

NOTES ON THE CORNELL MACINTOSH TN3270/.TN3270DRVR/HYPERCARD INTERFACE

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A new version of Cornell Macintosh TN3270 (1.3D1) is available along with a Macintosh driver which allows another Macintosh application running under MultiFinder to communicate with TN3270. A HyperCard stack is provided which uses the driver to connect with a host, check the state of TN3270, send data and commands, and put the screen into a HyperCard global.

This is a development version of this software, and both the HyperCard Interface and the driver interface are subject to change. Note that TN3270 must be launched before making calls.

HyperCard global fields:

TNID: Driver ID for XCMDs to use in subsequent calls.
TNscreen: A HyperCard global which is set to point to the TN3270 screen array in memory.
TNcursor: A HyperCard global which is set to point to the TN3270 cursor pointer in memory.
TNfield: A HyperCard global which is set to point to the TN3270 current field pointer in memory.

HyperCard XCMD calls:

Common Error Results placed in "the result":

"Out of memory"
"TN is not running"
"TN not opened"
"TNID is incorrect"
"TN has no connection"
"Can't set (interface global name)"
"Unknown error"

TNOpen "TNID" "TNscreen" "TNcursor" "TNfield": Open the TN3270 Driver.

TNID: The quoted name of a global which will be set to the driver number.
TNscreen: The quoted name of a global which will be set to the address of the TN3270 screen (an array of 1920 characters).
TNcursor: The quoted name of a global which will be set to the address of the TN3270 cursor pointer (-> location of cursor in the TNscreen array).
TNfield: The quoted name of a global which will be set to the address of the TN3270 current attribute pointer (-> the beginning of the current field in the TNscreen array).
the result is empty implies success;
"TN already open"
"Can't open .TNdrv"

TNConnect TNID hostname: Open a 3270 Telnet session.

hostname: The name of a host to look up in the TN3270 host table or a dot-notation Internet address.
the result is empty implies no immediate error;
"TN already has a connection"
"Name not in host table"
"Invalid Internet Address"

TNStatus TNID: Get the status of the 3270 Telnet session; the "New Data" condition is reset after the call.

the result is empty implies no new data;
"TN waiting for connection"
"TN waiting on network"
"New Data"
"More..."
"HOLDING"
"Keyboard locked"
"TNID is incorrect"

TNClose TNID: Close the current session.

the result = NULL implies success.

TNSendString TNID thestring: Put a string into the 3270 screen at the cursor location.

thestring: The string.

the result is empty implies success.

TNReceive TNscreen "aglobal": Copies the contents of the TN3270 screen into a Hypercard global.

aglobal: A quoted HyperCard global name into which TN3270 will copy the screen.

the result is empty implies success.

TNSendCmd TNID class entry: Execute a TN3270 command.

class: A character which indicates to TN3270 how to interpret the commandentry; the classes are:

' ' is an ASCII character.

'A' is a local action key.

'P' is a program function key.

'M' is a cursor movement key.

'X' is a cursor movement to a horizontal x location.

'Y' is a cursor movement to a vertical y location.

entry: A character or string which completes a command.

the result is empty implies success;

"Invalid Command Class"

"Invalid Command Entry"

List of Command Entries for TNSendCmd:

ASCII character class ' ':

simply use ASCII characters.

Local action class 'A':

INSRT "I" (capital i)

DEL_CHAR "D"

ERASE_EOF "E"

INPUT_ERASE "X"

BACKSP_DEL "B"

RESET "R"

Program function keys class 'P':

PF1 "1"

PF2 "2"

PF3 "3"

...

PF34 "34"

PF35 "35"

PF36 "36"

PA1 "a"

PA2 "b"

PA3 "c"

CLEAR "C"

ENTER "E"

Cursor movement class 'M':

LEFT_ARROW "L"

DOWN_ARROW "D"

UP_ARROW "U"

RIGHT_ARROW "R"

HOME "0" (zero)

TAB_FWD ">"

BACK_TAB "<"

NEW_LINE "N"

Move cursor to the beginning of line Y class 'Y':

use a numeric string to designate the desired y location from "0".

Move cursor to X location class 'X':

use a numeric string to designate the desired x location from "0".

NB: When moving the cursor to a specific X,Y location, move to the beginning of line Y first, then move to the X location.

