



Net2 Access Control

Software Installation Guide

Version 1.0

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Overview:

This document will explain the basic software setup needed for a Net2 Access Control installation. It does not cover any hardware installation as this should be completed by a licensed security technician.

Computer Requirements:

A PC of the following specification is required in order to run Net2 software:

Intel[®] Pentium[®] Dual-Core 2.00GHz (or equivalent) 4GB RAM or greater Minimum 20GB free disk space 256 colours @ 1024 x 768 Serial port, USB2 or Ethernet

For optimal performance we recommend the following PC specification:

Intel[®] Core[™]2 Quad Processor (or equivalent)
8GB RAM or greater
Minimum 20GB free disk space
256 colours @ 1024 x 768
USB2 or Ethernet

Further Windows compatibility and information can be found at http://paxton.info/720.

Net2 Software Download:

The latest version of the Net2 Access Control software can be downloaded from the following link – <u>http://paxton.info/1438</u>.

Software Installation:

Once the correct version of software is downloaded, extract the contents from the zip file. Before running the installation, make sure any anti-virus and firewall software is disabled as this may affect the install.

When ready, run the **Setup.exe** file found in the **Install** folder and select the appropriate installation type.

Net2 Pro This requires a Pro key supplied when purchasing the DVD. It includes all the standard features and also a host of advanced PC based features. (Roll call, Anti-passback, etc.)

Net2 Lite This is free and will enable the basic features required for access control.

Net2 Client This is free and allows a Net2 client to be installed anywhere on a suitable TCP/IP network to access the Net2 database on the server PC.

Net2 Demo This creates a demonstration database with doors and users already on the system. Random events will simulate activity similar to a real site. You may also connect to a demonstration case for added realism.

Net2 Access Control Setup	
11	Net2 Access Control
	Welcome
Parton	Setup will install Net2 Access Control on your computer. Click Install to continue, Options to set the install directory and site name or Close to exit.
	Select install type
0 Pro	© Net2 Pro
Nett	Net2 Lite Net2 Client
	 Net2 Demo
	Net2 Access Control <u>license terms</u> .
	Version 5.2.2525.4988
	☑ I agree to the license terms and conditions
	Options Install Close

The default location for the application is C:\Program Files\Paxton Access. The application location can be changed by clicking Options next to Install and using the browse button to select a location for the application files.

Software Configuration:

Once the installation is complete you may re-enable any anti-virus and firewall software that was disabled.

From Net2 v5.04 onwards, you will be required to create and configure a new password upon initial install. Double click on the 'Net2 Access Control' icon on the desktop to launch the software. When prompted, create a password for the 'System Engineer' user.

Once a password has been configured, close down the 'Net2 Access Control' software and head to the **Start** menu and find and select the **Net2 Configuration Utility** application. The Net2 Configuration Utility software is used initially to detect and configure any Net2 Plus ACU's or Net2 Air Bridges connected to the network.



You will then be prompted with a login screen. Login with the password you have just created.

Software Configuration (Continued):

Once you have logged in to the Net2 Server Configuration Utility, under the **General** tab rename the **Site name** to the name of the site/gym and select **Apply** down the bottom.

Now select the **TCP/IP Nodes** tab up the top and select **Detect** on the right hand side to detect the Net2 Plus units sitting on the network. <u>NOTE:</u> Any ACU's connected via RS485 will not show in this list, they will show in the main Net2 software after this configuration is complete.

		1 -	1		
Name	MAC address	Type	Firmware		
00-08-06-15-50-03	00-08-06-15-5C-03	Net2 plus	Update pending]	<u>D</u> elete
00000-0020-00-00	00-00-00-20-00-03	niciz pius	op to date		
				<	
					Detect
					<u>S</u> elect All
					Select <u>N</u> one
ick 'Detect' to automatical	ly find any TCP/IP nodes o	on your network.			
ick 'Detect' to automatical Configuration IP Addres Serial number	ly find any TCP/IP nodes o s Configuration Advanc	on your network. ed			
ick 'Detect' to automatical Configuration IP Addres Serial number IP Address	ly find any TCP/IP nodes o s Configuration Advanc	on your network. ed 2952323	Pi	ng	
ick 'Detect' to automatical Configuration IP Addres Serial number IP Address Download events	ly find any TCP/IP nodes o s Configuration Advanc	on your network. ed 2952323 192.168.1.38	Pi	ng	
ick 'Detect' to automatical Configuration IP Addres Serial number IP Address Download events Firmware	ly find any TCP/IP nodes o s Configuration Advanc	on your network. ed 2952323 192.168.1.38 ⊽ 5.03	Pi	ng	
ick 'Detect' to automatical Configuration IP Addres Serial number IP Address Download events Firmware MAC address	ly find any TCP/IP nodes o s Configuration Advanc	2952323 2952323 192.168.1.38 ▼ 5.03 00.08.05.20.00	Pi	ng	
ick 'Detect' to automatical Configuration IP Addres Serial number IP Address Download events Firmware MAC address	ly find any TCP/IP nodes o s Configuration Advanc	on your network. ed 2952323 192.168.1.38 ⊽ 5.03 00-08-D6-2D-00	-83	ng Copy MAC ac	Idress to clipboard 🗎
ick 'Detect' to automatical Configuration IP Addres Serial number IP Address Download events Firmware MAC address Interface mode	ly find any TCP/IP nodes o s Configuration Advanc	on your network. ed 2952323 192.168.1.38 ▼ 5.03 00-08-D6-2D-00 ○ RS-232	-83 (• RS-485	ng Copy MAC ac	Idress to clipboard 🗎
ck 'Detect' to automatical Configuration IP Addres Gerial number P Address Download events Tirmware MAC address nterface mode Port number	ly find any TCP/IP nodes o s Configuration Advanc	on your network. ed 2952323 192.168.1.38 ⊽ 5.03 00-08-D6-2D-00 ○ RS-232 10001	-83 (* RS-485	ng Copy MAC ac	Idress to clipboard 🖭

