

Installing Network Dongles

January 2007

12D SOLUTIONS PTY LTD

ACN 101 351 991 PO Box 351 Narrabeen NSW Australia 2101 Australia Telephone (02) 9970 7117 Fax (02) 9970 7118 International Telephone 61 2 9970 7117 Fax 61 2 9970 7118 email support@12d.com web page www.12d.com

Disclaimer

12d Model is supplied without any express or implied warranties whatsoever.

No warranty of fitness for a particular purpose is offered.

No liabilities in respect of engineering details and quantities produced by 12d Model are accepted.

Every effort has been taken to ensure that the advice given in this manual and the program 12d MODEL is correct, however, no warranty is expressed or implied by 12D SOLUTIONS PTY LTD.

Copyright

This manual is copyrighted and all rights reserved.

This manual may not, in whole or part, be copied or reproduced without the prior consent in writing from 12D Solutions Pty Ltd.

Copies of 12d Model software must not be released to any party, or used for bureau applications without the written permission of 12D Solutions Pty Ltd.

Copyright (c) 1989-2007 by 12D Solutions Pty Ltd Sydney, New South Wales, Australia. ACN 101 351 991 All rights reserved.

Table of Contents

Installing Hardlock Network Dongles	5
A Guide to the Notes	5
Installing the Hardlock Dongle Drivers	6
Installing the Network Administration Server	7
Copying the "Hardlock New" Folder	7
Installing the Network Device Drivers	8
Installing the Aladdin Network Monitoring Software	2
Adding the Hardlock Dongle to the Monitor 1	5
Updating env.4d and nodes.4d 1	7
Updating env.4d1	7
Updating nodes.4d1	8
Monitoring Network Dongles 1	9
Replacing an Existing Network Dongle 2	22

 \gg

Installing Hardlock Network Dongles

WARNING

Do not attach the network dongle to your computer until after you have installed the dongle drivers.

A Guide to the Notes

12d Model uses a *Hardlock* network dongle for controlling the number of copies of 12d Model that are available and being used on a computer network. The Hardlock network dongle can be either a USB dongle, or a parallel dongle for attaching to the older parallel (printer) ports.

These notes are for installing a new parallel or USB hardlock network dongle, for swapping network dongles or for monitoring network dongles.

To install/swap the network dongle you will need the *12d Model 7 Installation CD* and the network dongle supplied by 12D Solutions Pty Ltd.

An Adobe Acrobat (PDF) copy of these notes is on the 12d Model Installation CD in the directory

Documentation\Installing network dongle new

WARNING - if you were previously using the HLSADMIN Hardlock Server software to install and monitor your hardlock network dongle then you need to remove the existing network dongle, stop and remove the service (use *Hardlock*/*Hlserver*/*Nt_95*/*Hlsadmin.exe*) and *uninstall* the Hardlock Server software, any Aladdin monitor and Aladdin diagnostic software and Hardlock drivers before proceeding. If you do not uninstall the old Aladdin Hardlock software before trying to install this new software, then the new software will not install correctly.

Please continue to the next section if your are installing a *Hardlock* network dongle on the computer for the first time. If you already have a network dongle and are replacing it by a new network dongle, please go the section "Replacing an Existing Network Dongle" on page 22.

Installing the Hardlock Dongle Drivers

WARNING - Do not attach the network dongle to your computer until after you have installed the dongle drivers.

This section is only for installing a *Hardlock* network dongle onto the computer for the first time. If you already have a network dongle and are replacing it by a new network dongle, please go the section "Replacing an Existing Network Dongle" on page 22.

The first step is that the dongle drivers for the *Hardlock* dongle must be installed on the computer that the network dongle will be attached to.

The dongle drivers are installed from the 12d Model 7 Installation CD

Insert the 12d Model 7 Installation CD into the CD drive.

On inserting the CD, the 12d Model Installation program automatically begins.

If it doesn't, simply double click on the program "setup.exe" from the CD.

The Install 12d Model Release screen will appear.

