Oracle® Communications
Diameter Signaling Router 7.1.1.0.0

Release Notice

Release 7.1.1.0.0

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ORACLE®

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Introduction

This release notice lists the Resolved BUGs for Oracle Communications Diameter Signaling Router 7.1.1.0.0-71.31.0 and IDIH 7.1.0.0.0-71.24.6.

Release Notices are distributed to customers with a new software release at the time of Software Availability. They are updated for each Maintenance Release.

BUG Severity Definitions

The BUG sections in this document refer to BUG severity levels. Definitions of these levels can be found in the following publication:

TL 9000 Quality Management System Measurement Handbook

Upgrade Paths

DSR 7.1.1 supports the following upgrade paths for c-Class blades and Rack Mount servers

	From	To
DSR	5.1.x, 6.0.x, 7.0.x, 7.1.0	7.1.1
IDIH	6.0.x, 7.0.x	7.1.0
SDS	5.0.x, 7.1.x	7.1.1

Notes:
- DSR 7.1.1 is supported as a new/fresh installation.

Load Lineup

Application Lineup 7.1.0 GA	Application Lineup 7.1.1.0.0 GA***
DSR 7.1.0.0.0-71.24.0	DSR 7.1.1.0.0-71.31.0
IDIH 7.1.0.0.0-71.24.3	IDIH 7.1.0.0.0-71.24.6
SDS 7.1.0.0.0-71.11.0	SDS 7.1.1.0.0-71.15.0
Platform Lineup	**Platform Lineup**
TPD 7.0.2.0.0-86.28.0	TPD 7.0.2.0.0-86.28.0* (DSR/SDS Baseline; Oracle Linux 6.6)
TPD 7.0.2.0.0-86.32.0	TPD 7.0.2.0.0-86.32.0** (IDIH Baseline; Oracle Linux 6.6)
TPD 7.0.1.0.0-86.20.0	TPD 7.0.1.0.0-86.20.0 (PMAC TPD version)
TVOE 3.0.2.0.0-86.28.0	TVOE 3.0.2.0.0-86.28.0
PMAC 6.0.1.0.0-60.21.0	PMAC 6.0.1.0.0-60.21.0
Comcol 6.4-p252	Comcol 6.4-p262
Appworks 6.0.1-60.35.0	Appworks 6.0.1-60.38.0
Exgstack 7.1.0-71.22.0	Exgstack 7.1.0-71.26.0
HP FUP 2.2.9	HP FUP 2.2.9 (minimum)
N/A	Oracle FUP 3.1.5 (minimum)

*Note: TPD 7.0.2.0.0-86.28.0 should be used to IPM DSR and SDS systems. As part of successful installation of the DSR/SDS 7.1.1 GA version, the TPD version is upgraded to 7.0.2.0.0-86.36.0.

**Note: TPD 7.0.2.0.0-86.32.0 should be used to IPM IDIH systems.

***Note: For Cloud installations, use DSR 7.1.1.0.0-71.31.0 OVA, IDIH 7.1.0.0.0-71.24.6 OVA, SDS 7.1.1.0.0-71.15.0 OVA.

Media Pack

Components available for download from the Oracle Software Delivery Cloud (https://edelivery.oracle.com/) are listed in Table RN-1 Media Pack Contents.

Note: This list is accurate at the time of release but is subject to change. Please view the Oracle Software Delivery Cloud site for the latest information.

Table RN-1. Media Pack Contents, Oracle Communications Diameter Signaling Router (7.1.1.0.0) v1

Part Number	Description
V100406-01	Oracle Communications Diameter Signaling Router 7.1.1.0.0_71.31.0
V100408-01	Oracle Communications Diameter Intelligence Hub Applications 7.1.0.0.0-71.24.6
V100409-01	Oracle Communications Diameter Intelligence Hub Database 7.1.0.0.0-71.24.6
V100407-01	Oracle Communications Diameter Intelligence Hub Mediation 7.1.0.0.0-71.24.6
V100442-01	Oracle Communications Diameter Signaling Router ALL MIBS 7.1.1.0.0-71.31.0
V100410-01	Oracle Communications Diameter Signaling Router, Full Address Resolution 7.1.1.0.0_71.15.0
V77391-01	Oracle Communications Tekelec Platform Distribution 7.0.2.0.0_86.28.0
V100440-01	Oracle Communications Tekelec Platform Distribution 7.0.2.0.0_86.32.0
V77482-01	Oracle Communications Tekelec Platform Management and Configuration 6.0.1.0.0_60.21.0
V77390-01	Oracle Communications Tekelec Virtual Operating Environment 3.0.2.0.0_86.28.0
V100418-01	Oracle Communications Diameter Signaling Router 7.1.1.0.0_71.31.0 OVA
V100421-01	Oracle Communications Diameter Intelligence Hub Mediation 7.1.0.0.0-71.24.6 OVA
V100419-01	Oracle Communications Diameter Intelligence Hub Database 7.1.0.0.0-71.24.6 OVA
V100420-01	Oracle Communications Diameter Intelligence Hub Applications 7.1.0.0.0-71.24.6 OVA
V100423-01	Oracle Communications Diameter Signaling Router, Full Address Resolution 7.1.1.0.0_71.15.0 OVA

