Abstract

The Point-to-Point Protocol (PPP) [1] provides a standard method for transporting multi-protocol datagrams over point-to-point links. PPP defines an extensible Link Control Protocol (LCP) for establishing, configuring, and testing the data-link connection. This document defines several additional LCP features that have been suggested over the past few years.
1. Additional LCP Configuration Options

The Configuration Option format and basic options are already defined for LCP [1].

Up-to-date values of the LCP Option Type field are specified in the most recent "Assigned Numbers" [2]. This document concerns the following values:

13      CallBack

1.1. CallBack

Description

This Configuration Option provides a method for an implementation to request a dial-up peer to call back. This option might be used for many diverse purposes, such as savings on toll charges.

When CallBack is successfully negotiated, and authentication is complete, the Authentication phase proceeds directly to the Termination phase, and the link is disconnected.

Then, the peer re-establishes the link, without negotiating CallBack.

Implementation Notes:

A peer which agrees to this option SHOULD request the Authentication-Protocol Configuration Option. The user information learned during authentication can be used to determine the user location, or to limit a user to certain locations, or merely to determine whom to bill for the service.

Authentication SHOULD be requested in turn by the implementation when it is called back, if mutual authentication is desired.

A summary of the CallBack Option format is shown below. The fields are transmitted from left to right.
Type

13

Length

>= 3

Operation

The Operation field is one octet and indicates the contents of the Message field.

0 location is determined by user authentication

1 Dialing string, the format and contents of which assumes configuration knowledge of the specific device which is making the callback.

2 Location identifier, which may or may not be human readable, to be used together with the authentication information for a database lookup to determine the callback location.

3 E.164 number.

4 Distinguished name.

Message

The Message field is zero or more octets, and its general contents are determined by the Operation field. The actual format of the information is site or application specific, and a robust implementation SHOULD support the field as undistinguished octets. The size is determined from the Length field.

It is intended that only an authorized user will have correct site specific information to make use of the CallBack. The codification of the range of allowed usage of this field is outside the scope of this specification.
Security Considerations

Security issues are briefly discussed in sections concerning the CallBack Configuration Option.

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References


Contacts

Comments about this document should be discussed on the ietf-ppp@merit.edu mailing list.

This document is a submission to the Point-to-Point Protocol Working Group of the Internet Engineering Task Force (IETF). The working group can be contacted via the current chair:

Karl Fox
Ascend Communications
3518 Riverside Drive  Suite 101
Columbus, Ohio  43221

    karl@MorningStar.com
    karl@Ascend.com

Questions about this document can also be directed to:

William Allen Simpson
DayDreamer
Computer Systems Consulting Services
1384 Fontaine
Madison Heights, Michigan  48071

    wsimpson@UMich.edu
    wsimpson@GreenDragon.com (preferred)
    bsimpson@MorningStar.com