# Oracle® Communications Diameter Signaling Router Release Notes





Oracle Communications Diameter Signaling Router Release Notes, Release 9.2.0.0.0

G43258-02

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## **Preface**

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## **Documentation Accessibility**

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

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### Conventions

The following text conventions are used in this document:

Convention Meaning		
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.	
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.	
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.	

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- 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 9.2.0.0.0.

#### Release 9.2.0.0.0 - G43258-02, October 2025

- Added <u>DSR Security Test Summary</u> section.
- Updated IDIH in the Load Lineup section.
- Updated part number for the following components in the Media Pack section:
  - DIU ISO
  - Full Address Resolution
  - Integrated Diameter Intelligence Hub for VNFM Installation
  - Integrated Diameter Intelligence Hub for Manual Installation
  - Virtual Network Functions Manager
  - Virtual Network Functions Manager Artifacts

#### Release 9.2.0.0.0 - G43258-01, September 2025

- Added DSR features in the <u>DSR Features</u> section.
- Added vSTP features in the <u>vSTP Features</u> section.
- Added VNFM features in the VNFM Features section.
- Updated the media pack content in the Media Pack section.
- Updated supported upgrade paths in the <u>Supported Upgrade and Migration Paths</u> section.
- Updated the application and platform line up in the <u>Load Lineup</u> section.
- Added DSR resolved bugs in the DSR section.
- Added VNFM resolved bugs in the VNFM section.
- Added vSTP resolved bugs in the vSTP section.
- Added IDIH resolved bugs in the <u>IDIH</u> section.
- Added ATS resolved bugs in the <u>ATS</u> section.
- Added DSR known bugs in the <u>DSR</u> section.
- Added vSTP known bug in the <u>vSTP</u> section.
- Added ATS known bug in the ATS section.

## Introduction

This document provides information about new features and enhancements to the existing features for Oracle Communications Diameter Signaling Router.

It also includes details related to media and documentation pack, feature descriptions, Information on supported hardware baseline, supported upgrade paths. The details of the fixes are included in the Resolved Bug List section. For issues that are not yet addressed, see the Customer Known Bug List.

Release Notes are included in the documentation pack and made available with every software release. For information on how to access key Oracle sites and services, see <a href="My Oracle Support">My Oracle Support</a>.

### 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.

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- 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.

## Virtual Platforms Supported

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

- VMware ESXi 8.0 U2
- KVM QEMU 6.2.0, libvirt 8.0.0, and API QEMU 8.0.0
- OpenStack Wallaby

#### (i) Note

BareMetal is not supported from DSR 9.0.0.0.0.

For more information, see DSR Cloud Benchmarking Guide.

#### (i) 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.

## **Feature Descriptions**

This chapter describes the features for the 9.2.0.0.0 release.

### 3.1 Release 9.2.0.0.0

This chapter introduces the new features or feature enhancements for DSR, vSTP, and VNFM.

### 3.1.1 DSR Features

The following DSR features are implemented in release 9.2.0.0.0:

- Diameter End-To-End Security: The Diameter protocol plays a crucial role in modern telecommunications networks for Authentication, Authorization, and Accounting (AAA) functions. To enhance the security of Diameter messages, oracle introduces Diameter End-to-End Security (DESS) feature, allowing the signing and verification of messages exchanged between network nodes. For more information, see Oracle Communications Diameter Security Application User Guide with UDR.
- Enhanced Address Resolution: Enhanced Address Resolution is an advanced networking protocol designed to improve the efficiency and reliability of address resolution processes in modern networks. For more information, see Oracle Communications Diameter Signaling Router Range Based Address Resolution User Guide.
- DSR Routing list changes: Routing rules and rule actions are used to implement the
  routing behavior required by the operator. Routing rules are defined using combinations of
  the following data elements Destination-Realm, Destination-Host, Origin-Host, and OriginRealm. For more information, see *Oracle Communications Diameter Signaling Router*Feature Guide.
- LDAP Authentication: This enhancement allows operators to connect to their centralized
  user management systems for SSH users through LDAP, there by avoiding the need to
  create explicit users on DSR and simplifying the operations at customer. For more
  information, see Oracle Communications Diameter Signaling Router Operations,
  Administration, and Maintenance Guide.
- DSR Traffic Throttle Points and Groups Table Size Increase: The capacity for traffic management is enhanced by increasing the maximum number of Traffic Throttle Points and Traffic Throttle Groups per network element from 500 to 1500, and raising the maximum number of Shared Traffic Throttle Groups that can be marked as shared under the control of a single NOAM from 1000 to 3000. For more information, see Oracle Communications Diameter Signaling Router Diameter User Guide.

