Oracle® Communications Diameter Signaling Router
Release Notes

Release 9.0.1.1.0
G23655-02
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ORACLE®

Oracle Communications Diameter Signaling Router Release Notes, Release 9.0.1.1.0

G23655-02

Contents

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1. Select **2** for New Service Request.

2. Select **3** for Hardware, Networking and Solaris Operating System Support.

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What's New in this Guide

This section introduces the documentation updates for Release 9.0.1.1.0.

Release 9.0.1.1.0 - G23655-02, May 2025

- Updated the supported upgrade paths for DSR, SDS, and vSTP in the Supported Upgrade and Migration Paths section.
- Updated the version for the following applications in the DSR Release 9.0.1.1.0 section:
  - DSR
  - SDS
  - Tekelec Platform Distribution
  - Comcol
  - Appw
  - Exgs

Release 9.0.1.1.0 - G23655-01, December 2024

- Updated media pack content in the DSR Release 9.0.1.1.0 section.
- Added DSR resolved bugs in the DSR section.

1
Introduction

This *Oracle Communications Diameter Signaling Router Release Notes* includes the following:

- Feature descriptions
- Information on supported hardware baseline
- Media and documentation pack
- Supported upgrade paths for this release
- Resolved and known bugs for this release

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

1.1 DSR Overview

Oracle Communications Diameter Signaling Router (DSR) helps communications service providers monetize their network more efficiently to remain competitive in the market. It creates a centralized and secure signaling architecture that enables core networks to grow incrementally and to support increasing service and traffic demands. The distinctive advantages provided by the Oracle Communications Diameter Signaling Router are network scalability, resiliency, interoperability, and security, as well as network visibility. The cloud deployable Oracle Communications Diameter Signaling Router enables service providers to manage Diameter signaling while optimizing network resources, therefore maximizing the return on network and technology investments.

Disclaimer

Before installing third-party software on the same server with Oracle products, for example, DSR, PCRF, UDR, PIC, EAGLE, and so on, you must be aware of the following information:

- Oracle is not responsible for installation, operation, maintenance, and so on, of any non-Oracle distributed software with Oracle products, for example, DSR, PCRF, UDR, PIC, EAGLE, and so on.
- Additional due diligence, including testing, is recommended to be performed in the lab before deploying non-Oracle software on production sites to avoid potential issues.
- Oracle is not responsible for validating or integrating non-Oracle software with Oracle products, for example, DSR, PCRF, UDR, PIC, EAGLE, and so on. Additionally, the persistence of the non-Oracle software over the upgrade of any Oracle product may or may not occur, and Oracle does not guarantee that the non-Oracle software will persist.
- Oracle Support may require that the customer uninstall the non-Oracle software and reinstall Oracle products, for example, DSR, PCRF, UDR, PIC, EAGLE, and so on, to recover the system to address any field issue.

2

Virtual Platforms Supported

Virtual DSR is tested and supported only on the following platforms:

- VMware ESXi 6.0 U2
- KVM QEMU 1.5.3, libvirt 1.2.8, and API QEMU 1.2.8
- OpenStack Train

> **Note:**
>
> BareMetal is not supported from DSR 9.0.0.0.0.

For more information, see *DSR Cloud Benchmarking Guide*.

> **Note:**
>
> Our benchmarking and performance numbers are based only on the above mentioned platforms. If the customer environment is deployed on any other platform, all issues including compatibility and infrastructure concerns would be the responsibility of the customer. Oracle would only be responsible for application related issues.

3

Feature Descriptions

This chapter provides a summary of features released in DSR release 9.0.1.1.0.

3.1 Release 9.0.1.1.0

This section summarizes all the new and enhanced features in DSR, vSTP, and VNFM.

3.1.1 DSR

No new features or feature enhancements have been introduced in this release.

3.1.2 vSTP

No new features or feature enhancements have been introduced in this release.

3.1.3 VNFM

No new features or feature enhancements have been introduced in this release.

4

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.

4.1 Media Pack

All components available for download from the Oracle Software Delivery Cloud (https://edelivery.oracle.com/) are in the following Media Pack contents tables.

> 📝 **Note:**
>
> - 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.

