AUTOPUMA
Enhancement Script for Telix

WHAT IS AUTOPUMA?

Autopuma is a script that adds a number of trivial abilities to Telix, such as exiting or disconnecting if Telix has not been used, displaying incoming bells on the screen, and automatically starting MPt/Puma and Bimodem downloads when the host begins sending.

WHY IS AUTOPUMA?

Originally this script simply started Puma (since renamed to MPt) downloads anytime the Puma string was sent by the host, as Telix already does with Zmodem (hence the name, which I have never bothered to change). But I also have a small BBS on the same machine that I use for downloads. Often I would start a download from another BBS then have to leave before the download finished. I'd either have to abort the download to bring up the BBS, or leave with the download still going, and wait until I got back to bring up the BBS. I had some kluges to bring up the board when the download finished, but they required I remember to trigger them before I started the download.

Since I already had this script running "in the background" all the time anyway, I added the ability to monitor activity and bring up the BBS after Telix was left unattended for some amount of time. Then I though it'd be nice if Telix brought up the board for an incoming call. I gave it to a friend who asked for a few more things, then I needed more things...

FILES INCLUDED:

        AUTOPUMA.SLC   AUTOPUMA script ("resident" portion).
        APCONFIG.SLC   Configuration script.
        APSMALL.SLC   Small version of AUTOPUMA.SLC.
        APSCNFG.SLC   Configuration script for APSMALL.SLC.
        BIMODXFR.SLC   Used by Autopuma to start Bimodem transfers.
        BIMODXMT.SLC   Bimodem upload script.
        BIMODRCV.SLC   Bimodem download script.
        BIMODEM.SLC   Script similar to that included with BIMOD124, with minor
        changes to allow compatibility with BIMODXMT/BIMODRCV.
        BIMODEM.SLT   BIMODEM.SLC script source.
        MPTXMT.SLC   MPt upload script.
        MPTRCV.SLC   MPt download script.
        PUMAXMT.SLC   Puma version of MPTXMT.

```
    PUMARCV.SLC     Puma version of MPTRCV.
    MPTXMT.SLT      MPTXMT.SLC script source.
    MPTRCV.SLTMPTRCV.SLC script source.
    WHO.SLC         Tells who current/last connection was to.
    AUTOPUMA.DOC  This file.
    AUTOPUMA.WP5  WordPerfect 5.1 version of this file.
```

The difference between the large and small versions is where the code for Autopuma's configuration window resides. This code takes up about 22K of RAM. In the large version it resides in the AUTOPUMA.SLC script, which gives faster response when changing the configuration, but takes up memory you may need for things such as DOS shells and external protocols.

In the small version the configuration window code is in the configuration script, making the resident portion smaller (and the configuration script larger). However the configuration window will not respond as quickly as it does in the large version.

Which version of Autopuma and the configuration script you use is up to you.

INSTALLATION:

Choose the version of AUTOPUMA.SLC and APCONFIG.SLC you want to use, and copy them to the same directory as your other Telix scripts. If you use the small version of Autopuma rename APSMALL.SLC to AUTOPUMA.SLC, and APSCONFIG.SLC to APCONFIG.SLC. If you've never used scripts before, press ALT-O from Telix and select "Filenames and paths." Select "C" and enter the directory you want to keep scripts in. Make sure you save it ("Write setup to disk") then get back to DOS and copy the appropriate versions of AUTOPUMA.SLC and APCONFIG.SLC to that directory.

If you want Autopuma to run every time you run Telix, make a batch file (for instance "TLX.BAT") that contains:

    TELIX SAUTOPUMA

and run this batch file instead of TELIX.EXE. To take advantage of some Autopuma features you may eventually need to run Telix from a batch file anyway. More on this later.

You may also want to define a key combination to run the configuration script. Press "ALT-K", select <R>egular key table, <E>dit, then choose a key combination (I use ALT-N), and define it as:
        @APCONFIG
or "@APSCNFG" if you use the small version of the configuration script.

USING AUTOPUMA:

Run Autopuma, either from the DOS command line with:

   TELIX SAUTOPUMA

or from within Telix by pressing ALT-G and giving AUTOPUMA as the script to run.

