ASRock

AI QUICKSET

Experience AI in One Click

LINUX VERSION

User Manual

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Chapter 1 Introduction

ASRock AI QuickSet software tool can help users quickly download, install and set up artificial intelligence (AI) applications, and is very helpful in popularizing artificial intelligence (AI) technology, allowing enthusiasts to avoid the dilemma of complex installation and configuration.

Through a friendly user interface, ASRock AI QuickSet software tool guides users to download, configure and install various components of supported artificial intelligence (AI) applications, such as frameworks like TensorFlow or PyTorch, specialized AI function libraries, and runtime libraries and other body components, etc. It also prompts the user for configuration-specific options, or automatically set the default configuration for artificial intelligence (AI) applications. These enable users to ensure that artificial intelligence (AI) applications operate optimally without delving into complex configuration settings.

Whether it is a professional user who is familiar with artificial intelligence (AI) applications or an ordinary user who does not have extensive technical knowledge, the ASRock AI QuickSet software tool is undoubtedly an excellent choice for quickly experiencing AI applications!

NOTE

The pictures in this document are for reference only. The actual user interface may vary with the updated software version.

This documentation includes instructions on how to install and unintall the AI QuickSet software on your Linux system, and how to launch the third-party AI applications as listed below:

- AudioCraft (AudioGen)
- AudioCraft (MusicGen)
- Image/Manga Translator
- Stable Diffusion CLI Diffusers
- Stable Diffusion web UI
- Text generation web UI Llama 2
- YOLOv8 CLI

Chapter 2 System Requirements

Hardware Requirements	
CPU	• Intel® 14th/13th Gen Core™ Processors • AMD Ryzen™ 7000/5000 Series Processors
Motherboard	• Intel® 700/600 Series Motherboards • AMD 600/500 Series Motherboards
Memory	32 GB
Graphics Card	ASRock AMD Radeon™ RX 7000 Series Graphics Cards[1]
Storage	Minimum of 45 GB of available space (SSD recommended)
Internet Connection	Internet connection is required for both installation and operation (Broadband recommended)

Software Requirements	
Operating System	Canonical Ubuntu 22.04.4 Desktop (64-bit)
Driver	The default driver in Ubuntu

NOTE

ASRock AI QuickSet software (Linux version) supports only the platforms that are equipped with ASRock AMD Radeon™ RX 7000 series graphics cards.

English

Chapter 3 Software Installation

1. Download the compressed file "ai-quickset" from ASRock website.

2. Go to your Files > Downloads folder or where you have downloaded the file, and check if the version is preferred. Right-click on the file and select "Extract Here" to extract the installer files.

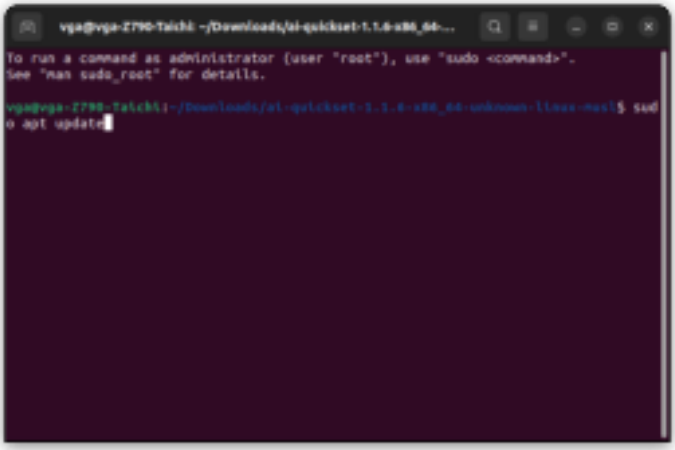
3. Double-click to open the folder.

English

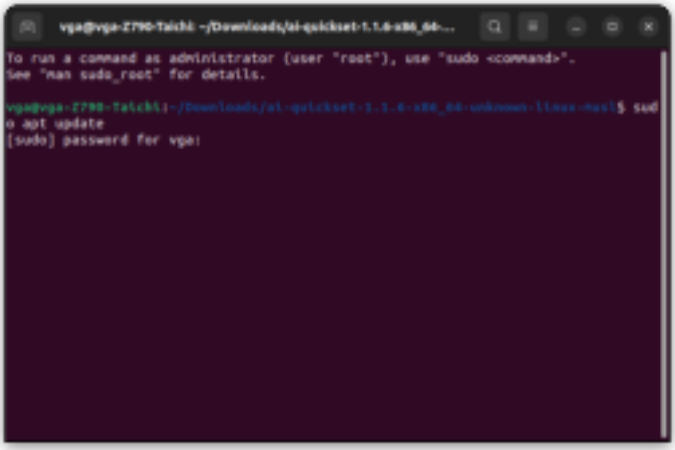
4. Right-click on the blank area in the folder and select "Open in Terminal".

