1 What is the Norpass Virtual System?

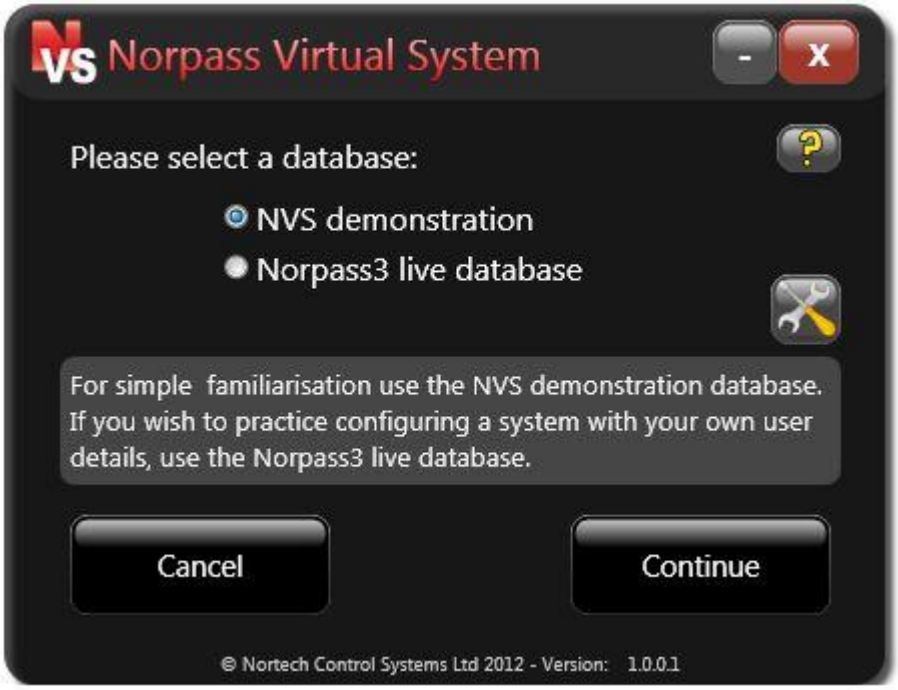
The Norpass Virtual System (NVS) is a Windows based PC application that simulates the behaviour of Norpass access control units. This enables you to experiment with or demonstrate Norpass3 (Nortech's Access Control Software), without the need to connect to physical access controllers, readers or locking devices.

The NVS can be used to simulate physical controllers in the following scenarios:

- You are unfamiliar with Norpass3 and would like to try it out
- You are an installer fitting Norpass and need to familiarise yourself with the software before carrying out a system installation
- You want to demonstrate Norpass3 to potential customers without the need to carry physical controllers
- You need to set up and test a system configuration on a different computer to that on which Norpass3 will ultimately be installed
- You wish to configure a 'real' system before you install the controllers

2 Selecting a database

When you run the NVS application for the first time, you will be asked to select either the 'NVS demonstration database' or the 'Norpass3 live database':



2.1 Selecting NVS demonstration database

If you select this option, NVS will start/restart Norpass3 to temporarily switch to the demonstration database supplied with NVS.

Note: When you close NVS, Norpass3 will be reset to use its original database ensuring experimentation with NVS and Norpass3 does not affect the live database.

You should use this option in the following scenarios:

- When you wish to see a working Norpass3 system communicating with two *Virtual System* controllers (ten cards) for experimentation and demonstration without the need to carry out Norpass3 setup
- When your live Norpass3 database is blank and has no useful data for experimentation
- When you wish to practice adding/deleting cards and controllers to/from the *Virtual System* but want to avoid the risk of modifying your live Norpass3 database

Note: If you add cards or controllers to or delete them from the demonstration database, you will need to re-install the NVS application to return the database to its original state.

2.2 Selecting Norpass3 live database

If you select this option, both Norpass3 and NVS will use your current Norpass3 database. Any changes you make to system settings, controllers and cards while experimenting will affect your live Norpass3 database.

You should use this option in the following scenarios:

- When you wish to practice adding controllers to Norpass3 from scratch and are not concerned that your live Norpass3 database will be affected
- When setting up and testing a system configuration on a different computer to that on which Norpass3 will ultimately be installed
- When configuring a 'real' system before the controllers have been installed
- When you want to add a *Virtual System* controller to a live system with physical controllers

Note: By default, NVS will be set up to communicate with Norpass3 using TCP protocol over port 12001. TCP is the protocol used by Norpass3 to communicate with controllers over an Ethernet network. If another device on the network is using port 12001 for communication, you can avoid a conflict by changing the port number.