### 3.1.2 vSTP Features

The following vSTP features are implemented in release 9.2.0.0.0:

 Cluster Routing Support: The Cluster Routing feature eliminates the need for a FPC (Full Point Code) entry in the routing table to route to every signaling point in every network.
 The Cluster Routing feature allows the vSTP to configure one routeset to a entire cluster of destinations. This feature also allows the vSTP to manage and switch traffic to more end



- nodes. For more information, see *Oracle Communications Diameter Signaling Router Virtual Signaling Transfer Point User Guide*.
- Nested Cluster Routing: The Nested Cluster Routing feature provides a mechanism that allows both cluster and member routes to be provisioned in the same cluster. For more information, see Oracle Communications Diameter Signaling Router Virtual Signaling Transfer Point User Guide.
- Network Routing: Network Routing allows the user to provision a single routeset which
  can be used for all MSUs destined to members of that specific network. For more
  information, see Oracle Communications Diameter Signaling Router Virtual Signaling
  Transfer Point User Guide.
- Calling Name Conversion Facility (CNCF): The CNCF (Calling Name Conversion Feature) simplifies the way calling name information is delivered in telecommunications. It converts ISUP IAM messages (used in traditional telephony) between using a proprietary PIP (Party Information Parameter) and standard GN (Generic Name Parameter). For more information, see Oracle Communications Diameter Signaling Router Virtual Signaling Transfer Point User Guide.
- Support for Applying GTT Action from intermediate GTT Sets: The Intermediate GTT
  Action Application feature enhances the flexibility of Global Title Translation (GTT) actions
  in your network. Previously, certain actions were restricted to the last GTT set only. With
  this feature, user can apply GTT actions from intermediate GTT sets for all actions. For
  more information, see Oracle Communications Diameter Signaling Router Virtual Signaling
  Transfer Point SS7 Security Guide.
- SFAPP ATIGTT Set: The SFAPP ATIGttset feature is designed to optimize the routing of ATI (Any Time Interrogation) messages in the network. When enabled, it ensures that ATI messages are directly routed to their corresponding destinations without the need for a selector lookup. This feature is useful only when the GTT Action (Global Title Translation Action) is set to SFAPP (Specific Forwarding Application). For more information, see Oracle Communications Diameter Signaling Router Virtual Signaling Transfer Point SS7 Security Guide.
- G-Port SRI Query for Prepaid: The G-Port SRI Prepaid Feature enhances standard G-Port functionality by ensuring that all Send Routing Information (SRI) queries from the Prepaid Service Control Point (SCP) receive a direct response with portability routing information. This feature simplifies tariff determination and routing for prepaid subscribers, whether they are ported or not, by providing a meaningful G-Port response for every query. For more information, see Oracle Communications Diameter Signaling Router Mobile Number Portability User Guide.
- Gateway Screening Enhancement: vSTP now supports screening of SCMG (SCCP Management) messages on the basis of scmg message type, affected Point code and affected SSN (subsystem number) by configuring required MTP Screening rule and Screen Groups. For more information, see Oracle Communications Diameter Signaling Router Virtual Signaling Transfer Point User Guide and Oracle Communications Diameter Signaling Router Virtual Signaling Transfer Point SS7 Security Guide.
- Group Code is extended to ITU-International Linksets: The Group Code concept, traditionally applied within national signaling networks, can be extended to ITU-International Linksets to provide a structured and efficient method for managing international signaling connections. This feature will allow vSTP to route traffic for two or more destinations or countries that may have overlapping point code values. For more information, see Oracle Communications Diameter Signaling Router Virtual Signaling Transfer Point User Guide.
- vSTP Measurement Reports must contain only the servers or links being used: The
  measurement (indexed by link or connection) must be pegged only on the MP server
  hosting that link or connection. Previously, measurement reports showed pegging of



measurements on other servers, in addition to the MP server hosting the link or connection. For more information, see *Oracle Communications Diameter Signaling Router Measurement Reference Guide* 