5. Enter the command "sudo apt update" and then press "Enter" to update your system.

```
sudo apt update
```

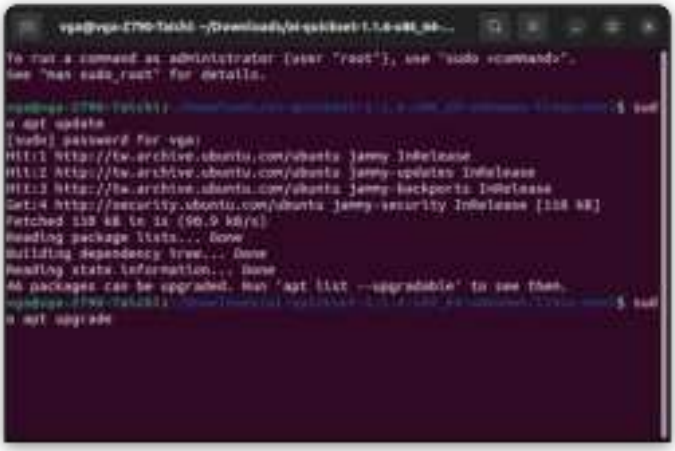


6. Enter your Linux user password and then press "Enter" to confirm.



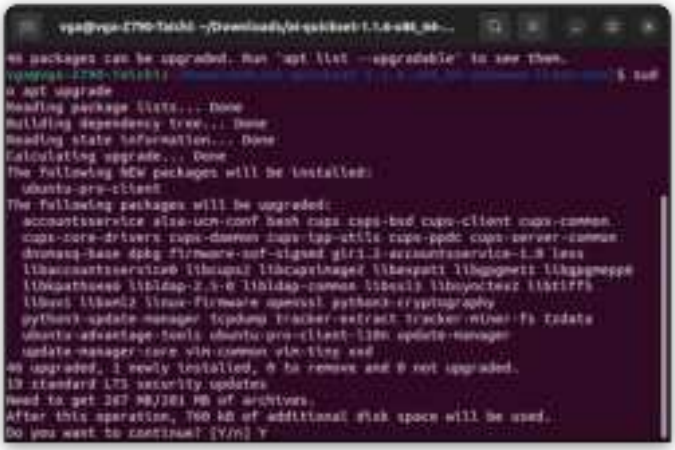
7. Enter the command “sudo apt upgrade” and then press "Enter" to start upgrading your system.

```
sudo apt upgrade
```

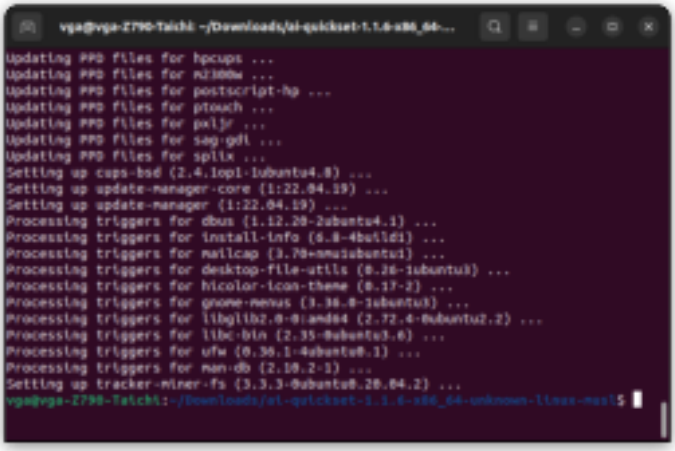


English

8. Check the required addiontal disk space. Type “Y” and then press "Enter" to continue the upgrading process.



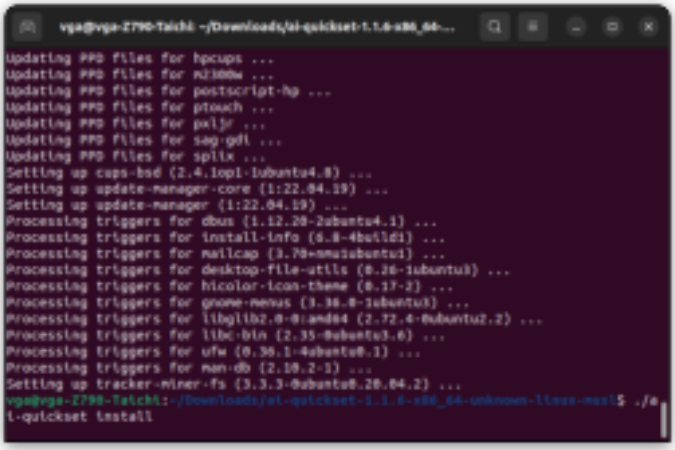
9. When you see the picture below, both system update and upgrade are now complete. Press "Enter" to continue.



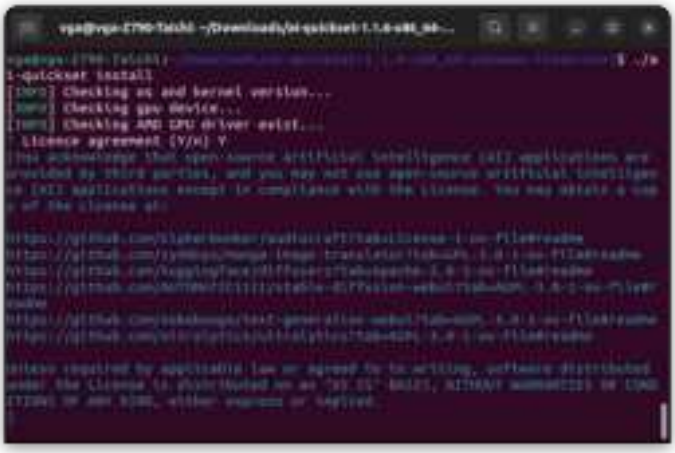
English

10. Enter the command “./ai-quickset install” and then press "Enter" to start the installation.

```
./ai-quickset install
```

