

**Oracle® Communications Service Broker**

Online Mediation Controller Protocol Implementation  
Conformance Statement

Release 6.1

**E29448-01**

February 2013

Oracle Communications Service Broker Online Mediation Controller Protocol Implementation Conformance Statement, Release 6.1

E29448-01

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# Preface

This book serves as a Protocol Implementation Compliance Statement (PICS) for Oracle Communications Online Mediation Controller.

## Audience

This guide is intended for system administrators, product integrators, and developers. It assumes knowledge of the following subjects:

- Online charging systems
- Diameter protocol
- RADIUS protocol

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## Related Documents

For more information, see the following documents in the Oracle Communications Service Broker Online Mediation Controller Release 6.1 documentation set:

- *Oracle Communications Service Broker Concepts Guide*
- *Oracle Communications Service Broker Online Mediation Controller Implementation Guide*
- *Oracle Communications Service Broker Modules Configuration Guide*
- *Oracle Communications Service Broker Signaling Service Units Configuration Guide*

## Downloading Oracle Communications Documentation

Oracle Communications Service Broker documentation is available from the Oracle software delivery Web site:

<http://edelivery.oracle.com/>

Additional Oracle Communications documentation is available from Oracle  
Technology Network:

<http://www.oracle.com/technetwork/index.html>

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# Online Mediation Controller PICS Overview

This book describes how Oracle Communications Online Mediation Controller supports different protocols. Each chapter lists the supported messages and AVPs for a specific protocol.

## Online Mediation Controller Supported Protocols

Online Mediation Controller supports the protocols defined in the following standards:

### Diameter Ro

- IETF RFC 3588, Diameter Base Protocol
- IETF RFC 4006, Diameter Credit-Control Application
- ETSI TS 132 299 V7.5.0, Telecommunication management; Charging management; Diameter charging applications (3GPP TS 32.299)
- ETSI TS 132 296 V7.0.0, Telecommunication management; Charging management; Online Charging System (OCS): Applications and interfaces (3GPP TS 32.296)
- ETSI TS 132 240 V7.2.0, Telecommunication management; Charging management; Charging architecture and principles (3GPP TS 32.240)
- ETSI TS 132 260 V8.7.0, Telecommunication management; Charging management; IP Multimedia Subsystem (IMS) charging (3GPP TS 32.260)
- 3GPP TS 29.329 V9.5.0 (2011-12), Sh Interface based on the Diameter Protocol

### RADIUS

- IETF RFC 2865, RADIUS Base Protocol
- IETF RFC 3579, RADIUS Support For Extensible Authentication Protocol (EAP)
- IETF RFC 2866, RADIUS Accounting Application
- IETF RFC 2869 (part of), RADIUS Accounting Interim Update



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# Diameter Compliance Protocol Implementation Conformance Statement

This chapter describes how Oracle Communications Online Mediation Controller supports Diameter commands and Attribute-Value Pairs (AVPs) defined in 3GPP TS 32.299 Version 10.4.0. Release 10. See <http://www.3gpp.org/ftp/Specs/html-info/32299.htm>, for more information about this standard.

## Supported Commands

Table 2–1 describes how Online Mediation Controller supports Diameter commands.

**Table 2–1 Supported Diameter Operations**

Operation	Status
Credit-Control-Request	Supported
Credit-Control-Answer	Supported
Re-Auth-Request	Supported
Re-Auth-Answer	Supported
Capabilities-Exchange-Request	Supported
Capabilities-Exchange-Answer	Supported
Device-Watchdog-Request	Supported
Device-Watchdog-Answer	Supported
Disconnect-Peer-Request	Supported
Disconnect-Peer-Answer	Supported
Abort-Session-Request	Supported
Abort-Session-Answer	Supported

## Credit-Control-Request

Table 2–2 describes how Online Mediation Controller supports Credit-Control-Request AVPs. The AVPs that have the **x-wcs** prefix are custom Oracle AVPs.