### 3.1.3 VNFM Features

The following VNFM features and enhancements are implemented in release 9.2.0.0.0:

- MTU Support in Scale: MTU Support in Scale allows users to specify Maximum
   Transmission Unit (MTU) values for all networks within additional parameters in (V1) or
   within configurable properties in (V2). if an MTU value is provided for the Signaling
   network, MTU values must also be provided for all other networks. For more information,
   see Oracle Communications Virtual Network Functions Manager Installation and User
   Guide.
- MTU Support for Signaling: MTU Support in Scale allows users to specify Maximum
  Transmission Unit (MTU) values for all networks within additional parameters in (V1) or
  within configurable properties in (V2). If an MTU value is provided for the Signaling
  network, MTU values must also be provided for all other networks. For more information,
  see Oracle Communications Virtual Network Functions Manager Installation and User
  Guide.
- MTU Support for NOAM: MTU Support in Scale allows users to specify Maximum
  Transmission Unit (MTU) values for all networks within additional parameters in (V1) or
  within configurable properties in (V2). If MTU is provided for NOAM, both xmiNetwork and
  imiNetwork values must be included. For more information, see Oracle Communications
  Virtual Network Functions Manager Installation and User Guide.
- MTU Support for DR NOAM: MTU Support in Scale allows users to specify Maximum
  Transmission Unit (MTU) values for all networks within additional parameters in (V1) or
  within configurable properties in (V2). if MTU is provided for DR NOAM, both xmiNetwork
  and imiNetwork values must be included. For more information, see Oracle
  Communications Virtual Network Functions Manager Installation and User Guide.
- Multiple NTP Server Ip support in DSR and SDS VNFs: VNFM supports multiple NTP server IP addresses, which can be specified during the instantiation of DSR and SDS VNFs. This supports both IPv4 and IPv6 NTP server IP addresses. For more information, see Oracle Communications Virtual Network Functions Manager Installation and User Guide.

### 3.1.4 IDIH Features

Enhanced IDIH 9.2 provides a refresh to the architecture of old version while retaining all of its core feature functionality. The architecture brings in latest technology and also provides enhanced User Experience.

The IDIH supports IPV6 along with IPV4.

## 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 (<a href="https://edelivery.oracle.com/">https://edelivery.oracle.com/</a>) are in the following Media Pack contents tables.

#### (i) Note

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

### 4.1.1 DSR Release 9.2.0.0.0

Table 4-1 Media Pack Contents for DSR 9.2.0.0.0

Part Number	Description	
V1052007-01	Oracle Communications Diameter Signaling Router 9.2.0.0.0-102.16.0 DIU ISO	
V1051943-01	Oracle Communications Diameter Signaling Router 9.2.0.0.0-102.16.0 OVA	
V1051944-01	Oracle Communications Diameter Signaling Router 9.2.0.0.0-102.16.0 QCOW2	
V1052008-01	Oracle Communications Diameter Signaling Router, Full Address Resolution 9.2.0.0.0-102.16.0 DIU ISO	
V1051946-01	Oracle Communications Diameter Signaling Router, Full Address Resolution 9.2.0.0.0-102.16.0 OVA	
V1051947-01	Oracle Communications Diameter Signaling Router, Full Address Resolution 9.2.0.0.0-102.16.0 QCOW2	
V1051948-01	Oracle Communications Diameter Signaling Router Diameter Security Application 9.2.0.0.0-102.16.0	
V1051949-01	Oracle Communications Diameter Signaling Router Steering Of Roaming Application 9.2.0.0.0-102.16.0	
V1051950-01	Oracle Communications Diameter Signaling Router Zero Balance Application 9.2.0.0.0-102.16.0	
V1051951-01	Oracle Communications Diameter Signaling Router Rx ShUDR Application 9.2.0.0.0-102.16.0	
V1051952-01	Oracle Communications Diameter Signaling Router 9.2.0.0.0-102.16.0 MIBs	
V1051953-01	Oracle Communications Diameter Signaling Router Automated Test Suite (ATS) 9.2.0.0.0-1.0.15 TGZ	



