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The Calling Party's Category tel URL Parameter
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Abstract

This document specifies a new parameter for the tel URL [1] that represents the Calling Party's Category, a parameter used in SS7 ISUP [2] signaling.

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1. Introduction

ISUP defines a Calling Party's Category (CPC) parameter that characterizes the station used to originate a call and carries other important state that can describe the originating party. When telephone numbers are contained in URLs, such as the tel URL, it may be desirable to communicate any CPC associated with that telephone number or, in the context of a call, the party calling from it.

Note that in some networks (including North America), the Originating Line Information (OLI) parameter is used to carry this information in ISUP rather than the CPC parameter. Legacy multifrequency (MF) signaling networks carry this information in the ANI II Digits. The tel URL parameter specified in this document is designed to carry data from these sources as well.

2. Parameter Definition

The Calling Party's Category is represented as a tel URL parameter. The ABNF syntax is as follows:

```
cpc                 = cpc-tag "=" cpc-value
cpc-tag             = "cpc"
cpc-value           = string
```

CPC values (``cpc-value'' strings) must be registered with IANA. The following values are pre-registered by this document:

ordinary: The caller has been identified, and has no special features.

priority: This call has priority/emergency status.

data: This call will contain voice-band data.

test: This is a test call that has been originated as part of a maintenance procedure.

operator: The call was generated by an operator position.

payphone: The calling station is a payphone.

prison: The calling station is in a prison.

unknown: The CPC could not be ascertained.

An example of the syntax of the CPC parameter (in a small fragment of a SIP message) is given below:

```
INVITE sip:bob@biloxi.com SIP/2.0
To: "Bob" <sip:bob@biloxi.com>
From: <tel:+17005554141;cpc=payphone>;tag=1928301774
```

3. Usage

The CPC is generally useful only when describing the originator of a telephone call. Therefore, when this parameter is used in an application such as SIP, it is recommended that the parameter be applied to URLs that characterize the originator of a call (such as a SIP URI or tel URL in the From header field of a SIP message).

It is anticipated that this URL will be used primarily by gateways that interwork ISUP networks with SIP networks. Various SIP network intermediaries might consult the CPC as they make routing decisions, although no specific behavior is prescribed in this document. While no specific mapping of the various ISUP parameters that contain CPC data is offered in this document, creating such a mapping would be trivial.

If the CPC parameter is not present, consumers of the CPC should treat the URL as if it specified a CPC of "unknown".

Generally, only one instance of the CPC will be associated with a particular URL.

4. Security Considerations

The information contained in the CPC parameter may be of a private nature, and it may not be appropriate for this value to be revealed to the destination user (typically it would not be so revealed in the PSTN).

Otherwise, this mechanism adds no new security considerations to those discussed in RFC2806 [1].

5. IANA Considerations

This document requests the creation of an IANA registry for Calling Party's Category values. The values of the CPC parameter in use in ISUP are unfortunately quite specific to national networks, and thus it is very difficult to uncover all the usages that may be in place in various networks. Note that in North American networks, the Originating Line Information parameter contains information common found in the Calling Party's Category elsewhere; it is therefore legitimate to register values associated with the Originating Line Information in this registry.

In order to file a registration, interested parties must contact IANA and supply them with both a new ``cpc-value'' and a short reason phrase describing the usage of the new CPC. Some values are given in Section 2; we ask that these values be pre-registered upon publication of this document as an RFC. It is not expected that this registry will require any expert supervision.

References

[1] Vaha-Sipila, A., "URLs for Telephone Calls", RFC 2806, April 2000.

[2] International Telecommunications Union, "Recommendation Q.763: Signalling System No. 7: ISDN user part formats and codes", September 1997, <http://www.itu.int>.

[3] Handley, M., Schulzrinne, H., Schooler, E. and J. Rosenberg, "SIP: Session Initiation Protocol", RFC 2543, March 1999.

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