**Table 2–2 Credit-Control-Request AVPs**

AVP	Status
Session-Id	Supported

**Table 2–2 (Cont.) Credit-Control-Request AVPs**

<b>AVP</b>	<b>Status</b>
Origin-Host	Supported
Origin-Realm	Supported
Destination-Realm	Supported
Auth-Application-Id	Supported
Service-Context-Id	Supported
CC-Request-Type	Supported
CC-Request-Number	Supported
Destination-Host	Supported
User-Name	Supported
Origin-State-Id	Supported
Event-Timestamp	Supported
Subscription-Id	Supported
---- Subscription-Id-Type	Supported
---- Subscription-Id-Data	Supported
Termination-Cause	Supported. Not used in IEC
Requested-Action	Supported. Not used in SCUR and ECUR
AoC-Request-Type	Supported
Multiple-Services-Indicator	Supported
Multiple-Services-Credit-Control	Supported
---- Requested-Service-Unit	Supported
---- ---- CC-Time	Supported. Used in SCUR only
---- ---- CC-Total-Octets	Supported
---- ---- CC-Input-Octets	Supported
---- ---- CC-Output-Octets	Supported
---- ---- CC-Service-Specific-Units	Supported. Used in ECUR only
---- Used-Service-Unit	Supported. Used in SCUR and ECUR only
---- ---- Reporting-Reason	Supported. Used in SCUR and ECUR only
---- ---- Tariff-Change-Usage	Supported
---- ---- CC-Time	Supported. Used in SCUR only.
---- ---- CC-Total-Octets	Supported
---- ---- CC-Input-Octets	Supported
---- ---- CC-Output-Octets	Supported
---- ---- CC-Service-Specific-Units	Supported. Used in ECUR only.
---- ---- Event-Charging-TimeStamp	Supported
---- Service-Identifier	Supported
---- Rating-Group	Supported

**Table 2–2 (Cont.) Credit-Control-Request AVPs**

<b>AVP</b>	<b>Status</b>
---- Reporting-Reason	Supported. Used in SCUR and ECUR only.
---- Trigger	Supported
---- ---- Trigger-Type	Supported
---- Refund-Information	Supported
---- Envelope	Supported
---- ---- Envelope-Start-Time	Supported
---- ---- Envelope-End-Time	Supported
---- ---- CC-Total-Octets	Supported
---- ---- CC-Input-Octets	Supported
---- ---- CC-Output-Octets	Supported
---- ---- CC-Service-Specific-Units	Supported
---- AF-Correlation-Information	Supported
---- Service-Specific-Info	Supported
---- ---- Service-Specific-Type	Supported
---- ---- Service-Specific-Data	Supported
---- QoS-Information	Supported
---- ---- QoS-Class-Identifier	Supported
---- ---- Max-Requested-Bandwidth-UL	Supported
---- ---- Max-Requested-Bandwidth-DL	Supported
---- ---- Guaranteed-Bitrate-UL	Supported
---- ---- Guaranteed-Bitrate-DL	Supported
---- ---- Bearer-Identifier	Supported
---- ---- Allocation-Retention-Priority	Supported
---- ---- ---- Priority-Level	Supported
---- ---- ---- Pre-emption-Capability	Supported
---- ---- ---- Pre-emption-Vulnerability	Supported
---- ---- APN-Aggregate-Max-Bitrate-UL	Supported
---- ---- APN-Aggregate-Max-Bitrate-DL	Supported
User-Equipment-Info	Supported
---- User-Equipment-Info-Type	Supported
---- User-Equipment-Info-Value	Supported
Proxy-Info	Supported
---- Proxy-Host	Supported
---- Proxy-State	Supported
Route-Record	Supported
Service-Information	Supported

**Table 2-2 (Cont.) Credit-Control-Request AVPs**

<b>AVP</b>	<b>Status</b>
---- Subscription-Id	Supported
---- AoC-Information	Supported
---- PS-Information	Supported
----- 3GPP-Charging-Id	Supported
----- PDN-Connection-Charging-ID	Supported
----- Node-Id	Supported
----- 3GPP-PDP-Type	Supported
----- PDP-Address	Supported
----- PDN-Address-Prefix-Length	Not supported
----- Dynamic-Address-Flag	Supported
----- Dynamic-Address-Flag-Extension	Not supported
----- QoS-Information	Supported
----- SGSN-Address	Supported
----- GGSN-Address	Supported
----- SGW-Address	Supported
----- CG-Address	Supported
----- Serving-Node-Type	Supported
----- SGW-Change	Supported
----- 3GPP-IMSI-MCC-MNC	Supported
----- IMSI-Unauthenticated-Flag	Supported
----- 3GPP-GGSN-MCC-MNC	Supported
----- 3GPP-NSAPI	Supported
----- Called-Station-Id	Supported
----- 3GPP-Session-Stop-Indicator	Supported
----- 3GPP-Selection-Mode	Supported
----- 3GPP-Charging-Characteristics	Supported
----- Charging-Characteristics-Selection-Mode	Not supported
----- 3GPP-SGSN-MCC-MNC	Supported
----- 3GPP-MS-TimeZone	Supported
----- Charging-Rule-Base-Name	Supported
----- 3GPP-User-Location-Info	Supported
----- Geographic Location Type	Not supported
----- Geographic Location	Not supported
----- User-CSG-Information	Supported
----- 3GPP2-BSID	Supported
----- 3GPP-RAT-Type	Supported

