Oracle® Communications LSMS Release Notes





Oracle Communications LSMS Release Notes, Release 14.0

F90363-06

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What's New in This Guide

Release 14.0.0.2.0 - F90363-06 - October 2024

- Updated the steps to obtain the license key files for Marben OSI and TMN Toolkit from Artifex in the Marben OSI and TMN Toolkit License Key Files section.
- Added a note about temporary license keys available on the Oracle Software Delivery Cloud (edelivery.oracle.com) with the LSMS 14.X software in the Marben OSI and TMN Toolkit License Key Files section.

Release 14.0.0.2.0 - F90363-05 - September 2024

Updated the steps to obtain the license key files for Marben OSI and TMN Toolkit from Artifex in the Marben OSI and TMN Toolkit License Key Files section.

Release 14.0.0.2.0 - F90363-04 - September 2024

Added the Marben OSI and TMN Toolkit License Key Files section to list the steps to obtain the license key files for Marben OSI and TMN Toolkit from Artifex.

Release 14.0.0.2.0 - F90363-03 - September 2024

Updated the following sections with the details of LSMS release 14.0.0.2.0:

- Media Pack
- · Resolved Bug Listing
- Customer Known Bug Listing

Release 14.0.0.1.0 - F90363-02 - May 2024

Updated the following sections with the details of LSMS release 14.0.0.1.0:

- Media Pack
- Resolved Bug Listing
- Customer Known Bug Listing

Release 14.0.0.0.0 - F90363-01 - January 2024

Updated the following sections with the details of LSMS release 14.0.0.0.0:

- Added the following features in the Feature Descriptions section:
 - Migration to TPD8
 - MySQL Uplift from 5.7 to 8.0
 - Security Hardening
 - TLS v1.3 Encryption
- Media Pack
- Supported Upgrade Paths
- Resolved Bug Listing
- Customer Known Bug Listing



Introduction

This Release Notice includes feature descriptions, media and documentation pack contents, and product compatibility; and identifies the supported upgrade paths and migration paths (if applicable). This document includes listings for both the resolved and known bugs for this release. Directions for accessing key Oracles sites and services are also identified in the Oracle References and Services chapter.

Release Notices are included in the documentation pack made available with every software release.

1.1 LSMS Introduction

Oracle Communications LSMS (Local Service Management System) receives data broadcast from the NPAC/SMS. The LSMS provisions the service provider's downstream systems, such as its Local Number Portability (LNP) call routing database.



Feature Descriptions

This chapter provides a summary of each feature released in LSMS 14.0.

2.1 Migration to TPD8

LSMS is currently based on TPD 7.X, which is based on OL6.X. As the extended support for OL6 is ending and TPD 8.X will be migrated from OL6 to OL8, LSMS will be migrated to TPD8.

2.2 MySQL Uplift from 5.7 to 8.0

LSMS currently uses MySQL 5.7 for LSMS databases. As the support for MySQL 5.7 is ending, the MySQL version will be upgraded from 5.7 to 8. 0. Along with the change in the MySQL version, LSMS will migrate from the MyISAM engine to the InnoDB engine.

2.3 Security Hardening

LSMS 14.0 supports data replication and transfer over an encrypted channel using IPSEC. This includes data replication between two nodes, for example, data replication between ELAP and LSMS nodes.

2.4 TLS v1.3 Encryption

LSMS will support TLS v1.3. Currently, LSMS supports TLS v1.2 but TLSv1.3 is not supported as it is supported only on OL7 and above.

Media and Documentation

Oracle Communications software is available for electronic download on the Oracle Software Delivery Cloud (OSDC). Documentation is delivered electronically on the Oracle Help Center (OHC). Both the software Media Pack and Documentation Pack are listed in this chapter.

3.1 Media Pack

All components available for download from the Oracle Software Delivery Cloud (https://edelivery.oracle.com/) are listed below.



This list is accurate at the time of release, but is subject to change. See the Oracle Software Delivery Cloud website for the latest information.

Table 3-1 Media Pack Contents for LSMS 14.0.0.2.0

Description

Oracle Communications LSMS 14.0.0.2.0-140.14.0 (includes upgrade to TPD 8.10.0.0.0-140.5.0)

Oracle Communications LSMS 14.0.0.2.0-140.14.0 MIBs

Oracle Communications LSMS 14.0.0.2.0-140.14.0 Temporary License Keys

Oracle Communications Tekelec Platform Distribution 8.10.0.0.0-140.5.0

Table 3-2 Media Pack Contents for LSMS 14.0.0.2.0 Query Server

Description

Oracle Communications LSMS Query Server 14.0.0.2.0-140.12.0

Table 3-3 Media Pack Contents for LSMS 14.0.0.1.0

Description

Oracle Communications LSMS 14.0.0.1.0-140.10.0 (includes upgrade to TPD 8.9.0.1.0-130.6.0)

