Gravity 6   Friction 0   Wind Strength 1 100   Wind Speed 100   Wind Speed2 0

Landscape V1.0

(0000) LandscapeV1.0 ▼   ⟷   Timer 30   Animate

(0000) LandscapeV1.0

(0000) LandscapeV1.0

LANDSCAPE SHAPING

| Landscape ▼ | River ▼ | Hill ▼ | Flat ▼ | Path ▼ | User ▼ |
| Land 0% | River 0% | Hill 0% | Flat 0% | Path 0% | User 0% |

DeNoise 0%   Smooth 0%

Rest 0%   Rest Y set 0%   Res nd

LOD LEVEL OF DETAIL

Size XZ 200   Size Y 100%   DIVISIONS 20   TILES 20

LANDSCAPE TEXTURES

Landscape ▼   Landscape Blend ▼

(0001) TreeV1.0

Tree Presets ▼   Seed 0   X 0   Z 0

Auto Off   MergeIt   Low LOD   Added tree to (0000) LandscapeV1.0

GROW-IT
Plug-in for Daz3D Studio

Updated 11th February 2019
Major improvements & bug fix
Added Animated billboard control-box
Faster updates
Added new texture and preset pack
Increase maximum control-box to 128 for paid users

About

A Daz3D plug-in to create 3D animate landscapes for films, cartoons, 2D/3D games and static scene. Other ideas such as wedding-trees where the guest put a finger in ink and make a leaf print on the tree. Maybe just create a simple tree and get it printed to canvas and framed!

Key Features

- Wind animation on trees, bushes, grass and plants Etc. Includes a 38 frame global animation loop, good for creating tiles for games.
- Grow-It can use up to 64 threads, ready for the New *AMD* Ryzen Threadripper *32 Cores*. *Note:* Each control-box uses one thread, so one thread per tree!
- Animation-emulation-button & a timeline-animation.
- Grow simple to complex objects. New objects & ideas added with every update.
- Landscapes collision, will place the tree fallen fruit and leaves on the ground, changing the landscape will update the position.
- No object is the same, almost all data is random. No 3D data has been used.
- Built in presets & textures to save time.
- Save material settings with presets.
- Save controls to scene & with 99% file compression, means 100MB is turn in to 1MB.
- Show all objects in low poly mode on click of a button, good for animators.
- No need to buy tree seed or pay out large amount of cash, publish or do what ever you want with the 3D objects!
- Works with Korg-Nano-Kontrol2 controller, Korg-Plug-in June 2018 update.

Installing

Download and open the Zip file. Copy or merge the "**GenerationX**" folder to the DAZStudio4 plug-in folder. Folder location normally: **C:\Program Files\DAZ 3D\DAZStudio4\plugins** Render engine can't access texture from this location so copy the "**GenerationX_Texture**" folder to **C:** Do not insert into any another folder! *If your using the Farm-It plug-in copy to each computer on network.*

Unlocking or Recovering Key-codes

Press yellow padlock, press buy/recover button, follow instructions on website. Plug-in is *£14.99*. *If its not unlock the save has been disable you can only have 2 controls boxes and you can't update!*

Getting Started

Press landscape-icon top left to create a landscapes, a control box will appear, move first slider to change the landscape. Now click on the tree-icon when the control box appears use a preset to get you started :) now click on grass-icon and make the grass grow around the tree, change grass shape to round using the shape slider and then move the ring slider, fiddle with slider until the grass looks like its growing around the tree. Click the animation-emulation-button to see the tree blow in wind!

Icons At Bottom

- Unlock Plugin
- Save & Open all control-boxes.
- Delete all control-boxes and objects.
- Hi or Lo LOD on objects, some object will change to a 3D icon or show less detail. A tree will display as a pointer, grass will show only 90%. Remember to click the Hi button when rendering.
- Enable Midi Korg-Nano-Kontrol2 plug-in on the Grow plug-in. *Korg plug-in is required.*
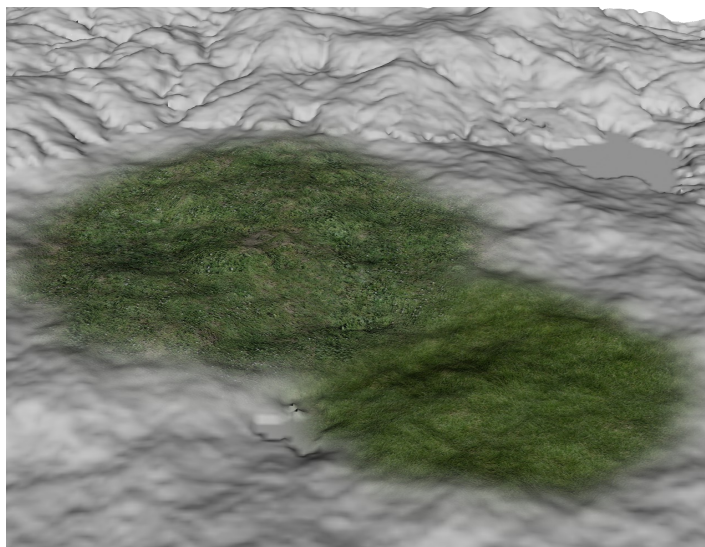
Control Boxes

