

ORACLE WHITEPAPER

ORACLE DATABASE
STANDARD EDITION 2

Oracle Database Standard Edition 2

Affordable, Full-Featured Database for SMB Customers

Oracle Database Standard Edition 2 is an affordable, full-featured database built for unprecedented ease of use, power, and performance. From single-server environments for small business to highly distributed branch environments, Oracle Database Standard Edition 2 includes all the features necessary to build business applications:

- Optimized for deployment in small enterprises, line-of-business departments, and distributed branch environments
- Offers a new cloud-ready container database architecture, making it easier to migrate to the cloud
- Includes rapid application development tools and supports a wide range of developer frameworks and data types including XML and JSON
- Supports enterprise-class high availability with Oracle Real Application Clusters (Oracle RAC)
- Provides complete upward compatibility, protecting your investment as your usage requirements grow
- Oracle Database Standard Edition 2 can be licensed on servers supporting a maximum of two sockets on all Oracle supported operating systems, including Windows, Linux, and Unix.
- There is no limit to the number of cores on the servers running SE2, but Oracle Database Standard Edition 2 automatically restricts usage to a maximum of 16 CPU threads at any time. When used with Oracle Real Application Clusters, each Oracle Database Standard Edition 2 database uses a maximum of 8 CPU threads per instance at any time. Multiple SE2 databases can be run on a single server to fully utilize the server CPU capacity.

Why Oracle Database Standard Edition 2?

Oracle Database Standard Edition 2 (SE2) streamlines the existing Standard Edition (SE) and Standard Edition One (SE1) offerings into a single offering going forward that continues to provide an affordable enterprise class database for SMB customers. When SE was first introduced single and dual core CPUs were the norm. Today, we have 18 core CPUs and 32 core CPUs are around the corner. Not to mention that per core performance has

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BENEFITS

- Greater functionality including high availability and rapid application development tools supporting a wide range of developer frameworks.
- Cost effective license model – licensed per Socket vs. Cores regardless of how many cores are added over time
- Easy migration to the cloud
- Provides an easy path for scale and growth to Enterprise Edition or Oracle Cloud.
- Zero-cost license migration from either SE or SE1 to SE2.

increased greatly. This offering takes into account the ongoing hardware trend of increasing cores per socket. This trend has essentially made 4 socket servers obsolete. Therefore, SE2 aligns us better with what customers are using.

Cost and Scalability Advantage: Oracle Database Standard Edition 2 can be licensed on servers with a maximum of 2 sockets. However, the core counts per 2-socket server can increase over time without impacting customer license obligation. With Oracle SE2, customer license costs remain the same regardless of the number of cores in the socket. Each SE2 database is automatically capped to use a maximum of 16 concurrent user threads. Since most customers run multiple databases on a single 2-socket server to exploit the full server CPU capacity, no matter how many databases they run on a single server, their license obligation is for 2-sockets only.

What does this mean if I'm currently licensed to use Oracle Database Standard Edition (SE) or Oracle Database Standard Edition One (SE1)?

Investment Protection: You can choose to stay with SE or SE1, and Oracle will continue to offer support as per our support policies as follows:

- SE1 and SE for 11.2.0.4 are in extended support, which includes patching, through the end of DEC-2020. Extended Support fees are waived from Jan-2015 to 31-May-2017
- SE1 and SE for 12.1.0.1 are in premier support, which includes patching, through the end of AUG-2016. Sustaining support is then available indefinitely.

Zero-Cost License Migration from SE: SE customers can choose to upgrade to Oracle Database Standard Edition 2 without incurring any additional license cost.

License migration from SE1: With a minor support cost uplift (20%), which averages to about \$500 per socket across all SE1 customers, SE1 customers gain access to enterprise capabilities including RAC for high availability and new features such as a container database architecture that makes it easy to migrate to the cloud, and JSON support that enable big data analysis and provide an enterprise class document store. Refer to the Database Licensing Information for more details about the features including in this edition.

With SE, I could scale my license to up to 4 sockets, but I can

only scale to 2 sockets with SE2?

A small percent of the install base uses SE with 4 socket systems. The most common configuration is 2-socket. For the small percent of customers that do run SE on 4 sockets systems, the following options are available:

- Continue to stay with SE for their existing license and Oracle will continue to support it as per support policies.
- Consider an upgrade to Oracle Enterprise Edition or Oracle Database Cloud Service.
- Switch to a new 2-socket server (likely offering more processing capacity).

Is it possible to license SE2 on a single processor of a 2 socket server?

- Yes, SE2 can be licensed on a single processor of a 2 socket server provided the server is hard partition (using any of the approved hard partitioning technologies; see the [Partitioning Document here](#)) such that Oracle program is not installed and/or running on the 2nd socket.

Is it possible to license SE2 on a single processor of a >2 socket server using hard partitioning?

- No, Oracle Database Standard Edition 2 may only be licensed on servers that have a maximum capacity of 2 sockets.

Is it possible to license SE2 (with RAC) across two 2 socket servers that have only 1 socket populated on each?

- Yes. If licensing by Named User Plus metric, DB SE2 minimums must be met on each server. The minimums are 10 Named User Plus licenses per server.

With SE/SE1 there was no limit on CPU threads but now there is a cap of 16 threads per database?

- The bulk of SE and SE1 customers are utilizing 8 threads at most today so the issues around threading caps are perhaps less critical than it seems.


Better Value. Greater Functionality.

MORE INFORMATION

Please refer to the following for more information:

[Oracle Standard Edition 2 Home Page](#)

[Database Licensing Policy](#)



Oracle Database Standard Edition 2 provides an affordable, full-featured database with a multitude of new features and is built for ease of use, power, and performance, providing an easy path for scale and growth to the cloud.

ÜBER HUNKLER

Das Karlsruher Systemhaus HUNKLER wurde 1988 erster offizieller Partner von Oracle in Deutschland. Ein Team von rund 20 Mitarbeitern unterstützt Kunden aus Industrie, öffentlicher Verwaltung, Gesundheits- und Finanzwesen mit Beratung, Lösungsentwicklung und Managed Services.

Im Fokus von HUNKLER stehen leistungsfähige, wirtschaftliche Infrastrukturen für Oracle-datenbanken mit den Schwerpunkten Hochverfügbarkeit, Ausfallsicherheit und Zero Downtime Migration. Die integrierten Komplettlösungen der Produktfamilie Oracle Engineered Systems sowie der Datenbank-/Anwendungsbetrieb in der Oracle Cloud sind weitere Themenfelder, die das Unternehmen umfassend abdeckt.

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