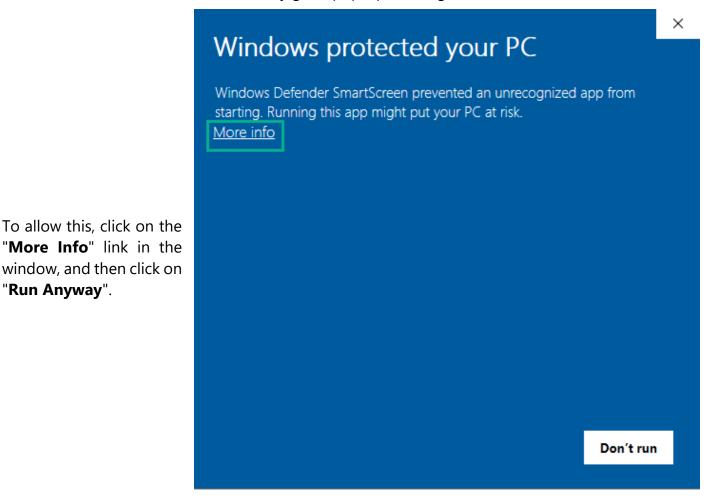
Creating Recovery MacOS USB Installer

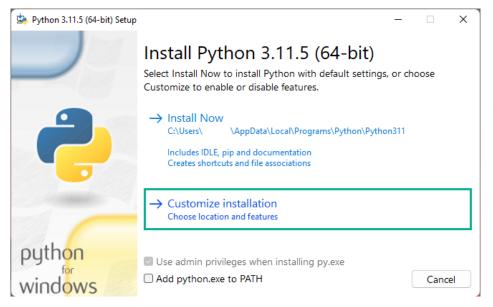
A.I. Acquiring Python:

Python (www.python.org/downloads/) – is a free scripting program used for the **GibMacOS** scripts. Click the link for Python and download the .exe package that installs it. It will be a direct .exe package.



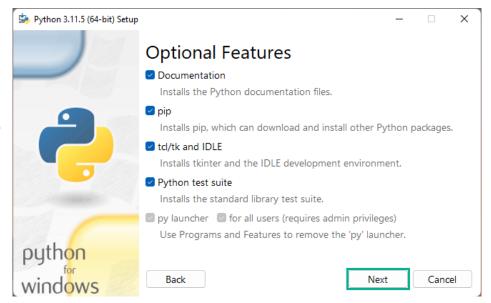
When you run any programs for the process, such as installing Python, right-click each one and select "Run as Administrator". You may get a pop-up warning such as the one below:

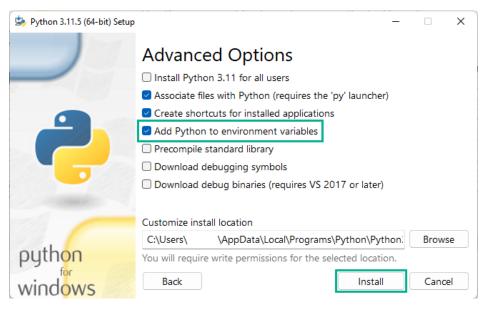




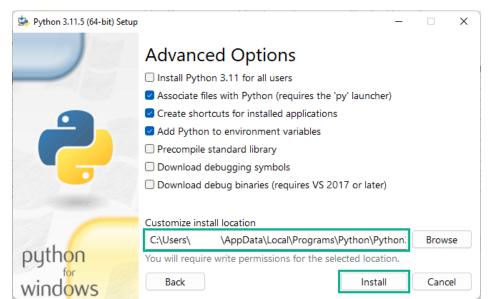
After launching the .exe installation package, you can also **customize** your Installation:

The default features of python cannot be de-selected, while Auxiliary Features can be deselected, Now Click (Next)

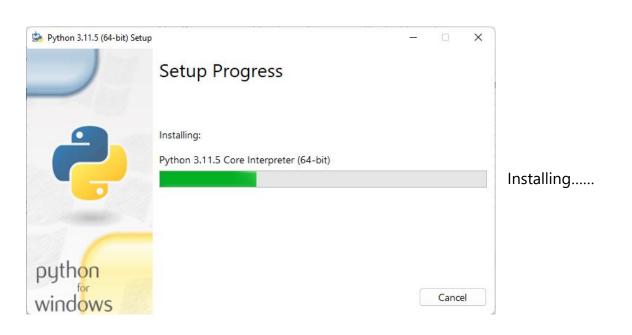




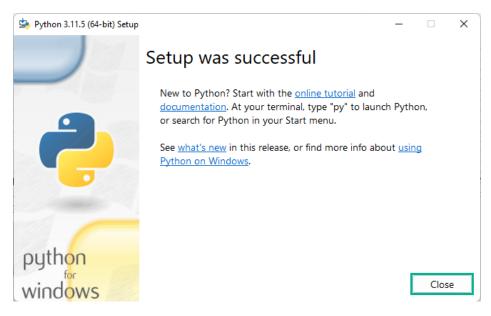
Then Select (Add python to environment variables), if you are Ok with Install Location, you can click install for now.



You can also customize where to install location of python. After setting all preferences, you can click (Install)

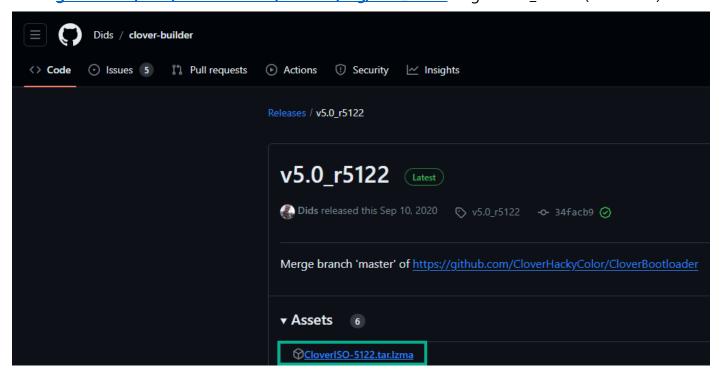


Setup was successful, now you can click on **close** and proceed to the next step

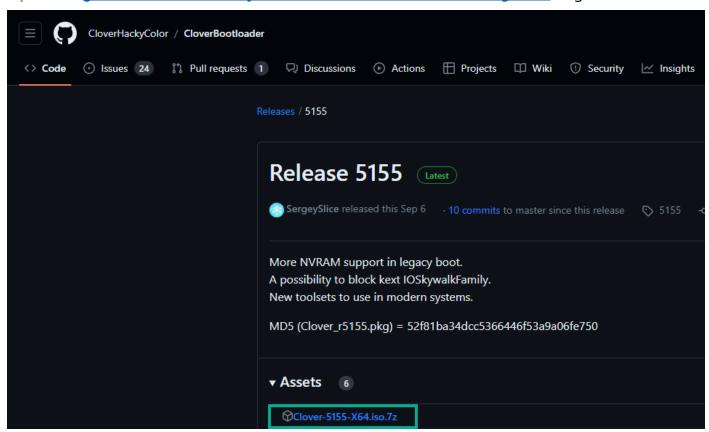


A.II. Acquiring Clover:

Go to github.com/Dids/clover-builder/releases/tag/v5.0 r5122 to get v5.0_r5122 (Click URL):



O|R Go to github.com/CloverHackyColor/CloverBootloader/releases/tag/5155 to get Release 5155:

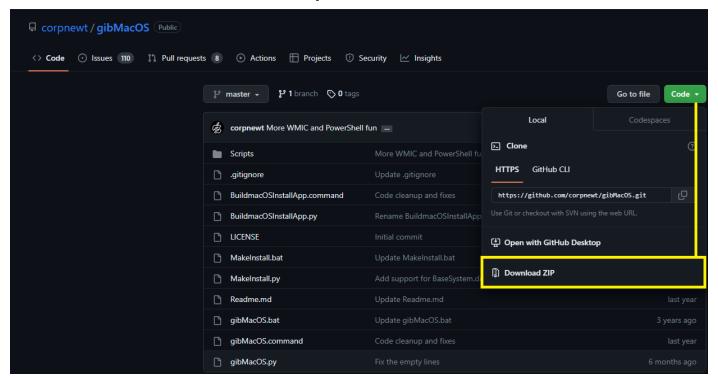


- 1. Download CloverISO-5122.tar.lzma → (C:\Users\<user>\desktop\gibMacOS-Master)OR (/!\ Use only one of them /!\)
- 2. Download Clover-5155-x64.iso.7z → (C:\Users\<user>\desktop\gibMacOS-Master)

