TELNET OUTPUT VERTICAL TABSTOPS OPTION

RFC 656, NIC 31159 (Oct. 25, 1974)
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Online file: [ISI]<DCROCKER>NAOVTXT

1. Command name and code
   NAOVTS 14
   (Negotiate About Vertical Tabstops)

2. Command meanings
   In the following, we are discussing a simplex connection, as described in
   the NAOL and NAOP Telnet Options specifications.
   IAC DO NAOVTS
   The data sender requests or agrees to negotiate about output
   vertical tabstops 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
   vertical tabstop considerations.
   IAC DON’T NAOVTS
   The data sender refuses to negotiate about output vertical tabstops
   with the data receiver, or demands a return to the unnegotiated
   default mode.
   IAC WILL NAOVTS
   The data receiver requests or agrees to negotiate about output
   vertical tabstops 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 vertical tabstop
   considerations.
   IAC WON’T NAOVTS
   The data receiver refuses to negotiate about output vertical
   tabstops, or demands a return to the unnegotiated default mode.
   IAC SB NAOVTS DS <8-bit value> ... <8-bit value> IAC SE
   The data sender specifies, with the 8-bit value(s), which party
   should handle output vertical tabstop considerations and what the
   stops should be. The code for DS is 1.
   IAC SB NAOVTS DR <8-bit value> ... <8-bit value> IAC SE
   The data receiver specifies, with the 8-bit value(s), which party
   should handle output vertical tabstop considerations and what the
   stops should be. The code for DR is 0.

3. Default
   DON’T NAOVTS/WON’T NAOVTS.
   In the default absence of negotiations concerning which party, data
   sender or data receiver, is handling output vertical tabstop
   considerations, neither party is required to handle vertical tabstops
   and neither party is prohibited from handling them; but it is
   appropriate if at least the data receiver handles vertical tabstop
   considerations, albeit primitively.

4. Motivation for the Option
   Please refer to section 4 of the NAOL and of the NAOVTS Telnet option
   descriptions.
5. Description of the Option
The data sender and the data receiver use the 8-bit value(s) along with the DS and DR SB commands as follows (multiple 8-bit values are allowed only if each is greater than zero and less than 251):

<table>
<thead>
<tr>
<th>8-bit value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Command sender suggests that he alone will handle the vertical tabstops, for the connection.</td>
</tr>
<tr>
<td>1 to 250</td>
<td>Command sender suggests that the other party alone should handle the stops, but suggests that the indicated value(s) be used. Each value is the line number, relative to the top of the printer page or terminal screen, that is to be set as a vertical tabstop.</td>
</tr>
<tr>
<td>251 to 254</td>
<td>Not allowed, in order to be compatible with related Telnet options.</td>
</tr>
<tr>
<td>255</td>
<td>Command sender suggests that the other party alone should handle output vertical tabstops and suggests nothing about how it should be done.</td>
</tr>
</tbody>
</table>

The guiding rules are that:

1) if neither data receiver nor data sender wants to handle output vertical tabstops, the data receiver must do it, and
2) if both data receiver and data sender want to handle output vertical tabstops, 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 NAOVTS 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. This is necessary due to the asynchrony 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 NAOVTS or DON’T NAOVTS command.