



EaseUS Todo Backup

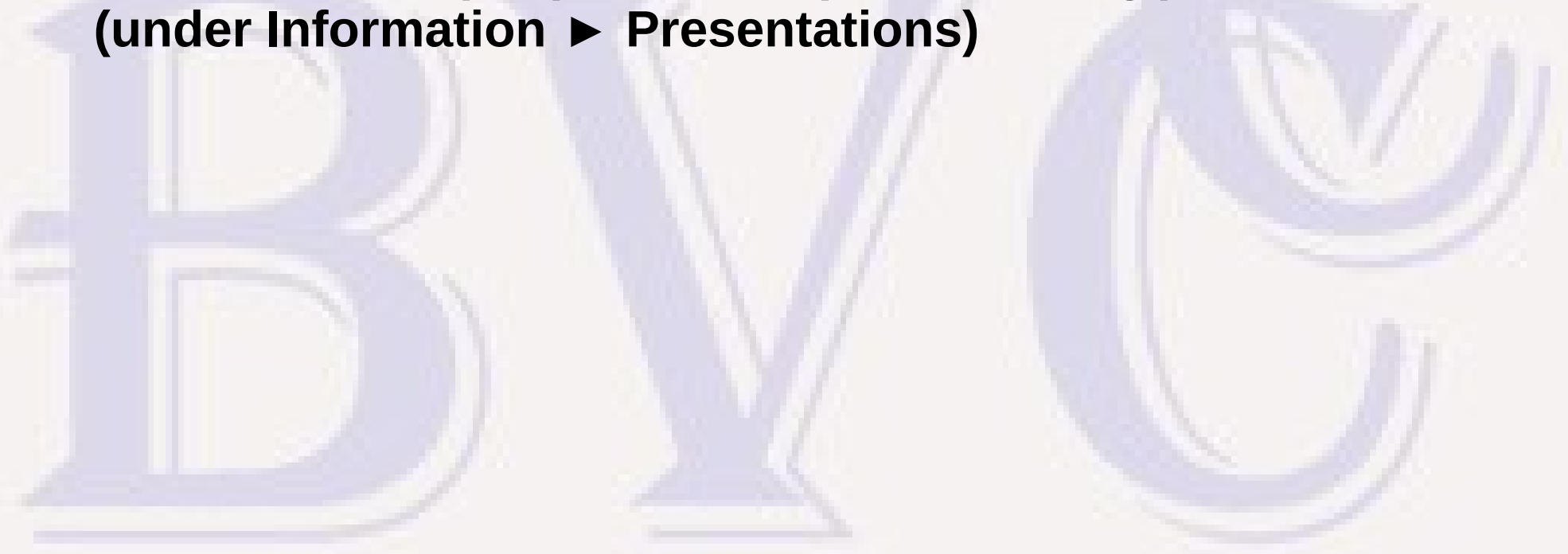
Joel Ewing, President, Bella Vista Computer Club

May 13, 2024

<https://bvcomputerclub.org>

EaseUS Todo Backup

- **These meeting presentation slides will be added to the BVCC website (<https://bvcomputerclub.org>) (under Information ► Presentations)**



EaseUS Todo Backup

- **Why try another backup tool?**
 - **Our recommendation to members in 2023 was to use Macrium Reflect Free**
 - **Free version no longer available for download or supported.**
 - **While there are still ways to install Macrium Reflect Free on a members machine if you saved the right stuff, I suspect technically each new machine would require a "new" free license which is no longer offered; so the legality is murky.**
 - **While the cost of one Macrium Reflect Home license is manageable, the licensing terms would seem to preclude even the temporary use of one "club" license for upgrading/repairing multiple member machines.**
 - **Members with multiple Windows computers would need multiple Macrium Reflect Home licenses (@ \$50/yr, or \$80 one-time cost with limited updates)**
 - **Alternatives would be nice for those with modest budgets**

EaseUS Todo Backup

- **A free version of EaseUS Todo Backup is available**
 - **From CHENGDU YIWO Tech Development Co, Ltd, Chengdu, China**
 - **Todo Backup first released in 2009**
 - **Priced versions are available with more features**
 - **Caveats?**
 - **Company has a good reputation, but if you work with highly sensitive business or national data, allowing all data on your computer to be handled by software from a company that could be subject to controls by an adversarial authoritarian government could be a concern. This may not be an issue for most of us.**

EaseUS Todo Backup Installation

- **Downloading from <https://www.easeus.com/backup-software/tb-free.html>**
 - **Look closely. It's much easier to find the download of the "free trial" of the paid version than the download of the free version.**
 - **Uses a typical download and install procedure**
 - **Expect and avoid selecting buttons to upgrade to non-free "Home" version during download and installation process.**



Windows Backup Freeware 2024

★ Trustpilot 20.8K reviews

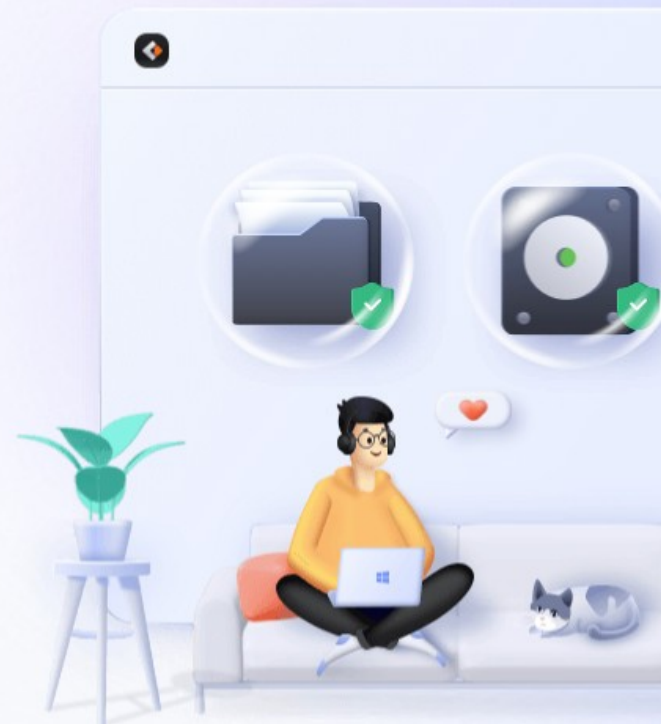
Free Backup Software - EaseUS Todo Backup

- One-click backup and instant recovery with high efficiency.
- Perform disk imaging and save backups in a safe condition.
- Over 20,000,000 users enjoy a high level of data security with EaseUS.
- **Cloud backup: 30-day free trial of 250GB cloud storage space.**



Free Download
Win 11/10/8/Vista

Upgrade to Home



Todo Backup Installation

Microsoft Edge | What's New | +

https://www.easeus.com/backup-software/tb-free.html

Limited Time Deal

00H 17M 54S 320MS

	Free	Home
Free Upgrade	✗	✓
Backup and Restore	✓	✓
Clone System	✗	✓
Outlook email backup & recovery	✗	✓
Universal Restore	✗	✓
Smart Backup-A scheduled backup is performed every half an hour if any changes are made.	✗	✓

[Download](#)

