HLMS Editor Cheat Sheet

Main 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**

Materials	**Command**
Apply current material to (sub)mesh	**Ctrl + M**
Open browser	**Ctrl + B**
Add Hlms to browser	**Ctrl + H**

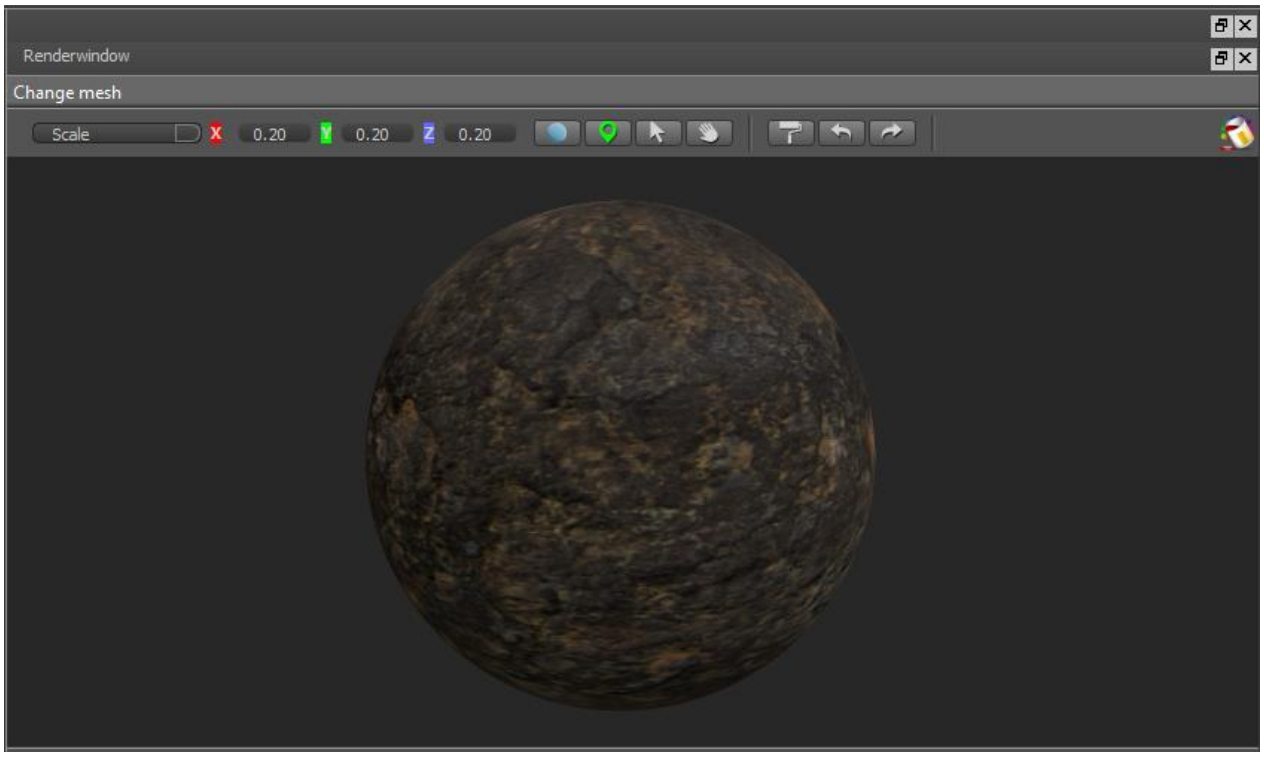
Textures	**Command**
Import textures from directory	**Ctrl + I**
Add texture file(s)	**Ctrl + T**

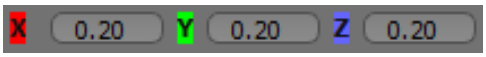
Painting	**Command**
Create paint layer	**Ctrl + P**
Edit paint layer	**Ctrl + R**
Delete selected paint layer	**Ctrl + D**

Tools	**Command**
Configure	**Ctrl + X**

Window	**Command**
Reset Window Layout	**Ctrl + R**

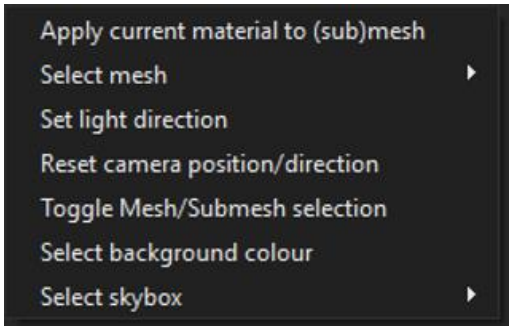
Render window



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
Paint on a texture	**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

