Improving SAP HANA Performance—Again

“My SAP runs too fast.”

I’ve been talking to SAP customers for nearly 20 years and have never heard that complaint. On the other hand, slow, spiky responses are often the first thing an application user will mention.

This happened again last week as I was flying on the “nerd-bird” from San Jose to Austin. I had a lovely conversation with my seat neighbor, a fascinating gentleman who works in finance at a biotech firm. We made agreeable small talk for two hours until I said I work on SAP. I spent the final hour of the flight listening to him go on about how slow SAP FI is on his legacy storage.

The Right Storage Matters

The good news for my new friend is that the right storage platform can make all the difference for SAP HANA performance. At Pure Storage®, we have a history of innovation specifically focused on improving the performance of mission-critical applications and databases without additional cost or complexity.

- We started by providing all-flash performance with best-in-class data reduction for SAP, including HANA. This provides fast, smooth business processing **and** efficient all-flash storage to deliver performance and cost savings at the same time.
- Pure was the first SAP partner to introduce and certify all-NVMe Flash storage, which further increased performance and provided greater performance density for significant data center rack real-estate savings.
- Last year we pioneered the use of SAP HANA's Native Storage Extension (NSE) for warm data management, pairing it with our new DirectMemory ™ Cache based on Intel Optane. The result? 90% of the performance of in-memory HANA at a fraction of the cost, dramatically improving TCO without a noticeable increase in latency.*

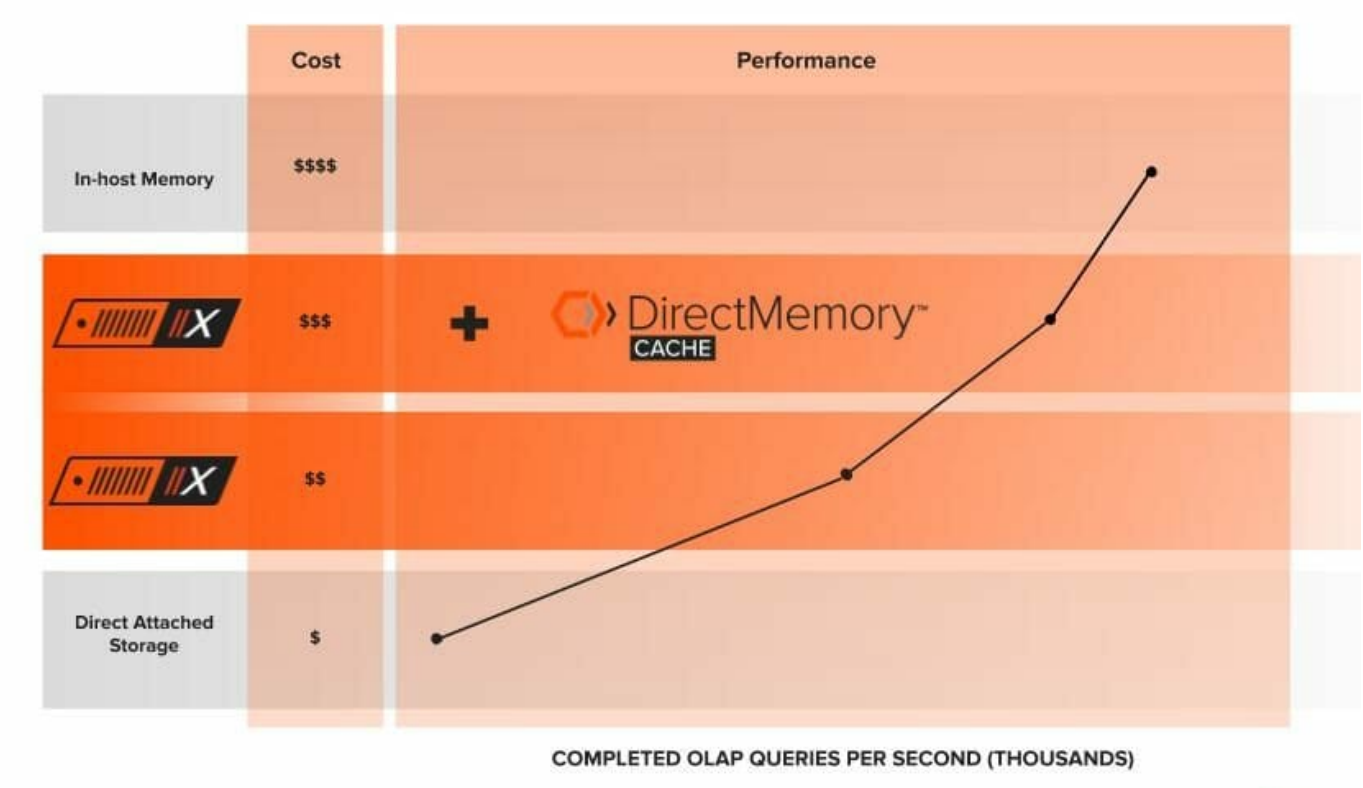

Figure 1

Increase HANA Performance with FlashArray//X

Building on our NSE/DMC innovation, Pure FlashArray™//X delivers decreased response times for analytical queries and report generation for data using warm data management.

How much faster? FlashArray//X increases analytical query performance for HANA over the previous generation by up to 50% when using warm data management. As shown in Figure 2, the FlashArray//X70 with our R2 controller we clocked about 17K queries completed/second, while the new R3 clocks in with 24K!

Of course, nothing is as fast as running 100% in memory. But that performance comes at a steep cost for both HANA licenses and compute infrastructure—potentially millions of dollars for an enterprise. By comparison, FlashArray//X R3 increases performance for these kinds of workloads at no additional cost as part of the Pure Storage Evergreen™ Gold subscription.

SAP Certification

As with our previous innovations for SAP, we worked closely with SAP to make sure FlashArray//X R3 is fully certified as an enterprise storage solution and ready to deliver value to our joint customers. FlashArray //XR3 is certified to serve the following number of HANA nodes per model:

- 14 nodes per //X10 R3
- 22 nodes per //X20 R3
- 30 nodes per //X50 R3
- 38 nodes per //X70 R3
- 44 nodes per //X90 R3

Knowing both SAP and Pure Storage stand behind you provides assurance that you can trust FlashArray to support and protect your mission-critical data—but faster than before.

Data Storage that Doesn’t Age

This is also great news for if you have the Evergreen Forever subscription because you can automatically benefit from Pure’s continuous innovation—with FlashArray//X R3 included controller upgrades, free with the Evergreen three-year renewal. You can also upgrade to the FlashArray//X R3 at any time and get full list-price trade-in credit for your old controllers when you use Evergreen. Evergreen Storage provides seamless, rapid upgrades without disruption, which is precisely what SAP users, like my new friend in the window seat, demand.

Learn more about improving your SAP performance with FlashArray //X.

* Based on internal Pure Storage testing. Your results may vary as differences in system configuration might affect actual performance.

More About FlashArray//X

- Learn more about how FlashArray//X can help simplify your work life.
- Blog posts:
    - Improving SAP HANA Performance—Again
    - Pure FlashArray Outperforms DAS!
    - Comparing Customer Experiences with FlashArray//X Competitors
    - Accelerate Oracle Database with the Next-Gen FlashArray//X