VIDEX®

INTRODUCTION
This application note explains how to connect more than 2 doors and setup as 'Mantrap' with EWS/EWSi controllers using the PROS software.

HARDWARE REQUIREMENTS
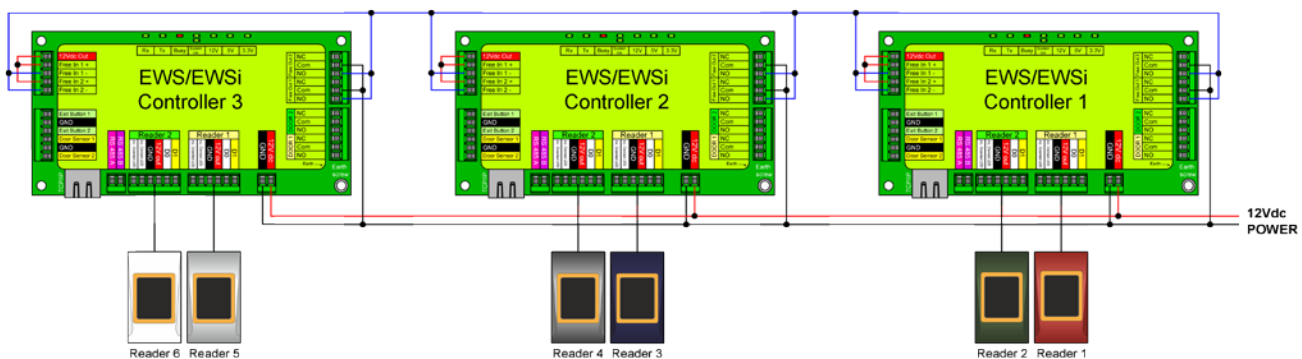EWS or EWSi access controller

SOFTWARE & FIRMWARE REQUIREMENTS
PROS ver 2.1.2 *(or later)*
EWS firmware ver 2.41 *(or later)*

MANTRAP WIRING CONFIGURATION
Connect the EWS/EWSi controllers for multi door 'Mantrap' as shown in **Fig.1** below.

Fig.1

SOFTWARE CONFIGURATION
After the EWS/EWSi controllers have been connected correctly *(refer to Fig.1)* and the PROS software installed on the PC follow the setup steps below:

- Highlight and double click on the Users icon from the drop down list in the bottom left display panel to open the 'Users count' window.
- Click on the 'select all' button.
- Select the 'Output control' tab.
- Check the 'Free Output 2' box for each reader on each EWS/EWSi controller to setup all users to activate 'Free Output 2', as shown in **Fig.2**. Click on the 'save changes' button and exit the window.
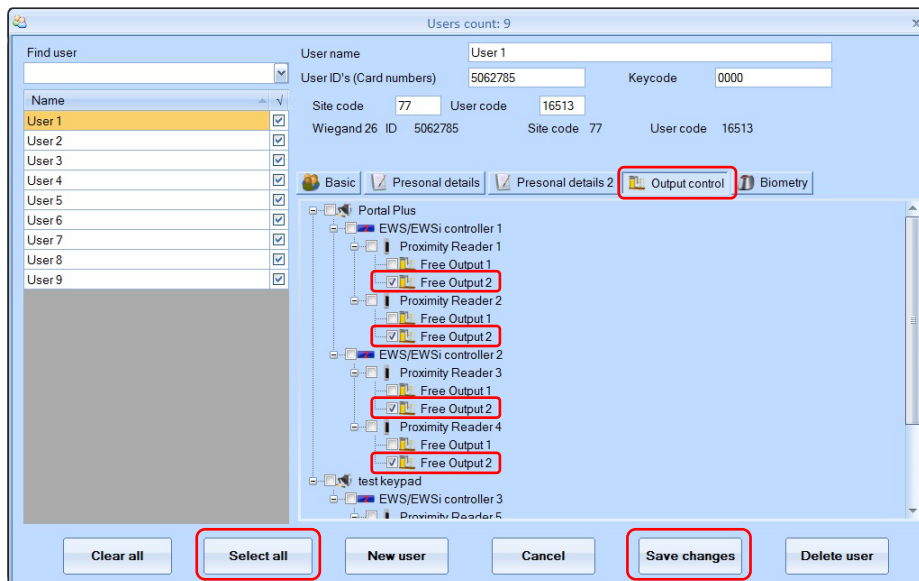
Fig.2