12d Model 7			12d®N	lodel™ 7	
	12d Release	12d Practise	Other Software	Documentation	
Install 12d Requiren	Model Release Installation notes in pdf form nents:	at			
	 Windows 2000/XP with at lea At least 250 MB of free disk Dongles should not be attact 	ist 128 MB of memory space <mark>hed to your computer bef</mark>	ore drivers are installed.		
Step 1:	Step 1: Install dongle drivers (administrator rights required) Hardlock driver Wibu driver				
Step 2:	Check your dongle(s) (Dongle <u>Check</u>	e(s) should be attached to ye	our computer)		
Step 3:	Install Camtasia codec (adm <u>Camtasia codec</u>	inistrator rights required)			
Step 4:	Install 12d Model 7 Release ● Install 12d Model 7 ● Install NT∨2 Grids files (optic	Program files mal)			
			Copyright © 2005 - 12D Solut	ions Pty Ltd. All rights reserved.	

Follow Steps 1 and 2 to install and check the Hardlock drivers for the parallel/USB port that the network dongle is to be attached to.

At the end of Step 2, your network dongle should be attached to the appropriate parallel/USB port and be visible when running the *Check* program. If you are having any problems, please contact your 12d Model Distributor.

Installing the Network Administration Server

This section is only for installing a Hardlock network dongle onto the computer for the first time. If you already have a network dongle and are replacing it by a new network dongle, please go the section "Replacing an Existing Network Dongle" on page 22.

The *Hardlock* network dongle supplied by 12D Solution should now have been attached to the appropriate port (USB or parallel printer port) and *Checked*. If this has not been done, please refer to the previous section "Installing the Hardlock Dongle Drivers" on page 6.

Note that the dongle must be attached to the port at all times, otherwise 12d Model sessions will stop running.

Copying the "Hardlock New" Folder

From the 12d Model Installation CD copy the folder

Hardlock new

onto the Computer that the network dongle is attached to.

Folders on 12d Installation CD 12dModelV6c3beta (Z:) 12d_Plotting 12d_Usage 12d_Usage 12d_Visualisation Bin Documentation Field12d Hardlock Hardlock.new Mew Barwon design training NTv2_grids Other_Software Setup

Installing the Network Device Drivers

The *Hardlock* dongle drivers and the network administration server need to be installed on the Computer (PC or Server) that the Hardlock network dongle is attached to.

In the folder

Hardlock new

run the program

hlsw32.exe

This will bring up the Select Language panel.

Select Language	X
Please select the language that you would like to use during installation.	the
U.S. English Deutsch	
OK Cancel	

Click on U.S. English and then OK. The Welcome panel for the Hardlock Server Setup program then appears.





Select Next. This brings up the Choose Destination Location panel.

Select Next. This brings up the Backup Replaced Files panel.

🚰 Backup Replaced Files		×			
	This installation program can create backup copies of all files replaced during the installation. These files will be used when the software is uninstalled and a rollback is requested. If backup copies are not created, you will only be able to uninstall the software and not roll the system back to a previous state. Do you want to create backups of the replaced files?				
	⊙ Yes				
1. 2. 2. 6.098	⊂ N <u>o</u>				
	Please select the directory where the replaced files will be copied.				
	Backup File Destination Directory				
Hardlock	C:\Program Files\HL-Server\BACKUP				
	< <u>B</u> ack <u>Next</u> Cancel	_			

Select Next. This brings up the Start Installation panel.



Select Next and the Hardlock Server is installed.

The HL-Server panel asking about installing the Hardlock Device Drivers should then appear.



Select *Yes* and the *Hardlock Device Drivers* will be installed and then bring up the *Installation Complete* panel.

(*WARNING* - if you were using the old HLSADMIN software and had not uninstalled it before now, then instead of the above *HL-Server* panel, the following panel will appear.



There will now be problems with the installation. Please click on *Cancel* and contact 12d Solutions on *support@12d.com*.)





Select Finish to end the Hardlock Device Drivers installation.

Installing the Aladdin Network Monitoring Software

In the folder

Hardlock new

run the program

askmon32.exe

This will bring up the Select Language panel.

