MacroIvAc

USER MANUAL

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Revision 1.3.0.0	March 2014	'SELECT <callsign>' not working on stand-alone - corrected
Revision 1.2.0.0	April 2013	Added 'SELECT <callsign>' command Support for FlightStripManager application
Revision 1.1.0.0	March 2012	Added 'LINK' command Added Moved to System Tray to Panel definition Customizable Panel borders Customizable Buttons horizontal and vertical spacing Hide Buttons as an option on Button Definition Buttons can be expanded on Rows/Columns
Revision 1.0.0.4	February 2012	Added 'SHOW_FPL' and "REQ_FPL' commands Added Copy & Paste buttons on panel preview (right-click menu
Revision 1.0.0.3	January 2012	Added 'HIDE' command to hide a button via Macro two state buttons add/remove full rows/columns in panels autohide controlbox function
Revision 1.0.0.2	January 2011	Bugfix
Revision 1.0.0.1	January 2011	Added 'CLOSE' command
Release 1.0.0.0	December 2010	

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MacroIvAc

MacroIvAc is an application that adds macro functionalities to IvAc (IVAO virtual ATC client)
It allows you to create button panels; you can assign a "macro" at each button; each macro can be a single or a list of "command";
each "command" let you interact with IvAc interface (buttons, CommBox window, Selection dialog boxes etc. etc.)

Main form

From the main form you can activate all MacroIvac functions.

Manage Panels – New Panel – Edit Panel

To create a new panel, click the New Panel button from the Main Form

It'll be asked to enter the panel name

Then is it possible to customize panel information (number and size of buttons, background color etc. etc.),

WinOnTop checkbox allows you to keep the panel on topmost position.
AutoHide ControlBox enable AutoHide function for the panel
Move App to System Tray show the application on the SystemTray in place of TaskBar
Panel Borders and Button spacing can be customized.

Press the **Panel Preview** button to display the panel and set buttons properties;
Move the panel around your screen and press "Get current position" button to save the position where the panel will be opened next time it will run.

Editing Buttons properties

It is possible to edit properties of each button; just Click the button and you'll be asked for properties.

You can set the following properties:

Button Type: define the behaviour of the button
Hidden if checked Hide button at runtime
Span on cols/rows expand a button on N rows/or columns to have bigger button
Text: text that will appear on the button
Macro: Macro to be executed when pressing the button
Background Color: Color of the button
Font: Font face, size and color of the button label

The Button Type can be:

Push Button	Push	standard button – only 1 state
Two-state Push Button	Press Release	2 logical states button; appears as a standard Button
Two-state Button	Press Release	2 logical and physical states; appears Pressed or Released

When two-state button is selected it is possible to assign two different set of properties to each logical state of the button: when pressed and when released.

NOTE: state of two-state buttons IS NOT SAVED when closing the panel

Standard Push Button

Two-state Button/PushButton

You can also expand the button on the following Row/Columns to have a bigger button.
The buttons behind the expanded one are not visible anymore but they are still present.

Right Clicking the buttons, allows swapping buttons position (right/left/up/down) and/or inserting and removing full columns / rows.
When adding/removing rows/columns the Panel definition Is automatically saved.
You can also Copy a button definition anc Paste it on another button (Copy & Paste commands)

Auto-hide control box

When running a panel the control box (buttons to close the panel or to activate menus) is not visible (auto-hide); to display the control box you have to leave the mouse along the panel borders for at lease 1 second or doubleclicking the panel borders
In case of inactivity, after 1 second the controlbox disappear again.

Standard (Controlbox Hidden)

Controlbox Active

Assign a Macro to a button

It is possible to select to different ways of assigning Macro to a button:

1. Own text file with list of commands (using a text editor)
2. Single o list of inline commands

In case of option 1 (Own text file with list of commands using a text editor) it is necessary to select an existing macro file using Select button (standard extension for macrofile is .TXT) or define a new filename for macro and press Edit button

Alternatively, it is also possible to enter in the Macro textbox the commands preceded and separated by "|" (pipe character)
Note: **MAX LENGTH 100 crt**.

