

BroTools

None

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None

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1. Welcome

This page will guide you through the initial installation process as well as share some information about BroTools compatibility and how updates work.

For instructions about floating licensing, please, [proceed here](#).

1.1 Installation



All of my tools share the same installation process and the same "Hub" folder - .

1. Unpack\Copy BroTools folder into any folder on your computer or a network drive or share
2. Open Maya
3. Locate install.mel file inside BroTools folder. Drag and drop it over Maya's viewport and follow instructions on screen.
4. Accept the license and you will be taken to License Manager window. Follow its instructions to activate your license. You can read more about the activation process [here](#) and if you are looking for instructions on using Floating licensing, proceed [here](#).
5. Enjoy!

After installation you should be able to find my tools under menu in Maya's top menu bar:

Screenshot

1.1.1 Maya 2023+ security warning

Maya 2023 and above introduced new security features when loading external scripts and plugins. It is a welcome addition, as there were cases where random scripts downloaded from the internet contained trojans, viruses or otherwise malicious code. However it can prevent BroTools from working, depending on where you choose to install it.

You might be presented with the following warning:

Screenshot

This warning says that Maya is about to load a script that is located in a non-standard location. As you are free to choose where to place BroTools folder in - this may be causing this warning to appear. Another probable cause for this is that BroTools contains compiled libraries containing high-performance and licensing code. These modules have to be compiled but they may throw Maya's security warnings off.

Make sure that the location it shows you is the location you installed BroTools in, tick the checkbox and click Allow.

If you don't do this, BroTools will not start.

Choosing install location - recommendations

Some cloud drive providers like Dropbox may cause problems due to their file locking mechanisms during sync. It does not mean you need to avoid using them, but something to keep in mind.

Using is not Recommended.

Installing BroTools into any of Maya's folders should work, but is not recommended, because on some systems it was reported to cause conflicts.

Make sure to choose a folder for which you don't need Administrator's privileges to access it.

If you have no preference, just use .

Network install locations **are** supported.

Installation fails...

First check [the Troubleshooting\Known bugs page](#), but if you can't find your answer there - feel free to contact me if installation fails. Just send me a mail with as much details about the problem you encountered as you can, and I will try to my best to help you. Please include brotool.log and bro_startup.log files.

I'm also interested in improving and simplifying installation process, and it was overhauled since version 2.0 of BroDynamics and BroTools

EMail: support@brotools.tech

1.2 Updating

BroTools has built-in updater, which will compare your existing files with the server and download only the files that changed. It will check for updates and if there are any it will prompt you for an update. You can also trigger the process manually by going to BroTools - Check for updates.

BroTools uses "Rolling release" approach, where updates come out frequently and may include small bug fixes or new features. So it's recommended to keep your installation up to date to get the best experience.

Can I disable automatic update checking?

Yes, go to BroTools - Preferences and uncheck the "Check updates" checkbox.

Can I update manually or offline?

Yes you can. You can always download the latest bundled version from the same link that you received in your email - it is a dynamic link that always leads to the latest version available to you.

After that you will need to remove all contents of BroTools folder, but keep the file and, optionally folder. Then extract new archive into the same location.

Using updater, however, is recommended as it is easier and will make sure that the folder is clean of any junk or redundant files.

What if update fails or introduces a bug?

While I do my best to make sure this does not happen, it is a possibility. With that in mind BroTools creates a backup of your current installation before each update, so you can revert to an older version at any time. These backups are stored in the `backups` folder which is located in the root of BroTools folder by default (you can change the `backups` of BroTools with an environment variable).

To revert to an older version you need to open Maya and drag and drop `backups` file into Maya's viewport. It will open up a window that will let you select a specific version to revert to and will do everything for you.

Automatic updating does not work with Floating Licensing

At the moment automatic updater does not work with Floating licenses.

You'll have to update BroTools manually. There are 2 ways you can download the latest version:

- The Download URL that was sent to you upon purchase - it always points to the latest version
- The Download Archive on <https://brotools.tech>, you can always [go there](#) to request an email with all versions available for your licenses

1.3 Compatibility

 **Maya 2025 is supported on Windows, Mac and Linux**

 **Maya 2024 is supported on Windows, Mac and Linux**

 **Maya 2023 is supported on Windows, Mac and Linux**

 **Maya 2022 is supported on Windows, Mac and Linux**

 **Maya 2021 on Windows, Mac and Linux - last version to support Maya 2021 is 2023.7.6**

 **Maya 2019 on Windows, Mac and Linux - last version to support Maya 2019 is 2023.7.6**

 **Maya 2018 on Windows, Mac and Linux - last version to support Maya 2018 is 2023.7.6**

 **Maya 2017 on Windows, Mac and Linux - last version to support Maya 2017 is 2023.7.6**

 **Maya 2016 on Windows, Mac and Linux - last version to support Maya 2016 is 2023.7.6**

1.4 Preferences

You can access preferences by going to `BroTools` maya menu.