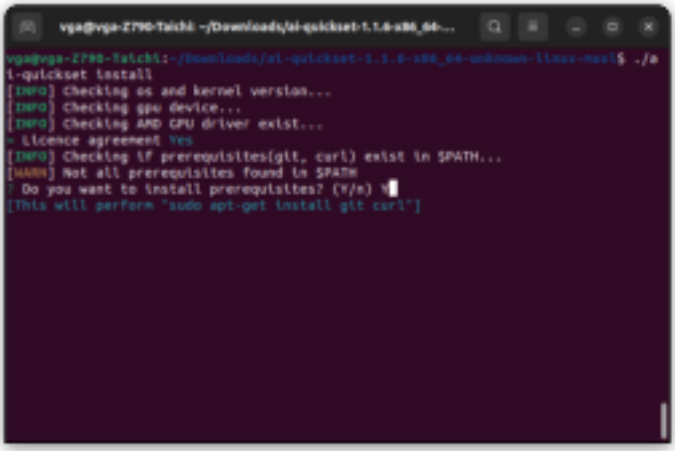


11. Read the license agreement carefully. If you agree, type “Y” and then press "Enter" to continue.

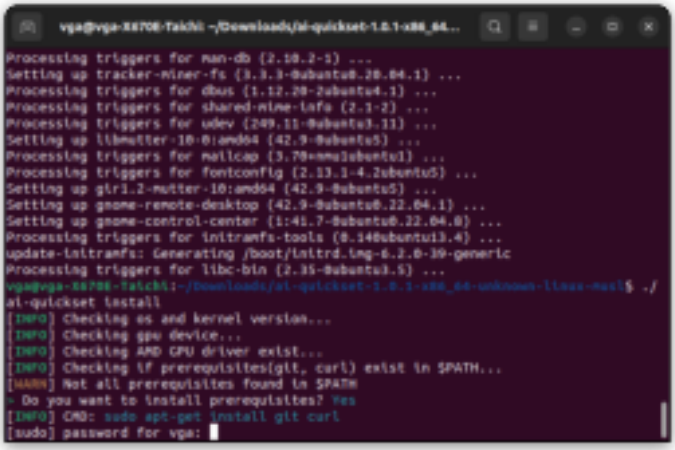


English

12. Enter “Y“ and then press "Enter" to install prerequisites.

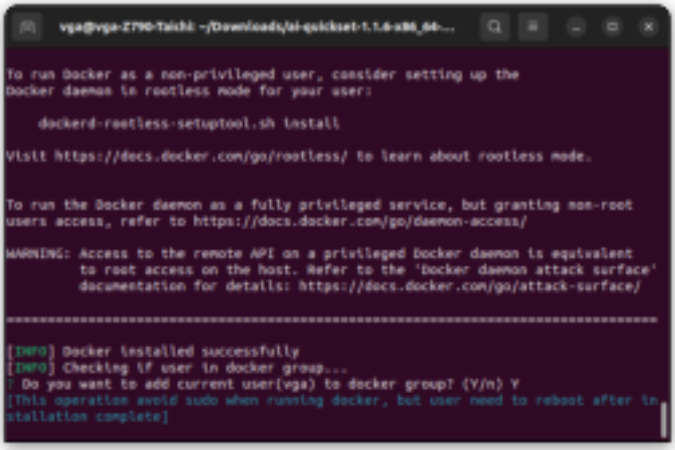


13. If you are asked for a password, enter your Linux user password and then press "Enter" to confirm.



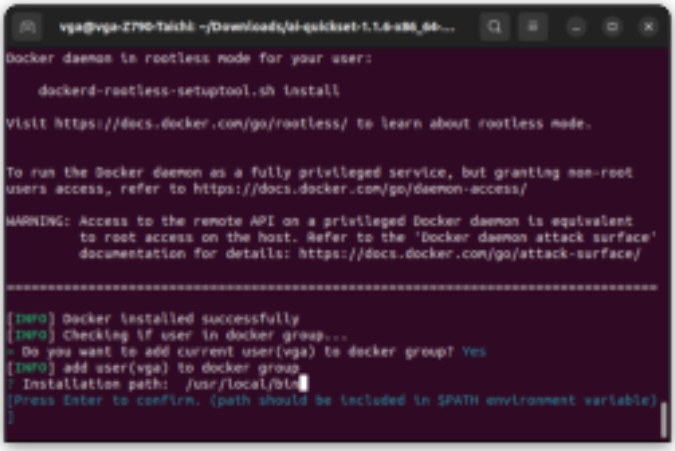
14. Enter “Y“ and then press "Enter" to install Docker.

15. Enter “Y“ and then press "Enter" to add the current user to the docker group.

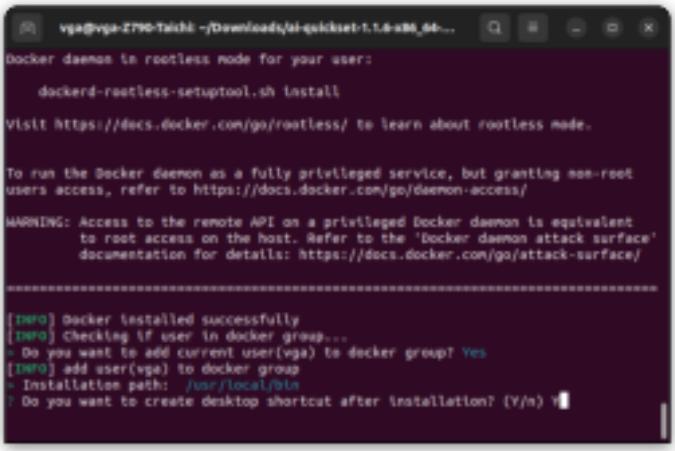


English

16. Check the installation path and then press "Enter" to confirm.



17. If you want create a desktop shortcut for AI Quickset, enter " Y " and then press "Enter" to confirm.



English

18. Select the AI application(s) you want to install, and then press “Enter” to confirm. By default, all applications are selected (marked as [X]) to be installed. Use ↑↓ arrow keys to move among the items and press Space bar to select or de-select them.