Select Language	×
Please select the language that you would like to use during the installation.	e
U.S. English Deutsch	
OK Cancel	

Click on U.S. English and then OK. The Welcome panel for the Aladdin Monitor Setup program then appears.



Select Next. This brings up the Choose Destination Location panel.



Select Next. This brings up the Backup Replaced Files panel.

🚰 Backup Replaced Files		×		
	This installation program can create backup copies of all files replaced during the installation. These files will be used when the software is uninstalled and a rollback is requested. If backup copies are not created, you will only be able to uninstall the software and not roll the system back to a previous state. Do you want to create backups of the replaced files?			
	 ♥ Yes No Please select the directory where the replaced files will be copied. 			
	Backup File Destination Directory	1		
Aladdin SECURING THE GLOBAL VILLAGE	C:\\Aladdin\Monitor\BACKUP B <u>r</u> owse			
		_		
	< <u>B</u> ack <u>Next></u> Cancel			

Select Next. This brings up the Start Installation panel.



Select Next and the Aladdin Monitor is installed and the Installation Complete panel appears.

😽 Installation Complete		×
Hardlock	Hardlock Server has been successfully installed and started. Press the Finish button to exit this installation.	
	< <u>B</u> ack <u>Finish</u> Cancel	

Select Finish to end the Aladdin Monitor installation.

 \sim

 \sim

Adding the Hardlock Dongle to the Monitor

Now that the Aladdin Monitoring Software is installed, the dongle needs to be added to the Monitoring software on the local machine.

On the Windows tool, select

Start => Programs => Aladdin => Monitor => AKS Monitor

to bring up the Aladdin Monitor panel.



The *Aladdin Monitor* is used to monitor all the Hardlock network dongles in the network but before a dongle can be monitored, it must be added to the *Monitor* on its *local* computer (that is, on the computer that the dongle is attached to).

🔜 Aladdin Monitor						
<u>File Services View ?</u>						
] \$ \$ \$ \$					Aladdim	
Aladdin Network Resources						
⊡ ⁻ HL-Server	Hardlock Ser	ver				
	Name	BREE				
	Version	4.56			🗖 IPX	
NetHASP LM	IP	192.168.168.243	}		☑ <u>N</u> etBIOS	
	IPX					
1	OS/Driver versions	WIN32 / DRV 3.	05 / API 3.81 /	HLVDD.DLL 2.18		
To add the dongle to the		May Logina	Current	Popk		
<i>Monitor</i> , click on the local	Module Address	Max. Logins	Cunent			
computer in the computer list						
	Module address	⁹⁴⁸⁰ 🗄	Add		<u>H</u> emove	
	Statistics	Desei		Cant Enam		
	ТСРИР			299 0		
Then type in 9480 for	TEX I					
the Module address	NetBIOS					
and then click of Aud		,				
,	,				NUM //	
A + will then appear beside the computer $\square \square \square \square \square \square \square \square$						
name to indicate t	that there is a ne	twork			ical)	
dongle attached to	o me computer.				-	



~ ~

 \sim

NetHASP LM

🔜 Aladdin Monitor						_ 🗆 ×
<u>File Services View ?</u>						
¢ ≥ ≥ S ≥						Aladdim
Aladdin Network Resources						
HL-Server ANNA BREE (local) G-SERVER G-SERVER TWINS	Hardic Module a Login tab	o ck Informat address: 9480	ion Port: 0xF001			
NetHASP LM	No	Login ID	Task ID	Timeout	Login Time	
information about the selected dongle	1 2 3 4 5 6 7 8 9 10					
p1						NUM

Select File =>Exit to exit the *Aladdin Monitor* program.

The Hardlock network dongle has now been added to the *Aladdin Monitor* on the local computer and can be monitored from anywhere in the network (see the section "Monitoring Network Dongles" on page 19).

Updating env.4d and nodes.4d

When 12d Model is installed on a computer by the 12d Model Installation CD, it assumes that a nonnetwork dongle with be used. Hence the default *env.4d* needs to be modified to tell 12d Model to access the network dongle. Also the *nodes.4d* file must contain the authorization information for the network dongle.