## The Landscape Control-Box V1.0
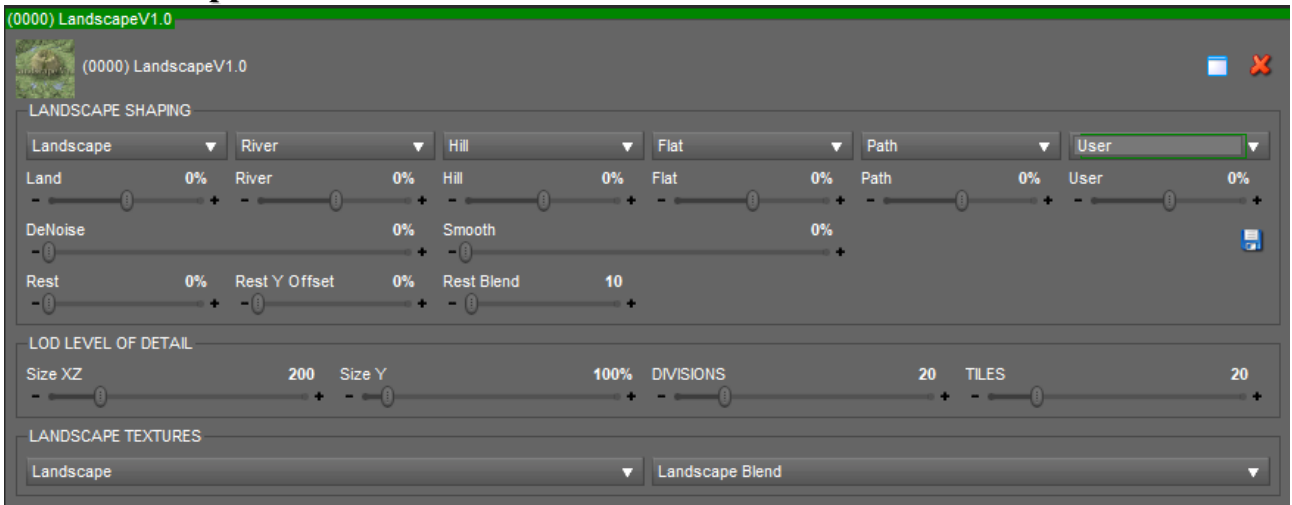
About: The landscape controller can mix five texture maps and mix one float data, marked in green. It has a de-noise & smother slider to remove spikes. Smaller landscapes can be mixed and blending togeather.

