# UI Assist VAM Plugin User Guide
## by JayJayWon

## Contents

# 1 What is UI Assist

UI Assist (UIA) is a VAM plugin intended to enhance the usability of VAM – primarily targeted at easier and rapid content consumption. It provides an alternative configurable User Interface (UI) to access common VAM features and additional extra functions. By default (in VR mode) the new UI can be activated from a clock on the user's wrist which reveals an array of buttons. Currently users principally interact with content using the very extensive and complex VAM UI screens and menus. Whilst comprehensive, there are a lot of options, history and complexities that can make navigation slow. For example, just changing a clothing preset can require the following sequence of actions in standard VAM:

1. Open the VAM UI
2. Enter Edit Mode
3. Select the control node of a Person atom
4. Select the Clothing Preset Tab
5. Click 'Select Existing…'
6. Navigate and find the Clothing Preset you want to load and select it
7. Wait for the Clothing to Load
8. Switch back to Play Mode
9. Close the VAM UI

Alternatively, some content creators produce scene specific User Interfaces (e.g. UIButtons) to perform discrete specific tasks. These are generally limited to only work for that specific scene and cannot easily be transferred to other scenes.

There are other plugins which provide alternate and accessible UIs – but these are designed to enable only the specific functions of the plugin.

UI Assist allows the user to define the function of each button on a custom UI and then reuse that setup in any scene. Because UIAssist is a Session plugin it automatically persists between scene loads. The UI is accessible via a watch (i.e. clock) on the user's VR wrist that can be activated to reveal a menu of buttons. The action for each button can (optionally) be targeted at the Atom last looked at by the user. For example, once setup, loading a clothing preset can be as simple as:

1. Look at Person atom
2. Glance at Watch UI
3. Click clothing preset load button on Watch UI

UI Assist has been built to work with VAM v1.20.1.5 (and above).

# 2 Free and Patron Version Differences

JayJayWon has produced many free plugins for the VAM community, however, to reflect the amount of work in creating UIAssist there are two variants of UI Assist:

1. Free version containing most core functions and features
2. Patron version containing additional advanced functions only available to JayJayWon patrons.

A list of the current differences can be seen below:

| Feature | Last Update | Free Version | Patrons Version | Notes |
|---|---|---|---|---|
| UIA Buttons | 1.13 | 16 buttons | Up to 81 buttons | Multiple screens of buttons can be configured to perform user customised actions. The free version is limited to 16 buttons per screen. The size of buttons can be set for each screen from five options (micro, mini, small, medium and large). |
| Button targeting | 1.14 | ✓ | ✓ | Each button's action can be configured to target a range of "atoms" (i.e. objects in VAM). This includes the atom of a particular type that was last looked at by the user (e.g. the last female or male looked at) and groups of atoms. |
| Buttons Edit mode | 1.13 | ✓ | ✓ | Buttons can be repositioned by dragging & dropping them on the Wrist UI once UIA Edit Mode is activated. Buttons can now be moved between screens and also the Quick Launch Bar (Patrons only). |
| One Handed VR Operation | 1.18 | ✓ | ✓ | A range of features are available to facilitate easier operation with one (or zero) VR controller:<br>• Static mode: UIA buttons can be detached from the wrist. Once detached the UI can be repositioned by drag and drop. Options allow rapid one-handed or automatic detachment of the UI from the wrist.<br>• HUD mode: UIA buttons are fixed in the VR users' field of view.<br>• Gaze control. UIA buttons can be activated (on or off the wrist) by gazing at them and pressing a VR controller button on the same wrist that the UI is attached to.<br>• Leap Motion Control. UIAssist buttons can be interacted with using Leap Motion finger detection without needing a VR Controller. 'OK' hand gesture allows free movement panning and rotation. |
| Presets | 1.15 | ✓ | ✓ | Buttons can be configured to load VAM Presets (new and legacy preset types). Options allow merge loading of presets and to always use the latest VARs (when a preset is packaged in a VAR). Additionally, Subscenes can be loaded. |
| Presets from folder | 1.16 | ✗ | ✓ | Buttons can be configured to prompt the user to select a specific preset from a custom folder or randomly select from that folder or sequentially cycle through the presets in that folder. This allows a collection of favourite presets to be collated in one folder that the user can choose from when activating the UIA button. |
| Person Appearance | 1.6 | ✓ | ✓ | UIA Buttons can be configured to control the appearance of person atoms. This includes:<br>• Changing hair color<br>• Resetting a person's scale to the scene default<br>• Resetting a person's appearance to the scene default<br>• Removing all clothing<br>• Setting Clothing Sim states on all clothing<br>• Prevent clothing changes when loading an appearance preset |

| Feature | Last Update | Free Version | Patrons Version | Notes |
|---|---|---|---|---|
| Appearance Suppression | 1.12 | ✘ | ✓ | Options to suppress certain appearance changes on person atoms:<br>• Prevents scale changes of person atoms when loading appearance presets with UIA<br>• Only apply decals when loading a skin preset with UIA |
| Toggle Merge Clothing Presets | 1.17 | ✘ | ✓ | Presets of clothing can be toggled without removing other clothing. This allows mixing and matching of different groups of clothing items. Can also be used to toggle the sim state of clothing items to undress groups of clothing items without effecting other clothing. Groups of clothing items can also be removed by Tag. |
| Plugins | 1.16 | ✓ | ✓ | UIA Buttons can be configured to load and interact with plugins. Plugin actions can be triggered and any available plugin parameters can be set. |
| Decal Maker Toggle | 1.9 | ✓ | ✓ | Rapidly Toggle and merge decals from UIA Buttons using DecalMaker plugin by Chokaphi. Allows rapid mixing and matching of tattoos etc. |
| HeelAdjust | 1.2 | ✓ | ✓ | Automatically apply Heel Adjust settings created using prestigitis HeelAdjust plugin. Optionally, person atoms can be raised and lowered to adjust for heel heights. |
| Atom Spawning | 1.15 | ✓ | ✓ | Atoms of specified type spawned at custom location and with configurable presets and plugins. Location can be relative to another atom/node or the VR head or hands. |
| Atom Teleport & Move | 1.18 | ✓ | ✓ | Teleport an Atom to a specific location. Target locations can be relative to another atom/node or the VR head or hands.<br>Targeted Atoms can be moved by mirroring a VR Controller position and rotation. Click "grab" button to end move or hold "grab" button to un-pause movement.<br>Additionally, the player can teleport to a specified position e.g. in front of the target person. |
| Atom Control | 1.17 | ✓ | ✓ | UIA buttons can be configured to Hide, Delete, Toggle Collision, Detach Control Nodes, Toggle Atoms On/Off and Select atoms.<br>Preset Locks on Person atoms can also be toggled. |
| Active Clothing Editor (ACE) | 1.12 | ✘ | ✓ | Rapidly shows what clothing items are currently active on a person and allows you to switch them on or off and to toggle the Sim Undress state |
| Gaze Assisted Select | 1.5 | ✓ | ✓ | Option to select from a list of Atoms and nodes that are auto sorted to show selections closest to the users gaze direction first. |
| Quick Launch Bar | 1.7 | ✘ | ✓ | Optional row of buttons that are available on all screens. Similar to smartphone app docks. |
| Scene Load | 1.6 | ✓ | ✓ | Buttons can be configured to Load or Merge Load a scene.<br>When loading scenes with UIA, the shortcuts can be filtered to only show scenes from VARs within a specified folder (under AddonPackages). This allows better organisation of scenes. |
| Scene Animation | 1.12 | ✓ | ✓ | UIA Button functions to control scene animation playback and record |

| Feature | Last Update | Free Version | Patrons Version | Notes |
|---|---|---|---|---|
| UIA Config | 1.17 | ✓ | ✓ | Buttons can be setup to Load another UI Assist button configuration.<br>Screens of buttons can be imported from other UIA Config files. |
| Force VAM modes | 1.17 | ✓ | ✓ | • Option to automatically switch to VAM Play Mode when the VAM UI is closed and Edit Mode when the VAM UI is opened.<br>• Option to force VSync to On whenever VAM is started in Desktop and VSync to Off when playing in VR.<br>• Options to force 'Disable Freeze Physics on Grab' off when loading scenes or adding person atoms. |
| VAM Controls | 1.18 | ✓ | ✓ | Button types to toggle VAM Play/Edit mode, Freeze motion, Show VR hands, World Scale, Soft Body Physics, Desktop VSync, VR Head Collision and Performance Monitor. |
| Button skin customisation | 1.13 | ✓ | ✓ | The appearance (or skin) of each button can be customized. This includes button and font colours, font types, size and alignment and thumbnail images. |
| Third party plugin integration | 1.16 | ✓ | ✓ | Integration with Acidbubbles Keybindings plugin and framework for other plugins to access the UIA last gazed at Atom values. |

Throughout this guide, the screenshots will be based on the Patron version of UIAssist and so may show options that are not available to UI Assist Free users.

# 3   How to install UI Assist

The free version of UIAssist can be downloaded from VAMHub here:

https://hub.virtamate.com/resources/uiassist-free.117/

and the patron versions of UIAssist can be downloaded from JayJayWon's Patreon website (once you have subscribed as a patron) here:

https://www.patreon.com/JayJayWon

Depending on the version you are using you will need to download one of the following VAR Packages:

| FREE VERSION | PATRON VERSION |
|---|---|
| JayJayWon.UIAssist(Free).21.var | JayJayWon.UIAssist(Patron).21.var |

As subsequent versions of UIAssist are released the numeric digit in the var filenames will be incremented.

Place the downloaded .var file into the folder \AddonPackages under the main VAM program folder. Start VAM in either VR or desktop mode.

When VAM has started, navigate to the Session Plugin Loader screen:
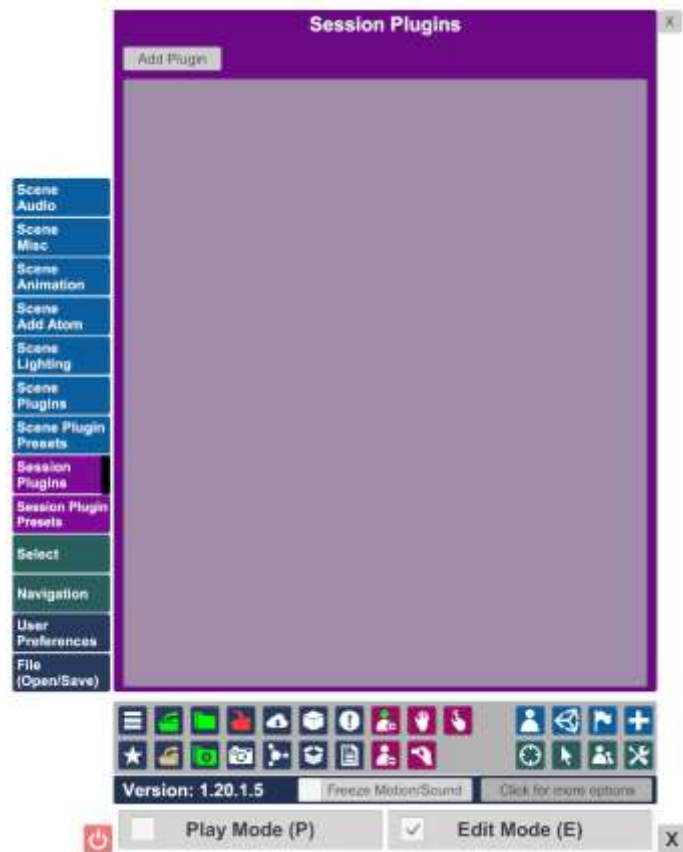
Click add plugin and then Select File:



