

1 Installation on Window

Miniforge

First, install Miniforge3 for Windows x86 64.

Open Miniforge Prompt, it is slightly different from Windows' Terminal

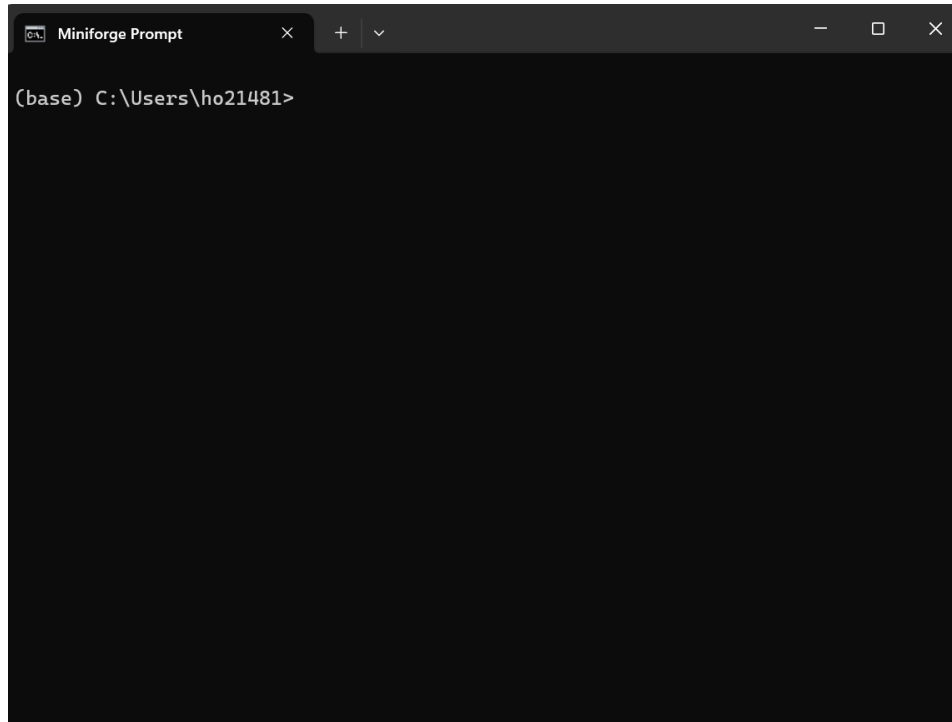


Figure 1: Miniforge Prompt

Salvus

(base) means you are in the virtually environment named base. And then you need to download the list of Python dependencies:

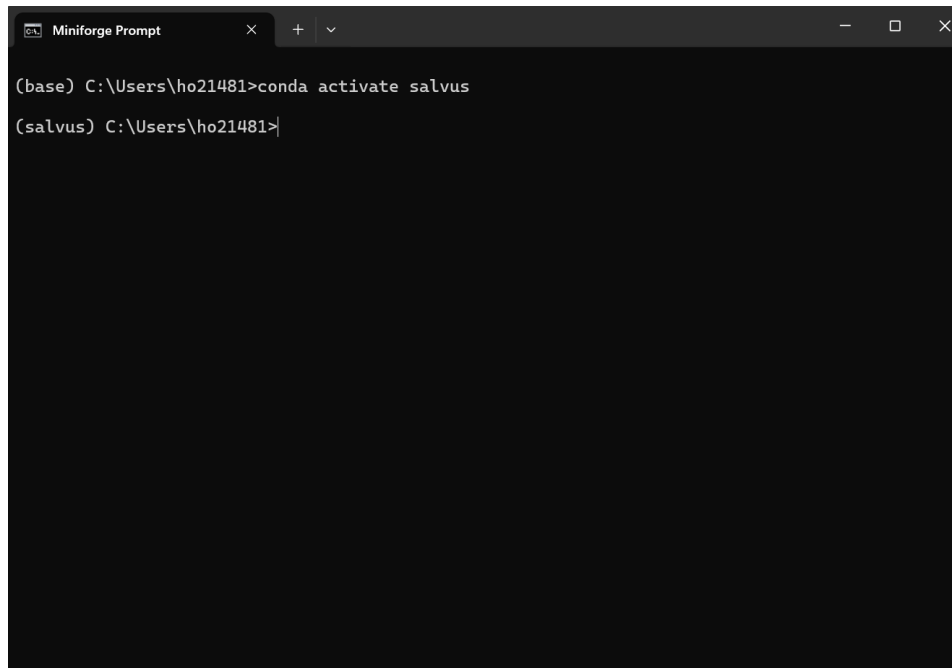
```
$ curl https://mondaic.com/environment-py311.yml -o environment.yml
```

and create a new virtual environment named salvus with the Python dependencies installed in the file environment.yml:

```
$ mamba env create -n salvus -f environment.yml
```

Then activate the virtual environment salvus:

```
$ conda activate salvus
```



```
Miniforge Prompt
(base) C:\Users\ho21481>conda activate salvus
(salvus) C:\Users\ho21481>
```

Figure 2: Activate the virtual environment named salvus

(salvus) indicates that you are in the virtual environment named salvus.