Run the configuration script (APCONFIG) with ALT-G from within Telix. This will bring up a window with Autopuma's available options.

Options are:

 A - If phone rings once exit with....... 0

If this is set to a non-0 value, and "RING" is received from the modem when there is no carrier, Autopuma will exit Telix with that errorlevel. A batch file can use the errorlevel to bring up a BBS, or some other software to handle incoming calls.

 B - If phone rings twice exit with...... 0

If this is set to a non-0 value, Autopuma will wait for two rings to come in from the modem, then exit from Telix with that errorlevel. If a second ring does not come in within 7 seconds of the first then Telix will exit with the errorlevel given in option A if it has been set.

 C - Exit on inactivity................. After 20:00 with 100

If the time limit is not 0 and Telix detects no local or comm port activity within that time it will exit with given errorlevel.

 D - Time out even if carrier present?... No

Usually Autopuma considers an active carrier as activity, and will not exit Telix if one is present even if nothing else is going on. If this option is set to Yes, an active carrier alone will not be considered activity, and Autopuma will exit Telix and hang up on an active connection if nothing is received from the host and no local activity is detected within the time limit given in option C.

 E - Hang up if no activity for.......... 0:00

If this is set to a non-0 value and no activity occurs within that time, Autopuma will drop any active carrier.

 F - Exit Telix on carrier loss..........   Off

Once, with 100
                                                  Always, with 100

This will cause Telix to exit with the given errorlevel when the carrier is lost. I use this when I start a download and I know I won't be around when it finishes to bring up the BBS (most decent BBSes can be told to hang up after a transfer). If the option is set to "Once" and the exit is canceled, it will not reset, and the next time a carrier drops Telix will not exit. If set to "Always" and the exit is canceled the option will reset, wait for another carrier, then try to exit again when it drops.

 G - Letter for MPT/Puma protocol........ P

This is the letter you have assigned to the MPt protocol in the Telix "File transfer protocols" configuration. If this is set and "Zmodem auto-downloads" is enabled in Telix, Autopuma will begin a receive with this protocol when a Puma or MPt string is received.

 H - Letter for Bimodem protocol......... B

This is the letter you have assigned to the Bimodem protocol in the Telix "File transfer protocols" configuration. If this is set and "Zmodem auto-downloads" is enabled in Telix, Autopuma will run the BIMODXFR script when the Bimodem handshaking string is received, which will prepare for a Bimodem transfer. The delay controls how long BIMODXFR will wait for a response to the "Filenames to upload" prompt. Bimodem transfers are discussed below.

 I - User defined string................ [none]

This can be any string that, when received by Telix, should trigger some action.

 J - User defined command............... [none]

This is the action that the user-defined string will trigger. The available options are:

    EXIT [errorlevel]   Exits Telix with the errorlevel
        HANGUP   Hangs up the phone
        SEND [text]   Sends text out the comm port
        LOAD [file]   Loads a configuration file
        SCRIPT [script]   Runs a SALT script
    DOS [command]   Runs a DOS command in a sub-shell

Anything else is considered a DOS command and will be executed from a sub-shell.

 K - Visual bells.......................   Off
                                                  Always, 0.5 seconds

If no sound, 0.5 seconds

Autopuma can display "BELL!" in the center of the screen for a user- selectable duration anytime a bell is received. Useful for environments where silence is required, but you still want to know about beeps.

 L - Seconds to delay before exit........ 0:10

In most situations that trigger an exit from Telix, Autopuma will display a countdown timer before exiting to allow a chance to abort. This sets the length of the delay.

 M - Show timer or clock on status line.. Neither

Timer
Clock Always
Clock if no Timer

If Telix status bar is enabled, Autopuma can display either the clock time or the length of time Telix has been inactive in the area that usually displays the script name. "Timer" displays the timer if it's relevant, otherwise the script name. "Clock Always" displays the current time. "Clock if no Timer" will display the timer if relevant, otherwise the current time is displayed.

 N - Load options from disk.............. AUTOPUMA.CNF

This allows you to recall previously saved Autopuma configurations from a saved file.