Updating env.4d

For each computer that needs to access the network dongle, a modification has to be made to the *env.4d* file for that computer to tell it to search for a network dongle.

In the initial 12d Model installation, the env.4d file is installed in the folder

 $12d\12dmodel\7.00\Set_ups$

Files in Set_ups are supplied by 12D Solutions and should not be modified.

However 12d Model looks for an env.4d in the folder User before looking in the folder Set_ups.

So copy the env.4d file from Set_ups into the folder

 $12d\12dmodel\7.00\User$

January 2007

17

and edit the env.4d file in User.

Now in the <i>env.4d</i>	file add the line:	
DONGLE_4D	parameters	// where each parameter is separated by at least one space
where the parameter	ers for DONGLE_4D	include:
-network_first	look for a network	dongle first
-network_last	look for a local do	ngle first and then network dongle last
-no_network	don't look for a ne	twork dongle
-local	look for a local do	ngle
-no_local	don't look for a loo	cal dongle
-login_retires	number_of_retries	which defines how many retries are made to see the dongle
-login_wait se	conds_to_wait	number of seconds to wait between retries.
For example,		
DONGLE_4D	-network_first	// would look for a network dongle first and then a local dongle
or DONGLE_4D	-network_last	// would look for a local dongle first and then a network dongle
or DONGLE_4D	-network_first	-no_local // looks for a network dongle only, no local dongle

Note that it is possible to set *env.4d* up so that if there is a standard local dongle on the computer then it will be used by 12d Model but if no standard local dongle exists, then 12d Model uses the network dongle.

To make searching for the dongle faster on large networks, or if more than one 12d Model dongle is on the network, then the IP address of the computer with the network dongle can be included in the *env.4d* file.

Simply add the line

HLS_IPADDR	IP address for the machine with the network dongle
For example,	
DONGLE_4D	-network_last
HLS_IPADDR	192.9.200.110

Updating nodes.4d

For each computer that accesses the network dongle, the authorization information for the network dongle must be added to the *nodes.4d* file accessed by 12d Model on the computer.

The default folder for the nodes.4d file is

 $12d\12dmodel\7.00$

or, the environment variable AUTHORIZATION_4D in the *env.4d* used by 12d Model on that computer can be set to point to a *nodes.4d* file with the network dongle authorization information in it.

Note that *nodes*.4d can contain the authorization information for more than one dongle (standard or network dongles).

 \longrightarrow

Monitoring Network Dongles

The *Aladdin Monitoring* software can be used to monitor all the Hardlock network dongles on the network. It displays how many licenses are available for each network dongle, how many licenses are being used and the IP address of the users on a network dongle.

The *Aladdin Monitoring* software can be run on any computer in the network, not just those with Hardlock network dongles attached. If the Aladdin Monitoring software is not installed on the computer, simply follow the installation instructions in the previous section "Installing the Aladdin Network Monitoring Software" on page 12.

To start the Aladdin Monitoring software, on the Windows taskbar, select

Start => Programs => Aladdin => Monitor => AKS Monitor

The *Aladdin Monitoring* software will start, scan the network for any Hardlock network dongles and display the results in the *Aladdin Monitor* panel.



Computers with a + beside their name have one or more network dongles attached to them

By clicking on the computer name, all the Hardlock network dongles attached to that computer are displayed along with the maximum number of licenses available for that dongle and the current number of users.

<u>File Services View ?</u>					
] ⊄ ≊ & ≋ ≋					Aladdim
Aladdin Network Resources					
⊡ HL-Server 	Hardlock Ser	ver			
	Name	SERVER			
HotHASP LM	Version	4.56			□ <u>I</u> PX
	IP	192.168.168.1			✓ NetBIOS
	IPX				
	OS/Driver versions	WIN32 / DRV 3.0	05 / API 3.81 / HLV	DD.DLL 2.18	
	Module Address	Max. Logins	Current	Peak	
	9480	20	0	8	
all the network dongles on the selected computer					
	<u>M</u> odule address	29809	<u>A</u> dd		<u>R</u> emove
	Statistics ——	Beceive	ad Se	at Errors	
note that all 12d Model	TCP/IP	2098	8 2097		
network dongles have	IPX				
the number 9400	NaRIOC				
	NetBIOS	1	°		
, Ready					NUM //