**Table 2-2 (Cont.) Credit-Control-Request AVPs**

<b>AVP</b>	<b>Status</b>
----- PS-Furnish-Charging-Information	Supported
----- PDP-Context-Type	Supported
----- Offline-Charging	Supported
----- Traffic-Data-Volumes	Supported
----- Service-Data-Container	Supported
----- User-Equipment-Info	Supported
----- Terminal-Information	Supported
----- Start-Time	Supported
----- Stop-Time	Supported
----- Change-Condition	Supported
----- Diagnostics	Supported
----- Low-Priority-Indicator	Not supported
--- WLAN-Information	Supported
--- IMS-Information	Supported
----- Node-Functionality	Supported
----- Calling-Party-Address	Supported
----- Called-Party-Address	Supported
----- IMS-Charging-Identifier	Supported
----- SDP-Session-Description	Supported. Used in SCUR only.
----- SDP-Media-Component	Supported. Used in SCUR only.
----- SDP-Media-Name	Supported. Used in SCUR only.
----- SDP-Media-Description	Supported. Used in SCUR only.
----- Media-Initiator-Flag	Supported. Used in SCUR only
----- Media-Initiator-Party	Supported. Used in SCUR only.
--- MMS-Information	Supported
--- LCS-Information	Supported
--- PoC-Information	Supported
--- MBMS-Information	Supported
--- SMS-Information	Supported
--- MMTel-Information	Supported
--- Service-Generic-Information	Supported
--- IM-Information	Supported
--- DCD-Information	Supported
Originator	Supported
x-wcs-diversion-information	Supported
--- x-wcs-diversion-name-addr	Supported
--- x-wcs-diversion-reason	Supported

**Table 2–2 (Cont.) Credit-Control-Request AVPs**

<b>AVP</b>	<b>Status</b>
x-wcs-routing-info	Supported
---- x-wcs-carrier-digits	Supported
---- ---- x-wcs-digits	Supported
----- x-wcs-type	Supported
---- x-wcs-destination-digits	Supported
---- ---- x-wcs-digits	Supported
---- ---- x-wcs-type	Supported
---- x-wcs-routing-digits	Supported
---- ---- x-wcs-digits	Supported
---- ---- x-wcs-type	Supported
x-wcs-start-timestamp	Supported
x-wcs-answer-timestamp	Supported
x-wcs-uid	Supported

## Credit-Control-Answer

Table 2–3 describes how Online Mediation Controller supports Credit-Control-Answer AVPs.

**Table 2–3 Credit-Control-Answer AVPs**

<b>AVP</b>	<b>Status</b>
Session-Id	Supported
Result-Code	Supported
Origin-Host	Supported
Origin-Realm	Supported
Auth-Application-Id	Supported
CC-Request-Type	Supported
CC-Request-Number	Supported
CC-Session Failover	Supported
Multiple-Services-Credit-Control	Supported
---- Granted-Service-Unit	Supported
---- ---- Tariff-Time-Change	Supported
---- ---- CC-Time	Supported. Used in SCUR only.
---- ---- CC-Total-Octets	Supported
---- ---- CC-Input-Octets	Supported
---- ---- CC-Output-Octets	Supported
---- ---- CC-Service-Specific-Units	Supported. Used in ECUR only.
---- Service-Identifier	Supported
---- Rating-Group	Supported

