TELNET OUTPUT FORMFEED DISPOSITION OPTION

RFC 655, NIC 31158 (Oct. 25, 1974)
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Online file: [ISI]<DCROCKER>NAOFFD.TXT

1. Command name and code
   NAOFFD - 13
   (Negotiate About Output Formfeed Disposition)

2. Command meanings
   In the following, we are discussing a simplex connection, as described in
   the NAOL and NAOP Telnet Options specifications.

   IAC DO NAOFFD
   The data sender requests or agrees to negotiate about output
   formfeed 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 formfeeds.

   IAC DON'T NAOFFD
   The data sender refuses to negotiate about output formfeed
   disposition with the data receiver, or demands a return to
   the unnegotiated default mode.

   IAC WILL NAOFFD
   The data receiver requests or agrees to negotiate about
   output formfeed disposition 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 formfeeds.

   IAC WON'T NAOFFD
   The data receiver refuses to negotiate about output formfeed
   disposition, or demands a return to the unnegotiated default
   mode.

   IAC SB NAOFFD DS <8-bit value> IAC SE
   The data sender specifies, with the 8-bit value, which party
   should handle formfeeds and what their disposition should be.
   The code for DS is 1.

   IAC SB NAOFFD DR <8-bit value> IAC SE
   The data receiver specifies, with the 8-bit value, which
   party should handle formfeeds and what their disposition
   should be. The code for DR is 0.

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

4. Motivation for the Option
   Please refer to section 4 of the NAOL and of the NAOFFD 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 formfeeds, for the connection.</td>
</tr>
<tr>
<td>1 to 250</td>
<td>Command sender suggests that the other party alone should handle formfeeds, but suggests that 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 formfeeds, but suggests that each occurrence of the character be replaced by carriage-return/line-feed.</td>
</tr>
<tr>
<td>252</td>
<td>Command sender suggests that the other party alone handle formfeeds, but suggests that they be discarded.</td>
</tr>
<tr>
<td>253</td>
<td>Command sender suggests that the other party alone should handle formfeeds, but suggests that formfeeds be simulated.</td>
</tr>
<tr>
<td>254</td>
<td>Command sender suggests that the other party alone should handle output formfeeds but suggests waiting for a character to be transmitted (on the other simplex connection) before sending more data. Note that, due to the asynchrony 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 formfeeds 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 formfeeds, the data receiver must do it, and
2) if both data receiver and data sender want to handle output formfeeds, 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 NAOFFD 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 formfeed character by enough line-feeds (only) to advance the paper (or line-pointer) to the top of the next page (or to the top of the terminal screen). Note that delays, controlled by the data sender, must consist of NUL characters inserted immediately after the formfeed character. This is necessary due to the asynchrony of network transmission. 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 NAOFFD or DON'T NAOFFD command.