

HLink

Michael D.P. Clerck

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COLLABORATORS

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Chapter 1

HLink

1.1 Handy Link v2.0 1995 by Michael D.P. de Clerck

Handy Link 2.0 by Michael D.P. de Clerck 1995

This is the FULL version of Handy Link 2.0 and it's all FREeware.

<<< Click Me >>>

Author note :

This product maybe distributed freely with the rule that all it's files stay unmodified and there is NO commercial provid made from the transaction of this product.

The use of this program is at your own risk therefor I cannot take any responsebility when any damage has occured to your system or the data stored on it. This product has been tested for more then 400 hours in a normal environment, transferring over a massive 1000 MB succesfully while testing and using it myself. Though problems can arise, if so please write Me.

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1.2 Main Menu

This is the contents of the Handy Link v2.0 user guide, make your selection :

- Introductie
- Author
- Features
- Distribution
- Installation
- Configuration
- Starting up

- HLink usage
- Shell syntaxes

Command syntaxes
File transfer
HLink scripts

Trouble shooting
Bug report

<<<< See more off the I.D. services and products >>>>

1.3 author

Author :

Welcome to Handy Link 2.0.

This is the FULL version of Handy Link, it has no restrictions whatsoever. Though for my personal needs I would like to know if this program is used and if so, if it was usefull.

So let me know your thoughts !!

HLink is written using Amos Profesional and compiled to a stand-alone program, it should therefor work on the whole amiga range (A500-A4000).

Although this program is FREeware i'm always open for any kind of reply, gifts, postcards, teddybears (blue ones only!), 'thank you' notes, anything NON-LETHAL if possible to keep the development going.

And of course for all you generous types, money contributions are preferred in Dutch, English or American valuta. Gold will also do.

If there are any suggestions, bug-reports or questions please write to :

Increased Development
Michael D.P. de Clerck
Koopvaardijhof 128
3071 PK Rotterdam
The Netherlands

Email : v932326@si.hhs.nl (available till April 1996)

Introductie to HLink 2.0

Features of HLink 2.0

<<<< See more off the I.D. services and products >>>>

1.4 distribution

Distribution@ub} :

This is the FULL version of Handy Link, it has no restrictions

whatsoever. This product maybe distributed freely with the rule that all it's files stay unmodified and there is NO commercial provid made from the transaction of this product.

! REMEMBER :

The use of this program is at your own risk therefor I cannot take any responsebility when any damage has occured to your system or the data stored on it. This product has been tested for more then 400 hours in a normal environment, transferring over 1000 MB succesfully while testing and using it myself. Though problems can arise, if so please write Me.

1.5 introduction

Introduction :

HLink is a serial communication and transfer tool for all amiga's. The only other thing needed is a serial null-modem cable. There are no further libraries or devices needed becides the standard ones. The installation is very simple and the program can be started after a few activities.

I know that there are an lot off 'network' like programs, some of wich very reliable. On the other hand, it sometimes takes ages to install them properly or when installed it just don't offers what you need.

So here is my contribution, a easy to install program with some nice features and all for free. Check it out, it might or might not be usefull but offers some usefull functions for anyone needing them.

Myself use it for a number of reasons. Firstly because I had it up to there sliding from one system to the other simply because the needed data was not at the right place or a guest-user had a request. No I can do this from my one workplace without bothering the guest.

Secondly, there are a hand full of programs that take complete control of the system without given you a chance of using workbench or CLI. The only sollution at that moment is to quit that program. In some situations I can imagine it beeing frustating, for example in the middle of a "This takes to long so do it once" render session.

I hope you enjoy this product,

Michael D.P. de Clerck

1.6 features

Features :

Since the last version of HLink there has been some changes, there are new commands, better routines and of course fixed bugs.

The memory needed to communicate is roughly 400 Kb, for file transfer the amount of needed memory is roughly equal to 400 Kb + filesize.

This program works best on an harddisk based systems. It can also be used on floppy based systems but at least 1MB of memory is advised.

