Oracle® Communications Integrated Diameter Intelligence Hub Release Notice





Oracle Communications Integrated Diameter Intelligence Hub Release Notice, Release 8.2.3.2

F76269-01

Copyright © 2000, 2023, 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, and MySQL 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.

Contents

Intr	roduction		
1.1	IDIH Overview	1-1	
1.2	Oracle DB Patch Installation	1-1	
Fea	ture Descriptions		
Med	dia and Documentation		
3.1	Media Pack	3-1	
3.2	Load Lineup	3-2	
3.3	Documentation Pack	3-2	
Sup	pported Upgrade Paths		
Sup	pported Hardware Baseline and Firmware Components		
Res	solved and Known Bugs		
6.1	Severity Definitions	6-1	
6.2	Resolved Bug List	6-2	
6.3	Customer 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 8.2.3.2.

Release 8.2.3.2 - F76269-01, April 2023

Updated the patch numbers, support patch numbers, subset patch numbers, directories, and file names in Oracle DB Patch Installation.



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.



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.

- 1. Log in to Oracle VM as admusr and change to oracle user.
- 2. List current patches applied using the following command:

```
opatch lspatches
```

The output must be as follows:

```
33561268; Database PSU 12.1.0.2.220118, Oracle JavaVM Component (October 2022)
33477199; Database Patch Set Update: 12.1.0.2.220118 (33477199)
OPatch succeeded.
```

- 3. Download the Oracle October CPU 2022 patches using the following steps:
 - a. Log in to support.oracle.com
 - b. Click Patches and updates
 - c. Enter 34386266 in patch number search field and click Search
 - d. Click DATABASE PATCH SET UPDATE 12.1.0.2.220118 (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 **34412250** patch as well.
- 4. It is recommended to take a back up of **ORACLE_HOME** so that it can be restored it to previous state in case of any issues during current patch installation. Here is an illustration to restore ORACLE_HOME:



Make a note of the permissions of files/directory so that they can be restored to their original state if needed in future. Shutdown databases, listeners, or any other processes related to the ORACLE_HOME which you are taking backup.

 Shutdown databases, listeners, or any other processes related to the ORACLE_HOME which you are restoring.

Note:

This step would be mandatory in the case of restore.

b. Navigate to the directory where **ORACLE_HOME** is located.

```
cd /u01/app/oracle/product/12.1.0.2
```

c. Rename or move the current **ORACLE_HOME**:

```
mv dbhome 1 db1 bkup
```

d. Restore ORACLE_HOME

tar -pxvf oracle home bkup.tar

Note:

- The file taken for backup has to be used here.
- Also ensure that there is enough free disk space before restoring the backup.



- 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 12.2.0.1.32 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 file "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-oraclep
```

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 p34386266_121020_Linux-x86-64.zip
cd 34386266
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 34386266 directory before applying patch.
- You will 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 34386266 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 **p34412250_121020_Linux-x86-64.zip** to /u01/app
- **14.** Unzip **p34412250_121020_Linux-x86-64.zip** and check for conflicts by using the following commands:

```
cd 34412250
opatch prereq CheckConflictAgainstOHWithDetail -ph ./
```

Note:

Ensure that there are no conflicts before proceeding to next step.

15. Apply the patch

opatch apply

Note:

- Ensure that you have logged in to 34412250 directory before applying patch.
- You will prompted with "Do you want to proceed? [y|n]" twice during the process. Type y when prompted on both the occassions.

Patch 34412250 successfully applied. Sub-set patch [33561268] has become inactive due to the application of a super-set patch [33561268]. 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:

```
34412250; Database PSU 12.1.0.2.221018, Oracle JavaVM Component (OCT2022)
34386266; Database Patch Set Update : 12.1.0.2.221018 (34386266)
```



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 PSU 2022. 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.

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

The following feature is introduced in IDIH Release 8.2.3.2:

- Modifications related to IDIH installation on OL7 and KVM: Refer to the following documents:
 - Diameter Signaling Router Cloud Installation Guide Release 8.6
 - Diameter Signaling Router Cloud Software Upgrade Guide Release 8.6
 - Diameter Signaling Router Cloud Disaster Recovery Guide Release 8.6



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

This section lists the media package for IDIH 8.2.3.2. For downloading the package, refer to My Oracle Support.

Note:

- This list is accurate at the time of release but is subject to change. Refer to the Oracle software delivery website for the latest information.
- No new Media package for IDIH 8.2.3.2. Refer to the Oracle software delivery website for the latest information.

Table 3-1 Media Pack Contents for 8.2.3.2

Part Number	Description
V1003486-01	Oracle Communications Integrated Diameter Intelligence Hub Mediation 8.2.3.0.0-82.40.0
V1003491-01	Oracle Communications Integrated Diameter Intelligence Hub Mediation 8.2.3.0.0-82.40.0 OVA
V1003488-01	Oracle Communications Integrated Diameter Intelligence Hub Database TVOE Guest 8.2.3.0.0-82.40.0
V1003487-01	Oracle Communications Integrated Diameter Intelligence Hub Database 8.2.3.0.0-82.40.0
V1003491-01	Oracle Communications Integrated Diameter Intelligence Hub Mediation 8.2.3.0.0-82.40.0 OVA
V1003484-01	Oracle Communications Integrated Diameter Intelligence Hub Applications 8.2.3.0.0-82.40.0
V1003490-01	Oracle Communications Integrated Diameter Intelligence Hub Applications 8.2.3.0.0-82.40.0 OVA
V1003443-01	Oracle Communications Tekelec Platform Distribution 7.7.0.0.0-88.68.0
V984443-01	Oracle Communications Tekelec Virtual Operating Environment 3.6.2.0.0_88.58.0
V981810-01	Oracle Communications Tekelec Platform Management and Configuration 6.6.1.0.0_66.9.0

3.2 Load Lineup

IDIH 8.2.3.2 contains the following components:



No new Load Lineup package for IDIH 8.2.3.2. Refer to Oracle Software Delivery Cloud for the latest information.

- Application Lineup
 - IDIH 8.2.3.0.0_82.40.0
- Platform Lineup
 - TPD: TPD.install-7.7.0.0.0-88.68.0-OracleLinux6.10-x86_64.iso (DSR/SDS/IDIH/PMAC Baseline; Oracle Linux 6.10)
 - TVOE: 3.6.2.0.0_88.58.0-x86_64.iso
 - PMAC: 6.6.1.0.0_66.9.0-x86_64.iso
 - Oracle FW 3.1.7 (minimum)
 - HP FUP 2.2.12 (minimum)
- Other Lineup items
 - WebLogic: 12c, version 12.2.1.4.0
 - Oracle Database: 12c Enterprise Edition, version 12.1.0.2.0 64bit Production

3.3 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 8.2.3.2 is compatible with DSR 9.0. If IDIH is a component of a Network Element, it should only be upgraded after the DSR upgrade.

The following table provides information about possible upgrade paths to IDIH Release 8.2.3.2:

Table 4-1 Upgrade Paths

Component	From	То
IDIH	8.2.3.1	8.2.3.2



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 8.2.3.2.

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

The following Resolved Bugs tables list the bugs that are resolved in IDIH Release 8.2.3.2.

Table 6-1 IDIH Release 8.2.3.2 Resolved Bugs

Bug Number	Severity	Found in Release	Title
33721746	3	8.0	Sticky bit of oracle binary file is overwritten during IDIH DB upgrade
33545015	3	8.0	IDIH:Export Trace as PCAP shows duplicate records

6.3 Customer Known Bug List

There are no known bugs detected in this IDIH Release.

