



User Manual

Version 2018.2

©2018 by db&w Bornemann und Wolf GbR

Software License and Limited Warranty Agreement

PLEASE READ CAREFULLY BEFORE DOWNLOADING, INSTALLING OR USING THIS SOFTWARE:

THIS SOFTWARE LICENSE AGREEMENT IS A LEGAL AGREEMENT BETWEEN YOU (EITHER AN INDIVIDUAL OR, IF PURCHASED OR OTHERWISE ACQUIRED BY OR FOR AN ENTITY, AN ENTITY) AND DB&W BORNEMANN UND WOLF GBR.

BY CLICKING THE "ACCEPT" BUTTON, OPENING THE PACKAGE, DOWNLOADING, INSTALLING OR OTHERWISE USING THIS SOFTWARE YOU AGREE TO BECOME BOUND BY THE TERMS OF THIS LICENSE . IF YOU DO NOT AGREE TO THE TERMS OF THIS LICENSE, CLICK THE "DO NOT ACCEPT" BUTTON AND DO NOT DOWNLOAD, INSTALL OR USE THIS SOFTWARE OTHERWISE.

1.0 DEFINITIONS

"Licensee" means you, the User, who agrees to all of the terms set forth in this Software License and Warranty Agreement, by downloading, installing or using this software.

"Licensed Software" shall mean the nodeMeister plug in for LightWave 3D and documentation for nodeMeister.

"Software" shall mean the nodeMeister plug in for LightWave 3D and documentation for nodeMeister.

2.0 OWNERSHIP OF THE SOFTWARE

The Licensee acknowledges and agrees that all of the computer programs and associated documentation are owned exclusively by db&w Bornemann und Wolf GbR. You agree that the price paid by you for the Software is a license fee granting you only rights set forth in this License Agreement.

3.0 RESTRICTED LICENSE nodeMeister

db&w Bornemann und Wolf GbR grants Licensee a non-exclusive, non-transferable, non-assignable, non-sub-licensable, revocable and restricted license to use Licensed Software, in machine-readable, object code form only. The licensee agrees to use the Software solely for the purposes as outlined in this Agreement. The License Agreement does not convey to the licensee any ownership rights or any other interest in the software.

4.0 SCOPE OF LICENSE

This Software is licensed to be installed and used only in connexion with one LightWave 3D license. A valid license must be purchased for each LightWave 3D license.

5.0 LICENSE RESTRICTIONS

No license is granted to Licensee for any other purpose and Licensee may not sell, rent, lent, lease, loan or sub-license or otherwise encumber or transfer the Licensed Software, in whole or in part, to any third party for any purpose.

5.1 Licensee may not duplicate or modify or translate or decompile or create derivative works of the Licensed Software, or disassemble or reverse-engineer script or protocols of the Licensed Software.

5.2 Licensee agrees to use all reasonable efforts to protect the Software from unauthorized use, modification, reproduction, distribution or publication.

5.3 Licensee acknowledges that nothing in this Agreement gives Licensee the right to use any trademark, trade name, or service mark of db&w Bornemann und Wolf GbR or any third party from whom db&w Bornemann und Wolf GbR has acquired license rights.

5.4 The License and other terms and conditions set forth in this Agreement shall apply to any and all versions and components of the Licensed Software furnished by db&w Bornemann und Wolf GbR to Licensee during the term of this Agreement and all versions and components of the Licensed Software used by Licensee in accordance with this Agreement.

5.5 The Licensed Software shall be used only by Licensee and only subject to the terms and conditions in this Agreement.

6.0 TITLE, PROPRIETARY RIGHTS, AND DEVELOPMENT

6.1 The Licensee agrees that db&w Bornemann und Wolf GbR and/or its licensors own all right, title and interest in the Licensed Software and in all patents, trademarks, trade names, inventions, copyrights, know-how and trade secrets relating to the design, manufacture, operation or service of the Licensed Software. All rights not expressly granted are hereby reserved by db&w Bornemann und Wolf GbR. Unauthorized copying or use of the Licensed Software, or failure to comply with the restrictions provided in this Agreement, will result in automatic termination of this Agreement. Nothing in this Agreement shall change db&w Bornemann und Wolf GbR's or any of its licensors' ownership rights to their respective intellectual property, including but not limited to the Licensed Software.

6.2 db&w Bornemann und Wolf GbR is under no obligation to support the Licensed Software in any way, or to provide Licensee with updates, bug fixes, builds, or error corrections (collectively "Software Updates"). If db&w Bornemann und Wolf GbR at its sole option, supplies Software Updates to Licensee, the Updates will be considered part of Licensed Software, and subject to the terms and conditions of this Agreement.

6.3 The Licensee acknowledges that db&w Bornemann und Wolf GbR shall have the right, in its sole discretion and without incurring any liability, to modify the Licensed Software or discontinue its use or distribution at any time and for any reason.

7.0 TERM AND TERMINATION OF AGREEMENT

This Agreement will commence on the date on which Licensee downloads Licensed Software (the "Effective Date") and will remain in force until terminated.