 O - Save options to disk................ AUTOPUMA.CNF

This will save the current Autopuma settings to a disk file.

 P - Unload Autopuma

This removes Autopuma from memory

There are two other options available from this menu that are not displayed. ALT-C will bring up a "color editor". This allows you to set the colors Autopuma uses to display the configuration window. The item to color is selected with up/down arrow, tab/shift tab, or home/end. Colors are selected with left/right arrow or the first letter of the color. The sample box will show what the colors will look like. Selecting "Set to saved Telix colors" will set the colors to whatever was last saved in Telix "Screen and color" menu. Note that these color settings are not saved anywhere. The next time Autopuma loads it will revert to Telix' saved colors. This feature may be removed in the future.

The other is ALT-ESC. By default Autopuma disables the ESC key's ability to abort scripts. On some machines however this slows the script down, sometimes intolerably. ALT-ESC will toggle the enabled/disabled state of the ESC key. This may speed up Autopuma, but will prompt you with "Abort Script?" whenever the ESC key is pressed. The state of the ESC key is saved to the Autopuma configuration file.

MPT DOWNLOADS:

In order for Autopuma to start an MPt or Puma download, you must have either PUMA.EXE 1.00, or MPT.EXE 1.10 or greater, and either batch files or SALT scripts for performing the transfer from Telix. MPt and Puma scripts are provided, but you can use others if you have them. The protocol must be installed in Telix in the Configuration Options' "Protocol Options" screen like this:

```
Key  Protocol    Upload   Download  BAT or   DL
       Name      Filename  Filename  Script  Name
----------------------------------------------------
 P   Puma/MPt    mptxmt    mptrcv    Script   N
```

BIMODEM TRANSFERS

In order for Autopuma to start a Bimodem transfer, you must have BIMODEM.EXE 1.24 or greater, and either batch files or SALT scripts for performing Bimodem transfers from Telix. The BIMODRCV.SLC and BIMODXMT.SLC scripts are provided, but you can use others if you have them. The protocol must be installed in Telix in the Configuration Options' "Protocol Options" screen like this:

```
Key  Protocol    Upload   Download  BAT or   DL
       Name      Filename  Filename  Script  Name
----------------------------------------------------
 B   Bimodem     bimodxmt  bimodrcv  Script   N
```

The BIMODXFR.SLC script is also required by Autopuma for automatic Bimodem transfers.

To explain why Autopuma initiates Bimodem transfers the way it does, a short explanation of how it handles MPt downloads is required.

Autopuma begins an MPt receive when it receives the handshake string sent by an MPt protocol on the remote end that wants to send. This string is different than the handshake sent by an MPt that wishes to receive, so there is no conflict.

On the other hand, Bimodem can transfer files in both directions at the same time, so there is no distinct sender or receiver. Because of this Bimodem has only one handshake string. Autopuma can tell the host wants to initiate a transfer, but has no way of knowing if it should simply start a receive or if it should prompt for files to upload.

The approach it takes is this: If a Bimodem transfer is initiated by the remote computer, the user will be prompted to enter files to upload. If there is no response within the time set in Autopuma's configuration, a download is assumed. If files are entered an upload is assumed.

BIMODXMT.SLC and BIMODRCV.SLC will perform Bimodem transfers. Both scripts require BIMODEM.EXE 1.24 or greater. If a BIMODEM.PTH file exists in the Telix directory it will be used in the transfer. After the transfer the scripts will ask if you want to delete BIMODEM.PTH. If there is no response and the transfer returned a successful status, the file is deleted. If the transfer failed, the file is retained.

NOTE: In the box Autopuma displays for entering filenames, strings of up to 241 characters can be entered. The Bimodem scripts included in the Autopuma ZIP file will accept file lists this long, but other Bimodem scripts will not. If you use different scripts to drive Bimodem the file list should not exceed the length of the window.

