<u>JASTModelBuilder</u>

Usage:

JASTModelBuilder.exe

Keyboard Commands:

'L' key: load part set file from a file of the same format as the TestPartSet.xml sample file

<u>'S' key:</u> save Target Configuration to a file of the same format as the TestConfig.xml sample file

<u>'R' key:</u> resize the box Target Configuration Area box, prompt will pop up in the console window that the programme is originally run from

<u>'D' key:</u> delete the selected polygon from the Target Configuration Area box

'Backspace' key: same as 'D' key

'Delete' key: same as 'D' key

<u>'C' key:</u> load colour set from a file of the same format as the TestColours.xml sample file <u>'Up' key:</u> move selected polygon up one pixel

'Down' key: move selected polygon down one pixel

'<u>Right' key:</u> move selected polygon right one pixel

'Left' key: move selected polygon left one pixel

<u>'F' key:</u> "fix" the rotation of the selected polygon; enter a rotation value in degrees, allows the user to make sure all rotation values are in nice whole numbers, multiples of 5, etc.

'<u>Q' key:</u> quit the programme

'Escape' key: same as 'Q' key

Mouse Commands:

- If a "polygon button" is clicked on, a new instance of this polygon will be created in the Target Configuration Area box, and the new polygon is selected
- If a polygon in the Target Configuration Area box is left-clicked on, it will become selected and can be mouse-dragged
- If a polygon in the Target Configuration Area box is right-clicked on, it will become selected and can be mouse-rotated
- One the mouse is released, any polygon that is being dragged or rotated will stop being dragged/rotated, but will remain selected.

Colours:

The Target Configuration Area box is always white, and the rest of the screen has a black background.

Colours that are defined be default (available in the programme without loading a Colours .xml file) are defined (with RGB colour component values) as follows:

Colour Nam	<u>ne Red</u>	<u>Green</u>	<u>Blue</u>
black	1	1	1
white	255	255	255
red		255 0	0
green	0	255	0

blue		0	0		255
yellow	255	255		0	
cyan		0	255		255
magenta	255	0		255	
orchid	154	50		204	
olive	110	139		61	
purple	137	104		205	
orange	255	127		0	
steelblue		205	225		255

The colour with RGB value (0,0,0) is treated as transparent by the programme.

Display:

A screenshot of the display with pointers to important areas of the screen is included below:



The graphical "working" window is set at a size of 640x480 pixels. The Target Configuration Area box defaults to a size of 250x220 pixels, but can be resized to anything from 125x110 pixels to 500x440 pixels.

Loading a Part Set:

When a Part Set file is loaded, any loaded polygons with the same name as an existing polygon will replace the corresponding polygon in the new polygon buttons area. Others will be added to the set of buttons.

If a polygon is loaded with a colour name that has not yet been defined, it will default to red (rgb 255,0,0) on the screen. When the Configuration File is saved, it will have the same colour name as in the originally loaded PartSet file.

Loading Colours:

When a Colours file is loaded, any colour with the same name as an existing colour will replace the existing colour's rgb definition. Others will simply be added to the set of available colour definitions.

Dragging and Rotating Polygons:

Polygons will not be allowed to be dragged or rotated to a position that allows any part of the polygon to be outside the Target Configuration Area box. It is possible for this to occur if the Target Configuration Area box is resized while polygons have already been added to it.

Order of operations:

The general usage of the programme should be as follows:

- 1) Load a Colours .xml file if your model/Part Set uses non-standard colours.
- 2) Load one or more Part Set(s) that contain the polygons you will be using in your JAST stimulus set.
- 3) Click the "new polygon" buttons to add polygons to the Target Configuration Area box; manipulate these using the mouse and/or key commands, resizing the Target Configuration Area box as necessary, until you have built the Target Configuration that you would like to use in your JAST Stimulus Set
- 4) Save the Target Configuration out to a file.

Integration with other JAST software:

The easiest way to create a PartSet file is to start with an existing JAST Stimulus Set file, and delete everything except the XML headers and PartSet section from the file, then load this into the Model Builder.

If non-standard colours are being used, then create a Colours .xml file in a similar way, starting with the existing JAST Stimulus Set file, deleting everything except the XML headers and Colours section from the file, and then loading the resulting file into the Model Builder.

To import the TargetConfig output from the Model Builder into a JAST Stimulus Set file, simply copy the text from the output saved from the Model Builder and paste it into the TargetConfig area of an existing JAST Stimulus Set file, and save it with a new name.