

# Oracle® MiniCluster S7-2 Product Notes

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# MiniCluster S7-2 Product Notes

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These topics provide late-breaking information and known issues for Oracle MiniCluster S7-2.

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## Supported Browsers for the MCMU BUI

At this time, Firefox 45.2.0 has been tested and is supported for the MiniCluster MCMU BUI. Refer to the Release Notes that are included with the latest MiniCluster software build for updates to the list of supported browsers for the MCMU BUI.

## Supported Java Versions

Java applications running on this product require one of these minimum JDK versions:

- JDK 11 or higher
- JDK 1.8.0\_60 b27 or higher
- JDK 1.7.0\_85 b33 or higher

For production use, Oracle recommends using the latest available JDK and JRE versions, and does not recommend using JDK versions that are no longer updated and are in sustaining support. For details, refer to <https://www.oracle.com/technetwork/java/javase/overview/index.html>

For information about running older versions of the JDK on SPARC servers, refer to Doc ID 2564392.1 on My Oracle Support.

## Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle recognizes the influence of ethnic and cultural values and is working to remove language from our products and documentation that might be considered insensitive. While doing so, we are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is an ongoing, long-term process.

## What's New for Release 1.5.0

The following items are new for the 1.5.0 version of MiniCluster. To use any of the features listed below, download the 1.5.0 Component Bundle or upgrade using the 1.5.0 Patch Bundle. Both bundles are available in the MiniCluster MOS note 2153282.1.

- Oracle Solaris 11.4 SRU 35
- Provides Database Patch updates (April 2021) for the following Oracle Database Releases.
  - Oracle Database 19c (19.8.0.0.210420)
  - Oracle Database 18c (18.14.0.0.210420)
  - Oracle Database 12c Release 2 (12.2.0.1.210420)
  - Oracle Database 12c Release 1 (12.1.0.2.210420)
  - Oracle Database 11g Release 2 (11.2.0.4.201020)
- The DISA-STIG auditing capabilities are updated to DISA-STIG compliance release (V 6.10).



## What's New for Release 1.4.0

The following items are new for the 1.4.0 version of MiniCluster. To use any of the features listed below, download the 1.4.0 Component Bundle or upgrade using the 1.4.0 Patch Bundle. Both bundles are available in the MiniCluster MOS note 2153282.1.

- Oracle Solaris 11.4 SRU 26
- Provides Database Patch updates (July 2020) for the following Oracle Database Releases.
  - Oracle Database 19c (19.8.0.0.200714)
  - Oracle Database 18c (18.11.0.0.200714)
  - Oracle Database 12c Release 2 (12.2.0.1.200714)
  - Oracle Database 12c Release 1 (12.1.0.2.200714)
  - Oracle Database 11g Release 2 (11.2.0.4.200714)
- The DISA-STIG auditing capabilities are updated to DISA-STIG compliance release (V 6).

## What's New for Release 1.3.0

The following items are new for the 1.3.0 version of MiniCluster. To use any of the features listed below, download the 1.3.0 Component Bundle or upgrade using the 1.3.0 Patch Bundle. Both bundles are available in the MiniCluster MOS note 2153282.1.

- Oracle Solaris 11.4 SRU 19
- Oracle Database 19c
- Grid Infrastructure 19c
- Oracle Database Patch updates (October 2019) for the following Oracle Database Releases
  - Oracle Database 19c
  - Oracle Database 18c
  - Oracle Database 12c Release 2
  - Oracle Database 12c Release 1
  - Oracle Database 11g Release 2
- Provides auditing capabilities based on the latest DISA-STIG compliance release (V 6)
- The firewall manager now uses the Oracle Solaris 11.4 packet filter functionality to protect network traffic.

In addition to the new items, the MiniCluster REST API was removed from MiniCluster 1.3.0.

## What's New for Release 1.2.5.22

The following items are new for the 1.2.5.22 release of MiniCluster software in December 2018.

- Oracle Database 18.3 Standard Edition 2
- Oracle Database 12.2 Standard Edition 2 with Oct 2018 Proactive PSU
- Oracle Database 12.2 updated with Oct 2018 PSU
- Oracle Database 12c EE and SE2 updated with Oct 2018 Proactive PSU
- Oracle Database 11g updated with Oct 2018 PSU
- MiniCluster updated with Solaris 11.3 SRU36.3 as default version
- System firmware upgraded to 9.8.6

## What's New for Release 1.2.5.15

The following items are new for the 1.2.5.15 release of MiniCluster in October 2018.

- Oracle Solaris 11.3 SRU 34.4 is the default OS
- Added support for these database and grid infrastructure items:
  - Oracle Grid Infrastructure 18c Release Update 3
  - Oracle Database 18c Release Update 3
  - Oracle Database 12c Release 2 (12.2), updated with Jul 2018 Release Update
  - Oracle Database Grid 12c updated with Jul 2018 PSU
  - Oracle Database 12c updated with Jul 2018 Proactive PSU
  - Oracle Database 11g updated with Jul 2018 PSU
- The MiniCluster BUI now provides a password expiration warning.
- Oracle Engineered Systems Hardware Manager is updated to version 3.2.0.0.1937

## What's New for Release 1.2.4

The following items are new for the Version 1.2.4 release of MiniCluster.

### Increased Drive Capacities

Increased drive capacities are available for the storage array:

- 3.2 TB 3.5-inch SSDs
- 10 TB 3.5-inch HDDs

Following are the raw and usable capacities of the storage array with these new drives:

- Database raw capacity: 35.2 TB
- Database usable capacity (normal): 17.6 TB
- Database usable capacity (high): 11.7 TB
- Shared storage raw capacity: 60 TB
- Usable capacity: 30 TB

## Firewall Manager

By default, MiniCluster enables network traffic protection using Oracle Solaris firewalls for all virtual machines, including Global, Non-Global and Kernel zones. This allows MiniCluster to protect its networks and residing virtual hosts from network-based intrusions.