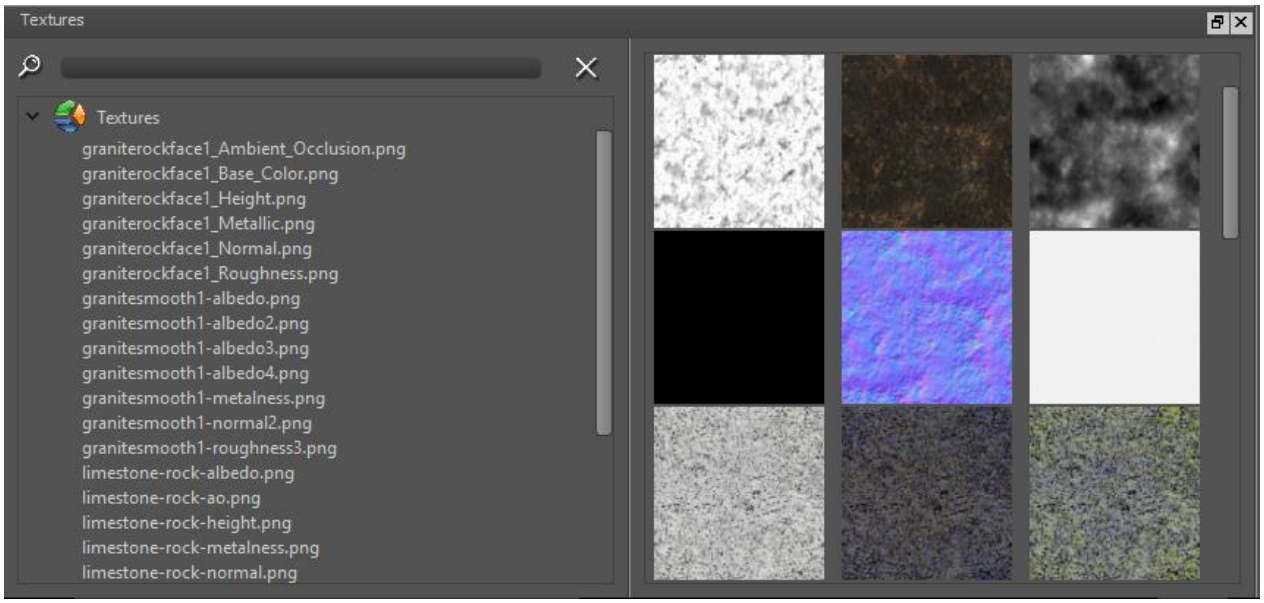
Render window context menu



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

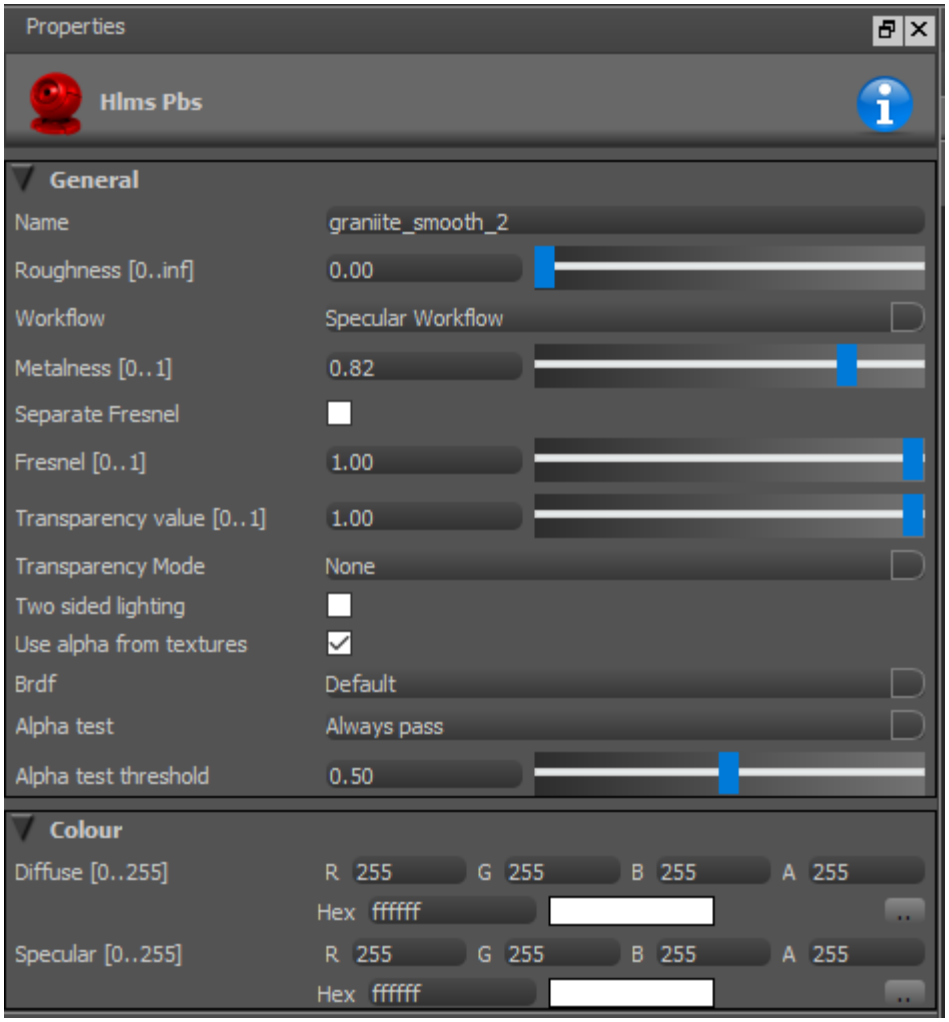
Texture window



