

Network Working Group  
Internet-Draft  
Intended status: Standards Track  
Expires: February 25, 2014

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August 24, 2013

**A Session Initiation Protocol (SIP) usage for Trickle ICE  
draft-iovov-dispatch-sdpfrag-01**

**Abstract**

This document registers the application/sdpfrag Multipurpose Internet Mail Extensions (MIME) media type. This type is similar to application/sdp, but allows certain subsets of well formed session descriptions, as per the Session Description Protocol (SDP), to be represented instead of requiring a complete SDP session description. The "a=candidate" lines that are incrementally exchanged between Trickle ICE agents are one example usage of the application/sdpfrag.

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## Table of Contents

<a href="#">1.</a>	Introduction . . . . .	<a href="#">2</a>
<a href="#">2.</a>	Terminology . . . . .	<a href="#">2</a>
<a href="#">3.</a>	Definition: application/sdpfrag . . . . .	<a href="#">2</a>
<a href="#">4.</a>	Security Considerations . . . . .	<a href="#">3</a>
<a href="#">5.</a>	Acknowledgements . . . . .	<a href="#">3</a>
<a href="#">6.</a>	References . . . . .	<a href="#">3</a>
<a href="#">6.1.</a>	Normative References . . . . .	<a href="#">3</a>
<a href="#">6.2.</a>	Informative References . . . . .	<a href="#">3</a>
	Authors' Addresses . . . . .	<a href="#">3</a>

## [1.](#) Introduction

The application/sdp MIME media type defined in [[RFC4566](#)] carries an entire well formed SDP session description. Yet, creating such a description may sometimes require a relatively long time as, for example, would be the case when the Interactive Connectivity Establishment (ICE) [[RFC5245](#)] protocol is in use and candidates need to be acquire in different, often time consuming methods. Some applications may therefore choose to use mechanisms like Trickle ICE [[I-D.ivov-mmusic-trickle-ice](#)] that would allow them to send initial session descriptions with only readily available information and then exchange candidates only when they become available.

This document does NOT provide a mechanism to segment an SDP session description into multiple pieces for separate transport and later reassemble.

## [2.](#) Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [[RFC2119](#)].

## [3.](#) Definition: application/sdpfrag

A valid application/sdpfrag part is one that could be obtained by starting with some valid SDP session description and deleting any number of lines.

[TODO maybe mention that we can only do frags with the declarative parts of an SDP offer/answer and not with the ones used in negotiations.]



[TODO maybe explain how attributes can be linked to an m line or at least say that this will be defined by usages.]

#### **4. Security Considerations**

[TODO]

#### **5. Acknowledgements**

[TODO]

#### **6. References**

##### **6.1. Normative References**

- [I-D.ivov-mmusic-trickle-ice]  
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- [RFC3264] Rosenberg, J. and H. Schulzrinne, "An Offer/Answer Model with Session Description Protocol (SDP)", [RFC 3264](#), June 2002.
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##### **6.2. Informative References**

- [RFC1918] Rekhter, Y., Moskowitz, R., Karrenberg, D., Groot, G., and E. Lear, "Address Allocation for Private Internets", [BCP 5](#), [RFC 1918](#), February 1996.

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