

Laporan Progress Minggu Ke-2

Benchmarking Performa Sistem Operasi (Linux Vs Windows)

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Laporan Ini Dibuat Untuk Memenuhi Tugas Proyek Mata Kuliah : System Operasi

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PRODI TEKNIK INFORMATIKA

FAKULTAS TEKNIK & TEKNOLOGI KEMARITIMAN

UNIVERSITAS MARITIMIN RAJA ALI HAJI

2025

1. Download Fio X64 .Msi

Releases · axboe/fio

Contributors

Assets

fio-3.41

What's Changed

fio-3.40

Recent download history

fio-3.41-x64.msi

2. Di Kanan Atas Klik 2 Kali Untuk Install

Releases · axboe/fio

Contributors

Assets

fio-3.41

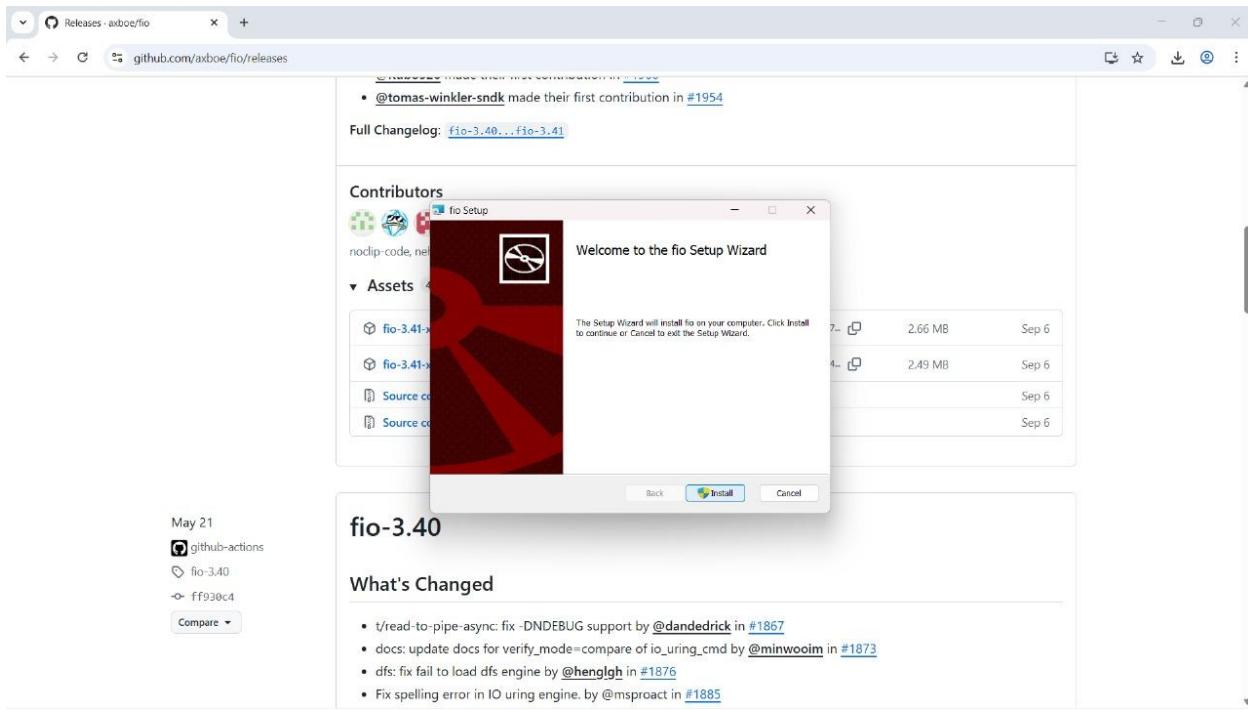
What's Changed

fio-3.40

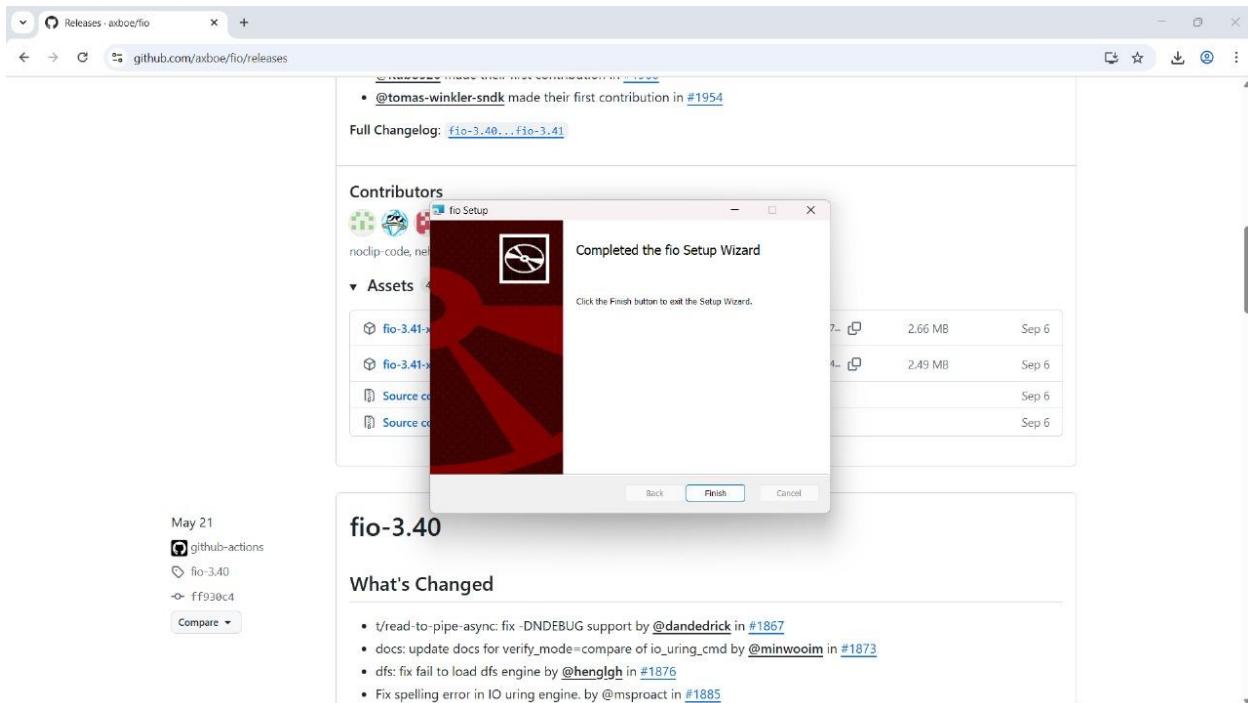
Recent download history

fio-3.41-x64.msi

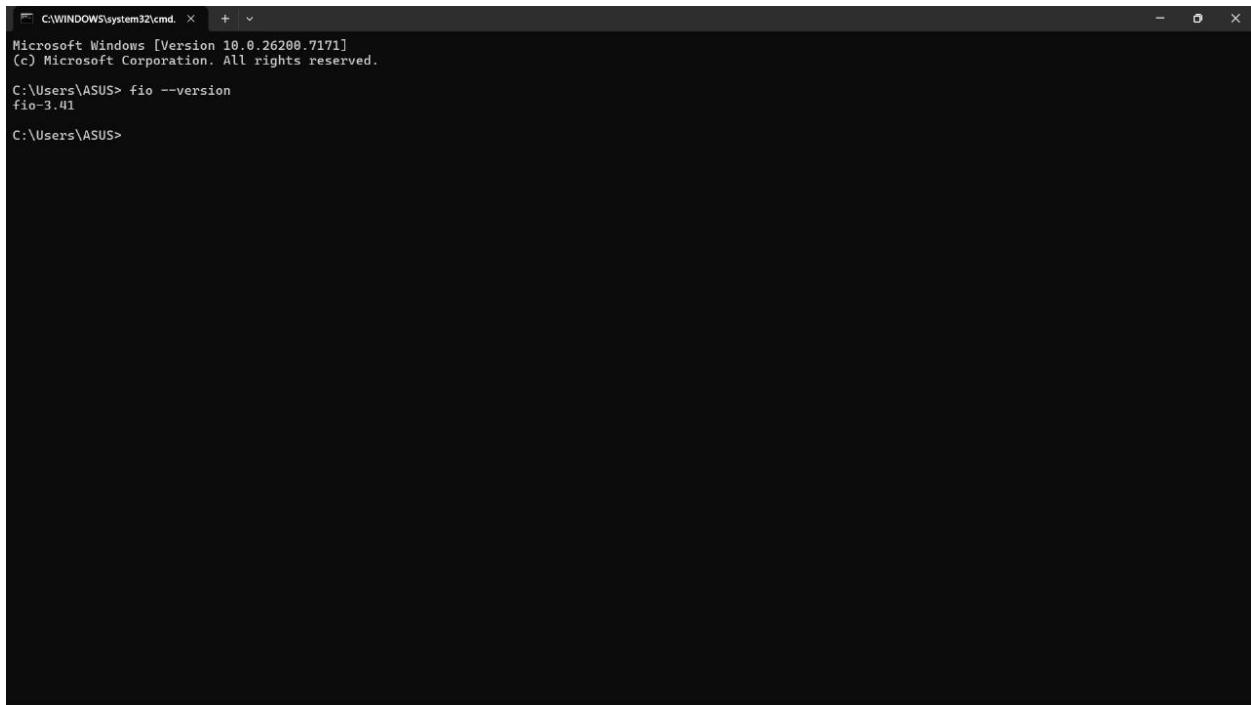
3. Klik Install



4. Klik Finish



5. Fio –Version Fio-3.42



```
C:\WINDOWS\system32\cmd. x + v
Microsoft Windows [Version 10.0.26200.7171]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ASUS> fio --version
fio-3.41

C:\Users\ASUS>
```

6. Name Os

Item	Value
OS Name	Microsoft Windows 11 Home Single Language

7. Ram

Installed Physical Memory (RA...	16.0 GB
Total Physical Memory	15.3 GB
Available Physical Memory	5.90 GB
Total Virtual Memory	21.3 GB

8. Processor Cpu

