Research Report

CA Technologies Mainframe Initiatives

Executive Summary
A few months ago we learned that Greg Lotko, the former Vice President & Business Line Executive for System Z at IBM, had joined CA Technologies (CA) as its Mainframe Business Unit General Manager. We knew Greg at IBM – he’s technical (he knows mainframe architecture backwards and forwards); he has a strong sales and marketing background; and he’s a good communicator (see these tweets, blogs and articles) – exactly the type of person that CA needs to lead its mainframe software organization.

We recently had the opportunity to meet with Greg and his staff, and we took that opportunity to get “caught-up” with CA Technologies’ mainframe software organization. What we learned is that:

• CA’s mainframe software strategy remains focused on DevOps (development/operations).
  o The company will continue to focus on building software that simplifies application development/integration between the mainframe and the distributed world. CA’s new Brightside, a modern development toolset designed that enables developers to control, script and develop applications on the mainframe using tools and processes similar to those found in other development environments, is a good example of CA’s commitment to modern development environments for the mainframe.
  o The company is making solid investments in improving its operations management software (adding machine learning/analytics improvements, and operational intelligence to its mainframe management environments);

• Security and compliance remain a central focus within the mainframe division. The company’s flagship Top Secret and ACF2 security environments continue to drive a lot of revenue for the mainframe organization – and the company is investing in further improving its compliance offerings;
Executive Summary Continued

- CA has long been focused on mainframe usability – as in simplifying interfaces to the mainframe, as well as simplifying mainframe management in order to make the mainframe simpler to manage for future generations of mainframe users. Simplification efforts are continuing – with new interfaces to arrive shortly; and, finally,

- CA plans to become more active in “blockchain” – the next generation transaction and ledger environment that will improve transaction security by creating an immutable transaction record, streamline transaction process flow, and reduce overall transaction cost.

For decades it has been argued that mainframe architecture is old, that mainframes will “fade away,” and that mainframes are difficult to use. It is important to note that CA sees mainframe software as a growth opportunity and is aligning its resources to support mainframe growth and to simplify mainframe operations through better interfaces and by introducing new machine learning algorithms to simplify mainframe use. CA is heavily committed to the future of the mainframe.

A Commitment to Mainframes

Greg Lotko started his discussion of CA’s mainframe strategy by telling us that CA has “a balanced mainframe software strategy”. According to Lotko, the first thing that customers want to know about CA Technology’s product offerings is the strength of the company’s commitments to its products:

- With around seventy-five mainframe software offerings (here’s a complete list of CA’s mainframe and distributed systems software product offerings, and here’s a complete list of CA’s Software-as-a-Service hosted offerings), not all products are strategic – some are tactical (they perform a specific function, they do not require constant updates and they already solve a particular need and need not be enhanced).

- Meanwhile, several CA mainframe software products are strategic – they perform specific functions but they offer the opportunity for future growth by providing CA customers with new opportunities (opportunities to reduce cost, to simplify management, to identify new growth opportunities using analytics or new technologies like blockchain and to improve security and compliance.)

CA sales representatives can tell customers specifically which products are tactical and which are strategic – and they can also describe several of the future improvements underway in the strategic product offerings.
DevOps with a Captial OPS

Two years ago, at CA World, we listened to speaker after speaker describes what CA was doing in Development/Operations (DevOps). There was a lot of talk about “the application economy”, about application program interfaces (APIs), about blending programming languages, and the like.

In our discussion with CA’s mainframe marketing organization we still heard some of the familiar “Dev” tools, languages and development environments (Agile) discussion. But what was new was the discussion of the company’s new Brightside environment. Brightside can use the familiar mainframe command line interface (CLI) to interact with the mainframe in a format that is natively familiar. Developers can also use modern, widely-used scripting languages (including shell, python, and javascript) to build new applications and integrate those applications with corresponding applications running on other systems. Brightside also supports development tools such as Jenkins, popular IDEs and editors like IntelliJ or Visual Studio Code. And developers can create specific tasks to submit jobs, compile code, or deploy application changes. Finally, developers can submit jobs for processing, issue TSO and z/OS console commands, and can dynamically provision environments – and can build or find plugins that can be integrated with their applications to gain access to a wide range of mainframe services.

CA has a wealth of other development tools and utilities – but Brightside looks to be a very promising environment for blending mainframe and distributed applications in both traditional and cloud environments.

Two years ago, when we last took a close look at CA’s mainframe initiatives, we would have said that the company was “behind” in its implementation of analytics and machine learning integration with its mainframe management environments. This is no longer the case. In our discussion of operations management with Lotko and his staff, the CA representatives opened the “operational intelligence” discussion with the following axiom: “‘slow’ is the new ‘down’.” CA presenters then proceeded to tell us about their approach to operations management.