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

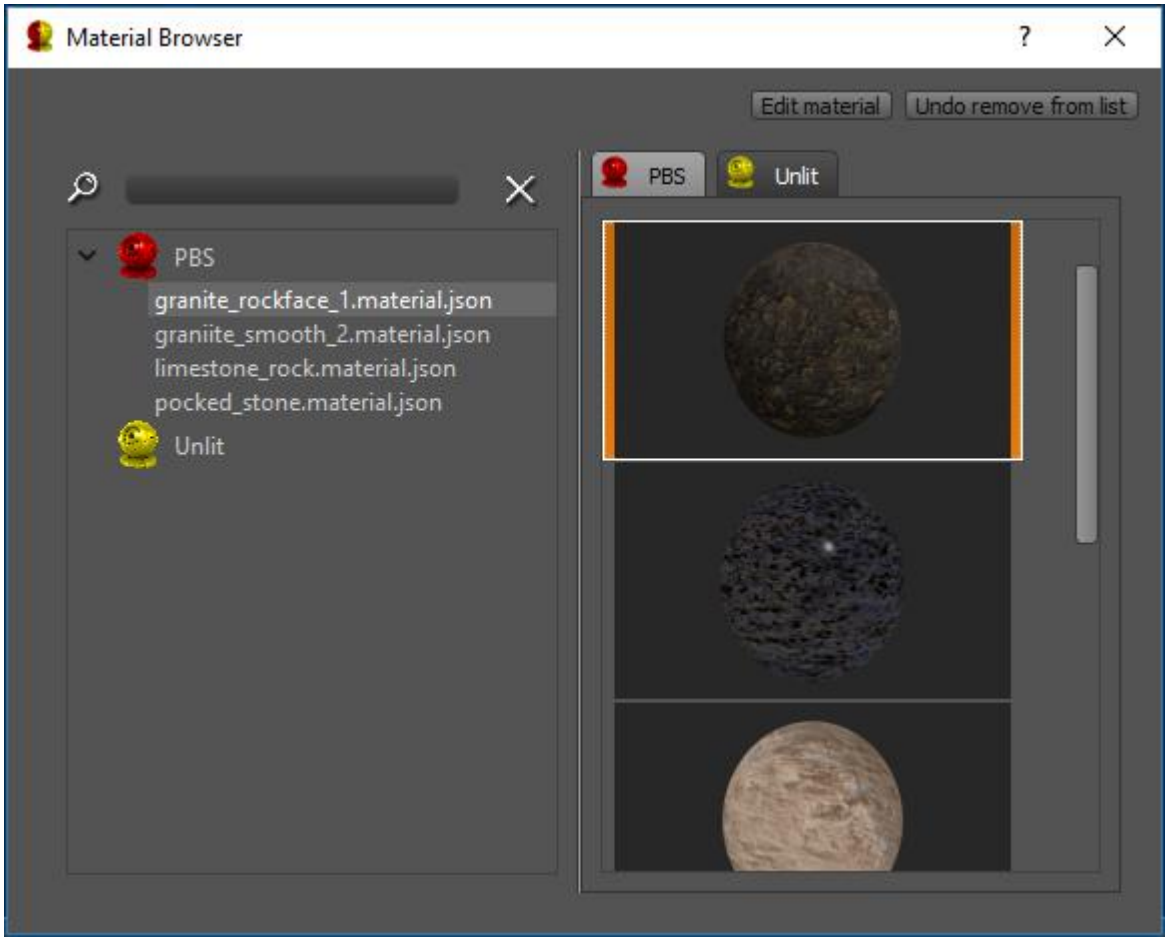
Action	Command
New Texture / Samplerblock node (in Node editor window)	**Drag** image + **drop** on node editor window