7.1 Licensee might terminate the license at any time by removing the Software from the computer and destroying the original Software and all copies.

7.2 Upon termination or expiration of this Agreement, Licensee must cease use of and destroy the Licensed Software, any records or copies thereof and any related materials, and provide to db&w Bornemann und Wolf GbR a written statement certifying that Licensee has complied with the foregoing obligations within thirty (30) days.

7.3 This license will automatically terminate if the licensee breaches any of the terms or conditions set out in this license agreement.

7.4 Rights and obligations under this Agreement which by their nature should survive, shall remain in effect after termination or expiration hereof.

8.0 DISCLAIMER OF WARRANTY

8.1 Licensed Software IS PROVIDED "AS IS." ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

8.2 db&w Bornemann und Wolf GbR does not warrant that the operation of the Licensed Software will be uninterrupted or error-free.

9.0 LIMITATION OF LIABILITY

9.1 IN NO EVENT SHALL db&w Bornemann und Wolf GbR BE LIABLE FOR ANY DAMAGES WHATSOEVER, INCLUDING ANY OR ALL GENERAL, SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES ARISING OUT OF THIS AGREEMENT OR USE OF THE LICENSED Software OR CONFIDENTIAL INFORMATION, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY, AND WHETHER OR NOT db&w Bornemann und Wolf GbR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THESE LIMITATIONS SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

9.2 Notwithstanding the foregoing, any damages that you might incur for any reason whatsoever (including, without limitation, all damages referenced above and all direct or general damages), the entire liability of db&w Bornemann und Wolf GbR and any of its suppliers under any provision of this Agreement and your exclusive remedy for all of the foregoing shall be limited to the greater of the amount, if any, actually paid by you for the Licensed Software or U.S.\$5.00. The foregoing limitations, exclusions and disclaimers shall apply to the maximum extent permitted by applicable law, even if any remedy fails its essential purpose.

9.3 Licensee will hold db&w Bornemann und Wolf GbR harmless from any claims based on Licensee's use of the Licensed Software for any purposes, and from any claims that later versions or releases of any Licensed Software furnished to Licensee are incompatible with the Licensed Software provided to Licensee under this Agreement.

9.4 Licensee shall have the sole responsibility to adequately protect and backup Licensee's data or equipment used in connexion with the Licensed Software. Licensee shall not claim against db&w Bornemann und Wolf GbR for lost data, inaccurate output, work delays or lost profits resulting from Licensee's use of the Licensed Software.

9.5 Neither party will be liable for any indirect, punitive, special, incidental or consequential damage in connection with or arising out of this Agreement, including loss of business, revenue, profits, use, data or other economic advantage, however it arises, whether for breach or in tort, even if that party has been previously advised of the possibility of such damage.

10.0 GENERAL TERMS AND INDEMNITY

10.1 Any action relating to or arising out of this Agreement shall be governed by German law.

10.2 Neither party may assign or otherwise transfer any of its rights or obligations under this Agreement, without the prior written consent of the other party, except that db&w Bornemann und Wolf GbR may assign this Agreement to any other company.

10.3 If any part of this Agreement is found void and unenforceable, it will not affect the validity of the balance of the Agreement, which shall remain valid and enforceable according to its terms. In the event that it is determined by a court of competent jurisdiction as a part of a final non-appeal able judgement that any provision of this Agreement (or part thereof) is invalid, illegal, or otherwise unenforceable, such provision will be enforced as nearly as possible in accordance with the stated intention of the parties, while the remainder of the Agreement will remain in full force and effect and the parties will be bound by obligations which approximate, as closely as possible, the effect of the provision found invalid or unenforceable, without being themselves invalid or unenforceable. The waiver of any breach or default shall not constitute a waiver of any other right in this Agreement or any subsequent breach or default. No waiver shall be effective unless in writing and signed by an authorized representative of the party to be bound. Failure to pursue, or delay in pursuing, any remedy for a breach shall not constitute a waiver of such breach.

10.4 Licensee agrees that the Licensee shall indemnify, defend, and hold harmless db&w Bornemann und Wolf GbR, and its respective officers, directors, employees, agents, successors, and assigns, from any damage, allegation, cost, loss, liability, or expense (including court costs and reasonable fees for attorneys or other professionals) arising out of or resulting from or in connexion with any breach or claimed breach of the terms of this Agreement or warranties provided herein.

Trademark and copyright information

© 2018 db&w Bornemann und Wolf GbR. All rights reserved.

All brands, company names, and product names are trademarks or registered trademarks of their respective holder.

TRADEMARKS

This paper may contain brands, company names and product names of third parties, and following are the requirements for identifying trademarks and registered trademarks of those third parties. This list is not exhaustive and the paper may contain brands, company names and product names of additional third parties. All brands, company names and product names are trademarks or registered trademarks of their respective holder.

LightWave® and LightWave 3D® are registered Trademarks of NewTek, Inc.