System Information	
File	Edit
View	Help
System Summary	
Hardware Resources	
Components	
Software Environment	
Item	Value
OS Name	Microsoft Windows 11 Home Single Language
Version	10.0.26200 Build 26200
Other OS Description	Not Available
OS Manufacturer	Microsoft Corporation
System Name	AZIZUL
System Manufacturer	ASUSTeK COMPUTER INC.
System Model	Vivobook Go E1404FA_E1404FA
System Type	x64-based PC
System SKU	
Processor	AMD Ryzen 5 7520U with Radeon Graphics, 2801 Mhz, 4 Core(s), 8 Logical ...
BIOS Version/Date	American Megatrends International, LLC. E1404FA.306, 6/15/2023
SMBIOS Version	3.5
Embedded Controller Version	255.255
BIOS Mode	UEFI
BaseBoard Manufacturer	ASUSTeK COMPUTER INC.
BaseBoard Product	E1404FA
BaseBoard Version	1.0
Platform Role	Mobile
Secure Boot State	On
PCR7 Configuration	Elevation Required to View
Window Directory	C:\WINDOWS
System Directory	C:\WINDOWS\system32
Boot Device	\Device\HarddiskVolume1
Locale	United States
Hardware Abstraction Layer	Version = "10.0.26100.1"
User Name	AZIZULVASUS
Time Zone	SE Asia Standard Time
Installed Physical Memory (RA...)	16.0 GB
Total Physical Memory	15.3 GB
Available Physical Memory	5.90 GB
Total Virtual Memory	21.3 GB
Available Virtual Memory	7.50 GB
Page File Space	6.00 GB
Page File	C:\pagefile.sys