Under `BroTools` you can find a few useful global BroTools settings.

Debug_level - controls debug output in script editor, value from 0 to 3. 0 prints all, 1 prints only `WARNING` messages and above, 2 prints only `ERROR` and `CRITICAL` message, 3 prints only `CRITICAL` messages. By default it's set to 2.

Write_log_file - Will write all maya logs into BroTools.log file located under [redacted] folder. This file is cleared after each Maya\BroTools restart. This file is used by Bug Reporter. By default it's enabled.

Check_versions - If on, will check main BroTools package version on startup. Alternatively you can use [redacted] to check if there were any updates for main BroTools package. It does not check for new versions of other installed tools. Enabled by default.

1.5 Central\Network installation for studios

BroTools supports installation in a network drive or share. Often this means that users don't have write permissions to this folder, and even if they do multiple users changing their BroTools\BroDynamics settings may interfere with each other, not to mention potential file lock issues.

Installation process is the same. the only change you need to do is set [redacted] environment variable on client machines. This path will be used by BroTools to store all it's changing data, config files and logs. Make sure user has write permissions to this directory.

1. Unpack\Copy BroTools folder into any folder on your computer or a network drive or share
2. On each workstation open Maya, Locate install.mel file inside BroTools folder. Drag and drop it over Maya's viewport and follow instructions on screen.
3. Set a [redacted] environment variable or restrict write access to network share.

You can set [redacted] to [redacted], which will automatically default it to current user's local [redacted] folder or a path to a specific folder. This folder will be used to store individual user's config files, logs and backups.

Default and recommended paths for [redacted] for network installations are:

- Windows: [redacted]
- MacOS: [redacted]
- Linux: [redacted]

The easiest way to set these up on Linux and MacOS is to add the variable into Maya.env file. Consult with Maya documentation on where to find it on your system.

Windows CMD Bash Python

```
[redacted]
```

Speeding up the process

You can speed up this process. If install location path is the same for all workstations then you can simply copy [redacted] from one workstation to every other. It is located in [redacted] folder on Windows. For other OSes refer to [redacted] variable and [Maya's official documentation](#).

2. Installation Troubleshooting

Unable to get UUID on this machine.

Error example in the log:

```
[redacted]
```

If you see this error on Windows you can try running `cmd /c wmic /namespace:\\root\cimv2 path Win32_Bios` command in CMD. If it shows `System.Management.ManagementException: Access is denied` - it can mean one of the following:

- You are using a hardened VM
- You are using a (poorly) cracked or repacked version of Windows which somehow messed up the wmic service or its dependencies
- You might have some cheats installed that do something called "nulling smbios" which might cause all wmic commands to return `System.Management.ManagementException: Access is denied`, something in regards to spoofing UUID, BIOS, etc info to avoid bans in games

All those cases are considered environmental, and are not and can't be supported.

3. PDF Documentation

Documentation is available in PDF format: [BroTools Documentation](#)

4. Licensing and License Management

4.1 License types

BroTools has support for workstation licenses (for individuals), network install and [floating licenses](#).

Looking for Floating Licenses documentation?

If you are looking for information about setting up BroTools to use floating licenses, please, [proceed here](#).

4.1.1 Workstation license

Best suited for individuals or small studios

- Hardware locked to a single machine (can be unlocked and moved to another)
- Automatic activation
- Offline activation (Requires another device with internet connection)
- Verification is required every ~30 or ~365 days (depending on your license - montly or yearly)

4.1.2 Floating license

Best suited and recommended for most studios. Instructions available [here](#).

- Powered by LimeLM TurboFloat server
- Works on any machine that has access to a machine where TurboFloat license server is running
- Floating licenses, limited number of concurrent users
- Automatic activation
- VPN supported
- Offline activation is possible, but not automated, contact me over support@brotools.tech for more info

4.1.3 Network license (Site license)

Only recommended if you don't want to run LimeLM server or for a very large number of concurrent users.

