TELNET OUTPUT HORIZONTAL TAB DISPOSITION OPTION

1. Command name and code
   NAOHTD 12
      (Negotiate About Output Horizontal Tab Disposition)

2. Command meanings
   In the following, we are discussing a simplex connection, as described in
   the NAOL and NAOP Telnet options.
      IAC DO NAOHTD
         The data sender requests or agrees to negotiate about output
         horizontal tab character disposition with the data receiver. In the
         case where agreement has been reached and in the absence of further
         subnegotiations, the data receiver is assumed to be handling output
         horizontal tab character considerations.
      IAC DON'T NAOHTD
         The data sender refuses to negotiate about output horizontal tab
         characters with the data receiver, or demands a return to the
         unnegotiated default mode.
      IAC WILL NAOHTD
         The data receiver requests or agrees to negotiate about output
         horizontal tab characters with the sender. In the case where
         agreement has been reached and in the absence of further
         subnegotiations, the data receiver alone is assumed to be handling
         output horizontal tab character considerations.
      IAC WON'T NAOHTD
         The data receiver refuses to negotiate about output horizontal tab
         characters, or demands a return to the unnegotiated default mode.
      IAC SB NAOHTD DS <8-bit value> IAC SE
         The data sender specifies, with the 8-bit value, which party should
         handle output horizontal tab characters and what their disposition
         should be. The code for DS is 1.
      IAC SB NAOHTD DR <8-bit value> IAC SE
         The data receiver specifies, with the 8-bit value, which party
         should handle output horizontal tab characters and what their
         disposition should be. The code for DR is 0.

3. Default
   DON'T NAOHTD/WON'T NAOHTD.
      In the default absence of negotiations concerning which party, data
      sender or data receiver, is handling output horizontal tab character
      considerations, neither party is required to handle horizontal tab
      characters and neither party is prohibited from handling them; but it
      is appropriate if at least the data receiver handles horizontal tab
      character considerations, albeit primitively.

4. Motivation for the Option
   Please refer to section 4 of the NAOL and of the NAOP Telnet option
   descriptions.

5. Description of the Option
   The data sender and the data receiver use the 8-bit value along with the
   DS and DR SB commands as follows:

   8-bit value   Meaning

   0   Command sender suggests that he alone will handle
                   horizontal tab characters, for the connection.
   1 to 250   Command sender suggests that the other party alone
                   should handle horizontal tab characters, but
                   suggests that a delay of the indicated value be
                   used. The value is the number of character-times
                   to wait or number of NULs to insert in the data
                   stream before sending the next data character.
   251   Command sender suggests that the other party alone
                   handle horizontal tabs, but suggests that each
                   occurrence of the character be replaced by a space.
   252   Command sender suggests that the other party alone
                   handle horizontal tabs, but suggests that they be
                   discarded.
   253   Command sender suggests that the other party alone
                   should handle horizontal tab characters, but
                   suggests that tabbing be simulated.
   254   Command sender suggests that the other party alone
                   should handle horizontal tab characters, but
                   suggests that waiting for a character to be
                   transmitted (on the other simplex connection)
                   before sending more data. Note that, due to the
                   assynchrony of the two simplex connections, phase
                   problems can occur with this option.
   255   Command sender suggests that the other party alone
                   should handle output horizontal tabs and suggests
                   nothing about how it should be done.

   The guiding rules are that:

      1) if neither data receiver nor data sender wants to handle output
      horizontal tab characters, the data receiver must do it, and
      2) if both data receiver and data sender wants to handle output
      horizontal tab characters, the data sender gets to do it.

   The reasoning for the former rule is that if neither wants to do it, then
   the default in the NAOHTD option dominates. If both want to do it, the
   sender, who is presumed to have special knowledge about the data, should
   be allowed to do it, taking into account any suggestions the receiver may
   make. Simulation is defined as the replacement of the horizontal tab
   character by enough spaces to move the printer head (or line-pointer) to
   the next horizontal tab stop.
   Note that delays, controlled by the data sender, must consist of NUL
   characters inserted immediately after the horizontal tab character. This
   is necessary due to the assynchrony of network transmissions. As with
   all option negotiations, neither party should suggest a state already in
   effect except to refuse to negotiate; changes should be acknowledged; and
   once refused, an option should not be resuggested until "something
   changes" (e.g., another process starts). At any time, either party can
   disable further negotiation by giving the appropriate WON'T NAOHTD or
   DON'T NAOHTD command.