Oracle® Communications Integrated Diameter Intelligence Hub Release Notice





Oracle Communications Integrated Diameter Intelligence Hub Release Notice, Release 8.2.3.3

F92978-01

Copyright © 2000, 2024, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Contents

Introd	uction	
1.1 ID	IH Overview	1-1
1.2 Or	racle DB Patch Installation	1-1
Featu	re Descriptions	
Media	and Documentation	
3.1 Lo	ad Lineup	3-1
3.2 Do	ocumentation Pack	3-1
Suppo	orted Upgrade Paths	
Suppo	orted Hardware Baseline and Firmware Components	
Resol	ved and Known Bugs	
6.1 Se	everity Definitions	6-1
6.2 Re	esolved Bug List	6-2
6.3 Cu	ustomer Known Bug List	6-2



My Oracle Support

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:

- 1. Select 2 for New Service Request.
- 2. Select **3** for Hardware, Networking and Solaris Operating System Support.
- **3.** Select one of the following options:
 - 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**.

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.



What's New in This Release

This section introduces the documentation updates for release 8.2.3.3.

Release - F92978-01, March 2024

- Updated the patch numbers in the Oracle DB Patch Installation section.
- Updated the Load Lineup section.
- Updated the Supported Upgrade Paths section.
- Added the steps to be followed after an upgrade in Supported Upgrade Paths section.
- Bugs updated in Resolved Bug List section.



Introduction

This Release Notice includes feature descriptions, supported hardware baseline, and media and documentation pack contents, and identifies the supported upgrade paths. This document includes listings for both the resolved and known bugs for this release. Directions for accessing key Oracle sites and services are explained in My Oracle Support section.

1.1 IDIH Overview

Integrated Diameter Intelligence Hub (IDIH) supports advanced troubleshooting for the Diameter traffic processed by Diameter Signaling router (DSR).

IDIH provides the following functionalities:

- Enables the selective collection and storage of Diameter traffic and provides nodal Diameter troubleshooting.
- Provides detailed information about how specific messages are processed within DSR.
- Allows users to create trace filters on DSR to capture messages required for troubleshooting service issues, and presenting those traces to the user through the graphical visualization capabilities.

1.2 Oracle DB Patch Installation

Perform these steps for applying latest Oracle DB patch.

Note:

- This section has been created to ease the patch installation process. Refer to README.html of individual patches for any further information or clarification during patch installation). Do not consider these steps as replacement for official patch README documents.
- This patch has to be applied on IDIH Oracle server only.
- 1. Log in to Oracle VM as admin user and change to oracle user.
- 2. List current patches applied using the following command:opatch lspatches
 The output must be as follows:

```
34412250; Database PSU 12.1.0.2.221018, Oracle JavaVM Component (OCT2022)
```

```
34386266; Database Patch Set Update: 12.1.0.2.221018 (34386266)
```

- 3. Following are the steps to download October 2023 DB PSU and January 2024 OJVM patches:
 - a. Log in to support.oracle.com
 - b. Click Patches and updates tab.
 - c. Enter **35564645** in patch number search field and click **Search**.
 - d. Click **DATABASE PATCH SET UPDATE 12.1.0.2.231017 (Patch)** for Linux x86-64 platform.
 - Click **Download** to download the patch to your local machine from the new window.
 - f. Repeat the same process for **35926723** patch as well.
- 4. It is recommended to take a backup of **ORACLE_HOME** binaries and Central Inventory prior to applying patches. For more information, see 565017.1.
- 5. The Central Inventory where the **ORACLE_HOME** is registered should also be part of the backup and taken at the same time as the **ORACLE_HOME** backup for consistency. Take a backup of /u01/app/oraInventory and restore it later if necessary.
- 6. Use the OPatch utility version 12.2.0.1.37 or later. To apply this patch, Oracle recommends that you use the latest released OPatch version for 12.2, which is available for download from My Oracle Support patch 6880880 (https://updates.oracle.com/ARULink/PatchDetails/process_form?patch_num=6880880) by selecting the 12.2.0.1.0 release.
- 7. Install OPatch

To install this patch, extract the "zipped file" directly under the **ORACLE_HOME**. Perform the following steps for extracting the zip file of OPatch:

a. Take a backup of ORACLE HOME/OPatch into a dedicated backup location.



This step can be ignored if backup is already taken.

- **b.** Ensure that no directory **ORACLE_HOME/OPatch** exists.
- c. Unzip the OPatch downloaded zip into ORACLE HOME directory.