- Highlight and then right click on 'Free Output 1' on the first EWS/EWSi controller 1 and select 'Properties' to open the outputs window.
- Select the 'Auxillaries' tab.
- Check and enable the door sensor 1 and 2 boxes to setup 'Free output 1' to follow Door senor 1 and Door sensor 2, as shown in **Fig.3**. Click on the 'save & exit' button and exit the window.
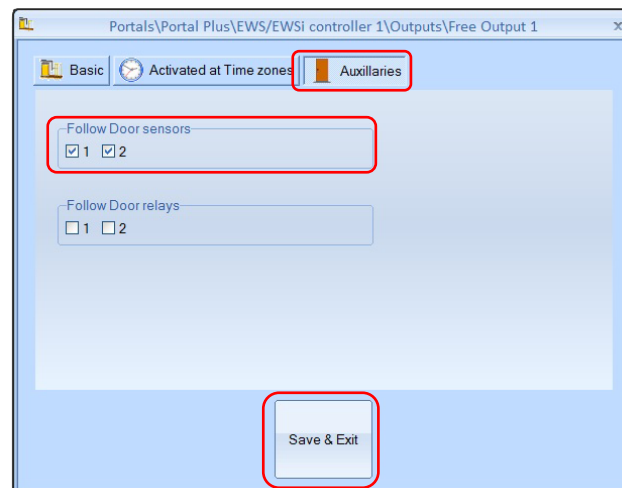

Fig.3

- Highlight and then right click on 'Door 1' *(in this example Main Front Door)* on the first EWS/EWSi controller 1 and select 'Properties' to open Door 1 properties window.
- Select the 'Auxillaries' tab.
- Check and enable inputs 1 and 2 boxes in order to disable Door 1 when 'Free Input 1' and 'Free Input 2' is triggered, as shown in **Fig.4**. Click on the 'save & exit' button and exit the window.
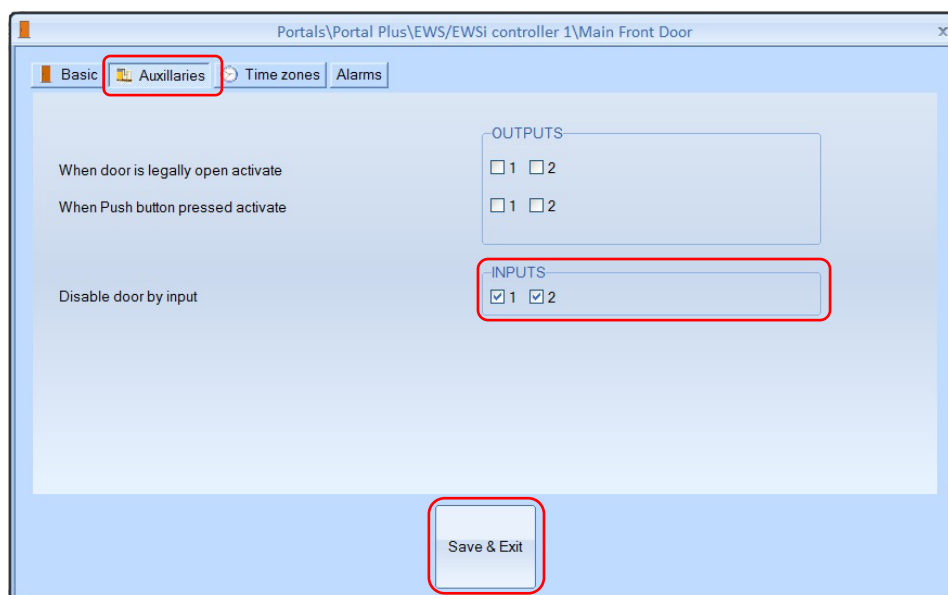
Fig.4