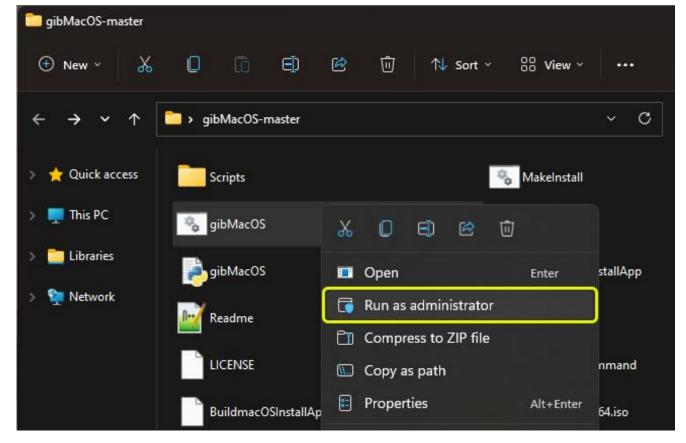
A.III. Acquiring GibMacOS:

GibMacOS (github.com/corpnewt/gibMacOS) - MacOS Downloader & Installer for the flash drive.

Go to the **link** for the GibMacOS software. On the right side of the page, there is a green button, **"CODE"**. Click this and select **"Download zip"**.



Then unzip it to your downloads folder or a different location you prefer. I choose to unzip it @ (C:\Users\<user>\desktop\gibMacOS-Master). When unzipped, it looks like that window below:



Next, Run Windows Batch (gibMacOS.bat) As Administrator.

```
C:\Windows\System32\cmd.exe

'C:\Users\ ' is not recognized as an internal or external command, operable program or batch file.

'C:\Users\ ' is not recognized as an internal or external command, operable program or batch file.
```

If your account has Special characters, py commands will not get recognized correctly N python.

When GibMacOS opens, it will start to download (**PublicRelease**) Catalog like Shown Below:

swscan.apple.com/content/catalogs/others/index-12-10.16-10.15-10.14-10.13-10.12-10.11-10.10-10.9-mountainlion-lion-snowleopard-leopard.merged-1.sucatalog

After downloading catalog, the tool reads all download-able products by fetching URLs from it:

```
Parsing Data
Scanning products after catalog download...
 --> 1. macOS Mojave (18F2059)
 --> 2. macOS Mojave (18G103)
 --> 3. macOS High Sierra (17G66)

    macOS Mojave (18E2034)
    Install macOS High Sierra Beta (17F66a)

     6. macOS Catalina (19D2064)
     7. macOS Catalina (19E2269)
     8. macOS Catalina (19F2200)
    9. macOS Catalina (19G2006)
    10. macOS Catalina (19G2021)
    11. macOS Catalina (19H2)
    12. macOS Catalina (19H4)
 --> 13. macOS Catalina (19H15)
 --> 14. macOS Ventura (22F82)
 -> 15. macOS Monterey (21G651)
  -> 16. macOS Big Sur (20G1351)
 --> 17. macOS Ventura (22G74)
 --> 18. macOS Monterey (21G725)
--> 19. macOS Big Sur (20G1426)
 --> 20. macOS Ventura (22G90)
 --> 21. macOS Ventura (22G91)
 --> 22. macOS Monterey (21G726)
```

GibMacOS can grab any release @ the following 4 channels (will explain them later):

MacOS 19H15 = MacOS X Major Version (10) . MacOS Minor Version (15) . MacOS Revision (7)

```
C:\Windows\system32\cmd.exe
14. macOS Catalina 10.15.7 (19H15)
   - 001-68446 - Added 2020-11-11 17:48:09 - 8.75 GB
15. macOS Catalina 10.15.7 (19H4)
   - 001-57224 - Added 2020-10-27 17:28:13 - 8.75 GB
16. macOS Catalina 10.15.7 (19H2)
   - 001-51042 - Added 2020-09-24 17:09:31 - 8.75 GB
17. macOS Catalina 10.15.6 (19G2021)
  - 001-36801 - Added 2020-08-12 20:04:02 - 8.75 GB
18. macOS Catalina 10.15.6 (19G2006)
  - 001-36735 - Added 2020-08-06 23:39:24 - 8.75 GB
19. macOS Catalina 10.15.5 (19F2200)
   - 001-15219 - Added 2020-06-15 18:52:41 - 8.74 GB
20. macOS Catalina 10.15.4 (19E2269)
  - 001-04366 - Added 2020-05-04 15:32:04 - 8.75 GB
21. macOS Catalina 10.15.3 (19D2064)
  - 061-86291 - Added 2020-03-23 21:41:00 - 8.69 GB
22. macOS Mojave 10.14.4 (18E2034)
  - 041-88800 - Added 2019-10-23 14:41:18 - 6.53 GB
23. Install macOS High Sierra Beta 10.13.5 (17F66a)
   - 041-90855 - Added 2019-10-23 14:41:18 - 5.69 GB
24. macOS High Sierra 10.13.6 (17G66)
  - 041-91758 - Added 2019-10-19 18:19:55 - 5.71 GB
25. macOS Mojave 10.14.6 (18G103)
  - 061-26589 - Added 2019-10-14 20:51:08 - 6.52 GB
26. macOS Mojave 10.14.5 (18F2059)
  - 061-26578 - Added 2019-10-14 20:38:26 - 6.52 GB
M. Change Max-OS Version (Currently 12)
C. Change Catalog (Currently publicreléase)
I. Only Print URLs (Currently Off)
R. Toggle Recovery-Only (Currently Off)
U. Show Catalog URL
Q. Quit
```

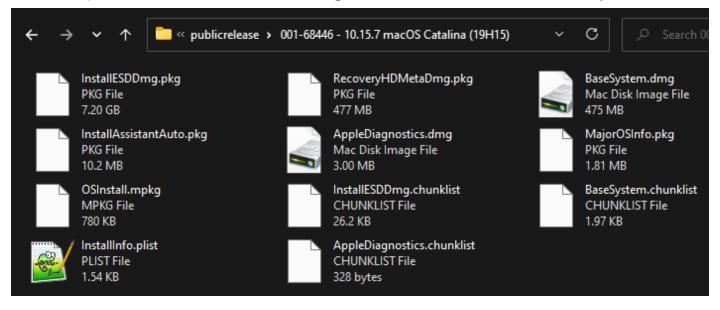
Please select an option: 14

The bottom section shows various options to customize your needs of downloaded release:

Option	Function			
/!\ NOTE /!\	GibMacOS REMEMBERS LAST ENTRY OF M.C.R			
M	Change Max-OS Version (Currently ind #)			
	Change Catalog (Currently Public)			
	O R			
	Change Catalog (Currently PublicRelease)			
C	O R			
	Change Catalog (Currently Customer)			
	O R			
	Change Catalog (Currently Developer)			
1	Only Print URLs (Currently Off)			
R	Toggle Recovery -Only (Currently Off)			
U	U Show Catalog URL			

When you start **downloading**, the progress for each item is listed with time remaining for larger downloads, When the download is finished you can press return, then Q to quit the program.

When completed, the OS will be found under **gibMacOS** \rightarrow **macOS** downloads \rightarrow publicrelease.