- Network wide installation with no limit on numer of concurrent users
- License server is not required
- Works only within a single subnet*
- VPN not supported

Works only within a single subnet*

You can run `ipconfig` in terminal or `cmd.exe` on a workstation you plan to install BroTools on to see a list of IPs and machines that you will be able to lock your license to.

4.2 Subscription and Lifetime licenses

BroTools come with Subscription and Lifetime licensing options.

4.2.1 Subscription

With Subscription you always get all the latest updates. Subscription can be payed monthly or annually.

4.2.2 Lifetime

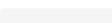
Lifetime license will only receive updates for a year (365 days) since the day of purchase. After that it will be locked to the latest stable version that was available at the last day, but it will continue to work indefinitely.

Example

If you purchase BroDynamics on 2021.04.17, then you would be able to update to the closest prior release to 2022.04.xx.

It's is, however, impossible to predict whether it will support newer Maya versions or not. Officially it will only support the last Maya version that was supported by the available version. However there will be no artificial limitaiton, and it will depend on whether newer Maya versions contain any API changes that would break compatibility.

4.3 Online activation of Workstation license

Once you install BroTools and launch it for the first time you will be presented with the License Manager window. You can also access it at any time under  menu.

On the first page you are asked to enter the email you used to make the purchase, choose the type of your license. Click on "Next".

If it's the first time you're accessing your account from current Device or if you accessed it from another Device previously, then a message will show up, asking you to check your email. Check your email and click the button in it to grant this device access to your BroTools account. Only one HID can have access to your account. After you clicked the link in the Email go back to Maya and click "Next".

On the second page you will see a list of licenses available for your email. You will see dropdowns that will offer to Install or Uninstall your license to\from the device. This is done so you can use different tools and licenses on different machines if you so wish. Install will bind selected license to your current machine's HID, Uninstall will free up a license for use on another Device.

Screenshot

After performing these actions you will be taken to Updater which will make sure you have all the files for all the tools that are bound to your current Device. If you've just installed a new license it's a good idea to proceed with the update.

You can always get back to the license manager to check current license key's expiry date and see which tools are available with this key

Screenshot

4.3.1 Available actions in License manager

Install - binds your license to current PC on the server **Uninstall** - unbinds your license from whatever PC it was installed on **Reinstall Here** - moves you license from whatever PC it is installed on to current PC. Essentially the same as using Uninstall and then Install actions.

4.4 Installation and Online activation of Networked license

If you have internet connection on the machine you use to install BroTools then you can download any version of BroTools to start installation. If you don't have internet connection on the machine you use to install BroTools then make sure to download the bundled BroTools version, you should've received bundle download link via email after purchase.

BroTools does not have to be installed in the same subnet as the one you plan to bind your license to. Meaning that you can have a network shared drive on subnet 10.1.0.x and your workstations on subnet 192.168.1.x. BroTools files can be located in the network share, but you will need to activate your license from one of the workstations in 192.168.1.x subnet. In the end you will get a license key file that will restrict usage to a subnet that can get a MAC address from the device you choose to bind your license to.

The process is similar to Workstation license. Here are the steps you need to take to activate Networked license:

1. To start the process place BroTools on a shared folder accessible to all workstations. Make sure you have write access to it from you current PC. Workstations won't need write access to that folder.
2. Follow the usual [Installation procedure](#), drag and drop install.mel into Maya
3. Open License Manager
4. Switch License Type to Network. Network Host IP section should show up, if not switch to Workstation and back to Network.
5. Select IP of a device on your network that you'd like to bind your license to. Make sure it can be accessed by every PC you plan to use BroTools on. If you don't see your device in the list you can try to ping it and re-open License Manager (or switch to Regular License and back to Network to refresh the list of available IPs)
6. Click Next.
7. If it's the first time you access your account from this device an email will be sent with authorization link. Open email and click the button to authorize. Then get back to Maya and click Next again.
8. At this point you should be on the Manage page of License Manager ([Screenshot](#))
9. You should see a list of licenses available to you. Select "Install" from the dropdown list (it says "Do Nothing" by default) next to the license you'd like to bind to the network device which IP you entered on the previous page.
10. Click Next. A license key file will be downloaded into BroTools folder.
11. You will then be taken to the Updater. Agree to update your installation, it will download all files required for selected tools to work.
12. If you performed activation from your local hard drive, then you can move BroTools folder to a shared network folder now. If it's already on a network folder, skip this step.
13. You should now install BroTools on every client machine by dragging and dropping install.mel file. Alternatively you can manually copy BroTools.mod file from your current PCs directory to workstaitons ([Maya Documentation - MAYA_MODULE_PATH](#))
14. On client's machines set the to point to a folder where workstation has write access. This folder will be used to store user config and log files.

