Oracle® Communications WebRTC Session Controller

Statement of Compliance

Release 7.1

E55132-02

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This document is a statement of compliance for the communications protocols supported by Oracle Communications WebRTC Session Controller.

WebRTC Compliance

The WebRTC Session Controller complies with the following standards, which are defined in the Internet Engineering Task Force specification https://tools.ietf.org/html/draft-ietf-rtcweb-overview-12:

- The WebRTC Session Controller JavaScript API supports any WebRTC user agent.
- The WebRTC Session Controller server is a compliant WebRTC gateway.
- The WebRTC Session Controller media engine is a WebRTC compatible endpoint.
- The WebRTC Session Controller Android and IOS SDKs support any WebRTC device.

Specification and RFC Compliance

WebRTC Session Controller is compliant with the following Internet Engineering Task Force (IETF) standards and protocols Request for Comments (RFCs):

- Overview: Real Time Protocols for Browser-based Applications. See https://tools.ietf.org/html/draft-ietf-rtcweb-overview-12.
- Javascript Session Establishment Protocol. See http://tools.ietf.org/html/draft-ietf-rtcweb-jsep-08.
- RFC 5245: Interactive Connectivity Establishment (ICE): A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer Protocols. See http://tools.ietf.org/html/rfc5245.
- RFC 5766: Traversal Using Relays around NAT (TURN): Relay Extensions to Session Traversal Utilities for NAT (STUN). See http://tools.ietf.org/html/rfc5766.
- RFC 5389: Session Traversal Utilities for NAT (STUN). See http://tools.ietf.org/html/rfc5389.
- RFC 3711: The Secure Real-time Transport Protocol (SRTP). See http://www.ietf.org/rfc/rfc3711.txt.
- RFC 4568: Session Description Protocol (SDP) Security Descriptions for Media Streams. See http://tools.ietf.org/html/rfc4568.

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- RFC 5763: Framework for Establishing a Secure Real-time Transport Protocol (SRTP) Security Context Using Datagram Transport Layer Security (DTLS). See http://tools.ietf.org/html/rfc5763.
- RFC 5124: Extended Secure RTP Profile for Real-time Transport Control Protocol (RTCP)-based Feedback (RTP/SAVPF). See http://tools.ietf.org/html/rfc5763.
- RFC 3261: SIP: Session Initiation Protocol. See http://www.ietf.org/rfc/rfc3261.txt.
- RFC 4975: The Message Session Relay Protocol (MSRP). See https://tools.ietf.org/html/rfc4975.

Diameter Rx Protocol Support

This section lists the Diameter Rx commands and AVPs that Oracle Communication WebRTC Session Controller supports. The supported protocol specification is Policy and Charging Control over Rx reference point 3GPP TS 29.214 V.9.9.0 (2011-12) (Release 9).

Supported Diameter Rx Commands

Table 1 lists the Rx commands supported by Policy Controller.

Command	Status	Link to List of Supported AVPs
AA-Request (AAR)	Supported	Supported Rx AA-Request (AAR) AVPs
AA-Answer (AAA)	Supported	Supported Rx AA-Answer (AAA) AVPs
Re-Auth-Request (RAR)	Supported	Supported Rx Re-Auth-Request (RAR) AVPs
Re-Auth-Answer (RAA)	Supported	Supported Rx Re-Auth-Answer (RAA) AVPs
Session-Termination-Request (STR)	Supported	Supported Rx Session-Termination-Request (STR) AVPs
Session-Termination-Answer (STA)	Supported	Supported Rx Session-Termination-Answer (STA) AVPs
Abort-Session-Request (ASR)	Supported	Supported Rx Abort-Session-Request (ASR) AVPs
Abort-Session-Answer (ASA)	Supported	Supported Rx Abort-Session-Answer (ASA) AVPs

Table 1Supported Rx Commands

Supported Rx AA-Request (AAR) AVPs

Table 2 lists the supported Diameter Rx AA-Request AVPs.

 Table 2
 Supported AA-Request AVPs

AVP	Status
Auth-Application-Id	Supported
Origin-Host	Supported
Origin-Realm	Supported

AVP	Status
Destination-Realm	Supported
Destination-Host	Supported
AF-Application-Identifier	Supported
Media-Component-Description	Supported
Media-Component-Number	Supported
Media-Sub-Component	Supported
AF-Application-Identifier	Supported
Media-Type	Supported
Max-Requested-Bandwidth-UL	Supported
Max-Requested-Bandwidth-DL	Supported
Flow-Status	Supported
Reservation-Priority	Supported.
	Reused from ETSI TS 183 017 V2.3.1 (2008-9)
RS-Bandwidth	Supported
RR-Bandwidth	Supported
Codec-Data	Supported
Media-Component-Number	Supported
Media-Sub-Component	Supported
Flow-Number	Supported
Flow-Description	Supported
Flow-Status	Supported
Flow-Usage	Supported
Max-Requested-Bandwidth-UL	Supported
Max-Requested-Bandwidth-DL	Supported
AF-Signalling-Protocol	Supported
AF-Application-Identifier	Supported
Media-Type	Supported
Max-Requested-Bandwidth-UL	Supported
Max-Requested-Bandwidth-DL	Supported
Flow-Status	Supported
Reservation-Priority	Supported
RS-Bandwidth	Supported
	Reused from ETSI TS 183 017 V2.3.1 (2008-9)
RR-Bandwidth	Supported