Table 4-1 (Cont.) Media Pack Contents for DSR 9.2.0.0.0

Part Number	Description		
V1051954-01	Oracle Communications Diameter Signaling Router Automated Test Suite (ATS) 9.2.0.0.0-1.0.15 QCOW2		
V1051955-01	Oracle Communications Diameter Signaling Router User Data Repository 14.2.0.0.0-114.43.0 OVA		
V1051956-01	Oracle Communications Diameter Signaling Router User Data Repository 14.2.0.0.0-114.43.0 ISO		
V1051957-01	Oracle Communications Diameter Signaling Router User Data Repository 14.2.0.0.0-114.43.0 DIU ISO		
V1052406-01	Oracle Communications Diameter Signaling Router Virtual Network Functions Manager 6.2.0.0.0-62.4.5 QCOW2		
V1052407-01	Oracle Communications Diameter Signaling Router Virtual Network Functions Manager Artifacts 6.2.0.0.0-62.4.5		
V1052411-01	Oracle Communications Diameter Signaling Router Integrated Diameter Intelligence Hub for VNFM Installation 9.2.0.0.0-92.1		
V1052408-01	Oracle Communications Diameter Signaling Router Integrated Diameter Intelligence Hub for Manual Installation 9.2.0.0.0-92.1		

## 4.2 Load Lineup

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

### 4.2.1 DSR Release 9.2.0.0.0

DSR Release 9.2.0.0.0 contains the following components:

Application Lineup

DSR: 9.2.0.0.0-102.16.0

SDS: 9.2.0.0.0-102.16.0

VNFM: 6.2.0.0.0\_62.4.5

ATS: 9.2.0.0.0-1.0.15

UDR: 14.2.0.0.0\_114.43.0

- IDIH: 9.2.0.0.0-92.1

Platform Lineup

- TPD: 8.10.1.6.0\_150.17.0

gSOAP: 2.8.137

Comcol: 8.1.0.18.0-14256

Appw: 9.9.2-102.15.0

Exgs: 9.9.2-102.15.0

## 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
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



### Table 4-2 (Cont.) Documentation Pack Contents

Diameter Common User Guide
Equipment Identity Register User Guide
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



## 4.4 DSR Security Test Summary

#### **Table 4-3 Security Test Summary**

Security Test Description	Test Completion Date	Summary
Static Source Code Analysis: Assesses adherence to common secure coding standards.	26th August 2025	All critical and high findings addressed.
Dynamic Analysis (including fuzz testing): Tests for risk of common attack vectors such as OWASP top 10 and SANS 25.	14th August 2025	All critical and high findings addressed.
Vulnerability Scans: Scans for CVEs in embedded 3rd party components.	26th August 2025	All critical and high findings addressed.
Malware Scans:	1st August 2025	No findings
Scans all deliverable software packages for the presence of known malware.		

## 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 9.2.0.0.0 are listed in the following table:

Table 5-1 Supported Upgrade Paths

Component	From	То
DSR	9.0.1.0.0, 9.0.2.0.0, 9.0.2.1.0, 9.1.0.0.0	9.2.0.0.0
SDS	9.0.1.0.0, 9.0.2.0.0, 9.0.2.1.0, 9.1.0.0.0	9.2.0.0.0
IDIH	NA	<ul> <li>9.2.0.0.0</li> <li>Note: <ul> <li>IDIH 9.2.0.0.0 supports only fresh installation.</li> </ul> </li> <li>IDIH 9.2 needs different flavour VMs and require additional resources as compared to the older architecture (IDIH 8.x).</li> </ul>
vSTP	9.0.1.0.0, 9.0.2.0.0, 9.0.2.1.0, 9.1.0.0.0	9.2.0.0.0
UDR	14.0.0.0.0, 14.0.1.0.0, 14.0.1.0.1, 14.0.2.0.0, 14.1.0.0.0	14.2.0.0.0

#### (i) Note

- For more information about IDIH see, Oracle Communications IDIH User Guide.
- 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.

