TELNET OUTPUT HORIZONTAL TAB DISPOSITION OPTION

telnet output horizontal tab disposition option

RFC 654, NIC 31157 (Oct. 25, 1974)
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Online file: [ISI]<DCROCKER>NAOHTD.TXT

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:

<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 horizontal tab characters, for the connection.</td>
</tr>
<tr>
<td>1 to 250</td>
<td>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.</td>
</tr>
<tr>
<td>251</td>
<td>Command sender suggests that the other party alone handle horizontal tabs, but suggests that each occurrence of the character be replaced by a space.</td>
</tr>
<tr>
<td>252</td>
<td>Command sender suggests that the other party alone handle horizontal tabs, but suggests that they be discarded.</td>
</tr>
<tr>
<td>253</td>
<td>Command sender suggests that the other party alone should handle horizontal tab characters, but suggests that tabbing be simulated.</td>
</tr>
<tr>
<td>254</td>
<td>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.</td>
</tr>
<tr>
<td>255</td>
<td>Command sender suggests that the other party alone should handle output horizontal tabs 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 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.