Properties window



Action	Command
Collapse property group	**Click** on ▼
Expand property group	**Click** on ▶

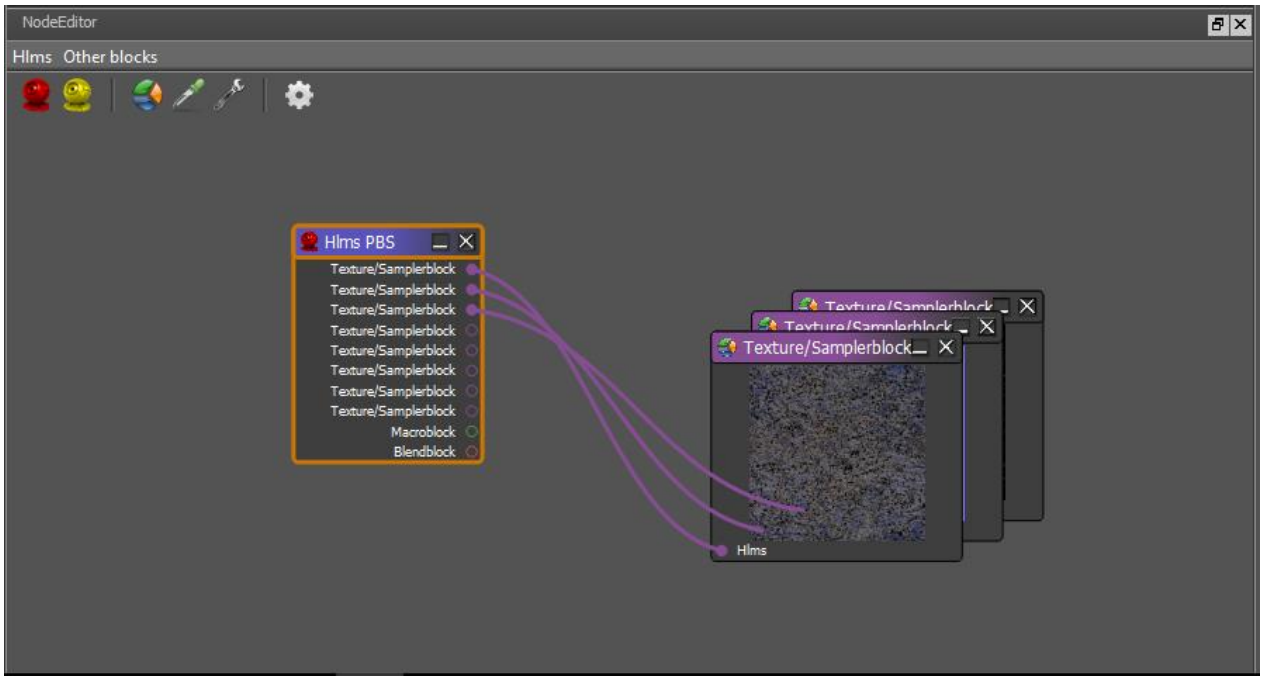
Material browser window



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

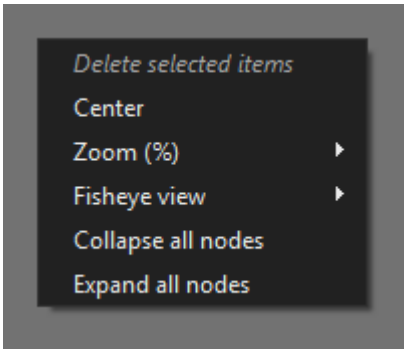


Node editor toolbar and menu

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