4.1.1 DSR Release 9.0.1.1.0

Table 4-1   Media Pack Contents for DSR 9.0.1.1.0

Part Number	Description
V1047142-01	Oracle Communications Diameter Signaling Router 9.0.1.1.0-98.19.0 OVA
V1047143-01	Oracle Communications Diameter Signaling Router 9.0.1.1.0-98.19.0 DIU ISO
V1047144-01	Oracle Communications Diameter Signaling Router, Full Address Resolution 9.0.1.1.0-98.19.0 OVA
V1047145-01	Oracle Communications Diameter Signaling Router, Full Address Resolution 9.0.1.1.0-98.19.0 DIU ISO
V1047146-01	Oracle Communications Diameter Signaling Router Diameter Security Application 9.0.1.1.0-98.19.0
V1047147-01	Oracle Communications Diameter Signaling Router Steering Of Roaming Application 9.0.1.1.0-98.19.0
V1047148-01	Oracle Communications Diameter Signaling Router Zero Balance Application 9.0.1.1.0-98.19.0
V1047149-01	Oracle Communications Diameter Signaling Router Rx ShUDR Application 9.0.1.1.0-98.19.0
V1047150-01	Oracle Communications Diameter Signaling Router 9.0.1.1.0-98.19.0 DIU Upgrade Scripts
V1047151-01	Oracle Communications Diameter Signaling Router 9.0.1.1.0-98.19.0 DUI Upgrade Checksums
V1047152-01	Oracle Communications Diameter Signaling Router 9.0.1.1.0-98.19.0 MIBs
V1047153-01	Tekelec Platform Distribution 8.0.0.0.0_90.19.1 OL7 DIU ISO

Table 4-1   (Cont.) Media Pack Contents for DSR 9.0.1.1.0

Part Number	Description
V1047179-01	Oracle Communications Diameter Signaling Router Virtual Network Functions Manager 6.1.0.0.0-61.3.13 QCOW2
V1047180-01	Oracle Communications Diameter Signaling Router Virtual Network Functions Manager Artifacts 6.1.0.0.0-61.3.13
V1047132-01	Oracle Communications Diameter Signaling Router Integrated Diameter Intelligence Hub 9.1.0.0.0

4.2 Load Lineup

This section provides information about supported services and ATS for this release.

4.2.1 DSR Release 9.0.1.1.0

DSR Release 9.0.1.1.0 contains the following components:

- Application Lineup
  - DSR: 9.0.1.1.0-98.16.0
  - SDS: 9.0.1.1.0-98.16.0

  > **Note:**
  >
  > SDS 9.0.1.0.1 and 9.0.1.0.0 is backward compatible with old SDS release supported SOAP messages.

  - VNFM: VNFM_6.0.1.0.0_60.8.1
  - ATS: 9.0.1.0.0-1.0.26
  - UDR: 14.0.1.0.0-114.17.0
- Platform Lineup
  - TPD: 8.0.0.0.0_90.19.1
  - gSOAP: 2.8.129
  - Comcol: 8.1.0.4.0-14244
  - Appw: 9.8.0-98.17.0
  - Exgs: 9.8.0-98.17.0

4.3 Documentation Pack

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

Table 4-2   Documentation Pack Contents

Release Notes and Licensing Information User Manuals Document Set
Release Notes

Table 4-2 (Cont.) Documentation Pack Contents

Licensing Information User Manual
DSR Planning, Installation, Upgrade, and Disaster Recovery Document Set
DSR Feature Guide
DSR/SDS NOAM Failover User Guide
DCA Feature Activation Procedure
DTLS Feature Activation Procedure
FABR Feature Activation Procedure
Mediation Feature Activation Procedure
PCA Feature Activation Procedure
RBAR Feature Activation Procedure
DSR Network Impact Report
DSR NIR MEALS Data
DSR Security Guide
DSA with UDR User Guide
DSR Security App Using Mediation Example Procedure
Zero Balance Application User Guide
Diameter Signaling Router Rx ShUDR Application User Guide
DSR VM Placement and CPU Socket Pinning Tool
DSR Compliance Matrix
Cloud Installation and Upgrade Document Set
DSR Cloud Installation Guide
DSR Cloud Software Upgrade User Guide
DSR BareMetal to Cloud Migration Guide
DSR Cloud Disaster Recovery Guide
DSR Automated Test Suite (ATS) Installation and User Guide
DSR VNFM Installation and User Guide
VNFM HEAT Templates
DSR Cloud Benchmarking Guide
SDS Cloud Installation Guide
SDS Cloud Disaster Recovery Guide
Diameter Signaling Router Core Document Set
DSR Getting Started
Operation, Administration, and Maintenance (OAM) User Guide
Diameter User Guide
MMI API Specification
Communication Agent User Guide
Policy Charging Application User Guide
Mediation User Guide
Range Based Address Resolution (RBAR) User Guide
Full Address Based Resolution (FABR) User Guide
Subscriber Binding Repository (SBR) User Guide
IP Front End (IPFE) User Guide
Diameter Common User Guide
Equipment Identity Register User Guide