The Firewall Manager feature is available through the MiniCluster BUI (System Settings → Firewall Manager).

## MiniCluster REST APIs

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**Note** - The MiniCluster REST API feature was removed in MiniCluster 1.3.0.

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The REST API functionality allows you to administer your MiniCluster using REST APIs.

The REST API catalog is available through the MiniCluster BUI (System Settings → REST API Information).

## mcbbackup Service

You can configure the SMF service called mcbbackup to save the global zone boot environment in the `/sharedstore/be` directory. The service is disabled by default.

Instructions for enabling mcbbackup are provided in [“Configure Global Zone BE Backups \(mcbbackup\)”](#) in *Oracle MiniCluster S7-2 Administration Guide*.

## What's New for Release 1.1.30

The following items are new for the Version 1.1.30 release of MiniCluster.

### One-Time Password Authentication

Authentication based on One-Time Password (OTP) is now available for App and DB VMs for specific user types. For more information on setting up OTP, refer to the *Oracle MiniCluster S7-2 Administration Guide* and the *Oracle MiniCluster S7-2 Security Guide*.

### Ability to Change DNS and NTP Servers After Initial Installation

As part of the initial installation of your MiniCluster system, you must provide the IP addresses for the DNS and NTP servers that you will use for your system. In previous releases of MiniCluster, you could not change that DNS and NTP server information once the system installation was complete without resetting the MiniCluster system. With this release of the MiniCluster software, you can now change this DNS and NTP server information through the User Input Summary page in the MCMU BUI. Refer to the *Oracle MiniCluster S7-2 Administration Guide* for those instructions.

### Ability to Increase Size of /u01 Directory

You can now increase the size of the /u01 directory through the MiniCluster CLI. Refer to the *Oracle MiniCluster S7-2 Administration Guide* for those instructions.

## What's New for Release 1.1.25

The following items were new for the Version 1.1.25 release of MiniCluster:

### Updates to ESHM

The following items have been added in ESHM 3.0.0:

- A new BUI Components tab that shows information on storage shelves
- A new BUI table in the Components, Compute Servers tab that shows information on non-global zones

## Additional Storage Array Support

MiniCluster now supports an additional storage array, effectively doubling the storage capacity. The additional storage array can be configured at time of install or added at a later time as needed.

## Oracle Standard Edition Database Support

Oracle Standard Edition Databases (Single Instance and RAC) are supported on MiniCluster. The MiniCluster virtual assistant fully automates the creation of Oracle Database 12c Standard Edition 2 (SE2) homes and single instance databases.

## DISA STIG Profile

A new security profile and compliance verification has been added to MiniCluster that meets "Defense Information System Agency - Security Technical Implementation Guidance (DISA-STIG)". The security profile builds on CIS security profile, and introduces additional 75 security controls and FIPS-140-2 cryptography.

## Auditor Role and Audit Review Page

A dedicated auditor role has been added to the MiniCluster roles. Upon approval, audit users can access the auditor's review page in the MiniCluster Configuration Utility, where they can generate audit reports and review user and system activity.

## Configure Additional Networks

You can now configure unused network interfaces as additional networks on existing VMs within MiniCluster. See the *Oracle MiniCluster S7-2 Administration Guide* for more information.

## Role Separation Enabled on VM Groups

- Separation of roles can be enabled to administer ASM and RDBMS separately.
- The SYSASM, SYSOPER for ASM, and SYSDBA for ASM system privileges enables the separation of the Oracle ASM storage administration privileges from SYSDBA. This is mostly needed by third party apps, mainly SAP.

## Shared Storage Isolation

A new toggle switch option is introduced to facilitate isolation of shared storage to all VMs. This helps to isolate Security and Compliance enabled VM group environment from sharing files with global and kernel zones by disabling corresponding NFS services.

## Edit User Profile

A user profile can be edited using the MiniCluster Configuration Utility or through the CLI.

## International Language Support

The MiniCluster Configuration Utility now supports five languages as part of the internationalization.

## Adding External NFS for Database Virtual Machine Group

You can add external NFS servers for a database Virtual Machine group through the MiniCluster Configuration Utility or the CLI.

## Dynamic Hardware Components Connection Display on MiniCluster Configuration Utility

A dynamic graph will show the connections between compute nodes and storage arrays on the “Hardware Topology” page in the MiniCluster Configuration Utility, and will detect if the connections are correct.

## Enable, Disable and Change EEPROM Password

You can change, enable, and disable the EEPROM password from the MiniCluster Configuration Utility or through the CLI.

## Patch Updates

There are multiple software update scenarios based on the state of MiniCluster (before initial setup or after initial setup) and based on the version currently running on MiniCluster. Depending on your situation, you might need to perform patch updates in a specific way. For further details, refer to the *Oracle MiniCluster S7-2 Release Notes* on MOS, available through the MiniCluster MOS note 2153282.1.

If you are using the MCMU CLI to apply patches, display the CLI help to see which command options are available on your system. For example:

```
% mcmu patch -h
```

## BUI Sessions

Each user must use their own browser and not share browser sessions.

## ESHM Fails to Start After Reboot (24843287)

When both compute nodes are rebooted simultaneously, the ESHM service on both compute nodes will enter maintenance mode. To resolve the issue, wait for the kernel zone to fully start, and then clear the ESHM servers on both compute nodes using this command:

```
svcadm clear svc:/application/management/eshm/omc
```