To use Network license you can either place BroTools on a shared drive on the network, and let workstation machines load it from there, or you can install them individually and share license key file.

In case of a shared drive make sure to refer to section of the .

Network license system limitations

Current licensing system is limited to working withing a subnet available in client machines' ARP table. This means that it may not work with VPN or some network layouts where the device you wish to bind your license to does not show up in command (for Linux and Mac).

It is a technical limitation, please, contact me at support@brotools.tech to discuss possible solutions to this problem.

4.5 Offline activation

If you don't have internet connection, then BroTools License Manager will give you a key code with instructions on what to do next. You will then use this key code to access online version of license manager, which you can access from any device that has internet connection, for example your phone. After activation you will be able to download a file which you will need to place in the root of directory.

You will not be able to run the update without internet connection, so "Network Installer" version of BroTools will not be able to fetch required files. Make sure to use Bundled version, you should've received download link for bundled version in an email after your purchase from support@brotool.tech or licensing@brotools.tech email.

If you have internet connection, but BroTools is showing offline activation window - try this first

If you have internet connection but BroTools fails to connect to the server there may be three main reasons for that:

1. Server maintenance
2. Your connection is currently overloaded (like if you are downloading something heavy) and testing server connection times out
3. Your firewall or DNS blocks domain or IP

If it's one of the first two - then try again in a few minutes. You can try going to or restarting Maya to force it to check connection with the server again.

If it's the latter then you'll need to check your hosts, firewall and any DNS blockers to make sure you can connect to .

4.6 Offline use

After activation you get a license key file. If you used License Manager then it will be downloaded to BroTools folder automatically. If you used Offline activation then you will have downloaded it and placed it in BroTools folder manually by now.

Depending on the type of your License, whether it's a monthly or yearly subscription, you will have different grace period. During this grace period internet connection is not required.

For monthly subscription grace period is a little more than 30 days, for yearly it's a little over 365 days.

4.7 Moving your license to another machine (Deactivating and Activating)

1. On a PC where you would like to move your license to open License Manager, enter your email and select the appropriate license type, like you normally would
2. In the list of licenses find a license you would like to move to curren machine and select "Reinstall Here" from the dropdown of Available actions column
3. Click Next

 This process is essentially the same as using Uninstall and then Install actions manually, which was required prior to 2021.12.x versions.

4.8 Definitions

Device - A device you can install BroTools on, a PC running Windows, MacOS or Linux

HID or Hardware ID - is the unique identifier of a device where you can install BroTools on: PC or a Mac

5. Developer API

BroTools exposes some options for developers that can be used to control some things about licensing.

5.0.1 Floating Licensing

You can set environment variable to if you'd like to make it so BroTools does not request a lease from TurboFloat server on startup.

You can also manually request and drop lease from Python like this:

```


```

6. Floating Licenses

Floating licenses are powered by LimeLM TurboFloat Server from [wyDay](#).

This guide helps you install an on-premise license server and configure BroTools to obtain licenses from it. The server can operate on Windows, Linux, MacOS, and FreeBSD, as long as it's reachable over the network from the BroTools host machine.

Floating Licenses are recommended for studios because they allow multiple users to share licenses on different machines. However, if you're an individual, purchasing a Floating License isn't necessary to transfer your license between workstations. For personal use, consider one of the standard licensing options instead, which can be found here: [Regular Licensing](#).

Make sure to download a 'Bundled' version from the email sent to you upon purchase or by requesting one from the Downloads page on the website. Network Installer and Updater are not supported for Floating Licenses

Looking for Regular, Site or Enterprise licensing?

If you are looking for Regular, Site or Enterprise licenses, please, [proceed here](#).

