

HLMS Editor Cheat Sheet

Main window

File Materials Textures Painting Tools Window

Action	Command
Generate HLMS	F5

File	Command
New Project	Ctrl + Shift + N
New Hlms Pbs	Ctrl + Alt + N
New Hlms Unlit	Ctrl + N
Open Project	Ctrl + Shift + O
Open Hlms	Ctrl + Alt + O
Open Mesh	Ctrl + O
Save Project	Ctrl + Shift + S
Save Hlms	Ctrl + Alt + S
Save Project as	Ctrl + Shift + A
Save Hlms as	Ctrl + Alt + A
Save Mesh as	Ctrl + A
Export Material browser to zip	-
Export Current project to zip	-
Import HLMS Editor project from zip	-
Import 3D models	-
Quit	Ctrl + Q

<u>M</u>aterials	Command
Apply current material to (sub)mesh	Ctrl + M
Open browser	Ctrl + B
Add Hlms to browser	Ctrl + H

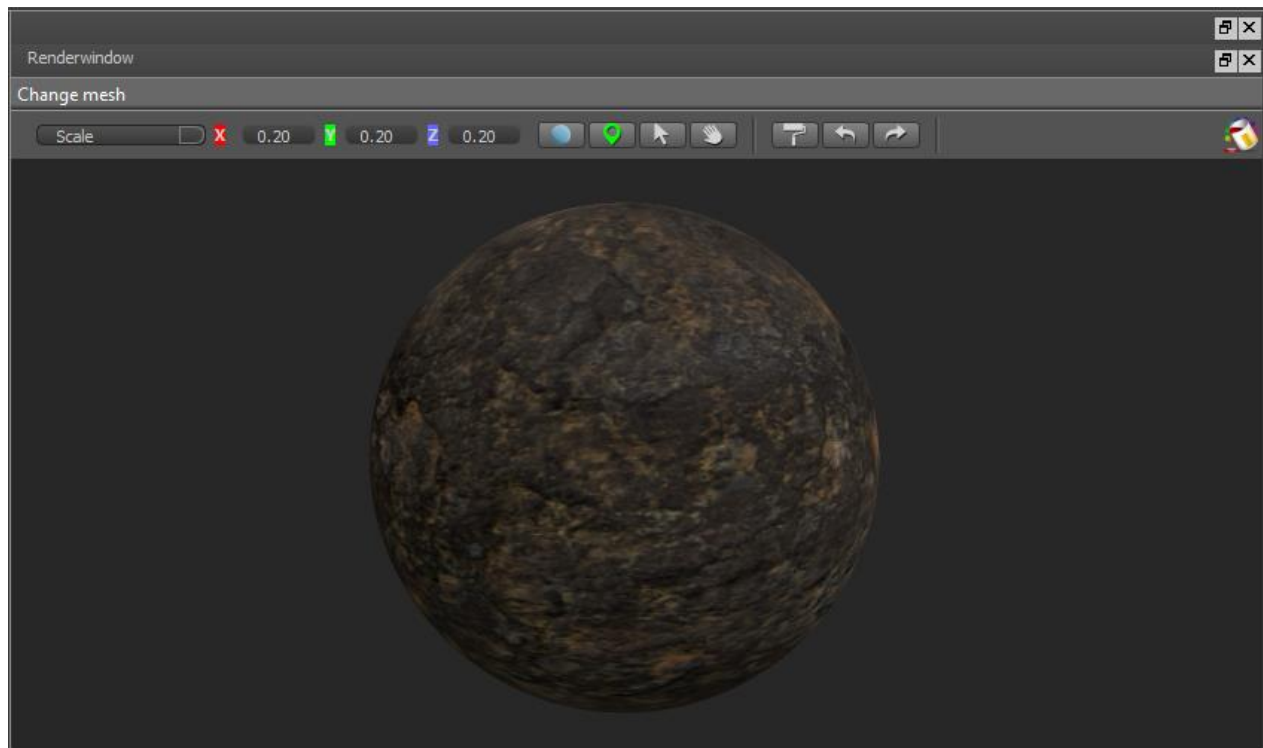
<u>T</u>extures	Command
Import textures from directory	Ctrl + I
Add texture file(s)	Ctrl + T

<u>P</u>ainting	Command
Create paint layer	Ctrl + P
Edit paint layer	Ctrl + R
Delete selected paint layer	Ctrl + D