Using the Shortcuts navigation on the left panel select the UIAssist VAR Package which was just installed. Select the UIAssist.cs file.
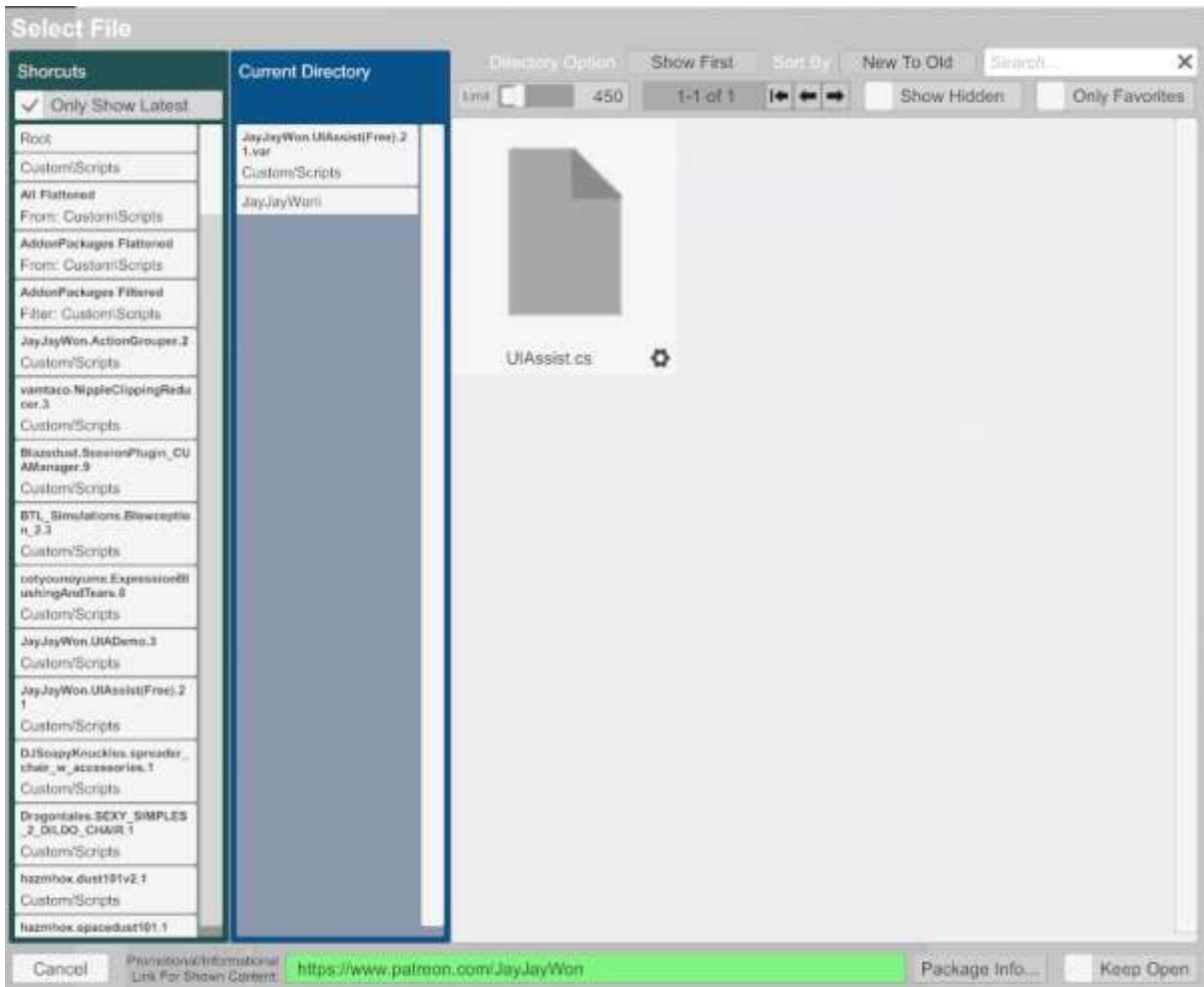
UI Assist should now be loaded. In VR mode a watch will appear on the left wrist of the user. In desktop mode a small button with the current time will appear in the bottom right corner of the screen.

## 4   How to use UI Assist

To start using UI Assist, click on the small clock face that appeared when first loading the UIAssist plugin. Three buttons with a blue text box above should now be displayed (these are the default set of buttons to help demonstrate the tool is working).



The three buttons from left to right have been pre-configured as follows:

1. Remove all clothing from the last looked at Person Atom
2. Apply the VAM clothing preset ''VaM_Seductress_Sim'' to the last looked at Female Atom,
3. Apply the VAM appearance preset "Ren_Tara" to the last looked at Female Atom.

The blue box is called the Gaze Targets box and contains the current gaze target atoms that will be applied when a button with a Gaze target is pressed. The gaze targets are context specific so will only show the target types that relate to the buttons on the current UI Assist screen.

If a person atom is not already in your scene then add them using the standard VAM procedure. Now try looking at that person in the scene (or in Desktop mode, rotate the view so the person is in the centre of the screen). The gaze targets will update to reflect that the Person atom is now targeted.



Try pressing the three buttons and see the effect on the Person atom. Changing the person to a Male atom will demonstrate that the Gaze feature will not apply the clothing or appearance presets to a male target but the remove clothing will still work.

## 4.1   Switching VR Hands

By default in VR Mode, the Watch UI will appear on the left VR hand. This can be switched to the right hand by opening the Custom UI menu for the UI Assist Session plugin the plugin:



In the left panel there is a dropdown menu to switch between Left and Right hands:

It is possible to simultaneously load two UIAssist session plugins and have one configured for the left hand and the other for the right hand.

## 4.2   Gaze Open and Close Screens

When these options are activated, the UI Menus will open and close automatically as the user gazes at the UI Assist buttons.
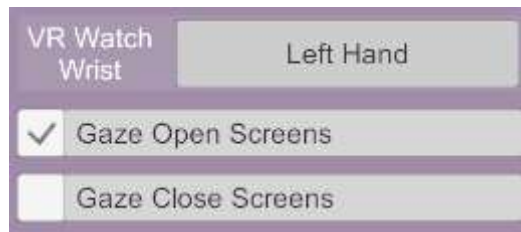


## 4.3   Static Pinned Mode

By selecting the Static VR Pin mode, the UI can be detached from the VR wrist position and will remain static in the VR space at the position and rotation it was detached:
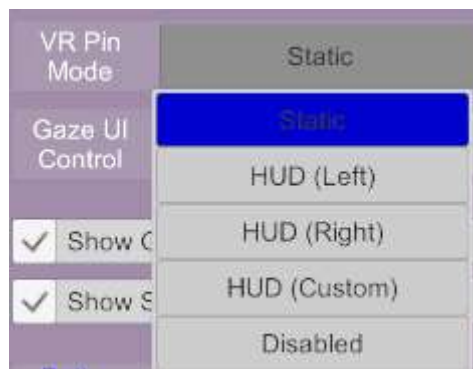


To detach the UI, either:

1. Activate the X button to the left of the main UIAssist clock/launch button,
2. Double click the Select button (typically tied to A on an Index Controller). This allows for one handed detach from the wrist.

Whilst detached, the UI can be repositioned by:

1. Holding the trigger button whilst pointing the VR controller at the O button and moving the controller.

To reattach the UI to the wrist, either:

1. Activate the O button to the left of the main UIAssist clock/launch button
2. Double click the Select button (typically tied to A on an Index Controller). This allows for one handed re-attach to the wrist.
3. Move the VR hand that the UI was previously attached to into the vicinity of the watch/launch button of UIA.

## 4.4   HUD Pinned Mode

By selecting one of the HUD VR pin modes, the UIA interface can be tied as a head up display that remains in a fixed view position irrespective of the user's head rotation. There are three available HUD modes:

1. HUD (Left) – the UIA interface will be displayed left of the user's centre view
2. HUD (Right) - the UIA interface will be displayed left of the user's centre view
3. HUD (Custom) – the UIA interface will be displayed at a configurable offset from the user's centre view.



To move the UI from wrist to the HUD, either:

1. Activate the X button to the left of the main UIAssist clock/launch button,
2. Double click the Select button (typically tied to A on an Index Controller). This allows for one handed detach from the wrist.
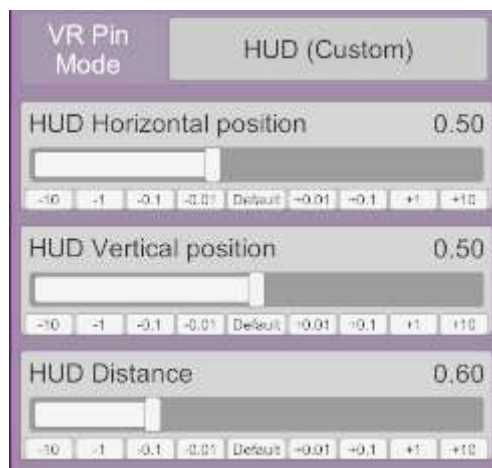
To reattach the UI to the wrist, either:

1. Activate the O button to the left of the main UIAssist clock/launch button
2. Double click the Select button (typically tied to A on an Index Controller). This allows for one handed re-attach to the wrist.

## 4.5   Gaze UI Control

When this option is active, the UIA buttons can interacted with in VR by gazing at the buttons and triggering a button by pressing the Grab controller button (typically tied to the Trigger button on an Index Controller). Gaze UI Control can be disabled, active on the wrist only or active on the wrist and in static pinned mode:

When active, the buttons on UIAssist will be colored blue when the current gaze focus to indicate which button is selected. This color can be customised by Patron UIA users (see Section **Error! R eference source not found.**).

## 4.6   Leap Motion Touch Control

VAM supports the use of Leap Motion Touch Controllers in VR. This allows interaction with Atoms (i.e. People) using just hands and no VR Controllers. There are several options available:

- https://www.ultraleap.com/product/leap-motion-controller/ - unexpensive but limited FOV restricts the experience significantly.
- For Pimax users  https://eu.pimax.com/products/hand-tracking-module-1 - expensive but much improved FOV
- https://www.ultraleap.com/product/stereo-ir-170/ - expensive but should improve FOV. However, it is unconfirmed if this works with VAM (although it should).

The UIAssist buttons can now be fully interacted with using Leap finger touch. Simply press on any UIAssist button with the tip of the index finger to activate that button. Scroll bars can be interacted with using a pinch gesture with the index finger and thumb. When in Pinned mode, the UI can be repositioned by pinching on the Pin button and moving the hand.

Free movement can be activated by forming and holding an 'OK' hand gesture (the index and thumb tips should be pinched, whilst the middle, ring and pinky fingers are extended straight. This needs to be done near the centre of the users field of view):

Whilst free movement is activated, movement of the hand in any of the 3 axis will pan the VR camera view in that direction. The further the hand is moved from the start position the faster the panning movement will be. Returning the hand to the starting position will stop panning.

Alternatively, the view can be rotated by twisting the wrist about the axis of the arm whilst holding the 'OK' gesture. Rotation is limited to yaw rotating the view (ie. around the y-axis). The further the wrist is rotated, the faster the rotation will be. Returning the wrist to the starting angle will stop rotation. Panning and rotations cannot be active simultaneously.

Free movement rotation can be configured to pivot around the user's head or pivot around a target person. See section 8.4 for configuration options.

Un-pinch the finger and thumb to stop the free movement mode.

A similar action can be used to control the movement of atoms when using the Move Atom button described in Section 6.3.3.

## 4.7   Quick Launch Bar (PATRON ONLY FEATURE)

In addition to having multiple screens of buttons, UI Assist has an option to activate a Quick Launch Bar that appears as a separate row (or two) of buttons below the main screens. The Quick Launch Bar behaves similarly to the iOS Dock.
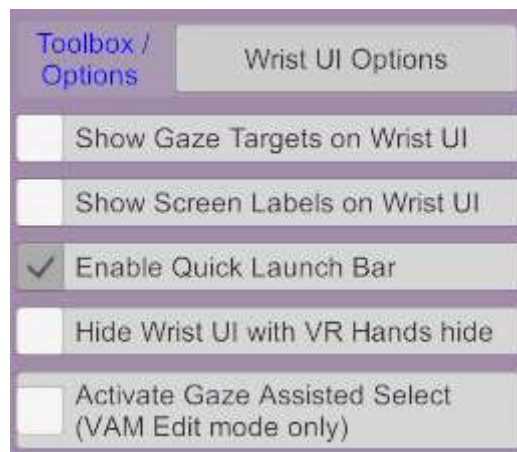


Once activated it appear below the main screen buttons and is persistent across all screens:
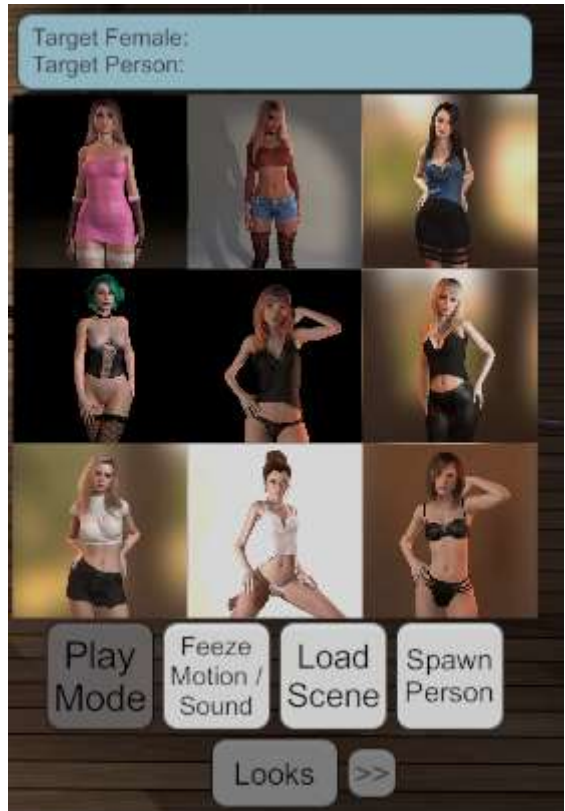
When activated, the Quick Launch Bar will appear in the list of Screens in the plugin UI and allows each button to be configured:



## 4.8    Hide Wrist UI with VR Hands Hide

An option is available to automatically disable or hide the Wrist UI whenever the VR Hands are not shown:

