Boeing 737NG Sixpack System

Manual (Version 1.0.0.0)

FSPS produces Flight Simulator addon software designed to be run across a computer network or as well on a single PC. Primary usage is for flight simulators or flight training devices. **The software can be used in professional or private use.** Any of our software **isn't** visible in **FS Full Screen Mode when it runs on FS's PC** because it is **not** part of Microsoft's FS panels, they are standalone applications. **But** that means when any of our software is running on a different PC over the Network it doesn't matter in what mode FS is running. All of the FSPS software follows very similar install procedures.

Requirements

- MSFS FS9 (FS2004) / FSX
- Project magenta pmsystems
- Windows 2000 / XP / Vista 32 / Vista 64
- Full registered version of FSUIPC
- Full registered version of WideFS for network installation
- Computer Network TCP/IP or IPX for network installation, check WideFS documentation
- .Net Framework 3.5 (or higher) must be installed on that PC

Caution:

All FSPS software requires that the Microsoft .NET Framework 3.5 be installed. Without .NET Framework 3.5 installed, our software will not launch properly and the user will see an error message.
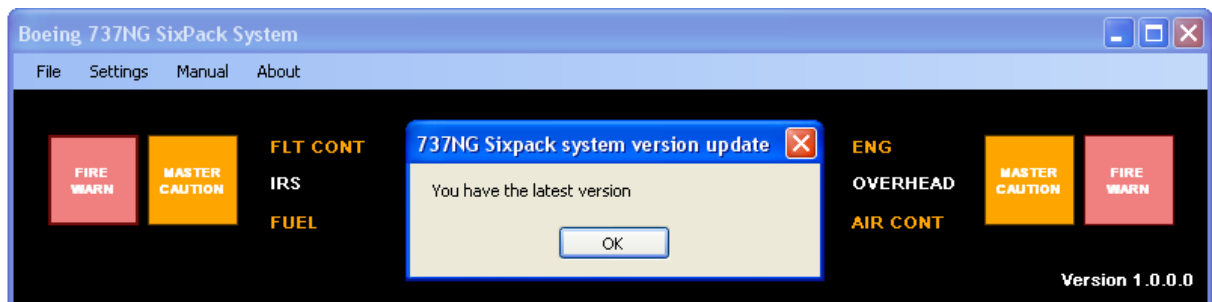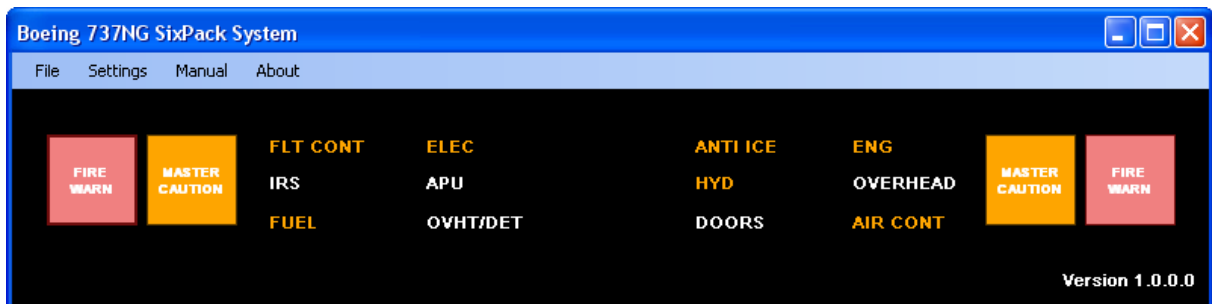
Compatibility:

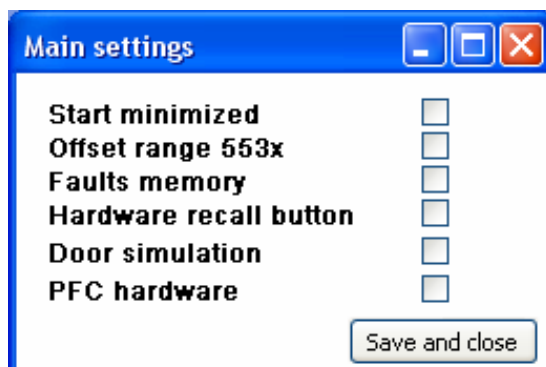*Windows 2000 / XP / Vista 32 / Vista 64*