6.1 Overview

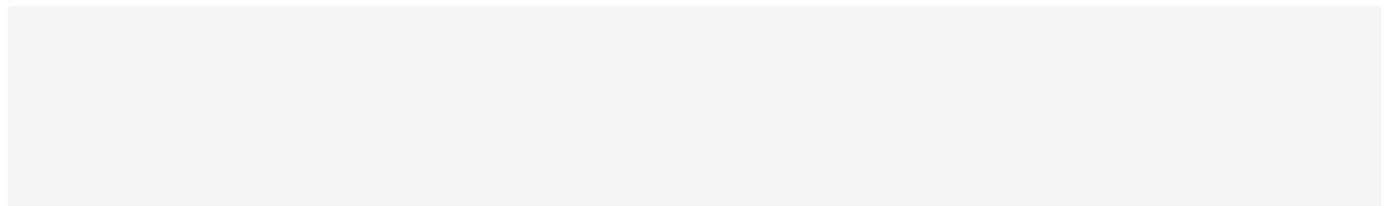
1. Acquire server software and TurboActivate.dat (located in `...` or provided via purchase email)
2. Place TurboActivate.dat file beside server executable
3. (Optional) Customize the configuration file.
4. Use Product Key to activate the server
5. Run the server

6.2 Where to find TurboActivate.dat file

A link to appropriate TurboActivate.dat file is emailed to you upon purchase. You can also find the file inside BroTools bundle archive at `...`, which you can **copy** and use in further steps as well.

6.3 Linux

On 64-bit systems, you can run these commands. Refer to the .zip file for non-Linux platforms.



To enable TurboFloatServer auto-launch at startup, consider using systemd (Linux) or similar tools based on your distro/preferences. Add `...` flag to prevent console output when run as a service: `...`.

Autostart with systemd

Example systemd unit file

Put this into a file at _____

```
_____
```

Then run

```
_____
```

More details

- [Installation Options](#)
- [Configuration Options](#)

6.4 Windows

1. [Get TurboFloat Server \(TFS\) for Windows](#)
2. Unpack the zip and go to _____. You'll see platform folders there with their respective _____. Generally, pick _____.
3. Put your TurboActivate.dat near the picked TurboFloat.exe.
4. Move the TurboFloatServer-config.xml from the archive next to your chosen TurboFloat.exe.

After these steps, your Windows system should be ready to run TurboFloat Server.

You don't have to do it exactly this way

In the end you just need to have a folder with 3 files in it: _____, _____, _____, like this:

Screenshot

6.4.1 Activate

To start the TurboFloatServer, run this command in CMD, PowerShell or Windows Terminal:

```
_____
```

No response typically indicates successful activation.

6.4.2 Launching and Installing

Run the TurboFloatServer.exe via PowerShell or CMD with the _____ flag for a temporary session:

```
_____
```

Please note that this doesn't persist across system restarts. To ensure permanence, install the server by running PowerShell or CMD **as administrator** and executing:

The installation process performs these tasks:

- Sets up the TurboFloat Server as a Windows Service, configured to initiate upon system startup and operate in the background.
- Enables incoming connections through the Windows Firewall for the TurboFloat Server (except if the Windows Firewall service is off, in which case it omits this action).
- Initiates the TurboFloat Server instantly after installation.

Subsequently, test BroTools in Maya to verify if it can obtain a license correctly.

6.4.3 Configuration

To modify TurboFloat's default port (which is 13), follow these steps:

1. Locate the `server.config` file.
2. Find the line `server.port=13`.
3. Replace `13` with your desired port number, say `12345`. The updated line should look like this: `server.port=12345`. Save the changes and restart the server.

Please note that you might want to alter the port due to common restrictions on lower ports, especially in Windows systems which often block them.

More details

- [Installation Options](#)
- [Configuration Options](#)

6.5 MacOS and FreeBSD

For these operating systems you can refer to the [official TurboFloat documentation](#).

[Download TurboFloat Server \(TFS\) for MacOS](#)

6.6 Maya, Workstations

Now that you have your license server up and running it is time to set up BroTools to connect to it.

To use Floating licensing BroTools can be installed in a central network shared location or on each machine individually.

Make sure that TurboActivate.dat file exists under `C:\ProgramData\Autodesk\BroTools` folder.

After that, on each Workstation you will need to set an environment variable `BRTOOLS_FLOATING`. For example:

Windows CMD **Bash** **Python**

```

set BRTOOLS_FLOATING={ip-address};{port-number}
export BRTOOLS_FLOATING
python -c "import os; os.environ['BRTOOLS_FLOATING']={ip-address};{port-number}"

```

To make changes persistent, for example, on CentOS 7 you can do it like this:

```

BRTOOLS_FLOATING="{ip-address};{port-number}"
export BRTOOLS_FLOATING

```

And reboot.