When active, this option takes effect whenever the VR Hand (Left or Right) which the Wrist Watch UI is attached to is hidden. The "Show VR Hands" option is available on either the User Preferences tab under VR 2:
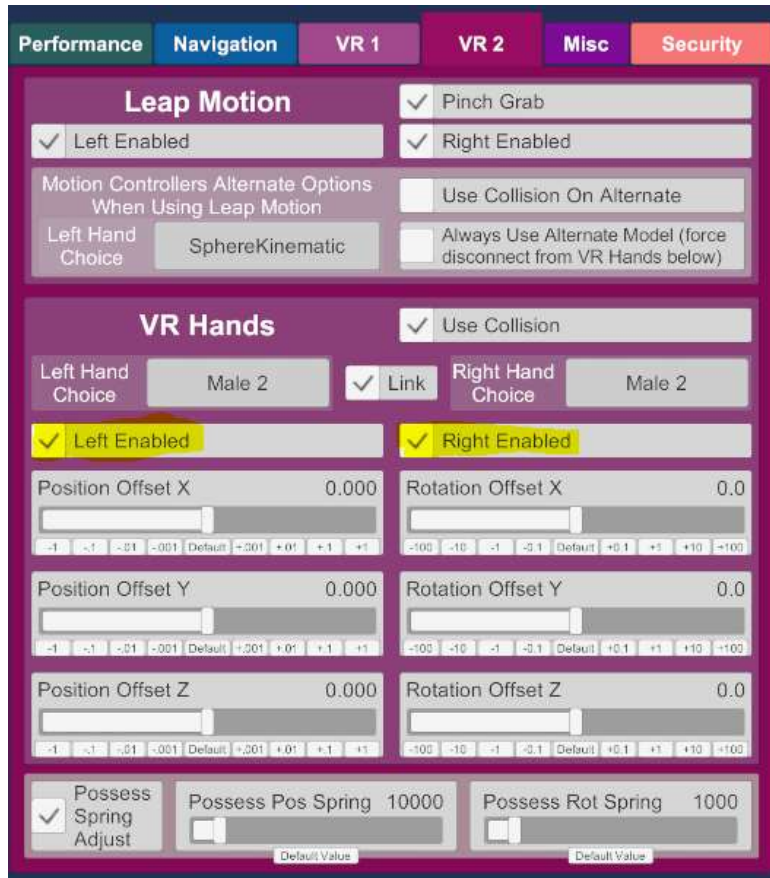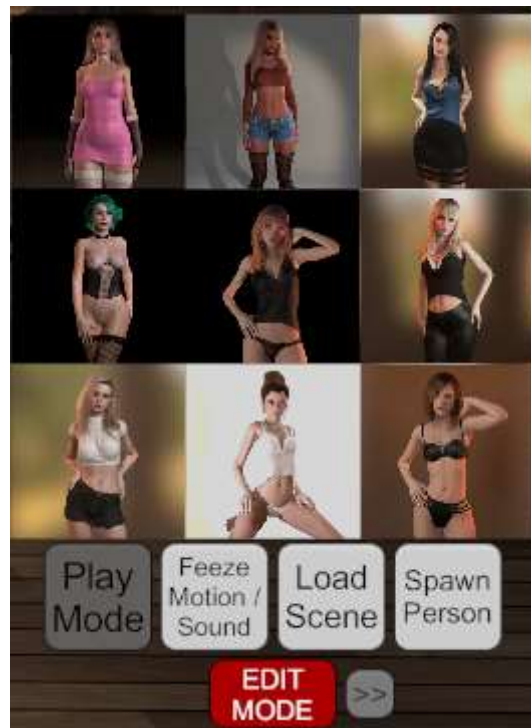


Or it can be quick toggled from the main VAM options bar using the hand icon:

## 4.9 UIA Edit Mode

UI Assist Edit mode can be activated by a long press on the main clock / watch button:



Once Edit Mode is activated, buttons can be dragged and dropped to re-arrange them within the wrist based Watch UI. Buttons can be dragged between the main button Screens and the Quick Launch Bar as long as there are Empty buttons available in the destination screen (this also allow buttons to be moved from one screen to another via the Quick Launch Bar). In Edit Mode, the normal action of buttons are not triggered - instead activating buttons on the Watch UI will select them in the plugin UI – to allow rapid modification of the action of that button.

When dragging and dropping buttons, if there are blank spaces in adjacent screens they can be dragged to the next screen with available space by dragging and dropping onto the buttons that state "Move to Screen X":

Edit Mode is de-activated by a short button press on the "EDIT MODE" button.

## 5 Setting up UI Assist Screens

When UIAssist is first installed it is pre-configured with 3 buttons on a single screen. Additional screens can be added - each with multiple buttons (up to 81 buttons per screen (9x9) for Patron users and 16 buttons per screen (4x4) for free users).

UI Assist Screens are configured using the three controls at the top of the right panel



The number of buttons available on each screen can be changed by selecting the desired number of rows and columns for the screen layout:

The size of the buttons can be set to Micro, Mini, Small, Medium or Large. The size of buttons on any screen are the same, but different screens can have different size buttons. Larger screen layouts (e.g. 9x9) will only support smaller buttons sizes.

Adding and switching screens can be done from the Screen Selector menu. When a screen is selected in this menu, the whole right panel is updated to display the current configuration of that screen.



When more than one screen (with buttons configured) has been added, the Wrist UI will display left and right scroll buttons to switch between the screens:

Note that when a screen is first added it will not have any buttons configured. Buttons will need to be configured before the screen can be accessed on the Wrist Watch UI.

There is also Patron Version Only Feature to specify a label for each Screen.
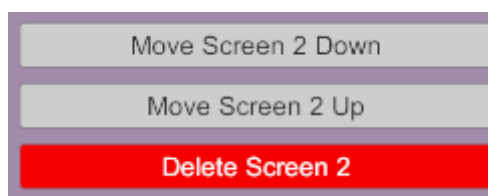


When active then Wrist UI will switch from showing the time to the screen label.



## 5.1   Re-ordering Screens

At the bottom of the right panel in the Plugin UI, the order of the screens of buttons can be modified:



Moving a screen "down" in order will move it earlier in the list of screens. Moving a screen "up" in order will move it later in the list of Screens.

# 6   Setting up UI Assist Buttons

Each button on a UI Assist Screen can be configured on the right panel of the plugin Custom UI under the Screen configuration:
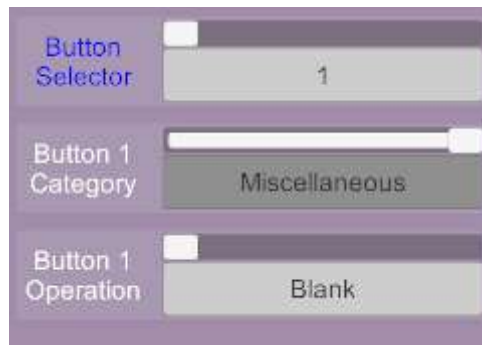


The button to be configured is chosen using the Button Selector menu. Each button has a unique number that defines its position on the screen (left to right and then bottom to top).

The function of a button is defined by selecting one of the Button Categories and then an Operation under that Category:
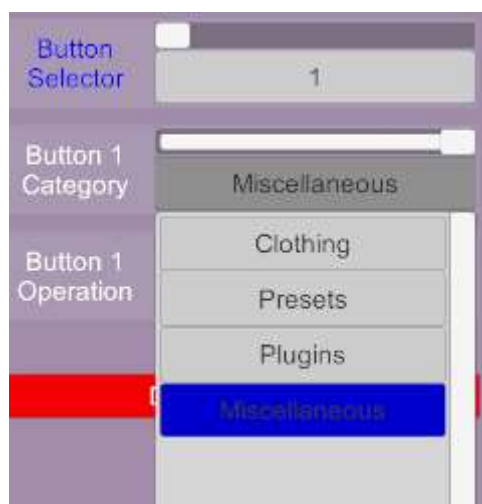


## 6.1   Auto or Manual Button Labels

By default every button will have an automatic label generated. This can be disabled and a custom label for each button can be manually specified:
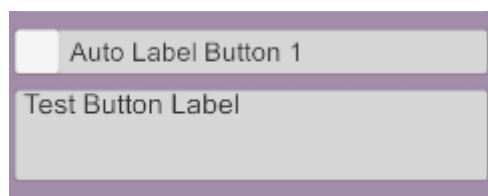


Some button types have two states (i.e. you can toggle the button between On and Off state). Where that is the case separate labels can be specified for the On and Off states:

## 6.2    Button Target & Category

A target and target category for every button can be specified:



These settings define the Atom(s) that the button operation will be conducted on. There are three categories of target that can be selected:

### 6.2.1    Gaze Selected Target



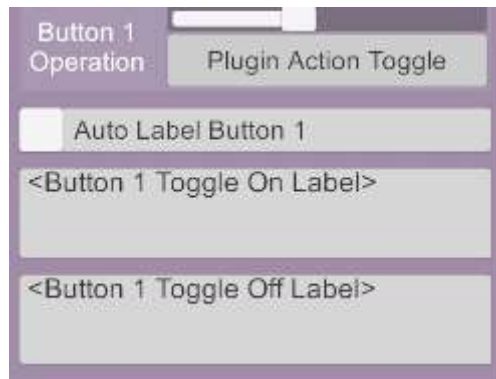Where the target Category is selected as "Gaze Selected Atom" the button operation will be performed on the last Atom which was looked at by the user in VR (or was in the centre of the desktop screen). The type of atom can be further restricted to one of four options:

1.  Last viewed Atom – the button action will be performed on the last gazed at Atom of any type
2.  Last viewed Person – the button action will be performed on the last gazed at Person Atom (of either Male or Female type)
3.  Last viewed Female – the button action will be performed on the last gazed at Female Person Atom
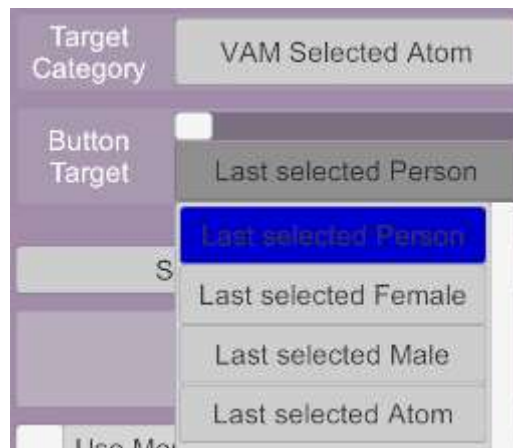4.  Last viewed Male - the button action will be performed on the last gazed at Male Person Atom

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### 6.2.2 VAM Selected Target



Where the target Category is selected as "VAM Selected Atom" the button operation will be performed on the last Atom that was Selected using the default VAM Selection techniques. The type of atom can be further restricted to one of four options:

1. Last selected Atom – the button action will be performed on the last selected Atom of any type
2. Last selected Person – the button action will be performed on the last selected Person Atom (of either Male or Female type)
3. Last selected Female – the button action will be performed on the last selected Female Person Atom
4. Last selected Male - the button action will be performed on the last selected Male Person Atom

### 6.2.3 Atom Groups



Where the target Category is selected as "Atom Group" the button operation will be performed on all Atoms of the specified type in the current scene. The type of atoms can be selected to one of four options:

1. All Atoms – the button action will be performed on all Atoms in the scene
2. All People – the button action will be performed on all people Atoms in the scene

3.  All Females – the button action will be performed on all Female people Atoms in the scene
4.  All Males - the button action will be performed on all Male people Atoms in the scene

### 6.2.4  Specific Atom



The button action will be performed on the specific Atom in the current scene with the selected Atom name. Although this option is available for completeness it relies on scenes containing an Atom that has been specifically named which given the plugin setup is not scene specific, may not always be the case – so best practice is to avoid using this category of target.

### 6.2.5  Scene & Session plugins

For Button Type that have been configured to perform a Plugin function, there are target options to select either Scene or Session plugins as the target rather than an Atom:
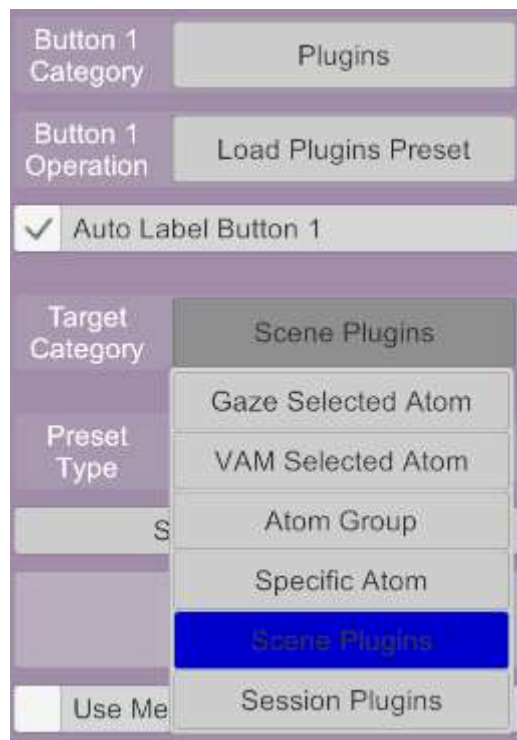


## 6.3  Atom Control Features

The following features are available under the Atom Control button category.

### 6.3.1   Spawn Atom

This button type allows a new atom to be spawned at a custom position and configuration. Position can be a fixed location or relative to other atom/nodes or relative to the users view (VR Head) or VR hands.
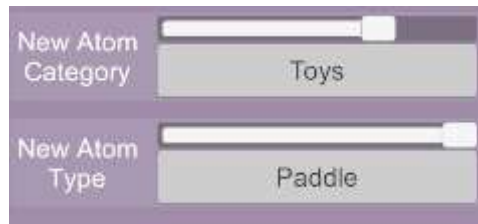
The Spawn Atom button is more complex to configure than many buttons due to the wide range of options.