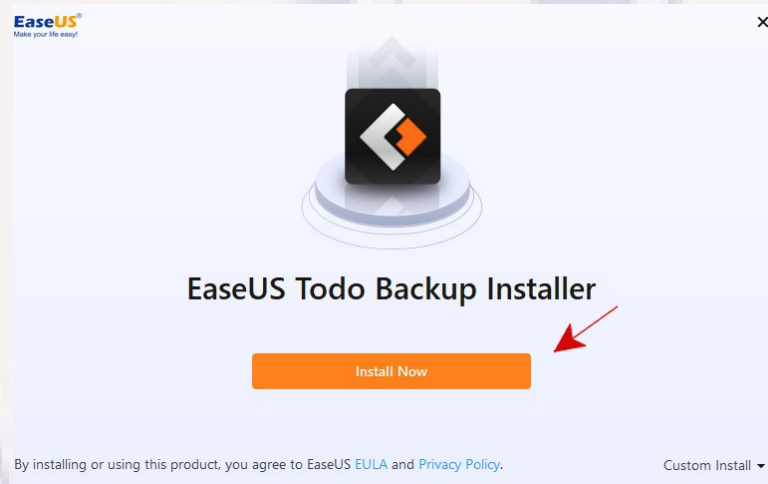
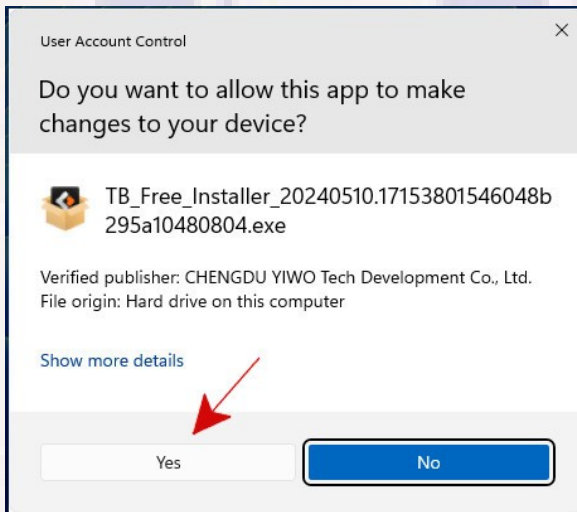
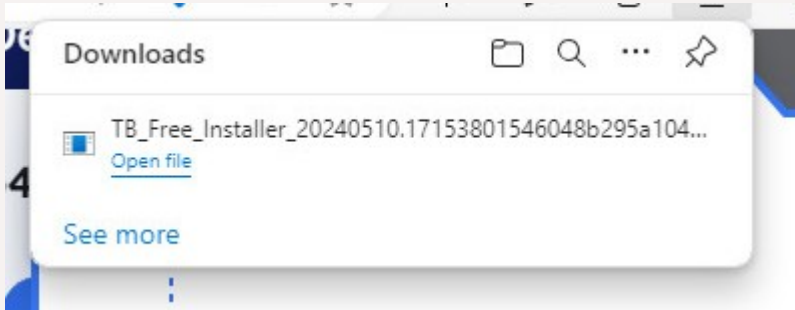
~~\$39.95~~ **\$29.95** /1-Year

~~\$59.95~~ **\$39.95** /Lifetime

Get Started

First click to download results in pop-up window where the free-version download is harder to see than the non-free Home version download.

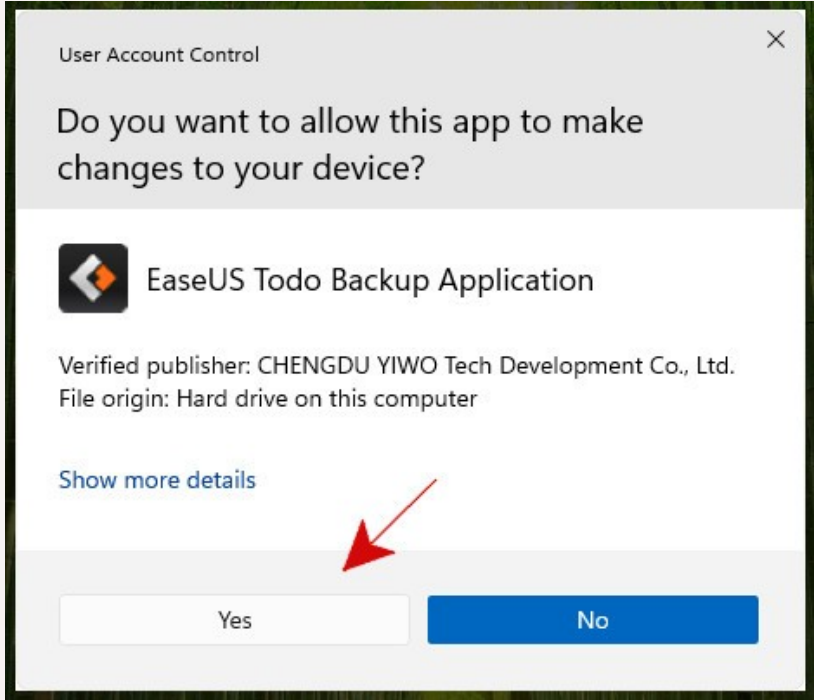
Todo Backup Installation



Takes a few minutes to install and puts application icon on desktop



Running Todo Backup



- **Starting the app, you will get a message warning that the app wants the authority to make changes to your computer.**
- **Macrium Reflect has same behavior. The hardware-level access required to determine disk partitioning info and sector-level info for image backups apparently also grants change capability.**
- **Does not mean than running the app will alter your system (unless you do a stand-alone recovery)**

Running Todo Backup

Upgrade to unlock more features

Please input a valid license

Activate

Free

Essential Backup and restore

Home
\$29.95/Year

Transfer system to different PC
Clone system, disk or partition
Backup Security Zone
Event-Triggered backup
Cloud storage is not available

Yearly

Buy Now

Home+
\$59.95/Year

Transfer system to different PC
Clone system, disk or partition
Backup Security Zone
Event-Triggered backup
Include 1TB of Cloud Storage

1TB Cloud Storage

Buy Now

- Starting the app will get a popup window inviting an upgrade to "Home" or "Home+".
- Just close the window to stay on free version.