The software uses the FSUIPCClient.dll by **Paul Henty** *to communicate with FSUIPC / FS (by* **Peter Dowson***).*

Software pictures

Main screen

Setting screens

Hardware pictures

Description

Sixpack indicator

- Illuminated = an amber light relating to illuminated system annunciator has illuminated on forward overhead, aft overhead, or overheat/fire protection panel (except FAULT light)
- Captain and First officer annunciators are different; show respective panel indications
- To extinguish, press either MASTER CAUTION

Recall button

- All system annunciator lights come on
- When you release the "6-pack", the system annunciator lights that remain illuminated shows which system have faults

Fire warn button / Bell cut-out

- Illuminated = indicates fire warning or system test in engine, APU or main gear wheel well
- gives a fire warning bell, and remote APU horn if on ground
- press to extinguish both master FIRE WARN lights, silence the bell and remote horn
- Pushing the bell cut-out on Fire Panel (aft electronic panel) accomplishes the same thing

Master Caution button

- Illuminated = a system annunciator has come on
- press to reset MASTER CAUTION light and system annunciator light
        - if a fault condition remains, the MASTER CAUTION light come on again
- resets system for additional MASTER CAUTION situations
- Lights on forward panel do not light the MASTER CAUTION light, only "out of view" lights
- Do not leave lights on when they are not necessary as extensive heat can distort the lenses

Master Fire Warning Lights

Two master FIRE WARN lights illuminate when any fire warning condition occurs. The lights remain illuminated as long as the condition exists. Pushing either master FIRE WARN light or fire warning bell cutout switch extinguishes both lights, silences the fire warning bell and resets the system for future warnings. Further information appears in the Fire Protection section.

Master Caution Lights

Two MASTER CAUTION lights illuminate when any caution occurs outside the normal field of vision of the flight crew. The lights remain illuminated as long as the caution condition exists, or until the crew resets the system. Pushing either MASTER CAUTION light extinguishes both lights and resets the master caution system for further cautions. Pushing either annunciator light panel recalls all existing fault annunciations.

A single fault in certain redundant systems, or some simple faults, do not illuminate the MASTER CAUTION or system annunciator lights. These faults, however, are stored in the master caution system. Pushing the system annunciator recalls the single fault on the system annunciator panel.

When the MASTER CAUTION recall is pressed, all twelve system lights should illuminate while the press-to-test feature is held. If a system annunciator light does not illuminate, refer to the dispatch deviation procedures guide (DDPG).

System Annunciator Lights

Two system annunciator light panels are located on the glare shield. The annunciator light panels include only those systems located on the forward overhead, aft overhead, and fire control panels. If a caution condition exists, the appropriate system annunciator(s) and MASTER CAUTION lights illuminate.

System Annunciators and Related Amber Lights – Left Side

FLT CONT		ELEC
LOW QUANTITY		DRIVE
LOW PRESSURE		STANDBY PWR OFF
FEEL DIFF PRESS		TRANSFER BUS OFF
SPEED TRIM FAIL		SOURCE OFF
MACH TRIM FAIL		TR UNIT
AUTO SLAT FAIL		BATTERY DISCHARGE
YAW DAMPER		ELEC
STBY RUD ON		
IRS	LEFT SIDE GLARESHIELD	APU
FAULT		LOW OIL PRESSURE
ON DC		FAULT
DC FAIL		OVERSPEED
GPS		
FUEL		OVHT/DET
LOW PRESSURE		ENGINE 1 OVERHEAT
FILTER BYPASS		ENGINE 2 OVERHEAT
		APU DET INOP

Glareshield annunciator panel:

FLT CONT	ELEC
IRS	APU
FUEL	OVHT/DET

System Annunciators and Related Amber Lights – Right Side

[Option - 737-800/900, ICE DETECTOR, AIRSTAIR, ELT, HIGH ALTITUDE LANDING - INOP, lavatory SMOKE detector]