<u>T</u>ools	Command
Configure	Ctrl + X

<u>W</u>indow	Command
Reset Window Layout	Ctrl + R

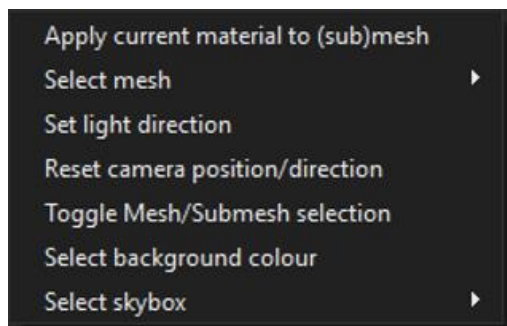
Render window



Action	Command
Rotate mesh	Left Mouse Button (LMB) Drag
Move mesh	Shift + LMB Drag
Select a mesh from a list	Change mesh listbox
Scale mesh	
Set light direction	Toggle between and
Reset position and orientation mesh	
Mesh/submesh selection	Toggle between and + Hoover over submeshes (on/off)
Offset texture	Toggle between and + (+ detail map selected) + LMB drag a detail map
	Toggle between and

Action	Command
	(+ paintlayer created) + LMB + move
Undo paint action	Click on 
Redo paint action	Click on 
Change background colour	Click on 
Set current material to a Mesh or a Submesh	Doubleclick on Mesh/Submesh

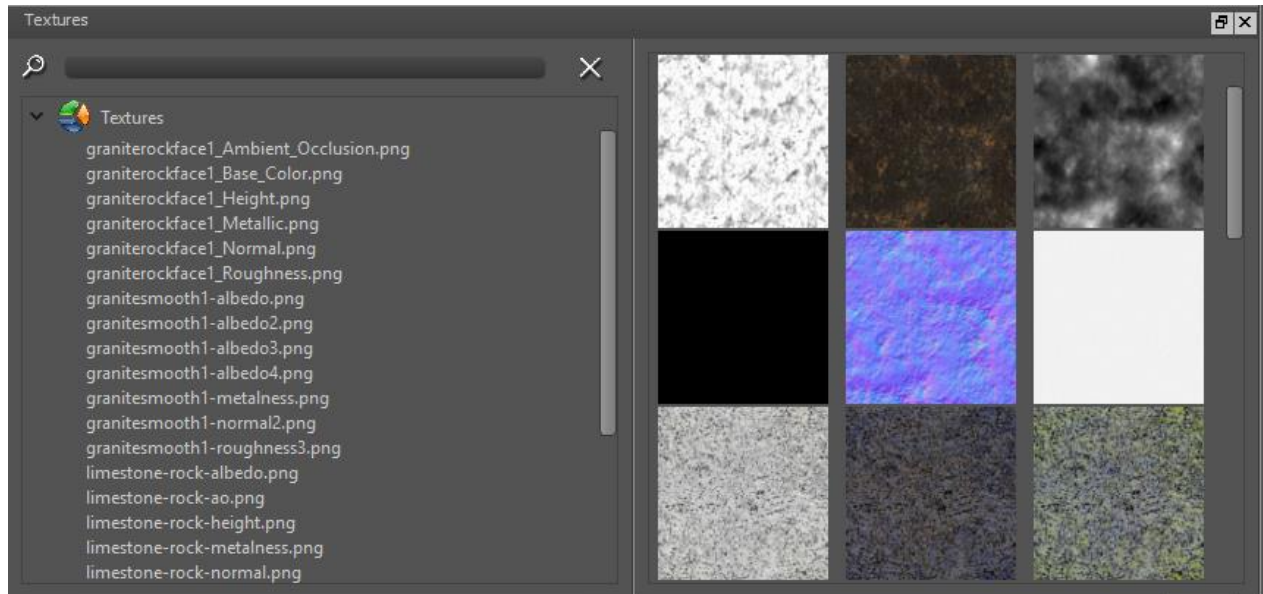
Render window context menu




Action	Command
Display context menu	Right Mouse Button (RMB)
Apply current material to a Mesh or a Submesh	Apply current material to a (sub)mesh
Select a mesh from a list	Select mesh
Set the direction of the light by moving the mouse	Set light direction + LMB + move
Reset position and orientation mesh	Reset camera position/direction
Hoover over submeshes; double clicking on highlighted submeshes applies the current material to that submesh	Toggle Mesh/Submesh selection

Action	Command
Change background colour	Select background colour
Select a skybox from a list	Select skybox