Acknowledgements

Software Design and Development

Michael Wolf

Management

Dagmar Bornemann

Documentation

Michael Wolf

Product Marketing

Dagmar Bornemann

Special thanks go to our superb team of beta testers. You've all done a great job and your feedback, time, criticism and bug hunting skills were invaluable.

A big thank you must go to Juanjo González, not only for creating the excellent port of Octane for LightWave 3D but also for helping us making nodeMeister compatible with it.

Additional thanks to Oliver Hotz from Origami Digital for collaborating in making nodeMeister compatible with überPäss.

We also thank the LightWave community and the members of the LightWave Plugin Developers mailing list, especially Marvin Landis and Ernie Wright for their insight into the more obscure depths of the LightWave SDK.

db&w Bornemann und Wolf GbR
Seyfferstr. 34
70197 Stuttgart
Germany

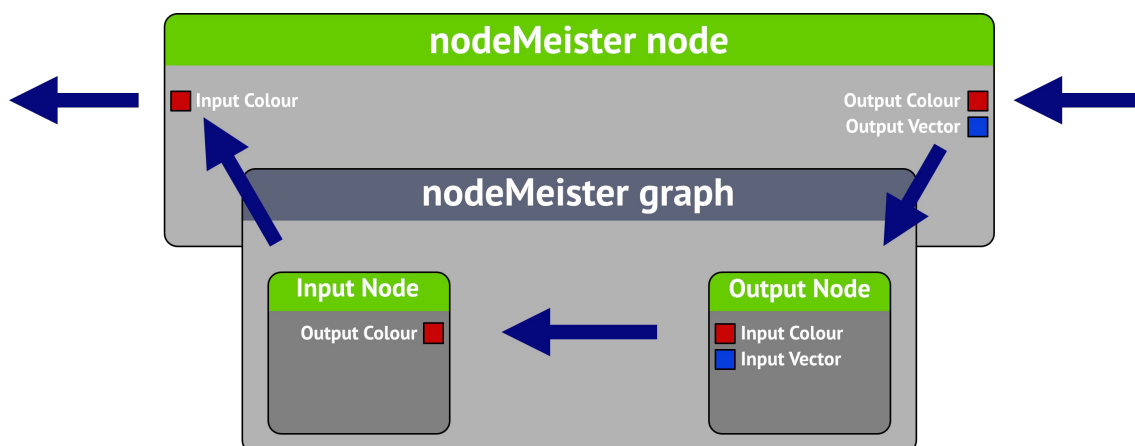
www.db-w.com
info@db-w.com

Table of Contents

Introduction	1
Compatibility.....	1
Features.....	1
Setting up nodeMeister	2
Installation.....	2
Registration.....	3
What nodeMeister does ... and how it does it	4
And what it can't do.....	4
nodeMeister node	5
The node menu.....	6
nodeMeister Graph	7
Input Node.....	7
Output Node.....	9
nodeMeister – Master Plugin	12
Additional Tools	14
Context Info (Node, db&w/developer).....	14
db&w nodeMeister... (Layout Command).....	14
Appendices	15
Node Graph Contexts.....	15
Preset System.....	16

Introduction

“one node graph to rule them all”



nodeMeister allows you to create global node graphs in Layout that can be referenced in other node graphs using a node. Effectively this acts a lot like a native compound node, except that the contained graph is shared.

Often parts of a node graph need to be reused in another graph. This could be a set of procedurals driving a displacement as well as instances or a complex nodal motion applied to multiple items.

Without nodeMeister, those parts of the node graph need to be copied and pasted to the other graph manually. Any changes to these parts will require a copy and paste again.

With nodeMeister, you can create a single node graph that can be used multiple times, via a single node, in other node graphs. Changes to the nodeMeister graph will propagate via the node.

Since the nodeMeister graphs can also create a user interface on the nodeMeister node, you can create a library of node graphs to reuse across scenes or even projects.

Compatibility

nodeMeister is compatible with LightWave3D 2018.0.4 and higher on Windows and MacOS.

Please visit <http://nodemeister.db-w.com> for more up to date information.

Features

nodeMeister has been thoroughly tested in production by us and our trusty beta testers. The main features of nodeMeister are:

- Create global node graphs to be referenced and used multiple times in Layout.
- Allow for any connection type.
- Dynamic user interface in the nodeMeister node to expose node graph inputs.

Please note that the nodeMeister node will not work as expected if a node graph is converted and exported to another system, such as, for example, Octane shading.

If any third party is interested in accessing the node graph within the node, please get in touch with us and we will provide a mechanism.

Setting up nodeMeister

Installation

The download contains ZIP compressed files for all platforms supported by nodeMeister including the plugin as well as this documentation as a PDF. Extract the appropriate ZIP file for your platform.

Windows

The nodeMeister2018.p file can be copied to any directory where you keep your plugins. We recommend using a manually created plugin directory to separate third party plugins from plugins shipped with LightWave 3D. This will simplify upgrades of LightWave 3D.

