

IBM Tivoli Service Management Center for System z: A Host of Reasons to Consider

Abstract

There are some announcements that make the hairs on the back of the neck tickle. IBM's Tivoli Service Management Center for System z (SMCz) is the most recent in a string of directional revelations with a common theme that is best characterized as Z-zeal. With SMCz, IBM has placed a sizeable wager on its resurgent System z as the logical solution for several vexing issues. First, IT budgets are in crisis. Second, IT infrastructure is overly complex. Third, IT labor costs are far too high. Consolidation of both servers and service management using an extremely robust platform that requires a fraction of the labor costs may justify the wager.

Service Management from System z

SMCz is vast. To understand it, one must picture dozens of Tivoli software products integrated into a sophisticated service management framework running on the System z10. The software that runs on distributed platforms now also supports Linux on System z. IBM has ported their entire service management architecture to System z. These products cover virtually every ITIL process in Service Operation and Service Transition as well as many in Service Strategy, Service Design, and Service Improvement.

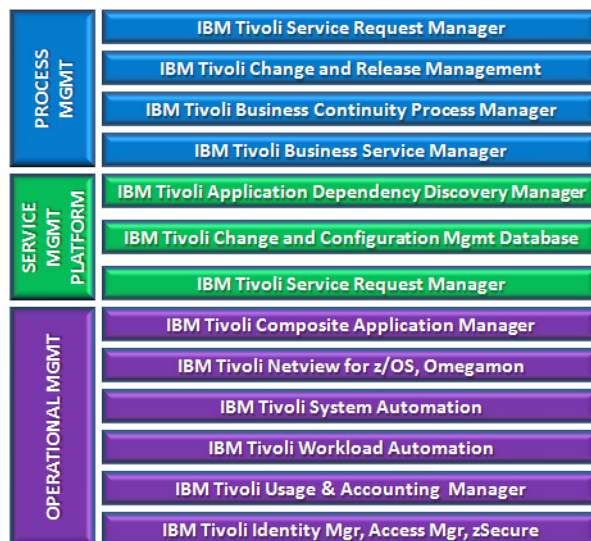


Figure 1. SMCz Components.

IBM's release of SMCz is bold, not because of Tivoli's rich functional integration but because of the strategic benefits that System z brings to IBM's service management architecture. According to ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) research¹, Linux on System z is growing at 72% per year. The reasons for this rapid growth – reduced people costs, simplified infrastructure, high availability, and robust disaster

¹ Mann, A. (2008, January 21). The EMA All-Stars in Enterprise Systems Management for 2008. p. 28. <http://www.enterprisemanagement.com/research/asset.php?id=661>

recovery – are probably the same reasons for the SMCz platform choice. Though there might well be genius in IBM's decision, circumstance and market forces must with genius conspire to create success, and this conspiracy is far from certain.

Long ago, many intelligent IT professionals formed an opinion of the “mainframe” as expensive, antiquated, and unresponsive despite its superiority in I/O throughput, heterogeneous workload management, recoverability, and availability. There was a time when that opinion was supportable. Times change. Any objective analysis of total cost of ownership (TCO), hypervisor, partitioning, parallelism, and hardware elegance should reveal an expanding rationale for hosting an ever-increasing subset of candidate applications on Linux on System z.

Even for those who have no wish to revisit their opinion of System z, SMCz should offer some intriguing advantages. From a service management perspective, most large companies lack a complete view of the IT infrastructure topology. IBM is one of the very few business service management (BSM) solutions that maps applications across distributed systems, networks, and mainframe systems to form a comprehensive weave of dependencies that span the enterprise. For those with System z platforms (77% of Fortune 500 companies), true service management is an illusion unless discovery and application dependency mapping include all critical components.

However, none of this really matters if System z is viewed as an exorbitant platform choice.

The Case for SMCz TCO

Figure 2 shows the change in constituent server costs from 1995 to 2004. The increase in people costs should come as no surprise and may explain IBM's exuberance over System z TCO where the labor cost per transaction has been decreasing at 16.9% each year (as per IBM). Years ago, IBM realized that its crown jewel, the once moribund mainframe, was suddenly cost-effective and perfectly positioned to simplify irrationally complex data centers.