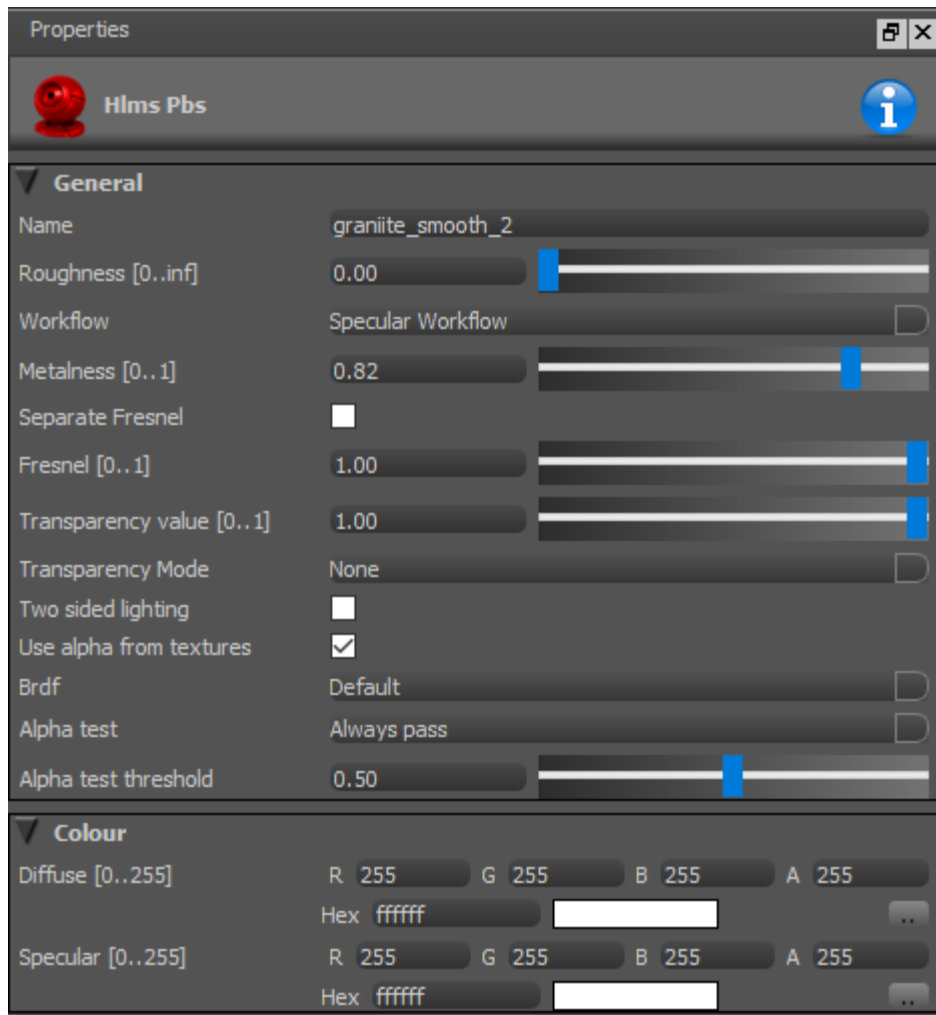
Texture window



Action	Command
Search	Enter search phrase in edit field
Reset search	Click on 
Create a subgroup	Right Mouse Button (RMB) + select 'Create a subgroup' from contextmenu
Remove selected subgroup or texture from texture list	RMB + select 'Remove from list' from contextmenu
Collapse / expand	RMB + select 'Collapse / expand' from contextmenu
Import from directory	RMB + select 'Import from directory' from contextmenu
Add texture file(s)	RMB + select 'Add texture file(s)' from contextmenu
Add texture file(s)	Drag from file external explorer (eg Windows file explorer) + drop on texture window
Delete selected texture	Delete key
New Texture / Samplerblock node (in Node editor window)	Drag from texture listbox + drop on node editor window

