actionair

ACTIONPAC LNS4
USER OPERATING GUIDE

Issue 1 – Feb 18

Index by page number

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FIRST FLOOR   GROUND FLOOR

This is the groups screen on the graphical user interface (GUI). In this example you can see that there are two groups of dampers, one ground floor and one first floor.
The first floor icon indicates that all dampers are open and healthy and the ground floor icon has no open or closed indication, but indicates that dampers are healthy. This is because on the ground floor there is a mixture of dampers, some are failsafe closed and some are balanced. In the event of a fault the group's icon will turn red.
The computer symbol shown in the ground floor icon indicates that one or more dampers are under the control of a building automation system (BAS).

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp | Description

The 50 most recent events are logged in the Event Log and system logging active is indicated by the disc in bottom right hand corner of the GUI. After 51 or more events they are logged to history on the Desktop

Engine Running   1   Log On   Desktop

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FIRST FLOOR

SFDI 01
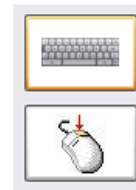
To view a particular group, either double click on the group within the groups pane or select tab "Group" and then select the group that you want to view from the drop down menu at top of pane.

Select damper logs to view a fault

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp	Description

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Engine Running | 1 | Log On | Desktop

FIRST FLOOR

SFDI 01

*Select Log On and default password is "000", which can be changed, if required, see page 13. **Please Note:** If a user is given access to the system they must be a competent person who understands the airflow implications of closing a damper, a group or groups. When finished, the user must remember to Log Off If the user changes the state of a damper(s) they will remain in that state when they Log Off*
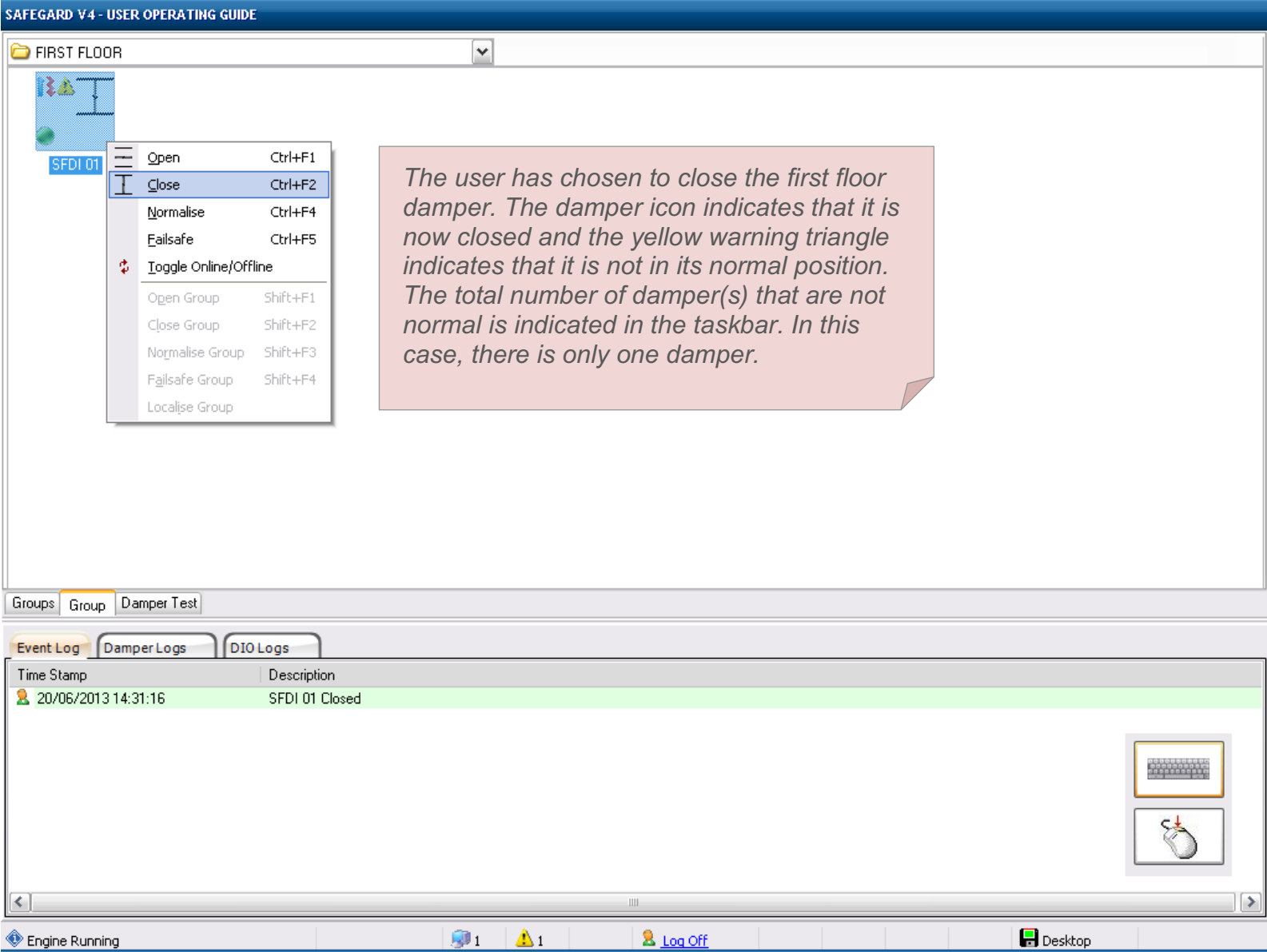
Password