Here is a list of the features of Handy Link 2.0 :

The first nice thing is that all the controlling is done from any dos-shell, the ability to perform normal dos commands and HLink commando's in the same shell improves the orientation of the user.

Status window	
Chatting	- Talking with the remote station.
Remote DOS control	- Entering remote Amiga DOS commands.
Command buffer	
File transfer	- Transmitting/receiving files/
Lowmemory transfer	- Spare memory by using file-2-file transfer.
HLink Scripts	- Batchscript processing (Local & Remote)
Network scripts	- Network-like environment use.
Automatic transfer	- Full automatic transfer of files.
Search & Send	- Get {remote-file} command.

1.7 installation

Installation :

The installation of HLink can be performed automaticly or manually. For automatic installation use the HLink2.Install script with the command from your Workbench disk

Follows these steps :

Copy the file HLink2.Lha to RAM: and dearchive it using :

```
> Lha -X RAM:HLink2.Lha RAM:
```

Now the following files should be available and copied to a directory :

HLink	- The main program.
HLink.Guide	- This Amigaguide documentation.
HLink.Config	- The configuration file,
Install_HLink	- The installation script.
HLink.Shell-Startup	- The Shell-Startup lines for HLink.
HLink.User-Startup	- The User-Startup lines for HLink.
Join	- The file joni command.
Print.hl	- A HLink remote scri example.
NetScripts	- Remote application script examples.

HLink uses 4 directory's to forfill it's tasks. here is an list of those

directory's :

- HLink: - This is the program directory.
- HL: - This directory is used for the command and chat lines,
 It is selected often so should be in the RAM: disk.
 Do NOT place it in the root of the RAM disk cause the
 files might be mistaken for system files, make an child-
 directory instead and assign HL: to it.
- D: - This directory is the default for transferring files
 and the saving of the errorlog file.
- SD: - This directory is used as automatic file transfer
 directory.

Add the following line to you S:startup-sequence or S:user-startup file :

- assign HLink: {path} - The path where the program files are placed
- assign HL: RAM: - The work directory of HLink, can be disk or RAM,
 this directory will also be temporarily used for
 placing the autotransfer files.
- assign D: {path} - The default transfer directory for receiving and
 sending. This assign name can be changed in the
 HLink.Config file.
 HLink.config file.
- assign SD: {path} - The automatic transfer directory.
 This assign name can be changed in the
 HLink.Config file.

Add the following lines to your S:shell-startup file to enable command
redirectini to HLink :

```
alias com   "Echo >> HL:execute"  
alias chat  "Echo >> HL:chat"
```

Make sure that the file "serial.device" exists in the Devs: directory and
that it is mounted. Now Hlink can be started by running it from the shell
or the workbench.

!NOTE : If you want to use HLink without having to acces a drive for DOS
commands then do the following following :

- Make the following commands resident using (Only <WB2.0) :

```
> RESIDENT >NIL: C:Echo PURE  
> RESIDENT >NIL: C:Copy PURE  
> RESIDENT >NIL: C>Delete PURE
```

```
> RESIDENT >NIL: C:List PURE
> RESIDENT >NIL: C:Protect PURE
```

- Use the RAM disk for temporary workspace, ie. assign HL: to RAM:

!NOTE : If you want an Date & Time notation at every transfer then make sure that the DATE commands is in the C: directory.

1.8 starting up

Starting up :

HLink is started from a shell or from the workbench.
Any default settings can be placed in the S:HLink.config file.

The program can be stopped using the Exit command or by pressing the Ctrl+Esc keys.

1.9 hlink

The HLink usage :

This chapter will describe the chat, command and transfer options of HLink. All the control of HLink is done through the use of temporary files, these are HL:Chat and HL:Execute and wich respectivily store the chat text and the commands.

When there is time the files are processed and deleted.

All the commands are given from the shell, there are two so'called alias commands to achive this. See installation part about the S:Shell-Startup file.

The first is the Chat command, this will redirect a textline into to the chat file wich will be send to the remote station.