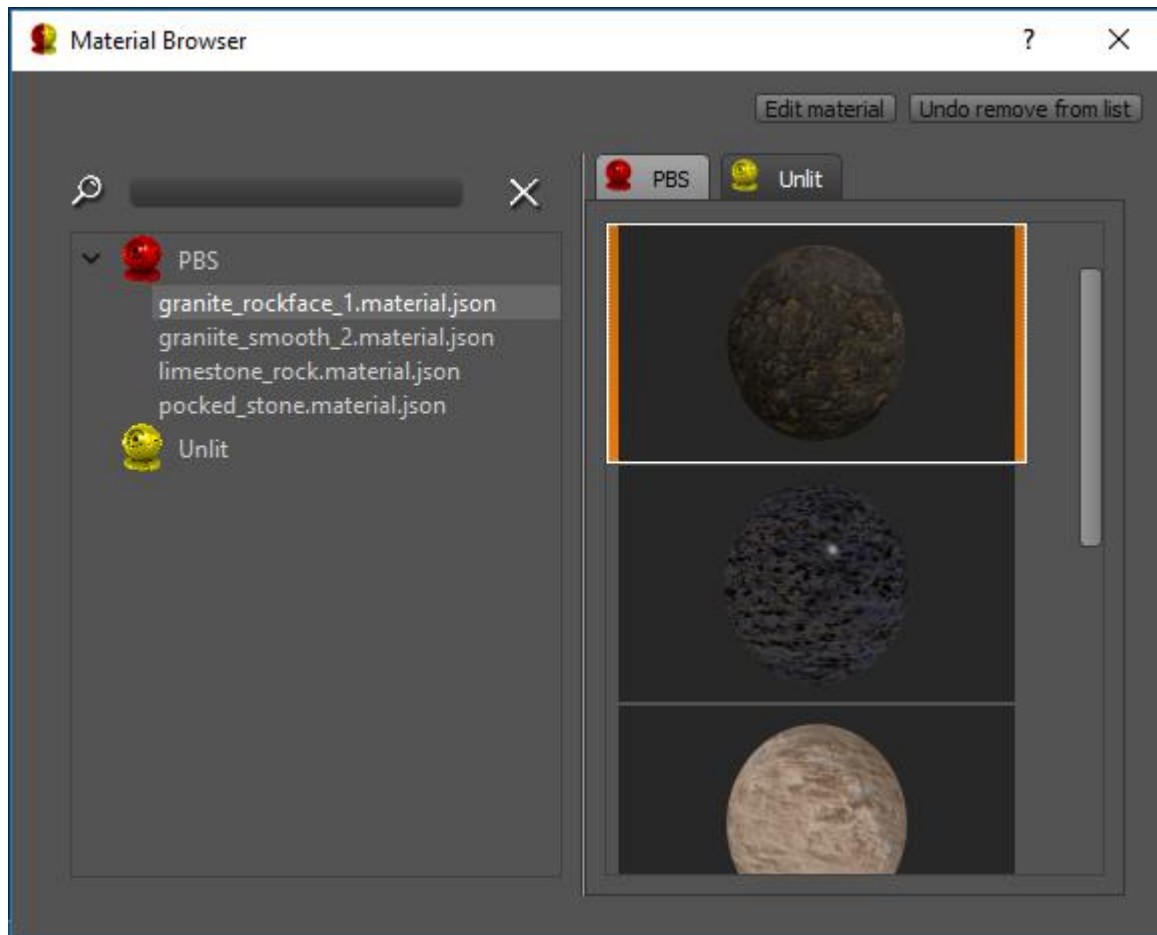
Action	Command
New Texture / Samplerblock node (in Node editor window)	Drag image + drop on node editor window


