Telnet X Display Location Option

Status of This Memo

This RFC specifies a standard for the Internet community. Hosts on the Internet that transmit the X display location within the Telnet protocol are expected to adopt and implement this standard. Distribution of this memo is unlimited.

This standard is modelled on RFC 1079 [1], the telnet terminal speed option. Much of the text of this document is copied from that RFC.

Motivation

When a user is running the Telnet client under the X window system, it is useful for the remote Telnet to know the X display location of that client. For example, the user might wish to start other X applications from the remote host using the same display location as the Telnet client. The purpose of this option is to make this information available through telnet connections.

1. Command Name and Code

    X-DISPLAY-LOCATION (XDISPLOC)

    Code = 35

2. Command Meanings

    IAC WILL X-DISPLAY-LOCATION

    Sender is willing to send the X display location in a subsequent sub-negotiation.

    IAC WON'T X-DISPLAY-LOCATION

    Sender refuses to send the X display location.

    IAC DO X-DISPLAY-LOCATION

    Sender is willing to receive the X display location in a subsequent sub-negotiation.
IAC DON’T X-DISPLAY-LOCATION
Sender refuses to accept the X display location.

IAC SB X-DISPLAY-LOCATION SEND IAC SE
Sender requests receiver to transmit his (the receiver’s) X display location. The code for SEND is 1. (See below.)

IAC SB X-DISPLAY-LOCATION IS ... IAC SE
Sender is stating his X display location. The code for IS is 0. (See below.)

3. Default

WON’T X-DISPLAY-LOCATION
The X display location will not be exchanged.

DON’T X-DISPLAY-LOCATION
The X display location will not be exchanged.

4. Description of the Option

WILL and DO are used only to obtain and grant permission for future discussion. The actual exchange of status information occurs within option subcommands (IAC SB X-DISPLAY-LOCATION...).

Once the two hosts have exchanged a WILL and a DO, the sender of the DO X-DISPLAY-LOCATION is free to request the X display location. Only the sender of the DO may send requests (IAC SB X-DISPLAY-LOCATION SEND IAC SE) and only the sender of the WILL may transmit actual X display location (within an IAC SB X-DISPLAY-LOCATION IS ... IAC SE command). The X display location may not be sent spontaneously, but only in response to a request.

The X display location is an NVT ASCII string. This string follows the normal Unix convention used for the DISPLAY environment variable, e.g.,

<host>[:<dispnum>[.<<screennum>]]

No extraneous characters such as spaces may be included.

The following is an example of use of the option:
Host1: IAC DO X-DISPLAY-LOCATION

Host2: IAC WILL X-DISPLAY-LOCATION

(Host1 is now free to request status information at any time.)

Host1: IAC SB X-DISPLAY-LOCATION SEND IAC SE

Host2: IAC SB X-DISPLAY-LOCATION IS "SRI-NIC.ARPA:0.0" IAC SE

(This command is 22 octets.)

5. Implementation Suggestions

Since the X display location may not contain a hostname on the client host, i.e., ":0" or "unix:0.0", the Telnet client will need to modify the location appropriately before sending it on to the remote Telnet.

Reference


Author’s Address:

Glenn A. Marcy
Carnegie Mellon University
School of Computer Science
Pittsburgh, PA 15213-3890

Phone: (412) 268-7669

Email: Glenn.Marcy@CS.CMU.EDU