4 November 2007
Expires: 7 May 2008

CLI forwarding method during call transfer
draft-giordano-cli-forward-in-call-trx-01

Status of this Memo

By submitting this Internet-Draft, each author represents that any applicable patent or other IPR claims of which he or she is aware have been or will be disclosed, and any of which he or she becomes aware will be disclosed, in accordance with Section 6 of BCP 79.

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

The list of current Internet-Drafts can be accessed at http://www.ietf.org/ietf/1id-abstracts.txt.

The list of Internet-Draft Shadow Directories can be accessed at http://www.ietf.org/shadow.html.

Copyright Notice

Copyright (C) The IETF Trust (2007).

Abstract

Many telephony services are IP based and they can use various signaling protocols like H.323, SIP, MGCP, MEGACO and vendor proprietary protocols. This document describe a method to identify and to change the Calling Line Identification (or CLI) field during call forwarding. This method is voice over ip protocol independent. This method can be apply to all voice over ip protocols.

Table of Contents

1. Conventions Used In This Document 3
2. Introduction 3
3. Implementation and Operations 3
4. Consideration about well known services 4
5. Security Considerations 5
6. IANA Considerations 5
7. Normative References 5
Author's Address 6
Intellectual Property and Copyright Statements 6

1. Conventions Used In This Document

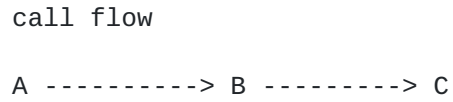
The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

2. Introduction

In POTS/PSTN networks the CLI (Calling Line Identification) is a base information about the billing telephone number from which calls are originated. CLI can be managed to obtain various services: CLI presentation or CLIP, CLI restriction or CLIR, CLI stripping, CLI screening and other well known services.
These cases are implemented in IP based telephony network or voice over IP network.
But, What happens during call forwarding?
In traditional telephony, two calling line ids are sent along with the outgoing call.
It doesn't happen in the current IP implementations.
There is a need for a mechanism to identify the originating party and to send the appropriate CLI.

3. Implementation and Operations

When a call is forwarded (unconditionally, on busy and not answered) we MUST identify three parties: the calling party A, the called transferor party B and the transferred party C.

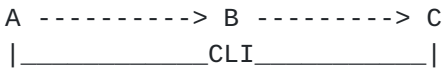


During call setup A sends its CLI to B.
B can send both CLI, its own and CLI of A.
CLI of A SHOULD be called original-CLI; CLI of B SHOULD be called transferor-CLI.

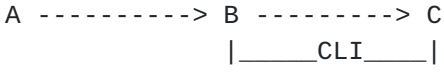
What happens to CLI in this scenario?

We MUST identify two cases:

1) CLI pass through: the transferred party C MUST receive the original-CLI



2) CLI override: the transferred party C MUST receive the transferor-CLI



Who set the forwarding MUST select a CLI forwarding method. In this way the appropriate caller line id can be sent during call setup.

This implementation would be protocol independent. All signaling protocols describe how to write CLI information in own signaling message.

4. Consideration about well known services

This draft doesn't influence the correct working of well known services like CLI Presentation or CLI Restriction. Their working is described in all signaling voice protocols.

5. Security Considerations

This document is not directly concerned with security.
However, implementing this feature you can obtain more control over call routing and more information in the call report.

6. IANA Considerations

None.

7. Normative References

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

Author's Address

Giordano Daniele
Email: d.giordano@fastpiu.it

Full Copyright Statement

Copyright (C) The IETF Trust (2007).

This document is subject to the rights, licenses and restrictions contained in BCP 78, and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY, THE IETF TRUST AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Intellectual Property

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in BCP 78 and BCP 79.

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at http://www.ietf.org/ipr.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at ietf-ipr@ietf.org.

Acknowledgment

Funding for the RFC Editor function is provided by the IETF
Administrative Support Activity (IASA).