Properties window



Action	Command
Collapse property group	Click on 
Expand property group	Click on 

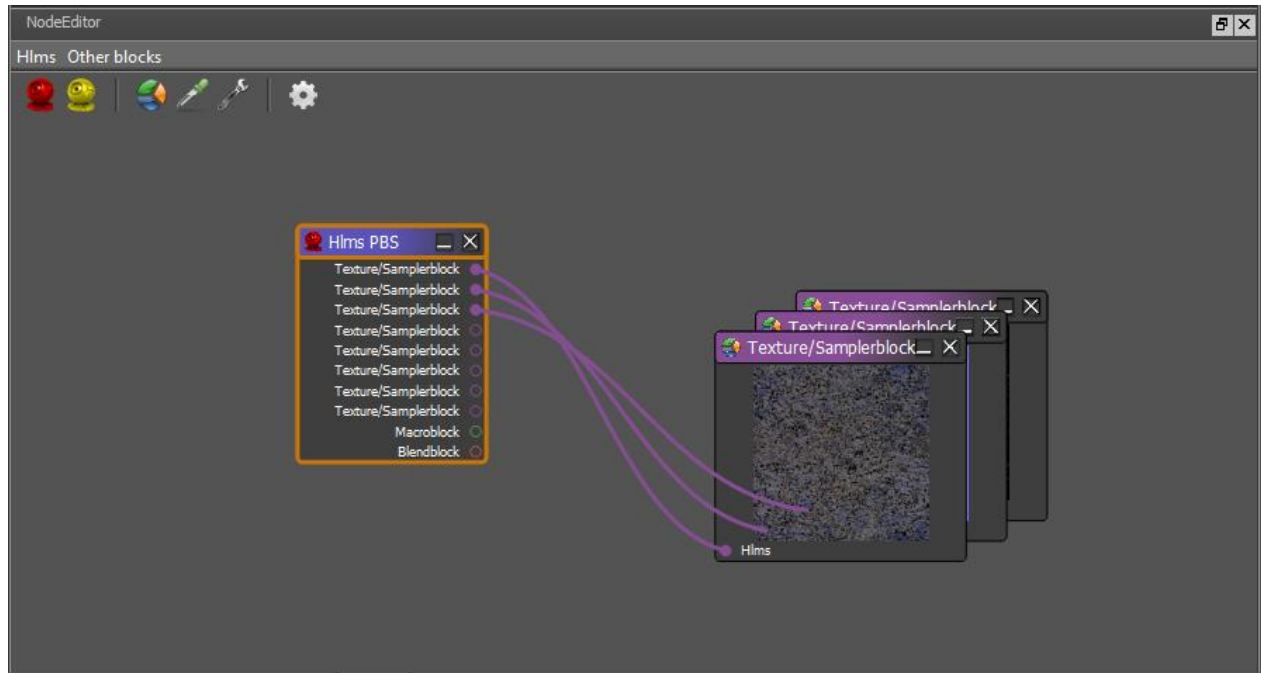
Material browser window








Action	Command
Search	Enter search phrase in edit field
Reset search	Click on 
Select material for editor	DoubleClick on item in listbox
Select material for editor	Click on item in listbox + button Edit material
Select material for editor	Right Mouse Button (RMB) + select 'Edit material' from contextmenu
Create a subgroup	RMB + select 'Create a subgroup' from contextmenu


Action	Command
Clone a material	RMB + 'Clone material' from contextmenu
Remove selected subgroup or material from material list	RMB + 'Remove from list' from contextmenu
Collapse / expand	RMB + 'Collapse / expand' from contextmenu
Undo remove from list	Click on item in listbox + button Undo remove from list

Node editor window

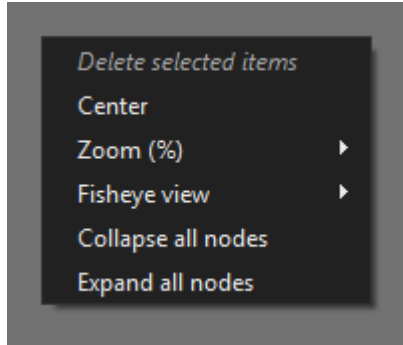


Node editor toolbar and menu

Action	Command
New HLMS PBS node	<div>Click on </div> <div>Menu: Hlms → New Hlms Pbs</div>
New HLMS Unlit node	<div>Click on </div> <div>Menu: Hlms → New Hlms Pbs</div>
New Texture / Samplerblock node	<div>Click on </div> <div>Menu: Other blocks → New Texture/Samplerblock</div>
New Blendblock	<div>Click on </div> <div>Menu: Other blocks → New Blendblock</div>
New Macroblock	<div>Click on </div> <div>Menu: Other blocks → New Macroblock</div>

Action	Command
Generate HLMS	Click on 

Node editor context menu



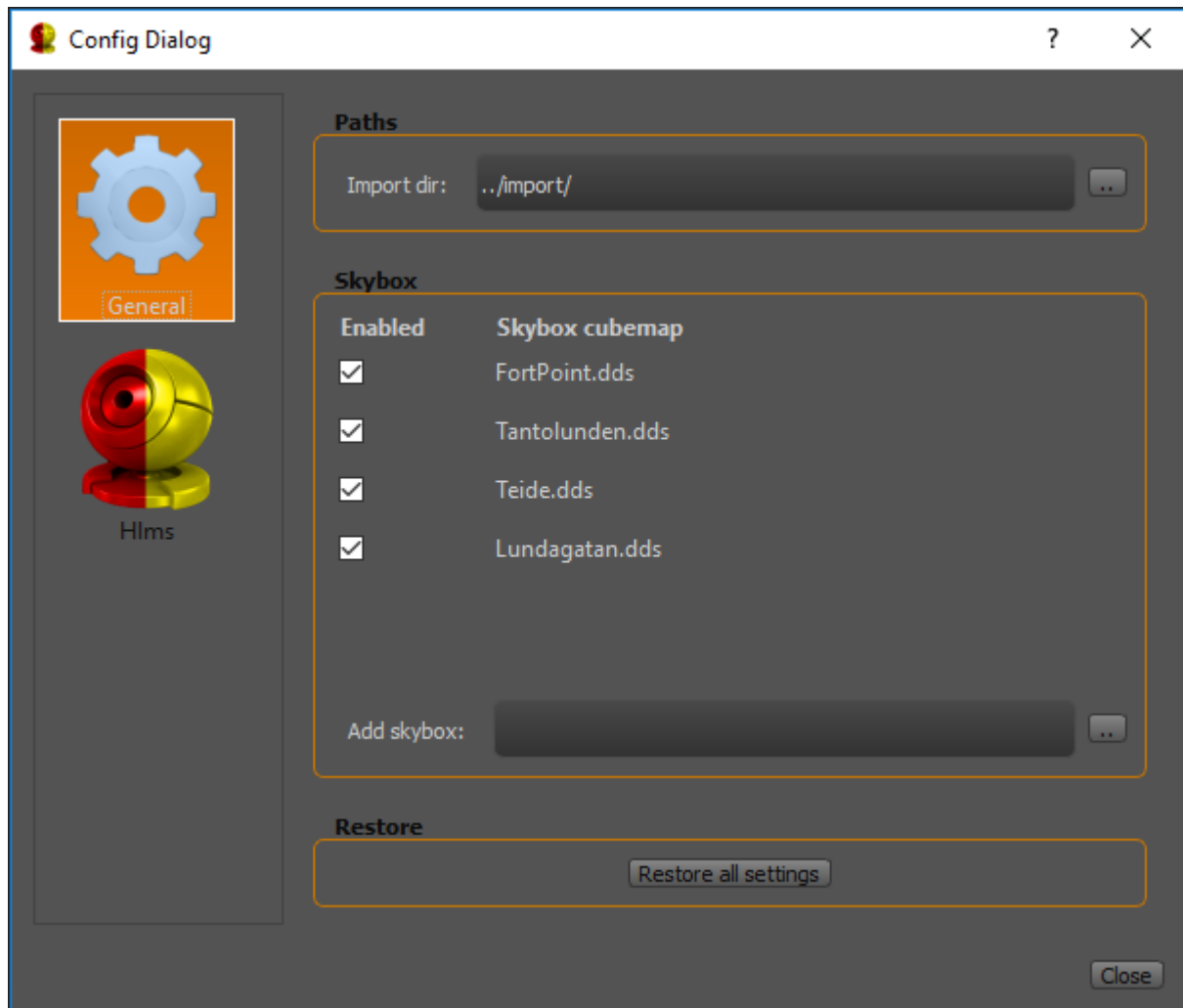
Action	Command
Display context menu	RMB
Center all nodes	Center
Zoom in/out (10% - 300%)	Zoom (%)
Automatic zoom in/out (based on mouse position)	Fisheye view
Collapse all nodes	Collapse all nodes
Expand all nodes	Expand all nodes