CA executives told us that they have added more monitoring, better visibility and better predictability to its operations management products (which we believe given that we’ve seen CA operations management products at various trade shows that we’ve attended). But what has really changed was the extent to which CA has added machine learning to its product offerings. Analytics and machine learning is now seen as a competitive differentiator at CA – and the company now claims to have a cadre of data scientists and machine-learning-savvy developers on staff building advanced predictive analytics and system analytics algorithms. CA is no longer “behind-the-eight-ball” in machine learning in operations management – it has improved tremendously since last we evaluated their operations management environments.

Another change that we observed with regard to operations management is a new commitment to creating “clustered” operations management solutions. What we’ve been seeing lately from CA is a focus on creating operations management solutions by finding new sources of operationally-useful data collected by CA programs or partner programs – and then analyzing that data to identify issues or to streamline troubleshooting. This clustering of data from third parties such as Splunk, IBM and others along with CA operations management tools is a smart way to bring new insights to mainframe managers.
DevOps with a Captial OPS

Security and compliance is one of CA’s core technology – at one point accounting for twelve percent of the company’s overall revenue. In security, the company has clear strengths in identity and access management – and the company continues to invest in broadening and deepening its security offerings (for instance, CA’s leading Top Secret mainframe security offering recently added additional auditing facilities to forensically track user and administrator behaviors with improved, more granular monitoring – providing enterprises with deeper insights into which privileged users are accessing what data.) CA’s ACF2 security offering has enhanced credential management with better, deeper authentication.

What has changed in CA’s mainframe security since we last covered CA (about two years ago). First, product functionality has been expanded, including:

1) Automated alerts, prevent insider threats
2) Rapidly monitoring changing patterns
3) Protect data (3 trillion dollars a year is spent on cyber threats)
4) Automating the discovery of sensitive data
5) Monitoring data that is on your systems (visibly may look like all sensitive data is protected, but what about data in test environments that is left behind?)

Second, the company is now making heavier use of machine learning algorithms to offload administrators from having to analyze a myriad of data from a variety of sources in order to ascertain how users/administrators are using their access rights. Two years ago we felt CA was slow on the uptake in machine learning – we now see solid evidence that the company has “caught-up” in overlaying machine learning on top of its security offerings. Two years ago we would have also said that CA needed to improve its security offerings through partnerships – and we learned that CA has just done that with stronger relationships with Splunk (applications management) and IBM’s QRadar – amongst others).

In security, we see CA heading in the right direction by adding artificial intelligence and machine learning to its security stack to off-load already overburdened systems administrators from having to do a tremendous amount of forensic analysis. In compliance, we note that CA has been aggressively pursuing the European GDPR (general data protection) standard for personal data and privacy protection by enhancing its product offerings to ensure customers can pass GDPR audits.

Blockchain

Two years ago CA had no commitment to blockchain. At present, most of their work in blockchain engagement centers on on-premise deployments with BlueMix integration. But what we expect to see over the next few years is that CA will start to blend its mainframe operational management software (smart contracts, fulfillment, latency and monitoring) – creating a “shadow ledger” that will provide better insights into blockchain flow and system behavior. And we expect CA to become more aggressive at partnering with third-party blockchain solutions providers to bring new and different industry-oriented blockchain solutions to market.
Summary Observations

Shortly before we spoke to CA mainframe executives we had the opportunity to attend CA’s Mainframe Virtual Summit 2018 (found here). At this summit we had an opportunity to listen to CA presenters describe their products and use cases in detail. What became apparent to us was that CA mainframe software has improved dramatically over the past two years (since we last wrote about CA).

Most noteworthy is that the company has significantly changed its mainframe security and operations management offerings by making heavier use of machine learning algorithms. CA now has a well-equipped team of data scientists, as well as teams working on better machine learning algorithms. When it comes to Ops management of the mainframe, CA is also putting huge focus on using “clustering,” ops management software – capturing data from a variety of sources, using the system to perform analysis on that data, and thus improving performance management and troubleshooting through better predictive management.

As for CA and blockchain – we see that as a work in progress. The company has been active in some blockchain/Bluemix engagements – but we need to see more action in this space. To us, blockchain is an architecture that will run best on the world’s fastest, most secure system environment: the mainframe. We hope to see several CA operations management products blended with blockchain to give administrators the ability to see the system, security and performance side of blockchain transactions on the mainframe. We also hope to see more partnerships with blockchain solutions providers.

As we said in our opening, we see CA’s hiring of Greg Lotko as the company’s new GM of its Mainframe Business Unit as a huge step in the right direction. Lotko sees the mainframe as a huge growth opportunity for the company – and has the knowledge and know-how to grow CA’s mainframe software marketshare. Watch for more Clabby Analytics reports and blogs as we track CA’s mainframe progress over the forthcoming year.