- Highlight and then right click on 'Free Output 2' on the first EWS/EWSi controller 1 and select 'Properties' to open the outputs window.
- Select the 'Basic' tab.
- Check and enable the 'Free Output 2' box. Set the 'ON time' for the 'Free Output 2' to be equal or larger than the 'Lock Release Time' of the doors *(ON time = Lock Release Time + 1 second is recommended)* in this example it is set for 5 seconds, as shown in **Fig.5**. Click on the 'save & exit' button and exit the window.
- Highlight and then right click on 'Door 1' *(in this example Main Front Door)* on the first EWS/EWSi controller 1 and select 'Properties' to open Door 1 properties window.
- Select the 'Basic' tab.
- Set the 'Lock Release Time' for 4 seconds, as shown in **Fig.6**. Click on the 'save & exit' button and exit the window.
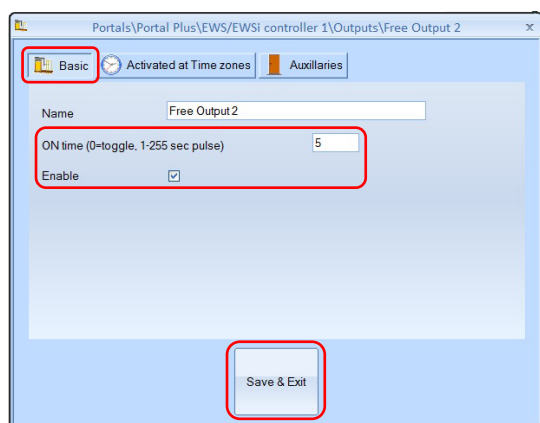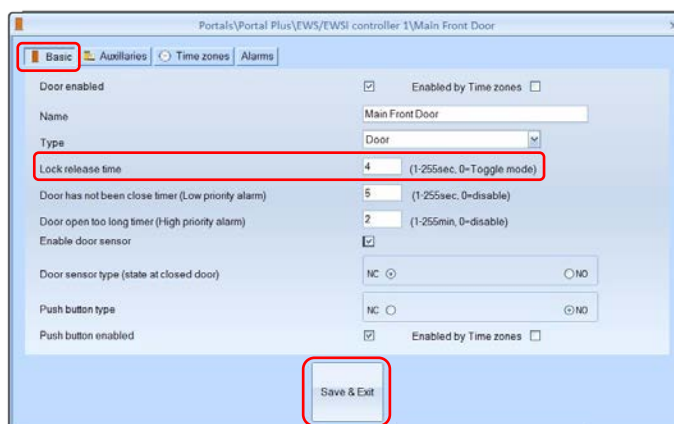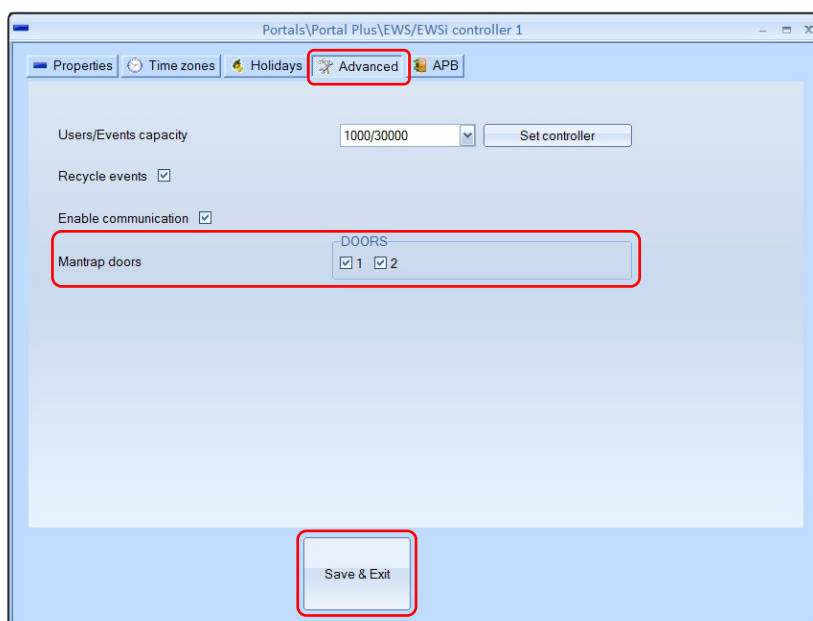

Fig.5

Fig.6

- Highlight EWS/EWSi controller 1 from the drop down list then right click and select 'Properties' to open the properties window.
- Select the 'Advanced' tab.
- Check and enable the 'Mantrap doors' boxes for doors 1 and 2, as shown in **Fig.7**. Click on the 'save & exit' button and exit the window.

Fig.7

- Repeat these same steps for the other EWS/EWSi controllers on the system that require the 'Mantrap' facility.

OPERATION

When a user presents a card on any of the readers, access will be granted, the door will open and 'Free Output 2' will be activated. As 'Free output 2' is wired directly to Free Inputs 1 and 2 on all EWS/EWSi controllers all the doors will be disabled *(since the all doors are set to be disabled by any Input).* When the system is in this state if a card is presented on any reader then nothing will happen since the doors are disabled. After the door release time has elapsed, the door will close and since 'Free Output 1' is set to follow the state of any door sensor, this means that when the door sensor goes closed *(i.e. the door itself is closed)* then 'Free Output 1' will be activated and that output will enable all the doors again.