Landscape Key Features

- Mix 5 texture maps.
- Save the mixed texture map to a float map for greater accuracy.
- De noise the landscape to stop spikes accruing with dark shades.
- Smooth the landscape for a more hill like look.
- Includes a handy landscape flattener for easy to place objects.
- One click on the – or + send a single to update everything on the landscape.
- This control box can work with the Korg-Nano-Kontrol-2 midi controller
- Rest smaller landscape on top of large landscape.
- Join landscapes together so there seamless, with the Rest blend slider
- Works with Walk-It plug-in to put foot prints on landscape.
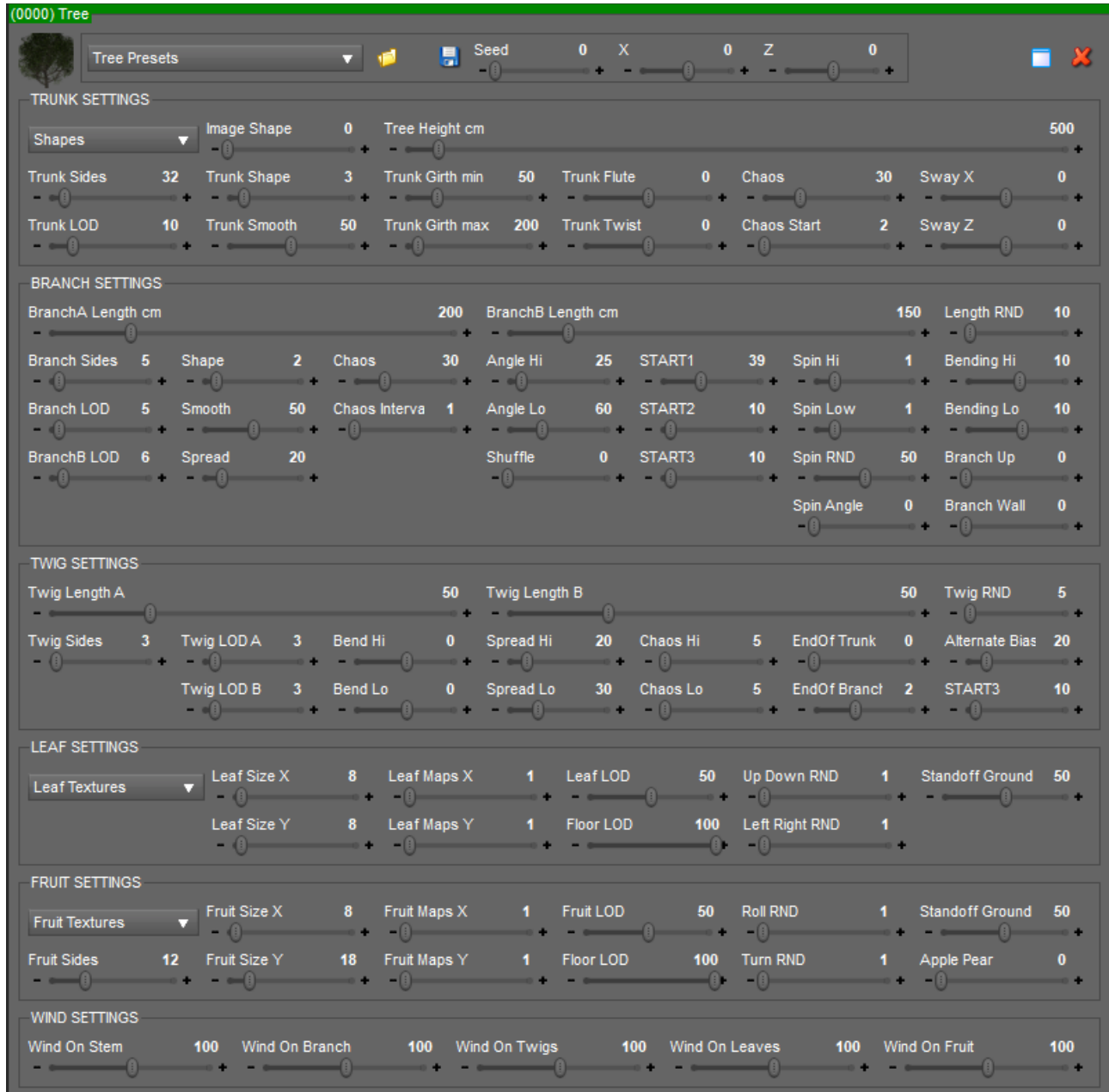
The Animated Grass Control-Box V1.0
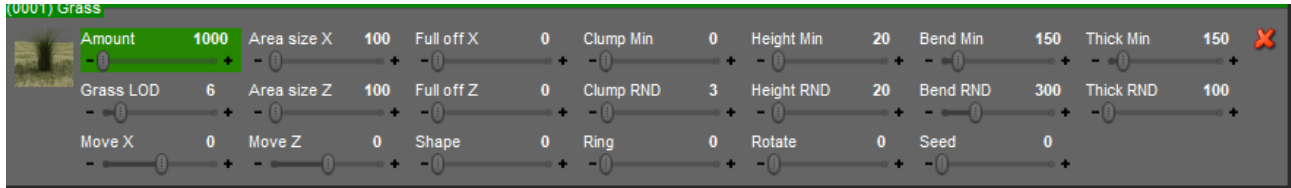
About: Places grass on top of landscape and apply a wind animation effect.

