AJS Station Kit – Gmax Source File

The supplied source *3406 Virtual Station 8T 3.5 100.gmax* is the gmax source for <kuid:122285:3406>. All of the other stations in my pack are written from the same file.

You will need to download the reference asset <kuid:122285:3406> and its associated dependencies.

Source for minor submeshes such as signs and the height animation are not supplied. The meshes and animations can be copied from the asset folder for <kuid:122285:3406>

The following describes the way the configs and meshes are set up and the various naming conventions used. Most of the features of the stations are optional and can be omitted simply by not supplying the associated mesh or animation or by setting tags in the extensions table of the asset. Read these notes in conjunction with config.txt from the reference asset.

The library source code will not be made available but I will consider any necessary changes to the way that the library operates.

config.txt

script	StationAJS.gs
class	StationAJS.gs
passenger-height	This is supposed to be an Auran tag but it doesn't do anything in their scripts. For my stations it defines the initial default height of any animated passenger meshes

kuid-table {

passenger	<kuid:-3:10060>	Kuid of passenger asset
codelib	<kuid:122285:3499>	Kuid of Code library
0	<kuid:122285:3495>	Icon used by library
1	<kuid:122285:3496>	Icon used by library
2	<kuid:122285:4089>	Icon used by library
3	<kuid:122285:3497>	Texture group needed to hide templates in some situations, see below.

The icons are often missed by CMP/DLS since they are nested dependencies. Adding them to the stations kuid list increases the chances of them being picked up

extensions table { stations-122285 {

platform-length integer metres required	Default length for all platforms in metres
platform-numbers boolean 0/1 default 0 optional	States whether or not platform number indicators are provided. These meshes, named sign1 – sign8 inclusive can be copied from the sample asset.

height-animation boolean 0/1 default 0 optional	States whether or not a height animation is provided. Include the two files height.im and height.kin from the sample asset.
shape-animation integer 0/1/2 default 0 optional	States whether or not passenger layout animation is included. If you enter the value 1 you should provide an animation in a mesh called *passengers*. If you enter 2 you should provide two animations in meshes *north* and *south* respectively.
terminal-cars integer required	For terminal platforms. The number of carriages that will be allowed to pass the centre point before the train is instructed to stop. If terminal-cars is 2 the stop instruction will be issued on the third car in the train.
terminal-offset integer metres required	The distance between the centre point of the platform and the furthest point at which the head of the train should come to rest. This should be about 2½ times the length of the carriages which you most commonly expect to visit the station.
reverse-doors boolean 0/1 default 0 optional	Reverses the logic for determining which side of the train doors should be opened. Since there are many factors to take into account this tag may produce unexpected results. The best way of getting door opening right is by making sure that the direction of the track is correct. This is controlled by the order in which the track attachment points are defined. You should only consider using this tag in drive on the right' situations where the default track direction causes the power rails to come up on the wrong side of the track, and only then when you are absolutely sure that all other factors have been correctly set up.
mesh-table {	The following describes the way that the sample asset is set up and the naming conventions used. There are other ways of doing it.
default	This is a static mesh which contains the track and trigger attachment points together with additional spline points for platform and roof splines. The sample asset also contains a black plane at ground level (textured both sides) for those occasions when elevated stations are viewed from below.
template-#	Any mesh named template- followed by a serial number will be hidden in Surveyor when the 'Hide Templates option is called and will always be hidden in Driver. There must not be any gaps in the serial number sequence.
sign-1 .. sign-8	These are the platform number indicators. The meshes can be copied from the sample asset together with *black.tga* and *black.texture.txt*. You must use the correct number for each platform. It would also be possible for permanent signs to be catered for in a similar way. This facility does not exist at the time of writing but I will consider requests.
height	This is an invisible mesh containing a single animated attachment point named *a.origin*. Any submesh attached at *a.origin* will be raised and lowered when the height animation is operated. The tag *height-animation 1* is required for this to work.

north & south	These two meshes contain the passenger placement points with their respective animations and correspond to the north and south groups in the gmax source. The tag *shape-animation 2* is required for this to work. If height animation is also included these meshes should be attached at a.origin. If you want to include hideable templates you should texture them in the normal way and define texture replacements called *platform-n* and *platform-s* respectively. This will require the texture group <kuid:122285:3497> to be available to the script library.
passengers	(Not included in the sample asset.) This is a simpler version of passenger placement animation requiring a single animation. The tag *shape-animation 1* is required for this to work.
attached-track {	
	Track attachment point names and track names are important to the running of the script. If you alter them you are on your own.
	The actual location of the attachment points can be freely moved as long as the tracks themselves will pass through the trigger points.
	You can do anything you like with road, wall, platform and roof points.
attached-trigger {	
	You should not alter the names, attachments, radii or track assignments in the attached trigger table. Adding additional triggers may also cause unexpected results.
string-table {	
	You can override any of the text strings defined in the Code Library string table by re-entering them here. The entries for help0..help3 point to image files which are displayed in the Property Editor when help is enabled.
soundscript { **processes {** **queues {**	
	These are as for standard Auran stations.
gmax source	
	There are four objects in the supplied gmax file:
Station (Group)	This is the source for *station.im*. It contains all of the track and trigger helper points and all of the other spline attachment helpers. It also contains a black plane at ground level.
	This is the place to add any additional fixed items you might want to provide.
	To create the mesh hide all of the other objects and call File/Export/station.im. This mesh can be left grouped for export. Linking to any other object is not required. *Black.tga* and *black texture.txt* are required for the ground plane.

Trigger (Editable Mesh)	This is the source for *trigger.im*. This is a marker mesh which shows the position of the trigger zones in Surveyor. There is no texture. To create the mesh hide all of the other objects and call File/Export/trigger.im.
North (Group)	This is the source for *north.im* and *north.kin*. It contains all of the passenger attachment points and the links and dummies which control the animations.

The linking is quite complex. You should note that any of the passenger helpers which move during the animation must use a special notation for example *a.r.p3-1/a.pass_t3_off_05*. This denotes that the helper is linked to *b.r.p3-1* and will animate with that dummy.

To keep things as simple as possible the file as saved displays bones for the principal links. The easiest way to make changes is as follows, if you follow these steps there will be no need to get involved in re-linking objects or in re-animating:

1. Hide all the other objects.

2. Ungroup the object. You cannot export groups which contain animation.

3. Right click on frame 10 in the animation track bar and select Go To Time. This straightens everything up and makes it easier to see what you're doing.

4. To reduce the number of platforms simply delete all of the objects for the platforms which you don't need.

5. To move platforms you should select and move the master dummy for the relevant platform. These are denoted by the displayed bones and are named *b.r.p1-4* to *b.r.p8-4* for the North mesh and *b.r.p1-5* to *b.r.p8-5* for South. Do not modify or move any other object or dummy.

6. To export the mesh make sure you have deselected everything and call File/Export/north.im

7. To export the animation call File/Export/north.kin.

South (Group)	As for north.