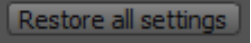
Node editor canvas actions

Action	Command
Select node	Click on header of a node
Add to selection	Ctrl + Click on header of a node
Rubberband selection	LMB Drag
Delete selected node(s)	Delete key

Action	Command
Move selected node(s)	Ctrl + LMB Drag
Pan the graph	Shift + LMB Drag
Zoom in/out	Mouse Wheel Up/Down
Display properties in properties window	Click on header of a node

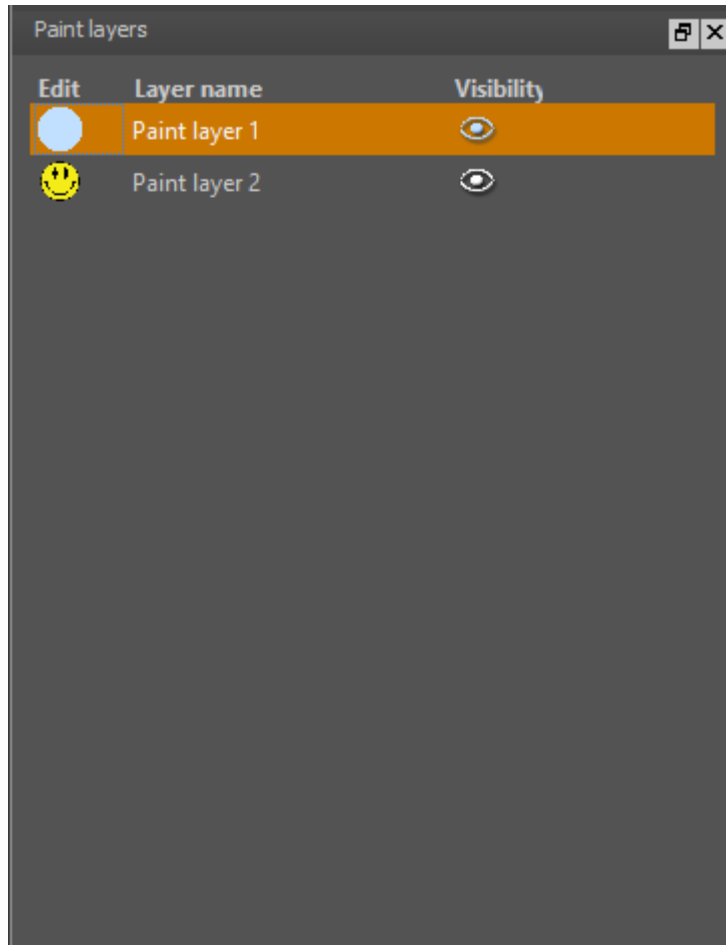
Configure dialog




Action	Command
Set the import directory (used for importing project and models)	Tab General: Click on  (in Paths group)
Enable/disable a skybox	Tab General: Click on 
Add a skybox	Tab General: Click on  (in Skybox group)
Restore all settings	Tab General: Click on 

