# GlassLine Front End Transducer API

Brehon Humphrey (bhumphre@usc.edu) & Jonathan Sun (sunjonat@usc.edu)

## ControlPanel events (fired by Agent)

(none)

## ControlPanel callbacks (received by Agent)

Channel	Event	args	Description
CONTROL_PANEL	START	null	Fired when the Start button is pressed, starts the factory
CONTROL_PANEL	STOP	null	Fired when the Stop button is pressed, stops the factory
CONTROL_PANEL	SET_RECIPE	<pre>args[0] is the recipe to produce</pre>	Fired when the a new recipe is set through the control panel

#### GUIConveyor events (fired by Agent)

Channel	Event	args	Description
CONVEYOR	CONVEYOR_DO_START	args[0] is the index of the conveyor	Fired whenever the conveyor should start (i.e. when a glass has left the sensor)
CONVEYOR	CONVEYOR_DO_STOP	args[0] is the index of the conveyor	Fired whenever the conveyor should stop (i.e. when a glass has reached the sensor)

#### GUIConveyor callbacks (received by Agent)

(none)

#### GUISensor events (fired by Agent)

(none)

# GUISensor callbacks (received by Agent)

Channel	Event	args	Description
SENSOR	SENSOR_GUI_PRESSED	<pre>args[0] is the index of the sensor, args[1] is the index of the glass that pressed it</pre>	Fired when a glass has moved onto the sensor
SENSOR	SENSOR_GUI_RELEASED	<pre>args[0] is the index of the sensor</pre>	Fired when a glass has moved off of the sensor

#### GUIPopUp events (fired by Agent)

Channel	Event	args	Description
POPUP	POPUP_RELEASE_GLASS	args[0] is the index of the popup	Fired when the popup should push its glass onto the next conveyor
POPUP	POPUP_DO_MOVE_UP	args[0] is the index of the popup	Fired when the popup should move up
POPUP	POPUP_DO_MOVE_DOWN	args[0] is the index of the popup	Fired when the popup should move down

#### GUIPopUp callbacks (received by Agent)

Channel	Event	args	*when the popup has the glass Description completely on its platform
POPUP	POPOP_GUI_LOAD_FINISHED	<pre>args[0] is the index of the popup</pre>	Fired when the loading animation has finished
POPUP	POPUP_GUI_RELEASE_FINISHED	<pre>args[0] is the index of the popup</pre>	Fired when the unloading animation has finished
POPUP	POPUP_GUI_MOVED_UP	<pre>args[0] is the index of the popup</pre>	Fired when the moving animation has finished
POPUP	POPUP_GUI_MOVED_DOWN	3	Fired when the moving animation has finished

Interesting note:

POPUP\_GUI\_MOVED\_DOWN for POPUP

SENSOR\_GUI\_PRESSED

Starting conveyor 6

POPUP\_GUI\_RELEASE\_FINISHED <--- after next family already got SENSOR\_GUI\_PRESSED

SENSOR\_GUI\_PRESSED

POPUP\_GUI\_LOAD\_FINISHED for POPUP

## GUITruck events (fired by Agent)

Channel	Event	args	Description
TRUCK	TRUCK_DO_LOAD_GLASS	null	Fired when glass needs to be loaded onto the truck
TRUCK	TRUCK_DO_EMPTY	null	Fired once the truck is full so that it empties its load

## GUITruck callbacks (received by Agent)

Channel	Event	args	Description
TRUCK	TRUCK_GUI_LOAD_FINISHED	null	Fired when the loading animation has finished
TRUCK	TRUCK_GUI_EMPTY_FINISHED	null	Fired when the emptying animation has finished

## GUIBin events (fired by Agent)

Channel	Event	args	Description
BIN	BIN_CREATE_PART	null	Fired when back end wants a new piece of glass to be created and put on the conveyor

## GUIBin callbacks (received by Agent)

Channel	Event	args	Description
BIN	BIN_PART_CREATED	null	Fired when the glass creation animation has finished

## GUIWorkstation (on conveyor) events (fired by Agent)

Channel	Event	args	Description
[WORKSTATION_NAME]	WORKSTATION_DO_ACTION	null	Fired once the glass is loaded to make the workstation perform its animation
[WORKSTATION_NAME]	WORKSTATION_RELEASE_PART	null	Fired when the Agent is ready to unload the glass onto the next conveyor

## GUIWorkstation (on conveyor) callbacks (received by Agent)

Channel	Event	args	Description
[WORKSTATION_NAME]	WORKSTATION_GUI_ACTION_FINISHED	null	Fired when the workstation animation has finished
[WORKSTATION_NAME]	WORKSTATION_LOAD_FINISHED	null	Fired when the loading animation has finished
[WORKSTATION_NAME]	WORKSTATION_RELEASE_FINISHED	null	Fired when the glass has been released to the conveyor

#### GUIWorkstation (off conveyor) events (fired by Agent)

Channel	Event	args	Description
[WORKSTATION_NAME]	WORKSTATION_DO_ACTION	args[0] is the index of the workstation	Fired once the glass is loaded to make the workstation perform its animation
[WORKSTATION_NAME]	WORKSTATION_DO_LOAD_GLASS	args[0] is the index of the workstation	Fired when the Agent is ready to load the glass onto the workstation
[WORKSTATION_NAME]	WORKSTATION_RELEASE_PART WORKSTATION_RELEASE_GLASS actually	args[0] is the index of the workstation	Fired when the Agent is ready to unload the glass onto the next conveyor

Technically only releases glass back to the popup!

#### GUIWorkstation (off conveyor) callbacks (received by Agent)

Channel	Event	args	Description
[WORKSTATION_NAME]	WORKSTATION_GUI_ACTION_FINISHED	args[0] is the index of the workstation	Fired when the workstation animation has finished
[WORKSTATION_NAME]	WORKSTATION_LOAD_FINISHED	args[0] is the index of the workstation	Fired when the loading animation has finished
[WORKSTATION_NAME]	WORKSTATION_RELEASE_FINISHED  This implies POPUP_GUI_LOAD_FINISHED too (immediately after)	args[0] is the index of the workstation	Fired when the glass has been released to the conveyor