Revised Telnet Status Option
NIC 31154 (25 Oct. 74)
Request for Comments: 651
D. Crocker (UCLA-NMC) 25 Oct. 74
RFC# 651
Online file: <[ISI]<DCROCKER>STATUS-OPTION-REVISION.RNO

Revised Telnet Status Option

1. Command name and code
   STATUS 5
2. Command meanings
   As described in the NAOL and NAOP option specifications, this option applie
   to a simplex connection.
      IAC DO STATUS
         Sender of DO wishes to be able to send requests for status-of-options
         information, or confirms that he is willing to send such requests.
      IAC WILL STATUS
         Sender of WILL wishes or agrees to send status information,
         spontaneously or in response to future requests.
      IAC DON'T STATUS
         Sender refuses to carry on any further discussion of the current
         status of options.
      IAC WON'T STATUS
         Sender refuses to carry on any further discussion of the current
         status of options.
      IAC SB STATUS SEND IAC SE
         Sender requests receiver to transmit his (the receiver's) perception
         of the current status of Telnet options. The code for SEND is 1. (See
         below.)
      IAC SB STATUS IS ... IAC SE
         Sender is stating his perception of the current status of Telnet
         options. The code for IS is 0. (See below.)
3. Default
   DON'T STATUS/WON'T STATUS. That is, the current status of options will not
   be discussed.
4. Motivation for the option
   This option allows a user/process to verify the current status of Telnet
   options (e.g., echoing) as viewed by the person/process on the other end of
   the Telnet connection. Simply renegotiating options could lead to the
   nonterminating request loop problem discussed in (NIC #16237). The changes
   to the option, described in this paper, allow STATUS to fit into the normal
   structure of Telnet options, by deferring the actual transfer of status
   information to the SB command. Additionally, the numbers of bytes that must
   be sent to describe the state of the options has been considerably reduced.
5. Description of the option
   WILL/DO are now used only to obtain and grant permission for future
   discussion. The actual exchange of status information occurs within option
   subcommands (IAC SB STATUS...).
   Once the two hosts have exchanged a WILL and a DO, the sender of the WILL
   STATUS is free to transmit status information, spontaneously or in response
   to a request from the sender of the DO. At worst, this may lead to
   transmitting the information twice. Only the sender of the DO may send
   requests (IAC SB STATUS SEND IAC SE) and only the sender of the WILL may
   transmit actual status information (within an IAC SB STATUS IS ... IAC SE
   command).
   IS has the subcommands WILL, DO and SB. They are used EXACTLY as used durin
   the actual negotiation of Telnet options, except that SB is terminated with
   SE, rather than IAC SE. Transmission of SE, as a regular data byte, is

described are assumed to be in their default states. A single IAC SB STATUS
IS ... IAC SE describes the condition of ALL options.
The following is an example of use of the option:

Host1: IAC DO STATUS
Host2: IAC WILL STATUS
(Host2 is now free to send status information at any time.
Solicitations from Host1 are NOT necessary. This should not produce
any dangerous race conditions. At worst, two IS's will be sent.)
Host1 (perhaps): IAC SB STATUS SEND IAC SE
Host2 (the following stream is broken into multiple lines only for
readability. No carriage returns are implied.):
IAC SB STATUS IS
WILL ECHO
DO SUPPRESS-GO-AHEAD
WILL STATUS
DO STATUS
WILL RCTE
SB RCTE <11><1><24> SE
DO NAOL
SB NAOL DS <66> SE
IAC SE
Explanation of Host2's perceptions: It is responsible for echoing back
the data characters it receives over the Telnet connection; it will not
send Go-Ahead signals; it will both issue and request Status information
it will send instruction for controlling the other side's terminal
printer; it will discuss the line width for data it is sending.