19. The installing process may take at least 30 minutes. Actual time spent may vary depending on your system configuration and network speed. Please wait patiently until it is done.

20. When installation process is complete, reboot your system.

21. Now, you can enter the command “ai-quickset launch –h“ in the terminal to view the command details. Press "Enter" to continue.

```
ai-quickset launch –h
```

22. After completing the installation, you can find the launchers for your installed AI applications at below location.

- **Shortcuts in the Start Menu**

1. Click on the grid button "Show Applications", which is at the bottom-left corner of the screen on the dock.
2. Enter the keyword "Launch" in the search bar to find the applications.

- **Shortcuts on the Desktop**

Chapter 4 Launching AI Applications

4.1 AudioCraft (AudioGen)

AudioCraft (AudioGen) is a generative AI model that can generate audio from text prompts.

1. Double-click on the “Launch AudioCraft (AudioGen)” icon to launch the application.

2. The Terminal window pops up. When you launch it for the first time, please wait for a few minutes for the application to configure itself. When the initialization process is completed, you will see the following information:
"Running on local URL : http://127.0.0.1:78XX“

   Please note the URL address may differ each time. In the picture below, as an example, please visit “http://127.0.0.1:7860“ to use AudioCraft(Audio Gen).

3. When you enter the "AudioGen" page, please do the following steps to create audio sound effects.

Step 1.

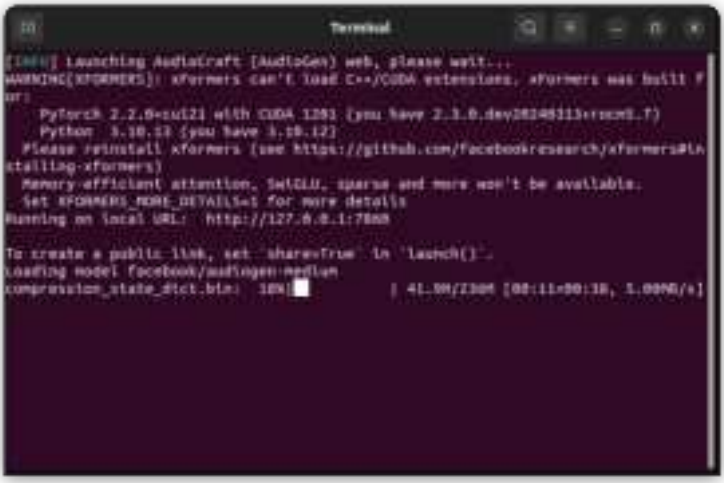
Enter the text prompts into the generator box.

Step 2.

Then click the “Submit” button, and it will start to generate audio.

Step 3.

When you launch it for the first time, please wait for a few minutes for the application to configure itself.



Step 4.

After the generation is completed, you will see the generated audio dipsplayed in the right pane.

4.2 AudioCraft (MusicGen)

AudioCraft (MusicGen) is a generative AI model that can generate music from text prompts.

1. Double-click on the “Launch AudioCraft (MusicGen)” icon to launch the application.

2. The Terminal window pops up. When you launch it for the first time, please wait for a few minutes for the application to configure itself. When the initialization process is completed, you will see the following information:
"Running on local URL : http://127.0.0.1:78XX“

   Please note the URL address may differ each time. In the picture below, as an example, please visit “http://127.0.0.1:7860“ to use AudioCraft(Audio Gen).

3. When you enter the "MusicGen" page, please do the following steps to generate music.

Step 1.

Click on the first input text example (recommended) in the "Exmaples" table to download the model file.

Step 2.

Now you can enter the text prompts into the generator box.

Step 3.

Then click the “Submit” button, and it will start to generate music.

Step 4.

After the generation is completed, you will see the generated music dipsplayed in the right pane.

4.3 Image/Manga Translator

Image/Manga Translator is an application that can easily translate texts in manga or images.

1. Double-click on the “Launch Image/Manga Translator” icon to launch the application.

2. The Terminal window pops up. When you launch it for the first time, please wait for a few minutes for the application to configure itself. When the initialization process is completed, you will see the following information:

   "Serving up app on http://127.0.0.1:5003"

   Please note the URL address may differ each time. In the picture below, as an example, please visit “http://127.0.0.1:5003“ to use the Image/Manga Translator application.

3. Use either method to access the Image/Manga Translator.

   - Press and hold Ctrl and then click on the URL addresss in the terminal window.
   - Open a web browser and type in the URL address in the address bar to access the website.

4. Once the launching process is done, the "Image/Manga Translator" window pops up automatically. Please do the following steps to translate an image.

   Step 1.

   You can click on the area below to upload your image or drag and drop the image into it for translation.

