

PHISON

aiDAPTIV+

Pro Suite 2.0 Install guide

Version 1.0

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REVISION HISTORY

Revision	Draft Date	History	Pro Suite Version	Author
1.0	2025/11/04	First release	NWUN_2.0.7	Sean Liou

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1. ENVIRONMENT PREPARATION

This program provides one-click installation.

Users only need to execute **install.sh** to complete the deployment.

Name	Version
Pro Suite	NWUN_2.0.7
aiDAPTIVLink	aidaptiv-vNXUN_2_04_A1

1.1. Supported OS and Nvidia driver version

Category	Detail
OS	Ubuntu 24.04 LTS Desktop
GPU driver	Nvidia driver version 570 or later version
Kernel	6.8.0-41-generic

Note: Due to the current Pro Suite version only matching this kernel version, when installing the OS, **DO NOT** connect to the internet to avoid automatic updates to the kernel version.

1.2. Precautions before installation

1. Please do not use special characters in folder or file names such as [whitespace](#), , !, ?, ' , @, #, \$, %, ^, &, *, (,), +

2. TCP Port

Service Name	Port
Pro Suite Web	8899, 8799
Pro Suite Service	3019, 5432, 9400, 7017, 8000
Prometheus	3090, 9100

3. Confirm that the installation environment can connect to the **external network**.

4. If you are using SSH to remotely connect to the machine, please enter the following command enable X11 forwarding.

```
ssh -X user@remote_host
```

5. Please enter the following command in the terminal to confirm whether the system recognizes the NVIDIA GPU card.

```
user@prosuite-dev:~$ sudo lshw -c display
[sudo] password for user:
*-display
      description: VGA compatible controller
      product: NVIDIA Corporation
      vendor: NVIDIA Corporation
      physical id: 0
```

6. Please enter the following command in the terminal to confirm the current time zone of the system.

```
# Check timezone on linux  
user@prosuite-dev:~$ cat /etc/timezone  
Asia/Taipei
```

7. To change the time zone, please enter the following command in the terminal

```
# Change timezone, e.g to Asia/Taipei  
user@prosuite-dev:~$ sudo timedatectl set-timezone Asia/Taipei
```

2. INSTALLATION

2.1. Place Pro Suite tar file within the Linux environment.

For example: Pro_Suite.tar

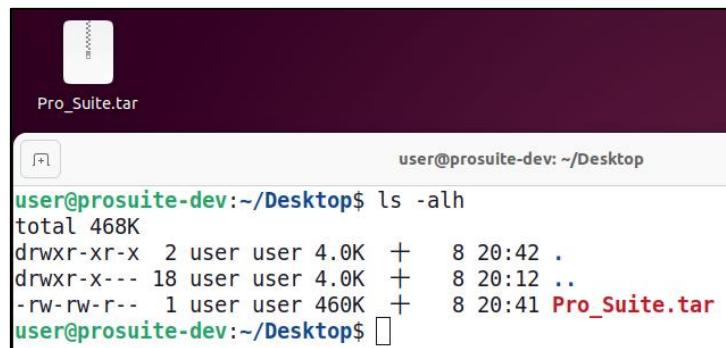


Figure 2-1 Pro Suite tar file

2.2. Unzip Pro Suite tar file

Enter the following command in the terminal to decompress the Pro Suite installation package.

```
tar xvf Pro_Suite.tar
```

