ORACLE
DATABASE IN-MEMORY

Oracle Database In-Memory Versus SAP HANA

Business Need	Oracle Database In-Memory	SAP HANA
Works transparently with existing applications, BI, and reporting tools.	**100-percent compatible with all Oracle and independent software vendor (ISV) tools and applications in addition to custom-written applications.**	Much less functionality. Requires new applications or recoding of existing applications.
Compatible with cloud computing, big data, and data warehousing.	**No database size limit; uses dynamic random access memory (DRAM), flash, and disk transparently. There is no overspending on storage because users don't have to put their entire database in expensive DRAM.**	The entire database must fit in costly DRAM, and large data warehouses and big data will not fit. Database cloud consolidation is also not feasible. SAP claims users can combine HANA with other databases such as Sybase to migrate data to and from HANA, but this is a fragile, complex, and slow architecture.
Ensures data availability and security.	**Very proven Oracle Maximum Availability Architecture is inherited by Oracle Database In-Memory, mitigating planned and unplanned outages. Memory duplication prevents downtime on node failure.**	Immature product and missing availability features make downtime unavoidable. No fast recovery from node failure. Security functionality is basic. It takes many years of real-world experience to cover all high-availability and security scenarios.
No hardware lock-in or limitations.	**Oracle Database In-Memory works on any platform running Oracle Database 12c.**	HANA works only on SAP-certified, X86-based HANA appliances from partners. Customers cannot run HANA on existing noncertified hardware.
Leverages existing IT talent (DBAs, developers).	**No new APIs and minimal new DBA commands are required, making Oracle Database In-Memory trivial to implement and maintain.**	Because HANA is a new "platform" with unique operational procedures and programming practices, a new team or retraining is required.
Scales for analytics and online transaction processing (OLTP).	**Oracle Database In-Memory's unique dual format enables transparent scale-up and scale-out for analytics and OLTP workloads running together.**	HANA uses a column format for high-performance analytics, which has severe architectural limitations for OLTP performance and scalability. Scale-up and scale-out are very immature.

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