Select the door you wish to configure and check the box next to the name - this will bind this door controller to this Net2 database. Then select the **IP Address Configuration** tab to assign the controller a **static** IP address. This is highly recommended, and to be an address outside of the DHCP pool to avoid any IP conflicts on the network. Once the IP address is configured as required, select **Apply** to set the unit with the new address. You will receive a confirmation when successful.

Configurati	ion IP Address Configuration Adv	anced
You can ge your netwo	et an IP address assigned automatical ork administrator for an IP address.	y if your network supports this capability. Otherwise you need to ask
🔿 Obtai	in an IP address automatically (use DH	CP) [
⊢⊙ Use t	the following IP address	
	New IP address	192.168.1.220 Ping
	Subnet mask (optional)	255.255.255.0
	Default gateway (optional)	192.168.1.1

Repeat this process with any other control units sitting on the network, and once finished select apply down the very bottom. You will be prompted with a message that the Net2 server that runs in the background needs to restart, just select **Yes.**

Net2 Serv	er Configuration Utility
?	You will need to restart the Net2 Server, before these changes become active. Would you like to re-start the Net2 Server now?

Once the Net2 server has been restarted, you can now go back in to the main **Net2 Access Control** software located on the desktop and log in with your newly created password.

Vet2 Logon	X
	E
Log onto Secdist-It	01
<u>U</u> ser name:	System engineer 🔹
Password:	
	OK Cancel

Configuring Doors:

You will now see a navigation tree down the left hand side of the software. Select the **Doors** tab to view the Net2 control units bound to the database. At this point, any additional control units connected via RS485 should show up in the list. Give the system up to 5 minutes per door for any additional firmware updates.

95 Flora Terrace, North Beach - Net2.	Access Cont	trol	_	_		And Disasteries	-	Number of Street
<u>File View Go</u> <u>T</u> ools <u>O</u> ptions <u>H</u> elp								
🚑 Back 👻 🛋 Forward 👻 🔀 Refre	esh 🦪 F	Print 🚷 Find us	er 🔋 🚺 Ope	n door 📄 📔 New	door 👻 🔇 Timesheet 👻			
Vet2 Access Control	Doors							
Events		Name	ACU serial	Туре	Firmware	Status	Port	Alarm
🕀 🥵 Users	1	ACU:2952323	02952323	Net2 plus	Up to date	OK	00-0B	
🕀 📔 Access levels								
🕀 🕒 Timezones								
🖃 🍯 Doors								
ACU:2952323								
Triggers and Actions								
🕀 🥗 Site graphics								
E 🕅 Reports								
Ret2 operators								

The door status will be indicated by a green tick or a red cross next to each door. A green tick indicates that the control unit is online and communicating with the server. A red cross indicates that the door is offline and will require further diagnostics to determine the fault. Generally, this could be because of firmware updating, an RS485 data line issue, an IP address issue etc.

Once all of the control units are online, you can now configure as necessary by double clicking on any of the doors. The main things to change are:

Door Names for easy identification of the doors
Door Open Time for how long you want Relay 1 to operate for
Reader Type any Paxton readers/keypads will be set up as Paxton reader/keypad.
Operating Mode for how you want the reader to operate.

ACU:2952323		
ACU serial number: 02952323		
Door name	Front Door	Apply
Door group	[none]	Cancel
Door open time	5 - seconds	Onen door
Unlock the door during	At no time	
	Only unlock the door once a user has been granted access Single Sterr operation	Identity
Unlock relay 2 during	At no time]
Reader 1 Reader 2 Alarm Eve	nts Inhuder Alam Access rights	
Reader details		
Name	Front Door (In)	
Reader type	Pakton reader	-
Keypad type	None	•
Token data format	Delauk	New format
Operating mode		
Reader operating mode	Token only -	
Timed operating modes - This al	ow for different reader operation during a selected timezone.	
During this timezone:	All day, every day	
This reader will operate as:	♦ Inacive	
Reader action - This is what will hap	pen when a valid access is granted.	
	Relay 1 opens (or door open time	

Click **Apply** to save changes.