Table 2 (Cont.) Supported AA-Request AVPs

AVP	Status
Codec-Data	Supported
Service-Info-Status	Supported
AF-Charging-Identifier	Supported
SIP-Forking-Indication	Supported
Specific-Action	Supported
Subscription-Id	Supported
	Reused from RFC 4006.
Subscription-Id-Type	Supported
	Reused from RFC 4006.
Subscription-Id-Data	Supported
	Reused from RFC 4006
Supported-Features	Supported
	Reused from 3GPP TS 29.229
Vendor-Id	Supported
	Reused from 3GPP TS 29.229
Feature-List-ID	Supported
	Reused from 3GPP TS 29.229
Feature-List	Supported
	Reused from 3GPP TS 29.229
Reservation-Priority	Supported
	Reused from ETSI TS 183 017 V2.3.1 (2008-9)
Framed-IP-Address	Supported
	Reused from RFC 4005
Framed-IPv6-Prefix	Supported
	Reused from RFC 4005
Called-Station-Id	Supported
	Reused from RFC 4005
Service-URN	Supported
Origin-State-Id	Supported
Proxy-Info	Supported
Proxy-Host	Supported

Table 2 (Cont.) Supported AA-Request AVPs

Table 2 (Cont.) Supported AA-Request AVPs

AVP	Status
Proxy-State	Supported
Route-Record	Supported

Supported Rx AA-Answer (AAA) AVPs

Table 3 lists the supported Diameter Rx AA-Answer AVPs.

Table 3Supported AA-Answer AVPs

AVP	Status
Auth-Application-Id	Supported
Origin-Host	Supported
Origin-Realm	Supported
Result-Code	Supported
Experiment-Result	Supported
Access-Network-Charging-Identifier	Supported
Access-Network-Charging-Identifier-Value	Supported
Access-Network-Charging-Identifier-Value	Supported
Flows	Supported
Media-Component-Number	Supported
Flow-Number	Supported
Final-Unit-Action	Supported
	Reused from RFC 4006
Access-Network-Charging-Address	Supported
Acceptable-Service-Info	Supported
Media-Component-Description	Supported
Media-Component-Number	Supported
Media-Sub-Component	Supported
Flow-Number	Supported
Flow-Description	Supported
Flow-Status	Supported
Flow-Usage	Supported
Max-Requested-Bandwidth-UL	Supported
Max-Requested-Bandwidth-DL	Supported
AF-Signalling-Protocol	Supported
AF-Application-Identifier	Supported
Media-Type	Supported
Max-Requested-Bandwidth-UL	Supported
Max-Requested-Bandwidth-DL	Supported

AVP	Status
Flow-Status	Supported
Reservation-Priority	Supported
	Reused from ETSI TS 183 017 V2.3.1 (2008-9)
RS-Bandwidth	Supported
RR-Bandwidth	Supported
Codec-Data	Supported
Max-Requested-Bandwidth-DL	Supported
Max-Requested-Bandwidth-UL	Supported
IP-CAN-Type	Supported
	Reused from 3GPP TS 29.212
RAT-Type	Supported
	Reused from 3GPP TS 29.212
Supported-Features	Supported
	Reused from 3GPP TS 29.229
Vendor-Id	Supported
	Reused from 3GPP TS 29.229
Feature-List-ID	Supported
	Reused from 3GPP TS 29.229
Feature-List	Supported
	Reused from 3GPP TS 29.229
Class	Supported
Error-Message	Supported
Error-Reporting-Host	Supported
Failed-AVP	Supported
AVP	Yes
Origin-State-Id	Supported
Redirect-Host	Supported
Redirect-Host-Usage	Supported
Redirect-Max-Cache-Time	Supported
Proxy-Info	Supported
Proxy-Host	Supported
Proxy State	Supported

Table 3 (Cont.) Supported AA-Answer AVPs

Supported Rx Re-Auth-Request (RAR) AVPs

Table 4 lists the supported Diameter Rx Re-Auth-Request AVPs.