#### 6.3.1.1   New Atom Category and Type

The first options are to select a type of atom to spawn. Most (but not all) of the standard VAM atom can be selected. These are grouped by the standard Atom types:



Where the Atom Category only contain one type of atom (e.g. People and Animation Patterns), there is no requirement to select the Atom Type.

#### 6.3.1.2   New Atom Name

The name of the new Atom can optionally be specified:
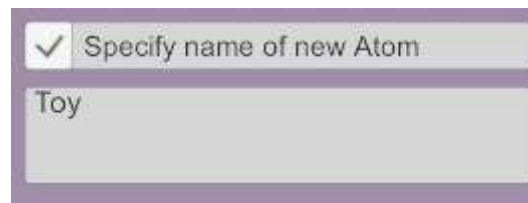


If the atom name is already in use, then a numeric digit will be added to the atom name to distinguish it. If no name is specified, then the VAM default name will be applied (based on Atom type).

#### 6.3.1.3   New Atom Position

The position and rotation of the new atom can be configured below the Atom Type selection. The position and rotation are always relative to a selected point:



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The function of each of the Spawn relative options are:

- Scene Origin: The new atom will be created relative to the Scene origin position i.e. (0, 0, 0). This is effectively the same as specifying an exact (or World) position and rotation for the new atom.
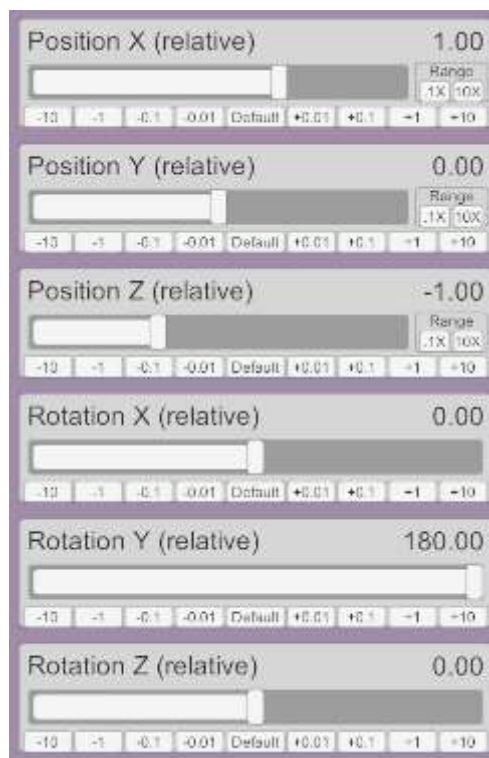- Last viewed Person/Female/Male: The atom will be created relative to the relevant current Gaze Target (see section 6.2.1). This is particularly useful for spawning CustomUnityAssets that are specialised types of clothing.
- VR Head: The new atom will be spawned relative to the user's eye position and direction. In desktop mode this is relative to the current camera position. This can be used to ensure an Atom is created directly in front of the user.
- VR Left/Right Hand: The new atom will be created relative to the selected VR Hand position and rotation. In desktop mode this position will be the same as selecting VR Head.

Once the 'Spawn Relative to' option is selected, the offset from this position can be configured:

| Position X (relative) | 1.00 |
| Position Y (relative) | 0.00 |
| Position Z (relative) | -1.00 |
| Rotation X (relative) | 0.00 |
| Rotation Y (relative) | 180.00 |
| Rotation Z (relative) | 0.00 |

When relative to a Gaze Target or VR Head or VR Hands, it is possible to specify that the height (i.e. Y position), pitch (i.e. X rotation) and roll (i.e. Z rotation) of a new atom are fixed rather than relative:

| ✓ Fixed Height (Y position) | |
| Position Y (absolute) | 0.00 |

| ✓ Fixed Pitch (X rotation) | |
| Rotation X (absolute) | 0.00 |

This is useful (for example) when spawning a person Atom relative to the VR Hand and can ensure the new person is always spawned with their feet at ground level (i.e. Fixed Position Y equal to 0) and upright (i.e. Fixed Rotation X and Z equal to 0) irrespective of the position and rotation of the VR hand.

The position and rotation settings can be tested without spawning a new atom using the 'Test Atom Spawn position on' feature:
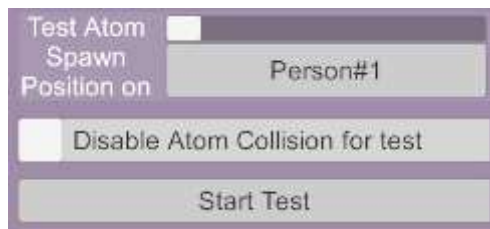


This feature requires an existing atom of the spawn type to be available in the scene. When Start Test is activated, the test atom will teleport to the specified position and rotation. Whilst the test mode is active, adjusting the position rotation settings in the button configuration will immediately update the test atoms position and rotation. Additionally, moving or rotating the test atom in game will update the button settings. **For this reason, it is important that only atoms that are not being animated are used as Test atoms**.
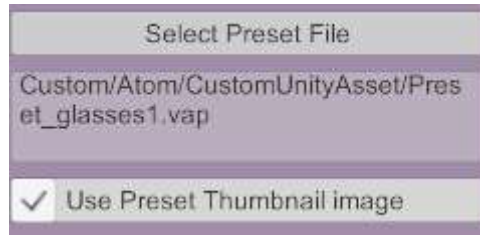
Optionally, collision for the test atom can be disabled. Pressing End Test will revert the Test atom to its original position and rotation.

### 6.3.1.4    New Atom Presets

For Person atoms, an Appearance preset and a Pose preset can be selected:
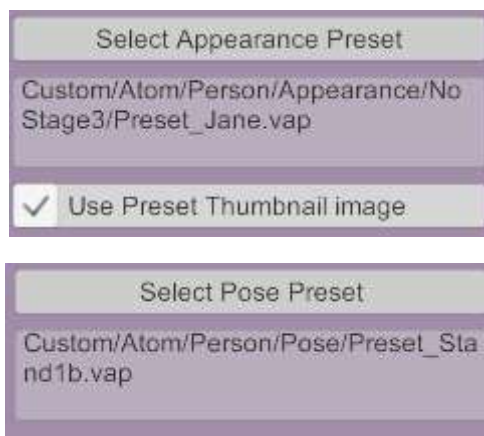


For all other types of atoms, a single atom preset can be selected:

The selected preset(s) will be applied as the new atom is being spawned. Optionally the thumbnail image for the preset can be used as the button icon. Patrons have the additional preset options described in section 6.4.3.

### 6.3.1.5   New Atom Plugins

Plugins can be specified to be pre-loaded for the new atom as it is created:



The Patron only version of the plugin allows for multiple plugins and plugin settings to be configured per Atom – as described for the Load Plugins feature (see section 6.6.1).

### 6.3.2   Teleport Atom

This button type allows a selected atom to be instantly moved (or teleported) to a custom position. The new position of the atom can be a fixed location or relative to other atom/nodes or relative to the users view (VR Head) or VR hands.



Options for configuring where the Atom is positioned are very similar to those described for Spawning Atoms – see Section 6.3.1.3.

### 6.3.3   Move Atom (VR Only)

The new Move Atom button type only operates when in VR.

Once activated, the main control node of the targeted atom will be moved by the VR controller that pressed the UIAssist button. Initially movement is paused but can be activated by clicking and *holding* the "Grab" button (normally mapped to the primary trigger) on the VR controller that is controlling the movement.

Whilst atom movement is activated, movement of the VR controller in any of the 3 axis will move the target atom in that direction. The further the hand is moved from the start position the faster the movement will be. Returning the hand to the starting position will stop movement.

Alternatively, the atom can be rotated by twisting the VR controller. The further the controller is rotated the faster the rotation will be. Returning the controller to its starting angle will stop rotation. Axis position movement and rotations cannot be active simultaneously.

In addition, each axis of rotation and position can be locked:
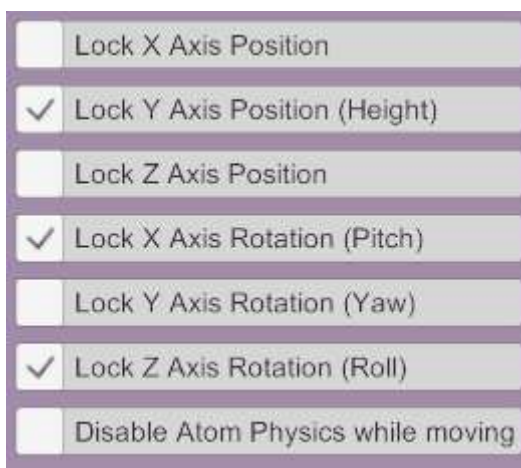


Locking an axis will prevent movement or rotation in world space along that axis. For example, locking the Y axis position will prevent the height of the atom from being adjusted.

Releasing the grab button will pause movement and rotation and allow the VR hand to be repositioned without altering the target atom's position or rotation. A single short click of the grab button will stop the Move Atom button action. Holding the grab button will re-activate the movement.

Lastly, there is an option to turn off collision whilst an Atom is being moved.

If VR Move button is activated using a Leap Motion finger action, then the Atom movement will be relative the Leap hand. The Grab button actions described above for the VR Controller will be replaced by an 'OK' hand gesture as described in Section 4.6.

### 6.3.4   Hide, Delete, Select Atoms

Button types are available to Hide, Delete or Select the currently focussed Atom(s).

**NB: THERE IS NO WARNING, CONFIRMATION OR UNDO FOR DELETING AN ATOM**.

### 6.3.5   Toggle Atom On/Off

Atoms can be toggled on and off using this button. By default, atoms in the Off state can not be gaze selected – however this can be enabled in the Tools/Options setting described in Section 8.5.

### 6.3.6   Toggle Atom Collisions

Atom Collision can be toggled on and off using this button.

### 6.3.7   Detach Root Node

The toggle option available on Person atoms to detach the root node from the atom so it can be repositioned can be controlled by a UIAssist button using this feature.
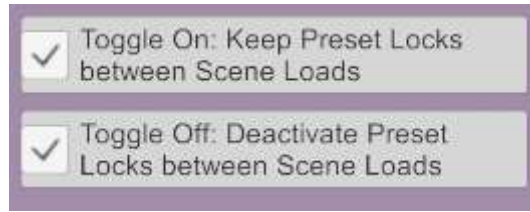
### 6.3.8   Toggle Preset Locks

The button type will toggle the Presets Locks for the targeted Person atom(s). Each Preset Lock type can be selected as part of the toggle action or not:
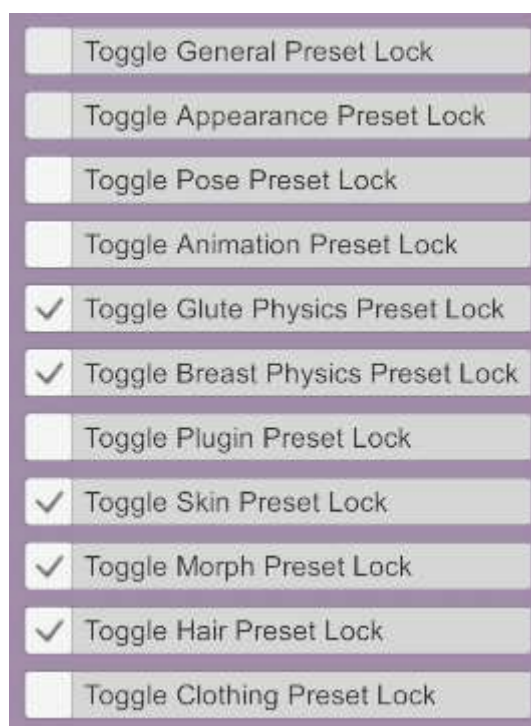


You can therefore have different UIA buttons to toggle different preset locks if required.

Additionally, the 'Keep Preset Parameter Locks between Scene Loads' option can be activated or deactivated in sequence with the Preset locks (or as an independent button function).

When the "Toggle On: Keep Preset Locks between Scene Loads" is active, then when the UIAssist button is Toggled On the target Atoms 'Keep Preset Locks between Scene Load' will be activated. This will ensure that Preset Locks are held between Scene Loads.

When the "Toggle Off: Deactivate Preset Locks between Scene Loads" is active, then when the UIAssist button is Toggled Off the target Atoms 'Keep Preset Locks between Scene Load' will be de-activated. This will ensure that Preset Locks are not held between Scene Loads.

Combination of these settings will allow users to rapidly apply Preset Locks to person atoms. This most commonly can be used to alter the appearance of a character in a scene and for that alteration to persist when a merge scene action occurs.

## 6.4   Presets Category Features

Nine button operations are available when the Presets button category is selected:



Each of the button Operations relates to one of the different person Presets (only the newer .vap presets are supported currently). A preset button operation will display the options to select a preset file of the relevant type:

The thumbnail image associated with the preset can also be optionally used as a thumbnail on the button UI.
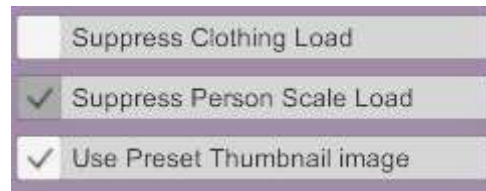
### 6.4.1 Suppress Clothing Load

When applying Appearance Presets, an option will be available to suppress the load of any clothing items in that preset:
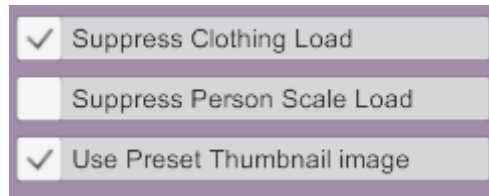


### 6.4.2 Suppress Person Scale Load (PATRON ONLY FEATURE)

When applying Appearance Presets, an option will be available to suppress the load of the person's scale when applying that preset:



This allows the size of the person defined by the scene to be maintained – which is useful where the alignment of animations are dependent on the person's scale in a scene.