0	0	0
1	1	1
2	2	2

OK   Cancel

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp	Description

Engine Running   1   Log On   Desktop

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The user has chosen to close the first floor damper. The damper icon indicates that it is now closed and the yellow warning triangle indicates that it is not in its normal position. The total number of damper(s) that are not normal is indicated in the taskbar. In this case, there is only one damper.

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FIRST FLOOR

SFDI 01

If wired radially and the network cable is cut or power to the damper(s) is lost then "Missing" will be indicated in the event log and damper log , the damper(s) will attempt to failsafe and their icon LED will change to red at the group screen with a '?' shown on the damper icon.

If wired in a loop and the network cable is broken the damper(s) still communicate because the system now sees two radial network cables. In this case there will be no indication on the system until a second break occurs.

If there is a loss of power to the damper(s) they will also attempt to failsafe and their icon LED(s) will change to red at the group screen with a '?' shown on the damper icon.

If there is a loss of power to the panel and it is reinstated before undergoing a full controlled shutdown then a UPS-CONF screen will appear. The user is required to simply close this screen at their convenience.

Groups | Group | Damper Test

Event Log | Damper Logs 1 | DIO Logs

Fault Log 1 | Aux Input Log

Damper	Time Stamp	Group	Location	Description
SFDI 01	20/06/2013 14:32:16	FIRST FLOOR	FIRST FLOOR RECEPTION	Missing

Engine Running   1   ⚠ 1   Log Off   Desktop

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FIRST FLOOR

SFDI 01

The damper is now under the influence of an environmental input which can be seen from the green square within the damper icon. This is typically used for occupancy. One IO event is now active, one input, which can be viewed in the DIO logs.   In the input log it shows that input 1 is active, its description (alias) and cable tags references.

Similarly, by selecting the output log you can see when an output(s) is active, its description (alias) and cable tag references.

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Fault Log | Input Log | Output Log

DIO	Input	Time Stamp	Class	Thread	Alias	Cable Tag
DI804 01	1	20/06/2013 14:32:54	Environmental	0	OCCUPANCY CLOSE FIRST FLO...	201 + 202

Engine Running   1   1   Log Off   1   Desktop

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FIRST FLOOR

SFDI 01

The damper is now under the influence of a fire alarm input which can be seen from the red square within the damper icon. Two IO events are now active, two inputs, which can be viewed in the DIO logs.   In the input log it shows that inputs 1 & 2 are active, their descriptions (alias) and cable tags references.

Similarly, by selecting the output log you can see when an output(s) is active, its description (alias) and cable tag references.

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs 2

Fault Log | Input Log 2 | Output Log

DIO	Input	Time Stamp	Class	Thread	Alias	Cable Tag
DI804 01	1	20/06/2013 14:32:54	Environmental	0	OCCUPANCY CLOSE FIRST FLO...	201 + 202
DI804 01	2	20/06/2013 14:33:23	Fire Alarm	0	FIRE CLOSE FIRST FLOOR	203 + 204

Engine Running | 1 | 1 | Log Off | 1 | 1 | Desktop

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The damper is now under the influence of a firefighter override input which can be seen from the yellow square within the damper icon. Three inputs are now active, which can be viewed in the DIO logs.   In the input log it shows that inputs 1, 2 & 3 are active, their descriptions (alias) and cable tags references

Should one of the dampers fail to reach one of its end positions it will attempt to failsafe and indicate a feedback failure in the event log and damper log and its LED will change to red in the damper icon.

