

Oracle® Communications WebRTC Session Controller

Release Notes

Release 7.0

E49238-01

November 2013

These release notes list the features and known issues for WebRTC Session Controller.

WebRTC Session Controller Features

This section briefly describes the features of WebRTC Session Controller.

Flexible Web Signaling Protocols

WebRTC Session Controller performs signaling normalization between Web clients and telecom network elements. Browser-based client applications send and receive control messages using JavaScript Object Notation (JSON) over WebSockets to control network resources.

For more information on WebRTC Session Controller Web signaling protocols, see *Oracle Communications WebRTC Session Controller Extension Developer's Guide*.

Protocol Extensibility

WebRTC Session Controller's JSON protocol, based upon the Session Description Protocol (SDP) offer-answer model, supports the following extensibility scenarios:

- Enhancement of existing methods and parameters
- Addition of completely new methods and parameters
- Implementation of new application-specific actions
- Specification or modifications of preconditions for actions from different states

For more information on extending WebRTC Session Controller, see *Oracle Communications WebRTC Session Controller Extension Developer's Guide*.

Authentication and Authorization

Since WebRTC communications are controlled directly by Web servers, WebRTC Session Controller supports standard web authentication models, including two-way Secure Sockets Layer (SSL), Form-based, HTTP, and OAuth 2.0 third party authentication using providers such as Facebook and Google. WebRTC Session Controller maps the successful authentication element, for instance a Uniform Resource Identifier (URI) or email address, to the telco "from" identity in the outbound call.

For more information on WebRTC Session Controller security, see *Oracle Communications WebRTC Session Controller Security Guide*.

JavaScript Client Software Development Kit

WebRTC Session Controller supplies a comprehensive JavaScript Development Kit that provides a framework for creating and extending WebRTC applications, while shielding Web developers from much of the complexity of WebRTC application development.

The JavaScript library provides a set of Application Programming Interface (API) packages that handle the following tasks:

- Audio call support
- Video call support
- Data transfer support
- Message alert support

The JavaScript API maps to the underlying JSON-base protocol, and is completely extensible. In addition, the API is fully compatible with both Firefox and Chrome Web browsers on any of their supported platforms.

For more information on the WebRTC Session Controller JavaScript API, see *Oracle Communications WebRTC Session Controller Web Application Developer's Guide*.

Client Connectivity

WebRTC Session Controller implements support for browser rehydration which allows Web application session state to be maintained even in the face of browser page refreshes and network state changes, for example, Ethernet to Wi-Fi to 3g.

For more information on the WebRTC Session Controller browser rehydration support, see *Oracle Communications WebRTC Session Controller Web Application Developer's Guide*.

Networking and Media Handling

WebRTC Session Controller supports the following networking and media handling features:

- Network Address Translation (NAT) Traversal
WebRTC Session Controller implements support for Interactive Connectivity Establishment (ICE) and Session Traversal Utilities for NAT (STUN) NAT traversal mechanisms over Secure Realtime Transport Protocol (SRTP).
- Media Encryption and Decryption
WebRTC Session Controller is fully interoperable with clients implementing media transport mechanisms defined in Request for Comments (RFC) 3711, 4568, and 5124.
- Codec Support
WebRTC Session Controller supports all WebRTC audio (Opus, G.711, iSAC) and video (VP8). In addition, WebRTC Session Controller supports codec reordering, removal, and insertion, as well as audio transcoding for the following codecs:
 - AMR
 - AMR-WB
 - G711a/u

- G722-1
 - G723
 - G726-16
 - G726-24
 - G726-32
 - G726-40
 - G728
 - G729
 - GSM
 - ILBC
 - SILK
 - Speex
- **Internetworking Functions**

WebRTC Session Controller supports internetworking functions between WebRTC applications to existing SIP/RTP-base voice, video over IP devices, and Public Switched Telephone Network (PSTN) devices. SRTP and ICE termination and RTP/RTCP stream multiplexing are also supported.

For more information on supported networking and media standards, see *Oracle Communications WebRTC Session Controller Statement of Compliance*.

Application and Network Specific Policy Controls

WebRTC Session Controller supports integration with Diameter Rx Policy and Charging Rules Function (PCRF) servers. Signaling and media policy rules can be enforced for bandwidth management, media channel allocation and Quality of Service (QoS).

For more information on PCRF integration, see *Oracle Communications WebRTC Session Controller System Administrator's Guide*.

Known Issues

[Table 1](#) lists the known issues in this release.

Table 1 WebRTC Session Controller Known Issues

Bug ID	Description
17564567	<p>Issue</p> <p>Google Chrome, version 30 and earlier, have an issue during Chrome's STUN connectivity checks if WebRTC Session Controller is configured for conditional media anchoring.</p> <p>This Chrome issue is intermittent and manifests itself as a Chrome webpage "crash" with the browser page displaying an error message.</p> <p>Workaround</p> <p>To mitigate this issue:</p> <ol style="list-style-type: none"> 1. Use the recommended WebRTC Session controller conditional-anchoring configuration, which delays STUN connectivity checks to the Chrome browser. For information on configuring media anchoring, see <i>Oracle Communications WebRTC Session Controller Installation Guide</i>. 2. Keep client-side firewalls enabled. <p>This problem has been fixed by Google in Chrome version 32 beta.</p>
17596497	<p>Issue</p> <p>When making a Bria (version 3.5.5 71238) softphone to Chrome browser call with audio and video, the initial call completes successfully, and there is two-way audio and video. However if the Chrome browser is refreshed, the audio on the Bria softphone becomes garbled, and the video is no longer rendered.</p> <p>This issue is caused by a bug with the Bria softphone. The Bria vendor, Counterpath, has provided a trial version of Bria that resolves the issue, but no official patch release date has been provided.</p> <p>Workaround</p> <p>To fix the audio problem, remove all the audio codecs on the Bria except PCMU.</p> <p>There is no configuration workaround to fix the video media stream.</p>
17697544	<p>Issue</p> <p>If you are editing the GroovyScript library and you introduce any errors, clicking the Validate Script or Commit buttons will display an error as expected. However, even after fixing the errors, you will still not be able to commit your changes.</p> <p>Workaround</p> <p>To work around this issue, save your valid changes to the clipboard or a local file, and click Revert. You can then click Lock & Edit, make your changes again, and commit them successfully.</p> <p>For more information on using the GroovyScript library, see <i>Oracle Communications WebRTC Session Controller Extension Developer's Guide</i>.</p>

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