ANTI–ICE		ENG
WINDOW OVERHEAT PITOT HEAT COWL ANTI–ICE ICE DETECTOR		REVERSER EEC ALTN MODE ENGINE CONTROL
HYD	.	**OVERHEAD**
OVERHEAT LOW PRESSURE	ANTI–ICE / ENG HYD / OVERHEAD DOORS / AIR COND RIGHT SIDE GLARESHIELD	ELT EQUIP COOLING– OFF EMER EXIT LIGHTS–NOT ARMED FLIGHT RECORDER–OFF PASS OXY–ON PSEU SMOKE
DOORS		**AIR COND**
FWD/AFT ENTRY AIRSTAIR EQUIP FWD/AFT CARGO FWD/AFT SERVICE LEFT/RIGHT OVERWING		ZONE TEMP DUAL BLEED PACK WING–BODY OVERHEAT BLEED TRIP OFF AUTO FAIL OFF SCHED DESCENT HIGH ALTITUDE LANDING - INOP

Settings.ini file

Start-minimized=No 'Yes or No
This will set the program to start minimized or not.
Note: Does not work at demo mode.

Offset-range-553x=No 'Yes or No
This will set the program to use 5530 and 5531 offset range or not.

Memory-faults=No'Yes or No
If set to No, then sixpackleds will be cleared in real time.

Hardware-recall-button-available= No 'Yes or No
Set to YES if you have a hardware recall button. Otherwise, leave it to no
and Master caution button will be the recall button also.

Door-Simulation=Yes 'Yes or No
Set to YES to use internal door simulation logic.
'Delete door-simulation logic from pmsys737ng.lgc
'You have to assing the doors at doors.ini file
Set to NO in order to use pmsystems door simulation

PFC-Hardware=No 'Yes or No
If you have PFC hardware then set this option to Yes

Doors.ini file

door1-type=1
door2-type=2
door3-type=3
door4-type=4

//TYPE OF DOORS
 FWD ENTRY=1
 AFT ENTRY=2
 FWD CARGO ENTRY=3
 AFT CARGO ENTRY=4
 LEFT FWD OVERWING=5
 LEFT AFT OVERWING=6
 RIGHT FWD OVERWING=7
 RIGHT AFT OVERWING=8
 FWD SERVICE=9
 AFT SERVICE=10
 EQUIP=11

Set door1-type=1 if 1st door is FTW ENTRY
Set door1-type=2 if 1st door is AFT ENTRY
Set door1-type=3 if 1st door is FTW CARGO ENTRY
Set door1-type=4 if 1st door is AFT CARGO ENTRY
Set door1-type=5 if 1st door is LEFT FWD OVERWING
Set door1-type=6 if 1st door is LEFT AFT OVERWING
Set door1-type=7 if 1st door is RIGHT FWD OVERWING
Set door1-type=8 if 1st door is RIGHT AFT OVERWING
Set door1-type=9 if 1st door is FWD SERVICE
Set door1-type=10 if 1st door is AFT SERVICE
Set door1-type=11 if 1st door is EQUIP

Follow the same procedure for the other doors.

Note: You must define the number of exits at aircraft.cfg file.
[EXITS]
number_of_exis=4

Output offsets (Use this for the leds)

Project magenta offset range from 5530 up to 5531 (1 byte)

```
5530 .0 SixPackFire
5530 .1 SixPackCaution
5530 .2 SixPackFltCont
5530 .3 SixPackElec
5530 .4 SixPackIRS
5530 .5 SixPackAPU
5530 .6 SixPackEng
5530 .7 SixPackOverheat

5531 .0 SixPackAntiIce
5531 .1 SixpackAirCond
5531 .2 SixPackHyd
5531 .3 SixPackFuel
5531 .4 SixpackOverhead
5531 .5 SixPackDoors
```

Project magenta offset range from 5540 up to 5541 (1 byte)

```
5540 .0 SixPackFireDisp
5540 .1 SixPackCautionDisp
5540 .2 SixPackFltContDisp
5540 .3 SixPackElecDisp
5540 .4 SixPackIRSDisp
5540 .5 SixPackAPUDisp
5540 .6 SixPackEngDisp
5540 .7 SixPackOvheDetDisp

5541 .0 SixPackAntiIceDisp
5541 .1 SixpackAirCondDisp
5541 .2 SixPackHydDisp
5541 .3 SixPackFuelDisp
5541 .4 SixpackOverheadDisp
5541 .5 SixPackDoorsDisp
```

Input offsets (Use this for the buttons)

Project magenta offset 56F8 (1 byte)

```
56F8 .0 MasterCautionSwitch
56F8 .1 RecallSwitch
56F8 .4 MasterFireSwitch
```