### 6.4.3 Random, Sequential or Folder Select Presets

When applying any presets, an option will be available to either:

- select a single preset file
- randomly select a preset from a user specified folder
- sequentially select the next preset in the user specified folder (alpha-numerical filename order that loops)
- launch a file browser window for the user to choose a preset

when the button is activated:
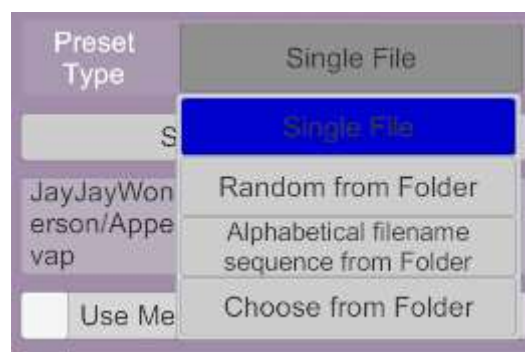


### 6.4.4 Skin Presets – Load Decals (PATRON ONLY FEATURE)

When applying any skin Presets, there is an option to only apply Decals from the skin presets:

This can be used to apply decals such as Tattoos with a single button press. Note that any existing decal will be replaced. See section 6.7.6 for details of an integration with Chokaphi's DecalMaker plugin which allows decals to be merge loaded.

### 6.4.5   Merge Presets Option

New option is available for Loading Presets to use Merge Load when the Preset is loaded:
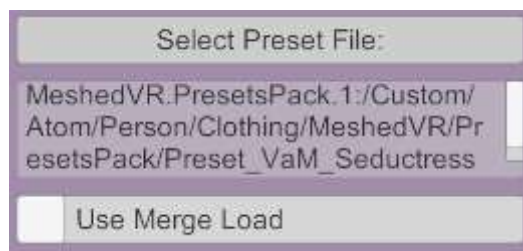


### 6.4.6   Load or Save Legacy Presets

Button types are available to Load and Save each of the Legacy Preset type (Preset, Pose and Appearance). The setup is otherwise the same as for the other presets (although there is no Merge option).

### 6.4.7   Spawn Atom on General Preset Load

An option is available when applying General Presets to non-Person atoms to spawn a new preset. This option is only available if the atom is targeting a specific Atom.

### 6.4.8   Load Subscene

A button type is available to load a new Subscene to a SubScene atom. The button targets for this button type will be limited so that the feature can only be applied to SubScene atoms. For Gaze Select Atoms and Atom Groups a Custom Gaze Target type will need to be defined for SubScene atoms.

This allows a button to change an Atom if it exists, but if it does not then it will create the Atom and then apply the General Preset. The same options for Spawning a new Atom are available to configure where the new Atom is spawned.

## 6.5 Clothing Category Features

The clothing category contains the following operations
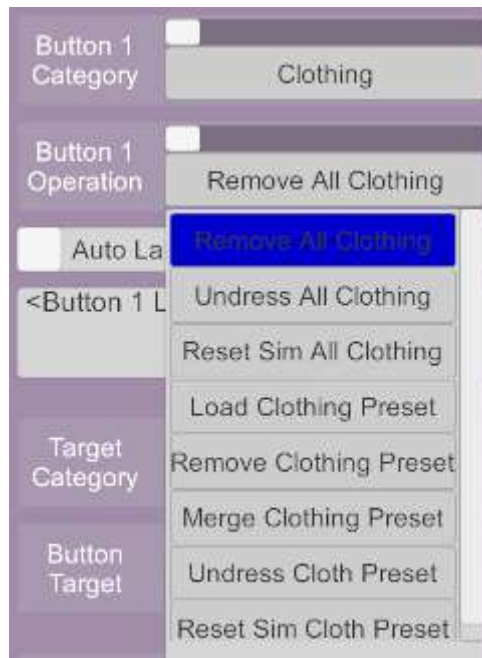


### 6.5.1 Remove All Clothing

Buttons with the "Remove All Clothing" operation selected will remove all clothing items from the target atom(s).

### 6.5.2 Undress All Clothing

Buttons with the "Undress All Clothing" operation selected will toggle the Sim Undress setting for all clothing items currently active on the target atom(s):



### 6.5.3 Reset Sim All Clothing

Buttons with the "Reset Sim All Clothing" operation will perform a Reset Simulation action for all clothing items on the target atom(s). This is the same as pressing "Reset Simulation" under individual clothing options:



### 6.5.4 Load Clothing Preset

Buttons with the "Load Clothing Preset" operation will perform the same function as a Preset Category button of the same name.

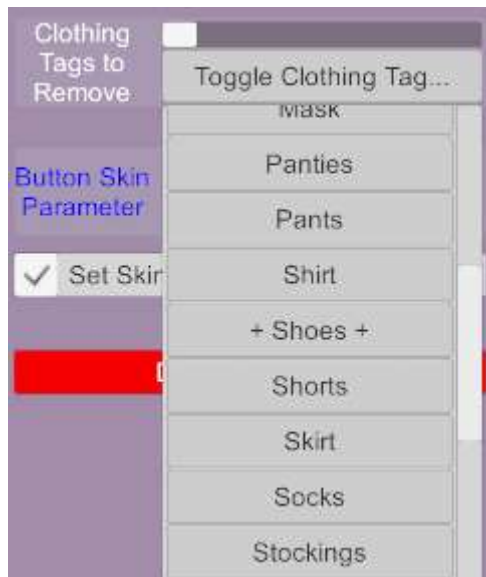### 6.5.5 Remove Clothing Preset (PATRON ONLY FEATURE)

Buttons with the "Remove Clothing Preset" operation will remove the clothing items in the Clothing Preset from the target atom(s).

### 6.5.6 Merge Clothing Preset (PATRON ONLY FEATURE)

Buttons with the "Merge Clothing Preset" operation will load the specified Clothing Preset but without removing any existing clothing on the specified target Atom(s). The button is a toggle button which means the merge operation can be reversed to remove the specified Clothing Preset whilst retaining any other clothing items.

This feature allows you to mix and match different presets. For example, you might have multiple jewellery presets that each consist of multiple jewellery items that can be switched between.

From v1.2, a new option to remove clothing items with specified Tags at the same time as merging has been added:

Clothing Tags (from the Region and Type category) can be toggled for removal or not. The + symbol is used in the drop down to indicate Tags that have been selected (reselecting will get rid of the + symbol). When a clothing tag has been selected for removal, any clothing items with that tag will be removed before the Merge Clothing action.

This feature allows the Merge Clothing action to be used to switch between variants of a specific clothing type with a single action e.g. remove any existing shoes and load new shoes whilst keeping all other clothing items.

### 6.5.7    Set Undress Clothing Preset (PATRON ONLY FEATURE)
Buttons with the "Set Undress Clothing Preset" operation will toggle the Sim Undress setting but only for active clothing items in the selected Clothing Preset on the target Atom(s). This allows the ability to sim undress a subset of the currently active clothing with a single button press.

### 6.5.8    Reset Sim Clothing Preset (PATRON ONLY FEATURE)
Buttons with the "Reset Sim Clothing Preset" operation will perform the Reset Sim action but only for active clothing items in the selected Clothing Preset on the target Atom(s).

### 6.5.9    Active Clothing Editor (PATRON ONLY FEATURE)
The Active Clothing Editor button type is available under Clothing Button Category:

When the button type is activated the Wrist UI display will become a list of clothing items being worn by the currently gazed at person:

Individual clothing items can be toggled on or off by pressing the remove button against the clothing item. Where a clothing item is "Sim Enabled", the Sim Undress can be toggled on and off by pressing the Undress button.

Multiple items can be selected using the check boxes on the left. The clothing state of these groups of selected items can be changed using the Remove and Undress buttons at the bottom of the list.

The top left text box shows the name of the Person atom that is currently being modified.

When a clothing item is removed from a Person (either in the Active Clothing Editor or in the normal VAM clothing UI) it is not removed from Active Clothing list (allowing it to be selected to wear again). To refresh the Active Clothing List to remove items that are not currently being work, the 'Clear Removed Clothing' button should be activated. In addition, loading a Preset (with a UIAssist button) that changes Clothing will remove all not currently worn clothing items from the Active Clothing Editor.
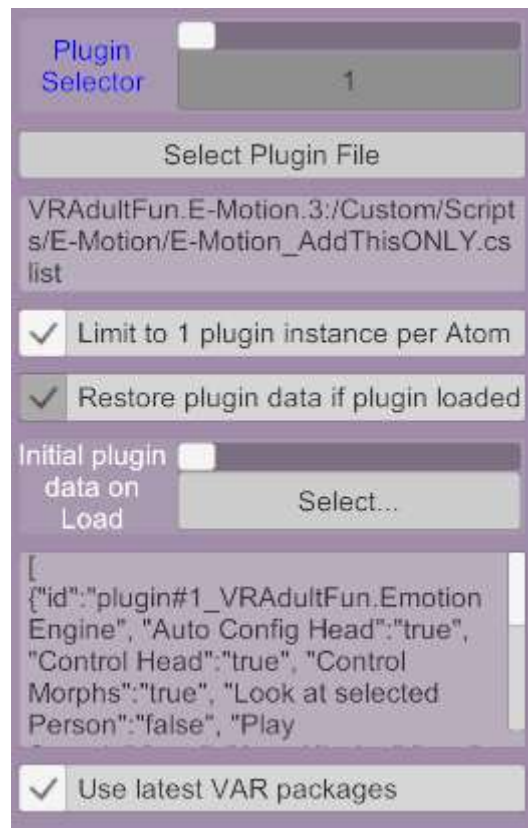
## 6.6    Plugins Category Features

The Plugins button Category contains six operations:
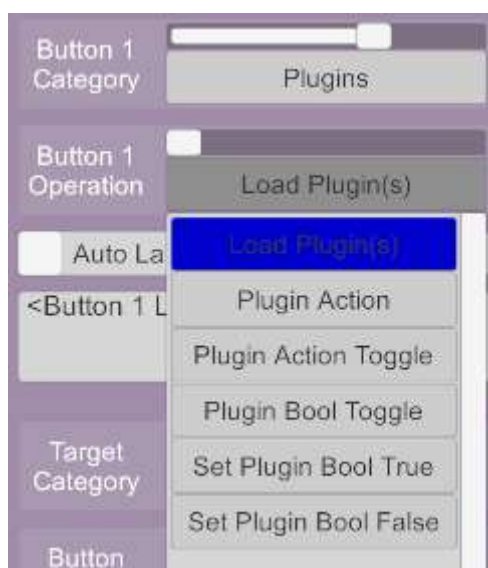
### 6.6.1   Load Plugin(s)

Buttons with the Load Plugin(s) will load a specified plugin to the target Atom (s).



In addition, there are a couple of checkbox options specific to the Load Plugins operation:

- 'Limit to 1 plugin instance per Aton' - option to limit the number of instances of the plugin to 1 per Atom. This will prevent multiple instances of the same plugin being loaded if it has already been loaded on the Atom.
- 'Restore plugin data if plugin loaded' – option that will load the specified plugin data if the plugin already exists in the Atom.

### 6.6.2   Plugin Action & Plugin Action Toggle

Buttons with the "Plugin Action" or "Plugin Action Toggle" operation will execute a plugin Action on the target Atom(s) – if the plugin is loaded into that Atom.
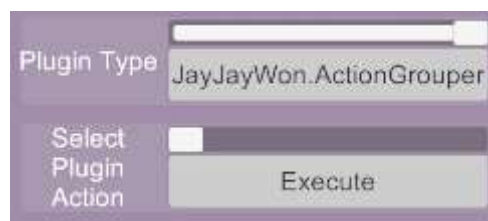


The Plugin Type will contain all Plugin types in the current scene and then an action for that plugin type can be selected.

A "Plugin Action Toggle" button will have two states (ie. On and Off) to toggle between. A separate action can be specified for each state:
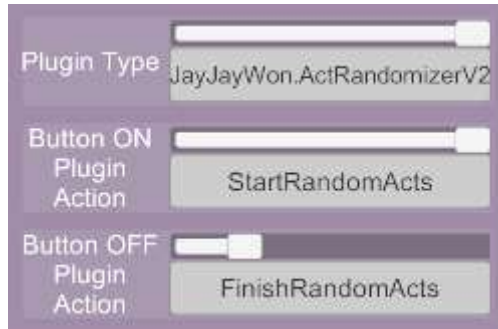
From v1.3, the settings (i.e. parameters or variables) for each plugin can be set before triggering an action:



Where a plugin setting is listed in the drop down with the '+' symbol at the start and end – this indicates that the setting will be initialised. By selecting one of the parameters, the user can choose whether to initialise that value and what value to initialise it to:
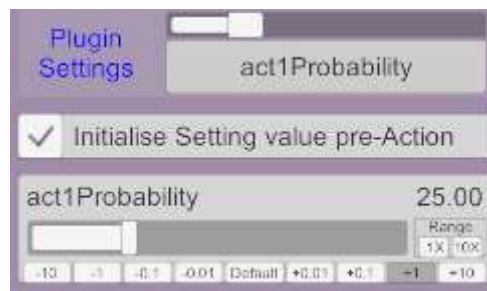


Initialised settings will now be applied to the plugin whenever the UIA button is activated.