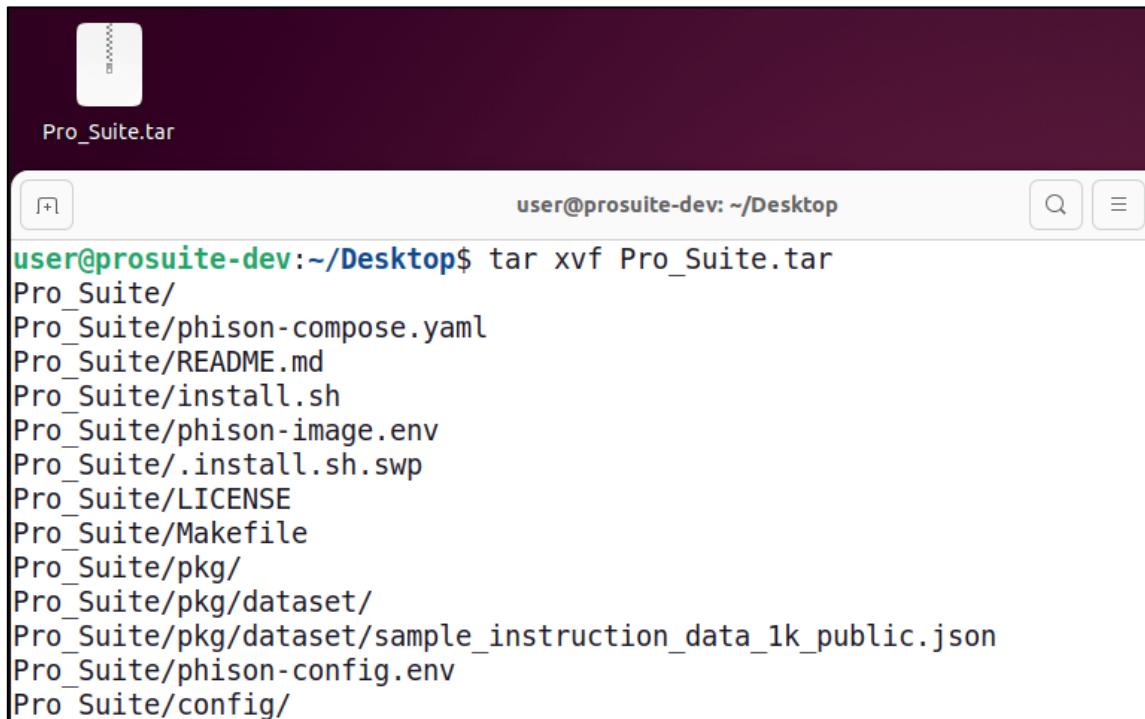


Figure 2-2 Unzip Pro Suite tar file

2.3. Execute install.sh

Enter the following command in the terminal to execute install.sh

```
cd Pro_Suite/  
sudo ./install.sh
```

If the yad package is missing, a message will pop up asking to install the yad package.

Please enter "y" to continue.



Figure 2-3 Install yad package

After executing install.sh, the main installation menu will appear.

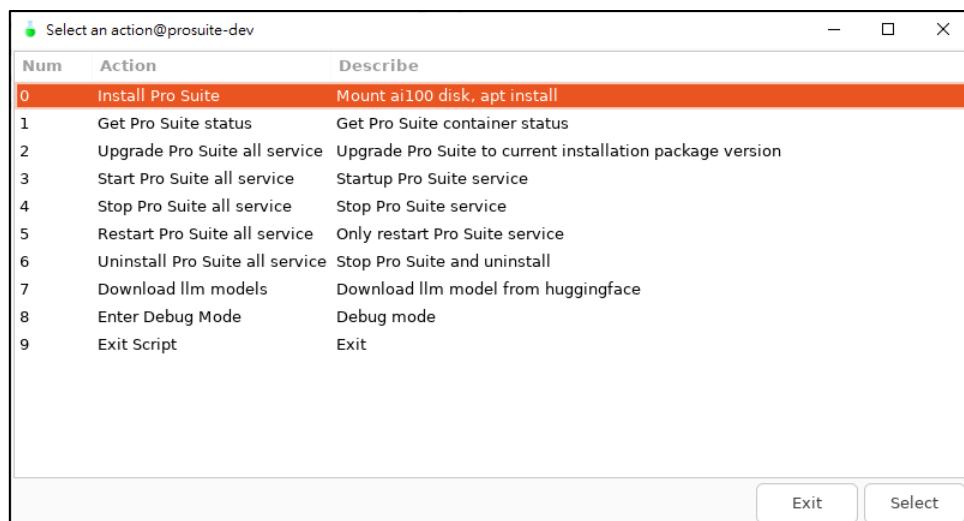


Figure 2-4 Mainmenu

2.3.1. Num 0, Install Pro Suite

- Available SSD(s) will be listed, please select the aiDAPTIVCache SSD.
- If you have already created or mounted the required LVM through Pro Suite, then the Pro Suite installation process will start directly.

Note: If you created LVM or mounted LVM yourself. Then you need to remove LVM setting first.



Figure 2-5 Mount aiDAPTIVCache

- Program will install apt packages and pull images

```
2024-10-30 16:19:16 : [info] Check apt package: docker-ce
2024-10-30 16:19:16 : [info] Check apt package: docker-compose-plugin
2024-10-30 16:19:16 : [info] Check apt package: nvidia-driver-550
2024-10-30 16:19:16 : [info] Check apt package: nvidia-container-runtime
2024-10-30 16:19:16 : [info] Check apt package: nvtop
2024-10-30 16:19:16 : [info] Config docker /etc/docker/daemon.json
2024-10-30 16:19:16 : [info] Starting docker service
2024-10-30 16:19:16 : [info] Try docker login, attempt 1.
2024-10-30 16:19:18 : [info] Successful login docker.
2024-10-30 16:19:18 : [info] Total image ls 16.
2024-10-30 16:19:18 : [info] Pulling the 1/16 docker image licensesesp/aidaptiv_web:6512
2024-10-30 16:19:25 : [info] Pulling the 2/16 docker image licensesesp/aidaptiv_api:NXUN
2024-10-30 16:19:27 : [info] Pulling the 3/16 docker image licensesesp/km-api:NXUN_2.0.0
2024-10-30 16:19:29 : [info] Pulling the 4/16 docker image licensesesp/auto-awq:v1.0.7.
```

- When the installation process has completed, program will display the Pro Suite website URL(s)