## Deprecated Software and Features

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

SCEF



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.

## 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:

- 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 9.2.0.0.0

The following table lists the resolved bugs in DSR 9.2.0.0.0 release.

Table 7-1 DSR 9.2.0.0.0 Resolved bugs

Bug Number	Severity	Found in Release	Title
37670709	3	9.0.1.0.0	Measurement reports not be deleted
38036238	3	9.0.2.0.0	DSR 9.2 PcrfRealm update issue in table when peer node configuration changed
38037911	3	9.1.0.0.0	Database comparison does not show correct count
37663915	3	9.1.0.0.0	remoteServerCleanup.sh script is not correctly executed in the SOAMs
38115166	3	9.0.1.0.0	Alarms List cannot be opened in GUI
37500262	3	9.0.0.0.0	[Rel 9.2] Advance Upgrade Health Check fails
37973188	3	9.0.2.0.0	Mediation Rule for Rx-Request-Type as "AVP Code" is not working as expected.
37355117	3	9.0.1.0.0	KPI Graph only scaling up 100

### 7.2.2 vSTP

#### Release 9.2.0.0.0

The following table lists the resolved bugs in vSTP 9.2.0.0.0 release.



Table 7-2 vSTP 9.2.0.0.0 Resolved bugs

Bug Number	Severity	Found in Release	Title
37503220	3	9.0.2.0.0	vSTP SMS Home Routing - vSTP is not sending SRI for the MO forwardSM
37381316	3	9.0.2.0.0	VSTP SMS Home Routing - for the SRI SM sent by vSTP, HLR is sending aborts with reason: "application-context-name- not-supported"
37466616	3	9.1.0.0.0	"VSTP Link Usage" export not working
37343731	4	9.0.2.0.0	Editing SftThrot action in GTT Action is giving error as the TA Index is incrementing
38424695	2	9.1.0.0.0	Traffic impact post SOAM site upgrade to 9.1 from 9.0.1.2
38206945	3	9.1.0.0.0	DNS query for the entire zone does not work over TCP
37965623	3	9.1.0.0.0	vSTP 9.1   Fail Action GTT "tcaperr" when SFAPP validation fails is not sending response to the originator of the Query
37947628	3	9.1.0.0.0	Capacity increase of Neighboring Country Table in SS7 Firewall
37936936	3	9.0.1.0.0	VSTP IR21 Utility throws error message(IR21 XML file not found).

## 7.2.3 VNFM

#### Release 6.2.0.0.0

The following table lists the resolved bugs in VNFM 6.2.0.0.0 release.

Table 7-3 VNFM Resolved Bugs

Bug Number	Severity	Found in Release	Title
38357244	3	6.0.2.1.0	Discover VNF support "vnfSoftwareVersion", display Upgraded DSR Image - Query All VNF API
38124321	4	6.0.2.1.0	Scaling feature in VNFM 6.2 Experiencing Issues assigning null for XSI nw in stack overview for backward compatibility of VNFM 5.4.1
38399547	3	6.0.2.1.0	Backward compatibility, Change Discover and scale VM Host name "vnf-discover-instance" to original for scaled VMs
38412158	3	6.0.2.1.0	Graceful Termination automatically cleans up DSR and SDS Noam for DSR and SDS signaling, as well as DR Noam setup termination.
38357193	2	6.0.2.1.0	Backward compatibility support / Discover and scale to level VNF support from VNFM 5.4.1 to VNFM 6.2



Table 7-3 (Cont.) VNFM Resolved Bugs

Bug Number	Severity	Found in Release	Title
38356952	3	6.0.2.1.0	Prometheus startup script file placement, trace interval, and permission issue
37801542	2	6.1.0.0.0	MySql and Kafka Cinder Volume Removal from EIDIH Template
37801607	2	6.1.0.0.0	Removal of MySQL, Kafka, Docker and Podman Version from VNFM & IDIH Deployments

### 7.2.4 IDIH

#### Release 9.2.0.0.0

The following table lists the resolved bugs in IDIH 9.2.0.0.0 release.