Click the 'Advanced Settings' button  to open the 'Advanced Setting' window and change the port number value to an unused port number. Remember that you must also configure the comm's port in Norpass3 to the same value (see Section 3).

Ensure that you keep the protocol setting as TCP. The UDP setting is for future use and is not compatible with the current version of Norpass3.

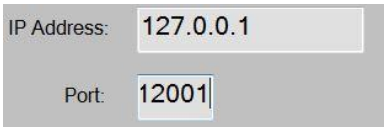
3 Adding a controller to your NVS

If you are using the NVS demonstration database, two virtual controllers will be created automatically and Norpass3 will be configured with corresponding controllers together with ten cards.

If however, you are using your current Norpass3 live database or are using the NVS demonstration database, but wish to add additional *Virtual Controllers*, you will need to use either the Norpass3 Wizard or the Norpass3 user interface, which may need reference to the Norpass3 Online Help or User Guide.

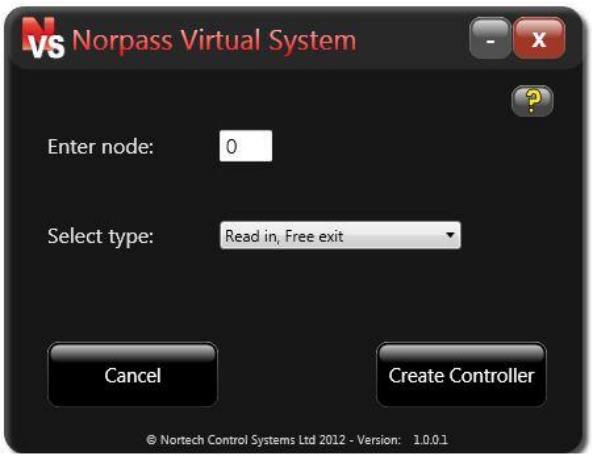
If you are configuring the system from scratch, a TCP port must be configured within Norpass3, as Norpass3 communicates with *Virtual Controllers* just as it would with physical TCP type controllers.

When setting up a communication port using the Norpass3 Wizard or manual settings, use the port details shown on the right unless you have changed the port number in section 2, in which case you must use the new port number here.



Up to 32 *Virtual Controllers* can be added to your Norpass3 system.

To start a new *Virtual Controller* from within NVS, enter a node number (0-31) that matches a controller on your Norpass3 system. For the NVS demonstration database, node 0 and node 1 are pre-configured.



Next choose the type of set-up for the *Virtual Door*:

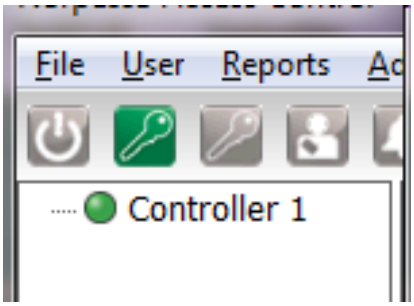
3.1 Read In, Read Out

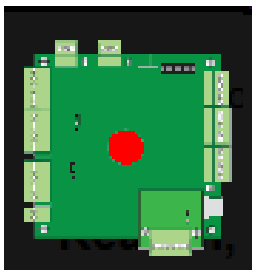
This option simulates a *Virtual Door* with two readers; one for entry and one for exit.

3.2 Read In, Free Exit

This option simulates a *Virtual Door* with a single reader for entry and a request to exist button for exit.

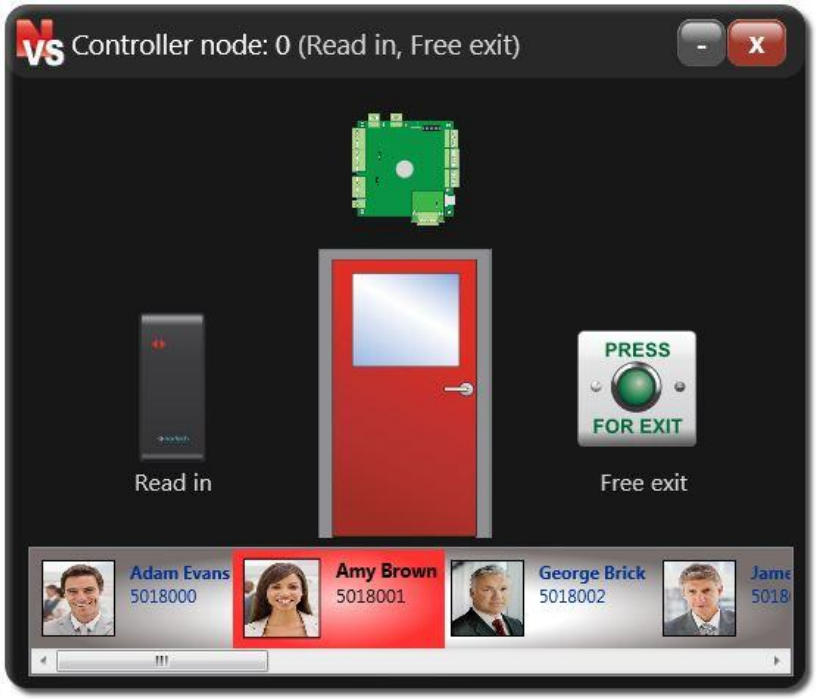
Once the *Virtual Controller* has been created and a controller with a matching node number exists on your Norpass3 system, Norpass3 should show the controller as online (green LED), and the communication LED on the *Virtual Controller* will start to blink:





Individual *Virtual Controller* windows can be minimised to keep the screen from becoming congested when there are many *Virtual Controller*s.

NVS features

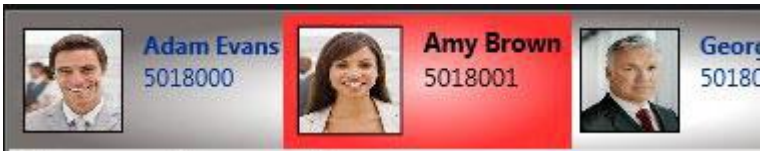


3.3 Request to Exit

Click on the 'Press For Exit' button. The door will unlock for the configured strike time and the event will be reported to Norpass3.

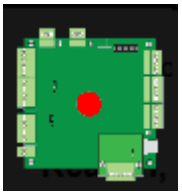
3.4 Card Access

Click on a card from the list at the bottom of the window to select it (selected card is displayed with red background) and then click a reader. If the chosen card has its access level set to 'All Doors, All Day', the door will unlock for the configured strike time and the event will be reported to Norpass3. If the card has its access level access level is set to 'No Access', the door will not unlock and the relevant event will be reported to Norpass3.



3.5 Communication LED

Each time that Norpass3 communicates with a Virtual controller, the communication LED will flash red.



4 Norpass3 features supported by NVS

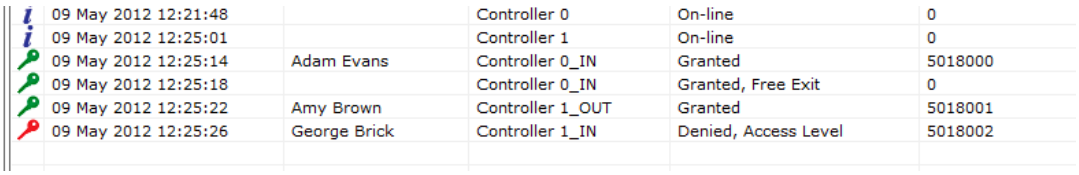
4.1 Door Control

The following door control features are supported in *Virtual Controllers* and can therefore be triggered from within Norpass3:

- door one pass
- unlock door
- door normal
- open all doors
- all doors normal

4.2 Event Log

When online/offline or door related events are reported by a *Virtual Controller*, the relevant events will appear in the Norpass3 live events log.



	09 May 2012 12:21:48		Controller 0	On-line	0
	09 May 2012 12:25:01		Controller 1	On-line	0
	09 May 2012 12:25:14	Adam Evans	Controller 0_IN	Granted	5018000
	09 May 2012 12:25:18		Controller 0_IN	Granted, Free Exit	0
	09 May 2012 12:25:22	Amy Brown	Controller 1_OUT	Granted	5018001
	09 May 2012 12:25:26	George Brick	Controller 1_IN	Denied, Access Level	5018002

4.3 Card Management

New cards added, edited or deleted from within Norpass3 will appear on your *Virtual Controller*.

Note: Currently, the only access levels supported by NVS are ‘All Doors, All Day’ and ‘No Access’.

4.4 Controller Configuration

Controllers can be edited, added or deleted from within Norpass3. New controllers can then be created *virtually* within NVS. The strike time can also be configured from within Norpass3, which is supported by NVS.

Note: Controller and door names, local door alarms, anti-passback and buddy mode are not currently supported within NVS.

4.5 Reports, Roll Call and Count Groups

All door event related data generated by *Virtual Controllers* can be used to generate reports and for viewing live Roll Call and Count Group location information.