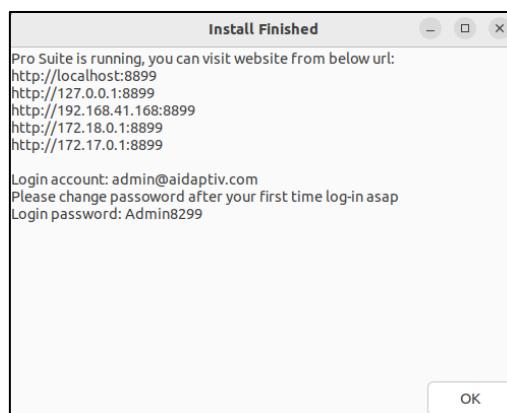


Figure 2-6 Pro Suite website URL

3. UNINSTALLATION PROCESS

3.1. Select **Num 6** to execute the uninstallation process.

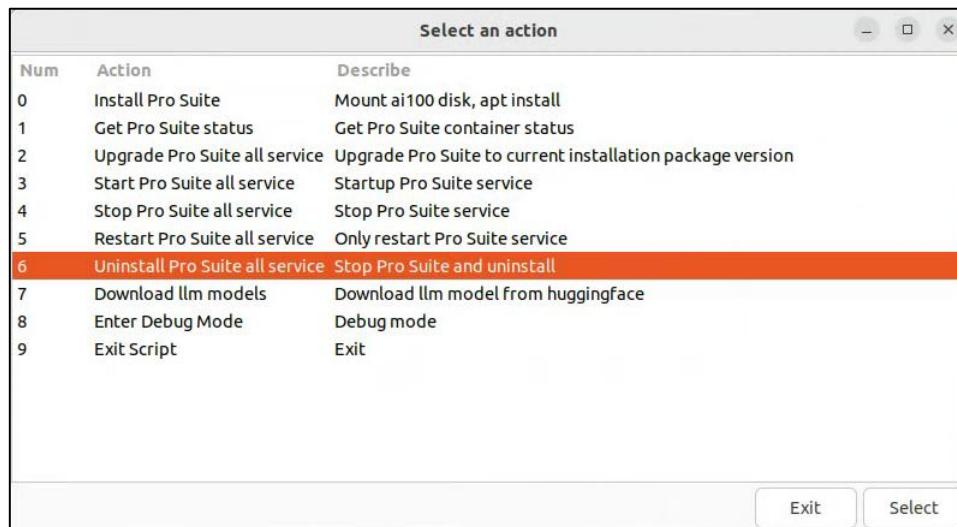


Figure 3-1 Mainmenu

- The user will be asked to confirm the following before the uninstallation process will start.
 1. Whether to remove LVM Raid0 ?
 2. Whether to remove Pro Suite docker image?
 3. Whether to remove Pro Suite data?

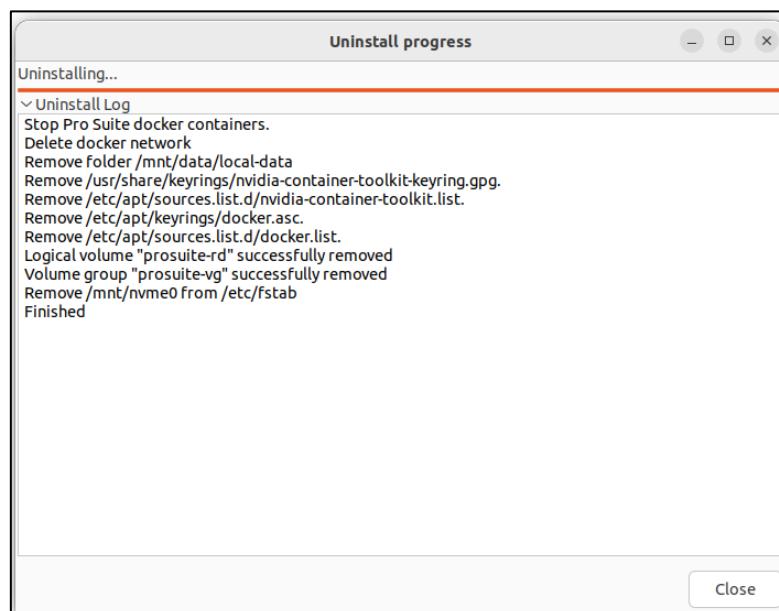


Figure 3-2 Uninstallation process

4. UPGRADE PRO SUITE

1. Execute the install.sh
2. Select Num 2 “Upgrade Pro Suite all service”

Note: Only supported on Pro Suite NXUN_2.0.X versions.

