!
EarthLink Network Script
!
!
Author:

Kris Kreutzman
!
Modified by:
Herb Hrowal
!
!
This script was automatically generated by EarthLink TotalAccess™
!
for §modemname§.
!
!

!
!
revision history:
!

v2.1
as shipped with the ARA 2.1
!
!   'mlts' resource info for this modem:
!   byte 1 == 01 -> modem HAS built-in error correction protocols
!   byte 2 == 01 -> modem HAS built-in data compression protocols
!   byte 3 == 40 -> max number of chars in varstr 7
!   byte 4 == 40 -> max number of chars in varstr 8
!   byte 5 == 40 -> max number of chars in varstr 9
!

@ORIGINATE
@ANSWER
!
! ---- Initial modem setup ----
!
! Set serial port speed depending upon the compression flag
!
A higher rate with compression on to handle expanded data from the modem
!

```
A lower rate closer to the DCE when compression is off
!
ifstr 5 1 "0"
serreset §portspeed§, 0, 8, 1
jump 2
!
@LABEL 1
serreset §portspeed§, 0, 8, 1
!
@LABEL 2
hsreset 0 0 0 0 0 0
settries 0
!
! Get the modem's attention
!
matchclr
matchstr 1 3 "OK\13\10"
write "AT\13"
matchread 30
!
@LABEL 3
!
! Setup the modem for the following:
!     Reset to factory settings
!     Standard compression/reliablity
!     Lock serial port speed
!     Serial port hardware handshaking, turn off software handshaking
!     Verbose responces and compression/protocol results
!     CONNECT returns DCE speed
!     Turn off answering
!     Reset or return to command mode on DTR toggle (optional)
!
matchclr
matchstr 1 4     "OK\13\10"
matchstr 2 101 "ERROR\13\10"
write "§initstring§\13"
matchread 30
inctries
iftries 3 101
!
! Reset the Modem on setup failure
!
DTRClear
pause 5
DTRSet
flush
```

```
jump 3
!
!
@LABEL 4
! Varstring 4 , reliable link protocol:
!      = 0, handled by computer (ARAP)
!      = 1, handled by modem (PPP)
!      = 2, MNP10 protocol (Cellular protocol, no longer supported)
ifstr 4 5 "1"
ifstr 4 5 "2"
!
! Varstring 4 == 0, turn off reliable link protocol in modem (ARAP)
matchclr
matchstr 1 9 "OK\13\10"
write "AT\13"
matchread 30
jump 101
!
!
@LABEL 5
! Varstring 5, compression protocol:
!      = 0, handled by computer
!      = 1, handled by modem
ifstr 5 9 "1"
!
! Varstring 5 == 0, turn off compression protocol in modem.
matchclr
matchstr 1 9 "OK\13\10"
write "AT\13"
matchread 30
jump 101
!
!
@LABEL 9
! Varstring 2, modem speaker:
!      = 0, speaker off
!      = 1, speaker on
ifstr 2 13 "1"
pause 5
matchclr
matchstr 1 13 "OK\13\10"
write "ATM0\13"
matchread 30
jump 101
!
! Modem ready, wait for a call or originate a call
```

```
!
@LABEL 13
ifANSWER 32
!
!
! ---- Originating a call ----
!
! Varstring 6, dialing mode:
!      = 0, normal dialing
!      = 1, blind dialing
!      = 2, manual dialing
ifstr 6 17 "1"
ifstr 6 15 "2"
jump 19
!
@LABEL 15
! Display ASK dialog with message.   Goto label 107 if dialog canceled.
ASK 2 "Pick up the phone & dial ^1.   Hit OK when the phone rings, then
hangup." 107
note "Manual dialing initiated" 3
! X1 to ignore dialtone & busy, D to dial, \^ generates data tone
write "ATX1D\13"
jump 32
!
@LABEL 17
note "Dialing without tone" 3
matchclr
matchstr 1 19 "OK\13\10"
! X1 to ignore dialtone & busy
write "ATX1\13"
matchread 30
jump 101
!
!
@LABEL 19
! Display the full dialstring contained in Varstring 1
note "Dialing ^1" 3
!
! Varstrings 7, 8 and 9, contain dialstring fragments
!      Long phone numbers may need to be split into smaller groups
!      for the modem to use
!