Example: Option 1 (external macro file)
Create an EGKK_STAR.TXT file and select it using Select Button

Examples: Option 2 (inline text)

A *special* macro (HIDE) allows you to hide the button on the panel (when running).

Manage Panels – Copy Panel – Remove Panel

It is possible to copy a panel to a new one;
select the original one from the list of available panels and press the Copy panel button
you have to enter the name of the new panel.

Manage Panels –Remove Panel

To remove the panel, select it from the list of available panels and press the Remove panel button; you'll be asked to confirm operation;
the panel will be moved to Recycle Bin

Running Panel

Select the panel from the list and press Run Panel button to start the panel.
The panel will display at position defined by edit panel window

Each panel has 2 buttons [X] Close and [M] Menu'

When a panel is called by another panel, the [X] function change in [<] Back function

Editing Macroes

It is possible to use an editor to create/edit macro files; For commands references see next sections.
It is possible to use the MacroHelper application.

Once started, click on the "target" image and drag it to the text editor window. The application will get the handle of the editor and will use it to send commands

For OCA command (see macro reference), the current position of the mouse pointer is displayed when the ScrollLock keyboard button is active; once the X,Y position is captured, is it possible to insert the OCA command with the last mouse position.

To insert command into text editor window, simply press the Action Button and select the command from the list.

It is also possible to get current selected items from IvAc window (if opened)

Running Client / Server mode

The application can run in Client/Server mode to control IvAc from a networked PC; the Client (usually the PC without IvAc) will run the panel; the Server will accept commands from the client and will execute the macro on IvAc;
Note: Client and Server must have the same Macros/Panels folder; use Copy&Paste to sync them.
Note: it should be necessary to open port used between Server and Client on the Firewall/Antivirus

Running Server

Press the Run Server button to display the Server dialog window;

If Port 6811 is used by other software you can change it to an unused one. Remember to specify same port on Client dialog.

Press Listen to wait for incoming connection from the Client running on another PC (take note of the IP address of the server)

If connection is successful, the green icon should appear.

It is possible to activate popup balloons on tray bar and get advised on commands received from the client

Each time a new command is received, the server will apply the macro to running IvAc window

Running Client

Select the panel from the list and press Run Client button;

It should appear the panel and the connection dialog box; enter the remote PC IP (running Server) and communication port.
(format IP:port example: 10.0.0.1:6811)

If the connection is successful, the Menu button should become green; if any problem occurs, it becomes red.

Opening data folder buttons

These buttons allows you to open the Application Data folder and backup your Macro/Panels;
Use this option also to sync Macro and Panels from Client PC to Server PC

Nome	Dimensione	Tipo	Data ultima modifica
Default		Cartella di file	21/08/2010 14.27
Macro		Cartella di file	23/08/2010 21.43
Panels		Cartella di file	29/08/2010 18.20

Configure General Options

Press button to display general option dialog box;
Use these settings to tweak MacroIvac behaviour; sometimes it can be necessary to increase delay between commands (millisecond delay) or change IvAc COMMBOX frequencies used
Note: when using [COMMBOX <Nr or Name> macro, MacroIvac detect COMMBOX nr. tab using the IvAc COMMBOX frequencies field.

