

Node based interfaces

Below is a list of node based interfaces; some of these programs/node based editors have been around for a while and likely already ran into issues we'll find in the future (providing we go with a node based interface). The documentation links often provide more information on how the interface works - we can grab ideas from there.

3D modelling programs

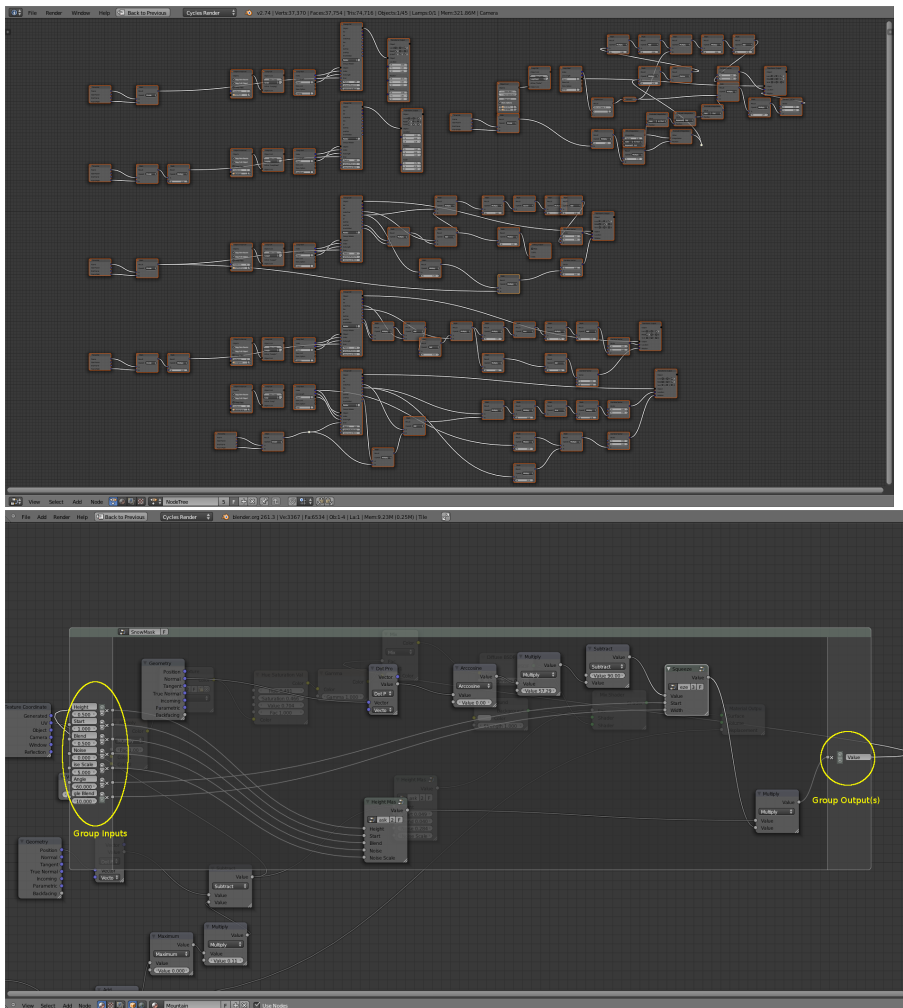
Blender

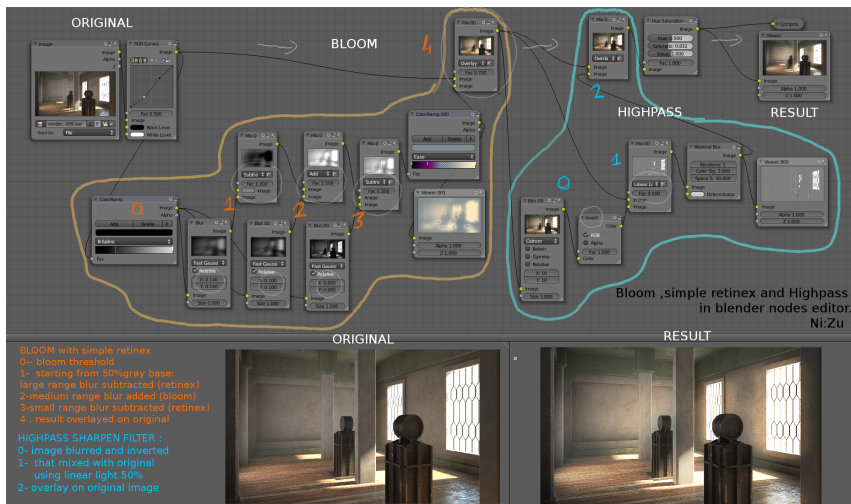
The node based interface is used to assign/create complex materials and have a real time preview of the changes.