The second one is the Com command, this will redirect a Amiga DOS or HLink command to the command file.

1.10 shell syntaxes

The Shell syntaxes :

Following are the syntaxes of HLink commands to use from within a shell:

Execute a local Amiga DOS command
> {Command}

Send a Chat textline to the other station
> Chat

```
Execute a local HLink command
> Com {command} [parameters]

Execute a remote DOS command
> Com {DOS command}

Execute a remote HLink command
> Com #{command} [parameters]

Execute a remote HLink script, always use extension '.al'
> com xxxxx.hl
```

1.11 chat

Remote chatting :

Textlines can be as long as the Shell and RAM memory will allow, further there is no restriction in the characters to be used.

The syntax to use is :

```
> Chat This is just a line !
```

1.12 hlink syntaxes

Handy Link syntaxes :

When using the commands with parameters DON'T forget to separate them using an space character !

The following HLink commands are available (precede using Com) :

Help	- Brings you to this documentation
Connect	- Try's to connect to other station when running.
Exit	- Close system down
Settings	- Show the current user settings
Test	- Starts serial testing procedure, also reset the transfer flags.
Testoff	- Cancels the testing procedure
Send {file} [AS] [dest]	- Send a file to the remote station, when no path is given the file is read from the default work path. The command works like the LIST command from DOS, wildcards can be given and also the ALL parameter works.

There is a possiblity to give a destination

directory or filename can be given.

To do this just add the pathname after the command,
eg. > Send D:test RAM:

To give a new filename enter AS {filename}
after the command, eg. > Send D:test AS file

To give both a path and a new filename enter
them both using the AS key.

eg. > Send D:test AS RAM:file

Give {path}{file} - Searches for the file(s) using the given wildcard and transmits it/them, when no path is given the search will be performed on all devices else the search will be performed within the given path. The filename is case-insensitive. As wildcard sign a * is used. For example :

star* - all the files starting with star
*.iff - all the files ending with .iff
.i - all the files containing .i

Get {path}{file} - This is an remote GIVE command and makes the remote station search for file(s) with the given wildcard which will then be transmitted back. See the Give command for the wildcard usage.

The following commands are used to set the user settings :

Serspeed	{baudrate}	- Set serial baudrate	
Serbuf	{buffersize}	- Set serial buffer (bytes)	! not yet !
Serbits	7/8	- Set serial data bits used	! not yet !
Serstopbits	0/1/2	- Set serial stop bits used	! not yet !
SetParity	-1/0/1/2/3	- Set serial parity	! not yet !
Serialfast		- Goto fast serial transfer mode	
Serialslow		- Goto normal serial transfer mode	
Serblock	{size}	- Set serial datablock size in bytes (48..60000)	

Reqprocess	on/off	- Ask before processing a command
MainExit	on/off	- Close both systems when quitting
Window	on/off	- Open/Close HLink message window,
Hidden	on/off	- Hides the communication window at all cost.
Setall	on/off	- If on all commands will be send to slaves
Chd	[+]{path}	- Set work directory, the + option is optional and will extend the current path with the given path. When only the path is given (like 'Com RAM:') the program will check if the path exists, if so the word directory is changed. This works with path extensions also.

Errorlog	on/off	- When on the chat & command input is displayed on the user screen (use Ctrl+W) and stored in the file D:errorlog. When set to on it will generate an small delay because everything that is printed to the status window will also be written to the ErrorLog file.
RequestAgain	on/off	- When this is set on, any unsuccesfull received file will be request until received succesfull.
Autodelay autotransfer	x	- Set the periodic time after wich HLink will all the files in the SD: directory. This period is set in 1/50th of a second.
ETAdelay	x	- Sets the period for wich the transfer E.T.A. time will be updated in the status window. The period is set in 1/50th of a second with an minimum of 100 1/50th.
Delay program	x	- Sets the system delay for file transfers, this is coded & tested on a boosted 1200. If any timeout problems arise on lower machines this setting can be of help by slowing down the timeout functions. It is set in 1/50th of a second.
Beep ending	on/off	- Turns the transfer warning on/off, when starting/ or initiating a transfer a beep sound will be made.
Lowmem station)	on/off	- When this is set to on all transfer (on current will be done directly from or to a file. If set to off the file will be loaded into memory and and transferred, if there is not enough memory to load the file the transfer will be automaticly done direct from file.