Running Todo Backup

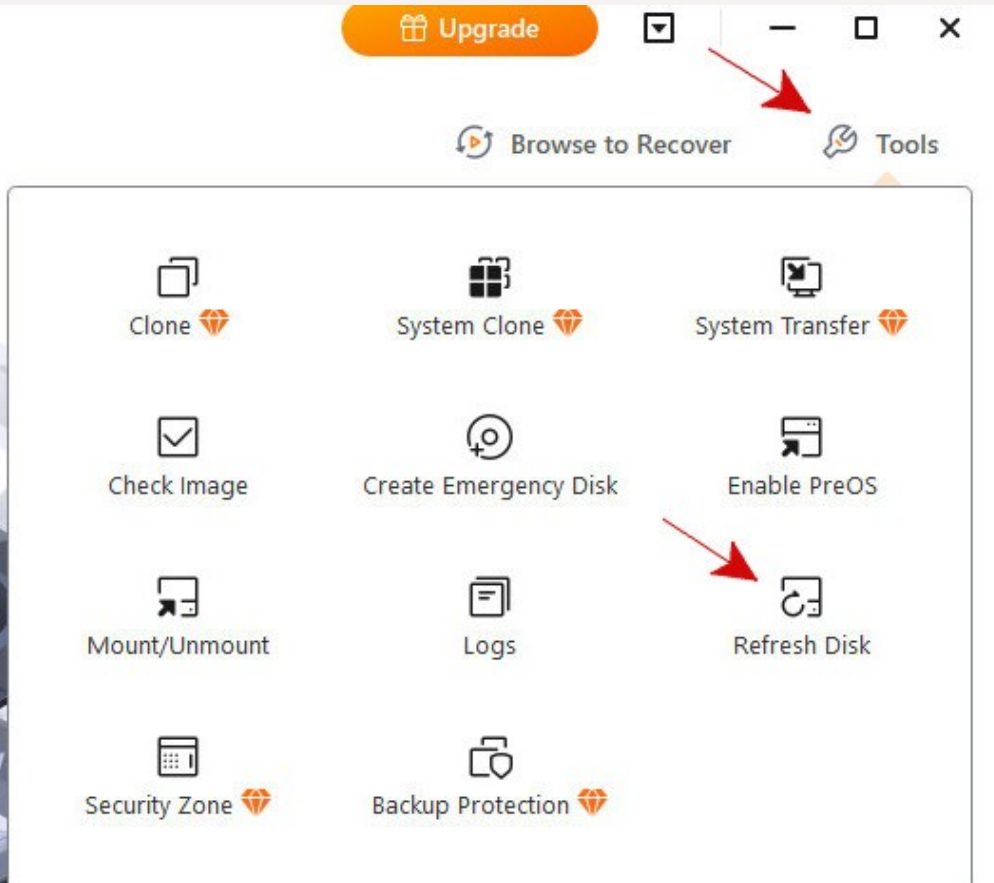


Everytime you start TB, you may get a popup window inviting you to upgrade to a paid version. Just close that window (x).

The "Log in" icon (upper left) only applies to paid versions with cloud storage. No login required to backup to local storage

Click on "Create Backup" to begin defining backup source & target.

Running Todo Backup

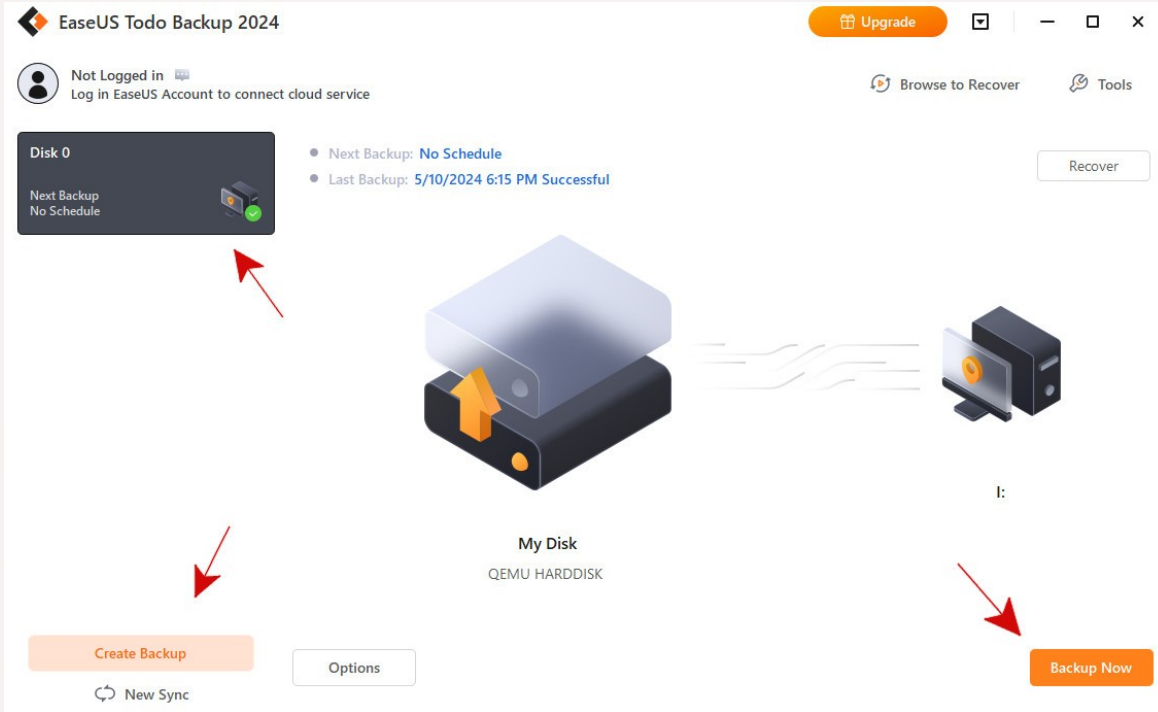


Did you remember to connect your external USB drive where your backups will be stored before starting Todo Backup?

If not, connect your USB drive now.

Once Windows has recognized the USB drive, in Todo Backup, select the menu item "Tools" and then click on "Refresh Disk" in the Tools menu so Todo Backup will see your external USB drive(s).