**Table 2–3 (Cont.) Credit-Control-Answer AVPs**

<b>AVP</b>	<b>Status</b>
---- G-S-U-Pool-Reference	Supported
---- ---- G-S-U-Pool-Identifier	Supported
---- ---- CC-Unit-Type	Supported
---- ---- Unit-Value	Supported
---- ---- ---- Value-Digits	Supported
---- ---- ---- Exponent	Supported
---- Validity-Time	Supported
---- Result-Code	Supported
---- Final-Unit-Indication	Supported
---- ---- Final-Unit-Action	Supported
---- ---- Restriction-Filter-Rule	Supported
---- ---- Filter-Id	Supported
---- ---- Redirect-Server	Supported
---- ---- ---- Redirect-Address-Type	Supported
---- ---- ---- Redirect-Server-Address	Supported
---- Time-Quota-Threshold	Supported
---- Volume-Quota-Threshold	Supported
---- Unit-Quota-Threshold	Supported
---- Quota-Holding-Time	Supported
---- Quota-Consumption-Time	Supported
---- Trigger	Supported
---- ---- Trigger-Type	Supported
---- PS-Furnish-Charging-Information	Supported
---- Refund-Information	Supported
---- Envelope-Reporting	Supported
---- Time-Quota-Mechanism	Supported
---- ---- Time-Quota-Type	Supported
---- ---- Base-Time-Interval	Supported
Cost-Information	Supported
---- Unit-Value	Supported
---- ---- Value-Digits	Supported
---- ---- Exponent	Supported
---- Currency-Code	Supported
---- Cost-Unit	Supported
Low-Balance-Indication	Supported
Remaining-Balance	Supported
---- Unit-Value	Supported

**Table 2–3 (Cont.) Credit-Control-Answer AVPs**

<b>AVP</b>	<b>Status</b>
---- Value-Digits	Supported
---- Exponent	Supported
---- Currency-Code	Supported
Credit-Control-Failure-Handling	Supported
Direct-Debiting-Failure-Handling	Supported
Redirect-Host	Supported
Redirect-Host-Usage	Supported
Redirect-Max-Cache-Time	Supported
Proxy-Info	Supported
---- Proxy-Host	Supported
---- Proxy-State	Supported
Route-Record	Supported
Failed-AVP	Supported
Service-Information	Supported

## Re-Auth-Request

Table 2–4 describes how Online Mediation Controller supports Re-Auth-Request AVPs.

**Table 2–4 Re-Auth-Request AVPs**

<b>AVP</b>	<b>Status</b>
Session-Id	Supported
Origin-Host	Supported
Origin-Realm	Supported
Destination-Realm	Supported
Destination-Host	Supported
Auth-Application-Id	Supported
Re-Auth-Request-Type	Supported
User-Name	Supported
Origin-State-Id	Supported
Proxy-Info	Supported
---- Proxy-Host	Supported
---- Proxy-State	Supported
Route-Record	Supported
G-S-U-Pool-Identifier	Supported
Service-Identifier	Supported
Rating-Group	Supported

## Re-Auth-Answer

Table 2–5 describes how Online Mediation Controller supports Re-Auth-Answer AVPs.

**Table 2–5 Re-Auth-Answer AVPs**

AVP	Status
Session-Id	Supported
Result-Code	Supported
Origin-Host	Supported
Origin-Realm	Supported
User-Name	Supported
Origin-State-Id	Supported
Error-Message	Supported
Error-Reporting-Host	Supported
Failed-AVP	Supported
Redirect-Host	Supported
Redirect-Host-Usage	Supported
Redirect-Max-Cache-Time	Supported
Proxy-Info	Supported
---- Proxy-Host	Supported
---- Proxy-State	Supported

## Capabilities-Exchange-Request

Table 2–6 describes how Online Mediation Controller supports Capabilities-Exchange-Request AVPs.

**Table 2–6 Capabilities-Exchange-Request AVPs**

AVP	Status
Origin-Host	Supported
Origin-Realm	Supported
Host-IP-Address	Supported
Vendor-Id	Supported
Product-Name	Supported
Origin-State-Id	Supported
Supported-Vendor-Id	Supported
Auth-Application-Id	Supported
Inband-Security-Id	Supported
Acct-Application-Id	Supported
Vendor-Specific-Application-Id	Supported
---- Vendor-Id	Supported
---- Auth-Application-Id	Supported

**Table 2–6 (Cont.) Capabilities-Exchange-Request AVPs**

AVP	Status
---- Acct-Application-Id	Supported
Firmware-Revision	Supported

## Capabilities-Exchange-Answer

Table 2–7 describes how Online Mediation Controller supports Capabilities-Exchange-Answer AVPs.

