Network Working Group
Request for Comments: 927

Brian A. Anderson
BBN

December 1984

TACACS User Identification Telnet Option

Status of this Memo

This RFC suggests a proposed protocol for the ARPA-Internet community, and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

Introduction

The following is the description of a TELNET option designed to facilitate double login avoidance. It is intended primarily for TAC connections to target hosts on behalf of TAC users, but it can be used between any two consenting hosts. For example, all hosts at one site (e.g., BBN) can use this option to avoid double login when TELNETing to one another.

1. Command name and code

TUID 26

2. Command Meanings

IAC WILL TUID

The sender (the TELNET user) proposes to authenticate the user and send the identifing UUID; or, the sender (the TELNET user) agrees to authenticate the user on whose behalf the connection is initiated.

IAC WON'T TUID

The sender (the TELNET user) refuses to authenticate the user on whose behalf the connection is initiated.

IAC DO TUID

The sender (the TELNET server) proposes that the recipient (the TELNET user) authenticate the user and send the identifing UUID; or, the sender (the TELNET server) agrees to accept the recipient's (the TELNET user's) authentication of the user identified by his UUID.

IAC DON'T TUID

The sender (the TELNET server) refuses to accept the recipient's (the TELNET user) authentication of the user.

IAC SB TUID <uuid> IAC SE

The sender (the TELNET user) sends the UUID <uuid> of the user on whose behalf the connection is established to the host to which he is connected. The <uuid> is a 32 bit binary number.

3. Default

WON'T TUID

A TELNET user host (the initiator of a TELNET connection) not implementing or using the TUID option will reply WON'T TUID to a DO TUID.

DON'T TUID

A TELNET server host (the recipient of a TELNET connection) not implementing or using the TUID option reply DON'T TUID to a WILL TUID.

4. Motivation for the Option

Under TACACS (the TAC Access Control System) a user must be authenticated (give a correct name/password pair) to a TAC before he can connect to a host via the TAC. To avoid a second authentication by the target host, the TAC can pass along the user's proven identity (his UUID) to the that host. Hosts may accept the TAC's authentication of the user or not, at their option.

The same option can be used between any pair of cooperating hosts for the purpose of double login avoidance.

5. Description for the Option

At the time that a host establishes a TELNET connection for a user to another host, if the latter supports the TUID option and wants to receive the user's UUID, it sends an IAC DO TUID to the the user's host. If the user's host supports the TUID option and wants to authenticate the user by sending the user's UUID, it responds IAC WILL TUID; otherwise it responds with IAC WON'T TUID. If both the user and server TELNETs agree, the user TELNET will then send the UUID to the server TELNET by sub-negotiation.

6. Examples

There are two possible negotiations that result in the double login avoidance authentication of a user. Both the server and the user TELNET support the TUID option.

S = Server, U = User

Case 1:

```
S-> IAC DO TUID
U-> IAC WILL TUID
U-> IAC SB TUID <32-bit UUID> IAC SE
```

Case 2:

```
U-> IAC WILL TUID
S-> IAC DO TUID
U-> IAC SB TUID <32-bit UUID> IAC SE
```

There are also two possible negoitiations that do not result in the authentication of a user. In the first example the server supports TUID and the user TELNET doesn't. In the second example the user TELNET supports TUID but the server TELNET doesn't.

S = Server, U = User

Case 3:

```
S-> IAC DO TUID
U-> IAC WONT TUID
```

Case 4:

```
U-> IAC WILL TUID
S-> IAC DONT TUID
```

The TUID is transmitted with the subnegotiation command. For example, if the UUID had the value 1 the following string of octets would be transmitted:

```
IAC SB TUID 0 0 0 1 IAC SE
```

If the UUID had the value 255 the following string of octets would be transmitted:

```
IAC SB TUID 0 0 0 IAC IAC IAC SE
```

If the UUID had the value of all ones the following string of octets would be transmitted:

IAC SB TUID IAC IAC IAC IAC IAC IAC IAC IAC IAC SE