If you are using Phidgets cards then you can make use of the supplied file Project Magenta Sixpack Variables.ini

Logics to remove from pmsys737.lgc file

```
sixpackfltcont = yawdamperfault or feeldiffpress
sixpackelec = source1off or source2off or (standbypower = 0) or battdischarge
sixpackhyd = hydeng1fault or hydeng2fault or hydelec1fault or hydelec2fault
sixpackapu = apulowpress or apufault
'sixpackfire = 0
'sixpackeng = 0
sixpackantiice = (fspitot = 0) or (testheat=0)
sixpackdoors = doorflags <> 0
sixpackfuel = aft1pumpfault or fwd1pumpfault or fwd2pumpfault or aft2pumpfault

if recallswitch then
        sixpackfltcontdisp = 0
        sixpackelecdisp = 0
        sixpackhyddisp = 0
        sixpackapudisp = 0
        sixpackfiredisp = 0
        sixpackengdisp = 0
        sixpackantiicedisp = 0
        sixpackdoorsdisp = 0
        sixpackfueldisp = 0
else
        sixpackfltcontdisp = sixpackfltcont
        sixpackelecdisp = sixpackelec
        sixpackhyddisp = sixpackhyd
        sixpackapudisp = sixpackapu
        sixpackfiredisp = sixpackfire
        sixpackengdisp = sixpackeng
        sixpackantiicedisp = sixpackantiice
        sixpackdoorsdisp = sixpackdoors
        sixpackfueldisp = sixpackfuel
endif

testbit = sixpackelec

if mastercautionswitch then
        sixpackcaution = 0
        mastercautionswitch = 0 [1]
endif

'Delete this section only if you set Door-Simulation=Yes inside settings.ini file
// door simulation
if fsPrkBrake and ((fsstartflag1 = 0) and (fsstartflag2 = 0)) and (beacon = 0)
        if OptDoors then
                pdoor1 = fsdoor1
                cdoor1 = fsdoor2
        else
                pdoor1 = 1 [2]
                cdoor1 = 1 [20]
        endif
        pdoor4 = 1 [10]
        cdoor2 = 1 [25]
else
        if fsdoors = 0
                pdoor1 = 0 [2]
                pdoor4 = 0 [3]
                cdoor1 = 0 [2]
                cdoor2 = 0 [1]
        endif
endif
```

ACTIVATION CENTER

This interface is intended for clients (end users).

LOGIN PAGE

Clients are using the same login page as administrators.

By default, clients are redirected to account section from login page.

