

STRATEGY PAPER

Next-Generation Mainframe Management

# Next-Generation Mainframe Management Summary

Mainstreaming the mainframe for  
enterprise IT product direction

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CA Technologies, Mainframe

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made possible™



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# Executive Summary

## Challenge

The IBM® zEnterprise™<sup>1</sup> (model numbers 196 and 114) represents a fundamentally new computing platform for customers. In contrast to traditional mainframe systems, the zEnterprise powerfully combines both mainframe and distributed systems that can be managed together in a coordinated way sharing power, cooling, network, and management capabilities. The zEnterprise offers to address the complexity of today's multi-platform/multi-tier applications by extending the virtues of the mainframe—including security, fault tolerance, efficiency, virtualization and dynamic resource allocation—to other systems and workloads running on Windows, Linux, and UNIX. In short, the zEnterprise allows clients to collapse an entire multi-tier application into a single managed system.

## Opportunity

With the release of IBM's zEnterprise or next generation mainframe, our strategic vision has evolved by building on the Mainframe 2.0 strategy to launch Next-Generation Mainframe Management that capitalizes on:

- the need to reduce cost and improve operational efficiency
- the need to modernize and simplify management
- the need to increase innovation & agility by
  - **Embracing** the next generation hybrid architecture from IBM
  - **Enabling** the use of mainframes in private and hybrid clouds
  - **Empowering** the multi-platform, converging IT workforce
  - **Extending** management to support multi-vendor environments

<sup>1</sup> The zEnterprise includes the following pieces: a central processing complex either the zEnterprise 196 (z196) or the zEnterprise 114 (z114); the IBM zEnterprise BladeCenter Extension (zBX) with its integrated optimizers and/or select IBM blades; and the zEnterprise Unified Resource Manager.

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## A Change of Strategy Means a Change of Pace

### Achievements with Mainframe 2.0

Since its launch in 2008, CA Technologies' Mainframe 2.0 strategy has made a significant impact at hundreds of large enterprises, helping them to reduce IT costs and simplify management tasks with an emphasis on preparing for the next generation of mainframe IT workers:

- CA Mainframe Software Manager™ (CA MSM) has revolutionized the acquisition, installation, deployment, configuration and maintenance of CA Technologies mainframe software.
- The CA Mainframe Chorus suite is beginning to set a new standard in ease of use, training and knowledge transfer to enable the next generation of mainframe workers as they take over from the retiring generation.
- Our exploitation of IBM's zIIP and zAAP specialty processors has led the market in delivering massive cost reduction through IBM's hardware pricing model.
- We remain committed to innovating our z/OS management solutions to continue these efforts at reducing costs and simplifying management.

### Mainstreaming the Mainframe as Part of Enterprise IT

As an extension of our efforts to help clients reduce costs and improve their operational efficiency, we will now extend our focus to help clients better integrate, or "mainstream their mainframe" into their broader enterprise IT strategy, including implementations of private clouds, and reemphasizing the need for cross-platform management tools. As we succeed in simplifying management and workflows via Chorus and extend the scope across Linux on System z, zEnterprise and the distributed environments, we will empower an IT workforce convergence between those managing and operating the distributed environments and those managing the mainframe.

Each company will progress at a pace that is right for them, but we think it is inevitable that we see more unified IT organizations in the future. While there will always be mainframe specialists, we believe that organizations will want to increasingly rely on better integrated toolsets, processes and teams. Our goal while supporting this is to extend the efficiencies of mainframe management to the distributed environment wherever possible, thus helping IT drive down costs.

Our emphasis on delivering cross-platform management solutions not only helps address the aging workforce problem, but recognizes IT's real role in provisioning, brokering and delivering, cross-platform business services. Rather than isolated, point products, managing individual aspects of a service, we will increasingly offer a service-centric approach that starts with management of the entire service and allows drill-down where and when required.

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## Addressing the Hybrid Mainframe

### **z/OS still the backbone of the mainframe and enterprise data processing**

This extension of our mainframe strategy only increases our commitment to the z/OS environment; the backbone of hundreds of businesses across the world. We believe that z/OS will continue to be the heart of data storage and transaction processing, and even more so as companies adopt “cloud IT”. We will continue to be a leader in z/OS management solutions as we help provide that the traditional mainframe can successfully evolve into its new role as an integral part of a broader IT strategy.

