



Another Superior Product from:



USER GUIDE

Version 1.03

For use with Link-IT Version 3.x

INDEX

1	Getting Started	3
1.1	Contents of the Link-/T package.	3
1.2	Overview.....	3
1.2.1	Compatibility	3
1.2.2	Basic Description.....	3
1.3	Installation.....	3
1.3.1	System Requirements	4
1.3.2	Connecting the system	4
1.3.3	Installation of the software.....	4
2	Using the Link-/T system.....	13
2.1	Starting the Link-/T system.....	13
2.2	The Link-/T System in operation	13
2.2.1	Viewing System Status	13
2.2.2	View or change Settings	14
2.2.3	Suspending the Application.....	18
2.2.4	Un-Installing the Application	18
2.2.5	Closing the Application	18
3	Notes on installation.....	20
3.1	Effects of Mechanical shielding.....	20
3.2	Adding Additional Software Security	20
3.2.1	Setting Your Boot Sequence	20
4	Encryption Error	21
5	Power requirements of the Link-/T system.....	22
5.1	Link-/T Reader.....	22
5.2	Identification Tag.....	22
6	Hot keys	23
6.1	"Right" Mouse button (Display on-line menu).....	23
6.2	Screen Saver override	23
7	General Problems	24
7.1	The Screen saver will not go away	24
7.2	Obtaining additional Tags.....	24
7.3	Email and Internet addresses	24
8	Licence	25
9	AIT Offices	26

1 GETTING STARTED

Thank you for purchasing the AIT "Link-IT" system. The Link-IT system will provide you with unequalled protection of your Computer and its data. The package includes all the necessary components needed to install and operate the Link-IT system. The product you have purchased provides access protection to your Computer and it's data.

1.1 CONTENTS OF THE LINK-IT PACKAGE.

On opening your package please check that the following items are included:

- 1 * Link-IT reader
- 1 * Personnel RFID (Radio Frequency Identification) Tag including card holder and clip
- 1 * CD with all the necessary software and user documentation

Please check the contents of the "Link-IT package" and report any inconsistency to the dealer from which the product was purchased. Alternatively, mail any AIT office with the nature of the problem together with a copy of your purchase Invoice. (Refer to the last page for addresses of AIT offices in your country)

1.2 OVERVIEW

1.2.1 Compatibility

This product is designed to work with Computer's running one of the following Microsoft® operating systems: Windows® 95/ 98 ,Windows NT 4.0 and Windows 2000.

1.2.2 Basic Description

The Link-IT system is an RFID system that automatically protects your computer from unauthorised access when you or an authorised user is away from the workstation.

This is achieved with three easy to install components, these being:

- A tag reader connected to your workstation
- The protection software
- An active (regularly transmitting) identification tag

With the tag reader connected to your workstation via a serial communications port (RS232), the protection software interrogates the tag reader to determine whether the reader can read the transmissions from your registered identifying tag. If your tag can be read then your workstation is enabled for normal operation. If however the reader cannot read your tag the software will display a screen saver that cannot be removed until the tag reader can once again see your tag. This effectively locks your computer in your absence.

The protection software works at a very low level inside your workstation thereby providing protection from operations such as [Ctrl][Alt][Del], even switching the workstation "Off" and "On" has no neutralising effect on the screen saver. In the event that you lose your tag or have left it at home the system provides for override via a password.

1.3 INSTALLATION

Before installing the Link-IT system you should decide whether the installation will be for an Administrator or a User.

ADMINISTRATOR LEVEL INSTALLATION: Has the rights to change any property in the Link-IT system. This includes adding or removing Users. The Administrator entry to the

system is recognised by the administrator password. The administrator may change the users settings ie. Password lock, changing boot key functionality etc.

USER LEVEL INSTALLATION: Is a single user system gives the user all rights and there is no need for the administrator password.

Please note in an administration installation the admin password is required to suspend or close the program, in the user level installation the users password will suffice for all system operation.

1.3.1 System Requirements

- The Link-IT system is designed to protect computers running Microsoft® operating systems. You therefore require one of the following operating systems on your computer. Windows® 95, 98, NT or Windows 2000.
- A spare serial communications port.
- A CD Rom drive for loading the software.
- Disk space required : 5MB

1.3.2 Connecting the system

- Turn off the computer and remove all power.
- Look for the open serial communication port at the back of your computer.
- Insert the Link-IT reader into the open port.
- Restore the power to your computer.

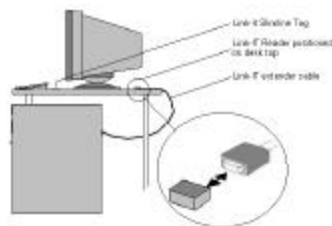


Figure 1: Installation

1.3.3 Installation of the software

CD Installation

Insert the Link-IT Software CD into your CD-ROM drive. The software will now auto-install. If the auto-install does not initialise refer to "Installing the software" below.

Installing the software

If your computer is configured to open an 'autorun' CD the software will automatically open the Link-IT set-up program, however if this is not configured to do so click on "My Computer" (Usually on top left corner of your desktop), click on the CD-ROM icon. You should then see the icons, which are on the CD. Double click on the "Setup.exe" icon and the set-up procedure will begin.