Configuring Access Levels and Timezones:

Access Levels and Timezones will need to be configured to meet the customer's requirements. This will normally be discussed with the client before setup to cater for site specific needs (24 hour member access, standard access, staff access etc.) as this will need to be setup before the integration with **Clubware**.

The Access Level is at the heart of Net2. Each one defines the relationship between the doors and the times when a user has access through them. Timezones are used to define the time periods and are discussed later in this application note. Together they are used to control when and where users can gain access. For detailed information, please see:

AN1038 - http://www.paxton.co.uk/docs/Application%20Notes/AN1038.pdf

Select **Timezones** from the navigation tree on the left to bring up the timezone page, click **'New Timezone'** in the right-hand window and name the timezone accordingly eg. Mon – Fri 9am – 5pm. Then select the time you want the timezone to be active. Timezones can have several timeslots per day allowing for break times, evening classes, etc. The maximum number of timeslots per timezone is over 2000. As an example, see below for a Cleaners timezone.

Sunday	No Time
Monday - Friday	6am to 10am
Saturday	7am to 11am
Public Holidays	7am to 11am

Once the timezones have been configured, click **Apply** to save changes and move on to Access levels.

When deciding what access levels are required, you should determine how the system will be used by the customer in the future. A site manager will easily relate to the physical layout of the building. Example names: 1st Floor only, 1st Floor, 2nd Floor & Car Park. This makes it easy to upgrade a user from one to the other just be selecting the new level in their user record.

A personnel department may be better suited to defining access levels by user/job type. Example names: Accounts Dept, IT staff, Cleaners, etc. These will often give access through the same doors but they will have different timezones.

You can use either style or a mix of both as required. Examples of both appear in this document.

To add a new access level, click on **Access Levels** in the navigation tree and then **New access level**. You now have the option to create a new blank access level with all timezones and all readers set to 'At No Time', or you can use one of the existing access levels as a template. This is helpful if there are a large numbers of doors on a system and this new level only differs slightly from an existing one.

You will now have a list of doors with a dropdown box next to them to select the timezone that the Access level will be able to gain access. The three default timezones (All day, every day / At no time / Working hours) are already set up as defaults in the software. You can modify the Working Hours timezone if required. A basic system could be configured with these default timezones in different door combinations. **NOTE:** It is usually good practice to set Out readers to All day/every day to avoid locking people on site after work.

Enrolment of Users

'Users' refers to the people that use the access control system. Users are identified to the system by a card, token or PIN (or a combination of any of these). Once a user has been identified to the system, a decision can be made at each door whether they are permitted or denied access.

Every user that has been entered onto the system has a user record. This contains information regarding their access permissions, cards/tokens, PIN's and any other details required. The users on the system are displayed in the main window. If departments have been configured then these will also be displayed.

To set up departments please refer to -: AN1041 - Using Departments <u>http://paxton.info/851</u>

Adding users can be done in several ways:

- New User. Click the 'Users' icon on the main Toolbar, click 'Users' in the tree view or click the icon on the Welcome screen.
- Desktop reader. When a new token is shown to the reader, the Add User form is automatically displayed.
- Large groups of users can be added by importing user data. Refer to -: AN1011 Importing and exporting Net2 user data <u>http://paxton.info/55</u>

🔱 Add user				×
 Please select the type of to 	oken which you wish to issue			
<u>I</u> oken type	Default			✓ New type
First name			Get picture	
Middle name			Capture Picture	
Surname				
Department	(none)	~		
Access level	No access	~		
Telephone				
Fax			Email	
Valid from	18/02/2020	•	Position	
Expires end	18/02/2020	•	Start date	
Address 1			Car registration	
Address 2			Notes	^
Town				
County				
Post code				< >
Home telephone			Personnel number	
Home Fax			PIN	Auto PIN
Mobile			Token number	
Card template		\sim	Token type	🛹 Unspecified 🛛 🗸
				Add fingerprints
When I click 'Add user' When I click 'Add user'	reload the token type default retain the previous record va	t values dues		
				Close Add user

You can enter as much information as you like through this form. The users name must always be entered. When completed, click 'Add user.' This will save the record and clear the fields for the next user's details to be entered. Clicking 'Close' will close the form and go to the last user record entered.