Grass Key Features

- Wind animation emulation.
- Grass will updates if the landscape changes.
- Square to round shapes.
- Ring shape for placing blades of grass around tress or post etc.
- LOD Level of detail, increases or decreases the amount of bends each lade of grass has.
- Bend grass with random bending, increases or decreases the amount of bends in the grass.
- Height with random height, increases or decreases the height in the grass.
- Clump with random clump, how many blades of grass are together.
- This control box can work with the Korg-Nano-Kontrol-2 midi controller.

The Animated Tree Control-Box V1.0

(0000) Tree

Tree Presets ▼ | Seed 0 | X 0 | Z 0

TRUNK SETTINGS

Shapes ▼	Image Shape 0	Tree Height cm			500
Trunk Sides 32	Trunk Shape 3	Trunk Girth min 50	Trunk Flute 0	Chaos 30	Sway X 0
Trunk LOD 10	Trunk Smooth 50	Trunk Girth max 200	Trunk Twist 0	Chaos Start 2	Sway Z 0

BRANCH SETTINGS

BranchA Length cm 200		BranchB Length cm 150				Length RND 10
Branch Sides 5	Shape 2	Chaos 30	Angle Hi 25	START1 39	Spin Hi 1	Bending Hi 10
Branch LOD 5	Smooth 50	Chaos Interva 1	Angle Lo 60	START2 10	Spin Low 1	Bending Lo 10
BranchB LOD 6	Spread 20		Shuffle 0	START3 10	Spin RND 50	Branch Up 0
					Spin Angle 0	Branch Wall 0

TWIG SETTINGS

Twig Length A 50		Twig Length B 50				Twig RND 5
Twig Sides 3	Twig LOD A 3	Bend Hi 0	Spread Hi 20	Chaos Hi 5	EndOf Trunk 0	Alternate Bias 20
	Twig LOD B 3	Bend Lo 0	Spread Lo 30	Chaos Lo 5	EndOf Branch 2	START3 10

LEAF SETTINGS

Leaf Textures ▼	Leaf Size X 8	Leaf Maps X 1	Leaf LOD 50	Up Down RND 1	Standoff Ground 50
	Leaf Size Y 8	Leaf Maps Y 1	Floor LOD 100	Left Right RND 1	

FRUIT SETTINGS

Fruit Textures ▼	Fruit Size X 8	Fruit Maps X 1	Fruit LOD 50	Roll RND 1	Standoff Ground 50
Fruit Sides 12	Fruit Size Y 18	Fruit Maps Y 1	Floor LOD 100	Turn RND 1	Apple Pear 0

WIND SETTINGS

Wind On Stem 100	Wind On Branch 100	Wind On Twigs 100	Wind On Leaves 100	Wind On Fruit 100

About: Grow a tree on top of landscape and apply a wind animation effect.

Note: *Do not apply a shader that does not have diffuse, opacity or bump maps! If you do then your materials may not be automatically created. However this is not an issue.*

Tip:
- You can use the new updated Sprite-It-plug-in to create the multi-image-texture-maps for the leaves and fruits! *See Leaf-Map-X & Fruit-Map-X to set the correct mapping grid coordinates.*
- By moving the Seed slider you can make a better or worst looking tree!
- Creating a loop set the timeline to 38 frames and 30fps. Set wind speed 2 to zero

Tree Key Features

- Built in tree presets. Save your own tree presets.
- Wind animation emulation on stem, branch, twigs, leaves & fruit.
- Create a wind effect for looping as seen in 2D games by *Moving the Wind2 slider to zero.*
- Multiple X Y leaf mapping on one texture, so each leaf or fruit is not the same.
- If a filename has 6X2 the the Leaf-Map-X slider will be set to 6 & Y 2. Same as the fruit.
- Tree bending.
- Wall garden pear tree effect.
- Hi and low poly control.
- Branch & twig LOD "Level Of Detail" control.
- Place leaves and fruit on the landscape.
- Increase or decrease the number of leaves and fruits on the tree & floor.
- Build your own library of trees and save to presets.
- Create pretty looking to horrible looking trees.
- Collapsible sections on control-box to fit non 4k monitors

Tree truck shaping with twisting

The Animated Flower Control-Box V1.0

Flower Key Features

- Built in flower presets. Save your own tree presets.
- Auto texturing, stem leaf petal in & out, centre pistil.
- Stem setting for bunching and bending
- Petal setting for inner and outer petals.
- Leaf setting for tapering and spinning leaves, big to small.
- Layout setting for grouping and placing.
- Wind setting for control the amount of movement.
- Flowers attach to landscape

