

TELNET OUTPUT VERTICAL TABSTOPS OPTION  
RFC 656, NIC 31159 (Oct. 25, 1974)"  
D. Crocker (UCLA-NMC)  
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 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

a

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):

8-bit value	Meaning
0	Command sender suggests that he alone will handle the vertical tabstops, for the connection.
1 to 250	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.
251 to 254	Not allowed, in order to be compatible with related Telnet options.
255	Command sender suggests that the other party alone should handle output vertical tabstops 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 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.