Now use the Edit Plug-ins panel (alt-F11) of the Add Plugins menu item to add the plugin file nodeMeister2018.p to LightWave 3D.

You can also copy it to

```
%userprofile%.NewTek\LightWave\2018.0.4\plugins
```

to allow LightWave to detect the plugin automatically.

MacOS

You can copy the nodeMeister2018.plugin file into one of two locations for LightWave to use it automatically.

You can either copy it to:

```
~/Library/Application Support/Newtek/LightWave2018.0.4/Plugins
```

or

```
/Library/Application Support/Newtek/LightWave2018.0.4/Plugins
```

In both cases LightWave 3D will automatically pick up the plugins once you launch it.

You are of course free to copy the plugin file to another location and add it manually.

Included Plugins

nodeMeister is actually a suite of plugins for LightWave 3D. Currently it consists of the following plugins (these are the plugin names as displayed in the Edit Plug-ins window by LightWave):

- nodeMeister Node
- nodeMeister Master Plugin
- nodeMeister Command
- nodeMeister Global

To be able to use nodeMeister you will need to register and activate it with the activation code we will send you after your purchase of a license.

The nodeMeister Command is a convenience tool you can assign to a shortcut, or add to a menu, to quickly apply the respective plugin to the current scene (if it isn't applied already) and open the user interface.

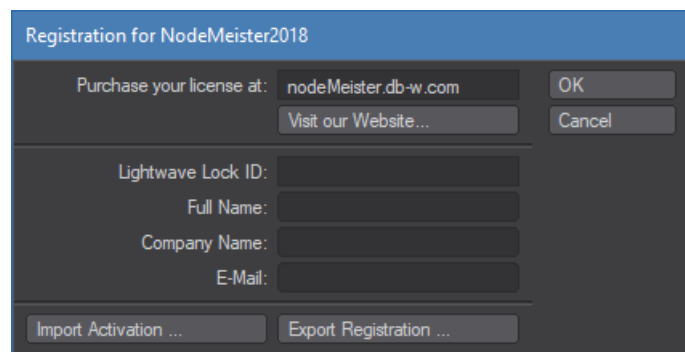
Registration



Once you've installed the plugin, add the nodeMeister master plugin to your scene in Layout, double click it to open the user interface and click on register.

Enter your full name, company name (if applicable) and e-mail address. Export the registration and attach it to an e-mail to registration@db-w.com. We will mail you an activation code within 24 hours after payment is received, depending on the time difference¹.

Please make sure that our replies don't end up in your spam folder - or check your spam folder for our e-mails. A safe way would be the white list any mail from @db-w.com.



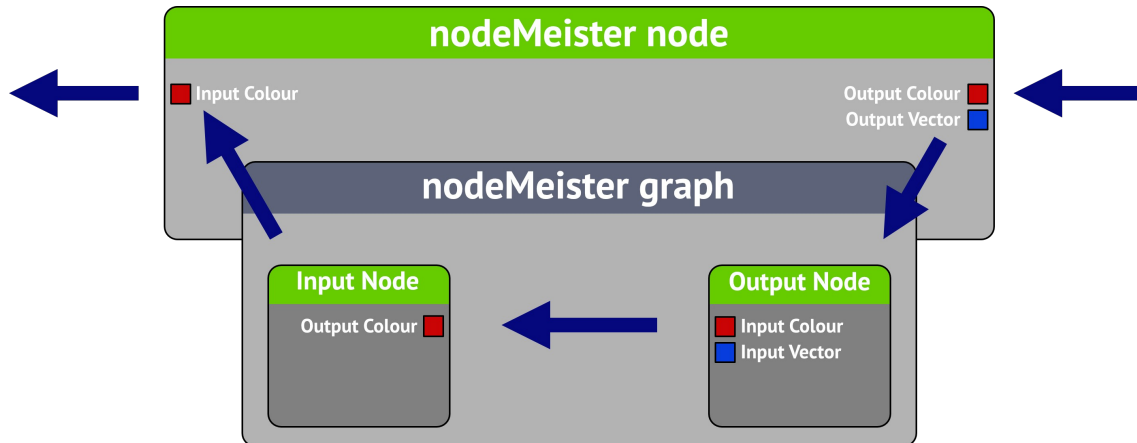
You can now either import the keyfile attached to the activation e-mail, or copy and paste the activation key into the registration panel (please make sure that the personal information is identical to the one submitted to us for the registration).

Your registration is now complete and you will see the interface of nodeMeister, allowing you to use it.

The registration file is stored in %appdata%\db&w\licenses in Windows, the license file is named nodeMeister2018.key. If you use multiple licenses of LightWave 3D from a single network share, the registration manager will only append/edit licenses locked to the dongle installed on the host machine. It will however manage multiple licenses allowing for a single registration file on your network share.

¹ Our key generator needs some sleep every now and then. ;)

What nodeMeister does ... and how it does it



nodeMeister allows you to create node graphs that can be used multiple times, in different node graphs, via the nodeMeister node.