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Feature Descriptions

Feature Constant Upgrade

DSR Rack Mount Server Enhancements on Oracle X5-2 and HP Gen9
- All Diameter Signaling Router applications, including Full Address Resolution (FABR), Policy Proxy (PDRA), and Charging Proxy (OCS), will be supported on the rack mount server (Oracle X5-2, HP Gen9) solution. (BUG# 20389827) (BUG# 20389835)
- The rack mount server solution will increase the supported capacity to 120K MPS on Oracle X5-2 and HP Gen9 hardware. (BUG# 20390013)

Fully Functional non-HA lab on a single server (BUG# 20389883)
- The DSR single server lab enhancement is available on the Oracle X5-2 and HP Gen9 hardware platform.
- The DSR single server lab provides a cost effective lab option for customers to test feature functionality.
    - The single server lab provides the ability to test all application functionality on a single Oracle X5-2 or HP Gen9 server
    - Does NOT test performance and capacity
    - OAM servers run in a pair (active/standby) while all other VMs run single in order to support upgrade.
- Single Server Lab Capacity:
    - MPS – 500
    - SDS (Subscribers) – 5M
    - SBR (Sessions) – 5M

Support for KVM/Openstack (BUG# 19108640)
- Cloud Deployable DSR with support of KVM as hypervisor and Openstack as cloud manager.

Resolved BUGs

Table RN-2. Diameter Signaling Router 7.1.1.0.0 Resolved BUGs

Bug ID	SR	Found Release	Severity	Title
21341296	3-10457878268	5.1	Enhancement	Timed alarm when ART triggers a disabled DSR Application
21223544		6.0	3	DRA rejecting to convert SAI message due to missing requesting PLMN-ID parameter
21436439		7.0	3	OVA Images Do not Contain Ethernet Interfaces
21305131		7.1	2	IPFE I+R connections cause DA-MP stasis when Resp half lands on different DA-MP
21860169		7.1	2	Default Enabled setting of SCTP AUTH extensions could cause network outage
21936815		7.1	2	[Cloud DSR]OCS pool mode changed during Major Upgrade from 7.0.1 to 7.1.1
22228079		7.1	2	DSR 7.1 PCA with topology hiding off abterms after receiving STA with 5002
20325253		7.1	3	IPv6 Only DSR: [32308] Server provisioning Network Error after enabling Ping
21609739		7.1	3	[IPv6][inetmerge] Retry DNS lookups for failing previously connected links
21627900		7.1	3	Cross-DSR timing measurements incorrect
21861273		7.1	3	Failure to resolve IPv6 addresses in DNS post- IPv6 migration
21867641		7.1	3	FPGA SIS LED register can not turn off rear SIS LEDs sometimes

Customer Known BUGs

Table RN-3. DSR 7.1.1.0.0 Customer Known BUGs

BUG #	SR	Sev	Title	Customer Impact / Workaround
22143961		2	[711MR]HA:Resource registrations during network recovery can cause database loss	Customer Impact: When recovering from a complete power outage at a site, the session records at the mated site may be dropped. Workaround: None. Sessions will need to re-created.
22227178		2	[711MR] inetrep abterm in TmOutgoingChannel::id()	Customer Impact: If an abterm occurs during a reboot while the database is being replicated, the database may become incoherent. The issue was encountered after repeatedly taking the switches up and down. This is is unlikely to occur in the field. Workaround: None. inetrep restarts and recovers by itself with no recovery steps needed.
21684532		3	Diameter Common Import Tasks List Not Complete	Customer Impact: "Diameter Common -> Import" task list may not be complete. Workaround: User could check ImportExportStatus logs in the file management area "Status & Manage -> Files".
21692073		3	pdbRelayMsgLogTimeStamp should be separated from the ProvOptions table	Customer Impact: No operational impact. Upgrade Backout wipes out the pdbRelayMsgLogTimeStamp causing pdbRelay to fail. This has been compensated by work-around in current Backout procedures until a SW fix is available.
21757262		3	Display appropriate error in DSR deployment screen	Customer Impact: Generic error, "An internal error has occurred - please contact Oracle Customer Support.", if an error is encountered during ISO deployment. There is no indication if ISO deployment is already in progress or already finished.
21766436		3	SDS: Failed to Start Manual Audit	Customer Impact: No operational impact. This manual Audit was purposefully disabled by default for COMCOL releases 6.2 thru 6.4. This causes the audit status to display on the GUI as "Not Applicable." However, the button has not disabled. Therefore, when you click it, it will state "Failed to start manual audit." It also displays another failed message if trying to suspend. All automated Audits remain fully operational.

