

Atos Breakout session
11 09 2019 – 10.00

Intel Optane Data Center Persistent Memory - Experience sharing in a SAP HANA content



Mark Walker

Intel Optane Data Center Persistent Memory - Experience sharing in a SAP HANA content

Abstract:

Intel Optane Data Center Persistent Memory usage in the context of SAP HANA

We have had the opportunity, in close collaboration with Intel and experts from SAP, to put into use Intel's persistent memory solution, DCPMM. This collaboration has brought us several insights into this technology, especially in an SAP HANA context, where the machine has several terabytes of memory (our 'reference' machine had 6TB DRAM, and 6TB DCPMM, and we have a second machine with 3TB DRAM and 12TB DCPMM – both of which have their own constraints and use-cases).

The proposed paper is thus:

An overview of Intel DCPMM (Apache Pass, AEP, or Pmem) – what it is, how it works, and where it fits into the storage hierarchy.

“The good, the bad, and the ugly” – what AEP brings to the table, the advantages, the disadvantages, and the potential pain points, both with the memory itself (latency, ...) and the “ratio” of DRAM to PMEM that DIMM sizes impose.

Some specifics about using AEP with SAP HANA – how HANA uses the PMEM, what impact that has on HANA, and what limitations there are. Additionally, some SAP benchmark results on BullSequana machines with, and without PMEM.

What are the next steps for the DCPMM technology, especially in a SAP HANA context – and what impact this will have both on Intel, SAP, and Atos

Intel Optane Data Center Persistent Memory - Experience sharing in a SAP HANA content

Presenter:
Mark Walker
E Databases
Senior Expert