1.13 hlink configuration

HLink Configuration :

This chapter will describe the configuration possibility's. When HLink is started it will search for the HLink.Config file in the S: directory.

This file may contain any of the commands to set some of the user settings, the command and it's parameters must be seperated by one space.

The commands are to be used something like this :

Name {name}	- Sets the station name
Serspeed {baudrate}	- Sets the serial speed
Serblock {bytes}	- Sets the serial datablock size
Window X/Y/Width/Height	- Turns the message window on using coordinates
Window on/off	- Turns the window on/off using previous coordinates.
Chd {Path}	- Sets the transfer work directory
Chddef {Path}	- Sets the default transfer work directory, used when error using directory Chd.
AutoChd {Path}	- Sets the Auto transfer directory path.
Errorlog	- Turns the logfile on
Doctool {path:tool}	- Sets a textview tool for the HLink documentation
Delay 1	- Lets HLink wait after each filetransfer for 1/50th seconds per 5 Kilobytes.
Autodelay 1500	- Set the Autotransfer check period to 30 seconds.
ETAdelay 1500	- Set the ETA update period to 30 seconds.
Beep on	- On every start/end or initiation of a transfer a beep sound will be made.
Lowmem off	- All transfers will be done from or to memory

My configuration looks like this :

```
;HLink V2.0 configuration
name Ren from the secret place ...
serspeed 38400
serblock 2048
window 80/150/500/10
doctool dh0:utilities/multiview
chddef D:
chd D:
autochd SD:
{hidden}
autosend 500
etadelay 1500
beep on
```

1.14 remote dos commands

Remote DOS commands :

When a remote DOS command is made to the remote system it's remote shell feedback is stored remotely in HL:feedback. After execution of this command the feedback file will be send to the instructing station.

To execute an remote command use :

```
> com dir DH0:
```

This command will tell the remote station to send back an directory listing of it's own DH0: disk.

!WARNING : When using remote dos commands else then dir or list without a path, it will be executed in the root of the bootdisk.

Therefor it's is always neccesary to specify a path in the command.

!REMEMBER : The DOS commands dir and list are if given without a path executed in the current workdirectory (chd).

!WARNING : Some commands require the user to enter a key (like format), it is not possible to forfill this remote request. Use an remote placed HLink Script to avoid any problems.

1.15 file transfer

File Transfer :

When a Send commando is given the filenames that are to be send are stored in the file HL:transfer. After this the filenames will be read, processed and the HL:transfer file will be deleted.

The files are send in single blocks, the block size is adjustable but goes hand-in-hand with the transfer reliability (so does the baudrate).

The estimated time (E.T.A.) for a transfer is calculated using pre-set values, therefor there can be a slight difference. The maximum possible is around 4Kb per second, this is at the highest baudrate.

For large files there is an E.T.A. update option, this is set using the ETAdelay command. After this period the new E.T.A. will be displayed.

When specifying the files to transfer all wildcards are allowed, this is because the wildcard is used with a list command to locate all the files and there size.

Further there is an additional file transfer work path wich can be assigned using the "Com Chd {path}" shell command. Any received files will end up in this directory.

The possibility that a file transfer fails is always there, for this purpose there is a user-setting 'RequestAgain', when this is set 'on' the receiving station will keep requesting the file until received succesfull.

!REMEMBER : Files with spaces in there names can't be transferred, this is because DOS can't identify them, rename the files and try again.

!REMEMBER : When transferring a single file without a path name the chd path is used as a source path.

!WARNING : When the processor has a high taskload timeout error may occur when transferring large files. A solution is to set the priority of other programs lower then that of HLink.

There is also the Auto Transfer directory SD: Any file or directory placed here will be transferred to the remote station.