Documentation: https://docs.blender.org/manual/en/dev/render/blender_render/materials/nodes/introduction.html

Download: <https://www.blender.org/download/>

Screenshots





Node arrangement and expand/collapse of nodes (towards the end)

Auto-offset moves nodes as needed (new nodes added, nodes removed, etc): http://blender-manual-i18n.readthedocs.io/ja/latest/editors/node_editor/usage.html



Node wrangler - improvements to Blender's node editing: <http://gregzaal.github.io/node-wrangler/>

See lazy Functions > Lazy Connect with Menu as an alternative way of connecting nodes without dragging/dropping from/to their sockets

3DS Max

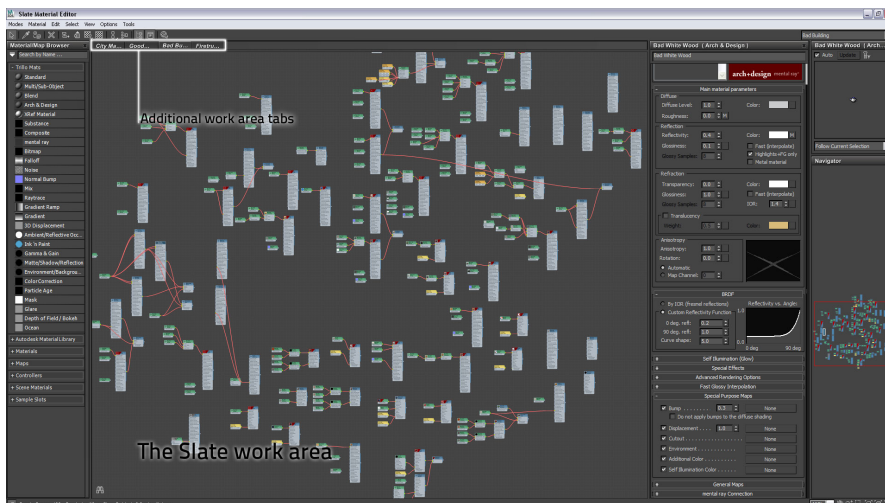
Slate - also used to work with materials

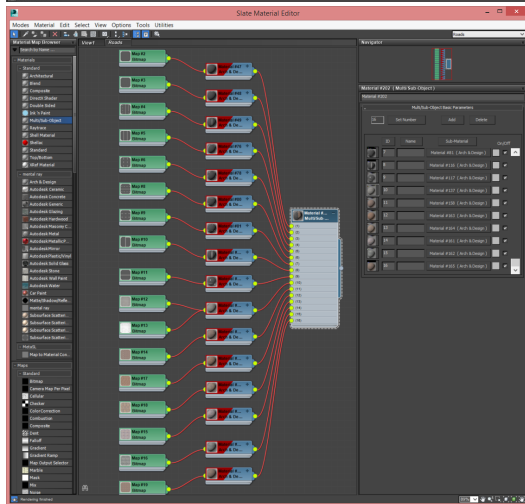
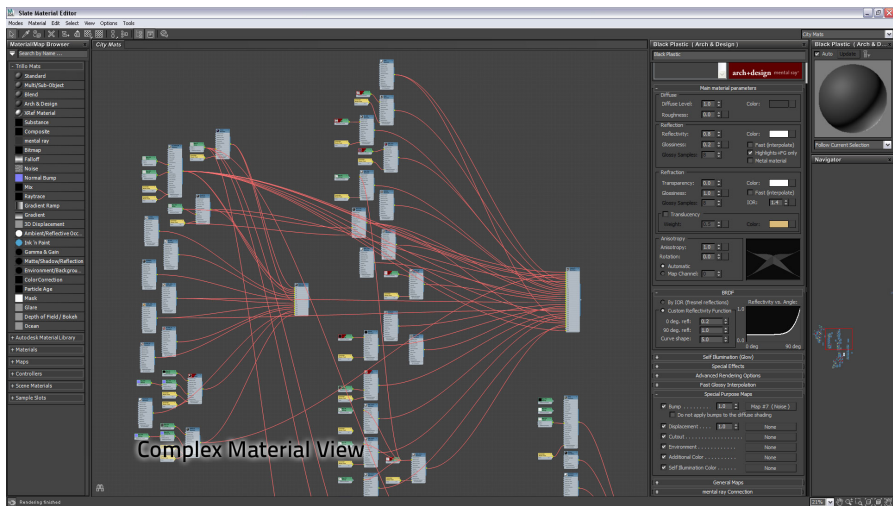
Documentation: <https://knowledge.autodesk.com/support/3ds-max/learn-explore/caas/CloudHelp/cloudhelp/2016/ENU/3DSMax/files/GUID-7B51EF9F-E660-4C10-886C-6F6ADE9E8F56-htm.html>