Action	Command
Generate HLMS	**Click** on 

Node editor context menu



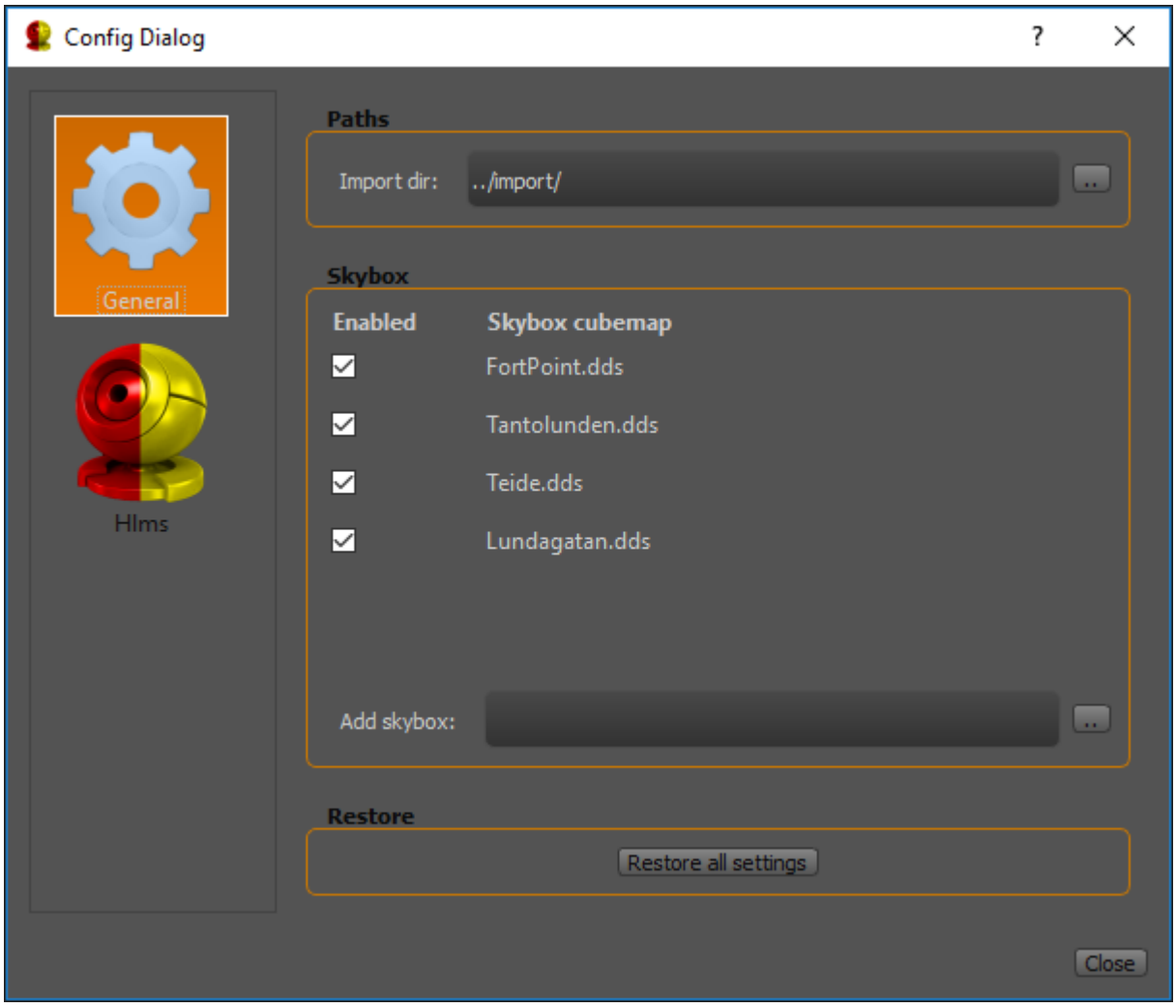
Action	Command
Display context menu	**RMB**
Center all nodes	Center
Zoom in/out (10% - 300%)	Zoom (%)
Automatic zoom in/out (based on mouse position)	Fisheye view
Collapse all nodes	Collapse all nodes
Expand all nodes	Expand all nodes