ACCOUNT SECTION
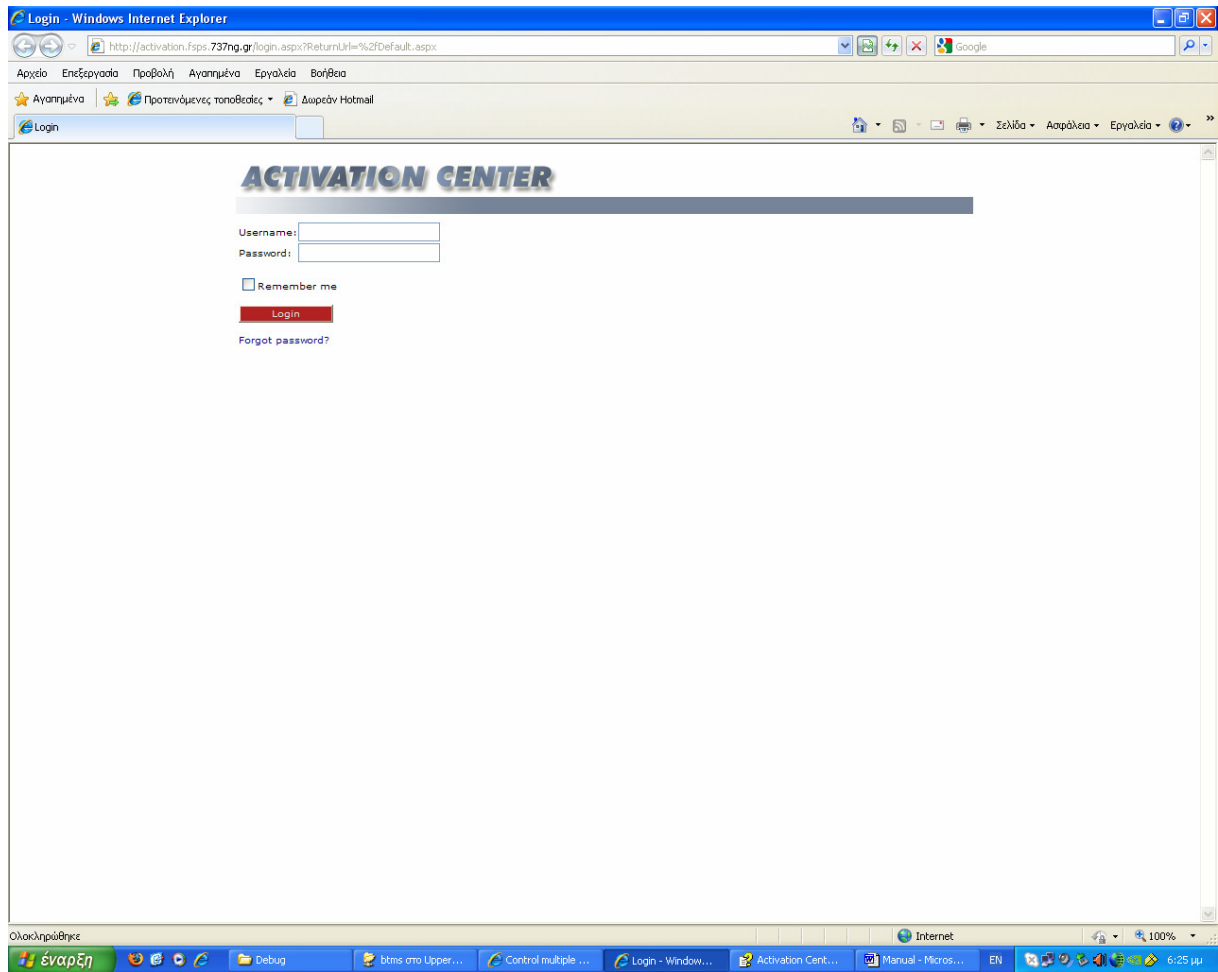
Clients can update personal (company) information and change access password here

ORDERS SECTION

Orders page is intended for:

- reviewing orders and licenses

- activating new licenses

- reactivating previous licenses

- transferring licenses from one computer to another

- adding new orders with valid serial numbers

LOGIN PAGE

http://activation.fsps.737ng.gr

ACCOUNT SECTION

Client can update personal/company information and login password here.

Clicking on '**Update**' button will update database with current client data.

Clicking on '**Restore**' button will reload and display client data from database.

In order to change login password client should set his current password and new password (twice) and click on '**Change**' button.

ORDERS SECTION

Client can review orders and manage licenses here.

ORDERS TABLE

All active orders are listed in this table.

Order ID, Program name, Order date, Number of licenses (total/activated) and payment info is available for each order.

By clicking on **licenses** button client can see active licenses for selected order.
- - - is displayed in case program does not require activation.

LICENSES TABLE

All active licenses for selected order are displayed here.

Site code, Machine ID, Note, Date of activation and Expiration date (in case of limited license) information is displayed for each license.

Activation code for each license can be viewed by opening activation email panel (button)

✚ ADD NEW LICENSE BUTTON

This button is used for adding new licenses and is available only in case there are unused licenses left. Site/MID codes are required for activation.

Client should set Site code, Machine ID code, Note (if required) and click on "**Add new license**" button to add new license.

↻ LICENSE UPDATE (REACTIVATION / TRANSFER) BUTTON

LICENSE REACTIVATION
Computer could crash, client could format drive or install new operating system without removing license first. Client can use this option to reactivate lost license on original computer without valid removal code.

Client should set Site code, Machine ID code, Note (if required) and click on "**Update license**" button to reactivate license.

ACEN will compare old and new locking parameters and based on locking/activation options determine if license can be reactivated.

 In case too many locking parameters are different client should contact you directly and ask for activation code. You will be able to manually check and compare locking parameters in activation panel.