9. Spesifikasi Graphics Card

System Information	
File	Edit
View	Help
System Summary	
Hardware Resources	
Components	
Multimedia	
CD-ROM	
Sound Device	
Display	
Infrared	
Input	
Modem	
Network	
Ports	
Storage	
Drives	
Disk	
SCSI	
IDE	
Printing	
Problem Devices	
USB	
Software Environment	
Item	Value
Description	Disk drive
Manufacturer	(Standard disk drives)
Model	SAMSUNG MZVL4512HBLU-00BTW
Bytes/Sector	512
Media Loaded	Yes
Media Type	Fixed hard disk
Partitions	5
SCSI Bus	0
SCSI Logical Unit	0
SCSI Port	0
SCSI Target ID	0
Sectors/Track	63
Size	476.94 GB (512,105,932,800 bytes)
Total Cylinders	62,260
Total Sectors	1,000,206,900
Total Tracks	15,876,300
Tracks/Cylinder	255
Partition	Disk #0, Partition #0
Partition Size	260.00 MB (272,629,760 bytes)
Partition Starting Offset	1,048,576 bytes
Partition	Disk #0, Partition #1
Partition Size	231.44 GB (246,510,750,208 bytes)
Partition Starting Offset	290,455,552 bytes
Partition	Disk #0, Partition #2
Partition Size	244.14 GB (262,142,951,424 bytes)
Partition Starting Offset	248,801,918,976 bytes
Partition	Disk #0, Partition #3
Partition Size	850.00 MB (891,289,600 bytes)
Partition Starting Offset	510,945,918,976 bytes
Partition	Disk #0, Partition #4
Partition Size	260.00 MB (272,629,760 bytes)
Partition Starting Offset	511,837,208,576 bytes