21792100		3	Peer Node and Connection Scope Value dropdown does not show all connections	Customer Impact: On the DSR GUI under "Diameter->Troubleshooting With IDIH->Configuration->Traces->Insert", Scope Type = Connection or Peer Node dropdown may not show all available choices. Workaround: User could type Connection or Peer Node name in the box.
21796989		3	Issue in PCA comAgent queue full error handling	Customer Impact: Possible failures of session creation requests while resizing plan is in progress only when the comAgent queue is full and topology hiding/Session state is enabled.
21807197		3	Event 22701 for Answer messages with Missing CC-Request Type AVP for Gy/Ro	Customer Impact: No impact to signaling / call processing. PCA will generate Event 22701 but continue processing the message using the CC-Request Type AVP from the corresponding Request. The only impact is that an unwanted event 22701 is generated.
21819238		3	ImpParser process is restarting in Mediation Server.	Customer Impact: No operational impact. Workaround has been incorporated in the DSR Installation Guide.
21833339		3	IDB Fragments (PsbrSessionPart.000) getting ousted on PDRA disable.	Customer Impact: If customer disables the PDRA function, replication and memory issues may occur. Workaround: Restart the psbr process to clean up the ousted fragment.
21840386		3	Cannot Delete Multiple Servers on NO GUI Configuration->Servers	Customer Impact: User cannot delete multiple servers at one time. Deletion must be serial. Workaround: Delete servers one at a time.
21857865		3	LongRunningTask table shows incorrect Taskstates	Customer Impact: User is presented with GUI box during enable/disable all that may be misleading (Another Enable All/Disable All operation is already in progress. Continue anyway?). Workaround: Select OK anyway, and process will continue.
21858970		3	ETG can not be configured with 128 peers	Customer Impact: Only 127 peers can be configured in an ETG.
21859187		3	Peer Node Group: Peer node name Add button not disabled after reaching max32	Customer Impact: None. Although Add button is not disabled an attempt to insert above maximum supported will result in "[Error Code 19558] - Insert Failed. maximum number of Peer Nodes for this Peer Node group have already been configured (max=32)."
21861273		3	Failure to resolve IPv6 addresses in DNS post- IPv6 migration	Customer Impact: No operational impact. Workaround has been

				incorporated in the IPv6 Migration Guide.
21866548		3	[VEDSR] X5-2: TemperatureWarning alarms	Customer Impact: Temperature Warning Trap is generated. Customer is warned that temperature is rising. ILO does not indicate any issue. Customer should inspect for temperature issues in the area to verify hardware is sufficiently cooled. If ILO does not have any warning, no additional action is necessary.
21909709		3	Cloud DSR - SS7 MP MP Profile assignment current value description is misleading	Customer Impact: No system impact. In the SOAM GUI under Main Menu -> Diameter Common -> MPs -> Profile Assignments the current value column will not be valid.
21917304		3	[Appworks]: Failure to resolve IPv6 addresses in DNS post- IPv6 migration	Customer Impact: No operational impact. Workaround has been incorporated in the IPv6 Migration Guide.
21955953		3	Unable to delete SS7 MPs when group assigned to NOAM NE rather than SOAM NE	Customer Impact: If SS7 MP servers are mistakenly assigned to the NOAM NE rather than the SOAM NE, user will not be able to delete the servers from the server group via the DSR GUI.
21955996		3	Unable to add spare SBR server as the first server in a server group	Customer Impact: User must add a non-preferred spare server to the server group first.
21956002		3	Multiple servers are not being deleted when selected via the server screen	Customer Impact: On the DSR GUI Configuration->Servers screen only one server can be deleted at a time. Although multiple servers may be selected, deleted and success message is received, only one server is actually deleted.
21965489		3	[Cloud]Hardware Id is HW_UNKNOWN on KVM / Openstack	Customer Impact: Unexpected ComAgent behavior. ComAgent parameters are set to high for Cloud installations when the Hardware Id is not recognized "HW_UNKNOWN". The ComAgent Parameters are set to HP Gen6 hardware which will potentially cause the Cloud installation to be overwhelmed with ComAgent traffic.
21975470		3	ASGU Feature not implemented according to spec	Customer Impact: Inter-Server Group full parallel upgrade coordination is not supported.
22012025		3	[VEDSR] SBR Alternate Key Creation Errors and high TmSbrProcessingTime	Customer Impact: During Oracle testing with system is running at 100% load (50% PCA) on duration runs, there were rare timeouts during processing. These timeouts prevent the necessary binding keys for being created for that session. System detects this failure, and sends RAR to the PCEF to re-establish these

