

Overview of Integrated Accelerator for zEDC on the IBM z15

0:01 Compression is when you make data smaller. This is important because when you do compression at scale, and at a low enough cost, you can make enough data smaller so that things like storage, data transmission costs, and encryption become more economical.

0:15 IBM z15 has industry leading technology around compression acceleration, and it's integrated into the entire z/OS software stack.

0:23 The IBM z15 on-chip compression, known as the Integrated Accelerator for zEDC, replaced the existing zEDC Express Adapter, resulting in significant performance improvements.

0:33 We took measurements in a controlled environment and found up to 8 times faster application elapsed time with no additional CPU time, and up to 15 times throughput improvement in Java, when compared to a z14 with zEDC Express.

0:46 These results are workload dependent. Your results might be different.

0:50 If you have already enabled compression with zEDC Express, no migration is required. However, you might now consider enabling compression more pervasively.

0:59 There's a multitude of use cases you can take advantage of that focus on encryption, storage, and data transmission savings.

1:06 When exploiting data set encryption, compress the data first for efficiency.

1:11 Our testing with z15 while using compression of transaction data before encryption showed 30 times lower latency and up to 28 times less CPU utilization when compared with software compression.

1:21 You can use compression with SMF logstreams, BSAM and QSAM datasets, and migration and backup processing with hsm and dss.

1:29 Compress data in the z/OS Distributed File Service (or ZFS) to save disk space.

1:33 For in-application compression, zEDC uses a modified version of the zlib library shipped with z/OS.

1:41 You can compress Db2 large objects (or LOBs) and archive logs as well as IBM Content Manager OnDemand archives.

1:47 To transmit compressed data from z/OS to z/OS or z/OS to other platforms, Sterling Connect:Direct for z/OS uses zEDC.

1:54 The on-chip compression of the Integrated Accelerator for zEDC lowers the cost of storing data and reduces network bandwidth for sending data.

2:02 We look forward to you learning more about this new offering.