8 Tips and Tricks

100% Flash

1. Legacy storage recommendations for Oracle DB no longer hold true in the flash world. For example, you absolutely should put redo logs on flash to accelerate performance. In fact you can dedicate a LUN to the redo logs to more precisely analyze I/O performance.

Speed OLTP

2. You can quickly tell if your Oracle DB can benefit from flash by looking at the "Top 5 Timed Foreground Events" section of your AWR report. For example, if you have an OLTP application for which log file sync or log file parallel write appear in the Top 5 Wait Events, your database is not able to write redo as fast as your application generates it. The Pure Storage FlashArray accelerates I/O to redo logs.

Simplicity

3. On a Pure Storage FlashArray, there is no significant performance benefit to using ASM over a traditional file system, so the decision can be driven by your operational policies and guidelines.

Lower Latency

4. Some of the most common I/O wait events include db file parallel write, db file sequential read, log file sync, and log file parallel write. If these or any other I/O wait events appear in the "Top 5 Timed Foreground Events" section of your AWR report, your Oracle database will benefit from flash storage.
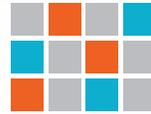
Granularity

5. Block size is not a consideration you have to worry about on the FlashArray. Pure Storage is based on a fine-grained 512-byte geometry, so there are no block alignment issues as you might encounter in arrays designed with, for example, a 4KB geometry. Another benefit is a substantially higher deduplication rate than seen on other arrays offering data reduction.

Performance

6. Unlike disk-based storage, you don't need multiple LUN's (spindles) in order to gain IOPS. The IOPS capability of the Pure Storage FlashArray is a function of the controllers, not how many LUN's are behind them.

Save Time

7. Time required to take snapshots on Pure Storage FlashArray is the same regardless of how many LUNs are included, and regardless of the size of the LUNs. Snapshots always take a second or less to perform.
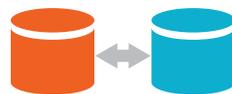
Snapshots

8. The FlashArray leverages metadata to create snapshots nearly instantaneously and that consume very little space. If you're creating clones of production databases to run reports and analytics because you're I/O constrained, you can now avoid extra hardware and database licenses (not to mention DBA resources) just to create and maintain clones.