

HPC Access & Pypsa Install Instructions



From [Alexander Kies](#) on 2024-10-23 11:41

Details Headers Plain text

Hej Kristoffer,

If you find the time you could check if you have computing resources already available on the central computing cluster:

For this purpose, you log into cloud.sdu.dk

For me, the starting screen looks like this, so have around 14k computing hours at the moment available.

I also made a brief video how to install and launch pypsa in a shell or jupyter notebook on this infrastructure:

https://drive.google.com/drive/folders/1Km4GwP7PTodHg6AgKUW4DoU_upCVr9pD

But first you should check out if you have access, if you already have resources allocated there and make yourself a little familiar with this cloud environment.

An recent overview of some methods to explore the solution space is also here: <https://iopscience.iop.org/article/10.1088/2753-3751/ad7d10>

It might also be interesting in the context of your thesis to apply the concepts on multi-step investment problems. E.g. where a European power system is served for different multi-year time steps, e.g. 2020-2030-2040-2050 respecting the solution from the previous timestep.

Best

Alex

GPU Node Capacity Expanded with new NVIDIA H100s

The DeIC Interactive HPC system at SDU has doubled its GPU resources.

The DeIC Interactive HPC system at SDU has enhanced its capabilities with the addition of four n node is equipped with four NVIDIA H100 GPUs, featuring 80 GB of VRAM per GPU. This upgrade of GPU nodes equipped with NVIDIA H100s to eight, accessible by selecting the u3-gpu product

The expanded capacity supports high-demand tasks such as machine learning, data analysis, ar which require substantial computing power for processing large datasets and complex algorithm

Resource allocations

u1-standard-h	6,68 / 13,64K Core-hours
u1-cephfs	4 GB / 100 GB