! Varstring 3:   "p" for pulse & "t" for tone dialing
! Varstring 8 == blank (dialstring in varstring 7)
! Varstring 9 == blank (dialstring in varstrings 7 & 8)
! Otherwise (dialstring in varstrings 7, 8 & 9)
```

```
! \^ is added to the dialstring to force the modem to generate a data tone
ifstr 8 27 " "
ifstr 9 24 " "
!
!   Write dialstring in varstrings 7, 8 & 9
matchclr
matchstr 1 21 "OK\13\10"
write "ATD^3^7;\13"
matchread 400
jump 101

@LABEL 21
matchclr
matchstr 1 22 "OK\13\10"
write "ATD^3^8;\13"
matchread 400
jump 101

@LABEL 22
write "ATD^3^9\13"
jump 32
!
!
@LABEL 24
!   Write dialstring in varstrings 7 & 8
matchclr
matchstr 1 25 "OK\13\10"
write "ATD^3^7;\13"
matchread 400
jump 101

@LABEL 25
write "ATD^3^8\13"
jump 32
!
@LABEL 27
!   Write dialstring in varstring 7
write "ATD^3^7\13"
!
!
!      ---- Connection responce ----
!
! The following section will parse modem responces of two types:
!     1) PROTOCOL: xxx, COMPRESSION: xxx, CONNECT xxx
!     2) CONNECT xxx/ARQ/V42
!
```

```
@LABEL 32
matchclr
matchstr   1 81   "RING\13\10"
matchstr   2 102 "NO DIALTONE\13\10"
matchstr   3 103 "NO CARRIER"
matchstr   4 103 "ERROR\13\10"
matchstr   5 104 "BUSY\13\10"
matchstr   6 105 "NO ANSWER\13\10"
matchstr   7 33   "CONNECT "
matchstr   8 32   "CARRIER"
matchstr   9 40   "CONNECT\13\10"
matchstr 10 62   "PROTOCOL: LAP"
matchstr 11 62   "PROTOCOL: MNP"
matchstr 12 62   "PROTOCOL: ALT"
matchstr 13 67   "COMPRESSION: V"
matchstr 14 67   "COMPRESSION: MNP5"
matchstr 15 67   "COMPRESSION: CLASS"
matchread 700
ifANSWER 32
jump 101
!
!   Parse the speed of connect result codes
!   2400 and 4800 have two entries each
!   to distinguish them from 24000 and 48000
!
@LABEL 33
matchclr
matchstr   1 40 "2400\13"
matchstr   2 40 "2400/"
matchstr   3 41 "4800\13"
matchstr   4 41 "4800/"
matchstr   5 42 "7200"
matchstr   6 43 "9600"
matchstr   7 44 "12000"
matchstr   8 45 "14400"
matchstr   9 46 "16800"
matchstr 10 47 "19200"
matchstr 11 48 "21600"
matchstr 12 49 "24000"
matchstr 13 50 "26400"
matchstr 14 51 "28800"
matchstr 15 52 "31200"
matchstr 16 53 "33600"
matchstr 17 54 "38400"
matchstr 18 55 "48000"
matchstr 19 56 "56000"
```

```
matchstr 20 57 "57600"
matchstr 21 58 "64000"
matchread 30
jump 59
!
! -- Connection rates --
! CommunicatingAt informs ARA of the raw modem to modem
! connection speed.
!
@LABEL 40
note "Communicating at 2400 bps." 2
CommunicatingAt 2400
jump 60
!
@LABEL 41
note "Communicating at 4800 bps." 2
CommunicatingAt 4800
jump 60
!
@LABEL 42
note "Communicating at 7200 bps." 2
CommunicatingAt 7200
jump 60
!
@LABEL 43
note "Communicating at 9600 bps." 2
CommunicatingAt 9600
jump 60
!
@LABEL 44
note "Communicating at 12400 bps." 2
CommunicatingAt 12400
jump 60
!
@LABEL 45
note "Communicating at 14400 bps." 2
CommunicatingAt 14400
jump 60
!
@LABEL 46
note "Communicating at 16800 bps." 2
CommunicatingAt 16800
jump 60
!
@LABEL 47
note "Communicating at 19200 bps." 2
```

```
CommunicatingAt 19200
jump 60
!
@LABEL 48
note "Communicating at 21600 bps." 2
CommunicatingAt 21600
jump 60
!
@LABEL 49
note "Communicating at 24000 bps." 2
CommunicatingAt 24000
jump 60
!