10. Disk Management Layout

```
akbarrzk@fedora:~$ sudo dnf install sysbench
[sudo] password for akbarrzk:
Updating and loading repositories:
Repositories loaded.

Package
Installing:
  sysbench
Installing dependencies:
  libpq

Transaction Summary:
  Installing:           2 packages

total size of inbound packages is 444 KiB. Need to download 444 KiB.
After this operation, 2 MiB extra will be used (install 2 MiB, remove 0 B).
Is this ok [y/N]: y
[1/2] sysbench-0:1.0.20-19.fc43.x86_64
[2/2] libpq-0:18.0-3.fc43.x86_64

-----
[2/2] Total
Running transaction
[1/4] Verify package files
[2/4] Prepare transaction
[3/4] Installing libpq-0:18.0-3.fc43.x86_64
[4/4] Installing sysbench-0:1.0.20-19.fc43.x86_64
Complete!
akbarrzk@fedora:~$ sysbench --version
sysbench 1.0.20
akbarrzk@fedora:~$
```

11. Overview Kapasitas Disk

```
akbarrzk@fedora:~$ sudo dnf install fio
Updating and loading repositories:
Repositories loaded.

Package
Installing:
  fio
Installing weak dependencies:
  fio-engine-dev-dax
  fio-engine-libaio
  fio-engine-liblio
  fio-engine-libpq
  fio-engine-rbd
  fio-engine-rados
  fio-engine-rdma
  fio-engine-rDMA
fio
x86_64          3.40-2.fc43

Transaction Summary:
  Installing:         9 packages

total size of inbound packages is 7 MiB. Need to download 7 MiB.
After this operation, 9 MiB extra will be used (install 7 MiB, remove 0 B).
Is this ok [y/N]: y
[1/9] fio-engine-http-0:3.40-2.fc43.x86_64
[2/9] fio-engine-libaio-0:3.40-2.fc43.x86_64
[3/9] fio-engine-liblio-0:3.40-2.fc43.x86_64
>>> Copt error (0x8): Timeout was reached for https://ftp.yz.yanagata-u.ac.jp/pub/linux/fedora-project/fedora/linux/releases/43/Everything/x86_64/os/Packages/fio-engine-liblio-3.40-2.fc43.x86_64.rpm [Operation too slow. Less than 1000 bytes/s transferred the last 30 seconds]
[4/9] fio-engine-libpq-0:3.40-2.fc43.x86_64
[5/9] fio-engine-nbd-0:3.40-2.fc43.x86_64
>>> Copt error (0x8): Timeout was reached for https://ftp.yz.yanagata-u.ac.jp/pub/linux/fedora-project/fedora/linux/releases/43/Everything/x86_64/os/Packages/fio-engine-libpq-3.40-2.fc43.x86_64.rpm [Operation too slow. Less than 1000 bytes/s transferred the last 30 seconds]
[6/9] fio-engine-rados-0:3.40-2.fc43.x86_64
[7/9] fio-engine-rDMA-0:3.40-2.fc43.x86_64
[8/9] fio-engine-rdm-0:3.40-2.fc43.x86_64
[9/9] fio-0:3.40-2.fc43.x86_64

[9/9] Total
Running transaction
[ 1/1] Verify package files
[ 2/1] Prepare transaction
[ 3/1] Installing fio-0:3.40-2.fc43.x86_64
[ 4/1] Installing fio-engine-dev-dax-0:3.40-2.fc43.x86_64
[ 5/1] Installing fio-engine-http-0:3.40-2.fc43.x86_64
[ 6/1] Installing fio-engine-libaio-0:3.40-2.fc43.x86_64
[ 7/1] Installing fio-engine-liblio-0:3.40-2.fc43.x86_64
[ 8/1] Installing fio-engine-libpq-0:3.40-2.fc43.x86_64
[ 9/1] Installing fio-engine-rados-0:3.40-2.fc43.x86_64
[10/1] Installing fio-engine-rDMA-0:3.40-2.fc43.x86_64
[11/1] Installing fio-engine-rdm-0:3.40-2.fc43.x86_64
Complete!
akbarrzk@fedora:~$ fio --version
fio 3.40
akbarrzk@fedora:~$
```