### 6.6.3    Set Plugin Settings & Toggle Plugin Settings

Buttons with the Set Plugin Settings or Toggle Plugin Settings can be used to configure or change the settings of a plugin. This is identical to the functionality described in Section 6.6.2, except that a plugin action is not activated after the settings are changed.

### 6.6.4    Plugin Bool Toggle, Set True & Set False

Buttons with the "Plugin Bool Toggle" or "Set Plugin Bool True" or "Set Plugin Bool False"  operation will either toggle a plugin Bool value or set it to be True or False on the target Atom(s) – if the plugin is loaded into that Atom. The setup options are the same as for Plugin Actions except only Plugin Bool values will be selectable.

### 6.6.5    Unload all Plugins

Buttons with the "Unload all Plugins" operation will remove all currently loaded plugins from Atoms that are in the scope of the Target criteria of the button. The setup options are the same as for Plugin Actions except only Plugin Bool values will be selectable.

## 6.7    Appearance Category Features

The Appearance category contains 8 operations:



### 6.7.1    Load App Preset

This feature performs an Appearance Preset load and is exactly the same as the function under the Presets category described in Section 6.4.

### 6.7.2    Reset Scale

When the Reset Scale button is activated it will reset the scale of the Target Persons to their size at the last scene load. If the Atom did not exist at scene load (or has had a name change) then the scale will be set to 1.0. This feature is useful when a scene animation becomes mis-aligned due to a scale change when loading a new look or appearance to a person.

### 6.7.3    Reset Appearance

When the Reset Appearance button is activated it will reset the appearance/look (including scale) of the Target Persons to the state at the last scene load. If the Atom did not exist at scene load (or has had a name change) then the appearance will be returned to the VAM default female.

### 6.7.4 Suppress Scale Load (**PATRON ONLY FEATURE**)

Buttons assigned this feature will toggle between "Scale Suppression" being active or not. When activated, any appearance preset loads (via UI Assist) will not change the scale of a person. This avoids animations becoming misaligned in some scenes.

### 6.7.5 Set Hair Color

Buttons assigned this feature will apply the selected hair color settings to all hair on the target person. This is useful for rapidly switching hair coloring – for example from blonde to black to brunette etc. Where multiple hair items are active on a target person – then all hair items will be changed to the same color. Scalp and hair color can be set at the same time.

To select a hair color for the button operation, chose from a list of existing hairs in the scene:
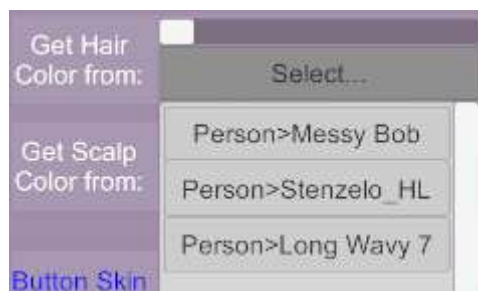


Once a hair has been selected, the details for that hair style (including the color settings) are displayed in a text box:
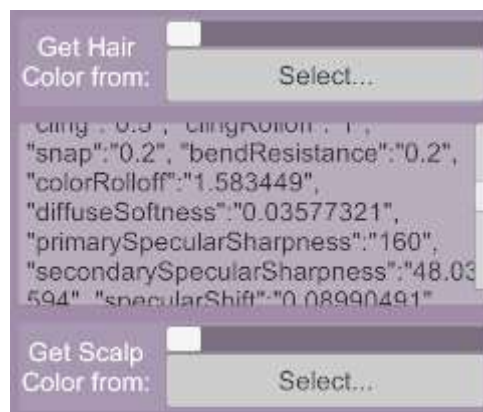


The details displayed can not be edited or changed within UIAssist but give a visual representation that a hair color has been captured. Whenever the button is activated then these hair settings will now be applied.

To set different colors, edit the hair color using the standard VAM Hair Creator tool and recapture the color settings in UIAssist.

NOTE: recreating all of the Hair Color configuration in UIAssist was considered but seemed excessive given how complex the UI already is.

### 6.7.6 Decal Maker Toggle

Decal Maker Toggle provides an integration with the DecalMaker plugin by Chokaphi (https://hub.virtamate.com/resources/decal-maker.196/). This allows decals to be merge loaded so that multiple decal textures can be applied to the same body part simultaneously. For example, this

can be used to apply and merge a tattoo and makeup from two different textures. UIAssist has been tested with DecalMaker Beta 4.

UIAssist allows decal textures to be toggled on and off with a single button press on the UIAssist interface. Each UI Assist button can be configured to load multiple face, torso, genital and limb decals:



From the 'Select Texture…' buttons, options allow texture to be added, removed or selected:



For each decal, a texture file can be selected and its color and alpha setting can be configured:

Once all the decals are setup, then activating the button will apply or remove the decals to the target person. If the target person does not have the DecalMaker plugin loaded, then UIAssist will NOT attempt to load the latest version of that plugin from VARs – so you need to load it on the Person Atom first.

If any decals are active in the VAM skin texture settings, then UIAssist will automatically apply this with the DecalMaker decals.

### 6.7.7    PluginAssist integration (NEW v1.19 FEATURE)
UIAssist buttons can be configured to open the UI of PluginAssist (another JayJayWon plugin) with a button operation. Buttons can be configured to open the Load Plugins UI or Find Plugins UI.

## 6.8    Miscellaneous Features
The Miscellaneous button category consists of general button configuration options not available under other categories:
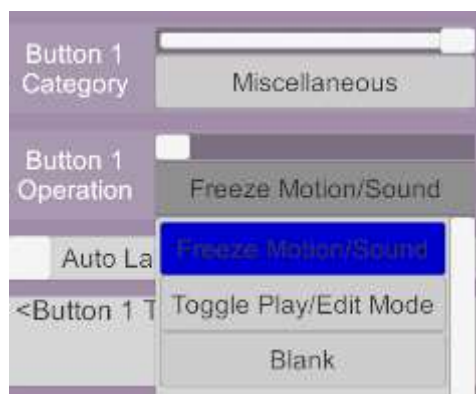
Each of the three Miscellaneous button operations are described below:

### 6.8.1 Freeze Motion/Sound

Buttons with this function will toggle the VAM function the freezes motion and sound.
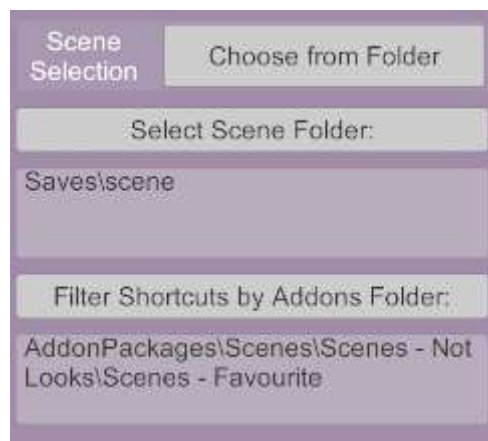
### 6.8.2 Toggle Play/Edit Mode

Buttons with this function will toggle VAM between Play Mode and Edit Mode.
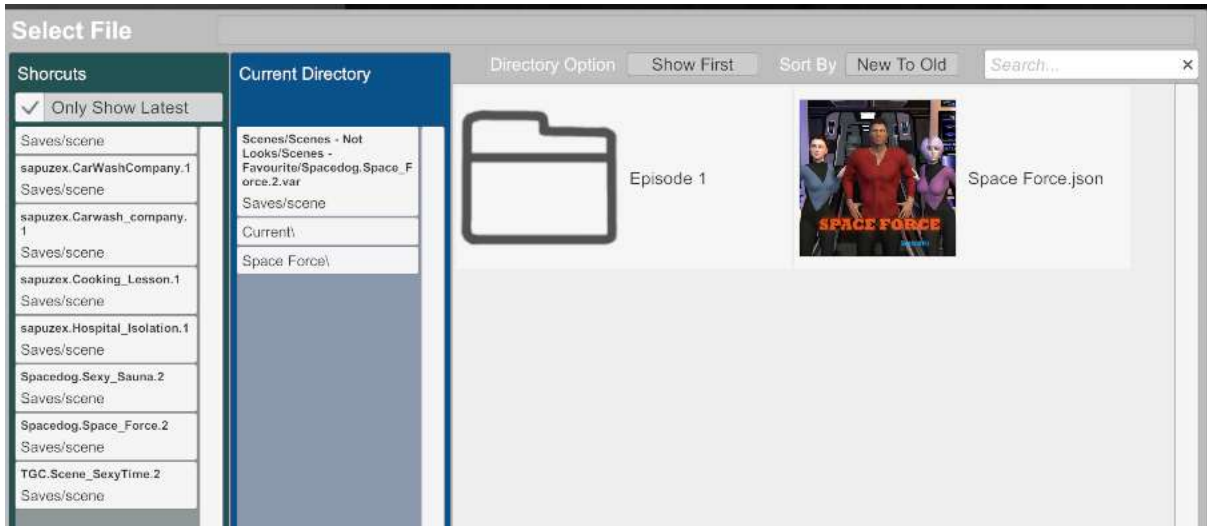
### 6.8.3 Load Scene

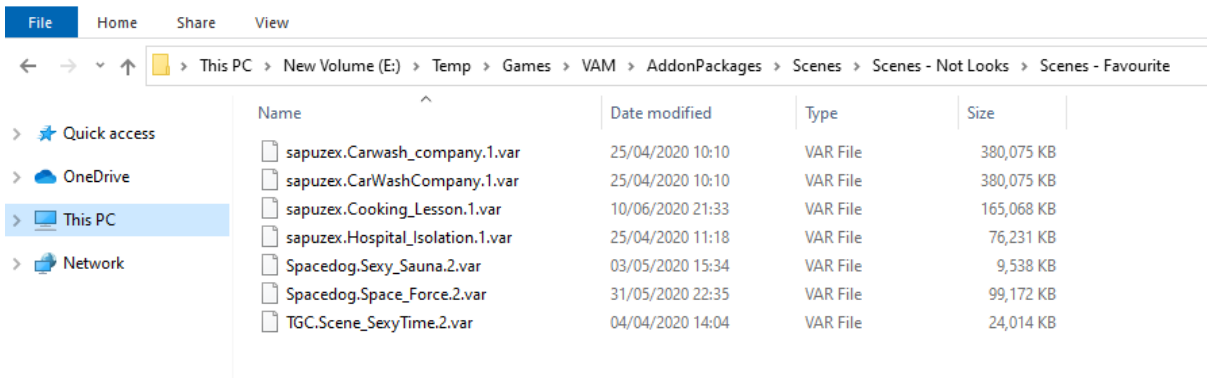Buttons with this function will load a new VAM scene as selected:



When using the Scene Selection from Chosen Folder, there is now an option to filter the shortcuts (left hand of the File selector dialog box) so that only Scenes from VARs within a specific subfolder are listed:



The above settings will activate a Scene file selection as follows:

Only 7 scenes are shown in the Shortcuts list – reflecting the organisation of VARs under the AddonPackages folder:



### 6.8.4   Merge Load Scene

Buttons with this function will merge load a new VAM scene as selected.

### 6.8.5   Toggle Performance Options

The Performance User Preferences for Soft Body Physics, Desktop VSync and Performance Monitor can be toggled on and off.

### 6.8.6   Show Hidden Nodes

The Select preference to 'Show Hidden' can be toggled with this button type. Note that the Hide option effects the controllers when in Edit Mode and whether they are visible – it does not effect whether the actual Atom is visible or not.

Hidden atoms won't be selectable as targets for Gaze Select unless the "Show Hidden" option is active.

### 6.8.7   Toggle Show VR Hands

Buttons with this function will toggle whether the VR Hands are visible or not. The button can be configured to toggle either the left or right or both hands.
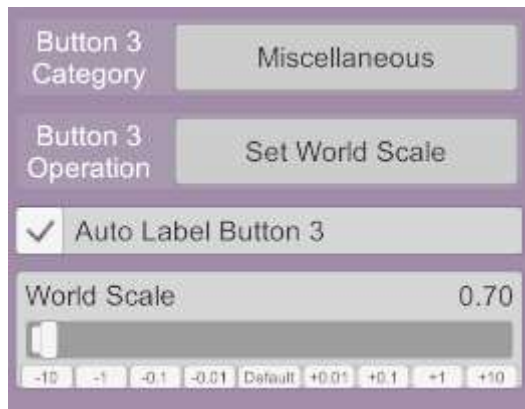
### 6.8.8 Toggle VR Head Collider

Buttons with this function will toggle whether the VR Head Collides with other objects or not. This is the same as the setting available under the VAM User Preferences / VR1 tab.