LICENSE TRANSFER
 Client should set Site code, Machine ID, Note (if required), valid Removal code and click on "**Update license**" button to transfer license to new computer.
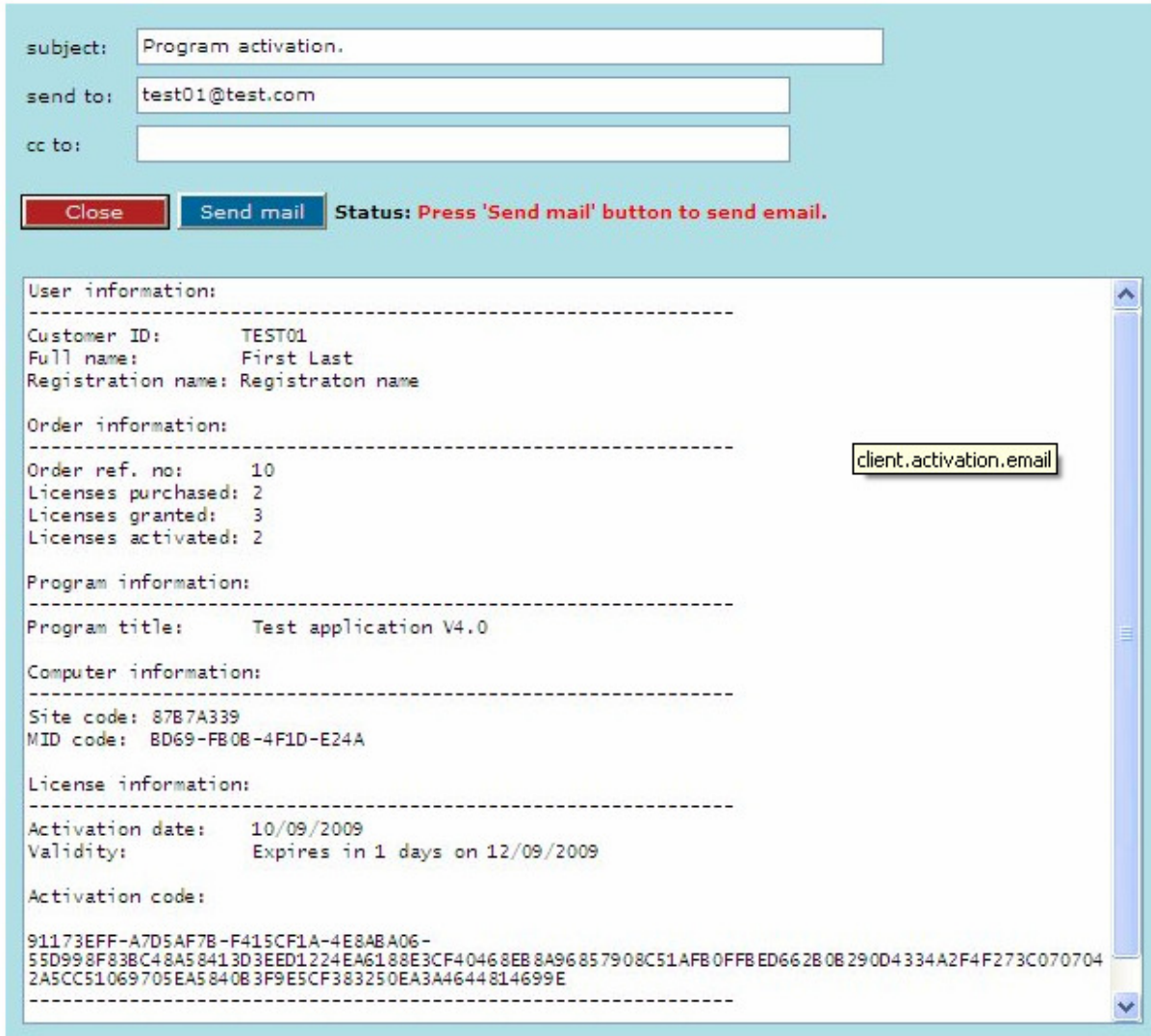
➖ LICENSE REMOVAL BUTTON
Client can remove license with valid removal code. Original license will be deleted and new license will be granted for appropriate order.

This button is not available for programs with limited license enabled.

◼ACTIVATION EMAIL PANEL BUTTON

This button will open activation email panel.

By default, user can not edit email message before sending it.

NOTES:

- Small note (up to 30 characters) can be added when updating existing or adding new license. This note will be displayed in licenses table right after activation code. Client can use this information to identify each license (by setting license owner name or computer name for example).