**Table 2–7 Capabilities-Exchange-Answer AVPs**

AVP	Status
Result-Code	Supported
Origin-Host	Supported
Origin-Realm	Supported
Host-IP-Address	Supported
Vendor-Id	Supported
Product-Name	Supported
Origin-State-Id	Supported
Error-Message	Supported
Failed-AVP	Supported
---- AVP	Supported
Supported-Vendor-Id	Supported
Auth-Application-Id	Supported
Inband-Security-Id	Supported
Acct-Application-Id	Supported
Vendor-Specific-Application-Id	Supported
---- Vendor-Id	Supported
---- Auth-Application-Id	Supported
---- Acct-Application-Id	Supported
Firmware-Revision	Supported

## Device-Watchdog-Request

Table 2–8 describes how Online Mediation Controller supports Device-Watchdog-Request AVPs.

**Table 2–8 Device-Watchdog-Request AVPs**

AVP	Status
Origin-Host	Supported
Origin-Realm	Supported
Origin-State-Id	Supported

## Device-Watchdog-Answer

Table 2–9 describes how Online Mediation Controller supports Device-Watchdog-Answer AVPs.

**Table 2–9 Device-Watchdog-Answer AVPs**

AVP	Status
Result-Code	Supported
Origin-Host	Supported
Origin-Realm	Supported
Error-Message	Supported
Failed-AVP	Supported
---- AVP	Supported
Original-State-Id	Supported

## Disconnect-Peer-Request

Table 2–10 describes how Online Mediation Controller supports Disconnect-Peer-Request AVPs.

**Table 2–10 Disconnect-Peer-Request AVPs**

AVP	Status
Origin-Host	Supported
Origin-Realm	Supported
Disconnect-Cause	Supported

## Disconnect-Peer-Answer

Table 2–11 describes how Online Mediation Controller supports Disconnect-Peer-Answer AVPs.

**Table 2–11 Disconnect-Peer-Answer AVPs**

AVP	Status
Result-Code	Supported
Origin-Host	Supported
Origin-Realm	Supported
Error-Message	Supported
Failed-AVP	Supported
---- AVP	Supported

## Abort-Session-Request

Table 2–12 describes how Online Mediation Controller supports Abort-Session-Request AVPs.

**Table 2–12 Abort-Session-Request AVPs**

<b>AVP</b>	<b>Status</b>
Session-Id	Supported
Origin-Host	Supported
Origin-Realm	Supported
Destination-Realm	Supported
Destination-Host	Supported
Auth-Application-Id	Supported
User-Name	Supported
Origin-State-Id	Supported
Proxy-Info	Supported
---- Proxy-Host	Supported
---- Proxy-State	Supported
Route-Record	Supported

## Abort-Session-Answer

Table 2–13 describes how Online Mediation Controller supports Abort-Session-Answer AVPs.

**Table 2–13 Abort-Session-Answer AVPs**

<b>AVP</b>	<b>Status</b>
Session-Id	Supported
Result-Code	Supported
Origin-Host	Supported
Origin-Realm	Supported
User-Name	Supported
Origin-State-Id	Supported
Error-Message	Supported
Error-Reporting-Host	Supported
Failed-AVP	Supported
---- AVP	Supported
Redirect-Host	Supported
Redirect-Host-Usage	Supported
Redirect-Max-Cache-Time	Supported
Proxy-Info	Supported
---- Proxy-Host	Supported
---- Proxy-State	Supported

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## Diameter Sp Protocol

This chapter lists the Diameter commands and AVPs that Oracle Communications Online Mediation Controller supports for communication with a Subscriber Profile Repository (SPR). The Online Mediation Controller uses modified commands and AVPs from the *Sh Interface based on the Diameter Protocol 3GPP TS 29.329 V9.5.0 (2011-12)* specification for this purpose. In some cases the list of AVPs in a command is different from that listed in the specification. Any reused AVPs are listed as such with their specifications in the Comments column.