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

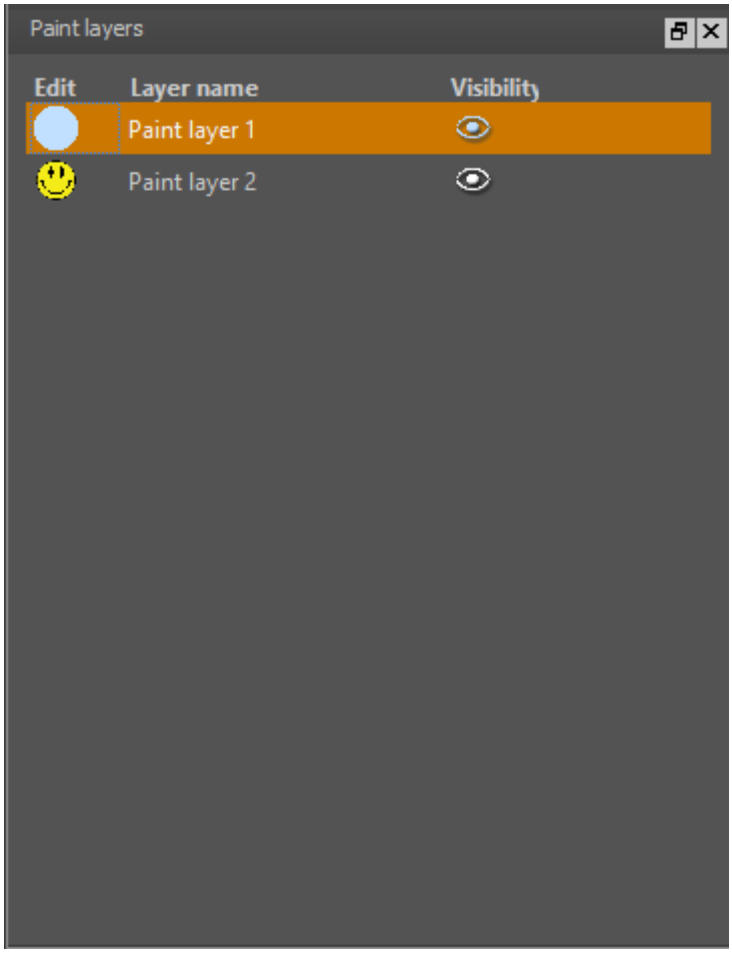
Configure dialog



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 Restore all settings

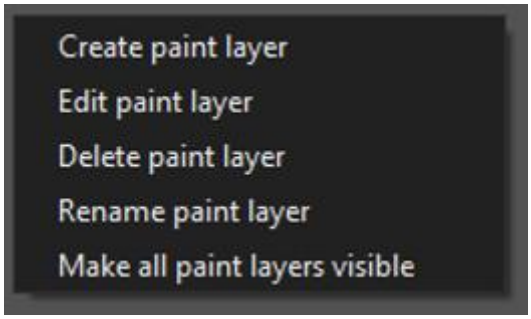
Action	Command
Set default value of Min, Mag, Mip Filter of a Samplerblock	**Tab Hlms: Select** from dropdown listbox
Close the config dialog	**Click** on 