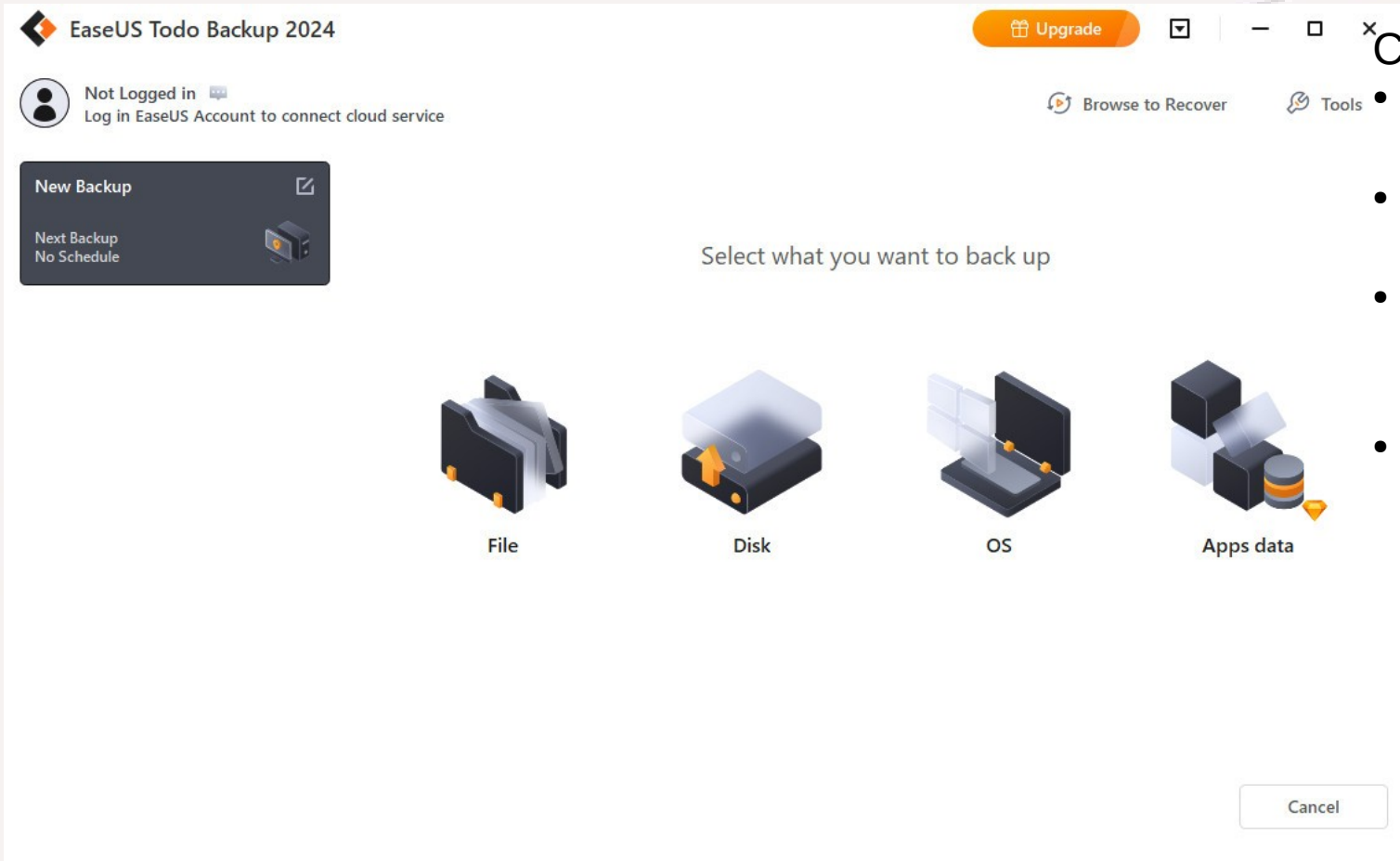
Running Todo Backup



If you have already used TB to make a backup, you will see any previous backup(s) that have been taken. My best guess is that

- You can select one of the prior backups as a pattern and use "Backup Now" to perform the same type of backup, or
- Use "Create Backup" to define a new type of backup.

Defining a New Backup



Can select

- "File" (specific files or directories),
- "Disk" (specific partitions on a local disk),
- "OS" (partitions associated with the running system), or
- "Apps data" (data associated with Outlook, Chrome, or Games)

Defining a New Backup

- **My primary interest was in making image backups**
 - **"Disk" – Can select entire disk drive (all partitions) or just selected partitions**
 - **"OS" – Appears to only select partitions associated with the running Windows system. Be sure that UEFI partition required for booting is included. Possibly "Disk" might be a safer option if uncertain.**

Defining a New "Disk" Backup

EaseUS Todo Backup 2024

Not Logged in
Log in EaseUS Account to connect cloud service

Upgrade

Browse to Recover

Tools

Disk 0

Next Backup
No Schedule

Hard disk 0 (64.00 GB, Basic, GPT)

Partition	File System	Free Space	Total Space
*: (FAT32)	FAT32	67.10 MB	100.00 MB
*: (Other)	(Other)	0.00 B	16.00 MB
C: (NTFS)	NTFS	25.65 GB	63.26 GB
*: (Other)	(Other)	0.00 B	640.00 MB

Back OK

Check "Hard disk" box for all partitions, or check box for individual partitions for a subset, Then click "OK".

Name of the dump will be based on selection, in this case "Disk 0" since all partitions on disk 0 were selected. If only some partitions were selected, the name would have been "Partitions Backup".

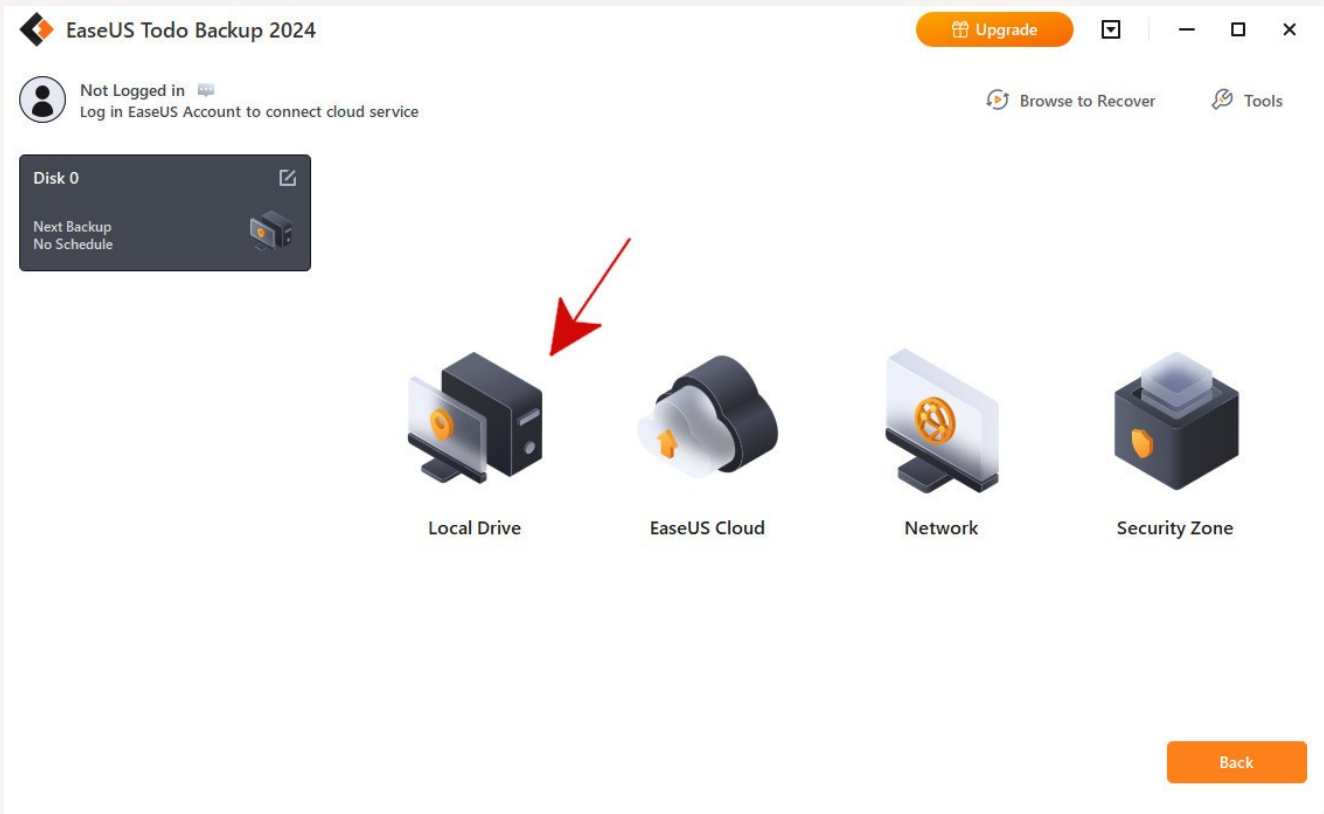
Defining Location For Backup



The default is to a folder on your C: drive – not too useful for image backups that include C:

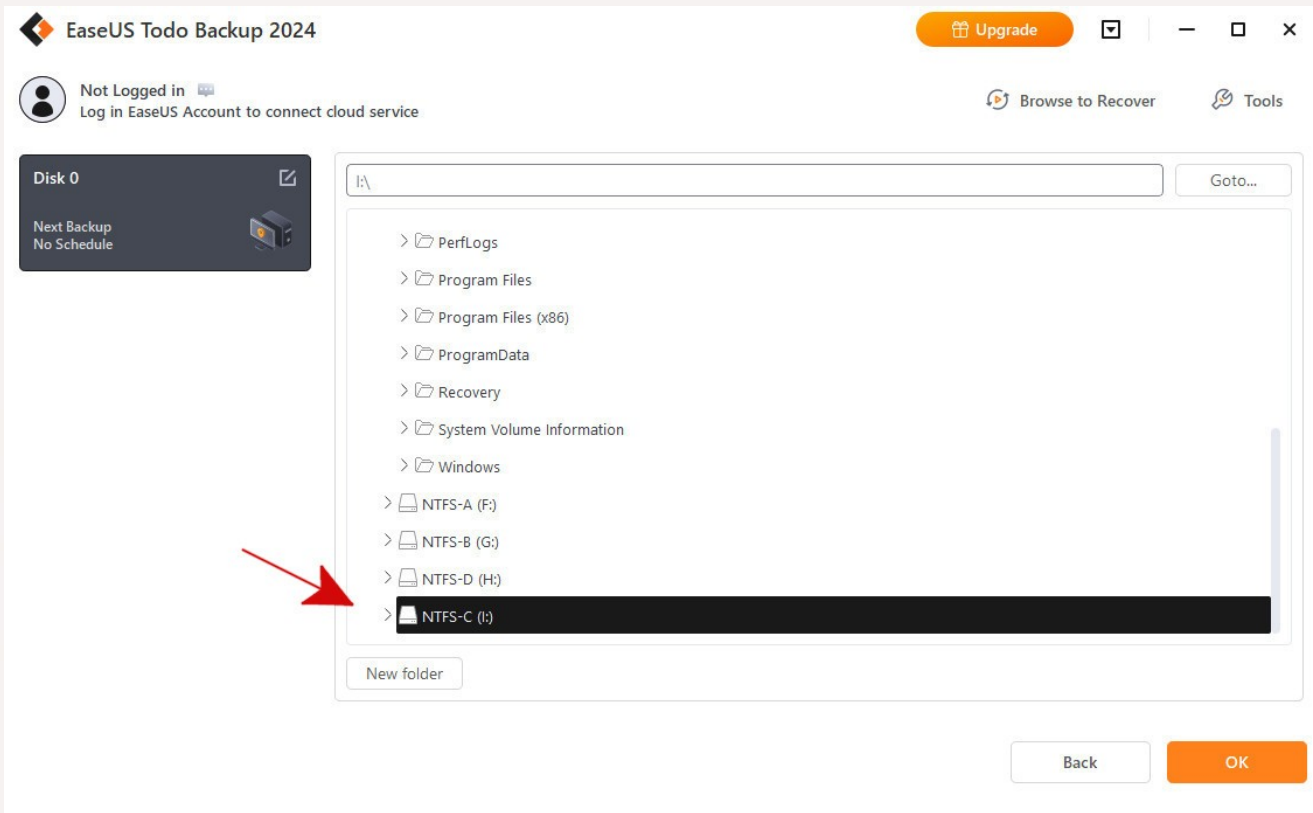
Hover over the computer image (size changes slightly) and click to get to selection.

Defining Location For Backup



Click on "Local Drive" to get to choices.

Defining Location For Backup



Browse through list of available directories and drives and select desired drive. Then click on "OK".

Performing A Backup



There are some options that will be mentioned later.

To start the backup, click on "Backup Now"

Performing A Backup

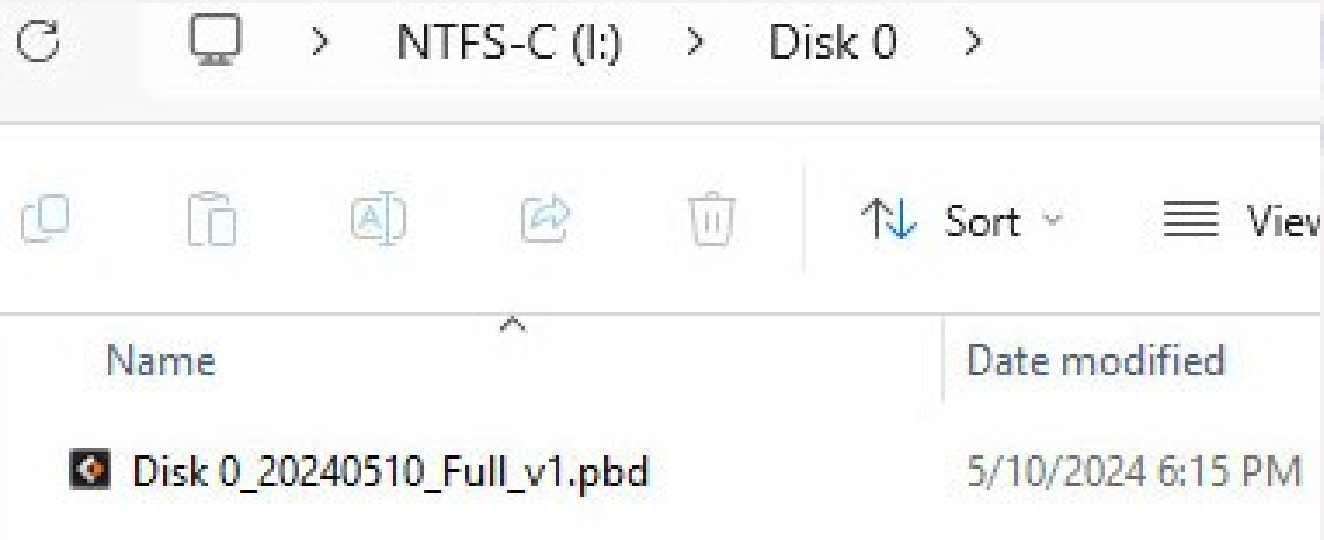
The screenshot shows the EaseUS Todo Backup 2024 application window. At the top left, it says "EaseUS Todo Backup 2024" and "Not Logged in". Below this, there's a "Log in EaseUS Account to connect cloud service" link. The main area displays a progress bar for "Disk 0" which is at 35% completion, with a remaining time of 00:04:00. A list of backup details shows: "Backing up file system on partition 2 of disk 0 (C:\)", "Backed up: 13.64 GB", "Speed: 56 MB/s", and "Remaining: 00:07:18". There are buttons for "Upgrade", "Browse to Recover", "Tools", "Speed up", and "Details". A diagram shows a "My Disk" (QEMU HARDDISK) being backed up to a drive labeled "I:" which has 98.5 GB free of 372.7 GB. At the bottom, there are buttons for "Create Backup", "Do Nothing after backup completes", and "Stop".

The backup proceeds with progress indication and estimate of remaining time.

The "Speed up" button is tempting, but tells you to upgrade to a non-free version to improve performance.

When the backup completes, the "Backed up..." progress line becomes "Last Backup <date time> Successful"

Performing A Backup



Looking at the USB drive content after the backup has completed (I:/) shows that a directory named the same as the backup ("Disk 0") was created, and under that a dated "Disk 0" .pbd file was created containing the backup.

An Important Follow-Up Step

Suggestion ×

It is recommended to create emergency disk now so that you can do recovery easier when needed.

Never ask again

Create now

Later

If you want to recover a non-functional system from a backup, you must have a bootable "emergency disk" to do that.

It can be on a USB memory stick (best, provided you can boot from a USB device), or on a DVD.

If you want to do it later (but don't put it off long!), you can use "Create emergency disk" under the Todo Backup "Tools" menu to create it at a later time.

I don't know if it will nag you again if you click "Later"; but don't forget this step.

Backup Options



There are some options that will be mentioned later.