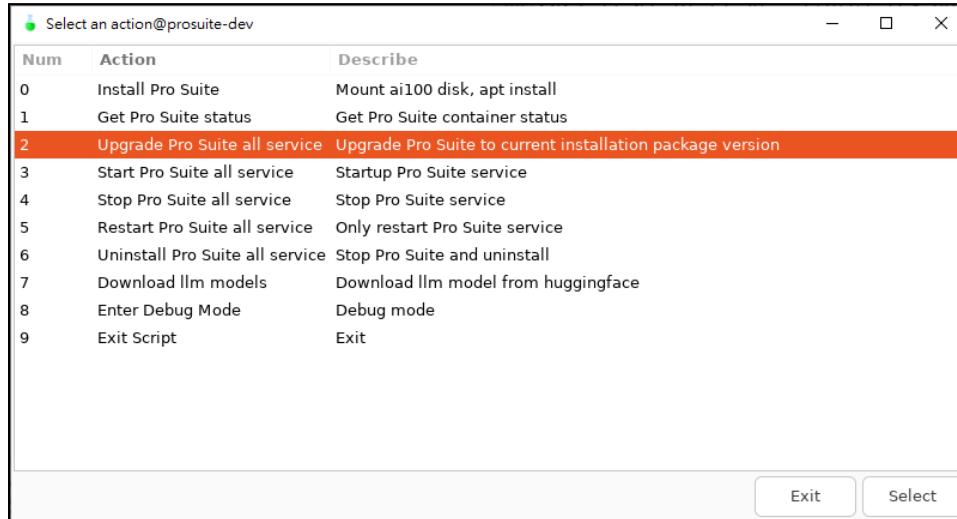


Figure 4-1 Upgrade Pro Suite all service

- Upgrade process

```

2024-11-01 18:19:28 : [Info] Stop Pro Suite services by docker compose.
[+] Running 11/11
  ✓ Container chrome      Removed@0.4s
  ✓ Container rabbitmq    Removed@0.4s
  ✓ Container redis       Removed@0.2s
  ✓ Container apollo      Removed@0.3s
  ✓ Container device_resources Removed@0.2s
  ✓ Container etcd        Removed@0.2s
  ✓ Container node_exporter Removed@0.2s
  ✓ Container reranker     Removed@0.2s
  ✓ Container redisFrontend Removed@0.2s
  ✓ Container prometheus   Removed@0.3s
  ✓ Container adaptiv-backend Removed@0.2s
  ✓ Container adaptiv-frontend Removed@0.2s
2024-11-01 18:19:38 : [Info] Stop Pro Suite services by docker network.
2024-11-01 18:19:40 : [Info] Pulling the 1/16 docker image license/aidaptiv_web:4519372d5.
2024-11-01 18:19:40 : [Info] Successful. Login docker.
2024-11-01 18:19:40 : [Info] Total Image ls: 16
2024-11-01 18:19:40 : [Info] Pulling the 1/16 docker image license/aidaptiv_api:NXUN_2.0_0-8005.
2024-11-01 18:19:42 : [Info] Pulling the 2/16 docker image license/aidaptiv_api:NXUN_2.0_0-8005-12-gd9799fc.
2024-11-01 18:19:45 : [Info] Pulling the 3/16 docker image license/aidaptiv_api:NXUN_2.0_0-8005-12-gd9799fc.
2024-11-01 18:19:49 : [Info] Pulling the 5/16 docker image license/device-resources:21422c27564.
2024-11-01 18:19:52 : [Info] Pulling the 7/16 docker image license/aidaptiv_vt:9d1579f.
2024-11-01 18:19:53 : [Info] Pulling the 7/16 docker image license/aidaptiv_vt:9d1579f.
2024-11-01 18:19:55 : [Info] Pulling the 8/16 docker image docker-rc-dind.
2024-11-01 18:19:57 : [Info] Pulling the 10/16 docker image chromedriver:5.0.
2024-11-01 18:19:59 : [Info] Pulling the 10/16 docker image chromedriver:5.0.
2024-11-01 18:20:01 : [Info] Pulling the 11/16 docker image lctunnel/postgresql:16.2.8-debian-12-r15.
2024-11-01 18:20:03 : [Info] Pulling the 12/16 docker image quay.io/prometheus/node-exporter:v1.7.0.
2024-11-01 18:20:05 : [Info] Pulling the 13/16 docker image quay.io/prometheus/node-exporter:v1.7.0.
2024-11-01 18:20:07 : [Info] Pulling the 14/16 docker image ghcr.io/huggingface/text-embeddings-inference:cpu-1.2.
2024-11-01 18:20:09 : [Info] Pulling the 15/16 docker image rabbitmq:3.13.4.
2024-11-01 18:20:12 : [Info] Pulling the 16/16 docker image ghcr.io/huggingface/text-embeddings-inference:cpu-1.2.

[+] Running 3/3
  ✓ Container rabbitmq    Started
  ✓ Container mongodb     Started
  ✓ Container chrome      Started

```

- When the upgrade process has completed, program will display the Pro Suite website URL(s)