BIMODEM.SLC is the same as the BIMODEM.SLC included in the Bimodem distribution ZIP file, except it ensures that the BIMODEM.CFG and BIMODEM.PTH files are created in the default Telix directory, which is where BIMODXMT and BIMODRCV expect to find them. This will allow you to mark uploads (and on hosts that permit it, downloads) offline through BiMenu, then connect to the host and start the transfer, letting Autopuma start Bimodem automatically.

AUTOPUMA AND ERRORLEVELS:

To be useful, any option that forces Telix to exit with an errorlevel requires Telix to be run from a batch file that uses the "if errorlevel" command to test the errorlevel and perform the appropriate action. For instance, if you want Telix to bring up a BBS if a call comes in, you need to set "A - If phone rings once exit with......" to a non-0 value (say, 100) and run Telix from a batch file that looks like this:

```
  rem run Telix with AUTOPUMA
  telix sautopuma
  rem if returned 100 run command to start BBS ("board" in this case)
  if errorlevel 100 board
```

ENTERING VALUES IN THE CONFIG WINDOW:

Values used as errorlevels cannot exceed 255. Times cannot exceed 99:59:59.

If you need to enter characters into string values that are usually special (i.e. ENTER or ESC), press CTRL-V or CTRL-P, then the character.   Characters that must be entered this way are ENTER, ESC, all CTRL characters and any ANSI "ALT<number>" code. The following keys perform these functions:

ENTER: save changes and quit editing
ESC: lose changes and quit editing
Right arrow/CTRL-D: right one position
Left arrow/CTRL-S: left one position
CTRL-right/CTRL-F: right one word
CTRL-left/CTRL-A: left one word
HOME: beginning of string
END: end of string
DEL: delete character at cursor
Backspace: delete character left of cursor
CTRL-DEL: delete from cursor to end of word
CTRL-Backspace: delete from beginning of word to cursor
CTRL-END: delete from cursor to end of line
CTRL-HOME: delete from beginning of line to cursor
INSERT: toggle insert mode
CTRL-P/CTRL-V: insert special character
CTRL-Y: clear entire line
CTRL-U: undo all changes

For numeric and time values:
Grey '+':   increment value by one
Grey '-':   decrement value by one

For time values
CTRL-Grey '+':   increment by one minute
CTRL-Grey '-':   decrement by one minute
ALT-Grey '+':   increment by one hour
ALT-Grey '-':   decrement by one hour

CONFIGURING VIA THE ENVIRONMENT:

Autopuma can also be configured partially or entirely through the environment rather than a disk file. The variable AUTOPUMA can be set to a string of options that tell Autopuma what to do. The easiest way to create the configuration string is to configure Autopuma through the configuration window, save the configuration to a file, then copy the configuration file into your batch file (or wherever). The config file is formatted as SET AUTOPUMA=<config string> to allow just that. If you

want to edit or create the string yourself, the format is:

  SET AUTOPUMA=[option[:arg1][,arg2]...]...

Options and their arguments are:

R1X:<errorlevel>
     <errorlevel> is the errorlevel Telix should exit with when one ring is received.

R2X:<errorlevel>
     <errorlevel> is the errorlevel Telix should exit with when two   rings are
     received.

TOT:<time>,<errorlevel>
     <time> is the length of inactivity after which Autopuma will force Telix to
     exit. <Errorlevel> is the errorlevel Telix will exit with.

IC[:switch]
     IC tells Autopuma to ignore a carrier. Autopuma will exit after inactivity (if
     that option is set) whether a carrier is present or not. <switch> may be 0
     (off) or 1 (on), or omitted, which is assumed to be 1.

DCT:<time>
     Sets amount of inactivity after which Autopuma will hang up on a live
     connection.

ECL[:switch]
     Tells Autopuma whether or not to exit when a carrier drops. Switch can be:
     0 - do not exit
     1 - once
     2 - always
     If ECL is not followed by any value, 2 is assumed.

ECLX:<errorlevel>
     <errorlevel> is the errorlevel Telix will return if it exits due to a carrier drop.

PKEY:<letter>
     <letter> is the letter that has been assigned to the Puma/MPt protocol in
     Telix' "File transfer protocols" configuration.

BKEY:<letter>
     <letter> is the letter that has been assigned to the Bimodem protocol in
     Telix' "File transfer protocols" configuration.