Oracle Communications LSMS 14.0.0.1.0-140.10.0 MIBs

Oracle Communications LSMS 14.0.0.1.0-140.10.0 Temporary License Keys

Oracle Communications Tekelec Platform Distribution 8.9.0.1.0-130.6.0

Table 3-4 Media Pack Contents for LSMS 14.0.0.1.0 Query Server

Description

Oracle Communications LSMS Query Server 14.0.0.1.0-140.9.0

Table 3-5 Media Pack Contents for LSMS 14.0.0.0.0

Description

Oracle Communications LSMS 14.0.0.0.0-140.7.0 (includes upgrade to TPD 8.6.0.2.0-110.14.0)

Oracle Communications LSMS 14.0.0.0.0-140.7.0 MIBs

Oracle Communications LSMS 14.0.0.0.0-140.7.0 Temporary License Keys

Oracle Communications Tekelec Platform Distribution 8.6.0.2.0-110.14.0

Table 3-6 Media Pack Contents for LSMS 14.0.0.0.0 Query Server

Description

Oracle Communications LSMS Query Server 14.0.0.0.0-140.7.0

3.2 Documentation Pack

All documents available for download from the Oracle Help Center (OHC) site (http://docs.oracle.com/en/industries/communications/) are listed in Table 3-7.



This list is accurate at the time of release, but it is subject to change. See the Oracle Help Center for the latest information.

Table 3-7 Documentation Pack Contents

Release Notices and Licensing Information User Manuals

LSMS 14.0.x Release Notice

LSMS 14.0.x Licensing Information User Manual

Core LSMS Documentation

LSMS 14.0 Configuration Guide

LSMS 14.0 Database Administrator's Guide

LSMS 14.0 Administration and LNP Feature Activation Guide

LSMS 14.0 Security Guide

LSMS 14.0 Incremental Upgrade/Installation Guide

LNP Database Synchronization User's Guide

Hardware, Installation, and Maintenance Documentation

LSMS 14.0 Alarms and Maintenance Guide

EAGLE Application B Card Hardware and Installation Guide

LSMS Query Server Documentation

LSMS Query Server Licensing Information Reference

LSMS Query Server on Linux Installation and Upgrade Guide

LSMS Query Server Security Guide



3.3 Marben OSI and TMN Toolkit License Key Files

LSMS 14.0 works on OL8.x and needs license key files for Marben OSI and TMN Toolkit from Artifex for successful communication between LSMS and NPAC. Follow the below procedure to request these license key files.

The following steps must be performed by the customer:

- Go to https://store-oracle.custhelp.com/app/LC_CP
- 2. Enter the required details.

Note:

- In the "Product Name and Version" field, enter "LSMS 14.0".
- If this is a new LSMS 14.X system, complete the "Oracle Sales Representative" and "Sales Order Number" fields.
- If this is an LSMS 13.X system being upgraded to LSMS 14.X, in the "Support Identifier" field, enter the Support Identifier number or the Support Contract number.
- In the "Subject" field, enter "Request for 3rd party license".
- In the "What can we help you with?" field, enter "Request for OL8-based 64-bit LSMS 3rd party license Marben OSI and TMN Toolkit".
- 3. If upgrading from LSMS 13.X to LSMS 14.X or performing a fresh installation of LSMS 14.X, obtain the following information (sample output provided below) from both primary and secondary customer servers and paste it in the "What can we help you with?" field textbox. Be sure to clearly indicate which hostname the ifconfig output corresponds with:

```
# ifconfig eth0
eth0 Link encap:Ethernet HWaddr 00:00:17:0F:2C:9D
inet addr:10.75.140.10 Bcast:192.168.61.255 Mask:255.255.255.0
inet6 addr: 2606:b400:605:b915:200:17ff:fe0f:2c9d/64 Scope:Global
inet6 addr: fe80::200:17ff:fe0f:2c9d/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:5154 errors:0 dropped:0 overruns:0 frame:0
TX packets:6943 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:546690 (533.8 KiB) TX bytes:732196 (715.0 KiB)
Memory:fdee0000-fdefffff
```



Note:

If you have access to a Linux terminal, open a terminal like PuTTY. Then, connect to the LSMS primary and secondary servers one after another using the following command:

ssh admusr@<lsms IP addres>

For example, ssh admusr@10.75.140.10

Input the required credential and run the following command:

ifconfig eth0

If there is no provision of a Linux session (for examle, PuTTY), a laptop can be directly connected to the first serial port (console port) of the LSMS server. On the backside of the E5-APP-B card, look for the connector with part number 830-1407-01. The top serial port is the console port and it is labeled 'S1' on the adaptor. Remove the serial cable at 'S1' and connect your laptop through a serial cable. The cable part number is 830-1220-x.