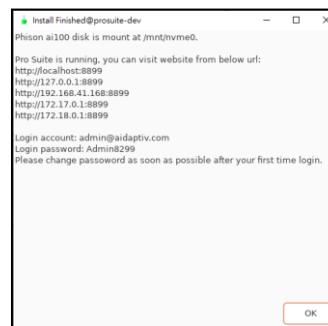


Figure 4-2 Pro Suite website URL

5. OTHER ACTION

5.1. Select *Num 1* to get the status of Pro Suite.

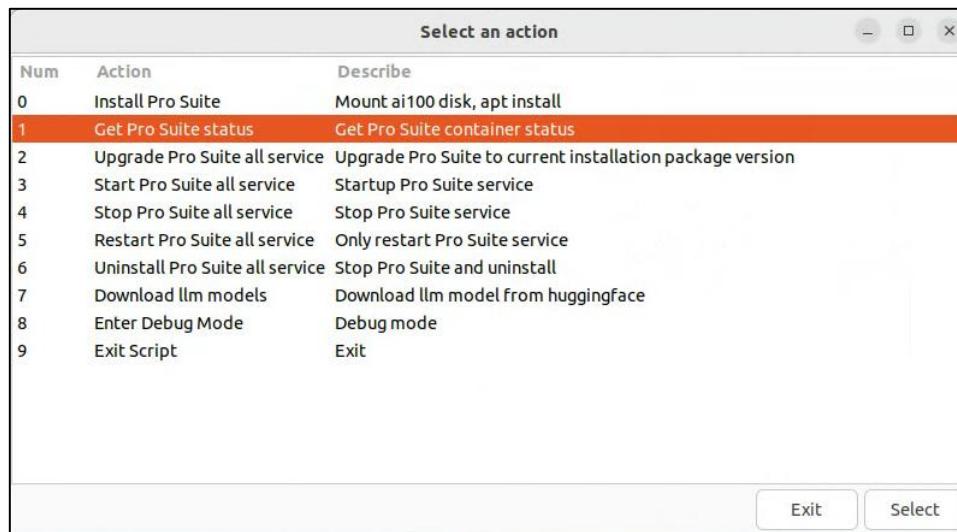


Figure 5-1 Get Pro Suite status

- Select *Num 1* to get the status of each container used in Pro Suite.

Pro Suite service status				
Container ID	Name	State	Status	Ports
4ca725ab741b	aidativ-backend	running	Up	443/tcp,8081/tcp,0.0.0.0:8799->8080/tcp,[::]:8799->8080/tcp
5a9feccbdcc	aidativ-frontend	running	Up	0.0.0.0:8899->80/tcp,[::]:8899->80/tcp
6edd190b1c8f	chroma	running	Up	0.0.0.0:8000->8000/tcp,[::]:8000->8000/tcp
d26b4168df38	device_resources	running	Up	0.0.0.0:9400->9400/tcp,[::]:9400->9400/tcp
3d021ed1729b	km-api	running	Up	0.0.0.0:3019->3019/tcp,[::]:3019->3019/tcp
52dec9acd485	mongodb	running	Up	0.0.0.0:7017->27017/tcp,[::]:7017->27017/tcp
cf32dc9cbc1e	node_exporter	running	Up	0.0.0.0:9100->9100/tcp,[::]:9100->9100/tcp
e59a1e0a425f	postgresql	running	Up	0.0.0.0:5432->5432/tcp,[::]:5432->5432/tcp
889988f78c97	prometheus	running	Up	0.0.0.0:3090->9090/tcp,[::]:3090->9090/tcp
4153339eb461	rabbitmq	running	Up	4369/tcp,5671-5672/tcp,15691-15692/tcp,25672/tcp,0.0.0.0:5672->1567
a7581f9ed459	reranker	running	Up	0.0.0.0:21345->80/tcp,[::]:21345->80/tcp

Figure 5-2 The status of each container in Pro Suite

5.2. Select Num 3 to start the service of Pro Suite.

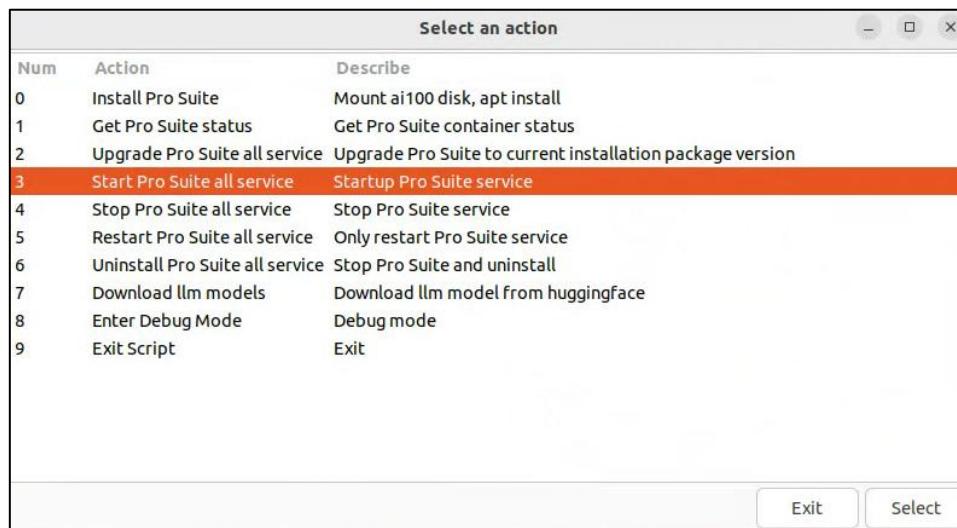


Figure 5-3 Start Pro Suite service

- If you stop the Pro Suite service, you can start the service by executing *Num 3*.