FIRST FLOOR

SFDI 01

Channel: Channel 02
Location: FIRST FLOOR RECEPTION
Type: Smoke-Fire Damper
Make: ACTIONAIR
Normal: Open
Failsafe: Closed
Mode: Auto
Drive times: 90 s; 45 s

Select a damper to view its details

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Fault Log | Aux Input Log

Damper	Time Stamp	Group	Location	Description

Engine Running   1   Log Off   Desktop

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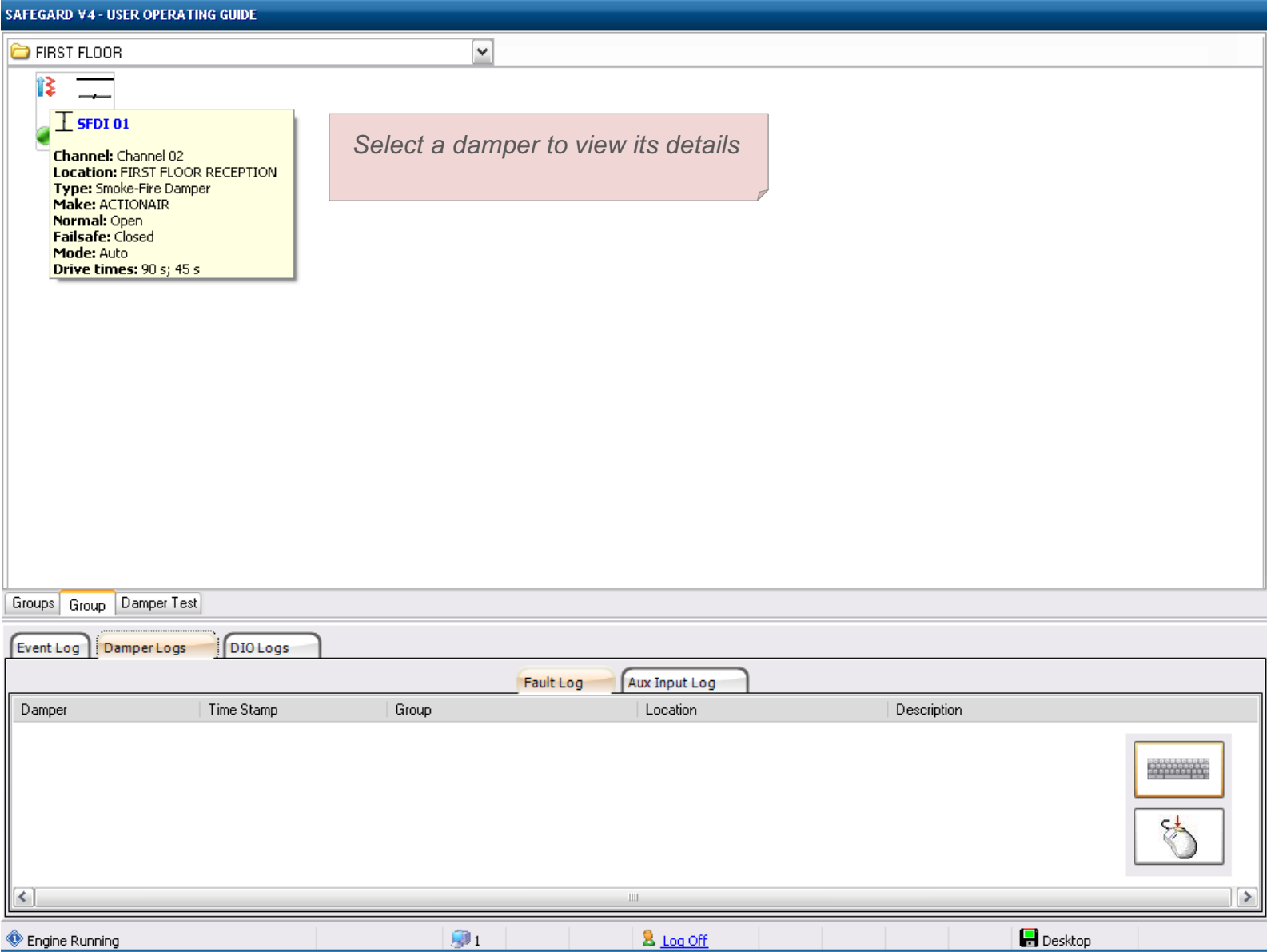
FIRST FLOOR   GROUND FLOOR

Open Groups	Shift+Ctrl+F1
Close Groups	Shift+Ctrl+F2
Normalise Groups	Shift+Ctrl+F3
Failsafe Groups	Shift+Ctrl+F4
About	
Show Service Information...	
Dump Event Log	
Change Password...	