To unset this variable, remove those lines from `/etc/environment` file and reboot. I'm sure there could be a better way of doing this which I may not know of.

```

unset BRTOOLS_FLOATING

```

The format of `BRTOOLS_FLOATING` is `{ip-address};{port-number}`. Where `port-number` is the port number you chose in `BRTOOLS_FLOATING`.

6.7 TurboFloat Server Offline activation

To launch TurboFloat Server without internet connection, use these commands on your TurboFloat Server:

Windows **Linux**

```

python -c "import os; os.environ['BRTOOLS_FLOATING']={ip-address};{port-number}"

```

Then email the resulting file to support@brotools.tech. Within 2-5 working days you will receive an `brotools_floating.txt` file in a response email which you can place anywhere and then run the second command:

Windows **Linux**

```

python -c "import os; os.environ['BRTOOLS_FLOATING']={ip-address};{port-number}"

```

This process will be automated in the future.

6.8 VM Activations

LimeLM, by default, does not allow TurboFloat server activation on Virtual Machines. To install it on a Virtual Machine, contact support@brotools.tech post-purchase using the same email as your purchase or an email from the same company domain along with your license key or purchase email.

7. Activating trial

30 day unlimited trial period of BroTools Complete Edition is available to all new users.

It includes each and every tool available. Using BroTools Complete Edition trial you can try them all, including but not limited to: BroDynamics, BroRenamer, Animation Toolbox, Tweener, IKFK Switcher, etc.

Here's how you can activate it:

1. Download Network Installer from the website and install it
2. In Maya go to BroTools - License Manager
3. Enter your email
4. Click Start Trial
5. It may ask you to check your email to verify. Check your Inbox and Spam folders for email from [redacted], and click the [redacted] button in the email
6. Back in License Manager - click Next
7. You will see that you now have a license of BroTools. Make sure it says "Install" next to it and click Next.
8. Updater window will show up. Running updater is required for Network installer, it will need to download extra files for your purchased tools to work. If you're using Bundled version you may skip this step, but it is still recommended to run it.
9. Enjoy!

8. Extended trial

Existing customers of BroDynamics 2.x receive extended trial period. To activate it simply use the same email that you used to purchase BroDynamics on Gumroad while activating your trial.

This page is constantly updated with new solutions and troubleshooting hints for problems that can't be solved by me from code.

9. Troubleshooting installation

9.1 Problem: Error mentioning `wmic`, for example `Command wmic csproduct get uuid returned non-zero exit status 1.`

9.1.1 Solution:

Since latest versions Windows 11 does not install `wmic` utility by default, which is used to obtain part of your machine fingerprint for licensing.

For now the solution is to go to windows Settings - System - Optional Features and install it from there.

In some cases this error can also be caused by pirated Windows, broken installs or some VM configurations.

9.2 Problem: BroTools disappears after restarting Maya, and requires re-running `install.mel` script every time

9.2.1 Solution:

The most likely cause of this is that `BroTools.mod` file is put in the wrong place by the installer. Installer tries it's best to find the correct location for it, and I am constantly keeping an eye on this and improving it, but sometimes it may choose the wrong spot.

To fix this you need to find your Maya installation's `BroTools` folder, find `BroTools.mod` file where it was installed to (not the one inside BroTools folder, this one is a template) and copy the file from wherever it is to `BroTools` folder.

For example, you may need to move BroTools.mod file from `C:\Program Files\Autodesk\Maya\2024\bin\BroTools` to `C:\Program Files\Autodesk\Maya\2024\bin\BroTools\BroTools.mod`

9.3 Problem: ImportError: No module named BroTools

9.3.1 Solution:

This error means that Maya can't find BroTools folder under paths that are registered as 'python paths'.

Here are some steps you can do: 1. Make sure you removed BroTools 1.x if you had it installed, it can often cause this error. BroTools 2.x and 1.x are incompatible. You can find instructions on how to remove 1.x on installation page of this documentation. 2. Make sure that you restarted Maya after installation of BroTools 3. Make sure that BroTools folder is called exactly like this `BroTools` with capital B and T.

If none of it helps, feel free to contact me.