You can create any number of inputs and outputs for the nodeMeister graph. These will be exposed respectively as outputs and inputs on the nodeMeister node².

Certain outputs in the nodeMeister graph will also be exposed as user interface controls on the nodeMeister node.

When the nodeMeister node is evaluated, it will pass on the evaluation to the nodeMeister graph. The evaluation of the nodeMeister graph happens within the context of the graph that's hosting the nodeMeister node.

And what it can't do...

nodeMeister only works with the basic input/output types as defined in the SDK. Third party connections are not supported at this time.

While you can use a material Input in the graph (which translated to a material output on the node using it), this will not be able to pass through the settings of the material connected to it for display in OpenGL. In this case nodeMeister will, just like the native material mixer, output a grey material for the surface. This is just used by OpenGL in the viewport though.

² If you think this sounds complicated, you should see our code. ;)

nodeMeister node

This node is central to nodeMeister. It allows you to use any of the existing nodeMeister graphs in the graph that you add the node to – provided that the contexts match.

To ease the set-up of scenes, it will automatically use the last nodeMeister graph when a nodeMeister node is added for the first time.

As for version 2018.2, a backup of the global graph is also stored within the nodeMeister node.

When loading, if there is no global graph that matches this backup, a global graph will be created from the backup.



Node Presets

The node presets allow you to load settings for the whole node from a preset file.

nodeMeister Graph

This allows you to select the nodeMeister graph to be used by the node.

Switching to a different graph will change the inputs and outputs of the node, disconnecting them.

Also, depending on the outputs of the graph, new user interface controls will be added to the node panel.

You will need to close/re-open the panel (if the right side of the node editor is collapsed) or select a different node and switch back to make the new controls visible.

(none)

This will select no node graph for the node, removing all the inputs, outputs and controls.

(add new graph)

This will create a new nodeMeister graph, select it for the node and open it in a node editor.

When creating the new nodeMeister graph, only the contexts of the graph the node is in are available. This is to make sure that the new nodeMeister graph is usable by the node.

The nodeMeister master plugin will be added automatically to the scene if required.

Use Global Graph

This is the default mode for the node and allows you to use a global graph which is shared amongst nodes.

Turning this off allows you to use a node graph that is local to the node – this effectively makes the node work like a native compound node, but with the added capability of displaying controls in the user interface.



Copy Global → Local Graph / Copy Local → Global Graph

Depending on the state of the **Use Global Graph** setting, this allows you to either copy the currently selected global graph to the local graph or vice versa.

Copying also switches the state of the **Use Global Graph** setting so you can use the copied graph immediately.

Open nodeMeister Master...

This opens the nodeMeister Master plugin, allowing for higher level nodeMeister graph management.

Switch to nodeMeister Graph...

This switches the node editor to the nodeMeister graph used by the node. You can use the Open Previous Node Graph... buttons on the Input or Output nodes to return.

[Custom Controls]

The custom controls displayed here depend on the outputs as defined in the currently used nodeMeister graph.

Single Threaded

This button is only exposed in the **Spot/Mesh/Surface** (Displacement node editor) context. It should be kept off for speed reasons but may be required of a node within the nodeMeister graph is not thread safe. Unfortunately there is no automatic way to detect this.

Transparent

This control is only exposed in the **Mesh/Spot/Surface/Raytrace** (Surfacing) context of the node.

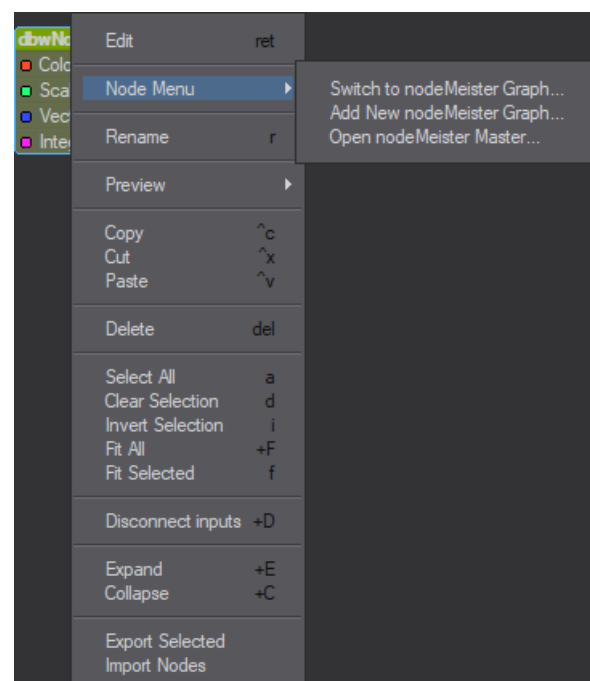
This should be off in general but needs to be turned on if a material **within** the used nodeMeister graph is, at least partially, transparent.

About...

This shows the about window, including version and registration information.