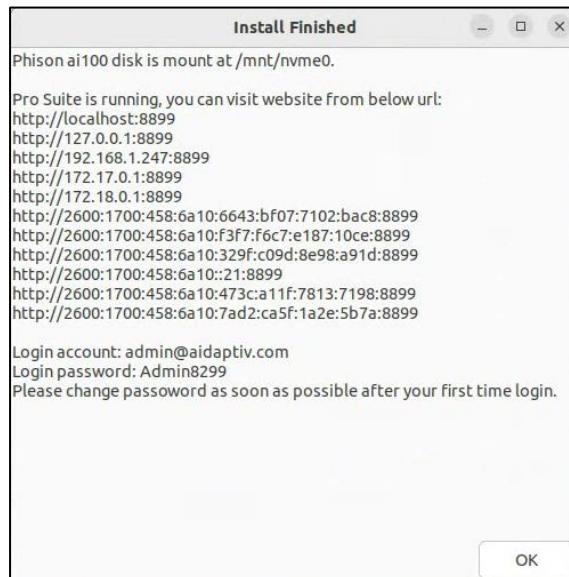


Figure 5-4 The service started successfully

5.3. Select Num 4 to stop the service of Pro Suite.

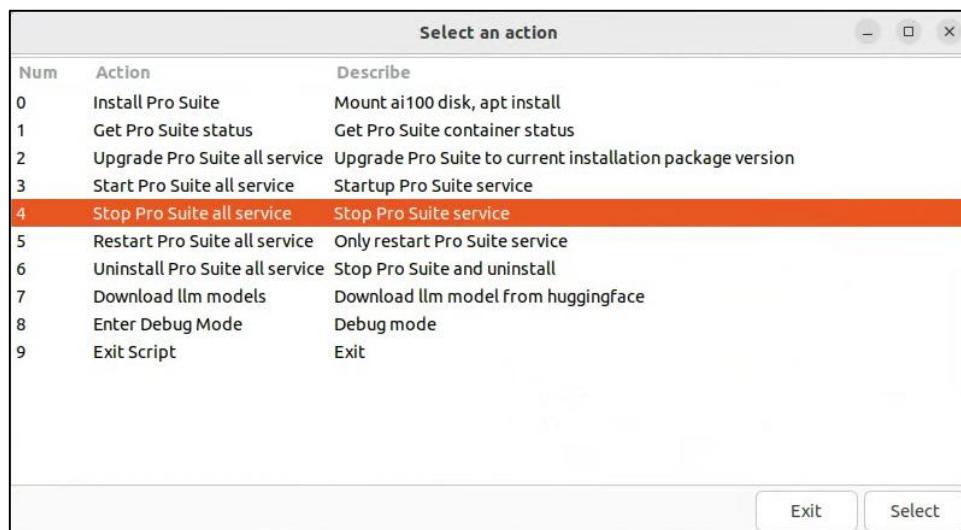


Figure 5-5 Stop Pro Suite service

- Select Num 4 to stop all of the Pro Suite services.

```
2024-11-12 19:00:16 : [info] Stop Pro Suite services by docker compose.  
[+] Running 11/11  
✓ Container mongodb           Removed 0.4s  
✓ Container rabbitmq          Removed 1.3s  
✓ Container km-api             Removed 10.4s  
✓ Container aidaptiv-frontend Removed 10.4s  
✓ Container node_exporter      Removed 0.2s  
✓ Container chroma             Removed 1.0s  
✓ Container reranker            Removed 1.0s  
✓ Container device_resources    Removed 0.3s  
✓ Container prometheus          Removed 0.4s  
✓ Container aidaptiv-backend    Removed 0.3s  
✓ Container postgresql          Removed 0.2s  
2024-11-12 19:00:27 : [info] Stop Pro Suite services by docker network.  
2024-11-12 19:00:27 : [info] Stop docker container InferenceModel2.  
2024-11-12 19:00:28 : [info] Stop docker container InferenceModel3.
```

Figure 5-6 Stop each container of Pro Suite

5.4. Select Num 5 to Restart the service of Pro Suite.

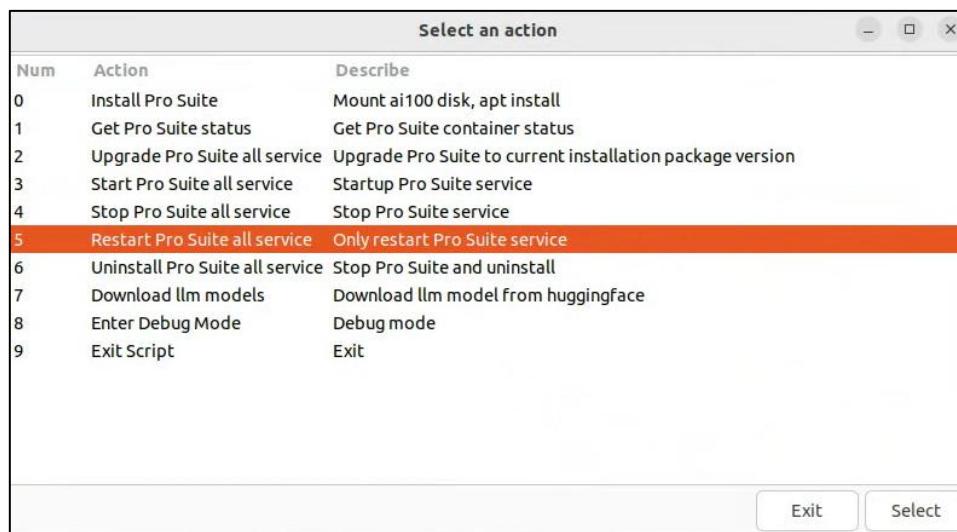


Figure 5-7 Restart Pro Suite service

- Restarting the Pro Suite service can resolve many abnormal problems. To restart the Pro Suite service, you can select *Num 5*.