A brief overview (last post in page), potential good ideas: <http://www.design-corps.co.uk/tag/interface/>

"To combat the confusion with complex scenes you have the option of creating new workspaces to keep things organised, these just sit at the top as tabs for you to flick between." - our idea of tabbing between collections

Screenshots





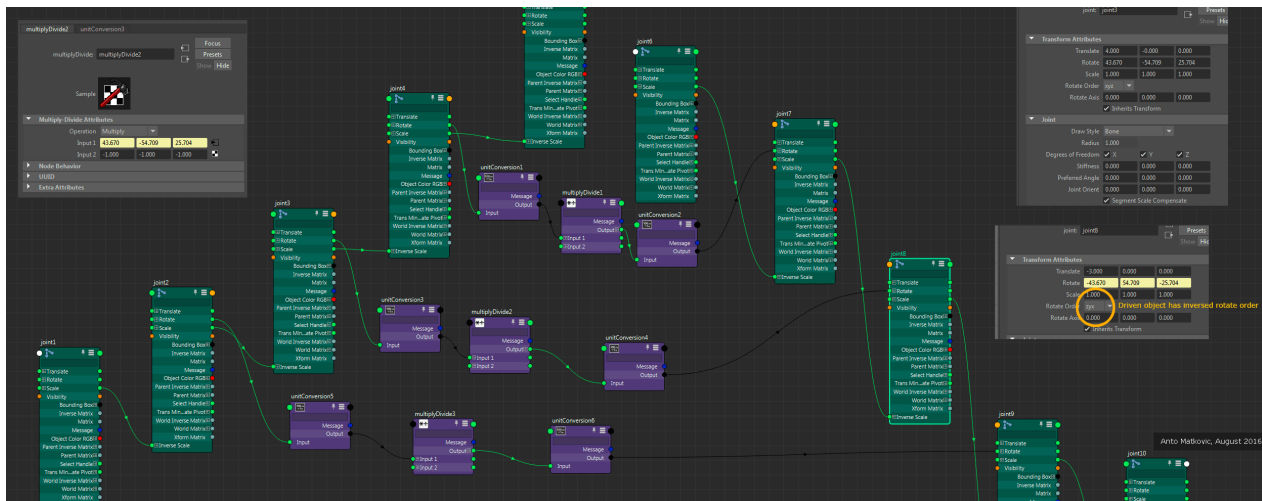
Maya

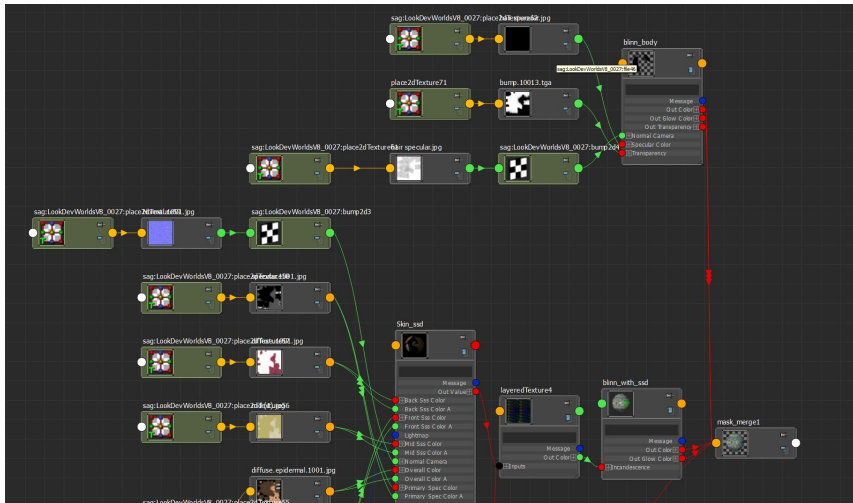
Also material editing, character rigging

Documentation: <https://knowledge.autodesk.com/support/maya/learn-explore/caas/CloudHelp/cloudhelp/2016/ENU/Maya/files/GUID-383D6D2A-DE9A-4764-9DE0-6514718A1578-htm.html>

Idea of bookmarks "You can create bookmarks in the Node Editor to store the current node graph as a quick reference."

