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RTCIceCandidate

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The **RTCIceCandidate** interface—part of the [WebRTC API](#)—represents a candidate Internet Connectivity Establishment (ICE) configuration which may be used to establish an [RTCPeerConnection](#).

An ICE candidate describes the protocols and routing needed for WebRTC to be able to communicate with a remote device. When starting a WebRTC peer connection, typically a number of candidates are proposed by each end of the connection, until they mutually agree upon one which describes the connection they decide will be best. WebRTC then uses that candidate's details to initiate the connection.

For details on how the ICE process works, see [Lifetime of a WebRTC session](#). The article [WebRTC connectivity](#) provides additional useful details.

Related Topics

[WebRTC API](#)[RTCIceCandidate](#)

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- [candidate](#)
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- [relatedPort](#)
- [sdpMid](#)
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- [usernameFragment](#)

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[toJSON\(\)](#)

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- [MediaDevices.getUserMedia\(\)](#)
- [Navigator.mediaDevices](#)

Constructor

RTCIceCandidate()

Creates an `RTCIceCandidate` object to represent a single ICE candidate, optionally configured based on an object based on the [RTCIceCandidateInit](#) dictionary.

Note: For backward compatibility, the constructor also accepts as input a string containing the value of the `candidate` property instead of a [RTCIceCandidateInit](#) object, since the `candidate` includes all of the information that [RTCIceCandidateInit](#) does and more.

Properties

candidate Read only

A [DOMString](#) representing the transport address for the candidate that can be used for connectivity checks. The format of this address is a `candidate-attribute` as defined in [RFC 5245](#). This string is empty ("") if the `RTCIceCandidate` is an "end of candidates" indicator.

- [RTCCertificate](#)
- [RTCDataChannel](#)
- [RTCDataChannelEvent](#)
- [RTCDtlsTransport](#)
- [RTCErrorEvent](#)
- [RTCIceTransport](#)
- [RTCPeerConnection](#)
- [RTCPeerConnectionIceErrorEvent](#)
- [RTCPeerConnectionIceEvent](#)
- [RTCRtpReceiver](#)
- [RTCRtpSender](#)
- [RTCRtpTransceiver](#)
- [RTCSctpTransport](#)
- [RTCSessionDescription](#)
- [RTCStatsEvent](#)
- [RTCStatsReport](#)
- [RTCTrackEvent](#)

component Read only

A [DOMString](#) which indicates whether the candidate is an RTP or an RTCP candidate; its value is either "rtp" or "rtcp", and is derived from the "component-id" field in the candidate a-line string. The permitted values are listed in the [RTCIceComponent](#) enumerated type.

foundation Read only

Returns a [DOMString](#) containing a unique identifier that is the same for any candidates of the same type, share the same base (the address from which the ICE agent sent the candidate), and come from the same [STUN](#) server. This is used to help optimize ICE performance while prioritizing and correlating candidates that appear on multiple [RTCIceTransport](#) objects.

ip Read only

A [DOMString](#) containing the IP address of the candidate.

port Read only

An integer value indicating the candidate's port number.

priority Read only

A long integer value indicating the candidate's priority.

protocol Read only

A string indicating whether the candidate's protocol is "tcp" or "udp". The string is one of those in the enumerated type [RTCIceProtocol](#).

relatedAddress Read only

If the candidate is derived from another candidate, `relatedAddress` is a [DOMString](#) containing that host candidate's IP address. For host candidates, this value is `null`.

relatedPort Read only

For a candidate that is derived from another, such as a relay or reflexive candidate, the `relatedPort` is a number indicating the port number of the candidate from which this candidate is derived. For host candidates, the `relatedPort` property is `null`.

sdpMid Read only

A [DOMString](#) specifying the candidate's media stream identification tag which uniquely identifies the media stream within the component with which the candidate is associated, or `null` if no such association exists.

sdpMLineIndex Read only

If not `null`, `sdpMLineIndex` indicates the zero-based index number of the media description (as defined in [RFC 4566](#)) in the [SDP](#) with which the candidate is associated.

tcpType Read only

If `protocol` is "tcp", `tcpType` represents the type of TCP candidate. Otherwise, `tcpType` is `null`.

type Read only

	Chrome	Edge	Firefox	Internet Explor	Opera	Safari	Android webvie	Chrome for An	Firefox for And	Opera for Andr	Safari on iOS	Samsung Inter
<code>RTCIceCandidate</code>	Yes	≤18	22	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<code>RTCIceCandidate()</code> <code>constructor</code>	Yes	≤18	22	No	Yes	?	Yes	Yes	Yes	Yes	?	Yes
<code>address</code>	74	79	?	No	?	?	74	74	?	?	?	11.0
<code>candidate</code>	23	15	22	No	15	Yes	Yes	25	Yes	14	Yes	1.5
<code>component</code>	74	≤79	No	No	?	?	74	74	No	?	?	11.0
<code>foundation</code>	74	≤18	No	No	No	?	74	74	?	No	?	11.0
<code>port</code>	74	≤18	No	No	No	?	74	74	No	No	?	11.0
<code>priority</code>	74	≤18	No	No	No	?	74	74	No	No	?	11.0
<code>protocol</code>	74	≤18	No	No	No	?	74	74	No	No	?	11.0
<code>relatedAddress</code>	74	≤18	No	No	No	?	74	74	No	No	?	11.0
<code>relatedPort</code>	74	≤18	No	No	No	?	74	74	No	No	?	11.0
<code>sdpMid</code>	23	15	22	No	15	Yes	Yes	25	Yes	14	Yes	1.5
<code>sdpMLineIndex</code>	23	15	22	No	15	Yes	Yes	25	Yes	14	Yes	1.5
<code>tcpType</code>	74	≤18	No	No	No	?	74	74	No	No	?	11.0
<code>toJSON</code>	45	15	27	No	32	Yes	45	45	27	32	Yes	5.0
<code>type</code>	74	≤18	No	No	No	?	74	74	No	No	?	11.0
<code>usernameFragment</code>	74	≤79	67	No	?	?	74	74	67	?	?	11.0

What are we missing?

Full support

No support

Compatibility unknown

See implementation notes.

Uses a non-standard name.

Last modified: Mar 23, 2019, by MDN contributors



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