# Maxymo v. 0.5 (Beta)

# **User Guide**

#### **Disclaimer**

Maxymo is beta software and may contain many bugs and incomplete features. Use at your own risk. This software is provided 'as-is' without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of fitness for a purpose.

# What is Maxymo?

Maxymo is software that allows Dynamo definitions to output geometry to 3ds Max. Maxymo is made out of two parts: a *Maxymo Server* on the 3ds Max side that listens and executes commands to create geometry nodes and a *Maxymo Package* on the Dynamo side that includes custom nodes (e.g. MXCircle, MXPoint, MXCylinder etc.). The Maxymo custom nodes translate and send Dynamo geometry to the Maxymo server that then adds them to the 3ds Max geometry list. Maxymo uses the standard TCP protocol to communicate between Dynamo and 3ds Max. Theoretically, the server and the client do not need to be installed on the same machine. They can be on any internet-connected computers, but this feature remains untested and can be hampered by firewalls and virus protection software.

#### Installation

1. Download the Maxymo Server file (MaxymoServer.mse) from:

#### http://www.scriptspot.com/3ds-max/scripts/maxymo-server

- 2. Save the server in a known location. If you wish to automatically start the Maxymo Server every time you start 3ds Max, then place it in the *scripts/Startup* folder inside your 3ds Max installation folder.
- 3. Download the Maxymo Package from the Dynamo Package Manager. After installation, a Maxymo category will appear in Dynamo.

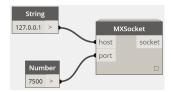
### How to use Maxymo

- 1. Start 3ds Max.
- 2. If you did not have the Maxymo Server configured to run automatically then choose MAXSCRIPT —> Run Script... from the top menu and choose the MaxymoServer.mse file. The Maxymo Server window will appear.

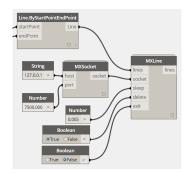


- 3. Read the Help text if you need to.
- 4. Choose and enter a port number into the designated field (e.g. 7500).
- 5. Press the START button to start the server.
- 6. Start Dynamo and load your definition

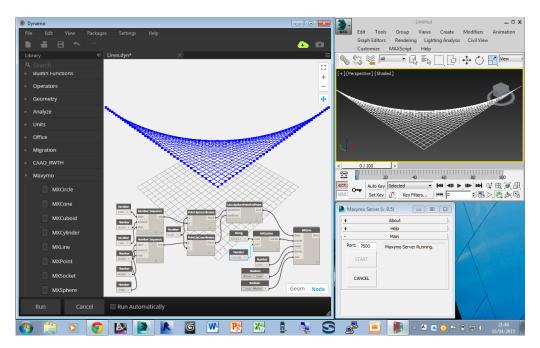
7. Add a MXSocket custom node. Connect it to a host string (e.g. "127.0.0.1" for the local host) and a port number (e.g. 7500) that matches the port number you chose for the Maxymo Server.



- 8. Add an MX custom node that matches your definition output (e.g. MXCircle for circles). MX nodes can accept either a single item or a *flattened* list of items (use a Flatten node if necessary).
- 9. Connect the output of your node to the input of the MX Node.
- 10. Connect the output of the MXSocket to the socket input on the MX node.
- 11. Add a number and connect the sleep input. Sleep is an amount in seconds to pause execution. It sometimes help when communication speed is an issue. 0.005 seconds is usually sufficient to avoid communication errors.
- 12. Connect a boolean node (true/false) to the *delete* input of the MX Node. If delete is true, any previous MX nodes in 3ds Max will be deleted and replaced with the new nodes from Dynamo. This has the effect of updating the geometry. If Delete is set to false, new nodes will simply be added to any pre-existing geometry.
- 13. Connect a boolean node (true/false) to the *exit* input of the MX Node. If exit is true, the communicationn with 3ds Max will be stopped. This is rarely needed. It is recommended to keep this as *false*.



14. Press Run. You should see the geometry in the 3ds Max viewport.



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# **Stopping the Server**

It is slightly tricky to correctly stop the server.

- 1. Press the CANCEL button in the Maxymo Server window. This simply asks for the server to be stopped, but does not stop it immediately.
- 2. Send any MX command from Dynamo to the Maxymo Server. This command will trigger the cancellation and the Maxymo Server will stop, display a dialog window in 3ds Max.
- 3. If all else fails, quitting both 3ds Max and Dynamo will stop the server and close the communication port.

#### Contact

For additional support and to provide feedback, please contact:

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