The node menu

Right clicking on the nodeMeister node in the graph opens a context menu. In the **Node Menu** section there's the option to switch to the nodeMeister graph used by the node, add a new (global) nodeMeister graph or open the nodeMeister Matser plugin.

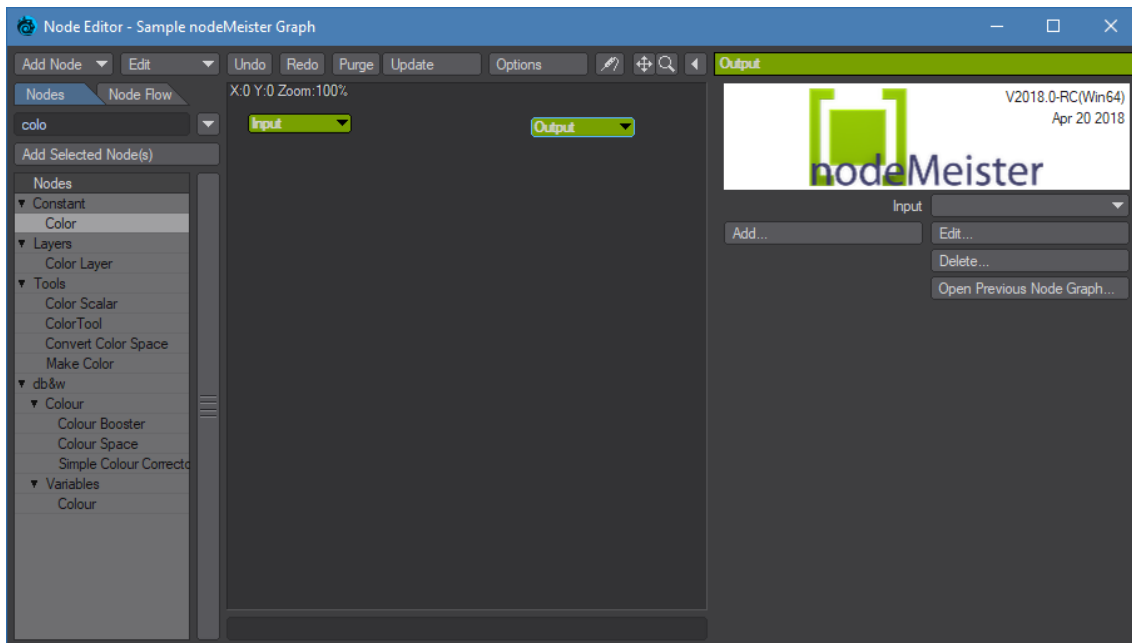


nodeMeister Graph

A graph created by nodeMeister allows you to add custom inputs to the output node as well as custom outputs to the input node.

The currently used graph can be accessed from any of the nodeMeister nodes using it, any nodeMeister graph may be accessed from the nodeMeister master plugin.

The available nodes may be limited by the context of the nodeMeister graph.



Input Node

You can add outputs to the Input node, these will be available as inputs³ as well as user interface controls on the nodeMeister node hosting the node graph.

The controls allow you to change the values driving the respective output connection on the Input Node without needing to connect the matching input on the nodeMeister node to a Constant.

The following types of outputs are available and expose the following controls:



³ If you think this sounds complicated, it's nothing compared to the mind twisters we had coding it.

Output Type	User Interface Control	Underlying data	Envelope
Colour	Colour	three float values	✓
Scalar	Float, Distance, Percentage, Angle	one float value	✓
Vector	Float, Distance, Percentage, Angle	three float values	✓
Integer	Integer	one integer value	
Function		one float value to be modified	
Projection			
4x4 Matrix		16 float values	
Material			
Octane specific			

The controls for Colour, Scalar and Float also host envelopes, allowing them to be animated directly on the nodeMeister Node.

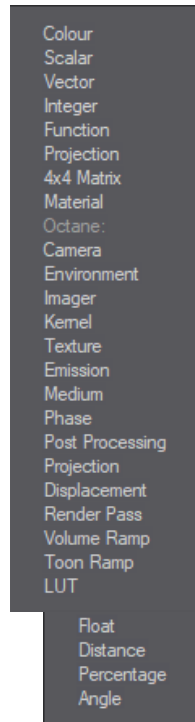
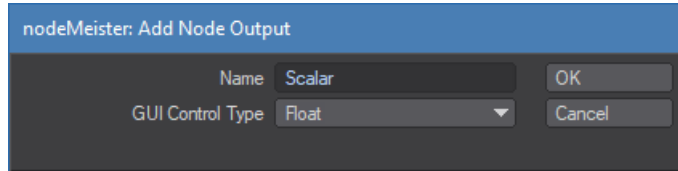
Add New Output...

This allows you to add a new output.

Please Note: The new output will not show up immediately after adding it. You can just select the node again and it will show.

Name

This is the name of the output. Once the node graph is used by a nodeMeister node, this name will be used for the respective input and user interface control (if applicable).



Control Type

If applicable, this displays a choice of user interface control types for the nodeMeister node.