# The Animated Grass Around Stones Control-Box V1.0
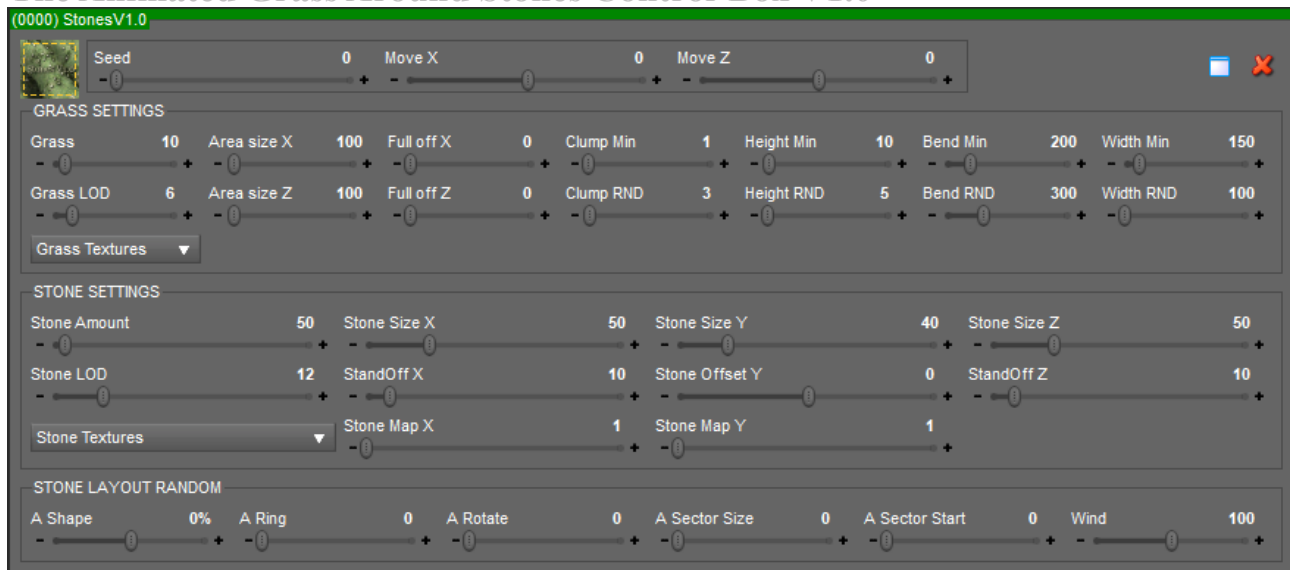
Stones Key Features

- Animated grass wind effects around stones.
- Grass around stone is same as grass control box but moves around a stone.
- Fast setup of stone texture.
- Complex layout control, If shape 100 the layout will create a circle, zero then its a square.
- Positions and angle its self to the landscape.

Stones position & angle them self on landscape!

The Animated Billboard Control-Box V1.0
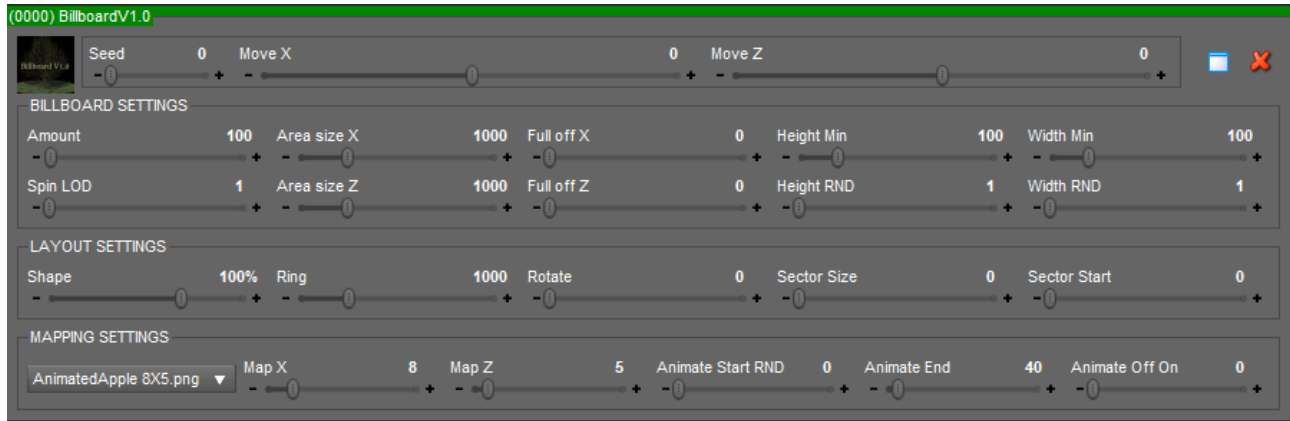
Billboard Key Features

