Response code for dynamic proxy redirect
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Abstract

This document defines new response code that clients would use for hinting the server to retarget a redirect response rather than allowing the sending client do perform the redirect.
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1. Introduction

The 303 Proxy Redirect response code allows the receiving UA the ability to hint the proxy to retarget an INVITE, rather than send the INVITE all the way back to the calling UA.

The 303 looks identical to the 302 in all respects, except that the response code servers as a hint to the proxy to retarget the INVITE. Proxys that do not support 303 or intentionally do not honor 303 are expected to send the 303 all the back to the client.

2. Terminology

In this document, the key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" are to be interpreted as described in BCP 14, RFC 2119 [1] and indicate requirement levels for compliant implementations.

3. 303 Proxy Redirect

SIP provides a 302 response code which allows the client receiving an INVITE request to redirect the caller to a new URI. The 302 response code can be sent all the way back to the calling party, or can be retargeted by the proxy. Currently SIP does not provide for a way for the redirecting client to instruct the server to perform one specific action dynamically on a call by call basis.

An example where a new response code which provides a hint to retarget the call is needed is where the client wants to dynamically choose to the call to be sent through the PSTN gateways in the client’s own domain for billing purposes.

Another example is when the client is retargeting to a URI that is routable only through the receiving clients’s own domain. For example if a redirecting to sip:+14251234567@microsoft.com;user=phone will fail from a federated company contoso.com because the microsoft.com access proxies may not authorize an incoming call to a PSTN number from contoso.com.

Moving the decision the retargeting on the client side reduces complexity on the server side and provides more flexibilty to the client. The server does not need to be updated on the list of retargeting destinations, and clients can be designed to make this choice.
The 303 response code is very similar in structure to the 302, but
the server interprets this as a hint to retarget the response. When
a client sends a 303 back, the proxy should handle this in the
following way:

Proxies that do not support 303 should send the response all the way
to the caller.

Proxies that do support the 303 but do not authorize the redirect for
the user can either choose to send a 302 to the caller, or proxy the
303 all the way back.

Proxies that support the 303 and authorize the redirect should
retarget the INVITE to the Contact URI specified in the 303 response.

Clients should be prepared to receive a 303 and treat it similar to a
302.

4. References

4.1. Normative References

[1] Rosenberg, J., Schulzrinne, H., Camarillo, G., Johnston, A.,
Peterson, J., Sparks, R., Handley, M. and E. Schooler, "SIP:

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