Right click on groups pane to open, close, normalize or failsafe all groups. Alternatively use Shift + Ctrl + F keys as shown.
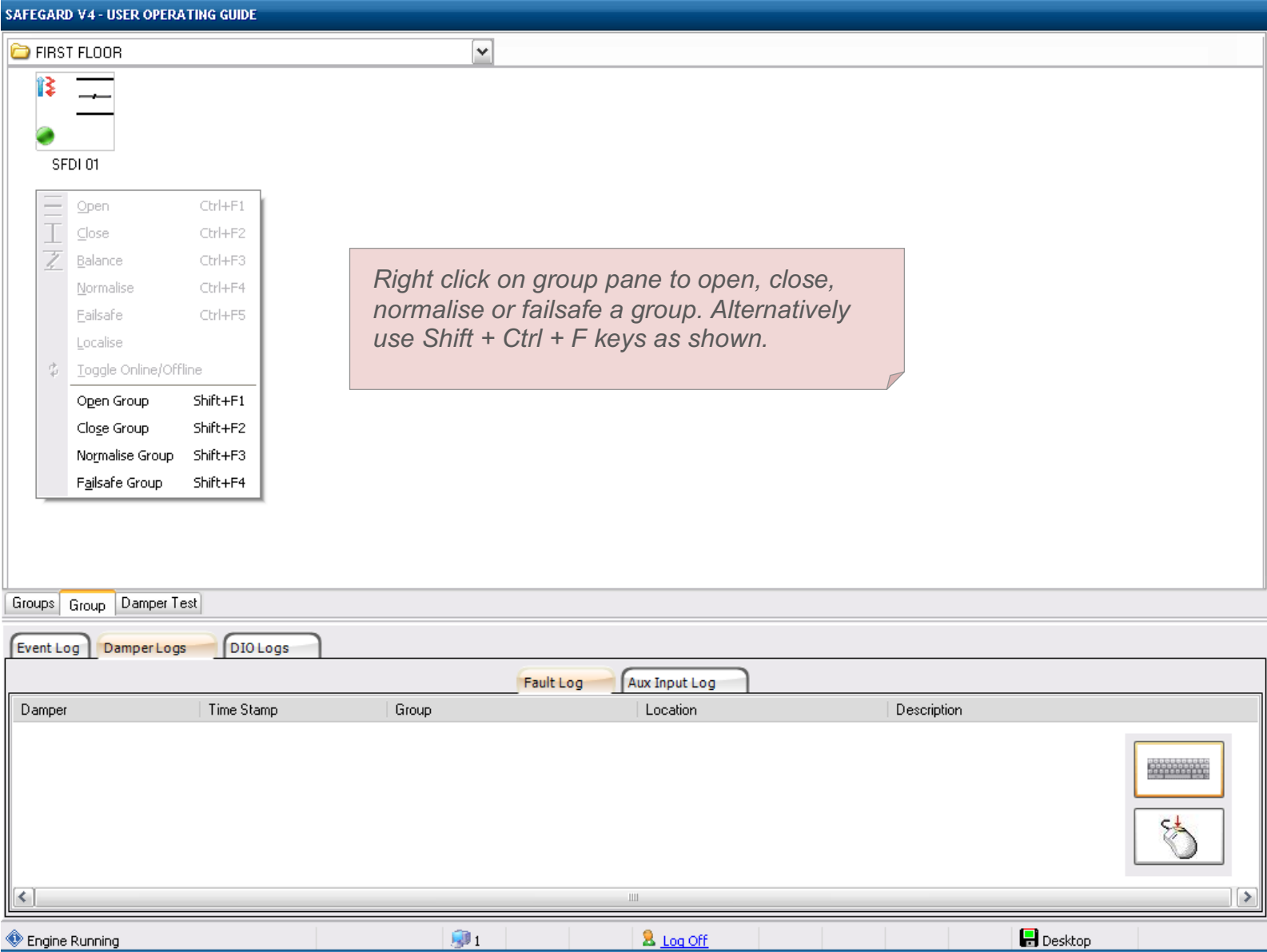
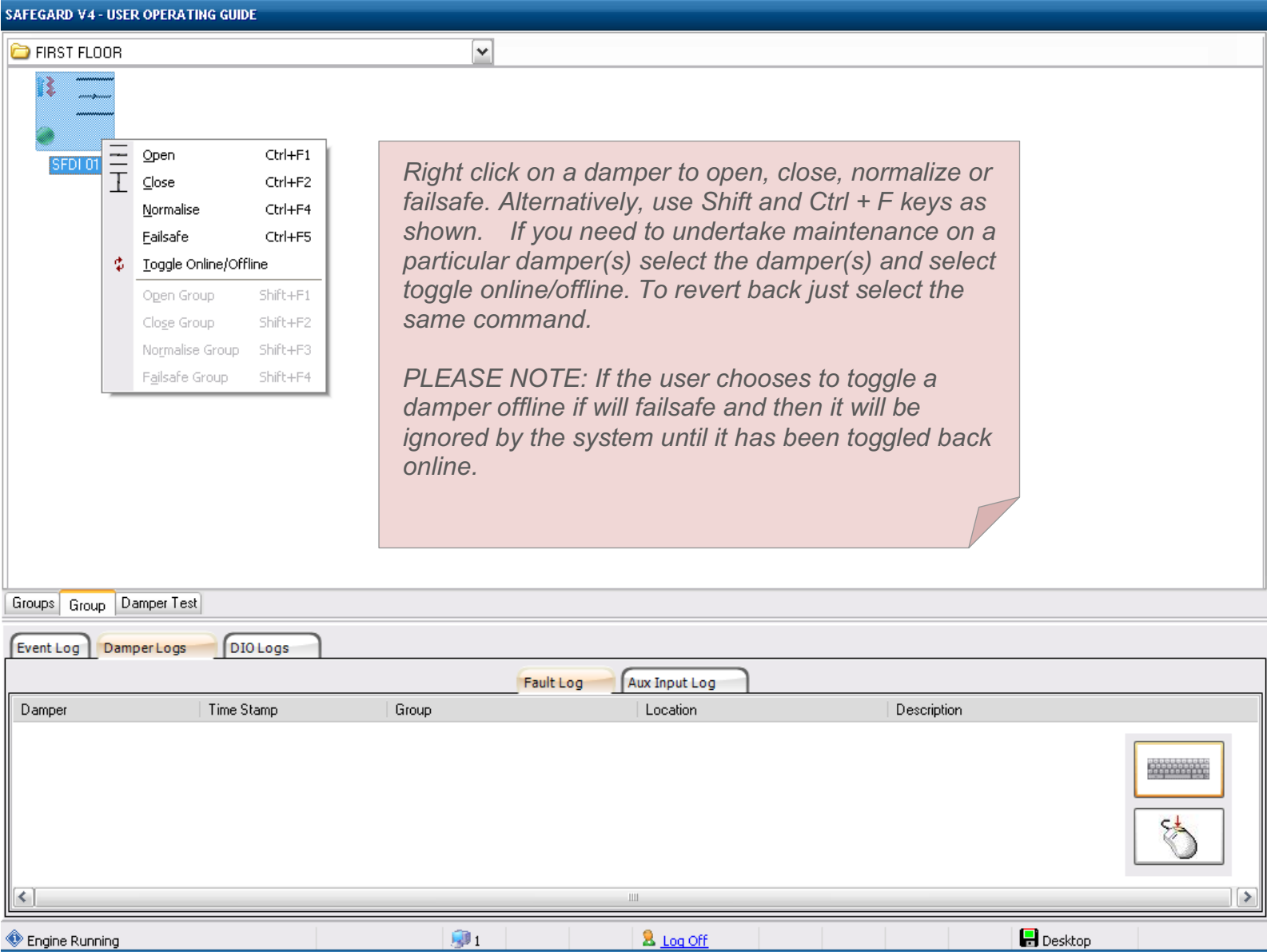*"About" indicates current software revision.*