The screenshot shows a terminal window with a list of services under the heading "[+] Running 11/11". Each service entry consists of a green checkmark, the service name, its status, and a timestamp. All services are listed as "Started".

Service	Status	Time
Container mongodb	Started	0.5s
Container reranker	Started	0.7s
Container node_exporter	Started	0.7s
Container rabbitmq	Started	0.5s
Container postgresql	Started	0.5s
Container device_resources	Started	0.6s
Container chroma	Started	0.5s
Container km-api	Started	0.5s
Container prometheus	Started	0.6s
Container aidaptiv-backend	Started	0.7s
Container aidaptiv-frontend	Started	0.9s

Figure 5-8 Restart Pro Suite service successfully

5.5. Select Num 7 to download LLM models from Pro Suite

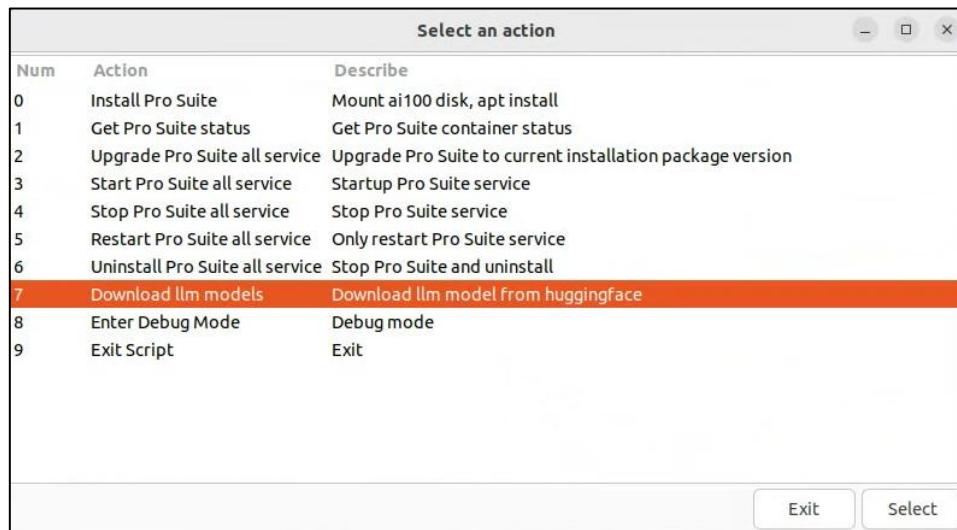


Figure 5-9 Download LLM models

- Select a model to download.