### Supported Diameter Sp Commands

Table 3–1 lists the Sh commands used for by Online Mediation Controller for its Sp protocol communication.

**Table 3–1 Supported Sp Commands**

Command	Status	List of Supported AVPs
User-Data-Request	Supported	Supported User-Data-Request (UDR) AVPs
User-Data-Answer	Supported	Supported User-Data-Answer (UDA) AVPs
Profile-Update-Request	Not Supported	N/A
Profile-Update-Answer	Not Supported	N/A
Subscriber-Notification-Request	Supported	Supported Subscriber-Notification-Req uest (SNR) AVPs
Subscriber-Notification-Answer	Supported	Supported Subscriber-Notification-Ans wer (SNA) AVPs
Push-Notification-Request	Supported	Supported Push-Notification-Request (PNR) AVPs
Push-Notification-Answer	Supported	Supported Push-Notification-Answer (PNA) AVPs

## Supported User-Data-Request (UDR) AVPs

Table 3–2 lists the supported Diameter Sh User-Data-Request AVPs that Online Mediation Controller uses in its Sp protocol.

**Table 3–2 User-Data-Request AVPs**

AVP	Status/Notes
Vendor-Specific-Application-Id	Supported.
Auth-Session-State	Supported.
Origin-Host	Supported. Mandatory.
Origin-Realm	Supported.
Destination-Host	Supported.
Destination-Realm	Supported.
Supported-Features	Supported.
- Vendor-ID	Supported.
- Feature-List-ID	Supported.
- Feature-List	Supported.
- AVP	Supported.
User-Identity	Supported. Mandatory.
- Public-Identity	Supported. Mandatory.
- MSISDN	Supported. Mandatory.
Wildcarded-Public-Identity	Supported.
Wildcarded-IMPU	Supported.
Server-Name	Supported.
Service-Indication	Supported.
Data-Reference	Supported. Mandatory.
- Identity-Set	Supported. Mandatory.
Requested-Domain	Supported.
Current-Location	Supported.
- DSAI-Tag	Supported.
Session-Priority	Supported.
Requested-Nodes	Supported.
User-Name	Supported.
AVP	Supported.
Proxy-Info	Supported.
Route-Record	Supported.

## Supported User-Data-Answer (UDA) AVPs

Table 3–3 lists the supported Diameter Sh User-Data-Answer AVPs that Online Mediation Controller uses in its Sp protocol.

**Table 3–3 Supported User-Data-Answer AVPs**

<b>AVP</b>	<b>Status/Notes</b>
Vendor-Specific-Application-Id	Supported.
Result-Code	Supported. Mandatory.
Experimental-Result	Supported. Mandatory.
Auth-Session-State	Supported.
Origin-Host	Supported.
Origin-Realm	Supported.
Supported-Features	Supported.
- Vendor-ID	Supported.
- Feature-List-ID	Supported.
- Feature-List	Supported.
Wildcarded-Public-Identity	Supported.
Wildcarded-IMPU	Supported.
User-Data	Supported.
AVP	Supported.
Failed AVP	Supported.
Proxy-Info	Supported.
Route-Record	Supported.

## Supported Subscriber-Notification-Request (SNR) AVPs

Table 3–4 lists the supported Diameter Sh Subscriber-Notification-Request AVPs that Online Mediation Controller uses in its Sp protocol.

**Table 3–4 Subscriber-Notification-Request AVPs**

<b>AVP</b>	<b>Status/Notes</b>
Vendor-Specific-Application-Id	Supported.
Auth-Session-State	Supported.
Origin-Host	Supported. Mandatory.
Origin-Realm	Supported.
Destination-Host	Supported.
Destination-Realm	Supported.
Supported-Features	Supported
- Vendor-ID	Supported.
- Feature-List-ID	Supported.
- Feature-List	Supported.
User-Identity	Supported. Mandatory.
- Public-Identity	Supported. Mandatory.

**Table 3–4 (Cont.) Subscriber-Notification-Request AVPs**

<b>AVP</b>	<b>Status/Notes</b>
- MSISDN	Supported. Mandatory.
Wildcarded-Public-Identity	Supported.
Wildcarded-IMPU	Supported.
Service-Indication	Supported.
Send-Data-Indication	Supported.
Server-Name	Supported.
Subs-Req-Type	Supported.
Data-Reference	Supported. Mandatory.
Identity-Set	Supported.
Expiry-Time	Supported.
- DSAI-Tag	Supported.
One-Time-Notification	Supported.
AVP	Supported.
Proxy-Info	Supported.
Route-Record	Supported.
User-Name	Supported.

