Installation & basic documentation guide for Glow *Beta* on MacOS.

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Introduction

This is a simplistic & non official guide. It is valid as off 08/10/2025, but may become invalid at any time due to a new release of Glow or it's support components. This guide is not complete documentation.

Glow is a theme engine for modern MacOS versions. It uses the open source Ammonia injection engine in order to work. For Ammonia to work, you will need to change or disable some security settings in MacOS, as is the case with every theme engine.

What is SIP?

System Integrity Protection, abbreviated as SIP is a security feature introduced in MacOS El Capitan (MacOS 10.11). It's main function is to limit modifications to core parts of the operating system, even if wanted by the user. SIP is enabled by default, and prevents the modifications directories such as:
/System, /bin, /sbin, /usr

Secondly, SIP also prevents unsigned or unapproved .kexts (kernel extensions) from running on the system.

Lastly, SIP prevents apps from modifying system processes (injecting), such as task_for_pid(), dtrace and ptrace being disabled.

In general, this does improve safety, however it also completely blocks any system modifications which are required for theming. For this reason, all theming utilities that existed in the last decade required SIP to be disabled. It should be noted that before SIP existed, MacOS was still very secure, but much more modifiable. Disabling SIP reduces security to a certain degree, but in return you can change low level settings, inject intro processes, change system icons, and more. If you are concerned about safety, please perform some research or ask your questions in the discord.

SIP can be reenabled at any time (which will disable Ammonia from working.)

What is Library Validation?

Library validation is a system that was introduced in MacOS 10.10 Yosemite. It prevents code injection into Applications that have Library validation enabled, which for many years now has been an opt-out setting in Xcode, meaning most applications will have this setting enabled. This means that when Library Validation is enabled, any application that has this entitlement will refuse injected code, and thus not be affected by Ammonia.

It is a system that operates independently from SIP, and as such, disabling SIP will not affect Library Validation, which needs to be disabled separately.

Library validation can be re-enabled at any time (which will disable Ammonia from working fully.)

What is the arm64e_preview_abi?

It is an experimental compatibility layer that allows third-party code to use arm64e features and lowers security/restrictions to allow code that otherwise would not be allowed. The default ABI does not allow third-party binaries built with arm64e to run, has stricter signature enforcement and does not allow theming engines to inject .dylibs into system processes.

The default ABI can be restored at any time (which will disable Ammonia from working fully.)

Glow / Ammonia System Requirements & Compatibility

Minimum MacOS version:	MacOS 13 (Ventura)
Latest supported MacOS version:	MacOS 26 (Tahoe)
Supported architectures:	Apple Silicon & Intel

Beta software: Keep in mind, the current release is beta software, and contains some bugs.

Full install procedure

1. Disabling SIP

Booting into Recovery Mode to Disable SIP

Intel: boot your Mac and immediately press CMD and R at the same time, and keep holding them until you see Recovery Mode appear.

Apple Silicon: Shut down your Mac, and boot it again by pressing the power button, but keep holding the power button until you see "Loading startup options.".
Choose 'Options -> Continue' to enter RecoveryOS.
You'll likely need to enter your password to be able to make changes.

Now that we have booted into Recovery mode, in the Menu Bar click Utilities, then open Terminal.

In terminal, type: `csrutil disable` and hit enter
Read the comment in terminal, press `y` if you agree.
Enter your password, and reboot

2. Setting boots args to include arm64e_preview_abi

Note: *This step should **only be followed if your Mac runs on the Apple Silicon architecture**. If you are using Intel, you may ignore this step.*

Boot back into MacOS and open Terminal.
Enter the following command: `sudo nvram boot-args=-arm64e_preview_abi` and hit enter.
Enter your password and reboot your system for the changes to take effect.

3. Disabling Library Validation

Boot into MacOS and open Terminal.
Enter the following command: `sudo defaults write /Library/Preferences/com.apple.security.libraryvalidation.plist DisableLibraryValidation -bool true` *(all on the same line!)* and hit enter.
Enter your password and reboot your system for the changes to take effect.

4. Installing Ammonia

In the Discords channel (https://discord.gg/xrNXwmUY) find the channel #requirements-info and download and install Ammonia.

5. Installing Glow Pre-release (current release)

In the Discords channel find the #glow-download channel and download and install the latest version there.

Important directories for Glow & Ammonia

Glow Theme directory: /Library/GlowThemes
Ammonia Tweak directory: /private/var/ammonia/core/tweaks

Glow Themes directory: The glow theme directory is the directory where you place your themes. It also contains a **com.bedtime.glowsettings.plist** file that defines which of the themes is active.

Inside your theme folder, there will be a settings.plist which contains additional settings which can be modified (for example: gMiniToolbar can be enabled or disabled here).

Ammonia Tweaks directory: This directory contains all the .dylib files of all installed tweaks. By default, it should contain **libGlowHooks.dylib**, but several developers on the discord are working on other tweaks which work with Ammonia. A newly released tweak for example would be libClassicNSToolbar, which restores the older MacOS behaviors of a full sizes navigation bar amongst other changes. When you want to install this tweak you will download a .dylib file which will need to placed in this directory.

Changing icons

Glows current documentation is virtually non-existent, so you will need to learn by looking at the existing pre-made themes.

Glow currently supports the following icon types:
- png
- icns

Not all icon types are supported for all targets.

Glow currently does not offer an option to change an icon system wide, instead you'll have to provide an icon for the dock, and a separate icon for rest the system (which does not theme the /Applications folder list in the dock).

Example: Changing the icon of Mail.app

To change the icon of Mail.app, you'll need two icons for the mail app. One a .png, and one a .icns.

To change the Dock icon:

In your theme folder /Library/GlowThemes/YourTheme/ place the .png icon you wish to use for Mail.app in your dock. These icons must be named as follows: `[CFBundleID][@2x][.png]`

In this case, the icon must be named: **com.apple.mail@2x.png**

You can find the CFBundleID by finding the application in finder, right click -> Show Package Contents -> Contents -> open Info.plist and find Bundle identifier or CFBundleIdentifier. It should be in the format of com.company.product.

Make sure you add @2x after the bundle identifier and before the .png. At the moment, only .png images are supported.

To change the system wide icon:

In your theme folder /Library/GlowThemes/YourTheme/ place the .icns icon you wish to use for Mail.app in the system (for example in Finder). These icons must be named as follows: ApplicationName.icns, in this case **Mail.icns**
Only .icns is supported.

Folder Icons:

Must be named Folder.icns. For example, to theme the library folder, name the icon **Library.icns**.
Only .icns supported.