TELNET OUTPUT VERTICAL TABSTOPS OPTION
RFC 656, NIC 31159 (Oct. 25, 1974)
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Online file: [ISI]<DCROCKER>NAOVTS.TXT

TELNET OUTPUT VERTICAL TABSTOPS OPTION

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 NAOPT 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 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 NAOVTS or DON’T NAOVTS command.