Output

Allows you to select any of the existing outputs to edit or delete.

Edit...

Allows you to edit the output. Currently only changing the name of the output is supported. This will also change the name of the respective input on the nodes using this graph.



Please be careful, if assets that are not in the scene, but use this nodeMeister graph, will later be added to the scene, they will not be able to find this output.

Delete...

This will delete the output and also the respective inputs of the nodes using this graph.

Open Previous Node Graph...

If the nodeMeister node graph has been opened from the nodeMeister Node this will return to the node graph that hosts the node.

This allows you to quickly toggle between the node graph where the node is used and the nodeMeister graph used by the node.

Output Node

You can add inputs to the Output node, these will be available as outputs⁴ on the nodeMeister node hosting the node graph.

The following types of inputs are available:

Colour, Scalar, Vector, Integer, Function, Projection, 4x4 Matrix, Material as well as Octane specific connections.



4 Yeah, I know, I know...

The node has a “New” input in the node graph. You can just drag any connection onto that input to create a new input with a matching type.

Add New Input...

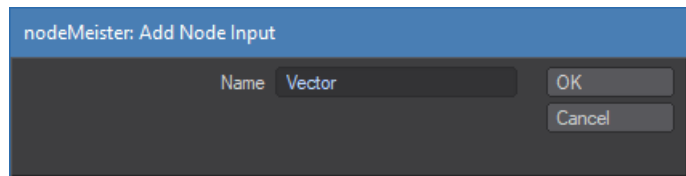
This allows you to add a new input. This will correspond to an output of the node that eventually hosts this graph.

Name

Name of the input

Input

Allows you to select any of the existing inputs to edit or delete.



Edit...

This allows you to edit the input - currently only the name can be changed. This will also change the respective output name of all nodes using this graph.



Please be careful: if assets that are not in the scene - but use this nodeMeister graph - are eventually added to the scene, they will not be able to find this input.

Delete...

This will delete the input and also the respective outputs of the nodes using this graph.

Open Previous Node Graph...

If the nodeMeister node graph has been opened from the nodeMeister node this will return to the node graph that hosts the node.

This allows you to quickly toggle between the node graph where the node is used and the nodeMeister graph used by the node.

nodeMeister – Master Plugin

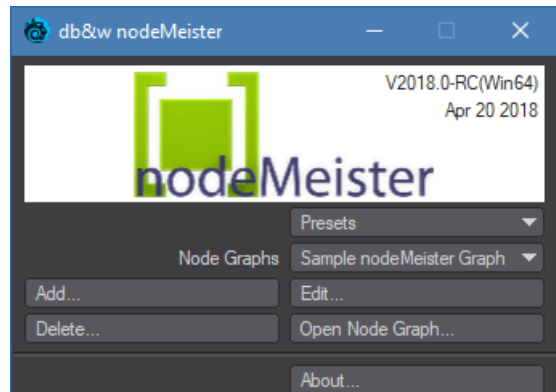
The master plugin allows you to manage and edit node graphs, to be referenced by the nodeMeister node.

You can either add the nodeMeister master plugin using the Master Plugins panel, or assign the **db&w nodeMeister...** Layout Command to a button or menu and use that to add and/or open the plugin.



This plugin needs to be a part of the current scene, otherwise the currently defined nodeMeister graphs will not be saved.

If a nodeMeister node is present in the scene, the master plugin will be added automatically prior to saving the scene if needed.



Presets

nodeMeister has its own system to manage presets.

nodeMeister tries to be as smart as possible when it comes to loading global presets:

- If the currently selected graph matches the graph loaded by the preset, the currently selected graph will be replaced automatically. nodeMeister will match by name of the graph, the context as well as the inputs and outputs defined for the graph.
- If it doesn't match the currently selected graph, you will have the option to replace the current graph or load the preset as a new graph.

Using the Presets pop-up you can apply any of your presets, save your current settings as a preset or delete existing presets.

More details about the paths and how you can add your own are available in the Appendix.

Save as Preset...

This option allows you to save the current nodeMeister graph as a preset. Choose any of the three types and enter a name for the preset. You can also use the small pop-up to select any of the currently available preset names.

Delete Preset...

This allows you to select any of the available presets and delete them from the hard drive.

Load Settings from File...

This allows you to load a previously saved nodeMeister graph from a file.

Save Settings To File...

This allows you to save the current nodeMeister graph to a file.

Node Graphs

This allows you to select any of the currently defined nodeMeister graphs for editing.

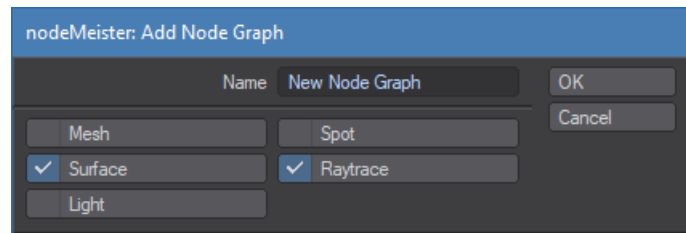
nodeMeister node graphs are saved with the Layout scene file.