BDLY:<seconds>

<seconds> is the number of seconds that Autopuma will display the upload filename prompt box before it continues with what it assumes is a Bimodem receive.

UDS:<string>
<string> is the string that, if received by Telix, will cause the user-defined string to be executed. The string can contain any characters, but the following characters have special meaning to Autopuma and must be quoted:

" (double quote)
' (single quote)
, (comma)
^ (caret)
(space)

Characters are quoted by either enclosing the character in double or single quotes, or immediately preceding the character with a caret (^). The string Enter name (i.e., "Joe Smith") contains spaces, a comma, and quotes that must be quoted. This can be done several ways:

'Enter name (i.e., "Joe Smith")'
<entire string in single quotes>

"Enter name (i.e., ^"Joe Smith^")"
<entire string in double quotes, with internal double quotes preceded by carets>

Enter^ name^ (i.e.^,^ ^"Joe^ Smith^")
<all spaces, quotes, and comma preceded by carets>

Control characters can be represented by a caret followed by a letter, such as "^A" to represent CTRL-A. Characters above ASCII 127 must be typed using ANSI.SYS' "ALT<keypad>" convention in an editor that accepts high ASCII characters.

UDC:<string>
<string> is the command that will be executed if the user-defined string is received by Telix. It's entered and quoted the same as the user defined string.

VB[:switch]
Controls whether or not incoming bells are displayed. <switch> can be:

0 - bells are not displayed
1 - bells are displayed only if sound is off
2 - bells are displayed whether sound is off or not.

If VB is not followed by any value, 1 is assumed.

DLY:<time>
     <time> is the amount of time Autopuma will delay before exiting from Telix.

ST:<switch>
     Controls whether Autopuma displays the clock or timer on Telix' status line.
     <switch> may be:

          0 - display neither
          1 - display timer if relevant; otherwise nothing
          2 - display clock
          3 - display timer if relevant; otherwise clock.

CLR:<border>,<text>,<highlight>,<inverse>
     Sets the colors Autopuma uses to display the configuration window.

          <border> - Configuration window border
          <text> - Normal configuration window text
          <highlight> - Highlighted text
          <inverse> - Inverse video

     Each color is a number calculated as (foreground + background * 16). Color
     values are:

          00 Black
          01 Blue
          02 Green
          03 Cyan
          04 Red
          05 Magenta
          06 Brown
          07 Light grey
          08 Dark grey
          09 Light blue
          10 Light green
          11 Light cyan
          12 Light red
          13 Light magenta
          14 Yellow
          15 White

     Since most machines display background colors 8 or higher as blinking
     versions of the lower colors, the color editor does not allow them to be used
     as background colors (neither does Telix). However no checks are done on
     numbers read from the configuration file, so you can pick blinking colors this

way if you want.

Note that Autopuma doesn't save color settings in configuration files itself. This option is used by scripts that communicate with Autopuma.

CFN:<filename>
This specifies the file from which Autopuma will read and write configuration information. When this option is encountered in a configuration string, Autopuma reads the contents of that file and sets the configuration to it before continuing with the original configuration information.

RENAMING AUTOPUMA

If you want to name the AUTOPUMA.SLC to something else you must also set the environment variable APNAME to the new script name to allow APCONFIG to get the current settings. Type at the command line or add to your batch file:

SET APNAME=<name of autopuma script file>

The WHO script:

This is an unremarkable script that will tell you what entry in your dialing directory you are currently connected to. However if AUTOPUMA has been loaded WHO will also tell you who you were just connected to, even if the connection has dropped. Telix does not store this information once the connection is lost, but Autopuma does and WHO can ask Autopuma for it. WHO also displays the information in Autopuma's current colors.

DISCLAIMER:

AUTOPUMA is provided on an "as is" basis without warranty of any kind, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. The person using the software bears all risk as to the quality and performance of the software. Should the software prove defective, the user assumes the entire cost of all necessary repair, servicing, or correction. The author will not be liable for any special, incidental, consequential, indirect or similar damages due to loss of data or any other reason, even if the author or an agent of the author has been advised of the possibility of such damages. In no event shall the author's liability for any damages ever exceed the price paid for the license to use the software, regardless of the form of the claim.