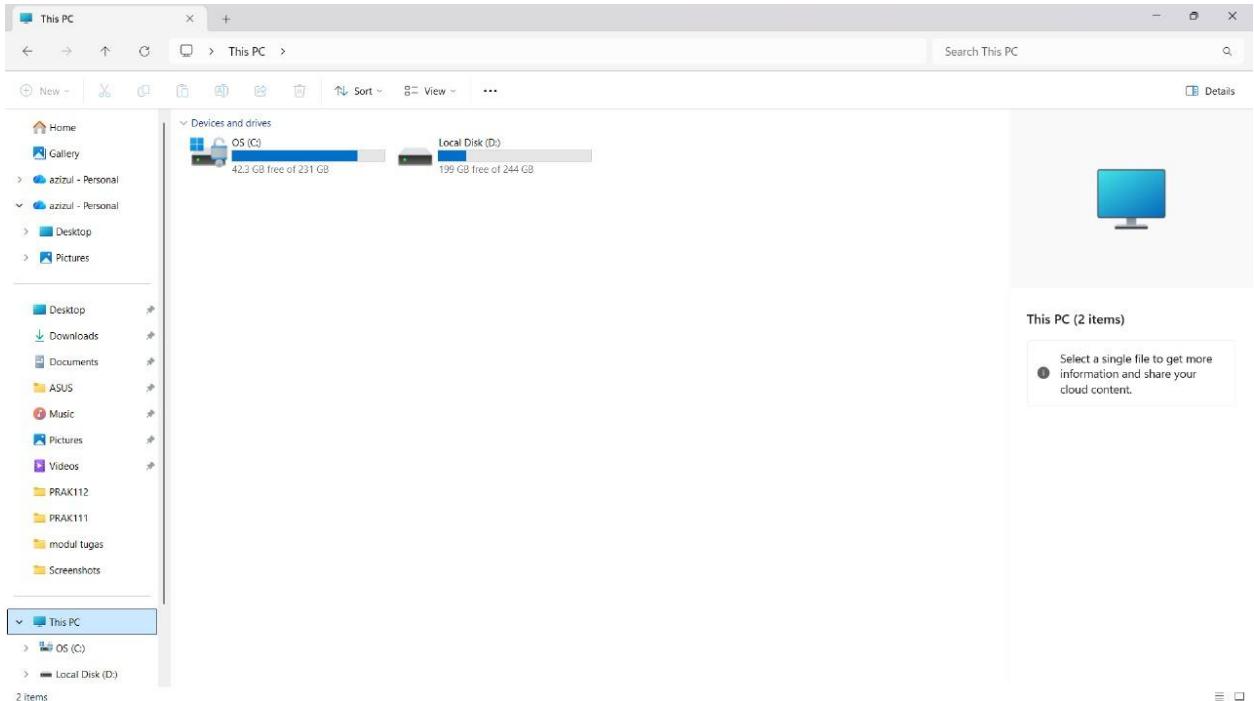
12. Informasi Motherboard

```
akbarrz@fedora:~$ sudo dnf install stress-ng
Updating and loading repositories...
Repositories loaded.
Package          Arch    Version     Repository      Size
installing:
stress-ng        x86_64  0.19.06-1.fc43   updates       19.0 M
Installing dependencies:
Judy             x86_64  1.0.5-39.fc43   fedora       364.6 K
Transaction Summary:
Installing:      2 packages

Total size of inbound packages is 4 MiB. Need to download 4 MiB.
After this operation, 19 MiB extra will be used (install 19 MiB, remove 0 B).
Is this ok [y/N]: y
[1/2] Judy-0.1.0.5-39.fc43.x86_64           0% | 0.0  B/s | -1.0  B | ? 
[2/2] stress-ng-0.19.06-1.fc43.x86_64       0% | 0.0  B/s | -1.0  B | ? 
[2/2] Total                           ??% | -100.0  B | -2.0  B | 0m00s
Failed to download packages
Librepo error: Curl error (6): Could not resolve hostname for https://mirrors.fedoraproject.org/metalink?repo=updates-released-f43&arch=x86_64 [Could not resolve host: mirrors.fedoraproject.org]
akbarrz@fedora:~$ sudo dnf install stress-ng
Updating and loading repositories...
Repositories loaded.
Package          Arch    Version     Repository      Size
installing:
stress-ng        x86_64  0.19.06-1.fc43   updates       19.0 M
Installing dependencies:
Judy             x86_64  1.0.5-39.fc43   fedora       364.6 K
Transaction Summary:
Installing:      2 packages

Total size of inbound packages is 4 MiB. Need to download 4 MiB.
After this operation, 19 MiB extra will be used (install 19 MiB, remove 0 B).
Is this ok [y/N]: y
[1/2] Judy-0.1.0.5-39.fc43.x86_64           100% | 112.7 Kib/s | 136.8 Kib | 0m01s
[2/2] stress-ng-0.19.06-1.fc43.x86_64       100% | 9.8 Kib/s | 3.8 MiB | 0m35s
[2/2] Total                           100% | 10.1 Kib/s | 3.9 MiB | 0m36s
Running transaction
[1/4] Verifying package files
[2/4] Preparing transaction
[3/4] Installing Judy-0.1.0.5-39.fc43.x86_64
[4/4] Installing stress-ng-0.19.06-1.fc43.x86_64
Complete!
akbarrz@fedora:~$ stress-ng --version
bash: stress-ng: command not found..
akbarrz@fedora:~$ stressng --version
stress-ng, version 0.19.06 (gcc 15.2.1, x86_64 Linux 6.17.8-309.fc43.x86_64) ████
akbarrz@fedora:~$
```