Now, I'll Explain How options (M, C, R) improves the overall functionality of GibMacOS utility:

Option M:

When you type "M" and press Enter, more options will be shown. The Max-OS versions were important if you want to Change the **index** Number of MacOS **S**oftware **U**pdate **C**atalog (**SU Catalog**) from **Monterey** (12) to **Sonoma** (14). Look @ the next table, it shows all current indexes (**ind** #)

After Typing (14), GibMacOS will download the url Assigned to your Entered Value (Ind # = 14)

Next, GibMacOS Starts the identification of available products from the freshly-retrieved catalog:

```
Scanning products after catalog download...
 --> 1. macOS Mojave (18F2059)
 --> 2. macOS Mojave (18G103)
 --> 3. macOS High Sierra (17G66)
 --> 4. macOS Mojave (18E2034)
 --> 5. Install macOS High Sierra Beta (17F66a)
 --> 6. macOS Catalina (19D2064)
     7. macOS Catalina (19E2269)
 --> 8. macOS Catalina (19F2200)
 --> 9. macOS Catalina (19G2006)
 --> 10. macOS Catalina (19G2021)
 --> 11. macOS Catalina (19H2)
 --> 12. macOS Catalina (19H4)
 --> 13. macOS Catalina (19H15)
 --> 14. macOS Ventura (22F82)
 --> 15. macOS Monterey (21G651)
 --> 16. macOS Big Sur (20G1351)
 --> 17. macOS Ventura (22G74)
 --> 18. macOS Monterey (21G725)
 --> 19. macOS Big Sur (20G1426)
 --> 20. macOS Ventura (22G90)
 --> 21. macOS Ventura (22G91)
 --> 22. macOS Monterey (21G726)
 --> 23. macOS Big Sur (20G1427)
```

Here is the table of available indexes:

(Replace "X" with "10");

 $X.10 \rightarrow 10.10 \mid X.15 \rightarrow 10.15$

 $(Ind # 11 = 10.16) \rightarrow Apple's Mistake$

Ind#	SU Catalog					
10.6		<u>leopard-sno</u>	wleopard			
10.7		lion-snowleopa	ard-leopard			
10.8	<u>m</u>	ountainlion-lion-sno	owleopard-leopard			
10.9	10.9-mountainlion-lion-snowleopard-leopard					
X.10	<u>10.10-1</u>	0.9-mountainlion-lic	on-snowleopard-leopard			
X.11	<u>10.11-10.1</u>	0-10.9-mountainlion	-lion-snowleopard-leopard	<u>d</u>		
X.12	10.12-10.11-1	0.10-10.9-mountain	ion-lion-snowleopard-leop	<u>oard</u>		
X.13	10.13-10.12-10.1	<u>1-10.10-10.9-mount</u>	ainlion-lion-snowleopard-l	<u>eopard</u>		
X.14	10.14-10.13-10.12-1	0.11-10.10-10.9-mo	untainlion-lion-snowleopar	d-leopard		
X.15	10.15-10.14-10.13-10.1	2-10.11-10.10-10.9-	mountainlion-lion-snowleo	pard-leopard		
11	10.16-10.15-10.14-10.13-10.12-10.11-10.10-10.9-mountainlion-lion-snowleopard-leopard					
12	12-10.16-10.15-10.14-10	0.13-10.12-10.11-10. <u>leopa</u>	<u>10-10.9-mountainlion-lion-</u> <u>rd</u>	-snowleopard-		
13	13-12-10.16-10.15-10.14-	10.13-10.12-10.11-1 <u>leopa</u>	0.10-10.9-mountainlion-lio rd	n-snowleopard-		
14	14-13-12-10.16-10.15-10.	14-10.13-10.12-10.11- <u>leopa</u>	10.10-10.9-mountainlion-lion rd	-snowleopard-		
	Snow Leopard	10.6	High Sierra	10.13		
	Lion 10.7 Mojave 10.14					
	Mountain Lion 10.8 Catalina 10.15					
	Mavericks 10.9 Big Sur 11					
	Yosemite	10.10	Monterey	12		
	El Capitan	10.11	Ventura	13		
	Sierra	10.12	Sonoma	14		

Apple uses **names** & **numbers** for **MacOS**, While, Windows uses **numerical naming** Convention for their OS (WINDOWS 7 – WINDOWS 8 – WINDOWS 8.1 – WINDOWS 10 – WINDOWS 11).

Option C:

When you type "C" and press Enter, more options will be shown. The current view of SU Catalog were optimized by default to show current releases inside Channel of (Public Release), GibMacOS can get all releases inside the **four** following channels: (**Remember**! Max-OS version = **14**) (See **Option M**).

- **1. Public :** this update channel usually contains Beta Releases + Stable Releases (1st column), you'll see the Final Beta Release + Final Stable Release of MacOS Sonoma (#1 & #2) As well As the Final Beta Release + Final Stable Release of MacOS High Sierra (#24 & #25).
 - /!\/!\ Stay Away from Beta Releases if you don't want to waste your traffic by Mistake /!\/!\
- **2.** PublicRelease: this update channel contains only Final Stable Releases (FSR) (2nd Column), It is the default update channel of (GibMacOs) (Release #23 is a mistake On Apple's Side).
- **3. Customer:** this update channel contains the releases offered in public channel (3rd column); you'll see the Final Beta Release + Final Stable Release of MacOS Sonoma (#1 & #2) As well As the Final Beta Release + Final Stable Release of MacOS High Sierra (#24 & #25).
 - /!\/!\ Stay Away from Beta Releases if you don't want to waste your traffic by Mistake /!\/!\
- **4. Developer:** this update channel looks identical to Customer channel (4th Column), Except, One More Thing, if you own An Apple-ID, Sign-In Apple's App Store, then, you can download Developer Preview Releases ASAP. Think of Apple-ID As your All-Access-Cheat 4 MacOS.
 - /!\ DP Releases were made specifically 4 (QA) purposes, Not Suitable 4 Every-Day Usage /!\
 - /!\ Important: Developer Preview Releases only install a specifc version of MacOS, you won't get an updated installer like Beta Releases; However, you can use Beta Releases As A Cumulative Updater Package for your downloaded copy of Developer Preview Releases. /!\

- **A.** Public: this update channel usually contains Beta Releases + Stable Releases (1st column), you'll see the Final Beta Release + Final Stable Release of MacOS Sonoma (#1 & #2) As well As the Final Beta Release + Final Stable Release of MacOS High Sierra (#24 & #25).
 - /!\ Despite Beta Releases can't be used For Every-Day Computing, They can be used As A Cumulative Updater Package for your downloaded copy of Developer Preview Releases /!\
- **B.** PublicRelease: this update channel contains only Final Stable Releases (FSR) (2nd Column), It is the default update channel of (GibMacOs) (Release #23 is a mistake On Apple's Side).