⊡... 📄 HL-Server 🖳 ANNA To display the information for a particular 🗄 🖳 BREE (local) dongle on a computer, simply click on the +-÷ SERVER beside the computer name to show all the network dongles attached to the computer 📄 NetHASP LM 🖃 💼 HL-Server International ANNA Inter and then click on the dongle itself to show information about the users of that network 🖻 🛄 SERVER dongle. **2 9480** 🖳 TWINS 📄 NetHASP LM



The *Hardlock Information* table for the selected dongle includes the number of 12d Model licenses available, the number of licenses currently being used, the IP address for each user and the login time and date.

Users of the network dongle can be removed from the dongle by clicking on the entry in the table and then selecting the *Delete Entry* button.

NOTE -There may be more than one Hardlock network dongle on the network and Hardlock network dongles from software vendors other than 12d Solutions. The Hardlock network dongles issued by 12d Solutions for *12d Model* have the number *9480*.

Replacing an Existing Network Dongle

When the number of 12d Model licenses for a network dongle is increased, the current Hardlock network dongle needs to be replaced by a new network dongle which is configured with more licenses. The new Hardlock network dongle must be received from 12D Solutions before preceding.

This section of the notes explains how to swap the two Hardlock network dongles.

NOTE: you can't just physically swap the network dongles on the computer.

Step 1 Make sure no one is using the network dongle

To check if the network dongle is being used, see the previous section on Monitoring Network Dongles.

If there are any users on the network dongle, get them to exit 12d Model before proceeding.

Step 2 Removing the existing network dongle from the *Aladdin Monitoring* software

On the Windows taskbar, select

Start => Programs => Aladdin => Monitor => AKS Monitor

The *Aladdin Monitoring* software will start, scan the network for any hardlock network dongles and display the results in the *Aladdin Monitor* panel.



There may be more than one Hardlock dongle on the network and Hardlock dongles from software vendors other than 12d Solutions. The Hardlock dongles issued by 12d Solutions for *12d Model* have the number *9480*.



Step 3 Physically exchange the network dongles

Physically remove the Hardlock network dongle from the computer and then attach the new Hardlock network dongle to the computer.

Step 4 Adding the new network dongle to the *Aladdin Monitoring* software

🔜 Aladdin Monitor					
<u>File Services View ?</u>					
					Aladdin
Aladdin Network Resources					
⊡ 🛅 HL-Server 	Hardlock Server				
BREE (local) ■ SERVER TWINS NetHASP LM	Name	BREE			
	Version	4.56			🗖 IPX
	IP	192.168.168.243			☑ NetBIOS
	IPX				
To add the dongle to the	OS/Driver versions WIN32 / DRV 3.05 / API 3.81 / HLVDD.DLL 2.18				
Monitor, click on the local		Markin Addam Mary Latin Commit			
computer in the computer list	Module Address	Max. Logins	Lurrent	Реак	
	<u>M</u> odule address	9480 📑	Add		<u>R</u> emove
	- Statistics				
Then type in 9480 for the Module address and then click on <i>Add</i>		Receive	ed Se	nt Errors	
	TCEAP	30	0 29	9 0	
	IPX IPX		0	0 0	
	NetBIOS		0	0 0	
					NUM ///



Step 5 Updating *nodes.4d*

The new network dongle will have a new 12d Model dongle number and hence need new authorization information to go with it. This is normally supplied in a new *nodes*.4d file.

For each computer that accesses the new network dongle, the authorization information for the new network dongle must be added to the *nodes.4d* file accessed by 12d Model on the computer.

Or, the environment variable AUTHORIZATION_4D in the *env.4d* used by 12d Model can be set to point to the *nodes.4d* file with the new network dongle authorization information in it.

Note that *nodes*.4d can contain the authorization information for more than one dongle (standard or network dongles).

~~~~