

Oracle MiniCluster S7-2 Frequently Asked Questions

Introduction

Oracle MiniCluster S7-2 is an extremely simple and efficient hardware and software system designed to run enterprise databases and applications with uncompromising security. The Oracle MiniCluster S7-2 virtual assistant enables users to configure, patch, tune, and secure the system with no special training and with minimal effort. The system integrates and automates hundreds of unique security technologies and controls such as memory intrusion protection; comprehensive data protection; defense-in-depth access controls for the compute, storage and networks; and full-visibility monitoring and auditing of user and system activities. The system also incorporates fully redundant, high-performance shared flash storage and active/active electrically isolated compute nodes with redundant network connectivity for a highly available architecture. Oracle MiniCluster S7-2 is powered by Oracle's SPARC S7 processor, which delivers higher baseline per-core performance than x86 processors. Further, Oracle MiniCluster S7-2 provides unprecedented levels of security and analytics performance with these features of Oracle's SPARC M7 and SPARC S7: Oracle's Silicon Secured Memory, Oracle's Data Analytics Accelerator (DAX), cryptographic acceleration, and Oracle's In-Line Decompression. The extreme efficiency of the system means workloads can be run with less hardware and software and with less administrative time and effort, resulting in lower operational costs.

Customer Benefits

Oracle MiniCluster S7-2 enables you to do the following:

- **Run** virtually any Oracle workload, database, and applications at optimal performance out of the box.
- **Simplify day-to-day operations** with the virtual assistant, which abstracts the hardware and software stack and eliminates the need for specialized OS skills and training.
- **Deploy turn-key, error-free configurations** of Oracle Database. The virtual assistant automates the deployment of Oracle Real Application Clusters (Oracle RAC) and provides an easy, error-free approach to implementing highly available Oracle Database instances. Oracle Database 11g Release 2, Oracle Database 12c databases, and Oracle Database Standard Edition 2 databases are supported. Database instances can be single-instance, Oracle RAC, or Oracle Real Applications Clusters One Node
- **Keep your system up to date** with a unified full-system update bundle that can run in an automated, rolling manner in hours.
- **Secure your applications** with hundreds of security controls, which are integrated into the system by default.
- **Apply hundreds of pre-integrated security controls** to deliver compliance-ready security posture for DISA-STIG, PCI-DSS, or CIS-equivalent security benchmarks through a single menu selection.
- **Verify the compliance** of virtual machines (VMs) automatically either monthly or on demand through the built-in compliance verification tools.

- **Protect data in memory** actively from security exploits such as Heartbleed, with the SPARC S7 processor's **Silicon Secured Memory** capabilities.
- **Encrypt end-to-end data** with near-zero-overhead through the SPARC S7 processor's **Cryptography Acceleration**, a feature of Oracle's Silicon in Security.
- **Improve efficiency** across all workloads with the SPARC S7 high-performance microprocessor.
- **Accelerate the performance of Oracle Database In-Memory** in Oracle Database 12c with the SPARC S7 processor's **In-Line Decompression**.
- **Speed up analytics** dramatically with the SPARC S7 processor's **SQL in Silicon** feature for **Oracle Database In-Memory in Oracle Database 12c**.
- **Achieve high transaction processing** and batch performance on Oracle Database workloads with **all-flash storage**.
- **Reduce software licensing costs** through subcapacity software licensing.

Frequently Asked Questions

Q: What is Oracle MiniCluster S7-2?

A: Oracle MiniCluster S7-2 is a simple, secure, and efficient database and application machine that is part of the Oracle SuperCluster family.

Q: How can Oracle MiniCluster S7-2 be deployed in my existing data center?

A: Connectivity to other systems in an existing data center can be achieved over the 10 GbE ports included in each Oracle MiniCluster S7-2 node.

Q: What type of applications can run on Oracle MiniCluster S7-2?

A: Applications supported on Oracle Solaris will run on Oracle MiniCluster S7-2. Additional certification is not required unless an independent software vendor (ISV) routinely requires certification for all new systems.

Q: Is Oracle MiniCluster S7-2 optimized for Oracle Database?

A: Yes. Oracle MiniCluster S7-2 integrates all-flash storage for databases. For this reason, it is well suited for highly concurrent online transaction processing (OLTP) applications and real-time analytics.

Oracle MiniCluster S7-2 also features a virtual assistant, which helps with the deployment of databases, including the deployment of Oracle RAC, Oracle Real Application Clusters One Node, and single-instance databases.

Oracle MiniCluster S7-2 supports Oracle Database, Enterprise Edition and Oracle Database, Standard Edition databases.

Q: What applications can benefit from the Oracle MiniCluster S7-2 high-availability infrastructure?

A: Oracle MiniCluster S7-2 is best for Oracle, ISV, and custom applications. Its built-in availability features address customers' uptime requirements through hardware availability and through the Oracle Solaris operating system, its Predictive Self Healing feature, and fault management.

Additionally, using Oracle RAC for database high availability provides even higher levels of application availability by offering built-in, automated failover of virtual environments.

Q: Can I run Oracle In-Memory Applications on Oracle MiniCluster S7-2?

A: The 1 TB memory footprint of Oracle MiniCluster S7-2 allows many smaller-scale applications to run entirely in memory. Running Oracle In-Memory Applications on Oracle MiniCluster S7-2 provides significant application performance benefits.

Q: How can Oracle MiniCluster S7-2 be managed effectively?

A: The virtual assistant enables the user to deploy, monitor, and manage all aspects of hardware and virtualization configuration. In addition, Oracle Enterprise Manager 13 provides a complete cloud lifecycle management solution.

Q: Are Oracle Optimized Solutions available for Oracle MiniCluster S7-2?

A: Yes. Oracle Optimized Solutions dramatically reduce deployment time, effort, and risk while maximizing performance by using tested and documented best practices.

Please check <https://www.oracle.com/solutions/optimized-solutions/index.html> for the latest information on available solutions.

Q: What versions of Oracle Solaris are supported on Oracle MiniCluster S7-2?

A: Oracle Solaris 11.3.

Q: What virtualization technologies are supported on Oracle MiniCluster S7-2?

A: Oracle Solaris 11 instances are virtualized with Oracle Solaris Zones for optimal utilization and application performance on Oracle MiniCluster S7-2.

Q: What versions of Oracle Database are supported on MiniCluster S7-2?

A: The Oracle Database releases required for Oracle MiniCluster S7-2 are Oracle Database 11g Release 2 (11.2.0.4) or Oracle Database 12c (12.1.0.2) or Oracle Database Standard Edition 2 (12.1.0.2)

Q: Where can I get more information about Oracle MiniCluster S7-2?

A: Visit the following web pages:

[Oracle MiniCluster S7-2 product page](#)

[Oracle SuperCluster product family page](#)



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