Table 4-2   (Cont.) Documentation Pack Contents

Diameter Custom Application (DCA) User Guide
Diameter Custom Application (DCA) Programmer Guide
Roaming Steering Application User Guide
RADIUS User Guide
vSTP User Manual
vSTP Heat Template
vSTP SS7 Security User Guide
vSTP eLYNX Card Installation Guide
ENUM User Guide
ENUM Heat Template
Mobile Number Portability (MNP) User Guide
TIF User Guide
Alarms and KPIs Reference
Measurements Reference
Glossary
Related Publications Reference
Subscriber Data Server Document Set
SDS Getting Started
SDS User Guide
SDS Provisioning Interface Guide
SDS Software Upgrade Procedure
SDS BareMetal to Cloud Migration Guide
UDR Installation, Upgrade, and Disaster Recovery Document Set
UDR Cloud Installation and Configuration Guide
UDR Cloud Disaster Recovery Guide
Provisioning Gateway Installation Guide
UDR Heat Templates
Provisioning Gateway Heat Templates
UDR SOAP Provisioning Interface Specification
UDR REST Provisioning Interface Specification
UDR Bulk Import/Export File Specification
UDR Provisioning Database Application and Interface Specification
Integrated Diameter Intelligence Hub (IDIH) Document Set
IDIH Release Notes
IDIH User Guide
IDIH Alarm Forwarding Administrator's Guide
IDIH Audit Viewer Administrator's Guide
IDIH Operations, Administration and Maintenance Administrator's Guide
IDIH ProTrace User Guide
IDIH Log Viewer Administrator's Guide

5
Supported Upgrade and Migration Paths

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

The possible upgrade paths to DSR Release 9.0.1.1.0 are listed in the following table:

Component	From	To
DSR	8.6.0.0.0, 8.6.0.1.0, 8.6.0.2.0, 8.6.0.3.0, 8.6.0.4.0, 8.6.0.5.0, 9.0.0.0.0, 9.0.1.0.0	9.0.1.x.x
SDS	8.6.0.0.0, 8.6.0.1.0, 8.6.0.2.0, 8.6.0.3.0, 8.6.0.4.0, 8.6.0.5.0, 9.0.0.0.0, 9.0.1.0.0	9.0.1.x.x
IDIH	8.2.1, 8.2.2, 8.2.3.2	8.2.3.3
vSTP	8.6.0.0.0, 8.6.0.1.0, 8.6.0.2.0, 8.6.0.3.0, 8.6.0.4.0, 8.6.0.5.0, 9.0.0.0.0, 9.0.1.0.0	9.0.1.x.x

> ✏ **Note:**
>
> - Any upgrade other than those listed above is not recommended or supported. Version 9.0.X.0.0 is supported as a new or fresh installation.
>
> - VEDSR is not supported from DSR Release 8.3 onwards.
>
> - Diameter Security Application (DSA) with Universal-SBR (USBR) application is not supported from DSR Release 8.4.0.5.0. Customers using this application must not upgrade DSR software to DSR 8.4.0.5.0 release and must migrate to DSA with UDR based application.
>
> - Zero Balance Application with USBR and Steering of Roaming (SOR) with USBR are not supported from DSR Release 8.4.0.5.0 and later. Customers using these applications must not upgrade the DSR software to DSR 8.4.0.5.0 or a later release and must migrate to ZBA with UDR and SOR with UDR based applications.

