Smarter**Computing**

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A Brief z/VM Update
February 2014 Announcements

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z/VM Development Client Focus and Care

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z/VM 6.3 RSU 1401

z/VM Release Status Summary

UPDATE

z/VM	Level	GA	End of Service	End of Marketing	Minimum Processor Level	Security Level
Version 6	Release 3	7/2013	4/2017		IBM System z10®	EAL 4+[2] OSPP-LS
	Release 2	12/2011	12/2016[3]	3Q/2013	IBM System z10®	-
	Release 1	10/2009	4/2013	12 2011	IBM System z10®	EAL 4+ OSPP-LS
Version 5	Release 4	9/2008	12/2014[1]	3/2012	IBM eServer zSeries 800& 900 (z800, z900)	-
	Release 3	6/2007	9/2010	9/2010	z800, z900	EAL 4+ CAPP/LSPP

[1] Or later (Announced August 7, 2012)

[2] Targeted Security Level in V6.3 SOD

[3] Extended from original date (Announced February 4, 2014)

Marketed & Serviced

Serviced, but not Marketed

End of Service & Marketing
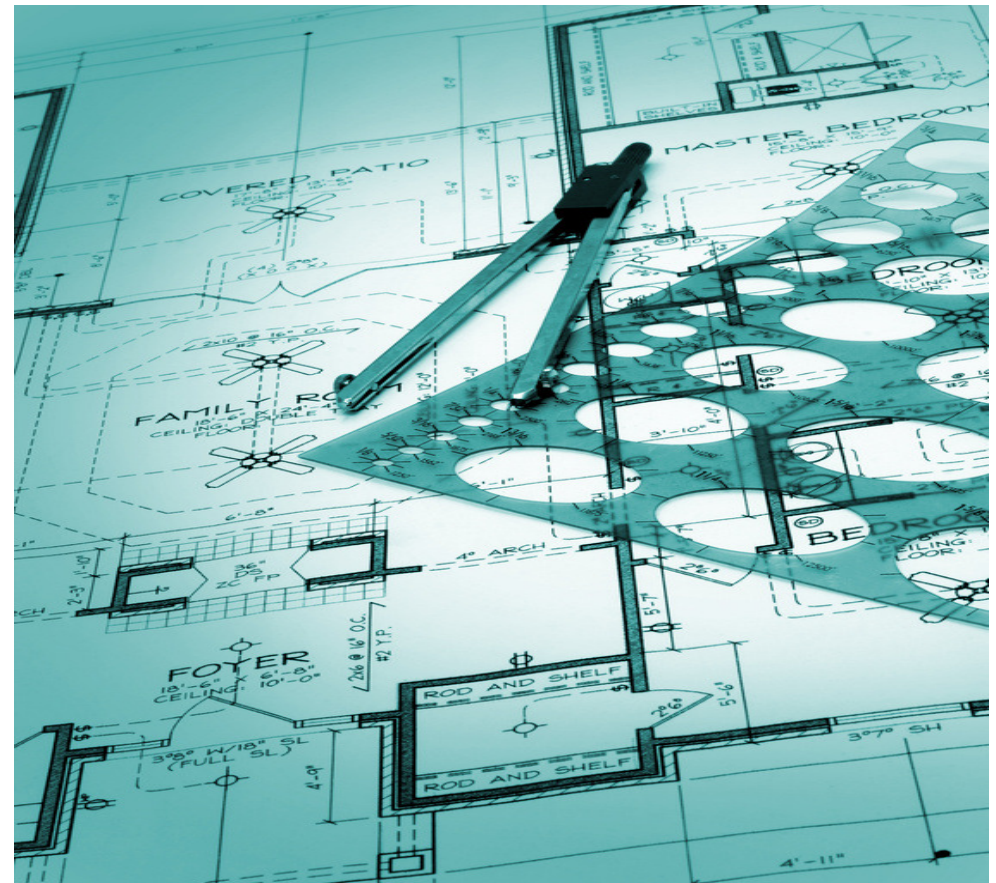
Extended support contracts are available.

Enhancing the Foundation for Virtualization

- Release for Announcement – zBX and zEnterprise System Enhancements

  – February 24, 2014

- Software Enhancements

  – CPU Pooling

  – Environment Information Interface

- Hardware Support

  – 10GbE RoCE Express Feature

  – zEDC Express Feature

- Available June 27, 2014

CPU Pooling

- Fine grain CPU limiting for a group of virtual machines

- Define one or more pools in which a limit of CPU resources is set.

- Two flavors of limits:
  – LIMITHARD - Percentage of system
  – CAPACITY – Number of CPUs

- Coexists with individual limit shares
  – More restrictive limit applies

- Support Details
  – z/VM 6.3 with APAR VM65418 - June 27, 2014

Environment Information Interface

- New interface allow guest to capture execution environment
  - Configuration and Capacity information
  - Various Levels:
    - Machine, logical partition, hypervisor, virtual machine

- New problem statement instruction Store Hypervisor Information (STHYI)
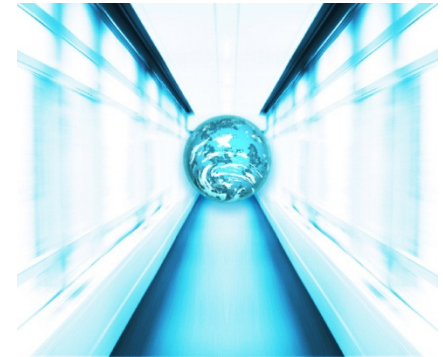
- Includes support for CPU Pooling enhancement

- Foundation for future software licensing tools

- Support details:
  - z/VM 6.3 with APAR VM65419 – June 27, 2014

10GbE RoCE Express Feature

- Support for RDMA over Converged Ethernet for guests

- Based on new hypervisor PCIe support

- Designed to support z/OS's Shared Memory Communications-Remote Direct Memory Access (SMC-R) in z/OS V2.1

- Helps reduce CPU resource consumption

- Support details:
    - IBM zEC12 or zBC12 with appropriate millicode (driver 15)
    - z/VM 6.3 with APAR VM65417 – June 27, 2014
    - z/OS 1.12, z/OS 1.13, z/OS 2.1 with APAR OA43256
    - Fulfills 2013 Statement of Direction

zEDC Express Feature

- Guest support for zEDC Express Feature

- High performance, low latency, low CPU consumption compression

- Possible disk utilization reduction

- Support details:
  - IBM zEC12 or zBC12 with appropriate millicode (driver 15)
  - z/VM 6.3 with APAR VM65417 – June 27, 2014
  - z/OS 1.12, z/OS 1.13, z/OS 2.1 with APAR OA43256
  - z/OS 1.12, z/OS 1.13, z/OS 2.1 with APAR OA44482
  - Fulfills 2013 Statement of Direction

IBM Cloud Management Suite for System z V1.1

- Benefits:
  - Quickly and easily provision a workload on System z
  - Self service portal running on distributed system
  - Monitor health of cloud environment
  - Linux server backup
  - Integration of various key management components

- Components include:
  - IBM SmartCloud® Orchestrator
  - OMEGAMON XE on z/VM and Linux
  - Tivoli Storage Manager Extended Edition

- Known at times as "CMSz"

- Requires z/VM 6.3 with appropriate service

- See http://www.vm.ibm.com/sysman/openstk.html

- Dates:
  - Announced February 25, 2014
  - Planned Availability March 14, 2014

Questions?