Paint Layers



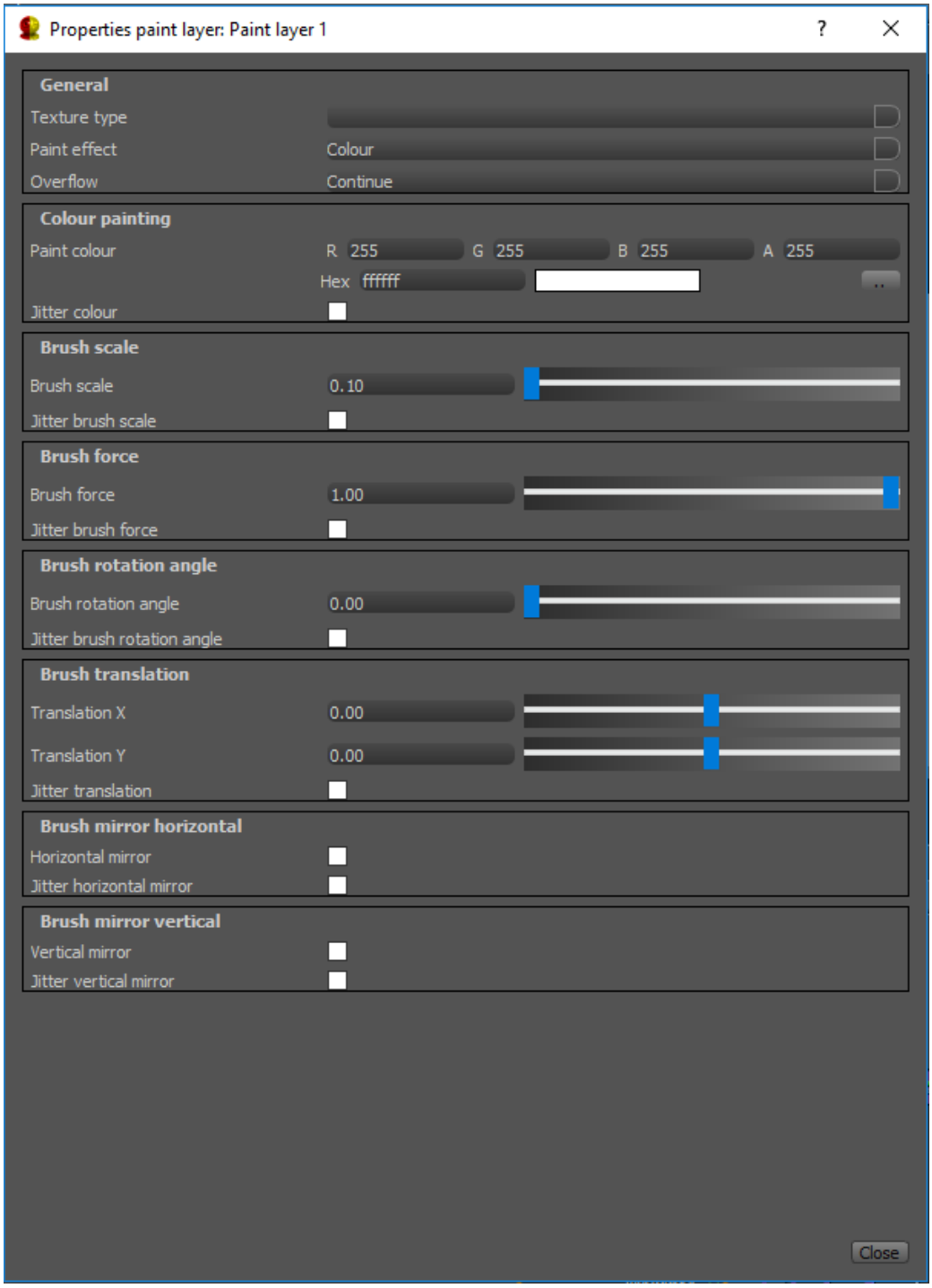
Action	Command
Open properties window	**Doubleclick** on brush icon
Change (edit) the name of the layer	**Doubleclick** on Layer name
Make layer visible/invisible; all other layers with the same texture type reference are also made visible/invisible	

