Oracle® Communications WebRTC Session Controller

Statement of Compliance

Release 7.2

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This document is a statement of compliance for the communications protocols supported by 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 Internetwork Operating System (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.



- 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.

Table 1 Supported Rx Commands

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

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

Table 2 (Cont.) Supported AA-Request AVPs

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

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 3 Supported AA-Answer AVPs

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

Table 3 (Cont.) Supported AA-Answer AVPs

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

Supported Rx Re-Auth-Request (RAR) AVPs

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

Table 4 Supported 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

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

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

Supported Rx Re-Auth-Answer (RAA) AVPs

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

Table 5 Supported 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

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

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

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

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

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

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

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

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

Supported Rich Communications Services

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.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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