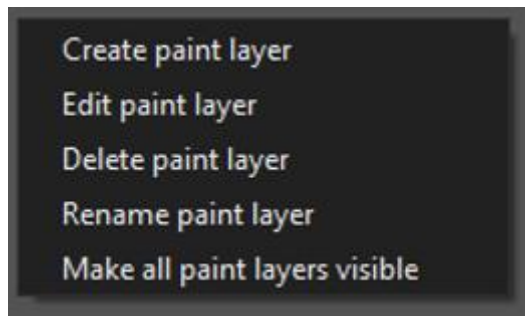
Action	Command
Set default value of Min, Mag, Mip Filter of a Samplerblock	Tab Hlms: Select from dropdown listbox
Close the config dialog	Click on 

Paint Layers



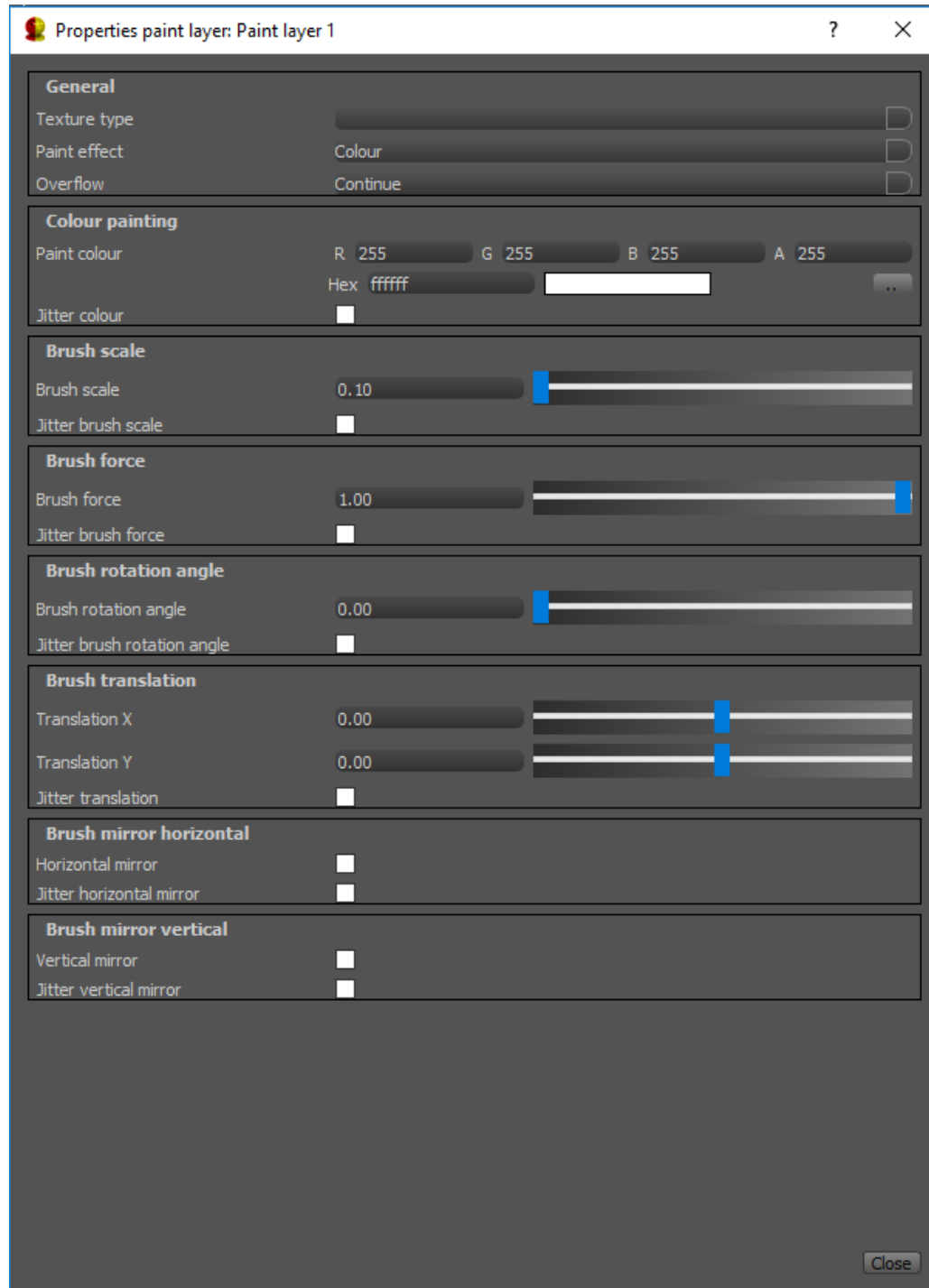
Action	Command
Open properties window	Doubleclick on brush icon
Change (edit) the name of the layer	Doubleclick on Layer name
Make layer visible/invisible; all other layers with the same texture type reference are also made visible/invisible	