- Multi texturing on billboards so they don't all look the same. *Animate* <mark>*Off On slider is 0*</mark>
- Fast animated billboards. *Animate* <mark>*Off On slider is 1*</mark>
- Timeline-animation.
- Layout setting square to circle.
- Automatically setup texture.
- Billboard look at active camera.
- Landscape resting
- Useful for creating object that our stand far in background.
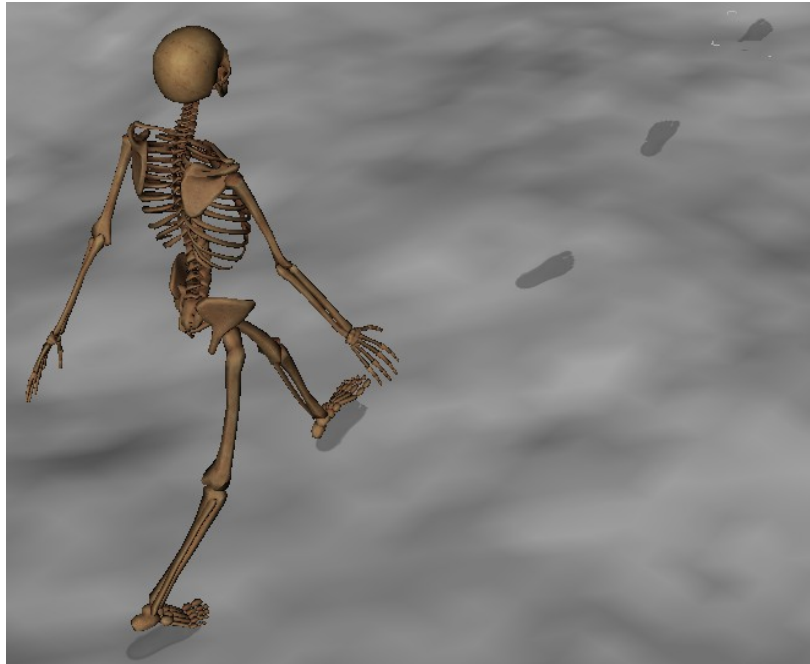- Create animated tree lines.

See Sprite-It-plug-in for creating animated billboards & multi mapping textures.

Animated Billboards

Walk-It plug-in with landscape

Foot prints can now lay on top of landscape and walk over uneven ground, to activate press the world button icon at bottom of walk-it plug-in.

*Walk-It V3 Plug-in sends signals to grow-it-plug-in to position the foot prints on top the landscapes!*

Creating automatic multi mapping textures

When a file name is mark with 2X2.png this means 4 diffuse texture our available. Note: use uppercase X not lowercase! Row X Column

Filename Examples
Apple2X2_O.png "_O." Opacity texture.
Apple4X1_D.png "_D." Displacement texture.
Apple4X4_N.png "_N." Normal texture.
Apple8X1_S.png "_S." Specular texture.
Apple2X4_B.png "_B." Bump texture.