## Supported Subscriber-Notification-Answer (SNA) AVPs

Table 3–5 lists the supported Diameter Sh Subscriber-Notification-Answer AVPs that Online Mediation Controller uses in it's Sp protocol.

**Table 3–5 Subscriber-Notification-Answer AVPs**

<b>AVP</b>	<b>Status/Notes</b>
Vendor-Specific-Application-Id	Supported.
Auth-Session-State	Supported.
Result-Code	Supported. Mandatory.
Experimental-Result	Supported. Mandatory.
Origin-Host	Supported.
Origin-Realm	Supported.
Wildcarded-Public-Identity	Supported.
Wildcarded-IMPU	Supported.
Supported-Features	Supported.
- Vendor-ID	Supported.
- Feature-List-ID	Supported.
- Feature-List	Supported.
User-Data	Supported. Mandatory.
Expiry-Time	Supported. Mandatory.

**Table 3–5 (Cont.) Subscriber-Notification-Answer AVPs**

AVP	Status/Notes
AVP	Supported.
Failed-AVP	Supported.
Proxy-Info	Supported.
Route-Record	Supported.

## Supported Push-Notification-Request (PNR) AVPs

Table 3–6 lists the supported Diameter Sh Push-Notification-Request AVPs that Online Mediation Controller uses in it's Sp protocol.

**Table 3–6 Push-Notification-Request AVPs**

AVP	Status/Notes
Vendor-Specific-Application-Id	Supported.
Auth-Session-State	Supported.
Origin-Host	Supported.
Origin-Realm	Supported.
Destination-Host	Supported.
Destination-Realm	Supported.
Supported-Features	Supported.
- Vendor-ID	Supported.
- Feature-List-ID	Supported.
- Feature-List	Supported.
User-Identity	Supported. Mandatory.
- Public-Identity	Supported. Mandatory.
- MSISDN	Supported. Mandatory.
Wildcarded-Public-Identity	Supported.
Wildcarded-IMPU	Supported.
User-Data	Supported. Mandatory.
AVP	Supported.
Proxy-Info	Supported.
Route-Record	Supported.
Data-reference	Supported.
Service-Indication	Supported.
Expiry-Time	Supported.
Send-Data-Indication	Supported.
User-Name	Supported.

## Supported Push-Notification-Answer (PNA) AVPs

Table 3–7 lists the supported Diameter Sh Push-Notification-Answer AVPs that Online Mediation Controller uses in its Sp protocol.

**Table 3–7 Push-Notification-Answer AVPs**

AVP	Status/Notes
Vendor-Specific-Application-Id	Supported.
Result-Code	Supported. Mandatory.
Experimental-Result	Supported. Mandatory.
Auth-Session-State	Supported.
Origin-Host	Supported.
Origin-Realm	Supported.
Supported-Features	Supported.
- Vendor-ID	Supported.
- Feature-List-ID	Supported.
- Feature-List	Supported.
AVP	Supported.
Failed-AVP	Supported.
Proxy-Info	Supported.
Route-Record	Supported.

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## Radius Compliance Protocol Implementation Conformance Statement

This chapter describes how Oracle Communications Online Mediation Controller supports Radius commands and Attribute-Value Pairs (AVPs) defined in RFC 2865, Remote Authentication Dial In User Service (RADIUS) and RFC 2866, RADIUS Accounting.

### Supported Packets

Table 4–1 describes how Online Mediation Controller supports RADIUS packets.

**Table 4–1 Supported Radius Packets**

Operation	Status
Access-Request	Supported
Access-Accept	Supported
Access-Reject	Supported
Access-Challenge	Supported
Accounting-Request	Supported
Accounting-Response	Supported

### Access-Request

Table 4–2 describes how Online Mediation Controller supports Access-Request attributes.

