

Operating large, business-critical ERP systems is a complex challenge. Running SAP NetWeaver on Oracle Cloud Infrastructure and technology is a good way to efficiently manage this task.

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am Kuen-Sang leads the Global Oracle-SAP presales team and provides his reasoning on the advantages of running SAP on Oracle Cloud and Infrastructure Technology.

Since 1988, when Oracle began working with SAP on the development of SAP R/3, tens of thousands of customers worldwide have benefited from the close cooperation and multifaceted relationship between the two companies in their SAP Business Suite implementations.

The database

The initial collaboration in the 1990s focused mainly on optimizing SAP applications running on Oracle Databases and supporting Oracle Database options that improve database performance and simplify system administration—for example, Advanced Compression (compression of tables and indexes), Partitioning (partitioning of tables and indexes) and Advanced Security (data encryption). It was later extended to include support database options that enhance SAP applications in terms of resilience, availability, and security—for example, Oracle Real Application Clusters, Active Data Guard, and Database Vault.

Infrastructure

When Sun Microsystems was acquired by Oracle in 2010, Oracle became not only an infrastructure partner to SAP for SPARC and X86-based servers/storage to run SAP NetWeaver applications, but also a key technology partner in terms of Java for the NetWeaver Java stack.

Additional efforts were made to certify the Engineered Systems product range—in particular Oracle Exadata—for use with SAP Business Suite. Since then, many of the largest customers have relied on the power of Oracle Exadata to run their SAP ECC/BW systems and other high-throughput NetWeaver applications.

Integrated Cloud

In 2016, Oracle Cloud Infrastructure (OCI) was launched, signaling Oracle's new status as an integrated cloud provider for customers. This enabled customers to deploy their SAP Business Suite applications onto OCI for worry-free operation.

These developments showcased the multi-faceted relationship between Oracle and SAP, which to this day remains a bedrock of stability and performance for many customers, both large and

small, around the world. Oracle's combined and integrated expertise in databases, engineered systems, operating systems, Java and cloud technology provides NetWeaver customers with unrivaled advantages. No other hyperscaler is able to offer such comprehensive, integrated solutions that enable worry-free operation of ECC and other NetWeaver applications.

The main advantage is the Oracle Database, which powers the largest ECC and NetWeaver systems worldwide. Through proven best practices and smart application of database options, large SAP systems can be operated smoothly and efficiently.

In-memory option

The in-memory option of the Oracle database enables in-memory processing for ECC, BW and other NetWeaver applications without the need to make changes to Abap programs.

In terms of database licensing, Oracle can either offer the database and optional licenses as needed either directly, or through an Oracle database license subscription as part of Exadata Cloud Services or Exadata Cloud@Customer.

Exadata technology has proven to be indispensable for many of the world's largest ECC implementations. This technology has been shown to be particularly effective at accelerating most of the customers' self-developed Abap programs and Z reports, without requiring any changes to the Abap code. Integrated quarterly bundled patches gave customers peace of mind when patching their Exadata systems as these patches are certified by both Oracle and SAP.

Exadata technology is not only available on-premises, but also for various forms of cloud deployment with a cloud deployment cost model.

Oracle Cloud Infrastructure

The Oracle Cloud Infrastructure (OCI) offers many benefits for NetWeaver customers. For many companies, the main reason for using cloud services is simple: they cost less than operating an on-premise data center. It is a matter of cost reduction. OCI customers pay for IT as an operating expense, and OCI benefits from economies of scale; this then results in savings for the consumer.

Another advantage is agility. OCI enables companies to respond quickly to new opportunities and problems by taking advantage of technological innovations. Since IT teams no longer have to worry about purchasing and provisioning hardware, databases, and containers, new development projects can be set up in app/dev environments in a matter of minutes.

Flexibility and scalability

OCI allows organizations to increase or decrease their computing power as needed. In an on-premises data center, such an increase or decrease in available resources would not be possible to achieve as quickly. Security is also critical. OCI constantly monitors the environment for potential security threats and patches/updates systems—often using automation—in a way that is only feasible in the cloud.

Sustainability is another important advantage of OCI. Traditional data centers have a low utilization rate, which means that a lot of energy is wasted on running servers with unused capacity. OCI's high utilization rate results in more efficient use of resources.

Failover and disaster recovery

OCI provides various failover capabilities, including a combination of failover and disaster recovery options, as well as automated resource management to keep applications running. In terms of accessibility, OCI enables organizations to make an easier transition to teleworking by allowing employees to access critical SAP applications from their own laptops at home. It also allows employees access to high-performance workloads when necessary. In addition, OCI maximizes availability through strong redundancy and distribution across separate zones within data centers and across multiple cloud facilities.

Efficiency and growth

By moving to OCI, IT departments no longer have to worry about time-consuming hardware maintenance or servicing, as these are now handled by OCI. The speed with which companies can adopt OCI and then add resources at any time helps them to seize new business opportunities and build the capacity to support rapid growth. As a cloud-based infrastructure, OCI can support an organization's growth plans by scaling to meet demand spikes and keeping customer-facing, revenue-generating systems up and running.

Advantages for NetWeaver customers

The advantages for NetWeaver customers that are only available on OCI include, first of all, the Oracle Exadata technology. This technology is available on OCI as a service. Customers can use the power of Oracle Exadata for their ECC and other NetWeaver applications on a subscription basis,

without having to spend a large amount of capital to purchase an on-premise Oracle Exadata system.

Exadata Cloud@Customer is aimed at customers who need not just data sovereignty, but also data residency in-house due to regulatory reasons, or requiring extreme low latency to the database. They can subscribe to Oracle Exadata Cloud@Customer—a model in which we deploy the Exadata systems in the customers' data centers, as a complete cloud service. Oracle Real Application Clusters (RAC), the gold standard for database availability, is only supported on Exadata Cloud Services or Exadata Cloud@Customer for SAP customers who want to work in the cloud.

Furthermore, only Exadata Cloud Services and Exadata Cloud@Customer are supported for subscriptions with an Oracle Database License and included subscription if the customer requires it. One of the many benefits of a license-included subscription is the inclusion of all database options that may be useful for their SAP systems (for example, RAC, in-memory, advanced security, and advanced compression).

It is also important to note that Oracle Linux is the only Linux that can be used for ECC, BW and other NetWeaver applications running on Oracle database on supported hyperscalers. An Oracle Linux Premier Support subscription is mandatory as stated in the corresponding SAP notes.

The Oracle Linux Premier Support subscription is bundled with the OCI subscription, resulting in significant costs savings for NetWeaver customers planning cloud deployments.

Conclusion

The many benefits that Oracle brings to the customer are significant, and these lead to the ultimate Oracle advantage for SAP NetWeaver customers—peace of mind. With this, customers can focus on new replacement ERP projects, and smoothly operate their ECC and NetWeaver-based applications till 2030 and possibly beyond.

Proven large scale NetWeaver deployments

There are success stories from some of the largest NetWeaver customers who have successfully migrated onto OCI, with SAP database sizes of up to 180TB. For more information please write to: frontdesk-sapcc_mb@oracle.com A good reference story and a related video can be found here:



Customer success story with Loblaw



Keynote speech by Oracle CEO, Safra Catz



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