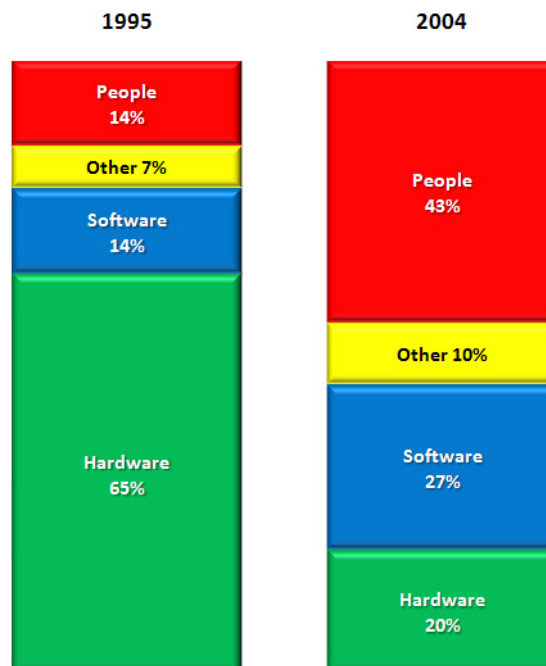


Figure 2. Data Center Costs. Source: IBM, 2006.

For those who are already running Linux on System z, the TCO of SMCz is compelling. Few, if any, additional staff are required. One may not even need to acquire another Integrated Facility for Linux (IFL) System z engines. Software charges might well be limited to the cost of SMCz.

For those with a System z but no IFLs, a few additional staff might be required, though one might be able to offset that cost with savings from consolidating existing service management software and staff. Add to this the cost of the IFL (about \$50K), z/VM, Linux, and minor utilities. The business case may not be persuasive unless one considers that the organization could use the same IFL to initiate server consolidation onto Linux on System z. In this case, SMCz becomes an excuse to save money.

Finally, for those without a System z, SMCz is an unlikely justification for such a large capital outlay. Still, if Linux on System z is a viable virtualization target, a System z10 Business Class (starting at around \$100K) is worth considering.

Case studies and personal observations seem to support IBM's overall TCO claims for Linux on System z. The weakness in IBM's argument emerges when building the business case for the project. What constitutes labor costs for server support and how does gather data and gain consensus? How many IFL engines are required to run a targeted workload? Since no public benchmarks exist to enable such an estimate, advocates are at a disadvantage when constructing the business case.

Key Ramifications

Assuming that IBM continues to improve the persuasiveness of its TCO argument for Linux on System z, SMCz will succeed. If SMCz succeeds, momentum may build for vendors of ancillary service management products to likewise support Linux on System z. After all, the z10 is a self-contained IT metropolis that integrates with distributed environments and z/OS with EAL5 (Evaluation Assurance Level) security, unmatched availability, massive I/O parallelism, and top tier virtualization. If, as IBM asserts (and I concede), the z10 is the most cost-effective platform for Linux virtualization, logic would favor this host for any compatible application, especially service management.

The elegance and versatility of the z10 architecture, should it intersect with a compelling TCO argument, is poised to exploit the dichotomous struggle of today's CIOs.

Will the tide turn, as IBM clearly intends, toward the System z? A confluence of circumstance seems to favor this outcome. The global economy remains anemic. Corporations, desperate for savings, efficiency, and agility will lose patience with complex and poorly managed data centers. TCO will reign. The trend toward a simpler nexus of management will continue. The elegance and versatility of the z10 architecture, should it intersect with a compelling TCO argument, is poised to exploit the dichotomous struggle of today's CIOs.

For IBM, the key will not be the migration of its management software to Linux on System z. Rather, IBM's success is assured when other vendors flock to the same platform for reasons of TCO, integration, and market penetration.

EMA Perspective

Though IBM's TCO argument has convinced an ever-increasing number of companies to purchase IFL engines, the lack of disclosure regarding comparative workload performance leaves the noble z10 shrouded in mystery. The stigmatic "mainframe" label and a generation of skeptics demand more than case studies and soulful assurance. If, as IBM claims, the z10 achieves dramatic TCO advantages when processing a massive heterogeneous workload, then a suitable performance benchmark proving this claim is long overdue.

IBM's Tivoli Service Management Center for System z has the potential to place Linux on System z at the center of the enterprise. However, the success of SMCz depends on the perceived TCO advantage of Linux on System z. To strengthen and popularize

that perception, IBM must (and likely will) take its message to the next level by releasing comparative performance benchmarks of selected platforms running massive heterogeneous Linux workloads that exploit specific z10 hardware advantages. When a compelling and credible TCO message moves from presentations to worksheets, SMCz will shake the service management landscape.

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Enterprise Management Associates, Inc.
5777 Central Avenue, Suite 105
Boulder, CO 80301
Phone: 303.543.9500, Fax: 303.543.7687, Web: www.enterprisemanagement.com

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