13. Tampilan This PC



14. Detail Drive C: (Os Drive)

System Information		
File	Edit	View
System Summary		
Hardware Resources		
Components		
Multimedia		
CD-ROM		
Sound Device		
Display		
Infrared		
Input		
Modem		
Network		
Ports		
Storage		
Drives		
Disks		
SCSI		
IDE		
Printing		
Problem Devices		
USB		
Software Environment		

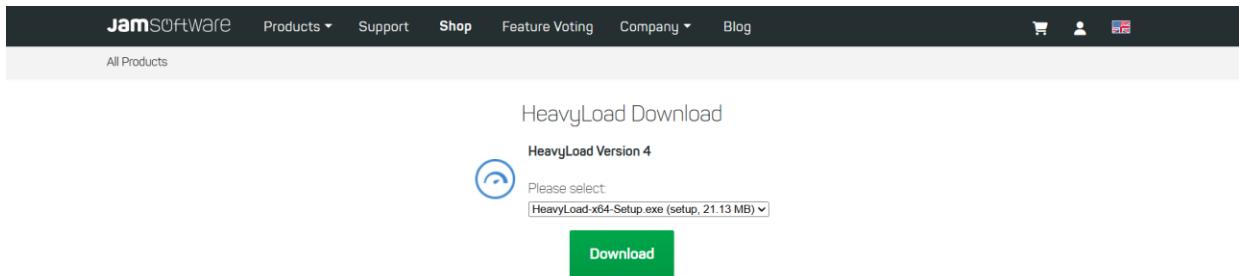
15. Detail Drive D: (Storage Drive)

System Information		
File	Edit	View
System Summary		
Hardware Resources		
Components		
Multimedia		
CD-ROM		
Sound Device		
Display		
Infrared		
Input		
Modem		
Network		
Ports		
Storage		
Printing		
Problem Devices		
USB		
Software Environment		

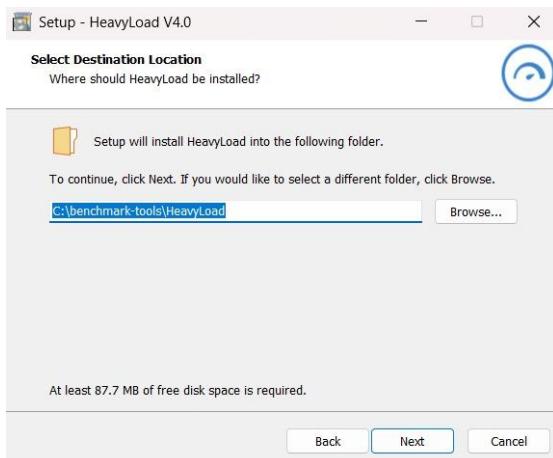
16. Free Disk Space Information

```
akbarz@fedora:~$ sudo dnf install glmark2 -y
[sudo] password for akbarz:
Updating repositories...
Repository repositories loaded.
Package Transaction Summary:
  Installing: 1 package
  Installing dependencies: 2 packages
Total size of inbound packages is 8 MiB. Need to download 8 MiB.
After this operation, 14 MiB extra will be used (install 14 MiB, remove 0 B).
[1/2] glmark2-0:2023.01*20250221gitcebbb63-2.fc43.x86_64
[2/2] glmark2-common-0:2023.01*20250221gitcebbb63-2.fc43.noarch
55% [http://mirror.centos.org/centos/8/Everything/x86_64/os/Packages/glmark2-common-2023.01*20250221gitcebbb63-2.fc43.noarch] [http://mirror.centos.org/centos/8/Everything/x86_64/os/Packages/glmark2-0:2023.01*20250221gitcebbb63-2.fc43.x86_64]
[2/2] Total
Running transaction
[1/4] Preparing transaction files
[2/4] Preparing transaction
[3/4] Installing glmark2-0:2023.01*20250221gitcebbb63-2.fc43.x86_64
[4/4] Installing glmark2-common-0:2023.01*20250221gitcebbb63-2.fc43.noarch
Complete!
akbarz@fedora:~$ glmark2
```