The possible migration paths from DSR BareMetal to DSR 9.0.1.0.0 are listed in the following table:

Component	From	To
DSR	8.6.0.0.0, 8.6.0.1.0, 8.6.0.2.0, 8.6.0.3.0, 8.6.0.4.0, 8.6.0.5.0	9.0.1.0.0
SDS	8.6.0.0.0, 8.6.0.1.0, 8.6.0.2.0, 8.6.0.3.0, 8.6.0.4.0, 8.6.0.5.0	9.0.1.0.0

Component	From	To
vSTP	8.6.0.0.0, 8.6.0.1.0, 8.6.0.2.0, 8.6.0.3.0, 8.6.0.4.0, 8.6.0.5.0	9.0.1.0.0

> **Note:**
>
> For further information on migration, refer to *DSR BareMetal to Cloud Migration Guide* and *SDS BareMetal to Cloud Migration Guide*.

6
Deprecated Software and Features

The following software element is not compatible with DSR 9.0.0.0.0 and later:

- SCEF

> **Note:**
>
> Baremetal is not supported from DSR 9.0.0.0.0.

The following features are deprecated from 8.4.0.5 and later:

- DSA with USBR
- ZBA with USBR
- SOR with USBR

The following software elements are not compatible with DSR 8.4 and later:

- DAMP Active-Standby Configuration
- GLA
- MAP Diameter Interworking

Virtualized Engineered DSR (VEDSR) deployment, also known as TVOE based Fully Virtualized Rack Mount Server (FV RMS) Signaling node, is not supported from DSR 8.3 and later. The following are the non-supported network elements of Virtualized Engineered DSR (VEDSR):

- DSR NOAM
- DSR SOAM
- DSR Message Processors (MP)
- SS7 MP
- DSR IPFE
- DSR SBR (Session or Binding or Universal)
- SDS NOAM
- SDS SOAM
- SDS QS
- SDS DP

Virtualized Engineered DSR (VEDSR) networks and associated elements need to be migrated to virtual DSR implementation based on KVM with or without OpenStack or VMware prior to DSR 8.3 or 8.4.x upgrade or install.

7

Resolved and Known Bugs

This chapter lists the resolved and known bugs for DSR.

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.

7.1 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 through 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 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.

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 as follows:

1. 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
   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.

Network Software Support & Sustaining Support, please see the Oracle Communications Network Premier & Sustaining Support and Oracle Communications Network Software Support & Sustaining Support sections above.

2. 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.

3. Severity 3 - You experience a minor loss of service. The impact is an inconvenience, which may require a workaround to restore functionality.

4. 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.

7.2 Resolved Bug List

This sections lists all resolved bugs for DSR, vSTP, and VNFM in this release.

7.2.1 DSR

Release 9.0.1.1.0

The following table lists the resolved bugs in DSR 9.0.1.1.0 release.

Table 7-1   DSR 9.0.1.1.0 Resolved bugs

Bug Number	Severity	Found in Release	Title
37297242	3	9.0.1.0.1	DCA:DSA Changing the implementation logic for getAvpMap
37183883	3	9.0.1.0.0	DCA:DSA Very slow progress for importing DSA related config CSV in SO GUI
37157568	3	9.0.0.0.0	Scheduled tasks are failing after switchover of OAM server's
37135791	3	9.0.1.0.0	DSR-9.0.1 Issue in file clearance after remote export
37122196	3	9.0.0.0.0	31215 - Process Resources Exceeded alarm appears continuously/active NOAMP (apwSoapServer)
37091132	3	9.0.1.0.0	Both Noam having same server name in DB submenu of NOAM GUI
37084317	3	8.6.0.0.0	DSR 9.0.1 : Memory size correction wrt meassqt process
37154174	3	9.0.0.0.0	[9.0.1] Bug for DSS - 5799 / DSD-2657 : Mediation Filter of Rule set getting removed on second page and full export of mediation Rule set required.
37131040	3	8.6.0.0.0	UDR "ULR is not received for this subscriber yet" || DRA deleting IMSI entries
36962622	3	8.6.0.0.0	DSA S6a Reset-Request RSR w/o User-Id Detection
37287888	4	9.0.1.0.0	IDIH Kafka feature

Table 7-1   (Cont.) DSR 9.0.1.1.0 Resolved bugs

Bug Number	Severity	Found in Release	Title
36997204	4	9.0.0.0.0	Cron file missing after upgrade

Release 9.0.1.0.1

The following table lists the resolved bugs in DSR 9.0.1.0.1 release.