To download Salvus and install the Salvus Python module, first run the Mondaic Downloader:

```
$ powershell -command "iex (New-Object System.Net.WebClient).DownloadString('https://get.mondaic.com/win')"
```

Enter the following license information prompted as shown in Figure 3.

license username: **bristol.support**
Password: **scah-bamp-POMP-vair**

```

Miniforge Prompt - powershell
Effective date: October 12, 2019

=====
Do you accept the terms of the end-user license agreement? [y/n] · y
License username · bristol.support
License password · *****
?
Do you want to create the Salvus license file 'C:\Users\ho21481\salvus-licenses.toml'? [y/n] · y
[2024-10-23T13:52:12Z INFO salvus_downloader::authentication] Created license file 'C:\Users\ho21481\salvus-licenses.toml'.
Select maximum CPU microarchitecture · Haswell [Recommend for this system based on autodetection]
Select operating system · Windows [This system]
Installation directory for Salvus · C:\Users\ho21481\Salvus
?
Choose Salvus release [select with the arrow keys, then hit ENTER to confirm] >
> 2024.1.1
  2024.1.0
  0.12.16

```

Figure 3: Download Salvus

Always choose recommended options and finally it shows in the Figure 4

```

Miniforge Prompt
?
Do you want to create the Salvus license file 'C:\Users\ho21481\salvus-licenses.toml'? [y/n] · y
[2024-10-23T13:52:12Z INFO salvus_downloader::authentication] Created license file 'C:\Users\ho21481\salvus-licenses.toml'.
Select maximum CPU microarchitecture · Haswell [Recommend for this system based on autodetection]
Select operating system · Windows [This system]
Installation directory for Salvus · C:\Users\ho21481\Salvus
Choose Salvus release [select with the arrow keys, then hit ENTER to confirm] · 2024.1.1
You will now be given a choice to download one or more products. Products that already are on disc will be updated in any case and thus no choice is given.
Select products to download [Space to (de)select, Return to submit] · Salvus [Single precision version of SalvusCompute (Recommended)], SalvusPy [Salvus Python package]
Downloading "salvus-2024.1.1-cp311-cp311-win_amd64.whl" [00:00:02] [ ] 17.22 MiB/17.22 MiB eta: 0s
Downloading "xxhsum.exe" [00:00:00] [=====] 74.50 KiB/74.50 KiB eta: 0s
Downloading "salvus.exe" [00:00:03] [=====] 47.25 MiB/47.25 MiB eta: 0s
[OK] Validation of the current installation has been successful.
[OK] Installation can be found in: C:\Users\ho21481\Salvus
(salvus) C:\Users\ho21481>

```

Figure 4: Download Salvus

And then install the Salvus Python package with:

```

$ cd Salvus\python_packages
$ pip install salvus-2024.1.1-cp311-cp311-win_amd64.whl

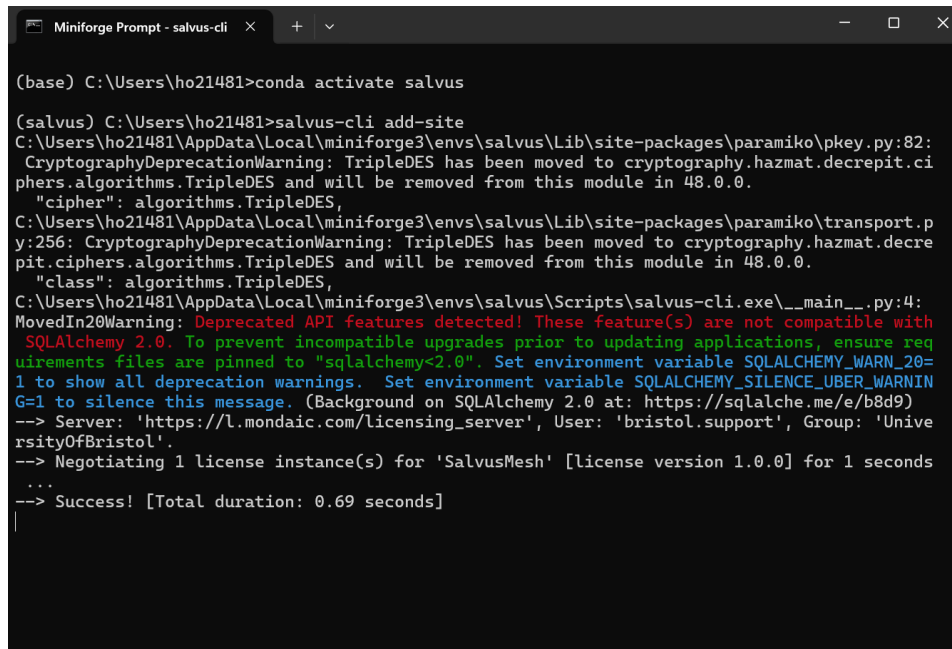
```

make sure you are in the correct directory and the *.whl file exists in the current directory.