Table 7-4 IDIH 9.2.0.0.0 Resolved bugs

Bug Number	Severity	Found in Release	Title
38146701	4	9.1.0.0.0	New AP circle    EIDIH    Error "No record found for traceInstance" while capturing the new trace
37879165	4	9.1.0.0.0	OCC   Not able to configure the EIDIH VMs
37930624	3	9.1.0.0.0	EIDIH 9.1   Unable to launch IDIH Application
37727909	3	9.1.0.0.0	IDIH Functionality issues post installing 9.1.0.0.22

### 7.2.5 ATS

#### Release 9.2.0.0.0

The following table lists the resolved bugs in ATS 9.2.0.0.0 release.

Table 7-5 ATS 9.2.0.0.0 Resolved bugs

Bug Number	Severity	Found in Release	Title
37872848	3	9.0.0.0.0	ATS GUI and CLI is not accessible
37280182	3	9.0.0.0.0	VzW ME Lab- vDSR 902 ME ATS lab: Roaming regression test cases failure.
37264618	3	9.0.0.0.0	Verizon vDSR-902 ME ATS lab: ATS-902 Test Case failing

## 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 9.2.0.0.0

The following table lists the known bugs in DSR 9.2.0.0.0 release.

Table 7-6 Known Bugs

	3	9.0.1.0.0		
38058523	3	3.0.1.0.0	Measurements reports not generating	Maintenance
	J	9.0.1.0.0	newly instantiated MP servers use hardcoded password for guiadmin user	Maintenance
38434733	2	8.6.0.0.0	Verizon    All radius connections are down after upgrade 9.0.2	Signaling
37212776	3	9.0.1	Not able to open DSR SOAM GUI	Install/Upgrade
38201236	4	9.0.2	Post DCA Activation Issues Seen	Maintenance
37937211	3	9.0.2	31000 Critical alarm is observed after upgrade.	Install/Upgrade
38114548	4	8.6	Bharti    KK WF NOAM    Excessive Shared Memory & Excessive Shared Memory Early Warning	Maintenance
38235349	2	9.1	DSR_Call failures observer for multiple PGW,SBC,PCRF for TNC and Kel Circle	Signaling
38340618	3	9.1	vDSR 9.1.0    dsr service restarted causing connections flapped on particular DAMP	Maintenance
38452339	3	9.0.2	MP1A Dlupgrade rejected during vDSR upgrade from version 9.0.2.0.0-99.14.0 to 9.0.2.2.0_99.22.0.	Install/Upgrade
37212776	4	9.0.1	Not able to open DSR SOAM GUI	Maintenance
37717657	3	9.0	IPFEs alarming 5002/5003 randomly	Signaling
38201236	4	9.0.2	Post DCA Activation Issues Seen	Signaling
38238334	4	9.0.1	USCC Services, LLC    DSA error in AVPWL SCRN security measure counter in vDSR	Signaling
38414241	3	9.0.1	Rel_9.0.1.3: Server core file (core.vpsetup) detected in DSR after Upgrade from 9.0.1.2.0_98.26.0 to 9.0.1.3.0_98.27.0	Signaling
37105931	4	9.0	Password Related Weaknesses	Maintenance

### 7.3.2 vSTP

#### Release 9.2.0.0.0

The following table lists the known bugs in vSTP 9.2.0.0.0 release.



#### Table 7-7 Known Bugs

Bug Number	Severity	Found in Release	Title	Customer Impact
38411674	3	9.1.0.0.0	GTT Action testmode ON, SCPVAL FAILED but Skipped	No impact

## 7.3.3 VNFM

#### Release 6.2.0.0.0

There are no known bugs for this release.

### 7.3.4 IDIH

#### Release 9.2.0.0.0

There are no known bugs for this release.

### 7.3.5 ATS

#### Release 9.2.0.0.0

The following table lists the known bugs in ATS 9.2.0.0.0 release.

#### Table 7-8 Known Bugs

Bug Number	Severity	Found in Release	Title	Customer Impact
37637869	4	9.1.0.0.0	OCDSR-ATS-GUI: ATS GUI should have a contrast ratio of at least 4.5:1 of text to its background	No impact