

IBM z Systems

IBM z Systems and LinuxONE Update

Gaylan Braselton

gbrasel@us.ibm.com

IBM.

z System Servers Continue to Scale with z13

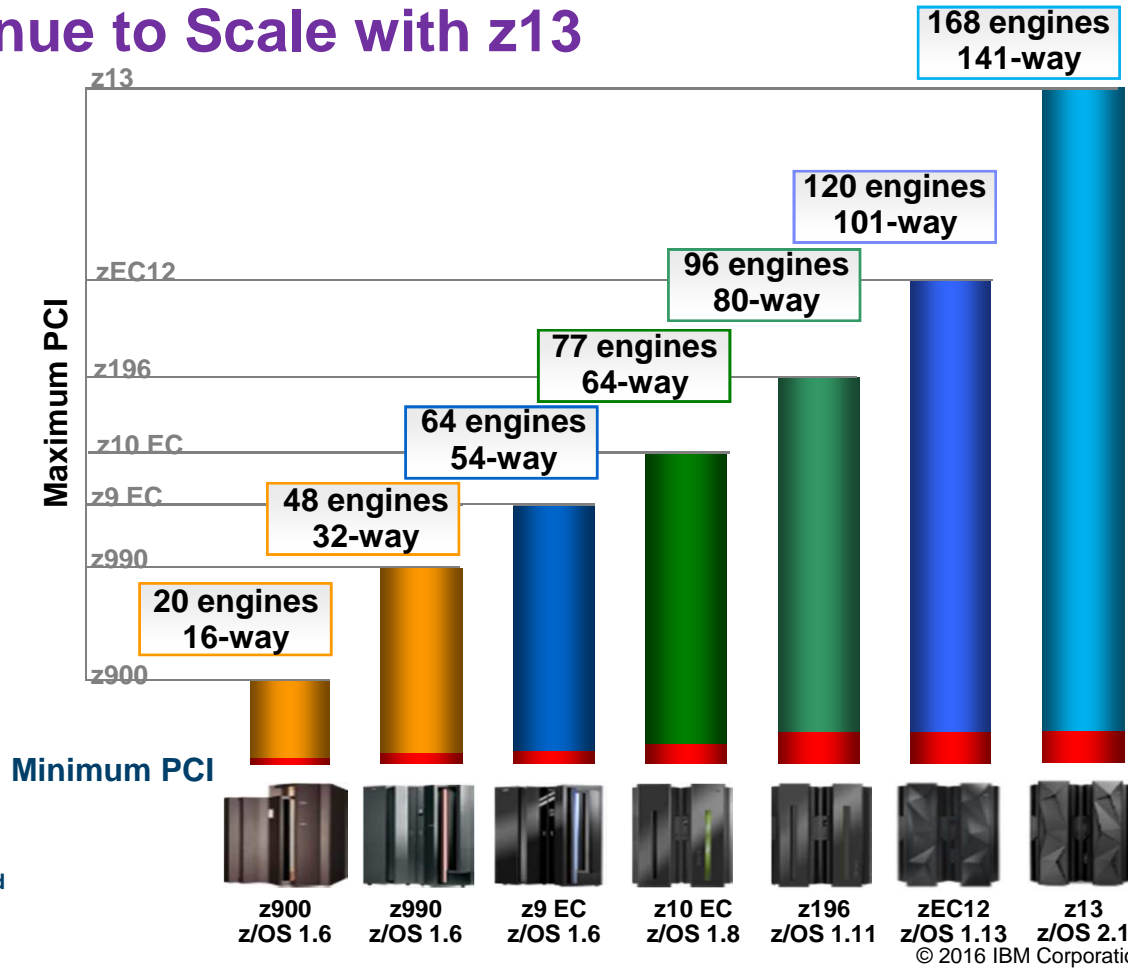
Each new range continues to deliver:

- New function
- Unprecedented capacity to meet consolidation needs
- Improved efficiency to further reduce energy consumption
- Continues to delivering flexible and simplified on demand capacity
- A mainframe that goes beyond the traditional paradigm



PCI - Processor Capacity Index

Note: OS supports varies for the number of 'engines' supported



The all new...

IBM z13s™



z13s delivers more: More performance, more scale, more capabilities

- 2 Models
- Greater scale for **Linux and z/OS**
- **2X** increase in channel speed
- **8X** increase in memory
- **2x** increase in cache
- **50-80%** more bandwidth per I/O domain



Model	Max CPs	Max Cores	Max Memory
N10	6	10	1TB
N20	6	20	4TB

IBM z13s

Performance delivered through multiple dimensions¹

HARDWARE

- 1.4x total z/OS capacity
- 2.1x total Linux on z capacity
- 2.3x performance boost for cryptographic coprocessors
- Up to 1.5x improvement for generic apps with Java8 using SIMD and SMT
- 1.5-1.8x more bandwidth per I/O domain
- 2x increase in channel speed
- 8x increase in memory



- Faster decision making with data-in-memory
- Less exposure to regulatory penalties
- Hundreds of production capable virtual machines
- Faster data sharing between systems
- More scale for mobile transactions
- Faster fraud detection
- Lower cloud cost

SOFTWARE

Hardware / software integration leads to richer optimization



¹ Comparison to zBC12. Official performance data will be available upon announce and can be obtained online at LSPR (Large Systems Performance Reference) website at: <https://www-304.ibm.com/servers/resourcelink/lib03060.nsf/pages/lspindex?OpenDocument> . Actual performance results may vary by customer based on individual workload, configuration and software levels



IBM **LinuxONE**

**A portfolio of hardware, software
and services for hosted Database
as a Service solutions and other
business applications**



Meet the
IBM LinuxONE Systems

The most trusted, secure, efficient and high performance enterprise-grade Linux platform



**IBM LinuxONE
Emperor™**



**IBM LinuxONE
Rockhopper™**



Oracle Pricing With Linux on z Systems and z13

For **Oracle Enterprise Edition (EE)** Database and **Core Based Pricing**:

(Standard Edition (SE) and other pricing models differ)

- Any z eligible, Oracle licenses are not processor specific, and are transferrable
- 1 IFL = 1 Core for any and all z Systems IFLs
- The Oracle Core Factor for any/all System z is 1.0
www.oracle.com/us/corporate/contracts/processor-core-factor-table-070634.pdf
- There are no special contracts or Oracle licenses for z Systems,
same licenses, same backup, DR etc terms apply to z as all other systems
- z LPAR's are considered 'Hard Partitions' by Oracle
for SubCapacity Pricing, where applicable
- Oracle license requirements not affected by multiple threads/core etc (SMT, z13)
- Oracle has no special licenses or contracts and terms for Loz, is same as other platforms