Licence Agreement

The first screen displayed during the installation is the license agreement and is shown in Figure 1.0 below.



Figure 2: License Agreement

Please read the licence agreement carefully!

For the installation to continue it is necessary to accept the license agreement and thereafter press [Next >]. Following the acceptance of the License agreement the installation will continue.

Installation Options

The next step in the installation is to select whether you are installing as a User (default) or as an Administrator. The primary difference between the two options is that the Administrator has control over relevant system settings while the User option only allows for the User to override the screen saver in the event that the User has mislaid their Link-IT tag.

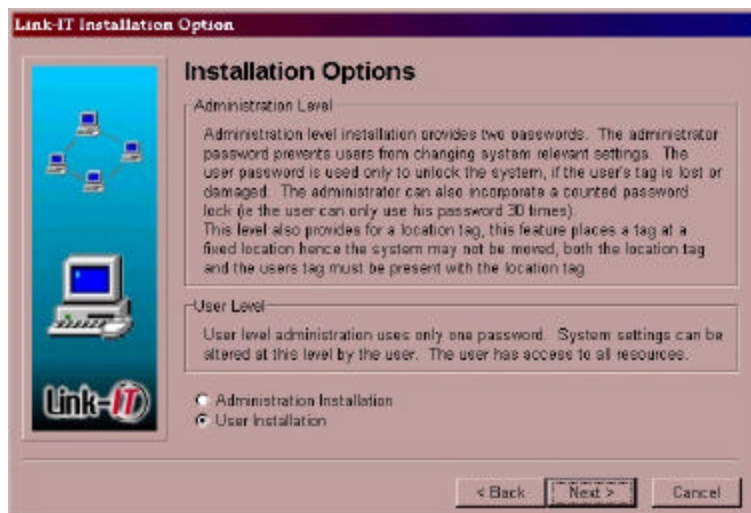


Figure 3: Installation Options

Once you have selected either Administrator or User installation press [Next >] to continue.

Administration Installation

Selecting the Administration installation option will require you to register an Administrator password as well as a User password. The following two screens are displayed:



WARNING !

DO NOT FORGET THE ADMINISTRATOR PASSWORD AS YOUR COMPUTER WILL BE RENDERED USELESS WITHOUT THE PASSWORD, OR THE TAG

Figure 4: Administration Installation

The Administration password must not be forgotten, as access to the system settings will not be possible without this password. Once the Administration password has been entered you will be required to enter a User password. The following screen is displayed for the entering of a User password.



WARNING !

IF NO ADMINISTRATOR IS REGISTERED FOR YOUR SYSTEM AND YOU FORGET YOUR PASSWORD YOU WILL NEED YOUR TAG TO UNLOCK YOUR COMPUTER

Figure 5: User Installation

When entering a User password as an administrated level installation you have the option of locking the system. Should the user attempt to use their password more than the allocated amount the user password will be rendered invalid. The locking mechanism is a simple counter that counts user password entries. Should the counter reach the pre-set count the User password will become inactive and you will have to get the Administrator to unlock the system. By presenting the primary user tag the lock out count will also be reset. Go directly to paragraph Hardware Installation

User Installation

If the User Installation option was selected in the paragraph above the installation will continue with the following screen.



Figure 6: Primary User Installation

It is only necessary to insert a User password in this screen. See the Figure above

Hardware Installation



Figure 7: Hardware Installation

Hardware installation is the process of selecting a communications port for your Link-IT System. By default the selected COM port is 1. Comm port addresses 1 through to 16 are valid. You should select the COM port into which the Link-IT reader has been inserted. The Hardware Installation screen also provides a test of the selected comm port. The test function not only tests the communications to the COM port, it also registers all tags currently being seen by the Link-IT reader. All tags registered in this way are also available for selection as user tags by the system. During the testing of the COM port the following window will be displayed: This window is displayed for 10 seconds while the reader searches the environment for tags.



Figure 8: Detecting Tags

Once the test is completed the Hardware Installation screen will show any tags detected during the test as shown in Figure 1.7 below.



Figure 9: Detected Tags

User Configuration

Once passwords have been set-up and the Hardware installation completed it is necessary to assign Tags to the User/s of the system. Prior to assigning a tag, check the Identity number of your tag. The Tag ID is a two- part number and is printed on your tag. Refer to the Figure 1.8



Figure 10: Tag ID number

Once you have identified your tag number you can proceed with the adding of users to the system. In the following screen (Figure 1.9) select [Add Primary User]

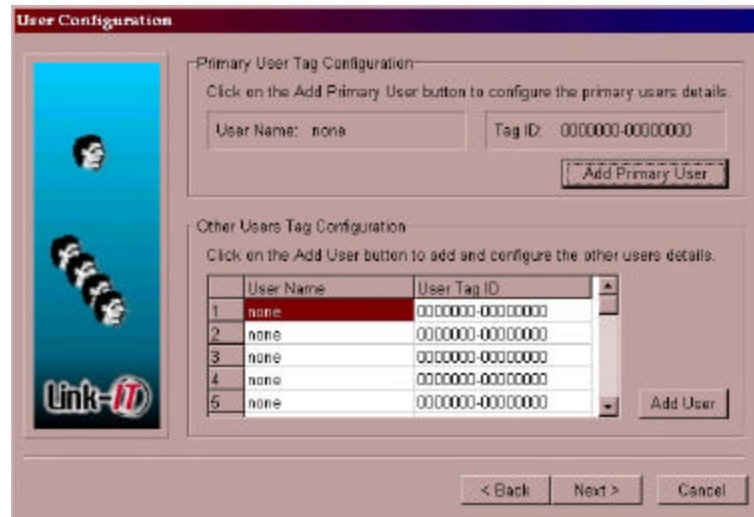


Figure 11: User Configuration

Add Primary User

Selecting Primary User will display the screen shown in the Figure below.