Step 2.

You can select a translation engine and a preferred language from the drop-down menu. Click on the "Translate" button to begin translating.

Step 3.

It's done. You can right-click on the image to save it and click "Upload another" to upload another image for translation.

Important

Please note that the terminal window will remain on the screen when the “Image/Manga Translator” page appears.

Do not close the terminal window while you are using the Image/Manga Translator application.

After you close the “Image/Manga Translator” page, please also close the terminal window as well.

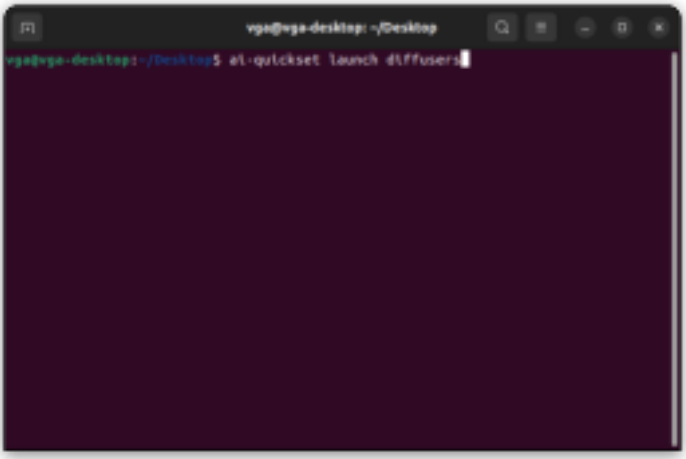
4.4 Stable Diffusion CLI Diffusers

Stable Diffusion CLI Diffusers is a text-to-image diffusion model that generates images from text descriptions.

1. Right-click on the desktop, or anywhere you want to save the generated image, and select "Open in Terminal" to open the terminal window.

2. Enter the command "ai-quickset launch diffusers" to launch Stable Diffusion.

```
ai-quickset launch diffusers
```



3. When it is successfully launched, you will see the following: "Describe the image you want to create". Now you can enter the descriptions and then press "Enter" to generate the image.

4. When it's done, it displays the message that the image has been saved.

English

5. The image has been created at the location where you open the terminal window in Step 1 on page 30.

6. You can keep creating another image by giving another description.

4.5 Stable Diffusion web UI

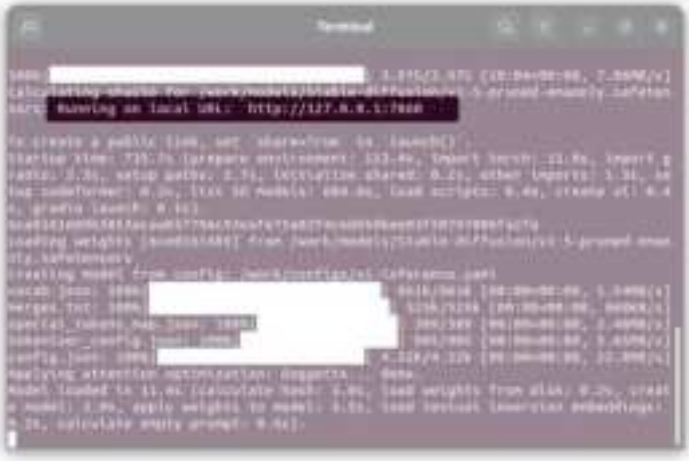
Stable Diffusion web UI, a browser interface for Stable Diffusion, is an AI model that can generate images from prompts.

1. Double-click on the “Launch Stable Diffusion web UI” icon to launch the application.

2. The Terminal window pops up. When you launch it for the first time, please wait for a few minutes for the application to configure itself. When the initialization process is completed, you will see the following information:

   "Running on local URL: http://127.0.0.1:78XX“

   Please note the URL address may differ each time. In the picture below, as an example, please visit “http://127.0.0.1:7860“ to use the Stable Diffusion web UI application.



3. Use either method to access the Stable Diffusion web UI.

- Press and hold Ctrl and then click on the URL addresss in the terminal window.
- Open a web browser and type in the URL address in the address bar to access the website.

4. Once the "Stable Diffusion" page appears, please do the following steps to create images.

Step 1.

Click on the "Refresh" button to update the model information.

Step 2.

Click ▼ button to expand the "Stable Diffusion checkpoint" drop-down menu.

For the first time running this application, please select “v1-5-pruned-emaonly. safetensors” model in the drop-down list.

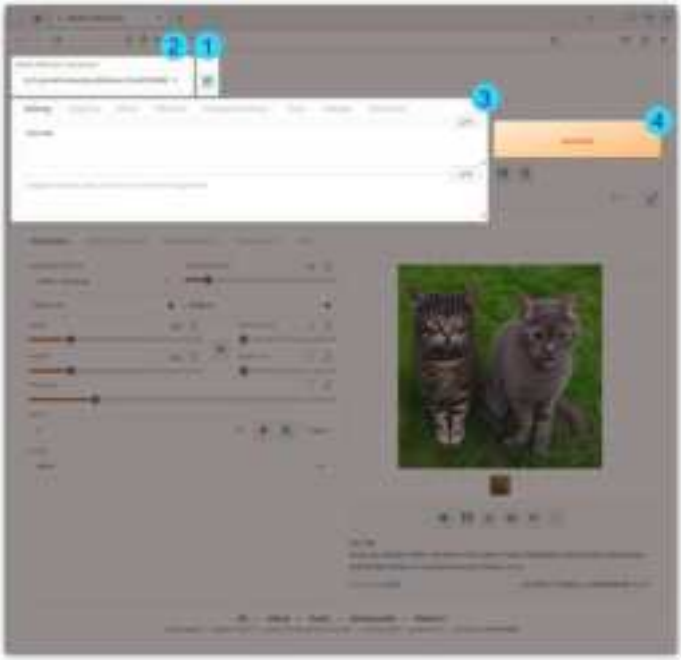
Step 3.