Screenshots





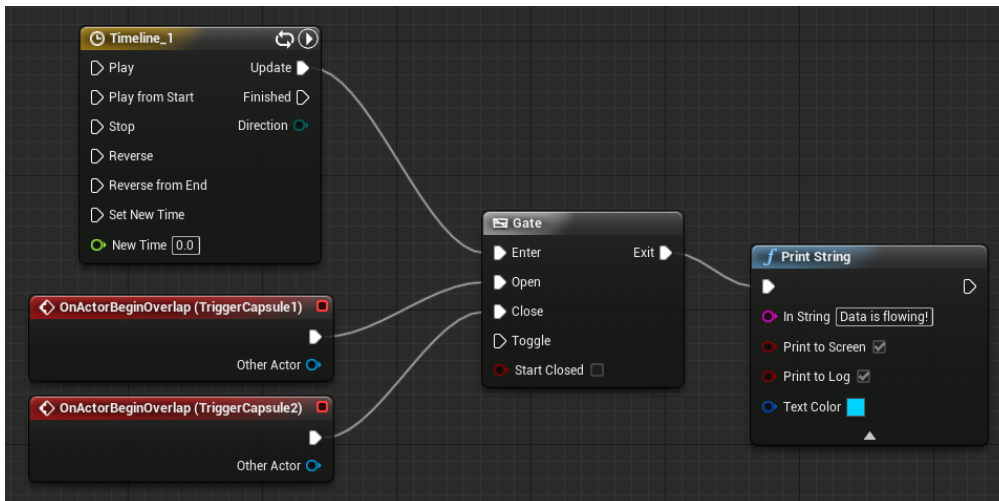
Node based programming/scripting

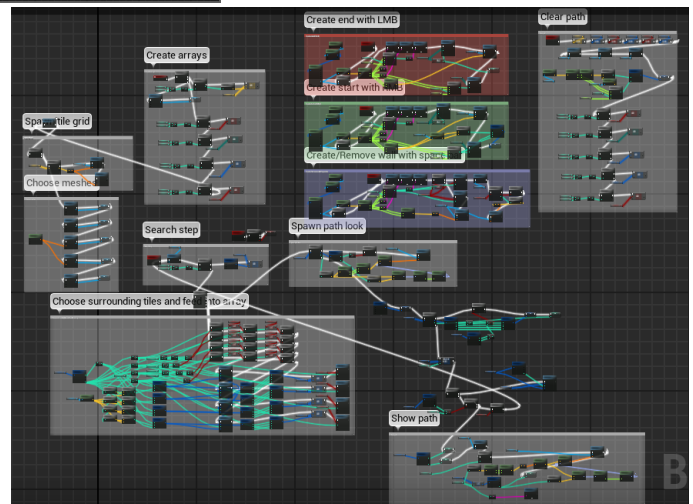
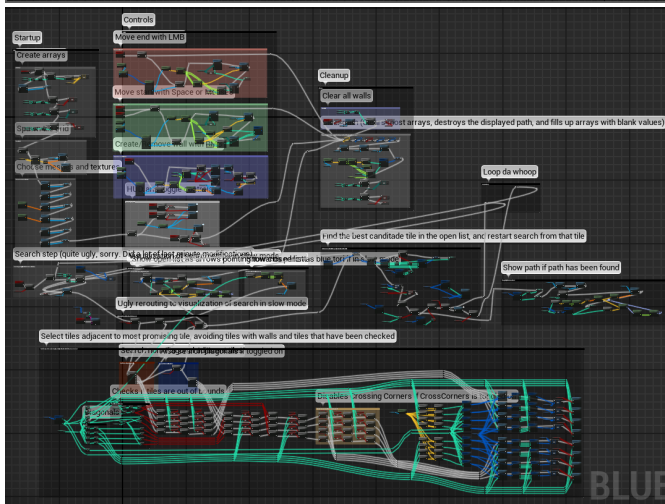
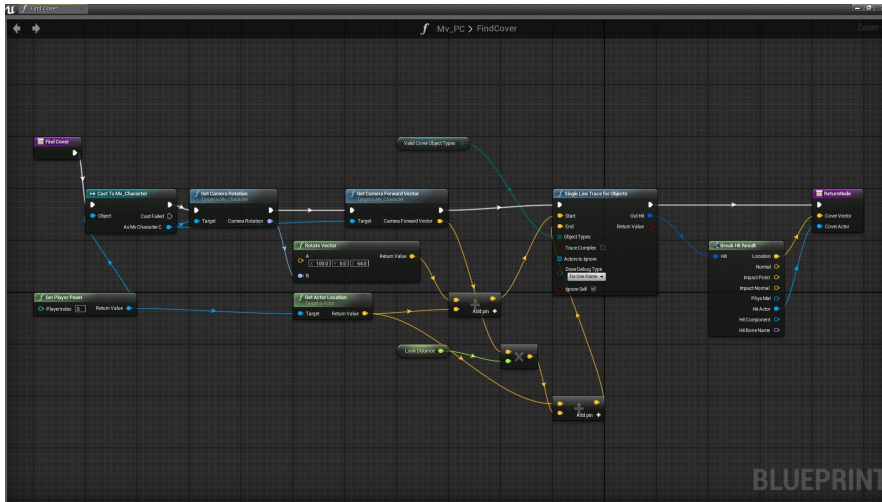
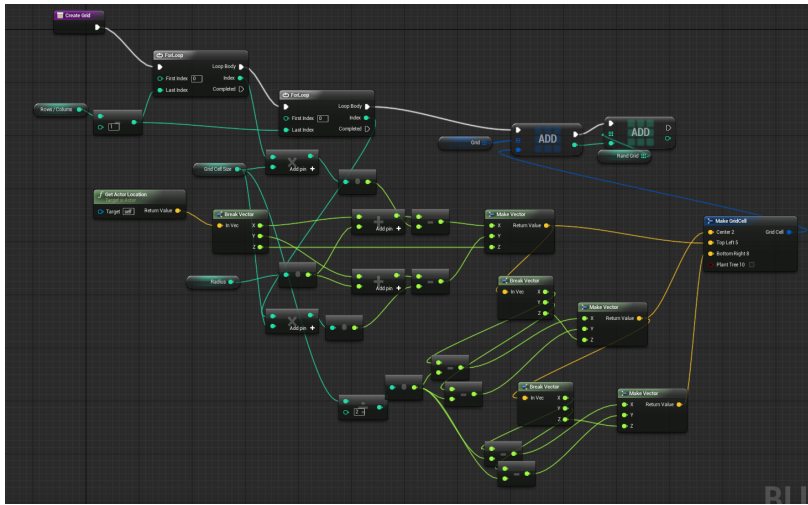
Blueprints (Unreal engine)

"a complete gameplay scripting system based on the concept of using a node-based interface to create gameplay elements from within Unreal Editor"

Documentation: <https://docs.unrealengine.com/latest/INT/Engine/Blueprints/>

Screenshots





Specific documentation related to nodes (and how to interact with them): <https://docs.unrealengine.com/latest/INT/Engine/Blueprints/UserGuide/Nodes/>

Connecting nodes: https://docs.unrealengine.com/latest/INT/Engine/Blueprints/BP_HowTo/ConnectingNodes/

Placing nodes: https://docs.unrealengine.com/latest/INT/Engine/Blueprints/BP_HowTo/PlacingNodes/index.html

Flow control nodes: <https://docs.unrealengine.com/latest/INT/Engine/Blueprints/UserGuide/FlowControl/index.html>

Not that relevant (at the moment), but it has some interesting ideas of how to visualise the flow of data