The first step is to type in your “User Name” example Joe Bloggs.

The next step is to assign your tag ID number to your User Name. This can be achieved in one of two ways:

1. Type your Tag Identity Number into the text box provided for this number. (This approach is NOT recommended as the relatively large identity number could easily be typed incorrectly)
2. Look for your tag identity number in the “Auto Detected Tags” list. If no tags are displayed use the [Back] command button to return to the “Hardware Configuration” screen and select the [Test] command button. This will read all the tags currently in the environment. Once the Reader has completed you can simply page forward using the [Next] command button until you return to the “User Configuration” screen. Once you find your tag in the “Auto Detected Tags” list, select this tag, by positioning the mouse cursor on the list entry and pressing the [left mouse button]. Once selected, press the [Assign Tag ID] button. The registration is only completed once the [Apply] button is pressed.

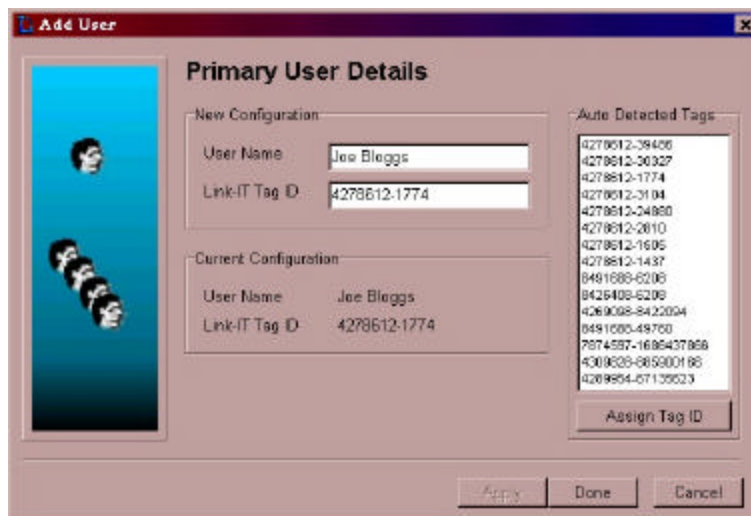


Figure 12: Primary User Details

If for any reason you do not find your tag in the “Auto Detected Tags” list.

- Check that the Reader is installed into a serial COM port.
- Check that the correct COM port is selected in the “Hardware Installation” screen
- Check that the tag is within one meter (3 feet) of the reader.
- Redo the test function in the “Hardware Installation” screen.

If you can still not identify your Tags identity, cancel the installation by pressing “Cancel” and refer the problem to the distributor from whom you purchased the product.

Add User

The “User Configuration” screen also allows for the registration of additional Users. This functionality provides for up to 10 additional Users to be registered with User rights only. The function is intended at allowing Users such as Managers, Secretaries, etc to have access to your computer. Each of these Users must have their own Link-IT tag. Additional Users are added by pressing the [Add User] button on the “User Configuration” screen. The above process must be repeated for each additional User that is to be added to the system. This will result in the following screen being displayed. See Figure below.

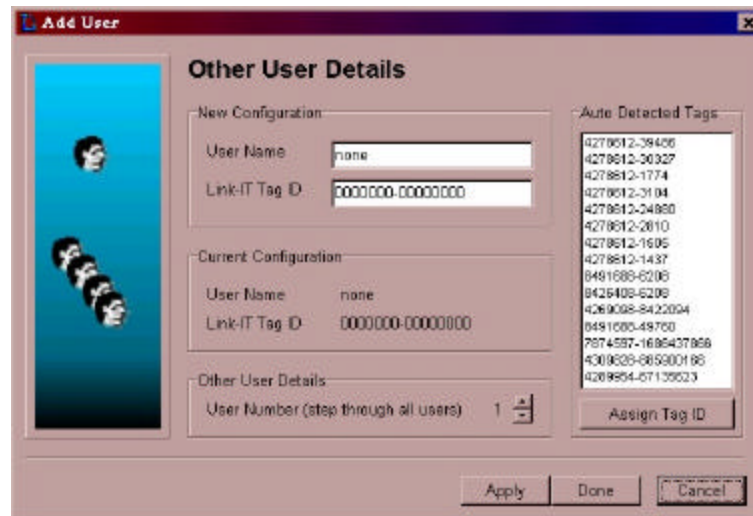


Figure 13: Other User Details

The process of registering additional Users is identical to that of registering the primary User. This process is repeated below for clarity:

The first step is to type in your “User Name”

The next step is to assign the additional tag ID number to the User Name. This can be achieved in one of two ways:

1. Type the additional Tag Identity Number into the text box provided for this number. (This approach is NOT recommended as the relatively large identity number could easily be typed incorrectly)
2. Look for the additional tag identity number in the “Auto Detected Tags” list. If no tags are displayed use the [Back] command button to return to the “Hardware Configuration” screen and select the [Test] command button. This will read all the tags currently in the environment. Once the Reader is completed you can simply page forward using the [Next] command button until you return to the “User Configuration” screen. Once you find the additional tag in the “Auto Detected Tags” list select this tag by positioning the mouse cursor on the list entry and press the [left mouse button]. Once so selected press the [Assign Tag ID] button. The registration is only completed once the [Apply] button is pressed.