Choose “txt2img” tab and key in the prompts you prefer in the column.

Step 4.

Then click the “Generate” button, and it will start to download the model checkpoint file and generate the image(s).

It may take a few minutes for the first time. Please wait patiently.



Important

Please note that the terminal window will remain on the screen when the “Stable Diffusion” page appears.

Do not close the terminal window while you are using the Stable Diffusion application.

After you close the “Stable Diffusion” page, please also close the terminal window as well.

English

4.6 Text generation web UI Llama 2

Text generation web UI Llama 2 is a text generation interface to input questions and receive responses.

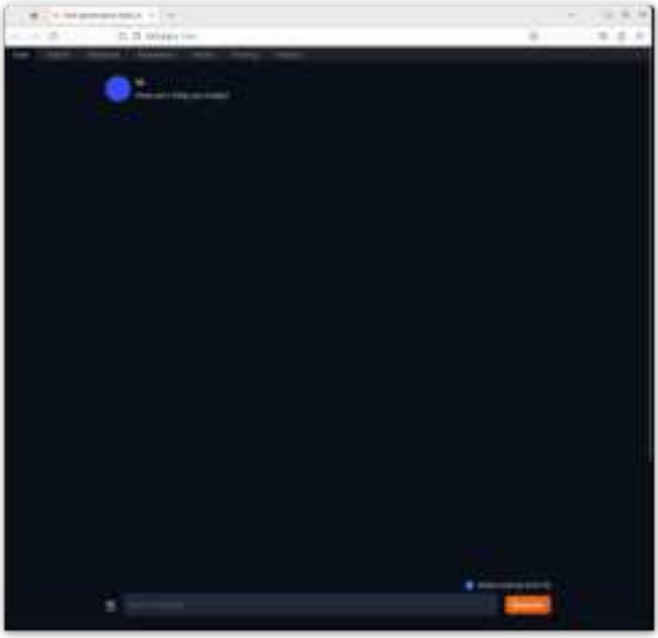
1. Double-click on the “Launch Text generation web UI Llama 2” icon to launch the application.

2. The Terminal window pops up. When you launch it for the first time, please wait for a few minutes for the application to configure itself. When the initialization process is completed, you will see the following information:
"Running on local URL : http://127.0.0.1:78XX“

   Please note the URL address may differ each time. In the picture below, as an example, please visit “http://127.0.0.1:7860“ to use Text generation web UI Llama 2.

3. Use either method to access Text generation web UI Llama 2.
   - Press and hold Ctrl and then click on the URL addresss in the terminal window.
   - Open a web browser and type in the URL address in the address bar to access the website.

4. Once the launching process is done, the "Text generation web UI Llama 2" window pops up automatically as shown below.



5. For the first time running this application, you need to download and load the model before start chatting with AI.

- To download the model, please follow the steps below.

Step 1.

Click on the "Model" tab to enter the model setting page.

Step 2.

Enter “TheBloke/Llama-2-7B-chat-GPTQ” in the text field of the Download model or LoRA area.

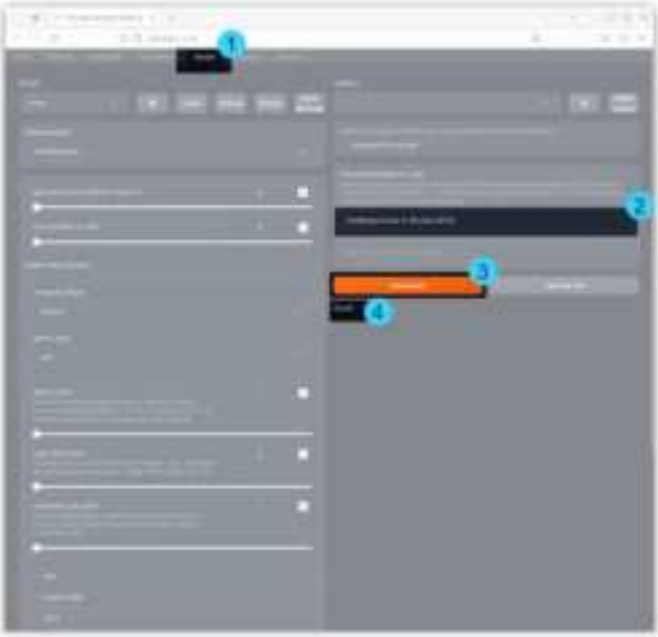
TheBloke/Llama-2-7B-chat-GPTQ

Step 3.

Click “Download” to start to download the model checkpoint file. The process may take a few minutes. Please wait patiently.

Step 4.

When download is complete, you will see the message "Done!".



- To load the model, please follow the steps below.

Step 1.

Click on the "Refresh" icon to refresh model files.

Step 2.

Click ▼ button to expand the "Model" drop-down menu.

Select “TheBloke/Llama-2-7B-chat-GPTQ” model in the list.