				sessions. Network protocol should recover based on RAR handling. Workaround: None. Network will auto-recover if occasional timeout of creation occurs.
22084979		3	[VEDSR] Error Reported on IDIH Install not Valid	Customer Impact: No system impact. Error indicating Healthcheck failed can be verified by re-running, " sudo /usr/TKLC/xIH/plat/bin/analyze_server.sh -I ".
22113166		3	[711MR] Unexpected error/TKLC Reference in featureActivationDeactivation script	Customer Impact: When running the featureActivateDeactivate script to activate a feature for additional SO servers that have been inserted, but not deployed user may see "Unable to find NodeId. Invalid Topology. Please contact Tekelec Customer Service."
22121220		3	DB compare should ensure hostname of restore server exists in Server table	Customer Impact: Customer must use the same hostname previously assigned during the DSR Disaster Recovery procedure to configure the first NOAM server otherwise the database restore will fail.
22122018		3	restoreDB.pl script needs to add error handling	Customer Impact: The restoreDB script could hang with no indication of failure. Workaround: SDS will use idb.restore until this is bug resolved.
22180707		3	[711MR] Spare fails to bulk audit Standby	Customer Impact: This is a rare scenario in that the spare server must have been idle when rebooting both the previously active and standby servers resulting in database loss.
22194751		3	[711MR] OneTable audit stuck in loop when forcing full audit	Customer Impact: Could cause replication issues due to replication link being stuck in a loop.
22217695		3	[Cloud] Max MPS traffic alarm [i.e. 22106] does not consider MAP orig traffic	Customer Impact: The Maximum MPS traffic alarm will not be raised for MAP originated traffic even if the traffic is greater than the alarm thresholds. The Maximum MPS traffic alarm does not consider diameter traffic running on DA-MPs due to MAP originated calls. Only Diameter originated traffic is considered.
22227120		3	[711MR] Remove unnecessary alarm when deleting Audit Arbitrator link	Customer Impact: Alam 31100-DB Replication Fault could be seen during a site recovery.
22301491		3	Connection dropped if Diameter header length is not a multiple of 4	Customer Impact: Alarms associated with the connection drop and automatic re-establishment.
22353640		3	Seeing "Upgrade exception is REBOOTING but waiting for VALIDATED"	Customer Impact: This only impacts SDS SOAM with IPv6 or dual stack management network. During upgrade,

					Tasks Tab may show "Server Upgrade exception <hostname>: Server <hostname> is REBOOTING but waiting for VALIDATED." Workaround may be applied to complete upgrade.
					Workarounds:
					*** If upgrade process hangs after starting(upgrade not completed); Manually 'complete' the upgrade. Selected the server and start the upgrade again.
					*** If upgrade completed; Once the server is up and present on the Status & Manage -> Server page, restart the application manually. The upgrade status should then update. Either manually refresh the GUI or allow time for auto refresh.

Table RN-3 represents Customer Known Bugs for DSR 7.1.1 after the DSR 7.1 GA Release Notice was published. Please see *DSR 7.1 Release Notice* on OHC (Oracle Help Center) for Customer Known Bugs in DSR 7.1.

Oracle References and Services

My Oracle Support (MOS)

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

Call the CAS 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 **2** for Non-technical issue

You will be connected to a live agent who can assist you with MOS registration and provide Support Identifiers. Simply mention you are an Oracle Customer new to MOS.

MOS is available 24 hours a day, 7 days a week, 365 days a year.

Note: Please consult MOS for additional clarification regarding Key Product Indicators (KPI) when deploying DSR on a hypervisor.

Emergency Response

In the event of a critical service situation, emergency response is offered by the My Oracle Support 24 hours a day, 7 days a week. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with the My Oracle Support Center.

Customer Training

Oracle offers a variety of technical training courses designed to provide the knowledge and experience required to properly provision, administer, operate, and maintain Oracle products. To enroll in any of the courses or for schedule information, contact Oracle University .

Appendix A: Firmware Components

Oracle FUP

The *Oracle Communications Oracle Firmware Upgrade Pack, Release Notes 3.1.5* lists the firmware versions approved for this Oracle Firmware Upgrade Pack release to assist customers with upgrading their Oracle hardware. Also, additional instructions and guidance on the firmware upgrades has been provided where possible.

The Release Notes are available on Oracle Help Center (OHC) at
http://docs.oracle.com/cd/E57832_01/index.htm

HP FUP

The *Oracle Communications HP Solutions Firmware Upgrade Pack, Software Centric Release Notes 2.2.9* lists the firmware versions approved for this HP Solutions Firmware Upgrade Pack release to assist customers with upgrading their HP hardware. Also, additional instructions and guidance on the firmware upgrades has been provided where possible.

The Release Notes are available on Oracle Help Center (OHC) at
http://docs.oracle.com/cd/E57832_01/index.htm