1.16 auto transfer

Automatic Directory Transfer :

By using the SD: directory it is possible to let HLink transfer the placed directory's or files automaticly. HLink will check at a set period of time if there are any objects available in SD: an starts transferring them.

A difference is that the files that are succesfully sended will be deleted. Any file or directory that fails an transfer will be noted and tried again at a later stage. This process will not stop until you remove the faulty file yourself.

An problem with faulty files is that if you have triggered the Errorlog it will be filled with transfer errors of the faulty file. This log can grow very rapidly if the AutoSend setting is set at a short period.

!WARNING : Don't build archives in this directory cause they will be transferred as soon as possible, this means that only the current archived part will be send.

```
@(" Main menu " Link "Main menu")
```

Features

1.17 lowmem transfer

Low memory / File-to-file transfers :

First of all I have to say that every file larger then 2MB automaticly triggers the Lowmem transfer mechanism. This means that the file will be transmitted in parts, each one loaded, transmitted and saved one by one. This, of coarse leads to an decrease of overall speed.

When activated a data buffer is reserved, this buffer will not be larger then 65 Kb and is accessed for quick loading and saving of file data.

The E.T.A. time is not so accurate because is was impossible to estimate the average load and save delays on all the available harddisks.

!WARNING : When using this lowmem transfer mode with certain file sizes you need the included Join command to join parts that can't be equally divided.

1.18 hlink scripts

HLink Scripts :

When you want to execute a remote batchscript, do the following :

- make a script with the necessary commands
- use the following extension .hl , DON'T USE SPACES IN THE NAME !
- place it on the remote machine in the HLink: directory
- if wanted place it on the local machine in the HLink: directory
- when calling the remote script enter it's name including the .al extension

The remote machine will now check if a file with that name exist in it's local HLink: directory, if it does it will be executed.

I have been trying some nice things with these scripts, the ability to execute DOS commands remotely can be very handy indeed. Myself have installed a couple of icons with IconX'ed script that command HLink to do almost anything you could do from a CLI window.

For the ancient capacity problem I had to place some programs on one of my other harddisk systems. To still be able to use it on the first system, I have made an script wich installs the program on the intitiated system and starts it up. Afterwards the programs and it's files can be removed by another iconX file or batchfile.

I have included some example remote-install script wich installs and runs OctaMED on a remote system within 2 minits. And only by initiating one script. These examples are in the NetScripts directory when unpacking the HLink2.Lha archive.

!WARNING : When using scripts wich contain multiple commands make sure that there is a delay (Wait xx) between commands that remotely acces a diskdrive (hard or floppy). If not HLink can get rushed into sending while the remote station is not yet ready resorting to Serial errors.

1.19 net scripts

Network scripts :

By using batchscripts it's possible to echo commands to the HL:execute command file of HLink. Now you can build such a script wich will transfer an entire application (program, configs, data) to another station.

See the examples for Octamed and Megalosound in the HLink:NetScripts directory.

!WARNING : When using scripts wich contain multiple commands make sure that there is a delay (Wait xx) between commands that remotely acces a diskdrive (hard or floppy). If not HLink can get rushed into sending while the remote station is not yet ready resorting to Serial errors.

1.20 trouble shooting

Trouble Shooting :

Problems can arise at the most unexpected moments, so here's a small list of known problems and their solutions.

* I keep having transfer-timeouts >> Set the Delay value higher and try again, repeat till normal.

1.21 bug report

Bug Reports :

23 June 1996 - The 'AutoDelay' command is renamed to 'Autosend'.
The parameters are not changed.

28 July 1996 - Using the SEND command in capitals is now possible.

01 July 1996 - When given a SEND command without a pathname all the files in the D: directory where send, this is corrected.

26 July 1996 - Automatic transferred directory's were not deleted. Fixed.

1.22 id projects

Increased Development Projects :

As a dynamic organisation ID is active in several branches, delivering AVC services and products. We are still growing and expanding, so keep track of our actions.