9.4 Problem: Maya crashes or freezes when trying to load BroTools.py plugin - either manually through plugin-manager or when using `install_step2.mel` script.

9.4.1 Solution 1:

Try running this command in Maya as Python:

```
python -c "import sys; sys.path.append('C:\Program Files\Autodesk\Maya\2024\bin\BroTools'); import BroTools"
```

If maya freezes or crashes - try disabling your anti-virus and anti-malware software temporarily and run this command again. If it works it means that you're anti-malware or anti-virus software is somehow blocking Maya from starting a Qt web browser window. It is used in BroDynamics for loading and displaying license agreement, welcome window, changelog, about description and other places where text with HTML formatting it required. You may need to adjust your anti-virus or anti-malware software's policies to allow it.

Since version 2.3.0 I've added an option to disable the use of `brodynamics` altogether and fallback to simple `bullet`. To do this you should open `brodynamics.cfg` file, find the following line:

```
brodynamics {
    enabled true
}
```

And change it to:

```
bullet {
    enabled true
}
```

This should solve the problem.

This problem was described in this blog post as well: <https://michaeldavydov.com/blog/post/brodynamics-troubleshooting-maya-hanging-on-plugin-load-possible-solution/>

9.4.2 Solution 2:

Try loading "bullet.mll" plugin through Maya's Plugin manager. If Maya freezes or crashes when trying to load this plugin - it means that you're probably using a GPU or GPU Driver unsupported by Maya. Try updating or reinstalling your GPU driver.

You can still launch BroDynamics by disabling RBD simulation mode. To do this you need to edit `\BroTools\config\brodynamics.cfg` file, and remove the `simulation` part from `simulation` option. So it will look like this:

```
simulation {
    enabled false
}
```

If the problem was with bullet.mll this will allow BroDynamics to load but with RBD tab disabled.

9.4.3 Solution 3:

If you're running 11th gen Intel CPU, Windows 10 and Maya 2019-2020, then this issue might be relevant (even if you don't run those versions still might be worth looking into): <https://forums.autodesk.com/t5/maya-forum/faulting-module-crash/m-p/10572552#M89988>

The solution is to add `DISABLE_OPENGL_SHADER_CACHE` environment variable as System Variable. You should not need to reboot after that, just restart Maya and try loading BroTools again.

10. Troubleshooting\Known bugs

10.1 Problem:

RBD Mode crashes maya during tracking or simulation

10.1.1 Solution:

Try to switch maya parallel evaluation off. To do it, go to Settings - Animation - Evaluation - Evaluation Mode, and set it to DG.

10.2 Problem:

```
brodynamics {
    enabled true
}
```

10.2.1 Solution:

You probably selected the chain using Select Hierarchy. Instead you need to simply select all the objects either one by one with CTRL, or you can also Shift-select them, if they are in the same hierarchy. Unfortunately this seems like a bug with Select Hierarchy.

10.3 Problem:

Maya crashing or slowing down while BroDynamics UI is open.

10.3.1 Solution:

This is expected behaviour, since BroDynamics UI adds a few ScriptJobs, which run when you select something, or when you open a scene. BroDynamics UI uses them to check and update itself accordingly to scene contents and selection. In most cases it should not have any impact on stability or performance, but it may happen. In this case you should just close BroDynamics UI when you don't need it.

10.4 Problem:

Exception of type RuntimeError occured in 'BroTools.common.nodes.**init**': (kFailure): NULL object returned**

10.4.1 Solution:

This error was seen in Maya 2016, but it seems like a Maya bug, probably due to early implementation of Parallel Processing (guessing here). For me it vanished on it's own after doing a few random things in Maya (creating another object and trying to run chain, then point simulation).

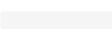
10.5 Problem: Fatal error on undo after using Chain Simulation Mode

10.5.1 Solution:

This bug seems to happen in Maya 2018.4 and 2018.5 for some people. If this happens and you can't upgrade to Maya 2019 try to remove your prefs folder (make a backup if you'd like to restore it later), and try again.

10.6 Problem: Shape Controls of Locators and/or other objects are missing from the Channel Box\Layer Editor tab after loading BroDynamics

10.6.1 Reason:

This happens when you load  plugin, which is a standard Maya plugin. Bullet physics is used by RBD tab of BroDynamics, and it gets loaded when launching BroDynamics UI.

Sorry, your browser doesn't support embedded videos, but don't worry, you can [download it](#) and watch it with your favorite video player!