1. Public (27 releases)

C:\Windows\system32\cmd.exe gibMacOS Available Products: macOS Sonoma beta 14.1 (23B5067a) - 042-73335 - Added 2023-10-11 18:30:00 - 12.90 GB 2. macOS Sonoma 14.0 (23A344) - 042-58988 - Added 2023-09-26 17:05:31 - 12.87 GB 3. macOS Monterey 12.7 (21G816) - 042-55586 - Added 2023-09-21 17:25:21 - 12.40 GB - 042-5586 - Added 2023-09-21 17:25:21 - 12.40 GB 4. macOS Ventura 13.6 (22G120) - 042-55926 - Added 2023-09-21 17:24:00 - 11.95 GB 5. macOS Big Sur 11.7.10 (20G1427) - 042-45246 - Added 2023-09-11 17:15:11 - 12.42 GB 6. macOS Monterey 12.6.9 (21G726) - 042-45268 - Added 2023-09-11 17:11:19 - 12.41 GB macOS Ventura 13.5.2 (22G91) - 042-43677 - Added 2023-09-07 17:22:55 - 11.95 GB macOS Ventura 13.5.1 (22G90) - 042-25643 - Added 2023-08-17 17:41:24 - 11.95 GB . macOS Big Sur 11.7.9 (20G1426) - 042-14707 - Added 2023-07-24 17:35:04 - 12.42 GB 10. macOS Monterey 12.6.8 (216725) - 042-15015 - Added 2023-07-24 17:31:37 - 12.42 GB 11. macOS Ventura 13.5 (22674) - 032-69593 - Added 2023-07-24 17:25:59 - 11.95 GB 12. macOS Big Sur 11.7.8 (2061351) - 032-96684 - Added 2023-06-28 17:06:56 - 12.42 GB 13. macOS Monterey 12.6.7 (21G651) - 032-97690 - Added 2023-06-28 17:06:09 - 12.41 GB 14. macOS Ventura 13.4.1 (22F82) - 042-01917 - Added 2023-06-28 17:05:41 - 11.80 GB 15. macOS Catalina 10.15.7 (19H15) - 001-68446 - Added 2020-11-11 17:48:09 - 8.75 GB - 001-08446 - Added 2020-11-11 17:48:09 - 8.75 GB 16. macOS Catalina 10.15.7 (19H4) - 001-57224 - Added 2020-10-27 17:28:13 - 8.75 GB 17. macOS Catalina 10.15.7 (19H2) - 001-51042 - Added 2020-09-24 17:09:31 - 8.75 GB 18. macOS Catalina 10.15.6 (19G2021) 001-36801 - Added 2020-08-12 20:04:02 - 8.75 GB - 001-36801 - Added 2020-08-12 20:04:02 - 8.75 GB 19. macOS Catalina 10.15.6 (19G2006) - 001-36735 - Added 2020-08-06 23:39:24 - 8.75 GB 20. macOS Catalina 10.15.5 (19F2200) - 001-15219 - Added 2020-06-15 18:52:41 - 8.74 GB 21. macOS Catalina 10.15.4 (19E2269) - 001-04366 - Added 2020-05-04 15:32:04 - 8.75 GB 22. macOS Catalina 10.15.3 (19D2064) - 061-86291 - Added 2020-03-23 21:41:00 - 8.69 GB - 061-86291 - Added 2020-03-23 21:41:00 - 8.69 GB 23. macOS Mojave 10.14.4 (18E2034) - 041-88800 - Added 2019-10-23 14:41:18 - 6.53 GB 24. Install macOS High Sierra Beta 10.13.5 (17F66a) - 041-90855 - Added 2019-10-23 14:41:18 - 5.69 GB 25. macOS High Sierra 10.13.6 (17G66) - 041-91758 - Added 2019-10-19 18:19:55 - 5.71 GB 26. macOS Mojave 10.14.6 (186103) - 061-26589 - Added 2019-10-14 20:51:08 - 6.52 GB 27. macOS Mojave 10.14.5 (18F2059) - 061-26578 - Added 2019-10-14 20:38:26 - 6.52 GB M. Change Max-OS Version (Currently 14)

2. PublicRelease (26 releases)

```
C:\Windows\system32\cmd.exe
    gibMacOS
 Available Products:
      macOS Sonoma 14.0 (23A344)
 - 042-58988 - Added 2023-09-26 17:05:31 - 12.87 GB
2. macOS Monterey 12.7 (21G816)
- 042-55586 - Added 2023-09-21 17:25:21 - 12.40 GB
      macOS Ventura 13.6 (22G120)
- 042-55926 - Added 2023-09-21 17:24:00 - 11.95 GB
 4. macOS Big Sur 11.7.10 (20G1427)
- 042-45246 - Added 2023-09-11 17:15:11 - 12.42 GB
       macOS Monterey 12.6.9 (21G726)
- 042-45268 - Added 2023-09-11 17:11:19 - 12.41 GB
      macOS Ventura 13.5.2 (22691)
- 042-43677 - Added 2023-09-07 17:22:55 - 11.95 GB
      macOS Ventura 13.5.1 (22G90)
- 042-25643 - Added 2023-08-17 17:41:24 - 11.95 GB
 8. macOS Big Sur 11.7.9 (20G1426)
- 042-14707 - Added 2023-07-24 17:35:04 - 12.42 GB
   . macOS Monterey 12.6.8 (21G725)
- 042-15015 - Added 2023-07-24 17:31:37 - 12.42 GB
10. macOS Ventura 13.5 (22G74)
- 032-69593 - Added 2023-07-24 17:25:59 - 11.95 GB
11. macOS Big Sur 11.7.8 (20G1351)
- 032-96684 - Added 2023-06-28 17:06:56 - 12.42 GB
 12. macOS Monterey 12.6.7 (216651)
- 032-97690 - Added 2023-06-28 17:06:09 - 12.41 GB
13. macOS Ventura 13.4.1 (22F82)
- 042-01917 - Added 2023-06-28 17:05:41 - 11.80 GB
14. macOS Catalina 10.15.7 (19H15)
- 001-68446 - Added 2020-11-11 17:48:09 - 8.75 GB
15. macOS Catalina 10.15.7 (19H4)
        - 001-57224 - Added 2020-10-27 17:28:13 - 8.75 GB
 16. macOS Catalina 10.15.7 (19H2)
- 001-51042 - Added 2020-09-24 17:09:31 - 8.75 GB
 17. macOS Catalina 10.15.6 (19G2021)
- 001-36801 - Added 2020-08-12 20:04:02 - 8.75 GB
 18. macOS Catalina 10.15.6 (19G2006)
- 001-36735 - Added 2020-08-06 23:39:24 - 8.75 GB

19. macOS Catalina 10.15.5 (19F2200)
- 001-15219 - Added 2020-06-15 18:52:41 - 8.74 GB

20. macOS Catalina 10.15.4 (19E2269)
- 001-04366 - Added 2020-05-04 15:32:04 - 8.75 GB

21. macOS Catalina 10.15.3 (19D2064)
- 061-86291 - Added 2020-03-23 21:41:00 - 8.69 GB

22. macOS Mojave 10.14.4 (18E2034)
- 041-88800 - Added 2019-10-23 14:41:18 - 6.53 GB

23. Install macOS High Sierra Beta 10.13.5 (17F66a)
- 041-90855 - Added 2019-10-23 14:41:18 - 5.69 GB

24. macOS High Sierra 10.13.6 (17G66)
- 041-91758 - Added 2019-10-19 18:19:55 - 5.71 GB

25. macOS Mojave 10.14.6 (18G103)
          001-36735 - Added 2020-08-06 23:39:24 - 8.75 GB
25. macOS Mojave 10.14.6 (186103)

- 061-26589 - Added 2019-10-14 20:51:08 - 6.52 GB

26. macOS Mojave 10.14.5 (18F2059)

- 061-26578 - Added 2019-10-14 20:38:26 - 6.52 GB
 M. Change Max-OS Version (Currently 14)
      Change Catalog (Currently publicrelease)
Only Print URLs (Currently Off)
```

C. Customer: this update channel contains the releases offered in public channel (3rd column); you'll see the Final Beta Release + Final Stable Release of MacOS Sonoma (#1 & #2) As well As the Final Beta Release + Final Stable Release of MacOS High Sierra (#24 & #25).

/!\/!\ Stay Away from Beta Releases if you don't want to waste your traffic by Mistake /!\/!\

D. Developer: this update channel looks identical to Customer channel (4th Column), Except, One More Thing, if you own An Apple-ID, Sign-In Apple's App Store, then, you can download Developer Preview Releases ASAP. Think of Apple-ID As your All-Access-Cheat 4 MacOS.

