

Q&A Session for  
IBM TechU Talk: The new IBM z15: Part 1 - processor design, new features, I/O cards,  
and infrastructure

Session number: 922400151  
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Q: Can you comment on the SORT accelerator? (Que pasa con el acelerador de SORT?)\_

A: \_The exploitation of the Integrated Accelerator for Z Sort, from a SW perspective, has no GA'ed yet. Please watch for the announce of the DFSort exploitation. If any clients would be interested in working with us as a sponsor user and/or possible beta tester, please feel free to reach out to me at [raschoon@us.ibm.com](mailto:raschoon@us.ibm.com) (Sort aún no tiene disponibilidad general (GA). Por favor estén atentos al anuncio de la explotación de DFSORT. Si algún cliente estuviera interesado en participar como usuario para testeo/beta, por favor comunicarse con Rick Schonmaker, [raschoon@us.ibm.com](mailto:raschoon@us.ibm.com))

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Q: If you need to upgrade from 3 drawer to four, it isn't possible on customer site\_

A: \_No, this is not possible. This is factory only, so please ensure that you plan ahead.

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Q: The fact that the IBM z15 is not field-upgradable from a MAX145 to a MAX190 is very unfortunate. This is a huge change from the last several generations of System z and has a real impact on customers like me.

A: It is worth remembering that the max config in z14 was factory only as well to get to 170 cores. We looked hard at how many clients went from 3->4 drawers in previous generations, and generally it was quite limited. We'd strongly encourage clients if they think they need the headroom for a 4-drawer system to make sure they order that straight out of the factory.

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Q: Integrated zEDC is on the chip, but needs to be 'purchased' to turn on?\_

A: The Integrated zEDC is on the chip and available. The only part that needs to be purchased is a z/OS feature. I believe that this is only for some additional compression features for QSAM/BSAM

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Q: \_Is HMA the future for HMC ?\_

- A: IBM has released the following statement of direction. **Future HMC Hardware:** IBM z15 is planned to be the last server to offer the ability to order stand alone Hardware Management Console (HMC) hardware. For future systems, new HMC hardware can only be ordered in the form of the Hardware Management Appliance feature (#0100) which was introduced on IBM z15. The Hardware management Appliance feature provides redundant HMCs and Support Elements (SEs) that reside inside the Central Processor Complex (CPC) frame, and the ability to eliminate stand alone HMC hardware (tower or rack mounted) outside the CPC frame. Stand alone HMC hardware (tower or rack mounted) can still be ordered and used with IBM z15.

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Q: \_ Can you still use the HMC's in the STP setup in the same way?\_

A: Yes the HMC panels for STP have not changed, the only item that will change is that in the future you will be able to define PTP servers to get the time from. Please see the the statement of direction released with the z15. **IEEE 1588 Precision Time Protocol (PTP):** In the future IBM plans to introduce PTP as an external time source for IBM Z Server Time Protocol (STP) for an IBM Z Coordinated Timing Network (CTN). The initial implementation will be for PTP connectivity via the IBM Z HMC/SE. At that time there will be no change to the use of STP CTNs for time coordination, other than the potential to use a PTP-based external time source. Future implementation is planned to include full connectivity of an external PTP time source directly to the IBM Z CPC, and re-introduction of the concept of a mixed CTN, with support for traditional STP and native PTP implementations. Beyond that, the goal is to enhance the role of IBM Z machines in a PTP environment that addresses the many governmental regulations and security concerns that our clients are facing.

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Q: So we do not need external NTP:s any more? Where is the time received? Do we need a satellite receiver?

A: You will still need the NPT servers PTP is currently a statement of direction. We do have a new redbook actually that covers timing on Z that you can read here: <http://www.redbooks.ibm.com/redpieces/pdfs/sg248480.pdf>

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Q: Which SMF records that captures the z Hardware configurations and utilizations (example- zEDC , SMT, CPACF etc..\_

A: Please review the SMF manual, Chapter 17 has additional information on available SMF Records [https://www-01.ibm.com/servers/resourcelink/svc00100.nsf/pages/zOSV2R4sa380667/\\$file/ieag200\\_v2r4.pdf](https://www-01.ibm.com/servers/resourcelink/svc00100.nsf/pages/zOSV2R4sa380667/$file/ieag200_v2r4.pdf)

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Q: Why no mix of 10g and 25g RoCE

A: It is not supported, the RoCE cards like the fibre OSA cards do not auto negotiate to slower speeds. If you do connect the two you run the risk of major performance problems.

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Q: Is the integrated zEDC accelerator chargeable?\_

A: No the hardware feature is not chargeable but there is still a z/OS software feature.

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Q: How is AI going to play on IBM z15 throughout?

A: Please see the following website <https://www.ibm.com/analytics/data-and-ai-on-ibm-z>

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Q: SMF 113s

A: These are the CPUMF Counters.

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Q: Feature Code zEDC? How many ? All or nothing\_

A: There is no F/C for the Integrated Accelerator for zEDC it is on every PU that is plugged in the system.

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Q: Our company just went from M03 to M04 on 4 Z14s within the last 60 days. \_

A: We know some clients have done this, and clearly you are one of them! Unfortunately, there was a real challenge in adding this in the field due to the frame new structure.

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Q: \_zEDC doesn't require z/OS zEDC feature but there are exceptions. Could you elaborate?

A: The following doesn't require the z/OS feature

- IBM Java
  - Cobol
  - C
  - IBM Content Manager OnDemand
  - IBM Encryption Facility
  - IBM Sterling Connect:Direct®
  - z/OS HTTP Server
  - OpenSSH
- IBM MQ for z/OS

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Q: Like if customer does not use DB2 but VSAM flat files and need to use zEDC feature. Do they need to buy the z/OS feature?

A: The following does require the z/OS Feature:

z/OS SMF Logstream  
z/OS QSAM/BSAM  
z/OS DFHSM / DFDSS  
Db2 for z/OS V12 LOBs  
z/FS in V2R3

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Q: We had presentations which said the z/OS feature (Charged) is no longer required. Hence the query

A: The following does require the z/OS Feature for zEDC:

z/OS SMF Logstream  
z/OS QSAM/BSAM  
z/OS DFHSM / DFDSS  
Db2 for z/OS V12 LOBs  
z/FS in V2R3