Once the User configuration is complete press the [Next] button to continue the installation.

System Settings

The final step in installing the Link-IT system is setting of system settings. At this stage the installation program is aware of whether you have selected to install as an Administrator or as a User. The installation therefore displays the systems set-up screen applicable to the type of installation being done.

System Settings for Users

There is only one System Setting that a User can set namely the Screen Saver Delay time. This is the time that must elapse between the last reading of a valid User Tag and when the screen saver is activated. (Computer in disabled mode). One of the following 6 settings can be selected: 30 seconds, or 1,2,3,4, or 5 minutes.

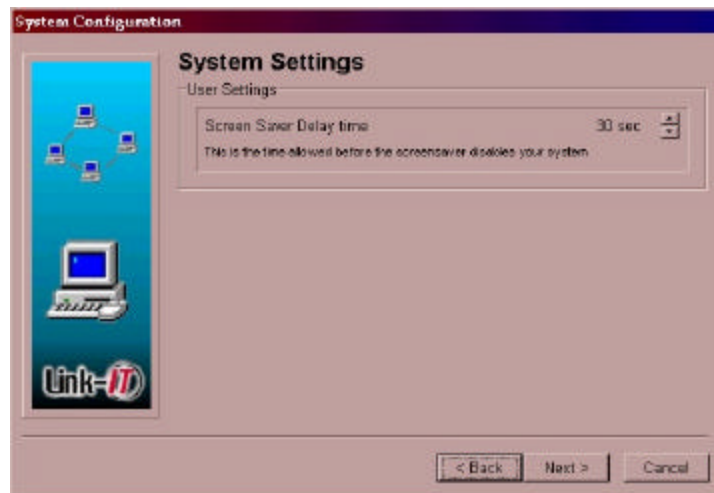


Figure 14: System Settings for Users

System Settings for Administrators

The system settings for an Administrator is exactly the same as for Users, refer to the paragraph above, and include registration of a location tag and the enabling or disabling of Function keys.



Figure 15: System Settings for Administrators

Location Tag

A location Tag is an additional tag that can be registered in the system for the purpose of testing whether a Machine is operating in its designated physical position. This location tag would normally be mounted (often secretly) in the physical environment in which the computer is to be used. The Link-IT system then checks if both the User Tag and the Location Tag can

be read. If either tag is missing the computer will be disabled. The location tag is registered in a two step procedure:

1. Select the [Enable Location Tagging] check box.
2. Select a tag from the "Tag List" and press the [Assign Tag ID] button.

Enable / Disable [Fx] keys

When starting your computer in a Windows environment the operating system can be interrupted using [Function] keys. Enabling these function keys provides a loophole through which your PC could be accessed even with the Link-IT system installed. To prevent this The Administrator can disable the function keys.

Set-up Complete

The final step in setting up your Link-IT product is to press [Next] on the "Set-up Complete" screen.

Please note that this is your last chance to review your set-up by scrolling through the various screens using [Back] and [Next] buttons. Pressing [Finish] while on the "Set-up Complete" screen will initiate the copying of files to your hard drive.



Figure 16: Set-up Complete

2 USING THE LINK-IT SYSTEM

2.1 STARTING THE LINK-IT SYSTEM

There are three ways of starting the Link-IT system namely:

1. The system will start automatically after installation.
2. The system will start automatically after power switch on.
3. If an Administrator stopped the system, it can be restarted by clicking on the Link-IT icon under the Link-IT Section in the Start Menu.

2.2 THE LINK-IT SYSTEM IN OPERATION

When the Link-IT system is in operation the Link-IT icon is  included in the Windows task Bar.

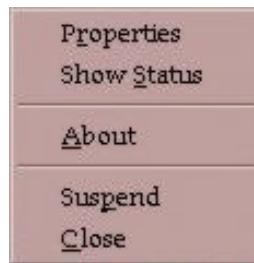


Figure 17: Menu

Positioning the computer mouse pointer over the Link-IT icon and pressing the [Right Mouse Button] will display a menu pop-up as shown in Figure 2.0 opposite.

This menu provides the User with a mechanism to view the status of the system, to view and alter system setting via the Properties, and to close the application down.