/!\ DP Releases were made specifically 4 (QA) purposes, Not Suitable 4 Every-Day Usage /!\

3. Customer (27 releases)

C:\Windows\system32\cmd.exe gibMacOS Available Products: macOS Sonoma beta 14.1 (23B5067a) - 042-73335 - Added 2023-10-11 18:30:00 - 12.90 GB 2. macOS Sonoma 14.0 (23A344) - 042-58988 - Added 2023-09-26 17:05:31 - 12.87 GB macOS Monterey 12.7 (216816) - 042-55586 - Added 2023-09-21 17:25:21 - 12.40 GB - 042-55586 - Added 2023-09-21 17:25:21 - 12.40 GB 4. macOS Ventura 13.6 (22G120) - 042-55926 - Added 2023-09-21 17:24:00 - 11.95 GB 5. macOS Big Sur 11.7.10 (20G1427) - 042-45246 - Added 2023-09-11 17:15:11 - 12.42 GB 6. macOS Monterey 12.6.9 (21G726) - 042-45268 - Added 2023-09-11 17:11:19 - 12.41 GB macOS Ventura 13.5.2 (22G91) - 042-43677 - Added 2023-09-07 17:22:55 - 11.95 GB . macOS Ventura 13.5.1 (22G90) 042-25643 - Added 2023-08-17 17:41:24 - 11.95 GB 9. macOS Big Sur 11.7.9 (20G1426) - 042-14707 - Added 2023-07-24 17:35:04 - 12.42 GB 10. macOS Monterey 12.6.8 (21G725) - 042-15015 - Added 2023-07-24 17:31:37 - 12.42 GB 11. macOS Ventura 13.5 (22G74) - 032-69593 - Added 2023-07-24 17:25:59 - 11.95 GB 12. macOS Big Sur 11.7.8 (20G1351) - 032-96684 - Added 2023-06-28 17:06:56 - 12.42 GB 13. macOS Monterey 12.6.7 (21G651) - 032-97690 - Added 2023-06-28 17:06:09 - 12.41 GB 14. macOS Ventura 13.4.1 (22F82) - 042-01917 - Added 2023-06-28 17:05:41 - 11.80 GB 15. macOS Catalina 10.15.7 (19H15) - 001-68446 - Added 2020-11-11 17:48:09 - 8.75 GB 16. macOS Catalina 10.15.7 (19H4) - 001-57224 - Added 2020-10-27 17:28:13 - 8.75 GB 17. macOS Catalina 10.15.7 (19H2) 001-51042 - Added 2020-09-24 17:09:31 - 8.75 GB 18. macOS Catalina 10.15.6 (19G2021) 18. macOS Catalina 10.15.6 (19G2021) - 001-36801 - Added 2020-08-12 20:04:02 - 8.75 GB 19. macOS Catalina 10.15.6 (19G2006) - 001-36735 - Added 2020-08-06 23:39:24 - 8.75 GB 20. macOS Catalina 10.15.5 (19F2200) - 001-15219 - Added 2020-06-15 18:52:41 - 8.74 GB 21. macOS Catalina 10.15.4 (19E2269) - 001-04366 - Added 2020-05-04 15:32:04 - 8.75 GB 22. macOS Catalina 10.15.3 (19D2064) - 061-86291 - Added 2020-03-23 21:41:00 - 8.69 GB 23. macOS Mojave 10.14.4 (18E2034) - 041-88800 - Added 2019-10-23 14:41:18 - 6.53 GB 24. Install macOS High Sierra Beta 10.13.5 (17F66a) - 041-90855 - Added 2019-10-23 14:41:18 - 5.69 GB 25. macOS High Sierra 10.13.6 (17666) - 041-91758 - Added 2019-10-19 18:19:55 - 5.71 GB 26. macOS Mojave 10.14.6 (18G103) - 061-26589 - Added 2019-10-14 20:51:08 - 6.52 GB 27. macOS Mojave 10.14.5 (18F2059) - 061-26578 - Added 2019-10-14 20:38:26 - 6.52 GB M. Change Max-OS Version (Currently 14)

4. Developer (27 releases)

```
C:\Windows\system32\cmd.exe
     gibMacOS
 Available Products:

    macOS Sonoma beta 14.1 (23B5067a)

 - 042-73335 - Added 2023-10-11 18:30:00 - 12.90 GB
2. macOS Sonoma 14.0 (23A344)
        - 042-58988 - Added 2023-09-26 17:05:31 - 12.87 GB
       macOS Monterey 12.7 (216816)
- 042-55586 - Added 2023-09-21 17:25:21 - 12.40 GB
 4. macOS Ventura 13.6 (22G120)
- 042-55926 - Added 2023-09-21 17:24:00 - 11.95 GB
     - 642-53920 - Added 2623-69-21 17:24:66 - 11:93 GB
macOS Big Sur 11.7.10 (20G1427)
- 042-45246 - Added 2023-09-11 17:15:11 - 12.42 GB
macOS Monterey 12.6.9 (21G726)
- 042-45268 - Added 2023-09-11 17:11:19 - 12.41 GB
      macOS Ventura 13.5.2 (22G91)
- 042-43677 - Added 2023-09-07 17:22:55 - 11.95 GB
      macOS Ventura 13.5.1 (22G90)
         042-25643 - Added 2023-08-17 17:41:24 - 11.95 GB
- 042-25043 - Added 2023-08-1/ 17:41:24 - 11:95 GB
9. macOS Big Sur 11.7.9 (20G1426)
    - 042-14707 - Added 2023-07-24 17:35:04 - 12.42 GB
10. macOS Monterey 12.6.8 (21G725)
    - 042-15015 - Added 2023-07-24 17:31:37 - 12.42 GB
11. macOS Ventura 13.5 (22G74)
    - 032-69593 - Added 2023-07-24 17:25:59 - 11.95 GB
 12. macOS Big Sur 11.7.8 (2061351)
- 032-96684 - Added 2023-06-28 17:06:56 - 12.42 GB
 13. macOS Monterey 12.6.7 (21G651)
- 032-97690 - Added 2023-06-28 17:06:09 - 12.41 GB
 14. macOS Ventura 13.4.1 (22F82)
 - 042-01917 - Added 2023-06-28 17:05:41 - 11.80 GB
15. macOS Catalina 10.15.7 (19H15)
- 001-68446 - Added 2020-11-11 17:48:09 - 8.75 GB
 16. macOS Catalina 10.15.7 (19H4)
- 001-57224 - Added 2020-10-27 17:28:13 - 8.75 GB
 17. macOS Catalina 10.15.7 (19H2)
- 001-51042 - Added 2020-09-24 17:09:31 - 8.75 GB
- 001-51042 - Added 2020-09-24 17:09:31 - 8.75 GB
18. macOS Catalina 10.15.6 (19G2021)
- 001-36801 - Added 2020-08-12 20:04:02 - 8.75 GB
19. macOS Catalina 10.15.6 (19G2006)
- 001-36735 - Added 2020-08-06 23:39:24 - 8.75 GB
20. macOS Catalina 10.15.5 (19F2200)
- 001-15219 - Added 2020-06-15 18:52:41 - 8.74 GB
21. macOS Catalina 10.15.4 (19E2269)
- 001-04366 - Added 2020-05-04 15:32:04 - 8.75 GB
22. macOS Catalina 10.15.3 (19D2064)
- 061-86291 - Added 2020-03-23 21:41:00 - 8.69 GB
23. macOS Mojave 10.14.4 (18E2034)
- 041-88800 - Added 2019-10-23 14:41:18 - 6.53 GB
24. Install macOS High Sierra Beta 10.13.5 (17F66a)
- 041-90855 - Added 2019-10-23 14:41:18 - 5.69 GB
 25. macOS High Sierra 10.13.6 (17666)
- 041-91758 - Added 2019-10-19 18:19:55 - 5.71 GB
 26. macOS Mojave 10.14.6 (186103)
- 061-26589 - Added 2019-10-14 20:51:08 - 6.52 GB
 27. macOS Mojave 10.14.5 (18F2059)
- 061-26578 - Added 2019-10-14 20:38:26 - 6.52 GB
 M. Change Max-OS Version (Currently 14)
```

Option R:

When you type "R" \rightarrow press Enter, you will see Recovery Installers (Package does not exceed 500MB):

```
Parsing Data
Re-scanning products after url preference toggled...
--> 1. macOS Mojave (18F2059) - FULL Install
 --> 2. macOS Mojave (18G103) - FULL Install
     macOS High Sierra (17G66) - FULL Install
     4. macOS Mojave (18E2034) - FULL Install
     5. Install macOS High Sierra Beta (17F66a) - FULL Install
     6. MacBook Pro Supplemental Update (18F203)
 --> 7. macOS 10.14.6 Update (18G103)
--> 8. macOS 10.14.6 Update (18G103)
--> 9. macOS Mojave 10.14.6 Supplemental Update 2 (18G103)
--> 10. macOS Catalina (19D2064) - FULL Install
--> 11. macOS Catalina (19E2269) - FULL Install
--> 12. macOS Catalina 10.15.5 Supplemental Update (19F2200)
--> 13. macOS Catalina (19F2200) - FULL Install
--> 14. macOS Catalina (19G2006) - FULL Install
--> 15. macOS Catalina (19G2021) - FULL Install
--> 16. Security Update 2020-004 (17G14019)
--> 17. macOS Catalina (19H2) - FULL Install
--> 18. Security Update 2020-005 (17G14033)
--> 19. macOS Catalina 10.15.7 Update (19H2)
--> 20. macOS Catalina 10.15.7 Update (19H2)
--> 21. macOS Catalina (19H4) - FULL Install
--> 22. macOS Catalina 10.15.7 Update (19H15)
--> 23. macOS Catalina 10.15.7 Supplemental Update (19H15)
--> 24. macOS Catalina (19H15) - FULL Install
--> 25. Security Update 2020-006 (17G14042)
--> 26. macOS Catalina 10.15.7 Supplemental Update (19H524)
--> 27. macOS Mojave Security Update 2021-002 (18G8022)
--> 28. macOS Catalina Security Update 2021-002 (19H1030)
--> 29. macOS Mojave Security Update 2021-003 (18G9028)
--> 30. macOS Mojave Security Update 2021-004 (18G9216)
--> 31. macOS Catalina Security Update 2021-003 (19H1217)
--> 32. macOS Catalina Security Update 2021-004 (19H1323)
--> 33. macOS Mojave Security Update 2021-005 (18G9323)
--> 34. macOS Catalina Security Update 2021-007 (19H1519)
--> 35. macOS Catalina Security Update 2021-008 (19H1615)
```

Typically, you should not need to download each type (Full & Recovery), but I was having issues when installing MacOS Catalina on my system using Full Installer. After so many attempts using the full installer, I couldn't get it to work but was able to install MacOS Catalina successfully using the Recovery method. (Recovery Installer Requires an Active Internet connection to complete getting All MacOS files).

Now, you may ask about the difference between **Full** & **Recovery** Installer. First, let me show you How Recovery Installation Works, shall we Start?



With the introduction of **OS X Lion**, Apple made fundamental changes to how OS X is sold and distributed. Install DVDs are history; OS X is now available as a **download** from the Mac **App Store**.

With the **elimination of install DVDs**, Apple needed to provide alternative methods for installing the OS, repairing startup drives and system files, and reinstalling the OS. All these capabilities were formerly available on the install DVDs.

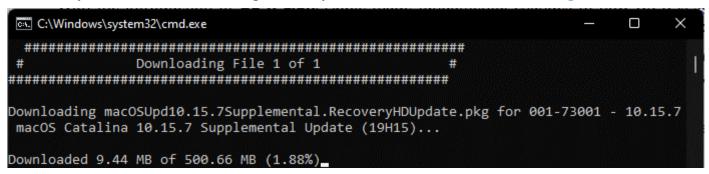
Apple's solution was to have the OS X download contain an installer that not only installs the OS on your Mac but also creates a **hidden volume** on your startup drive called **Recovery HD**. This hidden volume contains a minimal version of OS X that is enough to allow your Mac to boot; it also contains various utilities.

Utilities Included on the HD Recovery Volume :

- **Disk Utility** for repairing damaged drives and system files !.
- Safari —to go online 4 research any errors you may be having.
- **Reinstall OS X** —to install a new copy of the OS on your Mac.
- Restore from Time Machine Backup when everything has gone wrong, and you need to restore data from your backups (Restoring a backup will erase all data on your MacOS Drive).
- **Terminal** for working with Mac's file system or editing files.
- **Network Utility**: you need to troubleshoot networking issues.
- Firmware Password Utility to set up or remove passwords.

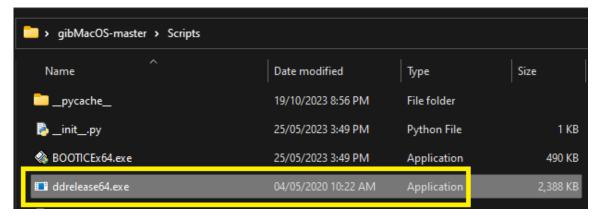


The **Recovery HD** can be a lifesaver, at least when it comes to troubleshooting and repairing a Mac. That is why we recommend creating Recovery HD on USB Flash Drive. **Returning to GibMacOS**



B. Bootable Recovery USB Creation:

Next, you have to download **dd** <u>github.com/corpnewt/gibMacOS/files/4573241/ddrelease64.exe.zip</u> (**dd** used to install recovery DMG to USB 2nd Partition) (extract it to gibMacOS-master\Scripts).



Return back to the **gibMacOS-master** folder and **run** Windows Batch File (**MakeInstall.bat**).

This program will install the Clover base bootloader and the freshly downloaded MacOS to the connected flash drive. In my example below I plugged in a **64 GB Kioxia** flash drive (**entry #6**).

The bottom section shows various options when setting up the flash drive,

```
Usage: [drive number][options] r[Clover revision (optional), requires C]
(eg. 1B C r5092)
Options are as follows with precedence B > F > E > U > G:
B = Only install the boot manager to the drive's first partition.
F = Skip formatting the disk - will install the boot manager to the first partition, and dd the recovery image to the second.
E = Sets the type of the drive's first partition to EFI.
U = Similar to E, but sets the type to Basic Data (useful for editing).
G = Format as GPT (default is MBR).
C = Use Clover instead of OpenCore.
L = Provide a local archive for the boot manager - must still use C if Clover.
D = Used without a drive number, toggles showing all disks (currently DISABLED)
Please select a disk or press [enter] with no options to refresh:
```

There is a usage example.

[drive number][options] r[Clover revision (optional), requires C]

We'll Discuss each parameter in it:

[Drive Number]

6. KIOXIA TransMemory USB Device – 62.47 GB (Removable)

0. M: (KIOXIA) FAT32 - 62.46 GB

Q. Quit

6 → Disk\Drive No.	— Disk 6 Removable 58.18 GB Online
KIOXIA → Disk Label	
M → Partition Letter	KIOXIA (M:)
0 → Partition Number	58.18 GB FAT32 Healthy (Primary Partition)
FAT32 → File System	Treatery (Timesy Fartition)

[Options]

Options	Function				
Note	(Commands Applied @State 0 = MBR + Single Vol + FAT32 + USB) (Next Page)				
В	Only install the boot manager to the drive's first partition				
F	Skip formatting the disk				
E	Sets the type of the drive's first partition to EFI				
U	Like E, but sets the type to Basic Data (useful for editing)				
G	Format as GPT (default is MBR)				
С	Use Clover instead of OpenCore				
L	Provide a local archive for the boot manager - must still use C if Clover				
D	Used without a drive number, toggles showing all disks (Currently DISABLED)				

r[Clover revision (optional)]

	Clover-Builder		CloverHackyColor		
Last version by (DIDS) is 5122			Last version by (SLICE) is 5155		
Doesn't Contains O.C. Mods			Contains OpenCore Mods		
High Stability for OS older than 11			High Stability for OS newer than 11		
Compatibili	Compatibility issues with OS > Catalina			ity issues with O	S < Big Sur
Example	6C r5111	6BC r5122	6GC r5133	6EC r5144	6FC r5155