**Table 4–2 Access-Request Attributes**

Attribute	Status
User-Name	Supported
User-Password	Supported
CHAP-Password	Supported
CHAP-Challenge	Supported
NAS-IP-Address	Supported
NAS-Port	Supported
NAS-Port-Type	Supported

**Table 4–2 (Cont.) Access-Request Attributes**

<b>Attribute</b>	<b>Status</b>
NAS-Identifier	Supported
Service-Type	Supported
Framed-Protocol	Supported
Framed-IP-Address	Supported
Framed-IP-Netmask	Supported
Framed-MTU	Supported
Framed-Compression	Supported
Login-IP-Host	Supported
Callback-Number	Supported
Called-Station-Id	Supported
Calling-Station-Id	Supported
State	Supported
Proxy-State	Supported
Login-LAT-Service	Supported
Login-LAT-Node	Supported
Login-LAT-Group	Supported
Login-LAT-Port	Supported
Vendor-Specific	Supported

## Access-Accept

Table 4–3 describes how Online Mediation Controller supports Access-Accept attributes.

**Table 4–3 Access-Accept Attributes**

<b>Attribute</b>	<b>Status</b>
User-Name	Supported
Service-Type	Supported
Framed-Protocol	Supported
Framed-IP-Address	Supported
Framed-IP-Netmask	Supported
Framed-Routing	Supported
Framed-Route	Supported
Framed-IPX-Network	Supported
Framed-AppleTalk-Link	Supported
Framed-AppleTalk-Network	Supported
Framed-AppleTalk-Zone	Supported
Filter-Id	Supported
Framed-MTU	Supported

**Table 4–3 (Cont.) Access-Accept Attributes**

<b>Attribute</b>	<b>Status</b>
Framed-Compression	Supported
Login-IP-Host	Supported
Login-Service	Supported
Login-TCP-Port	Supported
Reply-Message	Supported
Callback-Number	Supported
Callback-Id	Supported
Class	Supported
Session-Timeout	Supported
Idle-Timeout	Supported
Termination-Action	Supported
State	Supported
Proxy-State	Supported
Login-LAT-Service	Supported
Login-LAT-Node	Supported
Login-LAT-Group	Supported
Login-LAT-Port	Supported
Port-Limit	Supported
Vendor-specific	Supported
Acct-Session-Id	Supported

## Access-Reject

Table 4–4 describes how Online Mediation Controller supports Access-Reject attributes.

**Table 4–4 Access-Reject Attributes**

<b>Attribute</b>	<b>Status</b>
User-Name	Supported
Reply-Message	Supported
Class	Supported
Proxy-State	Supported
Vendor-Specific	Supported
Acct-Session-Id	Supported

## Access-Challenge

Table 4–5 describes how Online Mediation Controller supports Access-Challenge attributes.

**Table 4–5 Access-Challenge Attributes**

Attribute	Status
Reply-Message	Supported
Session-Timeout	Supported
Idle-Timeout	Supported
State	Supported
Proxy-State	Supported
Vendor-Specific	Supported

## Accounting-Request

Table 4–6 describes how Online Mediation Controller supports Accounting-Request attributes.

**Table 4–6 Accounting-Request Attributes**

Attribute	Status
User-Name	Supported
NAS-IP-Address	Supported
NAS-Identifier	Supported
NAS-Port-Type	Supported
Class	Supported
Service-Type	Supported
Framed-Protocol	Supported
Framed-IP-Address	Supported
Framed-IP-Netmask	Supported
Framed-MTU	Supported
Framed-Compression	Supported
Login-IP-Host	Supported
Callback-Number	Supported
Called-Station-Id	Supported
Calling-Station-Id	Supported
Proxy-State	Supported
Login-LAT-Service	Supported
Login-LAT-Node	Supported
Login-LAT-Group	Supported
Login-LAT-Port	Supported
CHAP-Challenge	Supported
Acct-Status-Type	Supported
Acct-Delay-Time	Supported
Acct-Input-Octets	Supported
Acct-Output-Octets	Supported

**Table 4-6 (Cont.) Accounting-Request Attributes**

<b>Attribute</b>	<b>Status</b>
Acct-Session-Id	Supported
Acct-Authentic	Supported
Acct-Session-Time	Supported
Acct-Input-Packets	Supported
Acct-Output-Packets	Supported
Acct-Terminate-Cause	Supported
Acct-Multi-Session-Id	Supported
Acct-Link-Count	Supported
Vendor-Specific	Supported

## **Accounting-Response**

Accounting-Response message do not contain any attributes.