If none of the above names our <u>not</u> found then its a diffuse texture. If incorrect names then when a texture is loaded it will not setup correctly.
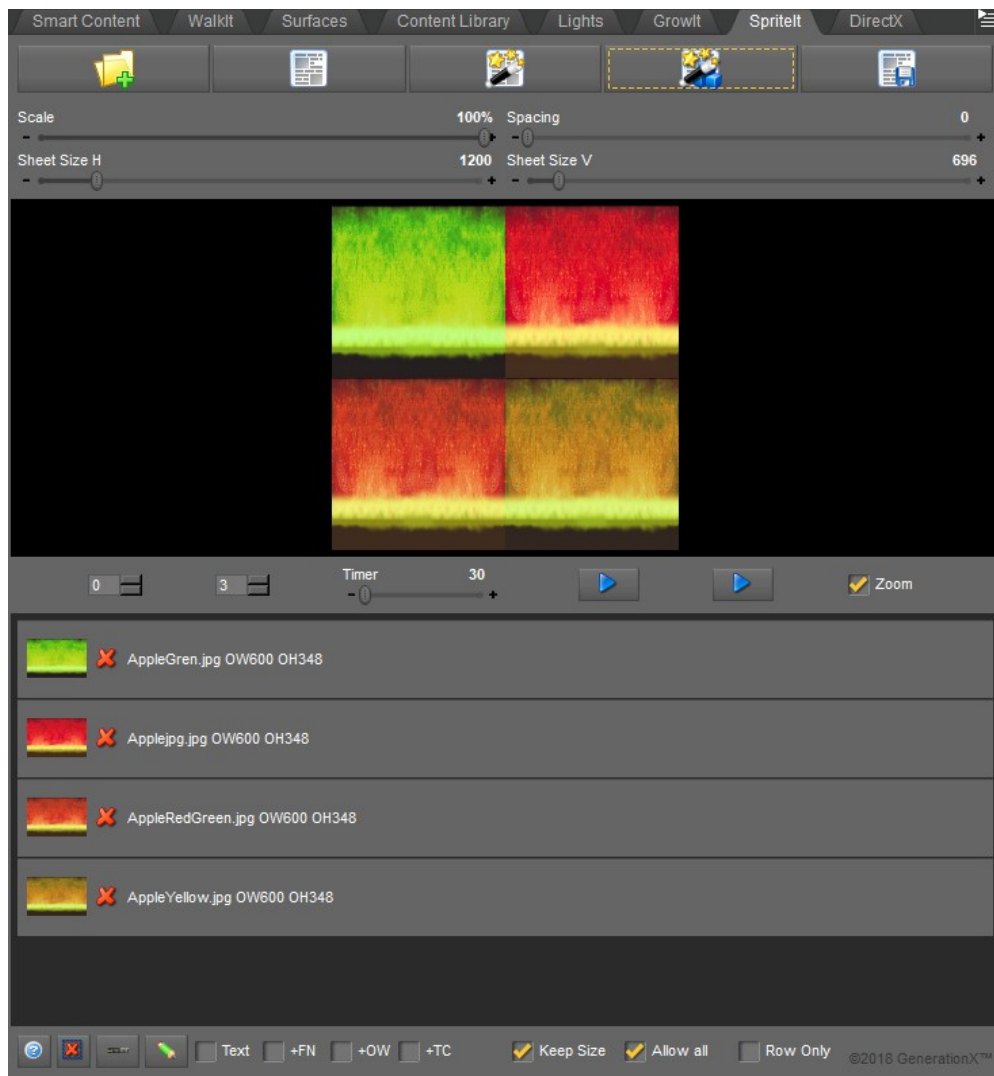
For best result use Sprite-It for packing textures & create lots of different colour stones leaves and fruits

Q&A

What frame rate should I use in animated film? 24 frames per second.

What resolution should I render at for today's films? 3840 x 2160 and not less than 1920x1080 older render-engine may require larger frames to cut down on noise.

What frame rate should I target for 3D games? 60Fps & higher.

What frame rate should I target for 2D games? 30Fps to 60fps with a 60fps update.

My film is rendered at 24fps why is the movement jittery? Your moving the camera too fast, moving the camera wrong will give the viewer a head-ache or sea-sick! Where you put and how you move the camera is very important. When watching a film see how they position & move the camera, how they clip and where is the light coming from! Check out Jaws One & Star-Wars.

The frame update is slow when animating why? The faster your graphics-card GPU is the better use a GTX 1080 Ti. Reason: When sending data to graphics card it is slow even though the Grow-It-plug-in is multi-core threaded. Games would normally store the data on the card first and use vertex-shaders to animate the objects, due to complex calculation this can't be done, this is why the plug-in has a low-poly-button, just uncheck the low poly mode when rendering!

How often is the plug-in update? Depends on update, but 3-6 months is the normal. If an error has been found then it will take a few days to correct & update.

How much is the plug-in? *£14.99* updates free.

How many threads can the Grow-It-plug-in use? One thread per control-box, **maximum of 64** threads at anyone time, that's 64 trees being drawn at once! I think there will be 128 thread CPU sooner or later and up to 256 threads even, so the plug-in will be updated for that CPU!

Ideas & Comments to dazplugins@pilning.net