Com	OS	Message		After		Notes
*	WIN	If you continue - THIS DISK WILL BE ERASED ALL DATA WILL BE LOST AND ALL PARTITIONS WILL BE REMOVED!!!!!!! Continue? (y/n):	L Disk 6 20 Online No	macOS Base System 57.99 GB (1.23 GB used) Apple HFS	58.18 GB Basic MBR	Format USB MBR + OpenCore Latest
*9	MAC	/dev/disk2 (internal, physical): #: TYPE NAME 0: FDisk_partition_scheme 1: Windows_FAT_32 BOOT 2: Apple_Boot macOS E	Base System	SIZE *62.5 GB 209.7 MB 62.3 GB	IDENTIFIER disk2 disk2s1 disk2s2	→ 1 st Volume + Recovery Pkg → 2 nd Volume***
*	WIN	If you continue - THIS DISK WILL BE ERASED ALL DATA WILL BE LOST AND ALL PARTITIONS WILL BE REMOVED!!!!!!! Continue? (y/n):	L Disk 6 20 Online No	macOS Base System 57.99 GB (1.23 GB used) Apple HFS	58.18 GB Basic MBR	Format USB MBR
6B *	MAC	<pre>/dev/disk2 (internal, physical): #:</pre>	Base System	SIZE *62.5 GB 209.7 MB 62.3 GB	IDENTIFIER disk2 disk2s1 disk2s2	OpenCore Latest → 1 st Volume
*	WIN	In order to continue without formatting, the selected disk's 1^{st} partition MUST be FAT32, and the 2^{nd} MUST be RAW. If that is not the case, the operation WILL fail Continue? (y/n) :	L Disk 6 20 Online No	macOS Base System	58.18 GB Basic MBR	OpenCore Latest → 1 st Volume
6F*	MAC	/dev/disk2 (internal, physical): #: TYPE NAME 0: FDisk_partition_scheme 1: Windows_FAT_32 BOOT 2: Apple_Boot macOS E	Base System	SIZE *62.5 GB 209.7 MB 62.3 GB	IDENTIFIER disk2 disk2s1 disk2s2	+ Recovery Pkg → 2 nd Volume***

Com	os	Message		After		Notes
**)	WIN	If you continue - THIS DISK WILL BE ERASED ALL DATA WILL BE LOST AND ALL PARTITIONS WILL BE REMOVED!!!!!!! Continue? (y/n):	L Disk 6 Online Online	macOS Base System 57.99 GB (1.23 GB used)	58.18 GB Basic GPT	Format USB GPT + 1st Vol → BDP*** +
259	MAC	/dev/disk2 (internal, physical): #: TYPE NAME 0: GUID_partition_scheme 1: Microsoft Basic Data BOOT 2: Apple_HFS macOS	Base System	SIZE *62.5 GB 209.7 MB 62.3 GB	IDENTIFIER disk2 disk2s1 disk2s2	Clover Latest → 1 st Vol.** + Recovery Pkg → 2 nd Vol.***
5122**	WIN	Setting type as EFI Disk 6 is now the selected disk. Partition 1 is now the selected partition. DiskPart successfully set the partition ID. Done.	L Disk 6 20 Online Sy	macOS Base System 57.99 GB (1.23 GB used) Apple HFS	58.18 GB Basic GPT	1 st Vol → EFI + Clover r5122
6EC r5122**	MAC	/dev/disk2 (internal, physical): #: TYPE NAME 0: GUID_partition_scheme 1: EFI BOOT 2: Apple_HFS macOS	Base System	SIZE *62.5 GB 209.7 MB 62.3 GB	IDENTIFIER disk2 disk2s1 disk2s2	→ 1 st Vol.** + Recovery Pkg → 2 nd Vol.
5144**	NIW	Setting type as Basic Data Disk 6 is now the selected disk. Partition 1 is now the selected partition. DiskPart successfully set the partition ID. Done.	L Disk 6 20 Online No	macOS Base System 57.99 GB (1.23 GB used) Apple HFS	58.18 GB Basic GPT	1 st Vol → BDP*** + Clover r5144
6UC r5144**	MAC	/dev/disk2 (internal, physical): #: TYPE NAME 0: GUID_partition_scheme 1: Microsoft Basic Data BOOT 2: Apple_HFS macOS	Base System	SIZE *62.5 GB 209.7 MB 62.3 GB	IDENTIFIER disk2 disk2s1 disk2s2	→ 1 st Vol.** + Recovery Latest → 2 nd Vol.

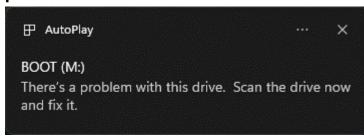
Comi	mand	Message			After		Notes
	₹.	NOTE: OpenCore archives are expected to be .zip!	KIOXIA Tran	sMemo	ry USB Device	58.18 GB Basic MBR	Face at HCD MADD
	0:	Please OpenCore archive path here:		KIOX	IA (M:)		Format USB MBR
6L*	BEFORE	If you continue - THIS DISK WILL BE ERASED ALL DATA WILL BE LOST AND ALL PARTITIONS	Disk 6 Online	58.18 FAT32	GB (128 KB used)		+ Opencore Release → 1 st Vol.*
19	~	WILL BE REMOVED!!!!!!	KIOXIA Tran	sMemo	ry USB Device	58.18 GB Basic MBR	+ +
	FTER	Continue? (y/n):		L	macOS Base System		Recovery Pkg
	AF	Please paste the recovery update pkg/dmg path to extract:	Disk 6 Online	20 No	57.99 GB (1.23 GB used) Apple HFS		→ 2 nd Vol.***
	RE	NOTE: OpenCore archives are expected to be .zip!	KIOXIA Tran	sMemo	ry USB Device	58.18 GB Basic MBR	
	BEFORE	Please OpenCore archive path here:		L	macOS Base System		
**	BE	If you continue - THIS DISK WILL BE ERASED ALL DATA WILL BE LOST AND ALL PARTITIONS	Disk 6 Online		57.99 GB (1.23 GB used) Apple HFS		Format USB MBR +
6BL**	ER	WILL BE REMOVED!!!!!! Continue? (y/n):	KIOXIA Tran	sMemo	ry USB Device	58.18 GB Basic MBR	Opencore Release → 1 st Vol.*
	AFTER	Please paste the recovery update pkg/dmg path to extract:	Disk 6 Online	20 No	macOS Base System 57.99 GB (1.23 GB used) Apple HFS		
	3E	NOTE: OpenCore archives are expected to be .zip!	KIOXIA Tran	sMemo	ry USB Device	58.18 GB Basic MBR	
	BEFORE	Please OpenCore archive path here:		L	macOS Base System		Opensore Polesco
6FL**	BE	In order to continue without formatting, the selected disk's 1 st partition MUST be FAT32,	Disk 6 Online	20 No	57.99 GB (1.23 GB used) Apple HFS		Opencore Release → 1 st Vol.*
	FTER	and the 2 nd MUST be RAW. If that is not the case, the operation WILL fail Continue? (y/n):	KIOXIA Tran	sMemo	macOS Base System	58.18 GB Basic MBR	+ Recovery Pkg → 2 nd Vol.***
	AF.	Please paste the recovery update pkg/dmg path to extract:	Disk 6 Online	20 No	57.99 GB (1.23 GB used) Apple HFS		

Comr	nand	Message			After		Notes
	₹E	NOTE: Clover archives are expected to be an ISO packed in either .tar.lzma or .7z!	KIOXIA TransMemory USB Device		58.18 GB Basic MBR	Format USB GPT	
	EFORE	Please Clover archive path here:		L	macOS Base System		+ 1st Vol → BDP***
*****	BE	If you continue - THIS DISK WILL BE ERASED ALL DATA WILL BE LOST AND ALL PARTITIONS	Disk 6 Online		57.99 GB (1.23 GB used) Apple HFS		+ Clover Release
96C	FTER	WILL BE REMOVED!!!!!! Continue? (y/n):	KIOXIA Tran	nsMemo	macOS Base System	58.18 GB Basic GPT	→ 1 st Vol.*
	AFT	Please paste the recovery update pkg/dmg path to extract:	Disk 6 Online		57.99 GB (1.23 GB used) Apple HFS		Recovery Pkg → 2 nd Vol.***
	RE	NOTE: Clover archives are expected to be an ISO packed in either .tar.lzma or .7z!	KIOXIA Trai	nsMemo	ory USB Device	58.18 GB Basic GPT	1 st Vol → EFI
	EFORE	Please Clover archive path here:		L	macOS Base System		+
6ECL*****	BE	Setting type as EFI	Disk 6 Online		57.99 GB (1.23 GB used) Apple HFS		Clover Release → 1st Vol.*
ECL	Par Dis Dor	Disk 6 is now the selected disk. Partition 1 is now the selected partition.		nsMemo	ory USB Device	58.18 GB Basic GPT	+
9		DiskPart successfully set the partition ID. Done.		L	macOS Base System		Recovery Pkg
		Press [enter] to return	Disk 6 Online	20 Sy	57.99 GB (1.23 GB used) Apple HFS		→ 2 nd Vol.***
	3E	NOTE: Clover archives are expected to be an ISO packed in either .tar.lzma or .7z!	KIOXIA Tran	nsMemo	ory USB Device	58.18 GB Basic GPT	4514 > 22214
	EFORE	Please Clover archive path here:		L	macOS Base System		1 st Vol → BDP***
90CL*****	BE	Setting type as Basic Data	Disk 6 Online	20 Sy	57.99 GB (1.23 GB used) Apple HFS		Clover Release → 1st Vol.*
OCL:	~	Disk 6 is now the selected disk. Partition 1 is now the selected partition.	KIOXIA Trai	nsMemo	ory USB Device	58.18 GB Basic GPT	+
9	FTER	DiskPart successfully set the partition ID. Done.		L	macOS Base System		Recovery Pkg
	A	Press [enter] to return	Disk 6 Online		57.99 GB (1.23 GB used) Apple HFS		→ 2 nd Vol.***