2.2.1 Viewing System Status

To view system status select the “Show Status” menu item or press [S] while the pop-up menu is being displayed. The status window shown in the Figure below will be displayed:

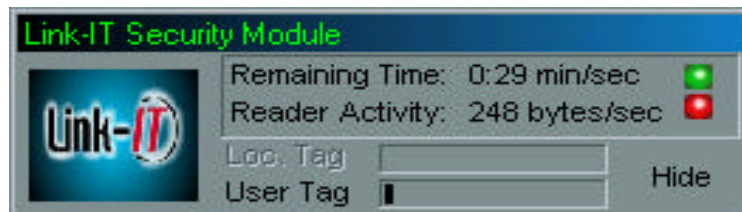


Figure 18: Status Window

The Status Window provides the User with the following information:

1. A “Green light”, when illuminated, indicates that power is being supplied to the Link-IT reader.

2. A “Red light” is illuminated each time the Link-IT reader reads a valid Tag. (A valid Tag is any Link-IT Tag which is in the read range of the Reader).
3. “Remaining Time” displays in digital form the time remaining until the Link-IT screen saver will be displayed and the system disabled.
4. “Reader Activity” provides the User with an indication as to how busy the reader is.
5. “Loc. Tag” is a bar graph showing how long the Location Tag has been missing. This bar graph is only active if the system has been set-up to include a Location Tag. Should the bar grow to full size the computer will be disabled until a valid Location tag is seen again.
6. “User Tag” is a bar graph showing how long the User Tag has been missing. Should the bar grow to full size the computer will be disabled until a valid User tag is seen again

The Status window includes a [Hide] button to close this window.

2.2.2 View or change Settings

Selecting the “Properties” menu option will result in a prompt for your password. Either the User or the Administrator passwords may be entered. If the User password is entered you will not have access to the Administration settings. The Administrator Password gives full access to all settings. Once a valid password has been entered and accepted the system will display the Properties Environment screen.

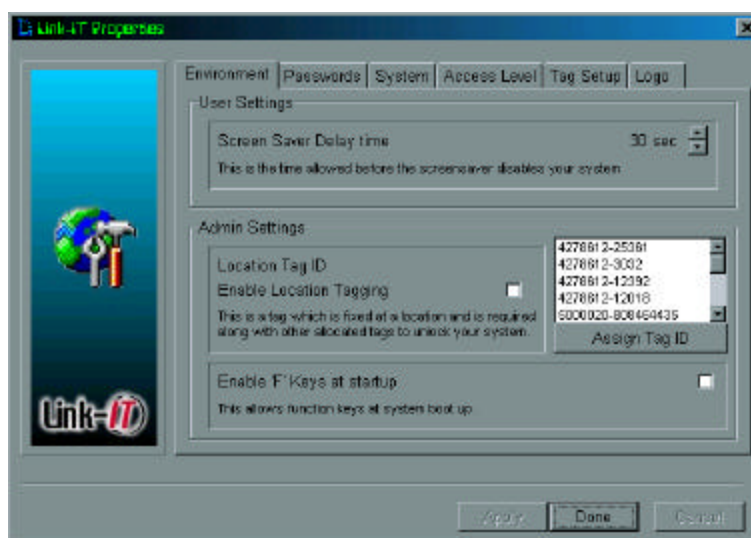
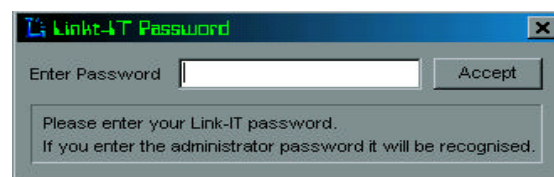


Figure 19: Password Prompt

2.2.2.1 Environment

If you have entered the “Properties” with a User password the screen shown opposite in Figure 19: Password Prompt will be displayed. This screen allows the User to modify the “Screen Saver Delay Time”. The time is altered by repeatedly pressing the up and down arrows of the spin control. The available options are 10,20,30 seconds, 1, 2, 3, 4, or 5 minutes.

To Enable or Disable the Location tag simply check the “Enable Location Tagging” check box. If you are registering a location tag for the first time or changing to a different tag you must select a tag in the list box and then assign the tag by pressing the [Assign Tag ID] button. If your location tag is not displayed in the list box you will need to refresh the data. Refer to paragraph 2.2.2.3 below.

2.2.2.2 Passwords

Select the “Passwords” tab at the top of the “Properties screen”. The screen displayed will depend on whether you are signed on as a User or an Administrator.

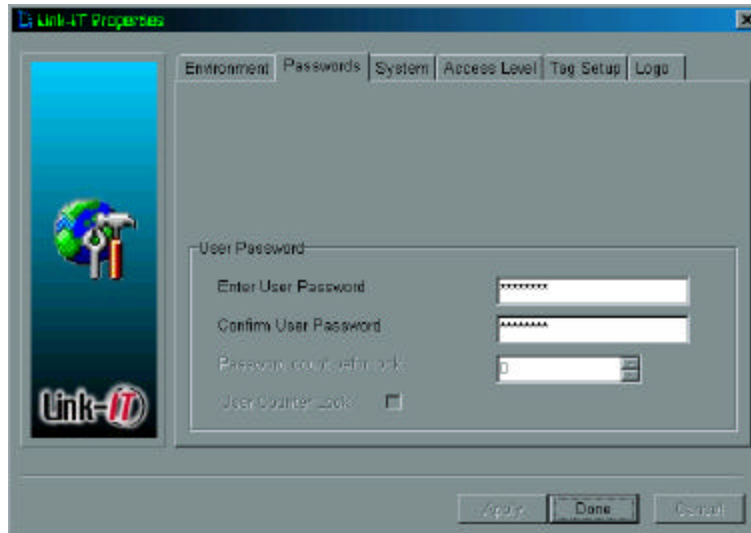


Figure 20: User Password

If you are a User then the screen shown opposite will be displayed. The User can change their password at any time by typing a new password into the “Enter User Password” text box.