Show Service Information - This will be greyed out unless a service notification date has been programmed by the engineer who commissioned the system. If it has been programed, by selecting this option a pop up window will appear in the bottom right hand side of the screen informing the user of the time/date that their next service is due.

Dump Event Log - The user can choose to dump the event log to the Desktop at any time rather than waiting for the system to automatically dump after 50 off events.

Change Password – select if required

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Fault Log | Aux Input Log

Damper	Time Stamp	Group	Location	Description

Engine Running   1   Log Off   Desktop

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FIRST FLOOR

SFDI 01

Open	Ctrl+F1
Close	Ctrl+F2
Balance	Ctrl+F3
Normalise	Ctrl+F4
Failsafe	Ctrl+F5
Localise	
Toggle Online/Offline	
Open Group	Shift+F1
Close Group	Shift+F2
Normalise Group	Shift+F3
Failsafe Group	Shift+F4

Right click on group pane to open, close, normalise or failsafe a group. Alternatively use Shift + Ctrl + F keys as shown.

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Fault Log | Aux Input Log

Damper	Time Stamp	Group	Location	Description

Engine Running   1   Log Off   Desktop

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FIRST FLOOR

SFDI 01

Open	Ctrl+F1
Close	Ctrl+F2
Normalise	Ctrl+F4
Failsafe	Ctrl+F5
Toggle Online/Offline	
Open Group	Shift+F1
Close Group	Shift+F2
Normalise Group	Shift+F3
Failsafe Group	Shift+F4

Right click on a damper to open, close, normalize or failsafe. Alternatively, use Shift and Ctrl + F keys as shown. If you need to undertake maintenance on a particular damper(s) select the damper(s) and select toggle online/offline. To revert back just select the same command.

PLEASE NOTE: If the user chooses to toggle a damper offline if will failsafe and then it will be ignored by the system until it has been toggled back online.

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Fault Log | Aux Input Log

Damper	Time Stamp	Group	Location	Description

Engine Running   1   Log Off   Desktop

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SAFEGARD V4 - USER OPERATING GUIDE

GROUND FLOOR

3PSFDI BAL 01   3PSFDI BAS 01   FDI 01   SDI 01   SFDI 11

On the ground floor a mixture of various dampers can be seen:-
3 Position Damper Interface (3PSFDI) - Actuator can be set to a balanced position or driven open/closed and failsafes via spring-return, shown as 3PSFDI BAL 01. Alternatively, actuator can be modulated via 0 – 10V signal from the BAS or an air flow sensor and only instructed to failsafe by the system in the event of an environmental input, shown as 3PSFDI BAS 01.

Fire Damper Interface (FDI) - Monitors damper position. Damper failsafes closed via spring mechanism and must be manually reset.

Smoke Damper Interface (SDI) – Drive open, drive closed.

Smoke Fire Damper Interface (SFDI) - Energizes actuator to drive and failsafe via spring-return.

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp	Description

Engine Running   1   Log Off   Desktop

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FIRST FLOOR   GROUND FLOOR

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp   Description

In the bottom left of the screen we can see that the system has been programed to output all damper information to the BAS via a Serial RS-232 link. When the BAS is communicating the icon will turn green. Other protocol options are RS-485, BacNet and Modbus.

RS-232

Engine Running   1   Log Off   Desktop

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SAFEGARD V4 - USER OPERATING GUIDE