Then, run the following command in the windows terminal. After successfully retrieving the output, connect the serial cable (that was removed earlier) back in the 'S1' slot.

ifconfig eth0

4. Run the following command on both the LSMS primary and secondary servers. Provide both hostnames in the "What can we help you with?" textbox:

hostname
lsmspri

Note:

If you wish to change the hostnames from the standard Ismspri/Ismssec, provide the new hostnames instead of Ismspri/Ismssec.

5. Click Submit.



Allow 24-48 hours for your request to be processed.



Note:

Temporary license keys that are valid for a maximum of 60 days are available on the Oracle Software Delivery Cloud (edelivery.oracle.com) with the LSMS 14.X software. There are primarily two reasons for using these temporary license keys:

- 1. Getting a fresh installation of an LSMS system installed and configured: The MAC addresses may not be known until during the installation process. Customers may wish to use the temporary license keys to proceed with getting the new LSMS system running before going live. The permanent license keys should be requested while system configuration continues using the temporary license keys. When the permanent license keys are available, they should be installed. Ideally, this should happen before going live.
- 2. Recovering from an unplanned hardware replacement: In the case of disaster recovery when one or both of the E5-APP-B cards must be replaced, the temporary license keys should be used in order to get the LSMS system up and operational as quickly as possible. Once the system is operational, permanent license keys should be requested and installed when they are available.



Supported Upgrade Paths

This release has been tested for upgrade from specific prior releases. This chapter contains the exact paths for upgrade. Please verify your current installed release is listed on a valid upgrade path.

4.1 Supported Upgrade Paths

The possible upgrade paths to LSMS Release 14.0 are listed in the following table.

Table 4-1 LSMS Release 14.0 Upgrade Paths

| From | То |
|-----------|-----------|
| LSMS 13.5 | LSMS 14.0 |



Any upgrade other than listed above is not recommended or supported. Version 14.0 is also supported as a new or fresh installation.

Resolved and Known Bugs

This chapter lists the resolved and known bugs for LSMS release 14.0.

These lists are distributed to customers with a new software release at the time of General Availability (GA) and are updated for each maintenance release.

5.1 Severity Definitions

The problem report sections in this document refer to bug severity levels. Definitions of these levels can be found in the publication, *TL 9000 Quality Management System Measurement Handbook*.

Problem Report: A report from a customer or on behalf of the customer concerning a product or process defect requesting an investigation of the issue and a resolution to remove the cause. The report may be issued via any medium.

Problem reports are systemic deficiencies with hardware, software, documentation, delivery, billing, invoicing, servicing, or any other process involved with the acquisition, operation, or performance of a product. An incident reported simply to request help to bring back the service or functionality to normal without the intent to investigate and provide a resolution to the cause of the incident is not a problem report.

- 1. **Critical**: Conditions that severely affect the primary functionality of the product and because of the business impact to the customer requires non-stop immediate corrective action regardless of time of day, or day of the week as viewed by a customer on discussion with the organization such as:
 - Product inoperability (total or partial outage),
 - A reduction in the capacity capability, that is, traffic/data handling capability, such that expected loads cannot be handled,
 - Any loss of emergency capability (for example, emergency 911 calls), or
 - Safety hazard or risk of security breach.
 - Major: Product is usable, but a condition exists that seriously degrades the product operation, maintenance, or administration, etc., and requires attention during predefined standard hours to resolve the situation.

The urgency is less than in critical situations because of a less immediate or impending effect on product performance, customers, and the customer's operation and revenue such as:

- Reduction in product's capacity (but still able to handle the expected load),
- Any loss of administrative or maintenance visibility of the product and/or diagnostic capability,
- Repeated degradation of an essential component or function, or
- Degradation of the product's ability to provide any required notification of malfunction.
- 3. **Minor**: Other problems of a lesser severity than "critical" or "major" such as conditions that have little or no impairment on the function of the system.

4. **Minor, No Loss of Service**: Oracle severity beyond what is defined by TL 9000. The numbered severity levels in the tables below correspond to these definitions of 1–Critical, 2–Major, 3–Minor, 4–Minor, No Loss of Service.

5.2 Resolved Bug Listing

The tables in this section list bugs resolved in the following builds:

- LSMS 14.0.0.2.0-140.14.0
- LSMS 14.0.0.1.0-140.10.0
- LSMS 14.0.0.0.0-140.7.0



Resolved bugs are sorted in ascending order by severity and then by bug number.