Table 7-2   DSR 9.0.1.0.1 Resolved bugs

Bug Number	Severity	Found in Release	Title
36074297	2	9.0.1.0.0	Slow response of SOAM GUI
36143239	3	9.0.1.0.0	Unexpected behavior of DSA when configured Peer Node's name is more than 15 characters
36154259	3	9.0.1.0.0	SCTP Multi-homing behaviour is not working
35959044	3	9.0.1.0.0	Duplicate Alarms observed from both Active and Standby SOAM to NMS system
36203464	3	9.0.1.0.0	Timezone retrieval issue after upgrade
36001873	4	9.0.1.0.0	Connection unavailable alarm is not raising for IPFE connections

Release 9.0.1.0.0

The following table lists the resolved bugs in DSR 9.0.1.0.0 release.

Table 7-3   DSR 9.0.1.0.0 Resolved bugs

Bug Number	Severity	Found in Release	Title
36343511	3	9.0	Host OS and KVM version needs to be updated for DSR 9.x documents
35559679	3	9.0	DSA low layer filtering feature changes
35574248	3	8.5.0.2.1	Invalid Framed-Ipv6-Prefix Error during Radius Call
35699416	3	9.0	Mediation - Rule template screen gets blank whenever they tried to add custom AVP
35684946	3	8.6.0.5.0	DSR8.6.0.5:core core.httpd formed in initial installation Partner Visible
35826484	3	9.0	DCA:DSA option is unavailable in measurement report
35867245	3	9.0	Mismatch of the vulnerability validation condition in DSA Userguide and DSA FD of Application-ID Whitelist Screening (AppIdWL) countermeasure
35625042	4	9.0	DSR Signaling FW malfunctions on IPFE with multiple TSA configured
35625042	4	8.6	Update DSR Security Guide for tpdProvd password reset

7.2.2 vSTP

Release 9.0.1.1.0

There are no resolved bugs for this release.

Release 9.0.1.0.0

The following table lists the resolved bugs in vSTP 9.0.1.0.0 release.

Table 7-4   vSTP Release 9.0.1.0.0 Resolved Bugs

Bug Number	Severity	Found in Release	Title
35706581	3	8.6	EIR service is not working when message is rt on gt
35616149	3	8.6	vSTP GUI: Issue with import for HSL links in interface mappings
35248609	3	9.0	PDU Pool exhausted on eLynx setup

7.2.3 VNFM

Release 6.0.1.0.0

The following table lists the resolved bugs in VNFM 6.0.1.0.0 release.

Table 7-5   VNFM Release 6.0.1.0.0 Resolved Bugs

Bug Number	Severity	Found in Release	Title
35874844	2	9.0	DSR Signaling Cloud-Init Failed to connect to Signaling VIP instance
35854237	3	9.0	Network Not Configured correctly when VNFM is ipv4 & VIM is ipv6
35814357	3	9.0	SBR Scale Issue - Newly spawned SBRs are not added to any Server Group
35472050	3	9.0	Graceful termination failure for DSR Signaling and SDS Signaling (9.0.1.0.0_98.3.0) on VNFM_6.0.1.0.0_60.3.0
35594972	4	6.0	"numServiceMp" parameter not mentioned in VNFM 6.0.0 usage instructions page.
35754632	4	9.0	VNFM : 6.0.1-60.5.2 : Only one Server group is creating for SBR in Diameter+sbr large setup
35788901	4	6.0	Response 400 if "vnfInstanceDescription" parameter (optional) left empty

7.3 Known Bug List

The section lists the known bugs for DSR, vSTP, and VNFM along with the associated customer impact statements.

7.3.1 DSR

Release 9.0.1.1.0

There are no known bugs for this release.

7.3.2 vSTP

Release 9.0.1.1.0

There are no known bugs for this release.

7.3.3 VNFM Known Bugs

Release 6.0.1.0.0

There are no known bugs for this release.