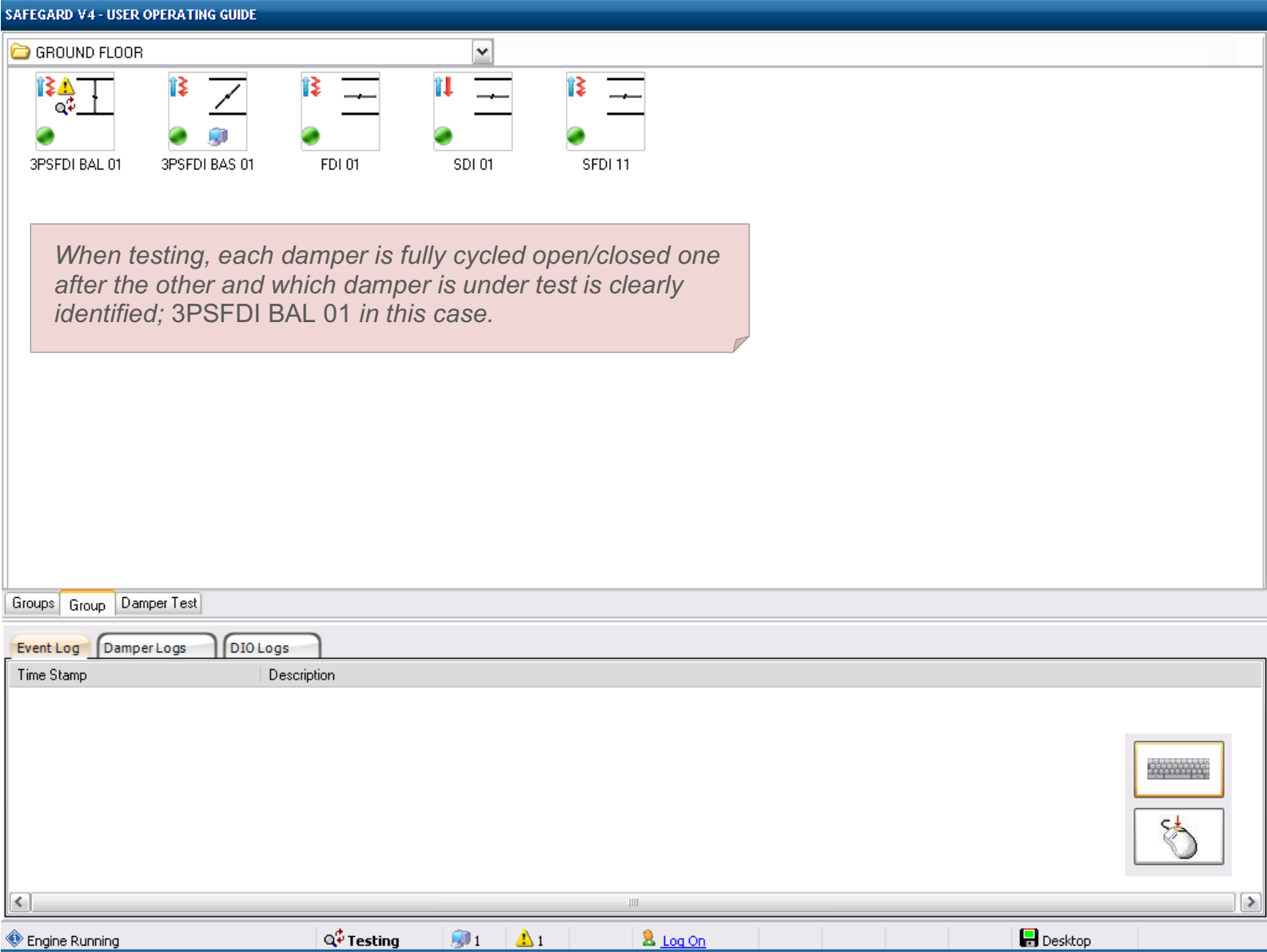| Time Stamp	Description
🔍↻ 20/06/2013 15:38:34	Testing 3PSFDI BAL 01
	Type: Smoke-Fire Damper; Drive times: 90 s; 45 s
⬆ 20/06/2013 15:38:29	Resumed (User Logged Off)
⛔ 20/06/2013 15:38:26	Suspended (User Logged On)
⬆ 20/06/2013 15:38:26	Started (User)

Control

Start Test

Stop Test

Elapsed Time: 00:00:00

Testing Damper: 0001 / 0006

0%

Started
- User
- Scheduler
- Input Action

Suspended
- User Logged On
- Input Priority
- Input Action

PLEASE NOTE: If programming or initiating a test from the GUI/Input Action be careful about the implications of closing a damper against air flow. If in doubt, speak to Safegard technical support. All events are logged to the Desktop. The user must Log On to initiate a user start test. The started – user and suspended - user logged on will flash and suspended will flash in the status bar.

Groups | Group | Damper Test

Event Log | Damper Logs | DIO Logs

Time Stamp	Description

Engine Running   🔍↻   🖥1   ⚠1   👤 Log On   💾 Desktop

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Start Test	
Stop Test	

Elapsed Time: `00:00:00`

Testing Damper: `0001` / `0006`

0%

Control

Started
- User
- Scheduler
- Input Action

Suspended
- User Logged On
- Input Priority
- Input Action

Groups | Group | Damper Test

Time Stamp	Description
20/06/2013 15:38:34	Testing 3PSFDI BAL 01
	Type: Smoke-Fire Damper; Drive times: 90 s; 45 s
20/06/2013 15:38:29	Resumed (User Logged Off)
20/06/2013 15:38:26	Suspended (User Logged On)
20/06/2013 15:38:26	Started (User)