Table 5-1 LSMS Release 14.0.0.2.0-140.14.0 Resolved Bugs (August 2024)

| Bug Number | SR | Severity | Title | Customer Impact |
|------------|----|----------|---|-----------------|
| 36641207 | N | 3 | Automatic/Manual Resync on EMS Not Working From Primary LSMS | |
| 36641311 | N | 3 | Unable to edit SNMPv3 User from User configuration Menu | |
| 36641424 | N | 3 | The Group Configuration menu becomes unresponsive (freezes) when it is accessed after creating more than one user | |

Table 5-2 LSMS Release 14.0.0.1.0-140.10.0 Resolved Bugs (May 2024)

| Bug Number | SR | Severity | Title | Customer Impact |
|------------|----|----------|---|--|
| 34624155 | Y | 3 | TKLCha/comcol process creates /tmp/re_state directory | Prevents customer from becoming compliant with CSO security scans. |
| 36280621 | N | 4 | Curses UI changes | |
| 36424899 | N | 4 | Update Perl-PAR package to 1.019 | |
| 36424926 | N | 4 | Update Xerces-c to 3.2.5 | |
| 36424928 | N | 4 | Update Perl-PAR-Packer package to 1.061 | |
| 36444720 | N | 4 | perl-DBD-mysql update | |

Table 5-3 LSMS Release 14.0.0.0.0-140.7.0 Resolved Bugs (January 2024)

| Bug Number | SR | Severity | Title | Customer Impact |
|------------|----|----------|---|-----------------|
| 33143482 | Υ | 4 | SR: Server Disk Space Shortage Error alarm | |

Table 5-3 (Cont.) LSMS Release 14.0.0.0.0-140.7.0 Resolved Bugs (January 2024)

| Bug Number | SR | Severity | Title | Customer Impact |
|------------|----|----------|--|-----------------|
| 33369053 | N | 4 | MySQL uplift from 5.7 to 8.0 | |
| 34273802 | Y | 4 | LSMS 13.5.0 User Password Change via the GUI Generates Core Dump | |
| 34498271 | N | 4 | Update to TPD 8.x | |
| 35193797 | Y | 4 | Non-Unique Hostnames for LSMS Servers | |
| 35345078 | N | 4 | TLS v1.3 encryption in LSMS | |
| 35677192 | N | 4 | LSMS NAS on TPD 8 | |
| 35677225 | N | 4 | LSMS QS on Oracle Linux8 and MySQL 8 | |
| 35677234 | N | 4 | TMN Toolkit, DSG, DSGRT from Artifex for OL8 | |
| 35948608 | N | 4 | Update MySQL to 8.0.33 | |

5.3 Customer Known Bug Listing

Please find below the known bugs and associated Customer Impact Statements. This information is provided for information purposes only.

Table 5-4 LSMS Release 14.0 Customer Known Bugs (August 2024)

| Bug Number | SR | Severity | Title | Customer Impact |
|------------|----|----------|--|--|
| 32645547 | N | 3 | LSMS13.5: Alarm LSMS- NAS-MIB::volumeNearlyFull is not getting cleared | A false alarm will be displayed on the LSMS that a volume is full on the NAS. |
| 35928261 | Y | 3 | LSMS Ismssec:DB Repl Err - Bin logs out of sync | Issues cause secondary LSMS to report bin logs error, which prevents database replication between the Active and Standby LSMS servers. |

Oracle References and Services

This chapter describes how to obtain help, where to find related documentation, and provides other general information.

6.1 My Oracle Support (MOS)

My Oracle Support (https://support.oracle.com) is your initial point of contact for all product support and training needs. A representative at Customer Access Support can assist you with My Oracle Support registration.

Call the Customer Access Support main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

- For Technical issues such as creating a new Service Request (SR), select 1.
- For Non-technical issues such as registration or assistance with My Oracle Support, select
 2.
- For Hardware, Networking and Solaris Operating System Support, select 3.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

6.2 Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, http://docs.oracle.com. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at http://www.adobe.com.

- 1. Access the Oracle Help Center site at http://docs.oracle.com.
- 2. Click Industries.
- 3. Under the Oracle Communications subheading, click the Oracle Communications documentation link.

The Communications Documentation page appears. Most products covered by these documentation sets will appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."

- 4. Click on your Product and then the Release Number.
 - A list of the entire documentation set for the selected product and release appears.
- 5. To download a file to your location, right-click the PDF link, select Save target as (or similar command based on your browser), and save to a local folder.

6.3 Locate Product Release Software on the Oracle Software Delivery Cloud Site

Oracle Communications software is available for electronic download at the Oracle Software Delivery Cloud site, https://edelivery.oracle.com. Only authorized customers with a valid password may download software from the site.

For directions on downloading the software and other information about using this site, click **FAQ** in the top right corner.