REVISION HISTORY:

Version 1.02, April 16:

Added a version of Erik Labs BIMODEM.SLC script with modifications to make
it compatible with BIMODXMT and BIMODRCV.

Modified BIMODXFR and AUTOPUMA to allow BIMODXFR to exit gracefully if it
was run some way other than from AUTOPUMA.

Corrected problem in small version of Autopuma that would ignore "Exit on
carrier loss" if it was set to "Once".

Configuration script for small version was displaying it's initial "Please wait"
message in black on black colors. Fixed.

Included separate Puma versions of the MPt script for Puma users.

Renamed the Autopuma scripts a little to (hopefully) clarify the difference
between the large and small versions.

Version 1.01, April 12:

Changed the name of the PUMA*.SLT scripts to MPT*.SLT, since that is the
current name of the protocol. AUTOPUMA remains AUTOPUMA, until I think of
something better.

MPt scripts will sound alarms when the transfer completes, similar to the
alarm Telix uses when it's internal protocols complete a transfer.

Added support for Bimodem protocol, and Bimodem scripts.

Autopuma now reads default colors from TELIX.CNF on startup. Removed
color editor from menu, but left it accessible via ALT-C. Colors are no longer
saved in Autopuma configuration files.

Eliminated unnecessary redrawing by the text entry function, reducing
flicker.

Time values were accepting times like "10:::::". Though it wasn't doing any
harm, it's been fixed.

Text entry function did not allow most legal special characters to be used in
file names. Fixed.

Version 1.00, March 16 1991: Initial release.

ANYTHING ELSE?

There is no charge for private, non-commercial use of AUTOPUMA (but if you send a check anyway it won't go uncashed). Comments, requests, and suggestions for a better name for this script can be left at:

    The Dead of Night BBS
    (703) 644-7667

or mailed to:

    Donald Mehrtens
    5923 Minuteman Rd
    Springfield VA 22152

or sent via CompuServe (which I don't check very often) to ID 72361,1407.

CAVEATS:

There is no direct way to test if a local key has been struck without interfering with Telix's ability to process that key. However most local Telix functions momentarily stop the script, and this can be detected. This means individual keystrokes may not always register as activity to Autopuma, but any local activity that takes more than a couple of seconds will register, and characters coming in from the comm port will keep the timer resetting.

If using the small version of Autopuma while running Telix under Windows, and the PIF file is set to "Detect Idle Time" Telix may take excessively long to bring up the configuration window. On my Compaq 386/20 it takes upwards of 2 minutes. Make sure Detect Idle Time is off or use the large version of Autopuma under Windows if you have this problem.

ACKNOWLEDGEMENTS:

Thanks to Bob Price for his help and suggestions; To Lori Davis, for her help with this documentation (we programmers don't speak good English); and to Colin Sampaleanu for a great comm program.

SALT Programmers, HELP!

Is there any way for a script to determine its own name, as DOS batch files can do with %0 or C programs can do with argv[0]?

Can a script find out how many and/or what types of arguments the main () function was actually passed, so that a script that needs arguments can GRACEFULLY exit if it wasn't given any? Is there something similar to C's argc?

As of v3.15 (possibly sooner) the SALT compiler has a "void" keyword. What does it do?

The script runs considerably slower if _scr_chk_key is set to 0 to disable the ESC key from prompting to abort the script. Can anything be done about this? Can the ESC key be prevented from aborting scripts without using _scr_chk_key?

Is there any way to find out whether the cursor is on or off?

Is there a cleaner way to find out if the status bar is on than to look on the screen for it with vgetchr/vgetstr?

Is there a way to see if a local key has been hit without destroying the terminal() function's ability to process it, like cinp_count() does with the comm port?

Despite the fact that Telix does not appear able to do anything with them, CS will happily compile a script that has no main() function. Is this of any use?

Can a script find out which dialing directory entries are marked? Can a script mark and unmark entries?

And does ANYBODY know ANYTHING about Telix 4.0?