To start the backup, click on "Backup Now"

Backup Options

- **The compression can be changed to trade faster compression time for a larger backup file.**
- **Backup encryption can be enabled and a password specified**
 - **Probably a really good idea both for security (since a small external drive can be lost or stolen) and to avoid needing to do a secure erase of the USB drive when it is retired from use.**
 - **A sufficiently good key should be used, and you must save it securely and not lose it, or you won't be able to use your backup.**

Restoring From Todo Backup

- **Must have bootable TB Emergency Recovery media (USB memory stick or DVD)**
- **Created a test Virtual Machine for Windows 11 with a slightly larger virtual drive (90GB vs 64GB original, to prove could be used to upgrade to a larger HD or SSD)**
- **Connected USB device with Emergency Recovery and USB device with backup file to VM.**
- **Set for boot from Emergency Recovery USB.**

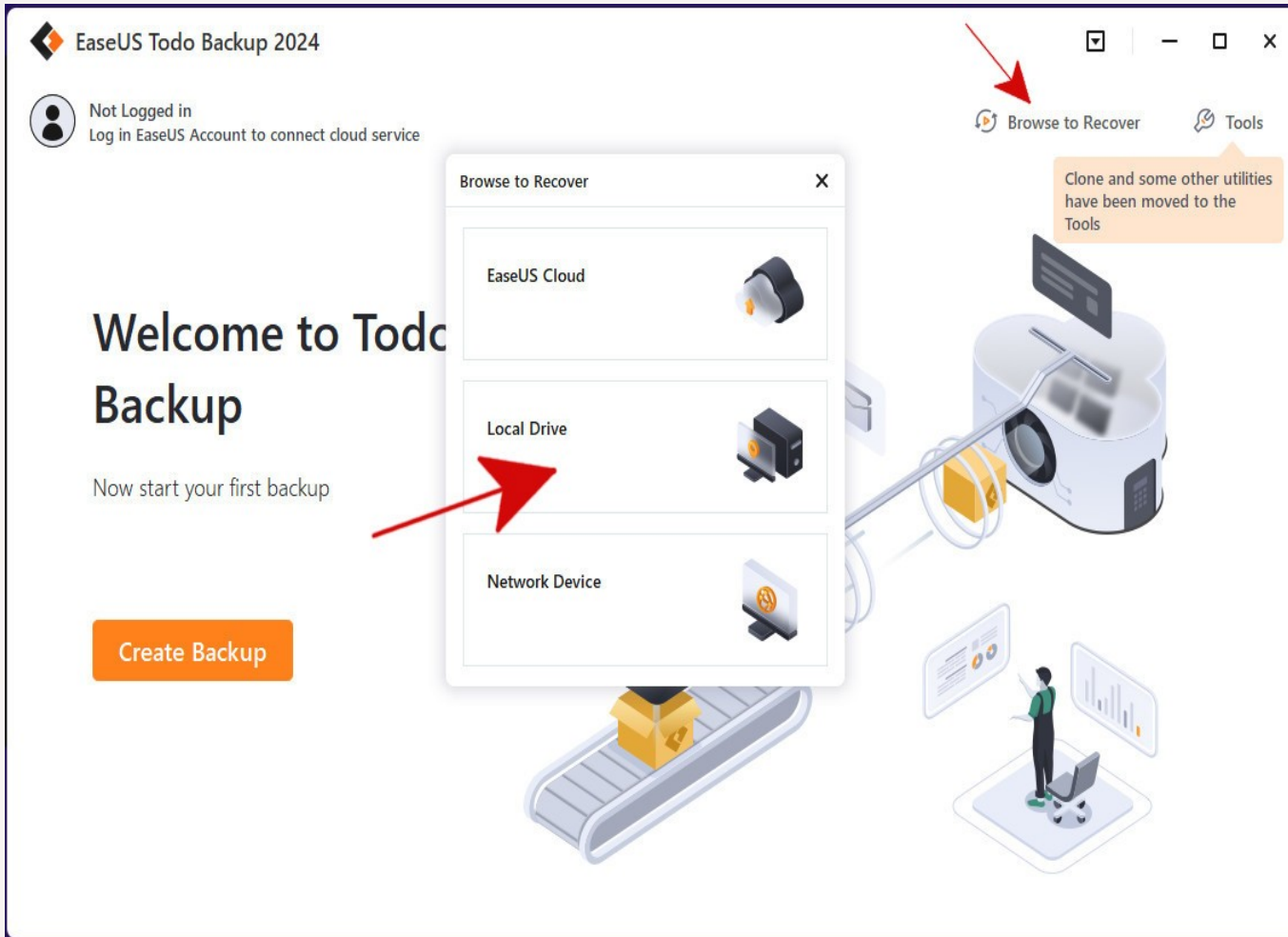
Restoring From Todo Backup



Initial boot screen

A "loading progress" bar at the bottom of the gray window

Restoring From Todo Backup

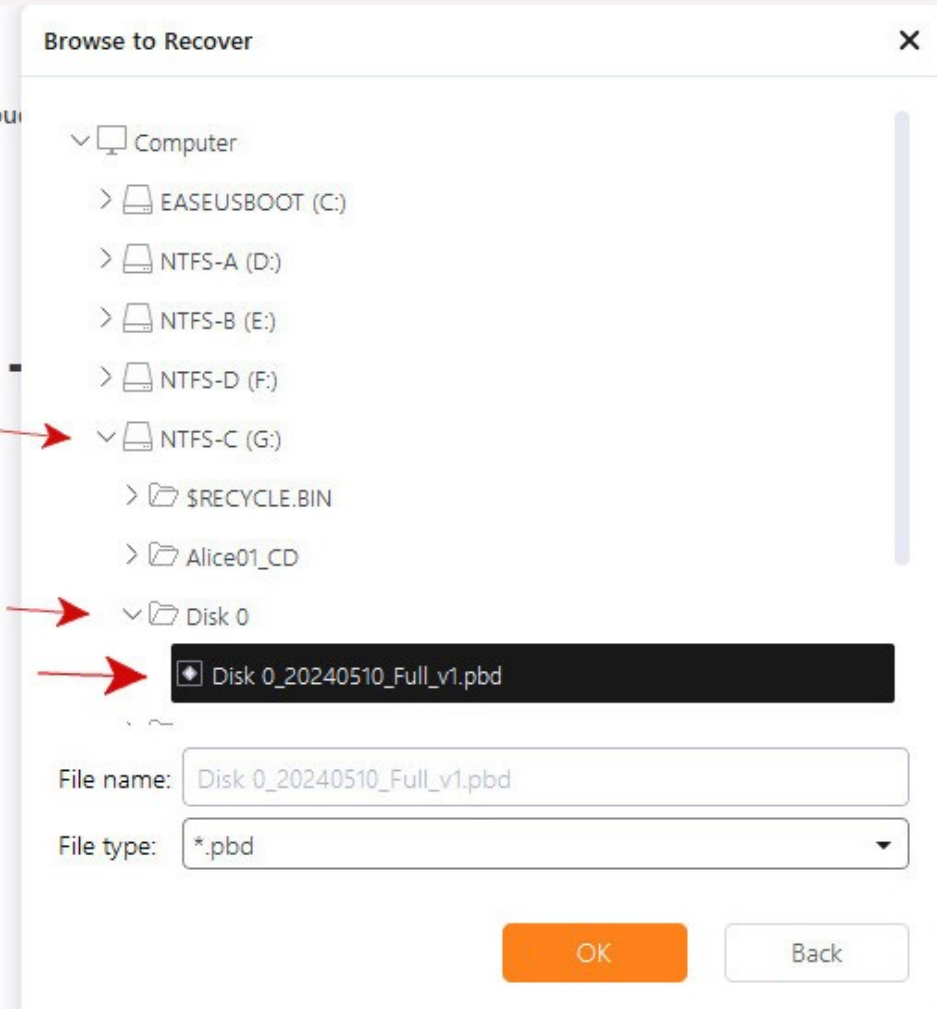


Click on "Browse to Recover"

Click on "Local Drive"

If USB drive containing the backup was not connected at the time the Todo recovery app starts, there may be a "Disk refresh" option under "Tools" to make the drive visible to the app.