### 6.8.9 Set World Scale

Buttons with this function will set the VAM World Scale to the specified value:



Scale values below 1.0 will make objects appear larger than real. Scale values above 1.0 will make objects appear smaller than real. The effect is most noticeable in VR.
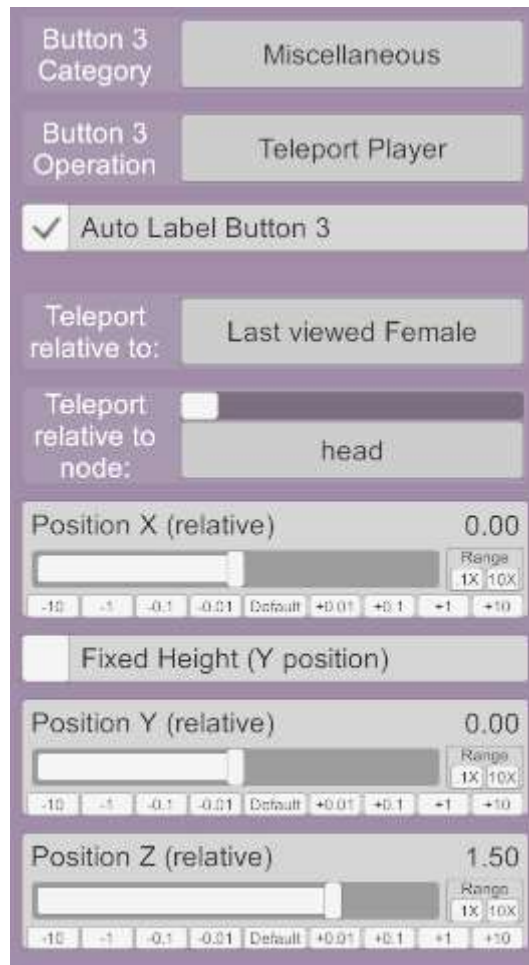
### 6.8.10 Offset World Scale

Buttons with this function will increment or decrement the VAM World Scale by the specified amount:
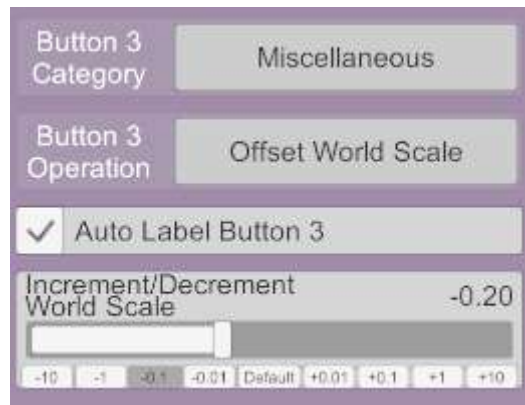
A positive value will increment the world scale and negative values will decrement the world scale.

### 6.8.11 Teleport Player

This button will move the players view to the specified position:



Target position can be relative to a gaze target. The intention is to allow the user to teleport to be directly in front of a person at which they are gazing.

### 6.8.12 Blank

Buttons with this function will act as a blank spacer on the UIA Wrist UI. If a screen only contains blank buttons then it won't be accessible from the UIA Wrist menu.

## 6.9 UI Assist Features

The UI Assist button category consists of button configuration options the control UI Assist feature and tools:

### 6.9.1 Load UI Assist Profile

The feature allows a button to be configured to load a new UI Assist profile. This feature is the same as the option on the plugin UI described in Section 7, except that the load can be trigger in game from the wrist UI. This allows the rapid switching of button profiles for different purposes if required.

### 6.9.2   Gaze Assisted Select

Gaze Assisted Select is a feature that is intended to help with the selection of nodes and atom controllers. Where nodes are close together it can be awkward to select the correct node using the mouse or pointer. The Gaze Assisted Select mode displays a list of nodes in game next to the UI Assist button menu as follows:
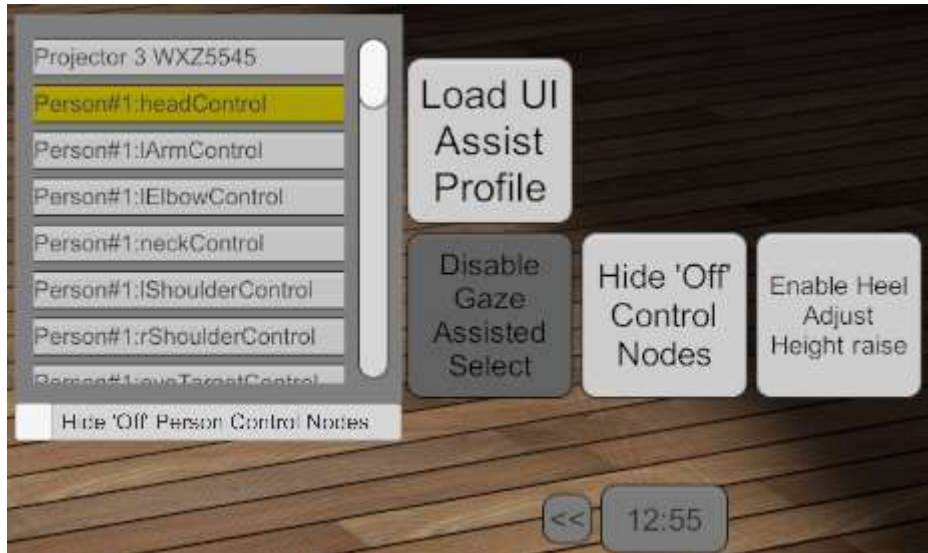


The yellow highlight item in the list is the currently selected node. The order of items in the list will automatically update as the user changes the direction they are looking so that the items nearest the centre of the current view are listed at the top.

For the body part nodes (e.g. head control), if the user clicks on an already selected node then the selection will toggle between the body part and main person control.

Note that the Gaze Assisted Select mode will only be active when VAM is in Edit Mode.

### 6.9.3   Hide 'Off' Control Nodes

The "Hide 'Off' Control Nodes" feature will allow the red body part nodes (which have their Position and Rotation states set to Off) to be hidden and not selectable with the mouse or VR controller. This is useful to avoid accidentally selecting the Off nodes when trying to select an On node.
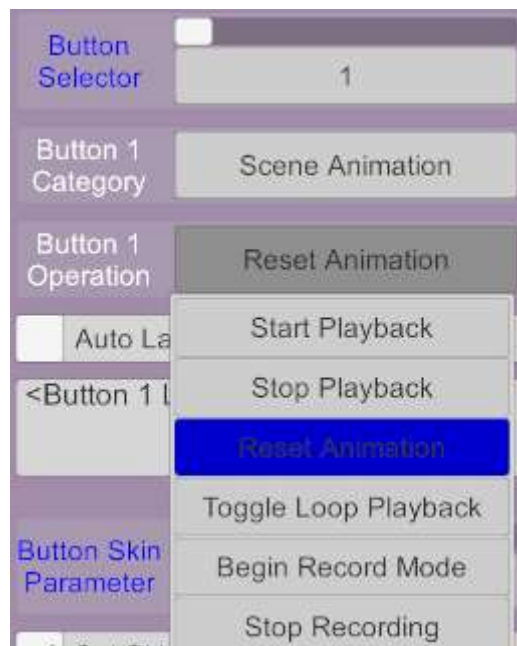
### 6.9.4 Raise People by Heel Adjust height

This feature allows the Heel Adjust Toobox setting (previously documented in section 8.1) to be toggled from the in game menu buttons.

## 6.10 Scene Animation Features

The Scene Animation button category consists of button configuration options that can control the Scene Animation playback and record functions:



Each of these functions correspond to a standard VAM setting on the Scene Animation tab:
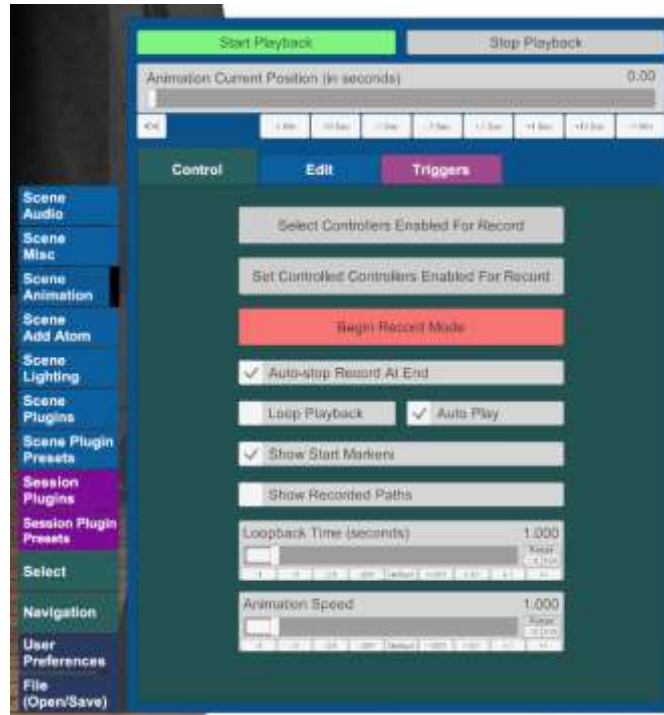
## 6.11  Custom Button Skin

Users of the Patron version of UI Assist can modify the appearance of buttons on the Wrist UI. This can be done at a default level for all buttons and can be optionally overridden for each specific button.

The default settings for all buttons are available at the bottom of the left panel on the plugin Custom UI under the Toolbox/Options:



The following parameters can be specified:

### 6.11.1 Font Size

The minimum and maximum font size can be specified separately for Micro, Mini, Small, Medium and Large buttons. The text in the buttons will be auto-sized to fit the box without exceeding these limits. To specify an exact font size then set the min and max font sizes to the same value.

### 6.11.2 Button Font

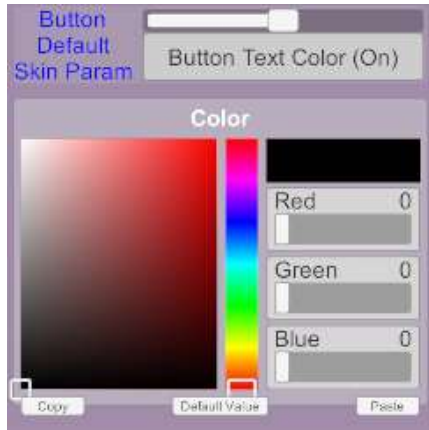A choice of four available fonts can be selected from:



### 6.11.3 Button Text Alignment

An alignment of the text within the buttons can be selected:



### 6.11.4 Button Text Color

The color of text for the buttons can be selected. Where buttons have two states (ie. On and Off) a separate color can specified for each state:

### 6.11.5 Button Color

The color of the buttons can be selected. Where buttons have two states (ie. On and Off) a separate color can specified for each state.

### 6.11.6 Button Thumbnail

An image file can be used as a button thumbnail. Where buttons have two states (ie. On and Off) a separate thumbnail can be specified for each state:



### 6.11.7 Button Specific Skins

For every individual button the default values for all the skin settings can be overridden to create a specific look for that button:

# 7   Saving and Loading UI Assist Configs

Once a set of UI Assist Screens and Buttons have been setup, their configuration can be saved and reloaded. This allows switching between different button configurations for different purposes.
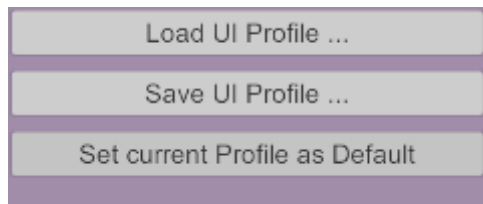


Additionally, pressing the "Set current Profile as Default" will set the current configuration of UIAssist to be loaded whenever UI Assist starts.

# 8   Toolbox functions

From UIA  v1.2 a new Toolbox option is available on the left of the UI Assist plugin menus:
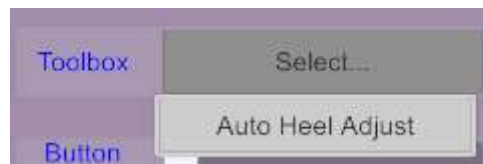


## 8.1   Auto Heel Adjust Tool (UPDATED v1.19 FEATURE)

The Auto Heel Adjust tool builds on the excellent VAM HeelAdjust plugin made by Prestigitis. The HeelAdjust plugin can be used to define heel and toe rotations for different shoe clothing items. It also creates colliders to mimic the heels.
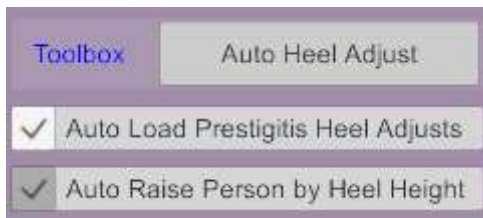


In addition, UI Assist can optionally raise and lower the person by the height of the heels – to avoid long heels from intersecting with the floor.