Paint layers context menu



Action	Command
Add (create) a new paint layer	Create paint layer
Open properties window	Edit paint layer
Delete the selected paint layer	Delete paint layer
Change (edit) the name of the layer	Rename paint layer
Set all visibility icons	Make all paint layers visible

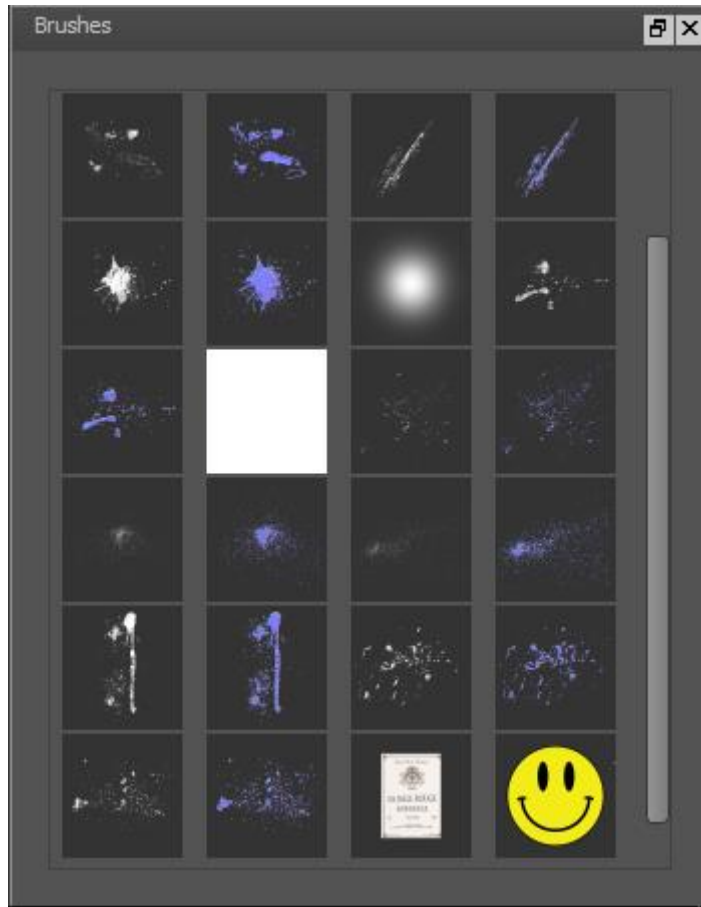
Properties paint layers



Action	Command
Select one of the available texture types. Only the texture types used by the material are showed.	Texture type
<ul style="list-style-type: none"> • Colour - Paint with colour • Alpha - Paint with an alpha value; the brush acts as eraser • Texture / Normal – The brush image is placed on the texture 	Paint effect
Determine whether the brush stops at the texture borders or continues on the opposite side of the texture	Overflow
Select a colour	Colour painting
If selected, a random colour between 2 colours is painted. The interval determines the frequency.	Jitter colour checkbox
Determines the size of the brush	Brush scale
If selected, a brush scale between 2 values is used for painting. The interval determines the frequency.	Jitter brush scale
Determines how much 'pressure' is used for painting	Brush force
If selected, a brush force between 2 values is used for painting. The interval determines the frequency.	Jitter brush force
Determines the angle of the brush in relation to the texture	Brush rotation angle
If selected, a brush rotation angle between 2 values is used for painting. The interval determines the frequency.	Jitter brush rotation angle
Applies a uv offset to the brush	Brush translation
If selected, a brush translation between 2 values is used for painting. The interval determines the frequency.	Jitter translation
Determines whether the brush is mirrored horizontally	Brush mirror horizontal

Action	Command
If selected, the brush is mirrored horizontal randomly. The interval determines the frequency.	Jitter horizontal mirror checkbox
Determines whether the brush is mirrored vertically	Brush mirror vertical
If selected, the brush is mirrored vertical randomly. The interval determines the frequency.	Jitter vertical mirror checkbox

Brushes



Action	Command
Assign the brush to the selected paint layer	Doubleclick on brush

Workflows