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

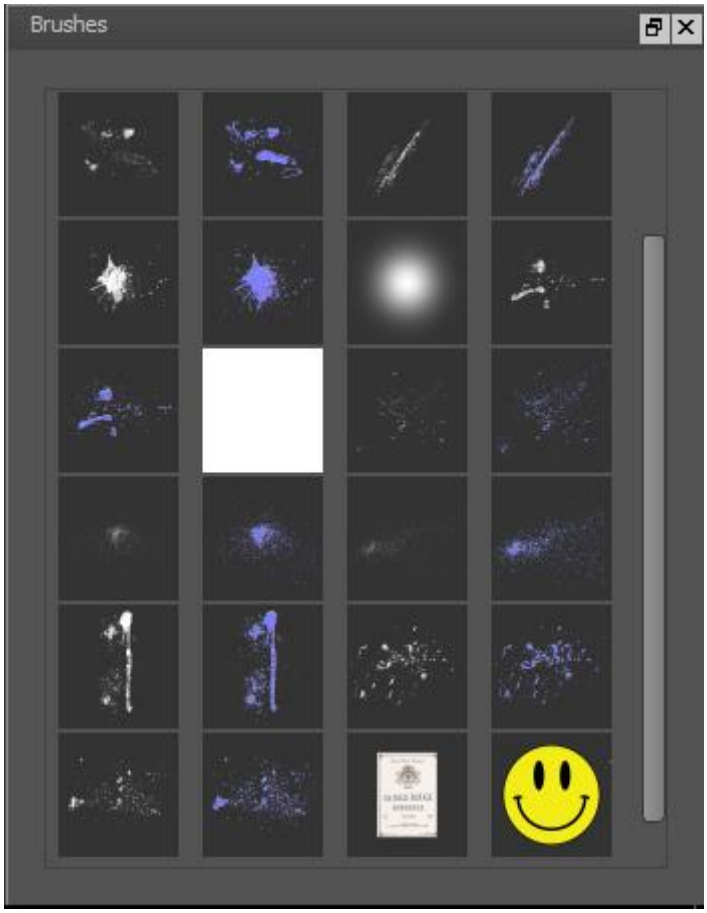
Properties paint layers



Action	Command
Select one of the available texture types. Only the texture types used by the material are showed.	Texture type
• 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

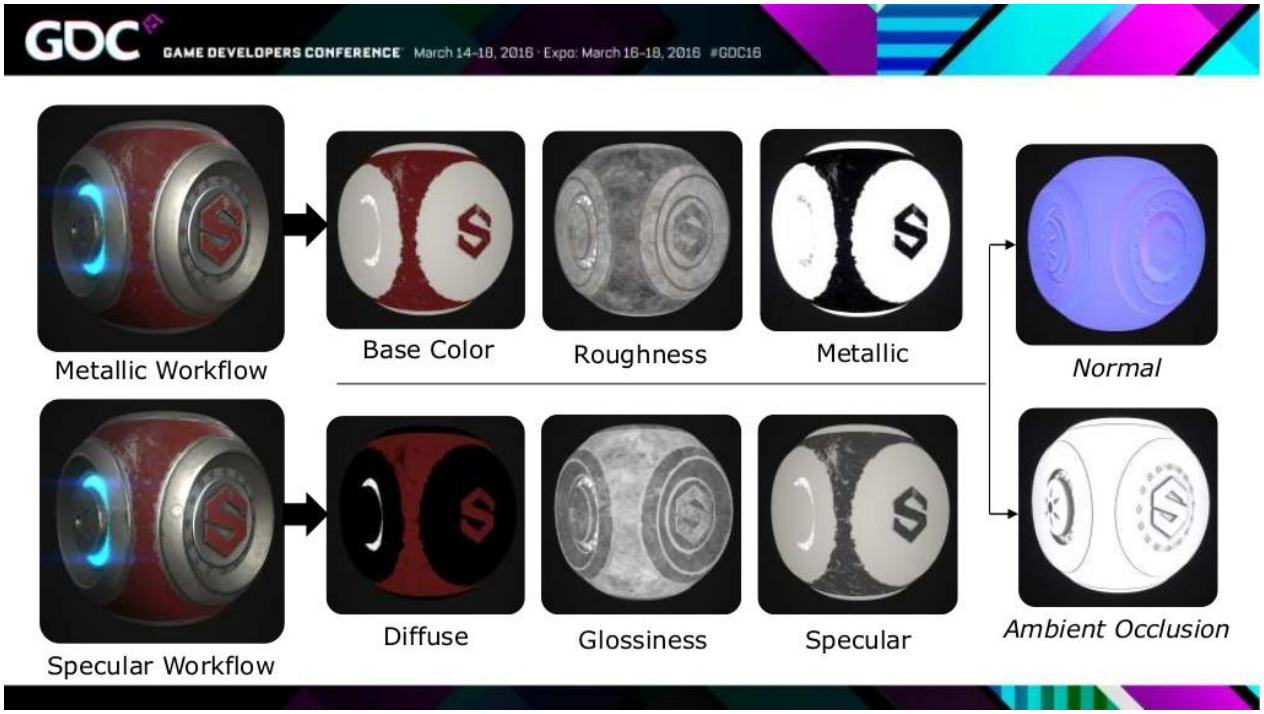
Action	Command
If selected, the brush is mirrored horizontal randomly. The interval determines the frequency.	Jitter horizontal mirror checkbox
Determines whether the brush is mirrored vertically	Brush mirror vertical
If selected, the brush is mirrored vertical randomly. The interval determines the frequency.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

Brushes



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

Workflows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Metallic Workflow
Base Color
Roughness
Metallic
Normal
Specular Workflow
Diffuse
Glossiness
Specular
Ambient Occlusion