Add...

This allows you to add a new node graph.

Name

This is the name for the node graph. The name must be unique. If you enter a name that exist already, a number will be added automatically.



Contexts

This allows you to define the required context(s) for the node graph.

More information about them is available in the Appendix.

Edit...

This allows you to edit the name and context of the currently selected node graph.

Name

You can change the name of the nodeMeister graph at any time, nodes that use it will pick up the name change.



Please be careful when using assets (such as Objects) across different scene. The node references the nodeMeister graph by name.

If you change the graph name and then load an asset that requires an older name, it won't be able to find the nodeMeister graph.

Contexts

This allows you to change the context of existing nodeMeister graphs.

Please have a look at Node Graph Contexts in the Appendix for more information.



If a nodeMeister node uses the graph, be careful not to pick a context that isn't supported by the graph the node is in.

If you do, the node will lose the connection to this nodeMeister graph.

Delete...

This will delete the current nodeMeister graph. All nodes referencing this nodeMeister graph will be reset.

Open Node Graph...

This opens the currently selected nodeMeister graph in the node editor.

About...

About displays the about window of nodeMeister, including the version number and your license status.

Additional Tools

Context Info (Node, db&w/developer)

Since the context of the various node editors is crucial for nodeMeister, we've included a node to probe the context of the current node graph.

Just add it to the node graph you want to examine, open the user interface and it will display the context(s) supported by the node graph.

db&w nodeMeister... (Layout Command)

This Plugin adds the nodeMeister master plugin (if required) and opens the user interface. You may assign this to a menu or shortcut for ease of access to the nodeMeister master plugin.

Appendices

Node Graph Contexts

This is a crucial part of creating a node graph.

The context defines which capabilities a node graph has, which also affects which nodes can be added to it.

Thus, only if the context of the node graph evaluation allows for raytracing, will you be able to add nodes that require raytracing.

The nodeMeister node only allows for a nodeMeister graph to be used if the graph that is hosting the node **at least** matches **all** of the contexts of the nodeMeister graph.

You can select multiple contexts for a node graph, but please note, while this may make more nodes available, this will also restrict where the nodeMeister graph may be used.

As a general rule of thumb, **don't** set a context at all unless you specifically need to use a node that requires a specific context.

The predefined contexts are as follows, more may be available in future versions:

- **All** The Node is available in all contexts.
- **Mesh** The Node is available in contexts where a physical mesh is provided.
- **Spot** The Node is available in contexts where virtual spot geometry is provided.
- **Surface** The Node is available in contexts where virtual or real surface geometry is provided. A surface requires proper normals.
- **Raytrace** The Node is available in contexts where ray-tracing functions are provided.
- **Light** Undocumented - available in a light context only.
- **OpenVDB** Undocumented - available in a OpenVDB context only

Here is a list of select node editors within Lightwave and the contexts they make available:

Node Editor	Available Contexts
Shading	Mesh/Spot/Surface/Raytrace
Motion	Mesh
Displacement	Mesh/Spot/Surface
Light	Spot/Light
Edges	All
OpenVDB	OpenVDB

Examples

Material nodes require both the Raytrace and Surface context.

Preset System

This Preset system is used by various db&w Plugins.

Using the Presets pop-up you can apply any of your presets, save your current settings as a preset or delete existing presets. Our plugins have their own system to manage presets. The main reason for developing a custom system was to differentiate between user, global and project (content directory) specific settings.

user presets are stored in the same directory where your LightWave3D configuration files are stored, in a subdirectory called "SimplePresets".

global presets are stored in a directory that is accessible to all users on the current machine (and can be mirrored on a server).

On Windows the location is:

```
%allusersprofile%\Documents\dbw\LightWavePlugins\
```

On MacOS it is

```
/Library/Preferences/LightWave3D/SimplePresets/
```

Content presets are stored in the current content directory.

The system supports the concept of **default** presets. If you name a preset "**default**" then it will be loaded automatically if the plugin is added to a scene.

The plugin searches for **default** presets in the **user**, **global** and **content** presets in exactly that order. This means that a **default** content preset overrides a global default which in turn has precedence over a user preset.

Custom directories for presets

It is possible to define user directories to store the presets in. This is done by placing a text file called "SimplePresetPaths.cfg" either into:

- The LightWave/Programs directory
- The directory where the LW settings are located
- and/or the content directory.

The files are read in that order, and preset paths defined in an earlier configuration file can be overwritten. The text file should be formatted as such:

```
# this is just a comment, anything that starts with a # is ignored
# first the name of the path as displayed to the user (without spaces)
# followed by the path
network \\db-w\lightwave\presets
local_temp c:\my_temp_presets
```

The path name is not case sensitive, it will be capitalized automatically. It may not contain spaces though.

You can also overwrite the existing default paths by using user, content or global as path names.

The custom directories are shared by all db&w plugins that use this preset system.