Software Projects
Presentations
AVC Facilities
Demo programmers wanted

1.23 software projects

This is a list of the current software projects of ID :

Available products :

Handy Link v1.0	- A serial communication and transfer tool.
Handy Boot v2.0	- A startup selection tool.

Forthcoming products :

Visual Music Application - A Real-Time graphic effects application.
Battle troops - A war/startegy game.

1.24 unnamed.1

Handy Link 1.0 - Available now as FREEWARE !

HLink is an serial communication and transfer tool controlled from any DOS shell. It has easy to use commands and

- Seperate window for status & reports.
- Talking with the remote station.
- Entering remote Amiga DOS commands.
- A buffer of the last used commands, only > WB2.0.
- Transfer files and directory's
- Lowmem transfer mode, spare memory by using file-2-file transfer.
- Batchscript processing (Local & Remote)
- Grab & Run remote programs.
- Automatic file transfer directory.
- Get {remote-file} command.

1.25 hboot

Handy Boot 2.0 - Available now as FREEWARE !

This is an handy boot tool for all you that change your startup tools regularly. Now select you tools using an mouse interface and store that config using an user name.

With this tool your system becomes more flexibel to use for yourself and other users.

HBoot has the following features :

- fully ASCII configured
- user password request
- 30 program scripts per user
- mouse controlled
- public or private mail
- save button defaults per user
- forced disklock per user

1.26 vma

The Visual Music Application - Not released until December 1996

VMA is an Real-Time grafical effect application, now you can produce your own light and effects show.

The VMA system has the following features :

- Grafical task generator voor image and colour tasks
- 16 effects per task each with 32 effect update settings
- Effect synchronisation with timer, midi, joystick, audio, mouse, keyboard
- Extended task en data monitor
- Real Time monitor and test possibilitiy
- Fully multitasking
- Automatic Lastsession mechanism
- MIDI support and control options like slide, bend, voicesselect and more
- Compateblity with AMOS Object Moduller 3D objects
- Data Manager for managing and validating VMA data
- IFF, Anim5 support

This application is in full development and a demo is to be released very soon so keep an eye out for VMA.

Managment Support Tool - Not released until 1997

By using MAST you can compose your own database with appointments, data, archive space and more. Use this tool to keep track of your activities, financial state and administration. MAST can increase your efficiency and orientation at work and private activities.

At the moment we are working on the designs of MAST wich release date is somewhere in 1997.

1.27 bt

Battle Troops - Not released until 1997

A (serial) multiplayer war/startegy game. Control anyone in an army of soldiers, snipers, scouts, tanks, planes and more with the purpose to win that battle.

- Realtime or axcellerated time usage
- Top map-view or 3D action view
- Save game option
- Statistics screens
- Build your own maps
- Up to 4 players simultaniously

This game is still under development, but due to other activities it won't be released until 1996 so hang on.

1.28 presentations

Presentations :

ID also performs on stage using it's own AVC facilities. We perform on house party's / events and present our own VMA product together with lots of video effects and live camera images. We call it our

"Live On Stage Visualisation Of Music"

We also produce video's of these presentations with commercial material tailored to your needs.

For more information contact :

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1.29 avc

AVC Facilities :

ID has it's own AVC studio in Rotterdam and produces custom made video's. Here is an list of our facilities :

- Digital process facilities
- Recording facilities
- Full stereo edit facilities
- Audio composition facilities
- Profesional guidance

For more information on these facilities contact :

Increased Development
Michael D.P. de Clerck
Koopvaardijhof 128
3071 PK Rotterdam
The Netherlands

Email : v932326@si.hhs.nl (available till April 1996)

1.30 wanted

Demo programmers wanted :

For our VMA software project I'm searching for programmers to supply routines and effects. The routines are preferred in assembly but maybe

another language will also do, contact me to find out.

The idea is that you join the development team. We will work together in designing and developing VMA and other projects.

It is preferred that you live in the Netherlands but thanks to the 'Big Net' we should be able to have a productive relation with anyone on this planet.

If you have any interest please contact :

Increased Development
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