Net2 Software Upgrade

Before performing a software upgrade, it is highly recommended to create a copy of the current Net2 Database (see 'Net2 Database Backup'), and to also create a Windows restore point. This is recommended in the event you will need to roll back or restore the system to a previous known working point. For further information on creating a Windows restore point, please see <u>https://support.microsoft.com/en-us/help/17127</u>.

Net2 Database Backup:

It is very important to back up the Net2 databases on a regular basis. Net2 has its own in-built procedures that creates backups automatically on the local drive of the server machine. The screen below shows a regular backup cycle of both the System and Events databases to C:\Net2 Access Control\Backup.

If a Database Restore is required, it is advisable that both the System and Events files are both restored as a pair from the same day.

Wet2 Server Configuration Utility					×
General Database Wiegand Dial-up node	s TCP/IP n	odes Net2Air Bridge Net2 Anywhere HT	ML Reports Features		•••
Database				Contra construction database	
Net2 server service · Running			Create copy	Lieale a copy or your database	,
SQL server service - Running			Import copy	Import a copied database (This delete all of the current data)	wit
Restart services			New database	Create a new blank database	
Backups					_
Database Backup date	Size	Filename		Server name	
Events Database 2010-12-15 12:46.12 System Database 2010-12-15 12:46.12 System Database 2010-12-15 12:46.03 Events Database 2010-12-13 08:31:05 System Database 2010-12-13 08:31:05 System Database 2010-12-13 08:31:04 Events Database 2010-12-10 08:13:17 Events Database 2010-12-10 08:13:17 Events Database 2010-12-09 08:42:00 System Database 2010-12-09 08:42:00	1,76 MB 7,85 MB 1,76 MB 7,85 MB 1,76 MB 7,85 MB 1,76 MB 7,89 MB 1,76 MB 7,89 MB	CNet2 Access ControNBackupWet22Vet CNet2 Access ControNBackupWet2Ever CNet2 Access ControNBackupWet2Ever CNet2 Access ControNBackupWet2Ever CNet2 Access ControNBackupWet2Ever	nternet/25 vents_Full/BBackup_201012101248 2_Full/BBackup_201012151246.BAK nts/Net2E vents_Full/BBackup_201012140841 t2_Full/BBackup_201012130831.BAK nts/Net2E vents_Full/BBackup_201012130831 t2_Full/BBackup_201012130831.BAK nts/Net2E vents_Full/BBackup_201012030841 t2_Full/BBackup_201012030841.BAK	5.64N GALVANINNE GALVANINNE I.BAK GALVANINNE I.BAK GALVANINNE BBAK GALVANINNE I.BAK GALVANINNE I.BAK GALVANINNE GALVANINNE	12 12 12 12 12 12 12 12 12 12
Restore					- I I
			<u>с ок</u>	Cancel Apply	

It is recommended that a further backup of this folder is made to another location on the network or other media. The Windows Backup Utility is a good application to use and should be run on a regular basis.

For details on how to use the Backup Utility see the Windows help pages. These can be found through Start/Help & Support. Type Backup into the search field for details how to use the utility.

For further information please see: www.microsoft.com for the relevant operating system compatibility.

ACU Reset - No OK LED flashing :

The ACU has no factory reset condition as it does not contain any fixed settings. The unit does have an operating program (firmware) that controls its functions and can be confirmed as running by means of the flashing OK LED. If the OK LED is flashing steadily, then there should be no reason to reset the unit. If the OK LED is not flashing, you need to clear the unit so that it can receive a firmware download from the PC. Any other ACU's without OK LED's must be taken off the line or powered down. 1. Stop Net2 Server (Net2 server icon - Bottom right of screen - Right mouse click, Select Stop the Net2 Server).

2. Power down the Net2 ACU.

- 3. Insert a link wire between the Orange and Mauve terminals on reader 2 port.
- 4. Power up the ACU. The OK LED flashes very quickly.
- 5. With the unit still powered, remove the link.

6. Go to the PC and Start the Net2 Server and go into the Doors screen. Click on the Detect button. This should look for the ACU and then download its firmware (This may take up to 5 minutes). - The OK LED should now be flashing with a steady heartbeat. This procedure must only be done for one ACU at a time.

NOTE: If this unit is using the TCP/IP interface, any fixed IP settings will be retained. If the unit is in DHCP mode it will need to be detected at each stage using the Net2 Server Config Utility as a new address may be issued by the IP server, each time the PCB resets.

Technical Support:

Security Distributors Australia Technical Support role is limited to the installation and configuration support of the Paxton Net2 Access Control system which includes both Paxton hardware and software. Security Distributors will not be responsible for the configuration of customer's networks, personal computers or 3rd party software.



Security Distributors Australia

- A: Unit 1, 31 Ledgar Road Balcatta, WA 6021
- P: 1300 882 101 Available Monday to Friday 09:30 -19:00AEST
- W: http://www.securitydistributors.com.au
- E: <u>support@securitydistributors.com.au</u>

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