Note all Password changes must be confirmed by typing the password into the “Confirm User Password” text box.

Entering the Password screen as an Administrator enables you to alter both the Administrator as well as the User passwords.

The counter lock is a facility by which the administrator can limit the amount of user password attempts will be allowed.

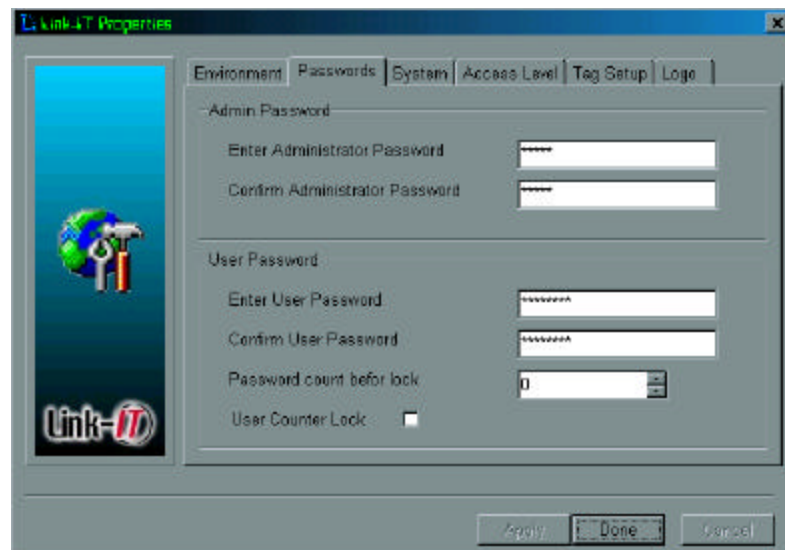


Figure 21: Administrator Password

2.2.2.3 System

Select the “System” tab at the top of the “Properties screen”. This will display the “System” screen as shown in the Figure below.

The only function that can be performed in the “System” display is the testing of the Link-IT reader. The testing of the reader does also read any tag in the environment and registers these into the available tags list.

If at any time you require to assign a tag to a User or an additional user see paragraphs 2.2.2.1 “Environment” and 2.2.2.5 “Tag Setup” it is essential that you first perform the reader test so that the system is aware of any new tags in the environment.

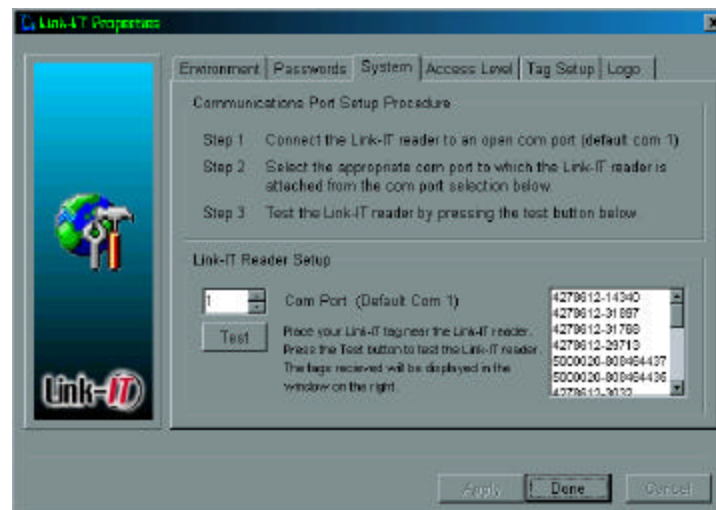


Figure 22: System Settings

2.2.2.4 Access Level

Select the “Access Level” tab at the top of the “Properties screen”. This will display the “Access Level” screen as shown in the Figure below.

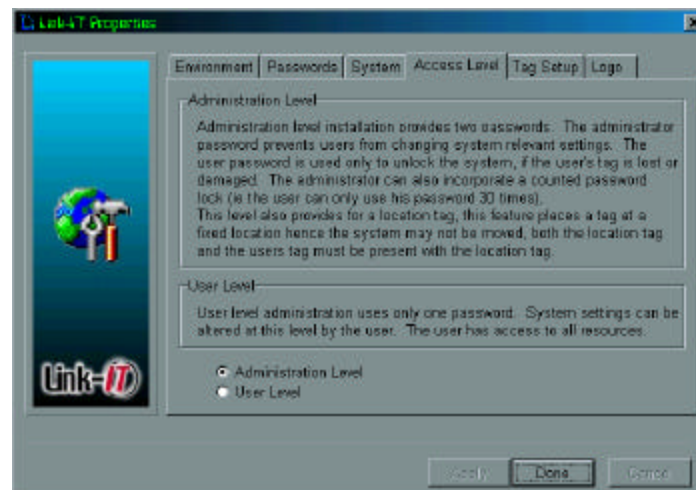


Figure 23: Access Level

The only property that can be changed in the “Access Level” screen are User or Administrator level.

The following rules apply:

1. If there has never been an Administrator then a User can change to an Administrator.
2. If there is a registered Administrator and you are signed on as a User then you cannot change to an Administrator.
3. An Administrator can make any change.