Restoring From Todo Backup



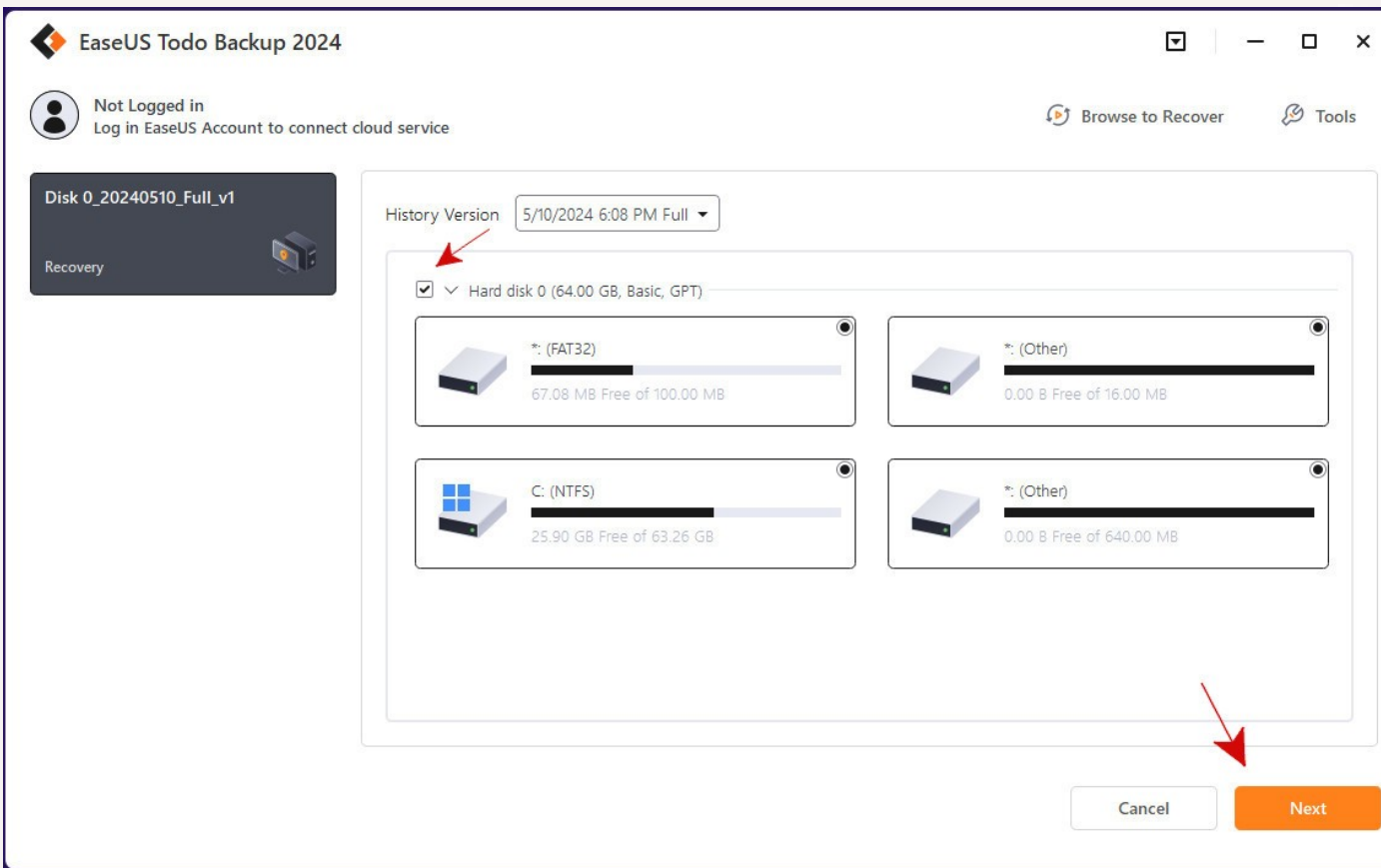
Browse to find correct USB drive (in this example "NTFS-C"). Go by the drive label, not the drive letter.

Browse to correct directory on that drive ("Disk 0" in this case)

Select correct .pbd backup file (by date and version).

Click on "OK"