To check the version of the opatch utility installed in the above step, navigate to the OPatch directory and run opatch version. You can remove the OPatch zip file after verifying the version.

8. It is required to increase the logical volume of /u01/app to 35 GB from current 25 GB as the zip file is huge and consumes significant space while applying patch. This can be performed using the following commands.

```
sudo lvresize -L +10G /dev/mapper/vgroot-oracle
sudo resize2fs /dev/mapper/vgroot-oracle
```

This also ensure that there is sufficient space still left for normal DB operations.

9. Copy the downloaded zip file to /u01/app directory and unzip the file before patching.



10. Unzip and check conflicts before applying patch by using the following commands:

```
unzip p35564645_121020_Linux-x86-64.zipcd 35564645
opatch prereq CheckConflictAgainstOHWithDetail -ph ./
```

Ensure that there are no conflicts before proceeding to next step. Also, remove the zip file from /u01/app to reclaim space.

11. Apply the patch

opatch apply

Note:

- Ensure that you have logged in to 35564645 directory before applying patch.
- You will be prompted with "**Do you want to proceed? [y|n]**" twice during the process. Type **y** when prompted on both the occassions.

Patch successfully applied. Composite patch 35564645 successfully applied. Log file location: /u01/app/oracle/product/12.1.0.2/dbhome_1/cfgtoollogs/opatch/opatch<time-stamp>.log OPatch succeeded.

- 12. You can remove both zip and unzipped folder from /u01/app after the patch installation is successful.
- **13.** Copy the downloaded **p35926723_121020_Linux-x86-64.zip to /u01/app** to /u01/app
- **14.** Unzip **p35926723_121020_Linux-x86-64.zip** and check for conflicts by performing the following commands:

```
cd 35926723
opatch prereq CheckConflictAgainstOHWithDetail -ph ./
```

Note:

Ensure there are no conflicts before proceeding to next step.

15. Apply the patch

opatch apply



Note:

- Ensure that you have logged in to 35926723 directory before applying patch.
- You will be prompted with "Do you want to proceed? [y|n]" twice during the process. Type y when prompted on both the occassions.

Patch 35926723 successfully applied. Sub-set patch [27923320] has become inactive due to the application of a super-set patch [35926723]. For more information, refer to Doc ID 2161861.1

Log file location: /u01/app/oracle/product/12.1.0.2/dbhome_1/
cfgtoollogs/opatch/opatch<time-stamp>.log OPatch succeeded.

16. opatch Ispatches lists the following patches:

```
35926723; Database PSU 12.1.0.2.240116, Oracle JavaVM Component (JAN2024)
35564645; Database Patch Set Update: 12.1.0.2.231017 (35564645)
```

OPatch succeeded.

17. You can further verify the details using the following command:

```
opatch lsinventory
```

18. It is recommended to delete the zip and unzipped directories from /u01/app to reclaim space.

Note:

The latest available patch at the time of consolidating these steps was OCT DB PSU 2023 and JAN OJVM 2024. It is always advisable to pick any superseded patch at the time of applying this patch so that we always patch the system with the latest available patch for our database server.



Feature Descriptions

There are no feature updates for IDIH Release 8.2.3.3



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 Load Line Up and Documentation Pack are listed in this chapter.

3.1 Load Lineup

IDIH 8.2.3.3 contains the following components:



No new Load Lineup package for IDIH 8.2.3.3. Refer to Oracle Software Delivery Cloud for the latest information.

- Application Lineup
 - IDIH 8.2.3.3.0 82.64.0
- Platform Lineup
 - TPD: TPD.install-7.8.9.0.0_89.33.0-OracleLinux6.10-x86_64.iso (DSR/SDS/IDIH/PMAC Baseline; Oracle Linux 6.10)
 - Oracle FW 3.1.7 (minimum)
 - HP FUP 2.2.12 (minimum)
- Other Lineup items
 - WebLogic: 14c, version 14.1.1.0.0
 - Oracle Database: 12c Enterprise Edition, version 12.1.0.2.0 64bit Production

3.2 Documentation Pack

All documents are available for download from the Oracle Help Center (OHC) site.

Documentation Pack Contents



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

- IDIH User's Guide
- IDIH Alarm Forwarding Administrator's Guide

- IDIH Audit Viewer Administrator's Guide
- IDIH Operations, Administration and Maintenance Administrator's Guide
- IDIH ProTrace User's Guide
- IDIH Log Viewer Administrator's Guide



Supported Upgrade Paths

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

Supported Upgrade Paths

IDIH 8.2.3.3 is compatible with DSR 9.0. If IDIH is a component of a Network Element, it should only be upgraded after the DSR upgrade.