The test will only commence when the user Log Off
Stop Test – stops test
Elapsed Time – elapsed time taken for test
Testing Damper – 2 of 10 in this example
% Indicator - % indication of time to complete test
Testing *in the status bar flashes when any one of the three initiators (User, Scheduler or Input Action) triggers a test.*

Event Log | Damper Logs | DIO Logs

Time Stamp	Description

Engine Running | 1 | 1 | Log On | Desktop

When testing, each damper is fully cycled open/closed one after the other and which damper is under test is clearly identified; 3PSFDI BAL 01 in this case.

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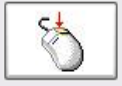
To program a scheduled test use Windows "Scheduled Tasks". To open "Scheduled Tasks", select "Start", "Control Panel" and then "Scheduled Tasks".

Double click "Add Scheduled Task" to start the Scheduled Task Wizard and select "Browse". Select "TestAgent" and Open

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Type a name for the task, the task name can be the same as the program name and then choose one of the following options:

Daily, Weekly, Monthly, One time only and then click Next.

Select the settings you require and then click Next

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Leave the "Enter the user name" as is and select the "Enter the password" box. Input the PC's administrator password: 'safegard' and confirm it, then click Next. Verify the choices you have made and click Finish.
To change a "Scheduled Task" that you have already programmed, go to "Start", "Control Panel" and then "Scheduled Tasks". Select "TestAgent" and right click on it and select "Properties". Select "Schedule" tab, change as required and click OK.

PLEASE NOTE: If a User or a Scheduled Task has initiated a Test and an environmental input that has been programmed to suspend or stop a test is activated it will override the test.

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Scheduled Tasks

File   Edit   View   Favorites   Tools   Advanced   Help

Back   Search   Folders

Address   Scheduled Tasks   Go

Name ▲	Schedule	Next Run Time	Last Run Time	Status	Last Result	Creator
Add Scheduled Task						

Other Places

Control Panel
My Documents
Shared Documents
My Network Places

Scheduled Task Wizard

You have successfully scheduled the following task:

TestAgent

Windows will perform this task:

At 22:00 on the first Mon of every month, starting 01/06/2013

☐ Open advanced properties for this task when I click Finish.

Click Finish to add this task to your Windows schedule.

< Back   Finish   Cancel

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SAFEGARD V4 - USER OPERATING GUIDE

GROUND FLOOR

Event Log Sessions

File   Edit   View   Favorites   Tools   Help

Back

Address C:\Docun

File and Folder
- Rename this f
- Move this file
- Copy this file
- Publish this fil
- E-mail this file
- Print this file
- Delete this file

Other Places
- Desktop
- My Document
- Shared Docun
- My Computer
- My Network P

Details

2013.06.20 15.18.20 - Notepad

File   Edit   Format   View   Help

```
20/06/2013 15:18:23 SYS: Disk Log Dump Test Pass
20/06/2013 15:18:29 SYS: Network Settled
20/06/2013 15:19:04 DMP: FDI 01 (GROUND FLOOR) Feedback Failure and Comm Failure
20/06/2013 15:19:04 DMP: SFDI 11 (GROUND FLOOR) Comm Failure
20/06/2013 15:19:04 DMP: SFDI 01 (FIRST FLOOR) Comm Failure
20/06/2013 15:19:04 DMP: FDI 01 (GROUND FLOOR) No Fault
20/06/2013 15:19:04 DMP: SFDI 11 (GROUND FLOOR) No Fault
20/06/2013 15:19:04 DMP: SFDI 01 (FIRST FLOOR) No Fault
20/06/2013 15:19:12 SYS: Engine Stopped
```

All system events are logged to the Desktop and are separated into Event Log Sessions and Test Log Sessions.

To minimise ACTIONPAC LNS4 double click on the blue ACTIONPAC LNS4 top left of screen and remember after you have accessed the logs maximise the screen by double clicking top left again.

Each log is a simple text file that includes all events in a time stamped format. The log files can be copied to a memory stick and removed from the control system for printing if required.

Recycle Bin

Disable File Based Wr...

Enable File Based Wr...

Display Overlay Detail

Shortcut to My Computer

SAFEGARD V4

Event Log Sessions

Test Log Sessions

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