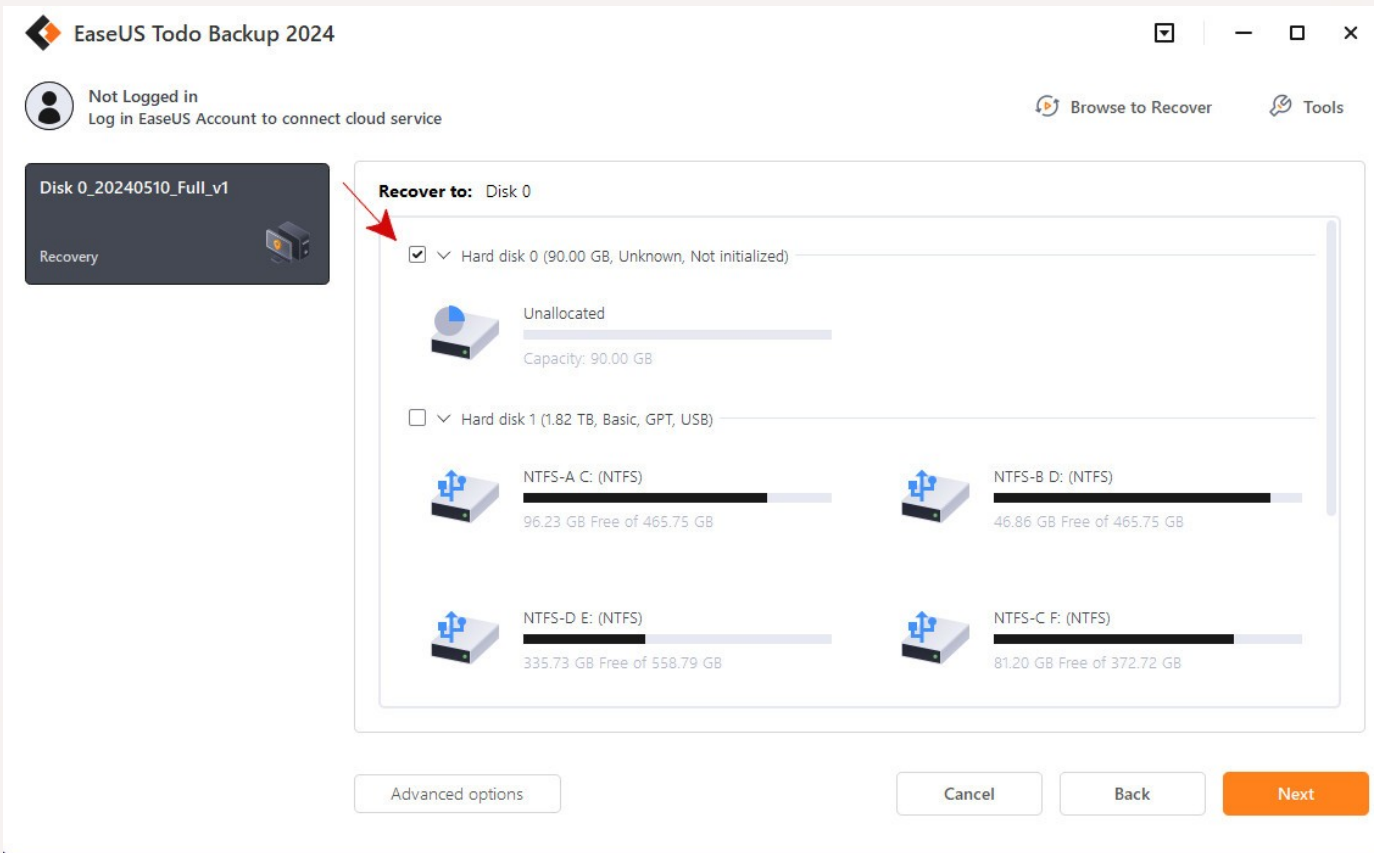
Restoring From Todo Backup



Click on the "Hard disk 0" box to restore all of the Hard disk 0 backup partitions.

Click Next

Restoring From Todo Backup



Select Target disk for restore
(Disk 0, 90GB in this case)/

In this example, the target disk
is a "new" uninitialized disk
with no allocated partitions.

Click Next

Restoring From Todo Backup

EaseUS Todo Backup 2024

Not Logged in
Log in EaseUS Account to connect cloud service

Browse to Recover Tools

Disk 0_20240510_Full_v1
Recovery

Source disk layout

Partition	Label	Format	Size
1	(*)	NTFS	100 M...
2	(*)	NTFS	16 MB...
3	(C:)	NTFS	63.26 GB

Target disk layout after copy Autofit the disk

Partition	Label	Format	Size
1	(A)	NTFS	100 M...
2	(*)	NTFS	16 M...
3	(B:)	NTFS	89.26 GB

Cancel Back Proceed

Verify Source and Target are as intended.

Note the default "Autofit the disk" option on target disk

Click "Proceed"

Restoring From Todo Backup

Disk 0_20240510_Full_v1

Recovering...
43% 00:00:34



- Copy Source Partition
- Recovered: 2.39 GB Speed: 126 MB/s Remaining: 00:00:40

**Shows progress as the recovery proceeds.
When recovery completes, click on "Finish"**

Disk 0_20240510_Full_v1

Recovery completed



- Recovery completed
- Total used time: 00:04:26

Restoring From Todo Backup

- **Close Todo Backup (no other apps available) and power off the machine**
- **Disconnect USB devices and reset to boot from Disk 0, and reboot.**

Restored System

Verified that Windows sees the expanded-size C: drive.

The screenshot shows a Windows 11 desktop with a scenic background image of a town built on a cliffside. A 'Disk Management' window is open, displaying the following information:

Volume	Layout	Type	File System	Status	Capacity	Free Spa...	% Free
(C:)	Simple	Basic	NTFS	Healthy (B...	89.26 GB	57.36 GB	64 %
(Disk 0 partition 1)	Simple	Basic		Healthy (E...	100 MB	100 MB	100 %

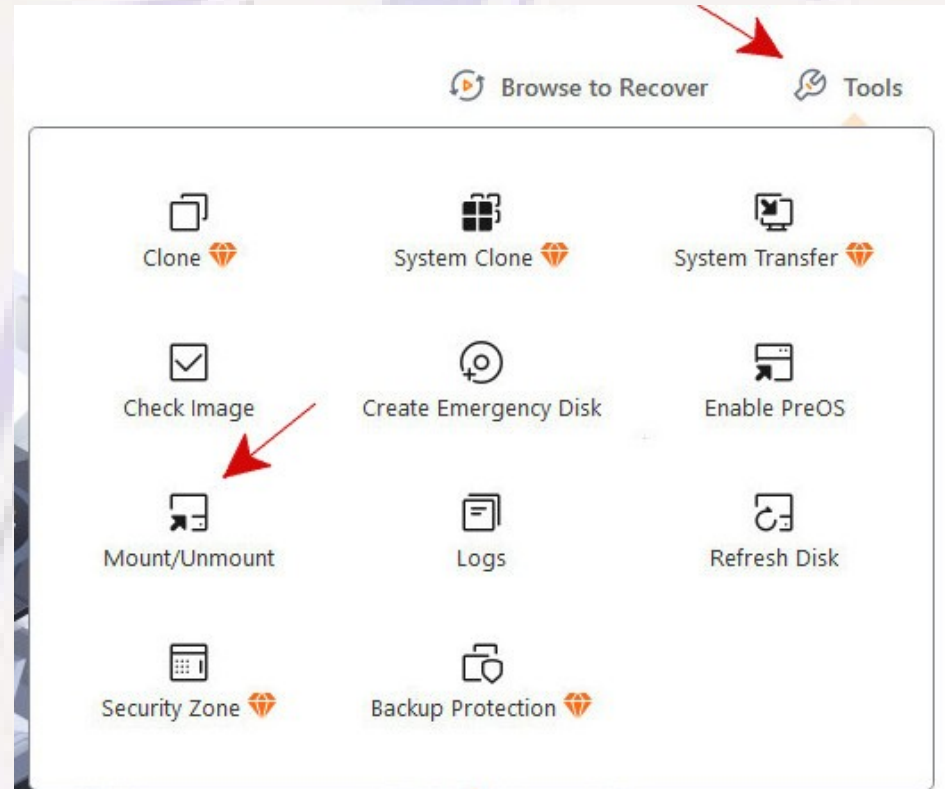
Disk	Layout	Type	File System	Status	Capacity	Free Spa...	% Free
Disk 0							
Basic							
89.98 GB	100 MB	(C:)	89.26 GB NTFS				
Online	Healthy (EFI System P...	Healthy (Boot, Page File, Crash Dump, Basic Data Partition)				640 MB	

Legend: ■ Unallocated ■ Primary partition

Taskbar: Search, 76°, 1:34 PM, 5/11/2024

Miscellaneous Comments

- Like Macrium Reflect it is possible to mount a backup file and access individual directories and files in an image backup. See "Mount/Unmount" function under the "Tools" menu. You can select a backup file and "mount" it to assign a drive letter that can be accessed using the Files Manager.
- When finished looking at content in the backup file, use the "Mounted" tab under "Tools" "Mount/Unmount" function to see the mounted drive and unmount the backup.



Miscellaneous Comments

- **I didn't do any timing of image backups between Macrium Reflect and Todo Backup on identical systems. My subjective feeling was that backups on Todo Backup were slower, but not enough data to be certain.**
- **The free version of Todo Backup doesn't support direct cloning, but with two data moves (backup + restore) and an intermediate drive you can get the same end result.**

Miscellaneous Comments

- **If you decide you want additional features only available on the non-free versions, then both EaseUS and Macrium Reflect have special deals for the first year. When comparing prices be sure to take into account the long-term annual cost.**
- **Macrium Reflect has reduced rates for a group of 4 licenses, and also has a lifetime-usage license option at a higher initial cost that is cheaper than an annual license if you plan on using the product for several years**

Questions?

BVS