@LABEL 50
note "Communicating at 26400 bps." 2
CommunicatingAt 26400
jump 60
!
@LABEL 51
note "Communicating at 28800 bps." 2
CommunicatingAt 28800
jump 60
!
@LABEL 52
note "Communicating at 31200 bps." 2
CommunicatingAt 31200
jump 60
!
@LABEL 53
note "Communicating at 33600 bps." 2
CommunicatingAt 33600
jump 60
!
@LABEL 54
note "Communicating at 38400 bps." 2
CommunicatingAt 38400
jump 60
!
@LABEL 55
note "Communicating at 48000 bps." 2
CommunicatingAt 48000
jump 60
!
@LABEL 56
note "Communicating at 56000 bps." 2
CommunicatingAt 56000
```

```
jump 60
!
@LABEL 57
note "Communicating at 57600 bps." 2
CommunicatingAt 57600
jump 60
!
@LABEL 58
note "Communicating at 64000 bps." 2
CommunicatingAt 64000
jump 60
!
@LABEL 59
note "Communicating at an unknown rate." 2
jump 60
!
! Look for reliablilty and compression results
! at the end of the connect result.
!
@LABEL 60
matchclr
matchstr   1 63 "LAPM"
matchstr   2 63 "REL"
matchstr   3 63 "ARQ"
matchstr   4 68 "COMP/"
matchstr   5 68 "COMP\13"
matchstr   6 63 "V42/"
matchstr   7 63 "V42\13"
matchstr   8 68 "V42BIS"
matchstr   9 68 "V42bis"
matchstr 10 63 "MNP\13"
matchstr 11 68 "MNP5"
matchstr 12 70 "\10"
matchread 30
jump 70

! -- Modem error correction link negotiation --
! Userhook 2 informs ARA that a modem-to-modem error
! correcting protocol has been negotiated
!
!
@LABEL 62
note "Modem Reliable Link Established." 2
userhook 2
jump 32
!
```

```
@LABEL 63
note "Modem Reliable Link Established." 2
userhook 2
jump 60
!
! -- Compression negotiation --
! Userhook 3 informs ARA that a modem-to-modem compression
! protocol has been negotiated
!
@LABEL 67
note "Modem Compression Established." 2
userhook 3
jump 32
!
@LABEL 68
note "Modem Compression Established." 2
userhook 3
jump 60
!
!
! -- Normal exit after "CONNECT" --
!
!   This modem has been setup to do CTS handshaking,
!   and we assume that a CTS handshaking cable is being used.
!
@LABEL 70
! Turn on CTS handshaking.
HSReset 0 1 0 0 0 0
!
ifANSWER 71
pause 30
@LABEL 71
exit 0
!
!
! ---- Answer calls ----
!
!
A RING result from the modem and in ANSWERING mode
!
claims the serial port and answering the phone
!
@LABEL 81
ifORIGINATE 32
userhook 1
note "Answering phone..." 2
```

```
write "ATA\13"
jump 32
!
!
! ---- Hang up and reset modem ----
!
@HANGUP
@LABEL 90
settries 0
HSReset 0 0 0 0 0 0
!
@LABEL 92
!   Escape from data to command mode
matchclr
matchstr 1 96 "OK\13\10"
write "+++"
matchread 20
!
@LABEL 94
! Force a hangup
matchclr
matchstr 1 98 "NO CARRIER\13\10"
matchstr 2 98 "OK\13\10"
matchstr 3 98 "ERROR\13\10"
matchstr 4 98 "0\13\10"
write "ATH\13"
matchread 30
!
! Try to get control of the modem by toggling DTR
DTRClear
pause 5
DTRSet
flush
!
! Try the hangup sequence three times otherwise declare and error
inctries
iftries 3 101
jump 92
!
@LABEL 96
! Pause between data and command mode
pause 50
jump 94
!
!
@LABEL 98
```

```
! Recall the factory settings
pause 15
matchclr
matchstr 1 99 "OK\13\10"
write "AT&F\13"
matchread 30
jump 101
!
@LABEL 99
exit 0
!
! ---- Error messages -----
!
! Modem Not Responding
@LABEL 101
exit -6019
!
! No Dial Tone
@LABEL 102
exit -6020
!
! No Carrier or Error
@LABEL 103
exit -6021
!
! Busy
@LABEL 104
exit -6022
!
! No Answer
@LABEL 105
exit -6023
!
! User Cancellation
@LABEL 107
exit -6008
```