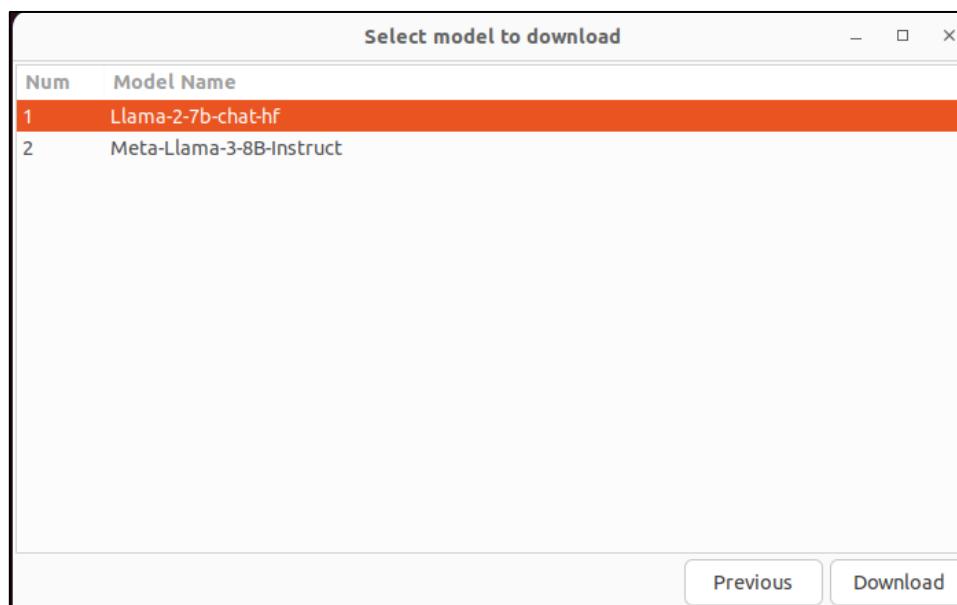


Figure 5-10 Model lists

5.6. Select Num 8 to enter debug mode

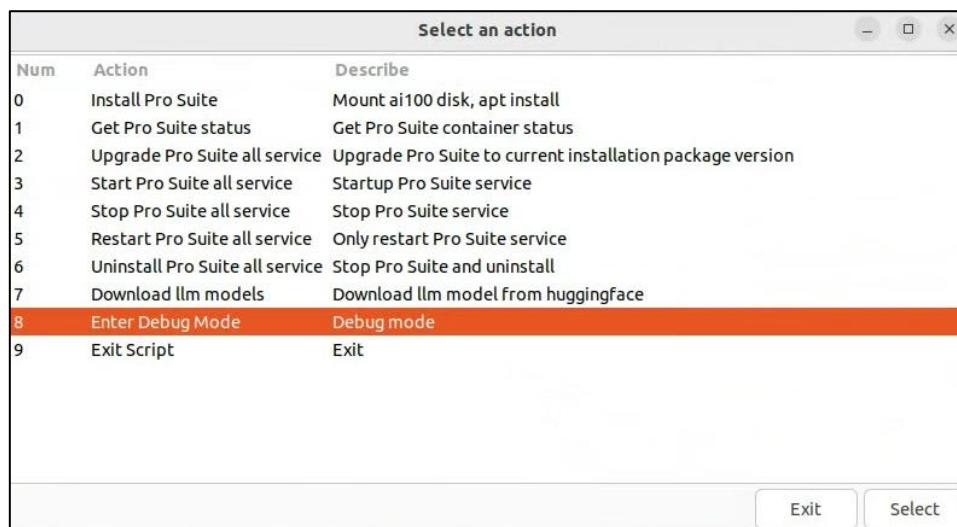


Figure 5-11 Enter debug mode

- If you need to restart a specific service for some reason, you can select *Num 1*.
- If the installation of specific docker images fails due to other abnormal reasons, you can select *Num 2* to pull and refresh the docker image(s).
- Select *Num 3* to clean memory buffer/cache.
- Select *Num 4* to create LVM.
- Select *Num 5* to update embedded model.

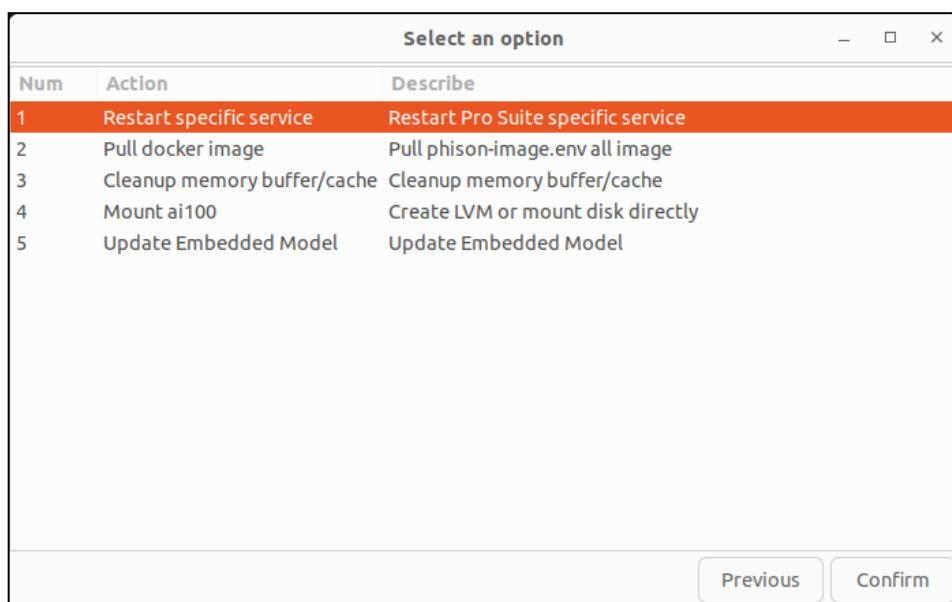


Figure 5-12 Enter debug mode

APPENDIX A – DEBUG NOTE

If you encounter issues and need assistance from Phison, please first run the export_log.sh file and provide the generated log to your Phison representative to improve troubleshooting efficiency.

The export_log.sh will collect the following information:

- Host system version information
- Motherboard information
- Processor, memory, hard drive, and PCI information
- NVIDIA version information
- Pro Suite Container information
- Pro Suite install log /var/log/prosuite information

Operating Instructions:

```
sudo bash exprot_log.sh
```

```
user@prosuite-dev:~/ProSuite$ ls -alh | grep export_log
-rwxrwxr-x 1 user user 2.4K + 24 15:28 export_log.sh
user@prosuite-dev:~/ProSuite$ sudo bash export_log.sh
2024-10-24 15:32:29 : Get OS version and board info.
2024-10-24 15:32:29 : Get PCI, CPU, Memory, Disk info.
2024-10-24 15:32:30 : Get Pro Suite docker container state.
2024-10-24 15:32:30 : Get Pro Suite docker container logs.
2024-10-24 15:32:30 : Finish gererate file export_hw_2024-10-24_1532.tar at /home/user/ProSuite.
user@prosuite-dev:~/ProSuite$ ls -alh export_hw_2024-10-24_1532.tar
-rw-r--r-- 1 root root 70K + 24 15:32 export_hw_2024-10-24_1532.tar
```