2.2.2.5 Tag Setup

Select the “Tag Setup” tab at the top of the “Properties screen”. This will display the “Tag Setup” screen as shown in the Figure below. The Tag set-up screen allows for the adding of Users to the system. Adding a Primary User replaces the existing Primary user.

For instruction on how to add users please refer to the paragraph above (Tag Setup).

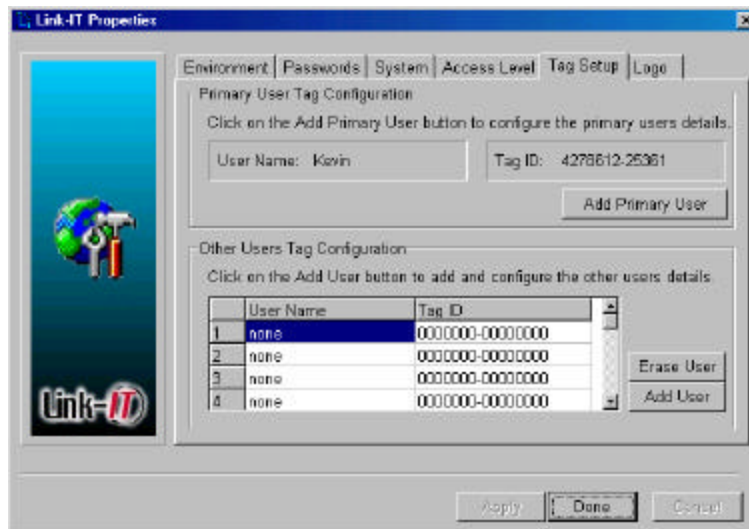


Figure 24: Tag Setup

2.2.2.6 Logo Setup

Select the “Logo” tab, this will display an option to add another picture to the Link-IT screensaver. Click on the “Use additional Logo” box then click on the “Select” button then find the selected file, the file name will be displayed along with the preview of the image selected. If you would like to see how the logo looks in screensaver mode press the “Preview” button. After selection click the “Apply” button to save settings.

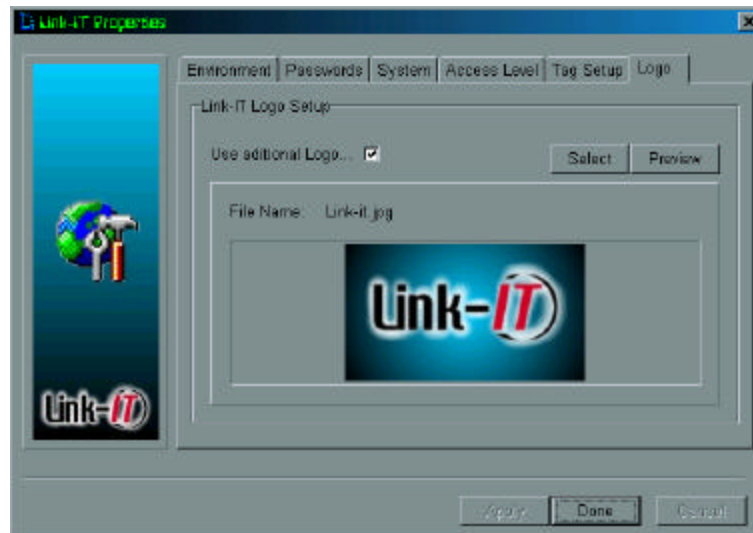


Figure 25: Logo Setup

2.2.3 Suspending the Application

Selecting the “Suspend” option the Link-IT system will release the selected comm port and the screensaver will be suspended. After selecting this option the caption for this option will change to “Resume”. Selecting the “Resume” will enable the comm port again and the screensaver will continue with normal operation. If an administrated installation is used the administrator password will be required to suspend the Link-IT system.

2.2.4 Un-Installing the Application

On the CD-ROM provided there is a Un-Install application. First close the Link-IT Security Module (refer to 2.2.5). Then double click on the Uninstall icon, this will completely remove the Link-IT system from your computer.

2.2.5 Closing the Application

Selecting the “Close” menu option will result in you being prompted to supply your password. Typing the correct password will result in the Link-IT system being shut down.

2.2.5.1 Password override

While the Link-IT system is running and the screen saver is active there are two ways to deactivate the screen saver:

1. By bringing the Tag within reading distance of the Link-IT reader
2. By password override.

To override the screen saver press any key while the screen saver is on. The system will prompt you to enter your password. Entering your password will disable the screen saver and allow you access to your computer. The override will remain active until the system is shut down OR, until the system once again sees its master tag. After either of these events the system returns to its normal operational state.

3 NOTES ON INSTALLATION

3.1 EFFECTS OF MECHANICAL SHIELDING

The Link-IT tag uses low power Radio Frequency transmissions to communicate with the Link-IT reader plugged into your computer. These transmissions can be adversely effected by the environment especially the presence of metal. The result would be loss of range on your Link-IT system. Repositioning your computer can rectify this situation. Should this approach not rectify the situation, an extension cable is available from AIT as an accessory. Please contact your supplier for more information. (Product code L-EC100)

3.2 ADDING ADDITIONAL SOFTWARE SECURITY

3.2.1 Setting Your Boot Sequence

It is important to set your boot sequence so that the system first boots from your primary hard disk to ensure that the Link-IT software will be running. This is easy to set, just follow the steps below:

NB: This sequence might not apply to your system, if your system is different and you can not find the boot sequence consult your PC users manual or contact your supplier.