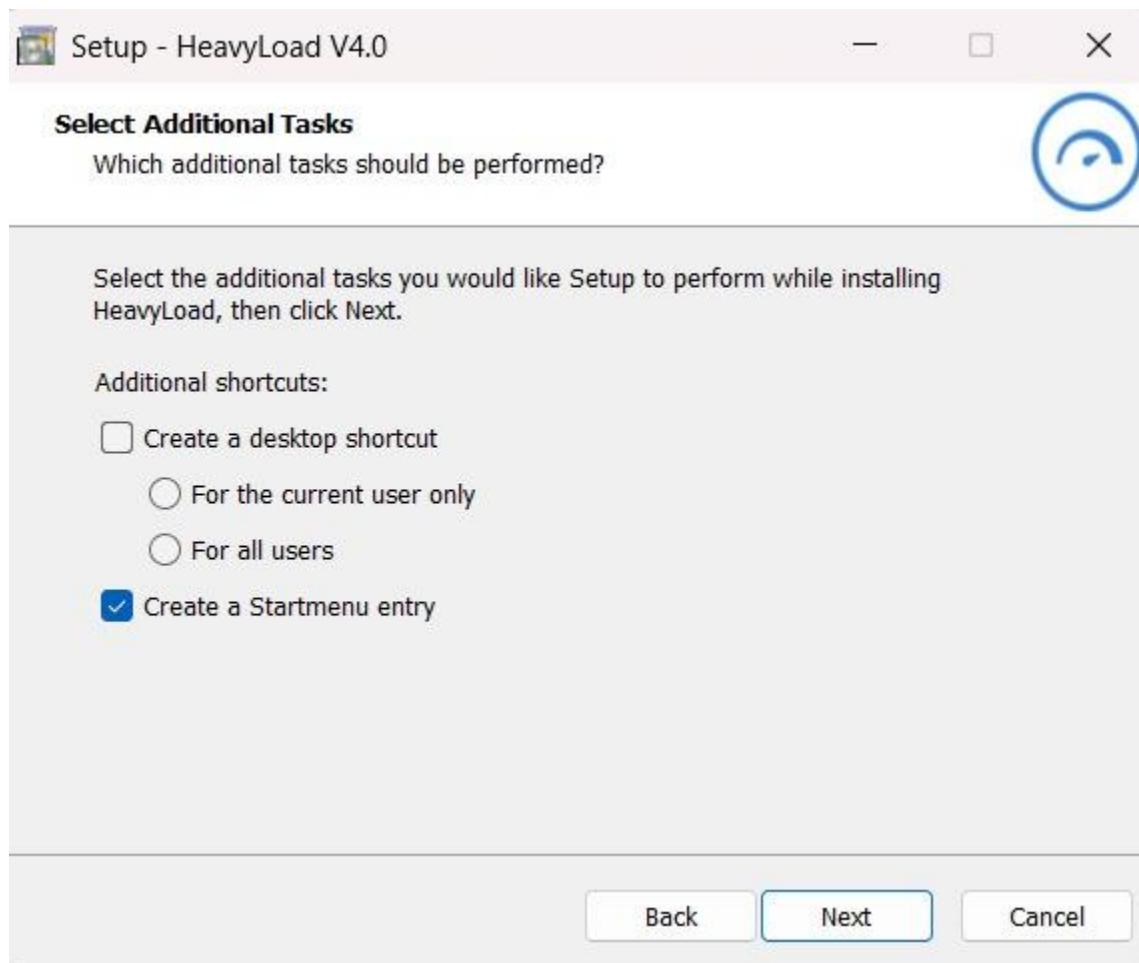
17. Storage Drive Information



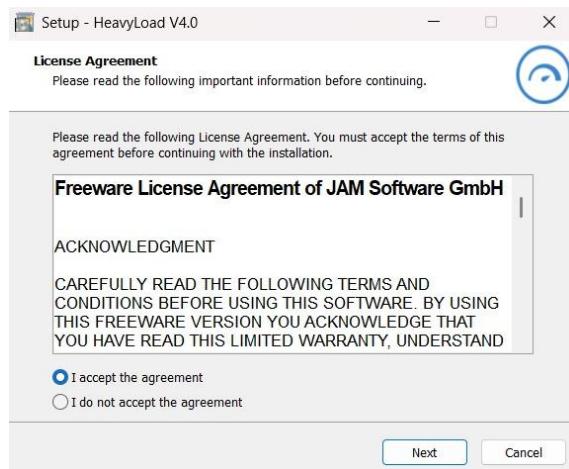
18. System Type & Architecture



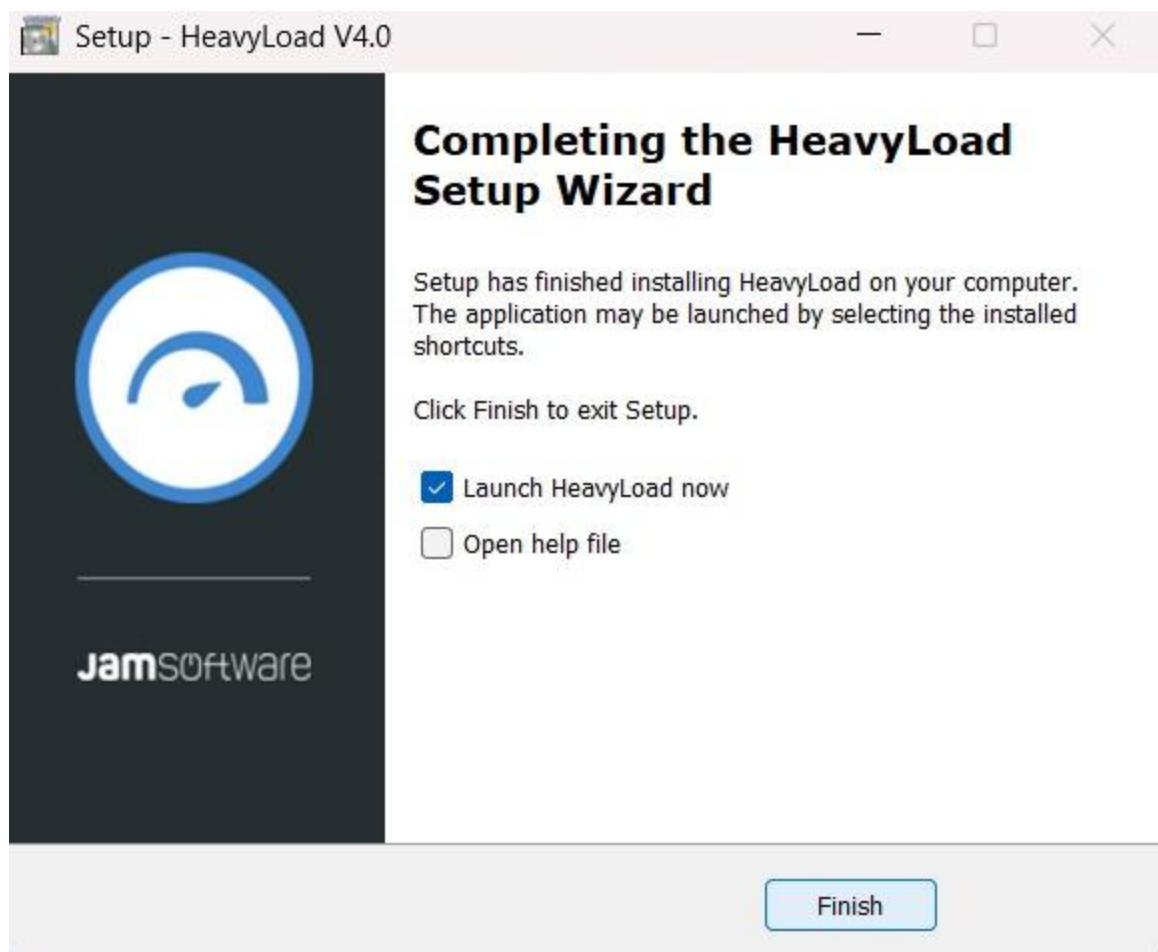
19. BIOS Information



20. Windows Directory & System Information



21. Virtual Memory & Page File Configuration



22. Status Progres

Windows: Fio Terinstal, Spesifikasi Tercatat

Linux: Dalam Persiapan

Progress: 70-75%

23. Dokumentasi