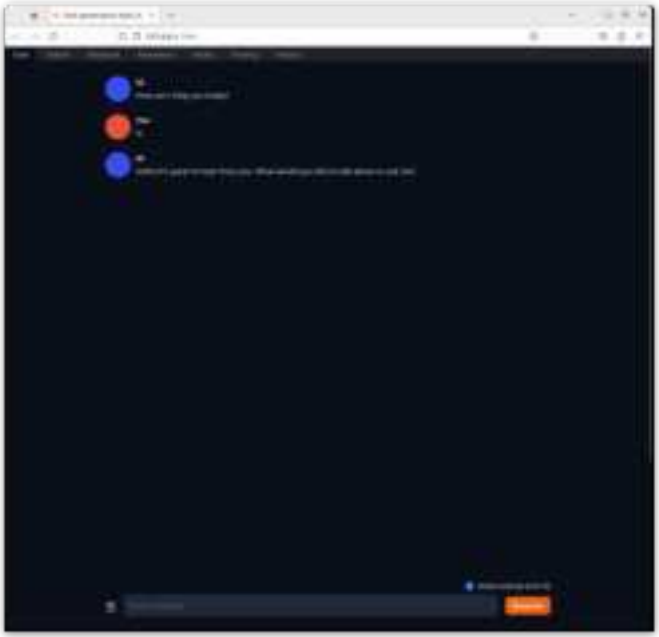
Step 3.

Click on "Load" icon to start loading the selected model.

Step 4.

When it is done, you will see the message the model has been successfully loaded.

6. Click on the "Chat" tab on the upper-left corner of the page to go gack to the chatting page. Now you can type in your message in the text field and click "Generate" to start chatting.



4.7 YOLOv8 CLI

YOLOv8 CLI is an object detection system. You can upload an image to detect objects in that uploaded image.

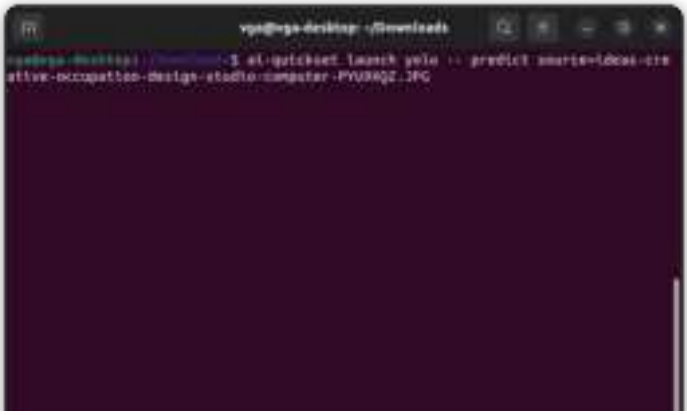
1. Download the image you want to recognize.

2. Right-click on the blank area in the folder where you save the image, and select "Open in Terminal" to open the terminal window.

3. Enter the command " ai-quickset launch yolo -- predict model=yolov8n.pt source=<YOUR IMAGE NAME> " to upload an image for object detection.

```
ai-quickset launch yolo -- predict model=yolov8n.pt source=<YOUR IMAGE NAME>
```

The command here is an example only. Please replace <YOUR IMAGE NAME> with the correct name of your image.



Then press "Enter" to start uploading the image.

4. The uploading process may take a few minutes. When it's done, you will see it displays where the generated image is saved.
Here is an example: "Results saved to runs/detect/predict".

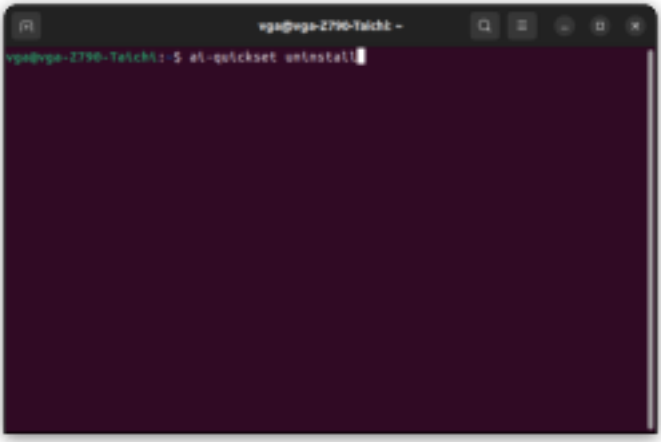
5. Go to the designated folder and find your generated image.

Chapter 5 Software Uninstallation

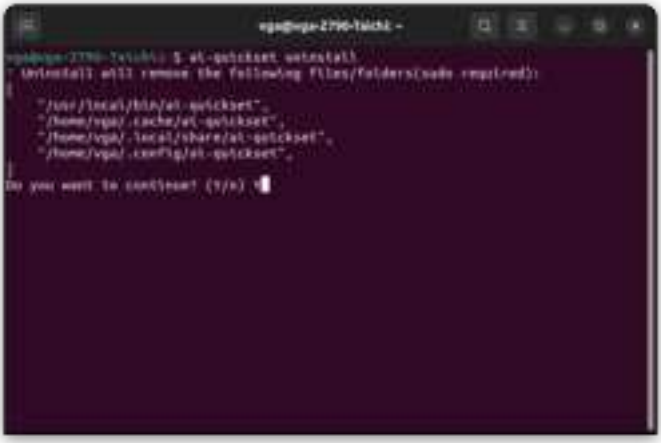
Please follow the steps below to remove the "AI QuickSet" software when it's no longer needed.