Macro Reference

Standard Commands

Command	Description
OPEN <panel name>	Open the <panel name> Panel - no Back function available Example: **OPEN NoVoice** **OPEN star**
CLOSE	Close current Panel Example: **CLOSE**
CALL <panel name>	Open the <panel name> Panel - Back function available Example: **CALL NoVoice** **CALL star**
RUN_PANEL <panel name>	Run <panel name> Panel as external application- Back function NOT available Example: **RUN_PANEL NoVoice** **RUN_PANEL star**
BACK	Open previous panel Example: **BACK**
INCLUDE <macro filename>	Include <macro file> at present position Example: **INCLUDE egbb_star.txt** **INCLUDE reset.txt**
CLEAR_TEXT	Clear IvAc COMMBOX edit window Example: **CLEAR_TEXT**
COMMBOX <name | number>	Select COMMBOX tab <nr> or <name> Note: **MacroIvac cannot locate the CommBox Tab label and use the setting in General Option to "*calculate*" the Tab position. Check if general option configuration matches your IvAc CommBox settings**. Example: **COMMBOX 2** **COMMBOX ATC** **COMMBOX GUARD**

Command	Description
ADD_TEXT <text>	Add text to IvAc COMMBOX edit window (an extra space is added at start of the <text>) Example: **ADD_TEXT Start and Pushback** **ADD_TEXT is approved**
ADD_TEXT_NOSPACE <text>	Add text to IvAc COMMBOX edit window (no space is added at start of the <text>) Example: **ADD_TEXT_NOSPACE Start** **ADD_TEXT_NOSPACE /Pushback approved**
SEND_TEXT <optional text>	If <optional text> is present, replace current to IvAc COMMBOX edit window text with <text> and send the text If <optional text> isn't present, send current IvAc COMMBOX edit window text Example: **SEND_TEXT Start and Pushback is approved** **SEND_TEXT**
COLORSCHEME <name>	Load IvAc <name> Colorscheme Example: **COLORSCHEME CDS2000.clr**
ZOOM <level>	Set IvAc ZOOM to <level> Example: **ZOOM 120** **ZOOM 90**
RESET_CENTERPOINT	Reset IvAc centerpoint to sector default Example: **RESET_CENTERPOINT**
CENTERPOINT <fix>	Set IvAc centerpoint to <fix> Example: **CENTERPOINT EGBB** **CENTERPOINT LAM**
HIDE	This *special* Macro hide the button on a running panel Example: **HIDE**
SELECT <callsign>	Select radar "blip" having <callsign> Example: **SELECT BAW1234**

Command	Description
PRESS <button name>	Press IvAc button Example: **PRESS H** **PRESS STAR** **PRESS RR**
RELEASE <button name>	Press IvAc button (two-state button) Example: **RELEASE L** **RELEASE SID**
SAVE_BUTTONS	Save current button status Example: **SAVE_BUTTONS**
RESET_BUTTONS	Revert current button status to previous saved one Example: **RESET_BUTTONS**

Command	Description
CLEARED_TO_SPEED <value | none>	Change selected label speed tag to <value> If value=**<none>** the tag is cleared Example: **CLEARED_TO SPEED 250** **CLEARED_TO_SPEED <none>**
CLEARED_TO_FIX <fix | none>	Change selected label FIX tag to <value> If value=**<none>** the tag is cleared Example: **CLEARED_TO_FIX LAM** **CLEARED_TO_FIX ABBOT** **CLEARED_TO_FIX <none>**
CLEARED_TO_FL <value | none>	Change selected label FL tag to <value> If value=**<none>** the tag is cleared Example: **CLEARED_TO_FL 030** **CLEARED_TO_FL 170** **CLEARED_TO_FL <none>**
ADD_TO_IO	Add selected label to IvAc In/Out window Example: **ADD_TO_IO**
ASSUME_LABEL	Assume selected label Example: **ASSUME_LABEL**
RELEASE_LABEL	Release selected assumed label Example: **RELEASE_LABEL**
FORCE_ACT	Issue ForceAct command to selected label Example: **FORCE_ACT**
REQ_FPL	Request Flight Plan of selected plane on IvAc Example: **REQ_FPL**
SHOW_FPL	Show Flight Plan of selected plane in IvAc Example: **SHOW_FPL**