Following are the steps to be followed after upgrading IDIH to 8.2.3.3.0 82.64.0:

- 1. Restart the ntp service on Application, Mediation, and Oracle Virtual Machines by running the following command:
 - a. "/etc/init.d/ntpd"
- 2. Log in to Mediation VM as admusr and change to tekelec user, restart all mediation processes by running the following commands:
 - a. pm.set off process-name>b. pm.set on process-name>
- 3. If <hostname> mapping does not exist for loopback IP and XMI IP in the /etc/hosts file, add the hostname as shown in the following example and restart the VM.

```
Example:
127.0.0.1 localhost localhost4 localhost4.localdomain4 <hostname>
::1 localhost localhost6 localhost6.localdomain6
<int-ip-oracle> oracle
<int-ip-mediation> mediation
<int-ip-sppserver> appserver
<xmi-ip> <hostname>
```

4. If <hostname> mapping exists for loopback IP and XMI IP then no changes are required to be made in the /etc/hosts file.



It is a must to verify the mapping on Application, Mediation, and Oracle VMs.

The following table provides information about possible upgrade paths to IDIH Release 8.2.3.3:

Table 4-1 Upgrade Paths

Component	From	То
IDIH	8.2.3.2	8.2.3.3



Supported Hardware Baseline and Firmware Components

Hardware Baseline

For supported hardware information, refer to the DSR Release Notice.

Firmware Components

The firmware components are software that is installed on the hardware. Oracle Firmware Upgrade Pack Release Notes 3.1.8, HP Solutions Firmware Upgrade Pack Release Notes 2.2.12 and 2.2.13 provide information about the firmware versions approved for this Oracle Firmware Upgrade Pack release to assist customers with upgrading their Oracle hardware. Also, additional instructions and guidance about the firmware upgrades have been provided wherever possible.



Resolved and Known Bugs

This chapter lists the resolved and known bugs for IDIH Release 8.2.3.3.

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.

6.1 Severity Definitions

Service requests for supported Oracle programs may be submitted by you online through Oracle's web-based customer support systems or by telephone. The service request severity level is selected by you and Oracle and should be based on the severity definitions specified below.

Severity 1

Your production use of the supported programs is stopped or so severely impacted that you cannot reasonably continue work. You experience a complete loss of service. The operation is mission critical to the business and the situation is an emergency. A Severity 1 service request has one or more of the following characteristics:

- Data corrupted.
- A critical documented function is not available.
- System hangs indefinitely, causing unacceptable or indefinite delays for resources or response.
- System crashes, and crashes repeatedly after restart attempts.

Reasonable efforts will be made to respond to Severity 1 service requests within one hour. For response efforts associated with Oracle Communications Network Software Premier Support and Oracle Communications Network Software Support & Sustaining Support, please see the Oracle Communications Network Premier & Sustaining Support and Oracle Communications Network Software Support & Sustaining Support sections above.

Except as otherwise specified, Oracle provides 24 hour support for Severity 1 service requests for supported programs (OSS will work 24x7 until the issue is resolved) when you remain actively engaged with OSS working toward resolution of your Severity 1 service request. You must provide OSS with a contact during this 24x7 period, either on site or by phone, to assist with data gathering, testing, and applying fixes. You are requested to propose this severity classification with great care, so that valid Severity 1 situations obtain the necessary resource allocation from Oracle.

Severity 2

You experience a severe loss of service. Important features are unavailable with no acceptable workaround; however, operations can continue in a restricted fashion.

Severity 3

You experience a minor loss of service. The impact is an inconvenience, which may require a workaround to restore functionality.

Severity 4

You request information, an enhancement, or documentation clarification regarding your software but there is no impact on the operation of the software. You experience no loss of service. The result does not impede the operation of a system.

6.2 Resolved Bug List

Following are the list of bugs that are resolved in IDIH Release 8.2.3.3.

Table 6-1 IDIH Release 8.2.3.3 Resolved Bugs

Bug Number	Severity	Found in Release	Title
36081595	4	8.2.3.2	OL6 security patches for openssh, sudo, kernel, python, nss, openssl and krb5.

6.3 Customer Known Bug List

There are no known bugs detected in this IDIH Release.