1. Press “Ctrl + Alt + T“ to open the terminal window. Enter the command “ai-quickset uninstall“ to uninstall the software.

```
ai-quickset uninstall
```

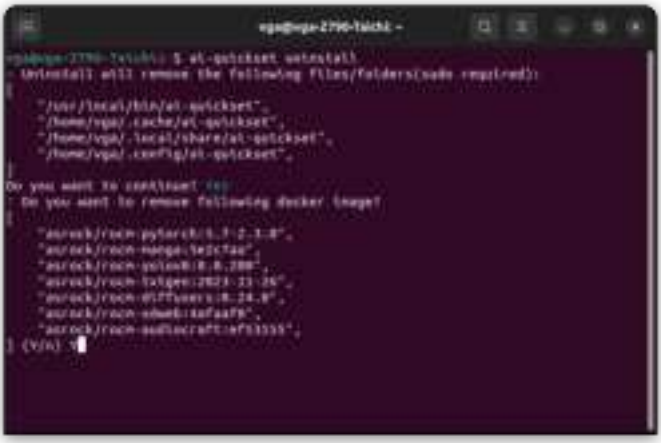


2. Enter “Y” and then press "Enter" to continue.

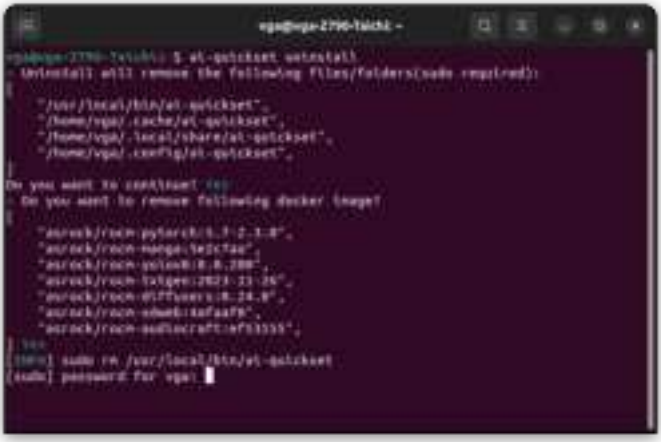


English

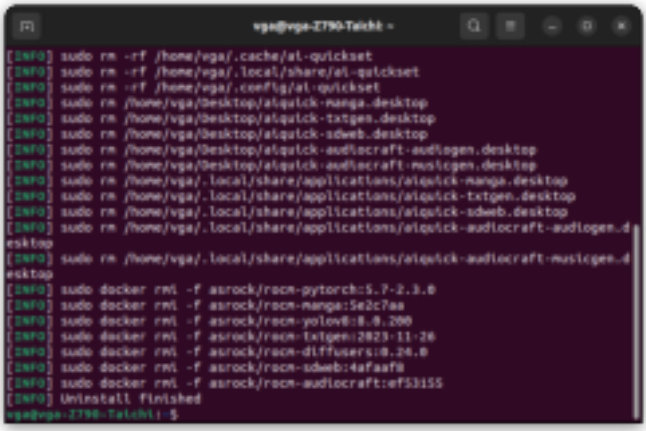
3. Enter “Y” and then press "Enter" to continue.



4. Enter your Linux user password and then press "Enter" to confirm. Wait for the uninstall process to complete.



5. The software has been uninstalled successfully, click “X” to close the window.

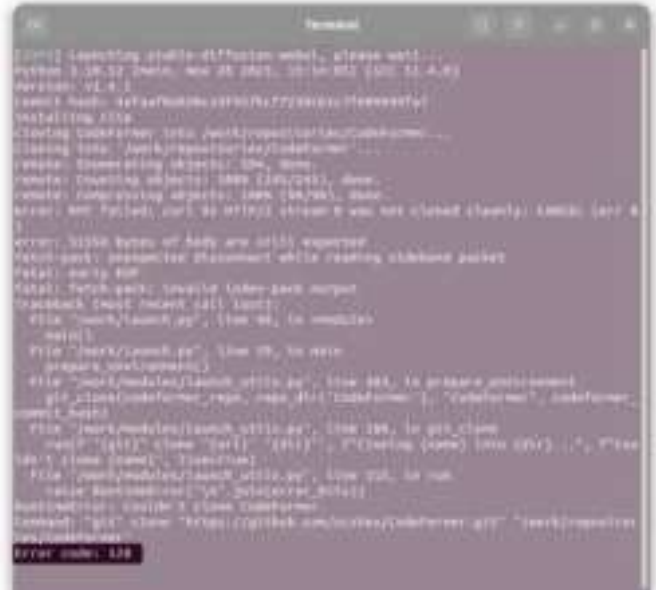


English

Chapter 6 Troubleshooting

6.1 Error code : 128

If you encounter the error code 128 while launching Stable Diffusion web UI, please check if your network is connected properly, and try to launch the application again.



6.2 Other Problems

- If you encounter any other problems, please reboot your computer and install the AI QuickSet software again.

English

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ASRock Contact Information

If you need to contact ASRock or want to know more about ASRock, you're welcome to visit ASRock's website at http://www.asrock.com; or you may contact your dealer for further information. For technical questions, please submit a support request form at https://event.asrock.com/tsd.asp

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