Command	Description
MOVE_IVAC <params>	Move/Size IvAc window into position specified by <params> <params> format: top,left,height,width (screen pixels) Example: **MOVE_IVAC 0,0,768,1024**
OCA <params>,<text>	Create and OCA (Occupied Area) on IvAc window into position specified by <params>; <params> format: top,left (screen pixels) Example: **OCA 100,240,AREA XYZ**
TRANSFER_TO <atc_unit>	Transfer selected traffic to <atc_unit> (traffic has to be selected and ATC Unit must be in IvAc ATC list Example: **TRANSFER_TO LIRN_TWR**

Selection commands

Command	Description
<SELECTION_START>	Start a selection list (see following **Multiline structure**) Example: **<SELECTION_START>**
<SELECTION_END	Ends a selection list (see following **Multiline structure**) Example: **<SELECTION_END>**

Extra commands

Command	Description
LINK <file>	Start an external application/file <file> full path of external file to be opened (<file> wil be opened by default program associated to the file extension) Example: **LINK http://bafio.altervista.org**

Item Selection command relative to IvAc buttons

These special commands allows to select/unselect IvAc elements relative to SID, STAR, H, L, AP, GEO,FIX,VOR,NDB and **OCN** elements

This command may have different structures

1) Inline structure:
<Button> <Command> <optional parameter>

Examples:

[H] SELECT_ALL	select all High Airways elements
[STAR] SELECT_NONE	deselect all STAR
[GEO] SELECT Taxiways	select Taxiway on GEO
[SID] UNSELECT CLN8M	Unselect SID named CLN8M
[STAR] SELECT *EGBB*	Select [START] containing with EGBB
[FIX] UNSELECT [A-Z][A-Z]###	Unselect Fixes starting with two alphabetic characters and ending with three digits Example: AA001 EN005
[GEO] SAVE_DEFAULT	Save current selected/unselected of GEO elements
[OCN] SELECT *XYZ*	Select OCAs containing EGBB
[STAR] RESET_DEFAULT	Restore selected/unselected items of STAR elements

The optional parameters can use patterns:

?	Any single character
*	Zero or more characters
#	Any single digit (0–9)
[charlist]	Any single character in charlist
[!charlist]	Any single character not in charlist

Values for <Button> field: **[SID], [STAR], [H], [L], [AP], [GEO], [FIX], [VOR], [NDB]**
Values for <command>:

SELECT_NONE	Unselect all elements from <button> selection dialog
SELECT_ALL	Select all elements from <button> selection dialog
SAVE_DEFAULT	Save current selected/unselected items
RESET_DEFAULT	Restore current selected/unselected items from a previous save one
SELECT <item>	Select <item> from list (patterns allowed)
UNSELECT <item>	Unselect <item> from list (patterns allowed)

2) Multiline structure

<selection_start>
Selected item 1
Selected item 1
Selected item 1
<selection_end>
<Button> <Command>

Example 1:	<selection_start> Buildings Coastal Lines Piers Prohibited Areas Restricted Areas Taxiways <selection_end> [GEO] **Select_None_Except_Selection**
Example 2	<selection_start> .BASE OF A CLASS (NO AWY) .INTENTION CODES .NORTH SEA LOW AREAS EG* <selection_end> **[SID] Select**

Values for <Button> field: **[SID], [STAR], [H], [L], [AP], [GEO], [FIX], [VOR], [NDB], [OCN]**[(1)]
Values for <command>:

SELECT_NONE	Unselect all elements from <button> selection dialog
SELECT_ALL	Select all elements from <button> selection dialog
SAVE_DEFAULT	Save current selected/unselected items
RESET_DEFAULT	Restore current selected/unselected items from a previous save one
SELECT <item>	Select <item> from list (patterns allowed)
UNSELECT <item>	Unselect <item> from list (patterns allowed)
SELECT_NONE_EXCEPT_SELECTION	Unselect all items **except** the <selection>
SELECT_ALL_EXCEPT_SELECTION	select all items **except** the <selection>

[(1)] [OCN] is not a button but it can be used to select/unselect OCA items

Manual - END