Table 4Supported Re-Auth-Request AVPs

AVP	Status
Origin-Host	Supported
Origin-Realm	Supported
Destination-Realm	Supported
Destination-Host	Supported
Auth-Application-Id	Supported
Specific-Action	Supported
Access-Network-Charging-Identifier	Supported
Access-Network-Charging-Identifier-Value	Supported
Access-Network-Charging-Identifier-Value	Supported
Flows	Supported
Media-Component-Number	Supported
Flow-Number	Supported
Final-Unit-Action	Supported
	Reused from RFC 4006
Access-Network-Charging-Address	Supported
Flows	Supported
Media-Component-Number	Supported
Flow-Number	Supported
Final-Unit-Action	Supported
	Reused from RFC 4006
Subscription-Id	Supported
	Reused from RFC 4006
Subscription-Id-Type	Supported
	Reused from RFC 4006
Subscription-Id-Data	Supported
	Reused from RFC 4006
Abort-Cause	Supported
IP-CAN-Type	Supported
	Reused from 3GPP TS 29.212
RAT-Type	Supported
	Reused from 3GPP TS 29.212

AVP	Status
Origin-State-Id	Supported
Class	Supported
Proxy-Info	Supported
Proxy-Host	Supported
Proxy-State	Supported
Route-Record	Supported

Table 4 (Cont.) Supported Re-Auth-Request AVPs

Supported Rx Re-Auth-Answer (RAA) AVPs

Table 5 lists the supported Diameter Rx Re-Auth-Answer AVPs.

Table 5Supported Re-Auth-Answer (RAA) AVPs

AVP	Status
Origin-Host	Supported
Origin-Realm	Supported
Experimental-Result	Supported
Vendor-Id	Supported
Experimental-Result-Code	Supported
Media-Component-Description	Supported
Media-Component-Number	Supported
Media-Sub-Component	Supported
AF-Application-Identifier	Supported
Media-Type	Supported
Max-Requested-Bandwidth-UL	Supported
Max-Requested-Bandwidth-DL	Supported
Flow-Status	Supported
Reservation-Priority	Supported
	Reused from ETSI TS 183 017 V2.3.1 (2008-9)
RS-Bandwidth	Supported
RR-Bandwidth	Supported
Codec-Data	Supported
Service-URN	Supported
Origin-State-Id	Supported
Class	Supported
Error-Message	Supported
Error-Reporting-Host	Supported
Redirect-Host	Supported

AVP	Status
Redirect-Host-Usage	Supported
Redirect-Max-Cache-Time	Supported
Failed-AVP	Supported
AVP	Supported
Proxy-Info	Supported
Proxy-Host	Supported
Proxy-State	Supported

 Table 5 (Cont.) Supported Re-Auth-Answer (RAA) AVPs

Supported Rx Session-Termination-Request (STR) AVPs

Table 6 lists the supported Diameter Rx Session-Termination-Request AVPs.

Table 6 Supported Session-Termination-Request AVPs

AVP	Status
Origin-Host	Supported
Origin-Realm	Supported
Destination-Realm	Supported
Auth-Application-Id	Supported
Termination-Cause	Supported
Destination-Host	Supported
Class	Supported
Origin-State-Id	Supported
Proxy-Info	Supported
Proxy-Host	Supported
Proxy-State	Supported
Route-Record	Supported

Supported Rx Session-Termination-Answer (STA) AVPs

Table 7 lists the supported Diameter Rx Session-Termination-Answer (STA) AVPs.

 Table 7
 Supported Session-Termination-Answer AVPs

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

AVP	Status
Class	Supported
Redirect-Host	Supported
Redirect-Host-Usage	Supported
Redirect-Max-Cache-Time	Supported
Proxy-Info	Supported
Proxy-Host	Supported
Proxy-State	Supported

Table 7 (Cont.) Supported Session-Termination-Answer AVPs

Supported Rx Abort-Session-Request (ASR) AVPs

Table 8 lists the supported Diameter Rx Abort-Session-Request (ASR) AVPs.

 Table 8
 Supported Abort-Session-Request AVPs

AVP	Status
Origin-Host	Supported
Origin-Realm	Supported
Destination-Realm	Supported
Destination-Host	Supported
Auth-Application-Id	Supported
Abort-Cause	Supported
Origin-State-Id	Supported
Proxy-Info	Supported
Proxy-Host	Supported
Proxy State	Supported
Route-Record	Supported

Supported Rx Abort-Session-Answer (ASA) AVPs

Table 9 lists the supported Diameter Rx Abort-Session-Answer (ASA) AVPs.

 Table 9
 Supported Abort-Session-Answer AVPs

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

AVPStatusRedirect-Host-UsageSupportedRedirect-Max-Cache-TimeSupportedProxy-InfoSupported---- Proxy-HostSupported---- Proxy StateSupported

Table 9 (Cont.) Supported Abort-Session-Answer AVPs

Supported Rich Communications Services

Oracle Communications WebRTC Session Controller supports the following Rich Communications Services as defined by the Groupe Speciale Mobile Association (GSMA), http://www.gsma.com/network2020/rcs/:

- **Capabilities Exchange**: Determine the capabilities of a remote endpoint, such as audio, video or file transfer support.
- Stand Alone Messaging: Send simple messages between two endpoints.
- One on One and Group Chat: Create real-time chat sessions between one or more participants.
- File Transfer: Transfer files of any type between two endpoints.

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