- Switch off the system (Shut Down)
- Switch the system on (Power Up)
- Press the delete button "Del" (some systems use "F1", some use F2, some use Ctrl-Esc) to go to "CMOS Setup"
- Choose "Bios Features Setup"
- Choose "Boot Sequence" eg. A, C, SCSI
- Change the sequence so that your primary boot device boots first or that your primary boot device is your only boot device.
- Press "Esc", go to "Save Settings And Exit"

The system will now restart, booting from your hard disk first. For additional security you should password protect your CMOS settings.

4 ENCRYPTION ERROR

Link-IT Tags include an encryption mechanism that is checked by the Link-IT software. This mechanism is unique to every tag. The encryption mechanism protects your system from access by a fraudulent tag with the correct tag identity. Should your system detect such a tag the following message will be displayed.

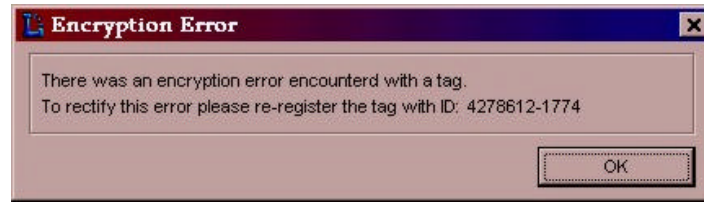


Figure 26: Encryption Error

The encryption error requests you to reregister your User Tag ID (in the Figure 4.1 above tag ID 4278612-1774 is used as an example) This is because the system can no longer decipher your tag data. If you are the authorised user you will know the password to override the system and reregister your tag.

5 POWER REQUIREMENTS OF THE LINK-IT SYSTEM

5.1 LINK-IT READER

The Link-*IT* reader derives its entire power requirement directly from the RS232 serial port.

5.2 IDENTIFICATION TAG

The Identification Tag includes a non-replaceable lithium battery. The battery is warranted for 12 months and has an expected life of 5 years.

6 HOT KEYS

6.1 “RIGHT” MOUSE BUTTON (DISPLAY ON-LINE MENU)

When the mouse is positioned over the Link-IT icon (located in the Windows task bar) the “right mouse button is used to display the Link-IT on-line menu options as shown in figure 6.1 below:

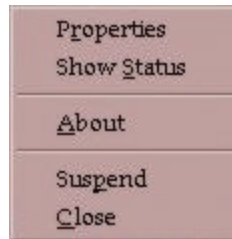


Figure 27: Hot Keys

6.2 SCREEN SAVER OVERRIDE

While the screen saver is active, pressing any key will prompt you for the override password. Typing in the correct password will override the screen saver.

7 GENERAL PROBLEMS

Please contact your administrator or visit our web site www.ait-linkit.com.

7.1 THE SCREEN SAVER WILL NOT GO AWAY

1. Click the mouse and press the any key and enter your password.
2. Try re-booting the system

Should this problem persist please contact your supplier or e-mail AIT at help@linkit.co.za.

7.2 OBTAINING ADDITIONAL TAGS

Additional tags can be purchased from your Link-IT supplier or by contacting AIT at help@linkit.co.za.

7.3 EMAIL AND INTERNET ADDRESSES

Email: help@linkit.co.za

Internet: www.ait-linkit.com

8 LICENCE

Link-IT™ Link-IT. HARDWARE AND SOFTWARE LICENSE AGREEMENT

BY INSTALLING, COPYING, OR OTHERWISE USING THE Link-IT PRODUCT HARDWARE AND OR SOFTWARE, YOU AGREE TO BE BOUND BY ALL OF THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT.

Upon your acceptance of the terms and conditions of the Licence Agreement, AIT grants you the right to use the Link-IT™ Link-IT product in the manner provided below.

All intellectual rights to the product are owned by AIT and are protected by copyright law and several patents. Therefore you must treat this product and its various components like any other copyright material, except that you may make one copy of the software for backup or archival purposes. The software may be transferred to a single hard disk provided you keep the original solely for backup or archival purposes. Except as provided you may not transfer, rent, lease, lend, copy, or modify, translate, time-share or electronically transmit or receive the software, media or documentation. Any attempt to reverse engineer the product will be deemed an infringement of the Licence agreement.

THE Link-IT™ Link-IT PRODUCT IS DISTRIBUTED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED. YOU USE THE PRODUCT AT YOUR OWN RISK. AUTOMATED IDENTIFICATION TECHNOLOGIES (PTY) LTD. WILL NOT BE LIABLE FOR ANY DATA LOSS, DAMAGES, LOSS OF PROFITS OR ANY KIND OF LOSS WHILE USING OR MISUSING THIS PRODUCT.

9 AIT OFFICES

Automated Identification Technologies Ltd. Unit 6 Amber Business Village Amber Close Tamworth Staffordshire B77 4RP United Kingdom	Automated Identification Technologies (Pty) Ltd. P.O. Box 490, Parklands, 2121 Republic of South Africa
---	--