HeelAdjust files (containing per clothing item settings) were previously saved in a folder under 'Saves\HeelAdjust'. From UIAssist v1.19, these will be migrated to 'Saves\PluginData\JayJayWon\UIAssist\HeelAdjust'. Users can now configure the heel settings for any clothing item set with a Shoes tag:

When Heel Colliders are visible they can be seen in green as follows and edited on the fly:
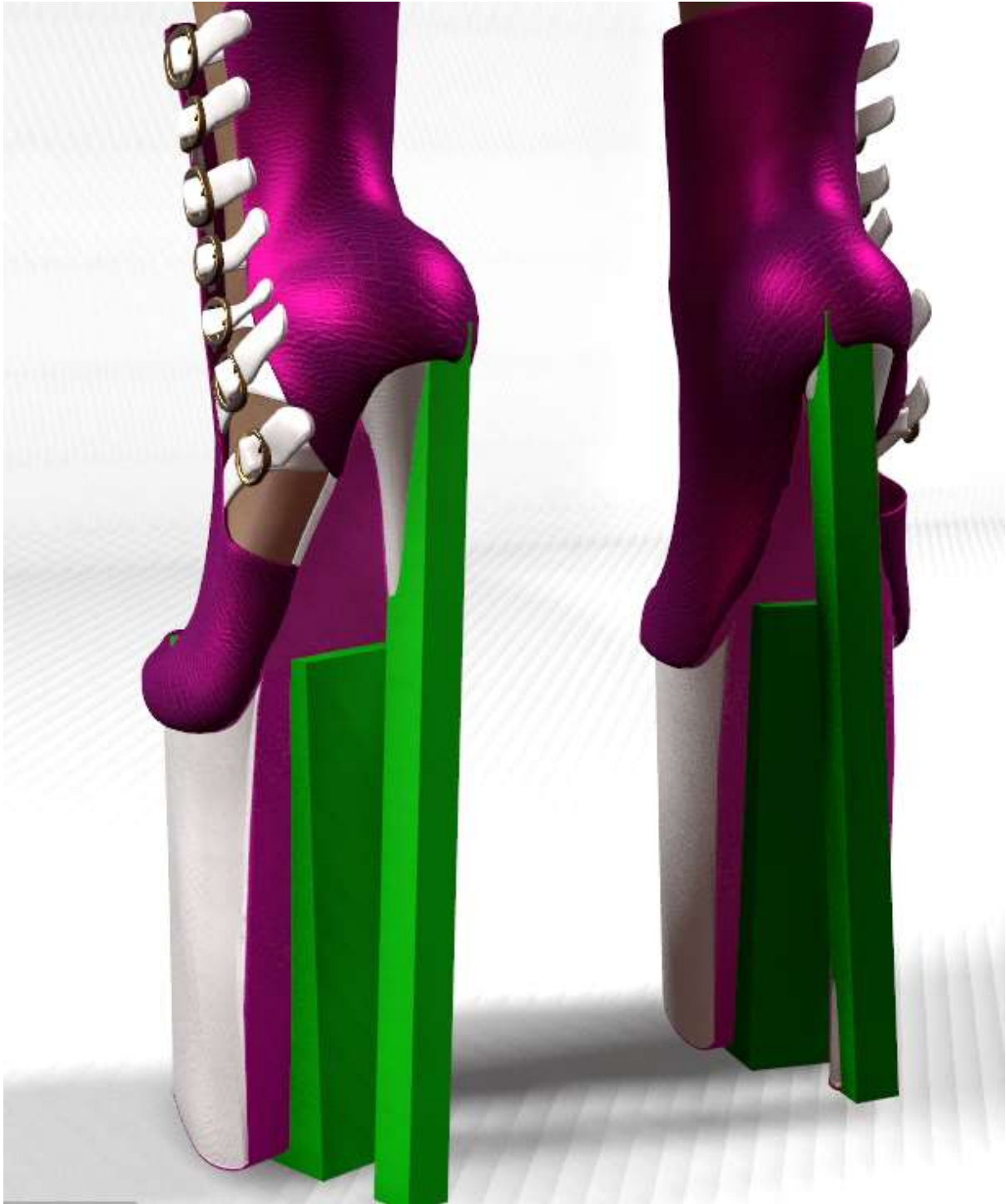
## 8.2 Wrist UI Options

Addition options to configure the wrist UI are available under "Wrist UI Options":

1. Show Gaze Targets  - enables the panel above the UIA buttons which displays the list of currently gazed at Atoms
2. Show Screen Labels – allows screen labels to be applied to each screen of buttons
3. Enables the Quick Launch Bar described in Section 4.6
4. Time format for the main UIAssist Wrist watch can be switched from 24 hour clock to a 12 hour clock
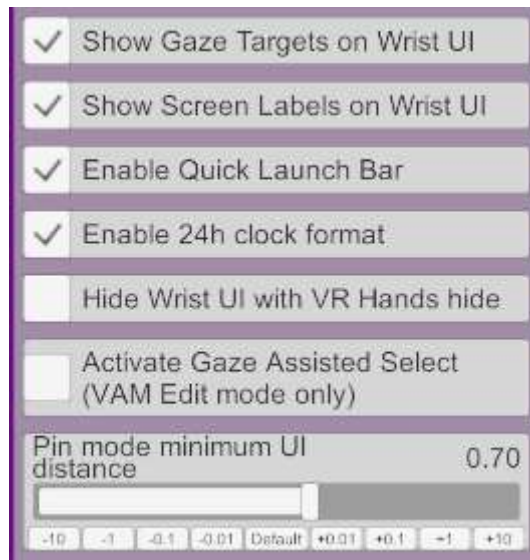5. 'Hide Wrist UI with VR Hands hide' Enables the functionality described in section 4.8
6. Activate Gaze Assisted Select - replicates the same functionality as described in the button controls in sections 6.9.2.
7. Pin Mode minimum UI distance – when the UI is pinned in static mode, a minimum distance from the users is applied.

## 8.3   Force VAM Modes Tool

The Force VAM Modes Tool allows various VAM states to be set automatically:

Each of the toggles enables the following functions when selected:

1. Edit Mode on Scene Load – forces VAM into Edit Mode every time a scene is loaded
2. Edit Mode on VAM UI Open – forces VAM into Edit Mode every time the standard VAM UI is opened
3. Play Mode on VAM UI Close – forces VAM into Play Mode every time the standard VAM UI is closed.
4. VSync Off at VR start-up – forces the VSync performance setting to be disabled when VAM is started in VR Mode
5. VSync On at Desktop start-up – forces the VSync performance setting to be enabled when VAM is started in Desktop Mode
6. Disable UI on Top at VR startup – forces the 'Draw UI on Top' to off when VAM is started in VR Mode.
7. UI on Top at Desktop startup – forces the 'Draw UI on Top' to on when VAM is started in Desktop Mode.
8. Disable 'Freeze Physics while Grabbing' for new Person Atoms - will disable this setting whenever a new Person is created.
9. Disable 'Freeze Physics while Grabbing' for all Persons on Scene Load - will disable this setting for all Person atoms whenever a new scene is loaded.

## 8.4   Leap Motion Control

The Wrist UI can be interacted with using Leap Motion Finger Tracking. When enabled the Wrist UI can be interacted with using fingers and no VR controllers.  In addition, an optional free move of the VR users view can be activated by forming an OK hand gesture. When free move is activated then rotation can be configured to rotate around the last viewed male or female atom:

The 'Toggle Leap Hands Enabled with CR Controller proximity' option will mean that as the user picks up or puts down a physical VR Controller, then the leap hands will be toggled on or off. This avoids having leap hands working at the same time as holding a VR controller.

## 8.5   Gaze Targeting

Selection of Button targets by gazing at them can be configured under Gaze Targeting Options menu:



The following features can be configured:

1. Allow the Gaze Selection of Atoms that are in Off state
2. When a new button is being configured, by default the gaze target will now be set to 'Last viewed Female' (prior to v1.3 the default was 'Last viewed Person'). Users can change that default here.
3. When Gaze UI Control is active (see Section 4.5) or Leap Touch Controls are being used, the UIA buttons will be shaded a different color to indicate which button is being gazed at or touched. That color can be customised in the control.

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## 8.6 Preset Options

The following preset options can be configured:
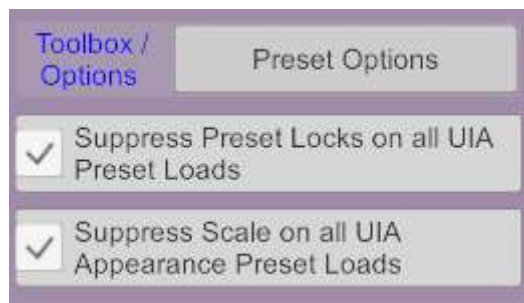


The first option will suppress and Person Preset Locks that are active when loading any UIA Presets. Recommendation is this is left active, as Preset Locks are normally used to persist appearances between scene loads. This setting avoids preset locks from blocking normal UIA initiated preset loads.

The second option is to Suppress Scale load on all Appearance Preset Loads . This is the same feature as controlled by the button described in Section 6.4.2. This is a PATRONs only feature.

## 8.7 Import Screen of Buttons from UIAP file

This feature allows on entire Screen of Buttons to be imported from another UIA config file that has been saved to storage (.uiap files).



When the Import Screen button is pressed, the selected Screen of buttons from the saved UIA Profile file will be replicated as a new Screen of buttons in the current setup.

## 8.8 Custom Target Groups

The Custom Target Groups feature allows the user to specify their own criteria to identify a Group of Atoms. Once a Custom Target Group has been defined it can be used in button setup as a Gaze Target (similar to 'Last Viewed Female', 'Last Viewed Person' etc) or as a group of targets (similar to 'All Atoms', 'All Males' etc). The criteria for Custom Target Group can be based on the type of Atom (e.g. Custom Unity Asset or Animation Pattern) and the name of the Atoms (e.g. atoms that start with the name 'Toy').
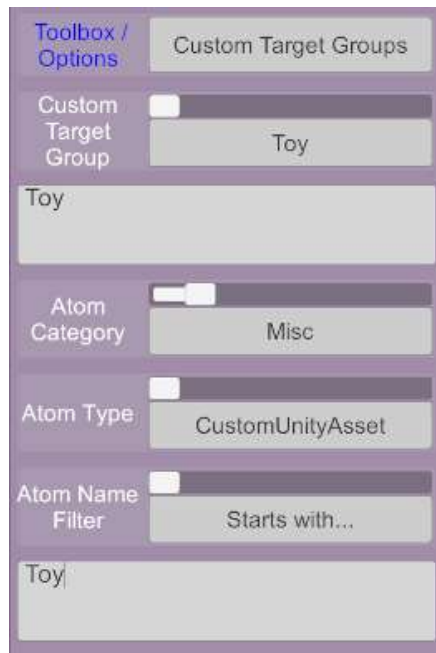
Once a Custom Target Group has been defined it can be used to configure the Gaze Selection functionality of buttons to only Gaze Select atoms that are of that custom type:



Or it can be used to configure a button to target all atoms that are of that custom type:

The potential usage of this feature are varied, but a typical usage might be to have buttons that target a specific set of Custom Unity Assets – for example Sex Toys or Scenery.

# 9   Miscellaneous

## 9.1   AcidBubbles Keybindings integration

Acidbubbles has developed a plugin that allows users to map keyboard and joystick controls to VAM actions:

https://hub.virtamate.com/resources/keybindings.4400/

UIAssist integrates with Keybindings to provide a quick way of performing particular UIAssist actions using the keyboard. The following are currently supported:

**JayJayWon.UIAssist**

| | | |
|---|---|---|
| Activate QLB Button 1 | | |
| Activate QLB Button 10 | | |
| Activate QLB Button 11 | | |
| Activate QLB Button 12 | | |
| Activate QLB Button 13 | | |
| Activate QLB Button 14 | | |
| Activate QLB Button 15 | | |
| Activate QLB Button 16 | | |
| Activate QLB Button 17 | | |
| Activate QLB Button 18 | | |
| Activate QLB Button 2 | | |
| Activate QLB Button 3 | | |
| Activate QLB Button 4 | | |
| Activate QLB Button 5 | | |
| Activate QLB Button 6 | | |
| Activate QLB Button 7 | | |
| Activate QLB Button 8 | | |
| Activate QLB Button 9 | | |

| | | |
|---|---|---|
| Frist Screen | Ctrl+Shift+LeftArrow | |
| Last Screen | Ctrl+Shift+RightArrow | |
| Next Screen | Ctrl+RightArrow | |
| Open Screen 1 | Ctrl+1 | |
| Open Screen 10 | Ctrl+0 | |
| Open Screen 2 | Ctrl+2 | |
| Open Screen 3 | Ctrl+3 | |
| Open Screen 4 | Ctrl+4 | |
| Open Screen 5 | Ctrl+5 | |
| Open Screen 6 | Ctrl+6 | |
| Open Screen 7 | Ctrl+7 | |
| Open Screen 8 | Ctrl+8 | |
| Open Screen 9 | Ctrl+9 | |
| Previous Screen | Ctrl+LeftArrow | |
| Toggle Gaze Assisted Select | Ctrl+a | |
| Toggle Gaze Targets Display | Ctrl+g | |
| Toggle Prestigits Heel Adjusts | Ctrl+h | |
| Toggle Prestigits Heel Height | Ctrl+Shift+h | |
| Toggle Quick Launch Bar | | |
| Toggle UI | Ctrl+o | |

## 9.2   Gaze  Target third party plugin access

A number of VAM creators enquired if it was possible to access the Gaze Target atom that UIAssist calculates. A framework for plugins to access this data has now been implemented in UIAssist. An example plugin has been provided in the standard UIAssist VAR in the folder called UIAUtils. This plugin has comments that should explain how to do this. The framework is based on a plugin Interop-spec proposed by Acidbubbles here:

https://github.com/vam-community/vam-plugins-interop-specs/blob/main/keybindings.md