####

[Command Notes 1]

*. At this point, the app will have formatted the flash drive into two partitions: one for booting and one for the installer. The Boot section is accessible, but the installation section is invisible as it is in a Mac format. This is why you may get a prompt saying that the second part of the flash drive is **problematic**.



Ignore this message. When this process is done in MacOS, the visibility is reversed. That is, the EFI partition is hidden until you use a program like clover Configurator or the terminal to expose it, while the OS installation files are visible and accessible.

- **. Option C requires revision, i.e., 6BC r5122 \rightarrow Installs Clover r5122 on 1st Volume (USB), If ignored, GibMacOS will install the latest build of Clover on 1st Volume (USB) (Last \rightarrow 5155).
- ***.i. The First launch of (MakeInstall), it will search for the existence of (ddrelease64.exe), (dd used for extracting recovery DMG to USB 2nd Partition), if it existed @ "gibMacOS\Scripts", Then, the tool would operate normally and opens this screen:

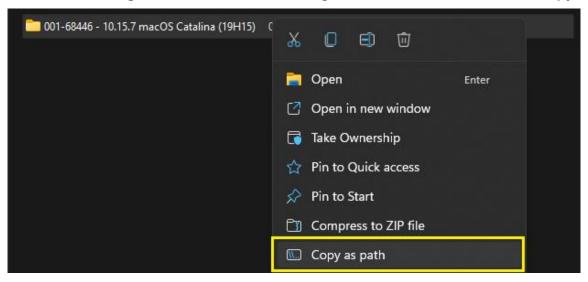
```
Potential Removable Media
!WARNING! This list includes both Removable AND
!WARNING! Unknown disk types. Be ABSOLUTELY sure
!WARNING! before selecting a disk!
KIOXIA TransMemory USB Device - 62.47 GB (Removable)
  0. M: (KIOXIA) FAT32 - 62.46 GB
Q. Quit
Usage: [drive number][options] r[Clover revision (optional), requires C]
  (eg. 1B C r5092)
 Options are as follows with precedence B > F > E > U > G:
   B = Only install the boot manager to the drive's first partition.
F = Skip formatting the disk - will install the boot manager to the first
   partition, and dd the recovery image to the second.
E = Sets the type of the drive's first partition to EFI.
   U = Similar to E, but sets the type to Basic Data (useful for editing). G = Format as GPT (default is MBR).
     = Use Clover instead of OpenCore.
      = Provide a local archive for the boot manager - must still use C if Clover.
   D = Used without a drive number, toggles showing all disks (currently DISABLED)
```

When **ddrelease64** doesn't exist @ **gibMacOS\Scripts**, the tool will display this error message :

Note: If the tool (MakeInstall) failed to download (ddrelease64), it will close unexpectedly, Then, you must download (ddrelease64) manually by following demonstration steps @ (Page 16)

- ***.ii. dd will ask for the path of Recovery Update (pkg/dmg):
- → (Path of Full Installer) O|R
- → (Path of Recovery Installer).

Here you will need to navigate to where you downloaded the MacOS in an earlier step. To copy this path, hold down **shift + right-click** the mouse to bring context menu, then click on "**Copy as Path.**"



Return to the **MakeInstall** command window, then simply **right-click** at the prompt where it will automatically paste that path for you, shown in the example below:

Press **Enter** to begin the process, The window will say "This may take some time...".

[Command Notes 2]

*. Options B & F requires Multi-Partitioned Flash disks in order to proceed without errors:

/!\ Option B Installs Bootloader only on the 1st partition on multi-Partitioned disks, The output may render your MBR system unbootable after using B Commands against Fixed disks /!\

/!\ Option F Skips formatting only when the target disk has two partitions (FAT32 + RAW), It installs bootloader on the 1st Partition & recovery package on the 2nd One. The output may render your MBR-Partitioned system unbootable after using F Commands against Fixed disks /!\

**. Option G requires MBR-Partitioned Flash disks in order to proceed without errors:

/!\ (Data-Destructive)

Option G uses DiskPart commands to convert the partition scheme of your USB Flash Drive from (MBR) → (GPT). The output against your GPT-Partitioned Usb flash drive will produce this logical error: you cannot convert from (GPT) → (GPT), right? /!\

***. Options E & U requires GPT-Partitioned Flash disks to be performed without errors:

/!\ (Non-Data-Destructive)

Option E uses DiskPart commands to convert the partition ID of 1st Partition of your GPT-Partitioned Fixed / Removable USB Drive to (C12A7328-F81F-11D2-BA4B -00A0C93EC93B). The output against your MBR-Partition'd Fixed / Removable disk will produce this Format error /!\

/!\ (Boot-Destructive)

Option U uses DiskPart commands to convert the partition ID of 1st Partition of your GPT-Partitioned Fixed / Removable USB Drive to (EBD0A0A2-B9E5-4433-87C0-68B6B72699C7). The output against your MBR-Partition'd Fixed / Removable disk will produce this Format error /!\

[Command Notes 3]

*. Option L (Offline-Mode) supports provided locally downloaded packages of :

- **1.** OpenCore Debug Build 0.9.5 (Build 0.5.9 & older can't be provided online or offline)
- **2.** OpenCore Release Build 0.9.5 (Build 0.5.9 & older can't be provided online or offline)
- **3.** CloverHackyColor (Current 5155) (Use only if you had compatibility issues with Clover-Builder)
- **4.** Clover-Builder (Last build r5122) (Use only if you had compatibility issues with CloverHackyColor)

/!\ Other bootloaders aren't supported, Such as Chameleon, rEFIt, rEFInd, GRUB /!\

**. Option D Toggles display of All Connected Storage your PC As shown Below:

- 1. Shows USB Flash Drives
- /!\ Use At Your Own Risk /!\
- 2. Shows HDD/SSD Drives
- /!\ Use At Your Own Risk /!\
- 3. Shows External HDD/SSD
- /!\ Use At Your Own Risk /!\

```
Potential Removable Media
!WARNING! This list includes both Removable AND
!WARNING! Unknown disk types. Be ABSOLUTELY sure
!WARNING! before selecting a disk!
0. KINGSTON SA400M8240G - 240.05 GB (Unknown)
  No Mounted Partitions

    LITEONIT LSS-24L6G - 24.01 GB (Unknown)

  No Mounted Partitions

    SanDisk Cruzer Glide USB Device - 15.66 GB (Removable)

  0. E: (BOOT) FAT32 - 205.52 MB
Q. Quit
Usage: [drive number][options] r[Clover revision (optional), requires C]
 (eg. 1B C r5092)
 Options are as follows with precedence C > E > U > G:
   C = Only install Clover to the drive's first partition.
   O = Use OpenCore instead of Clover.
   I = Only install OpenCore to the drive's first partition.
   E = Sets the type of the drive's first partition to EFI.
   U = Similar to E, but sets the type to Basic Data (useful for editing
   G = Format as GPT (default is MBR).
   D = Used without a drive number, toggles showing all disks.
Please select a disk or press [enter] with no options to refresh:
```

***. Using option U against a Fixed disk by mistake, can be fixed by using option E on the same disk.