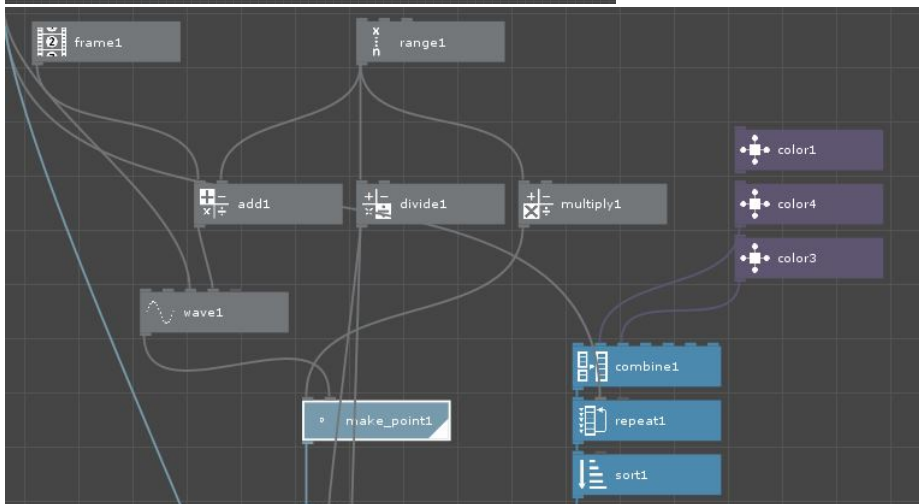
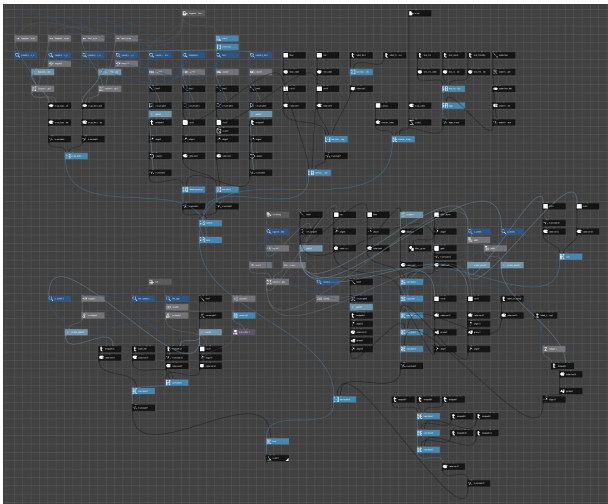
Collapsing nodes/node groups: https://docs.unrealengine.com/latest/INT/Engine/Blueprints/BP_HowTo/CollapsingGraphs/index.html

Not that relevant (at the moment) but might be handy in the future

UI documentation: <https://docs.unrealengine.com/latest/INT/Engine/Rendering/Materials/Editor/Interface/index.html>
Probably should have something similar on our documentation

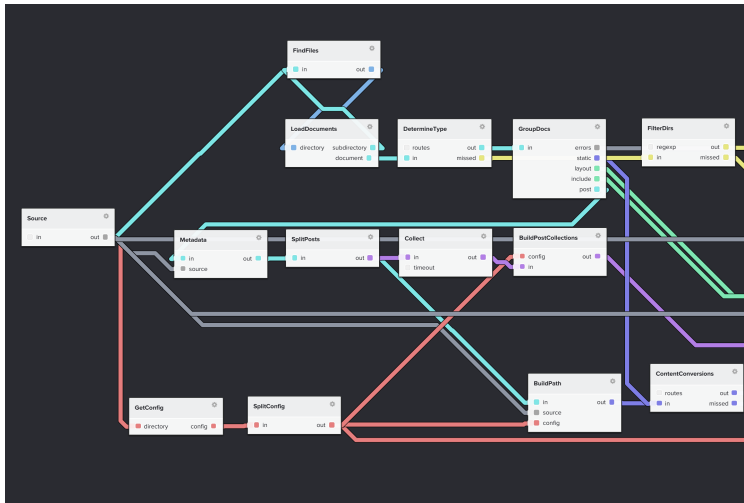
NodeBox

<https://www.nodebox.net/node/>



NoFlo

<https://noflojs.org/>



Video editing/FX

PixelConduit

Apply effects, render them in real time

<http://pixelconduit.com/>

Other

List of data modelling tools: http://www.databaseanswers.org/modelling_tools.htm

DbDesigner: <https://dbdesigner.net/> (one of the many)

Long list of visual programming languages: <http://blog.interfacevision.com/design/design-visual-programming-languages-snapshots/>

Screenshots here: <https://nz.pinterest.com/source/blog.interfacevision.com/>

More screenshots of node based interfaces:

<https://nz.pinterest.com/aarrss/node/>

<https://nz.pinterest.com/eugenekiver/nodes/>