnapLogic reports that it plans to support these and other such protocols in future releases as the market matures and it begins to see increasing demand.

Competition

As SnapLogic enters the market for IoT enablement platforms, it finds that it is both crowded and noisy, with many companies purporting to offer various products and value propositions. Its new rivals include IoT/M2M specialist middleware vendors Exosite, SeeControl, PTC (Axeda/Thingworx) and LogMeIn/Xively. Ayla Networks and Arrayent are also gaining some traction targeting connected product companies with their own cloud offerings.

Traditional IT SOA integration companies such IBM and Oracle have also targeted the IoT integration opportunity with a combination of custom and off-the shelf IoT platform offerings. SnapLogic's typical iPaaS rivals, such as Dell Boomi, Informatica, MuleSoft and now Talend will also queue up to the IoT markets. Amazon's recent acquisition of 2lemetry places it in the competitive mix, where Amazon is intending to build value-added middleware platform services on top of AWS. API management vendors such as Apigee, Intel (Mashery), and CA (Layer 7) are also quickly joining the competitive mix by adding support for IoT-specific protocols and ramping up their marketing efforts.

All these vendors see the same opportunity as SnapLogic, and intend to extend their reach to include IoT in their respective product roadmaps. Actually, this is a testament to the nascent and rapidly evolving nature of this market that such a long list of companies can credibly bid for a seat

at the table.

SWOT Analysis

Strengths

SnapLogic's Elastic Integration Platform is a well-thought-out integration design and execution platform that wins in enterprises that value a user experience with a shallow learning curve.

Weaknesses

Technically, the SnapLogic platform has inherent capabilities needed for IoT and to use and manipulate APIs as part of its overall integration tooling. It could benefit by adding capabilities to manage APIs just as it now manages its own Snaps – handy to have in IoT ecosystems.

Opportunities

IoT is believed by many to spark a sea change of opportunity in virtually all markets. The problem is one of focus and education. Enterprises need to understand how these technologies can benefit their operations and business-intelligence efforts. This learning process is now underway, and SnapLogic is entering the market at a time when it may be able to influence its direction in some way.

Threats

The convergence of iPaaS, API management and IoT middleware means that many existing rivals will jockey for mind and market share. Moreover, since the IoT market is still nascent, several new rivals are likely to show up unannounced.