Configure SalvusFlow

The last step is to teach Salvus how to run on your specific machine. Please run this interactive wizard to get started as shown in Figure 5, ensure that you are in the virtual environment named salvus otherwise enter commend: `$ conda activate salvus`.

```
$ salvus-cli add-site
```



```
Miniforge Prompt - salvus-cli x + v
(base) C:\Users\ho21481>conda activate salvus
(salvus) C:\Users\ho21481>salvus-cli add-site
C:\Users\ho21481\AppData\Local\miniforge3\envs\salvus\Lib\site-packages\paramiko\pkey.py:82:
CryptographyDeprecationWarning: TripleDES has been moved to cryptography.hazmat.decrepit.ciph
C:\Users\ho21481\AppData\Local\miniforge3\envs\salvus\Lib\site-packages\paramiko\transport.p
y:256: CryptographyDeprecationWarning: TripleDES has been moved to cryptography.hazmat.decre
pit.ciphers.algorithms.TripleDES and will be removed from this module in 48.0.0.
  "cipher": algorithms.TripleDES,
  "class": algorithms.TripleDES,
C:\Users\ho21481\AppData\Local\miniforge3\envs\salvus\Scripts\salvus-cli.exe\__main__.py:4:
MovedIn20Warning: Deprecated API features detected! These feature(s) are not compatible with
SQLAlchemy 2.0. To prevent incompatible upgrades prior to updating applications, ensure req
uirements files are pinned to "sqlalchemy<2.0". Set environment variable SQLAlchemy_WARN_20=
1 to show all deprecation warnings. Set environment variable SQLAlchemy_SILENCE_UBER_WARNIN
G=1 to silence this message. (Background on SQLAlchemy 2.0 at: https://sqlalche.me/e/b8d9)
--> Server: 'https://l.mondaic.com/licensing_server', User: 'bristol.support', Group: 'Unive
rsityOfBristol'.
--> Negotiating 1 license instance(s) for 'SalvusMesh' [license version 1.0.0] for 1 seconds
...
--> Success! [Total duration: 0.69 seconds]
```

Figure 5: Download Salvus

Select "Already installed" for the question "Do you want to install Salvus on remote machine or is it installed?" as shown in Figure 6, and always enter "y" or choose default options for the others.

```
Miniforge Prompt - salvus-cli  X  +  v  -  □  X
--> Negotiating 1 license instance(s) for 'SalvusMesh' [license version 1.0.0] for 1 seconds
...
--> Success! [Total duration: 0.69 seconds]

? Do you want to initialize a local (this computer) or a remote (another computer) Salvus site? local

? Name of the site (the name you'll use to refer to it): oliver

? Do you want to install Salvus on the remote machine or is it already installed? Already installed

? Path to the Salvus binary: C:\Users\ho21481\Salvus\bin\salvus.exe

-----
The remainder of the questions will be site specific settings.

? default_ranks -- (The default number of processors Salvus will be run with on this site, if not explicitly specified.): 4
? max_ranks -- (The maximum number of processors Salvus will be run with on this site. Serves to protect against accidental user errors.): 8
? run_directory -- (Run directory on the site. Salvus will copy all files it requires to run into this directory. Must be read-and writeable.): C:\Users\ho21481\salvus_data\run_directory
? tmp_directory -- (Run directory on the site. Use for very large and/or temporary output. Must be read-and writeable. If site's systems has a scratch file system use it here.): C:\Users\ho21481\salvus_data\tmp_directory
? use_cuda_capable_gpus -- (Set this to true if each compute node on the target site has at
```

Figure 6: Download Salvus

2 Installation on Linux or MacOS

Miniforge

First, install Miniforge3 by running the command below in your terminal:

```
$ curl -L -O "https://github.com/conda-forge/miniforge/releases/latest/download/Miniforge3-$(uname)-$(uname -m).sh" bash Miniforge3-$(uname)-$(uname -m).sh
```

Salvus

Then you need to download the list of Python dependencies:

```
$ mamba env create -n salvus -f environment.yml
$ conda activate salvus
```

To download Salvus and install the Salvus Python module, first run the Mondaic Downloader:

```
$ bash -c "$(curl -sSL https://get.mondaic.com)"
```

Enter the following license information as it requires.

```
license username: bristol.support
Password: scah-bamp-POMP-vair
```

And then install the Salvus Python package with:

```
$ pip install ~/Salvus/python_packages/salvus-*.whl
```

Configure SalvusFlow

The last step is to teach Salvus how to run on your specific machine.

```
$ salvus-cli add-site
```

Select "Already installed" for the question "Do you want to install Salvus on remote machine or is it installed?", and always enter "y" or choose default options for the others.