### **Linux on System z Management**

Since its introduction as zLinux in 2000, use of the now “Linux on System z” has increased significantly to be an important resource pool in the enterprise infrastructure. CA Technologies has a best in class suite of management tools for managing Linux on System z and we are selling these as point solutions. Our strategic direction is to integrate these tools into our cross-platform management solutions (like CA Cross-Enterprise APM) and into our CA Mainframe Chorus management suite both as an integrated enhancement to existing roles and as a stand-alone Linux Management role.

Many enterprises are choosing not to adopt Linux on System z. Most often this is because the IT department does not have the skills to manage z/VM or another Linux image. Often it is also because of a political divide between mainframe and distributed groups over server platform choices. The CA AppLogic® for System z product (discussed below) will help organizations eliminate both these barriers as they seek to make IT decisions that are aligned to business priorities and unify their IT workforce eliminating the polarization around platforms.

## Managing the Hybrid zEnterprise Mainframe with a zBX Blade Center

This is a new market opportunity created by IBM's investment in the System z hardware platform. The addition of the zBX blade center allows distributed workloads to run 'on the mainframe' and the zEnterprise architecture unifies management of resources and provisioning. From discussions with customers we are anticipating that take-up of zBX will grow slowly over the next 12-18 months. CA Technologies will be partnering to provide solutions that support this growing adoption from inception.

Essentially we will be doing two sorts of work:

- Readyng z/OS tools to leverage the new hybrid architecture interfaces centered around URM, aka zManager
- Integrating point management products to provide unified mainframe-distributed management solutions

The latter will be designed to work equally well across real distributed environments thus allowing unified management of the whole heterogeneous infrastructure.

## Mainstreaming the Mainframe as Part of the Cloud Connected Enterprise

Cloud Computing is a new paradigm of IT service delivery and consumption. Increasingly IT departments will move to providing services using the principles of scalable, on demand delivery and the mainframe will be central to these efforts for companies that have traditionally used mainframes, and some new emerging enterprises too.

CA AppLogic is a product that creates an application-centric cloud infrastructure on x86 based distributed servers. We will port CA AppLogic to System z to first allow Linux on System z to be included in a cross-platform grid. According to current plans, the first release will allow z/OS resources such as CA IDMS™, CA Datacom®, DB2 and CICS to be included in the definition of cross-platform business services. This will enable customers to model their existing business-critical services as entities that can be eventually be managed end-end as cloud services making them more scalable and easier to expand, replicate and move.

The unique qualities of the mainframe can provide a powerful, reliable and cost effective platform for the most critical of workloads running within a cloud environment. With our CA AppLogic product strategy, CA Technologies will enable cross-platform, service centric provisioning that focuses first on private and hybrid cloud implementations, but also embraces and enables the delivery and consumption of public cloud services.

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## Giving Customers What They Ask For

### **Delivering Customer Value as Part of an ISV Community**

A significant evolution of our business and product strategy is the decision to move from a pure management product play to a mix of solution and platform strategies.

Customer feedback about CA Mainframe Chorus and CA MSM confirms that the capability those products offer is what they need, but the value of these products will increase dramatically if they support software from other vendors in addition to CA Technologies software.

IBM owns the mainframe platform, meaning the hardware, the operating system and how the whole processing capability is positioned. CA Technologies will lead the ISV community in offering strong market alternatives to a single vendor solution by enrolling them to leverage our 3 'open' elements: CA Mainframe Chorus, CA MSM and CA AppLogic. In this way we think we can take the next step in defining a Next-Generation Mainframe Management strategy that delivers maximum choice and value to the customer base.

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## Conclusions

We have proven our commitment to z/OS and the IBM mainframe with our successful Mainframe 2.0 strategy. With our evolution to Next-Generation Mainframe Management, CA Technologies is ensuring that we can be a strategic partner to our customers in helping them to get the maximum value from existing and future investments in a mainframe. We are also demonstrating industry leadership by recognizing that all ISVs are important to the customers they serve, and that by working together, even while we still compete, we can deliver a higher overall value point to our enterprise base.

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## The CA Technologies Advantage

CA Technologies has 30 years of recognized expertise in robust, reliable, scalable, and secure enterprise-class IT management software. CA Technologies strategic vision has evolved by building on the Mainframe 2.0 strategy to launch Next-Generation Mainframe Management to change the way the mainframe is managed forever by helping you maximize the value of CA Technologies mainframe products and by providing a simplified experience and innovative solutions that deliver value quickly and flexibly.



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## About the Author

David Hodgson is the SVP, Strategy and Product Management for CA Technologies Mainframe business unit, in his prior position to that he headed product management in CA Technologies' Cloud business unit. David has over 30 years experience in the IT industry with a focus on the mainframe platform.

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