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Supercomputing
Center**
Centro Nacional de Supercomputación



Programming Distributed Computing Platforms with COMPSs

Workflows & Distributed Computing Group

26-27/01/2021

Barcelona

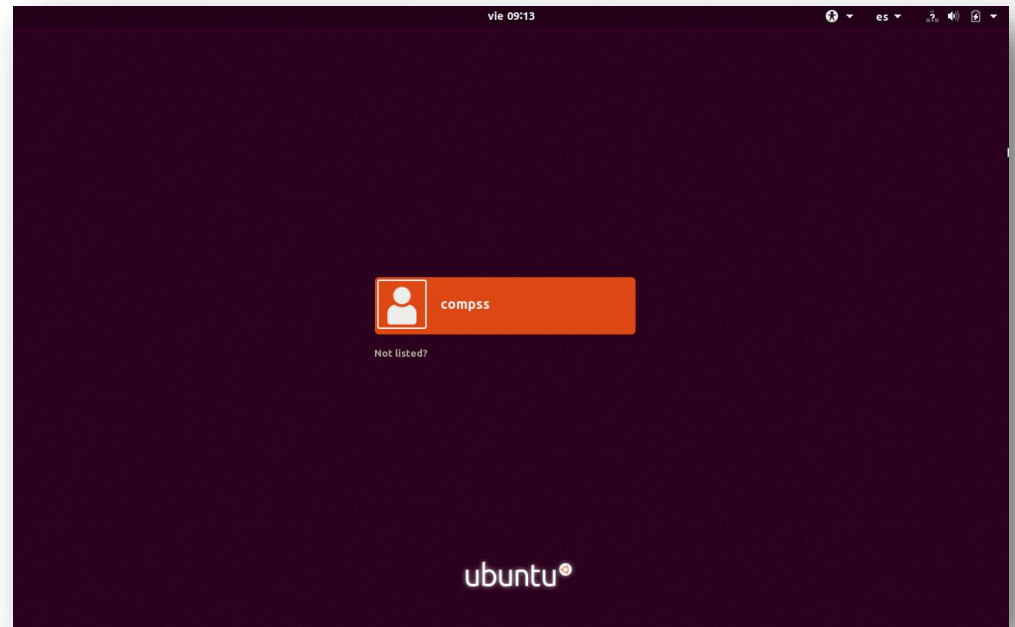
Python Hands-on (Jupyter-notebook)



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PyCOMPSs and Jupyter-Notebook in VM

- Start the Virtual Machine
 - User: **compss**
 - Password: **compss2021**
- Open a console
- Update tutorial_apps
 - `rm -rf tutorial_apps`
 - `git clone https://github.com/bsc-wdc/tutorial_apps.git`



PyCOMPSs and Jupyter-Notebook in Docker

- Install pycompss-player (already installed in the VM):
 - Linux: `$ sudo python3 -m pip install pycompss-player`
 - Mac-os: `$ pip install pycompss-player`
- Download example applications:
`$ git clone https://github.com/bsc-wdc/tutorial_apps.git`
- Initialize a COMPSs cluster:
`$ pycompss init -i compss/compss-tutorial:2.8`
- Start Jupyter-notebook
`$ pycompss jupyter`
- Open a web browser with the address:
<http://localhost:8888>
or
<http://172.17.0.2:8888>

**With pycompss-player <= 2.8 Follow the url that shows*

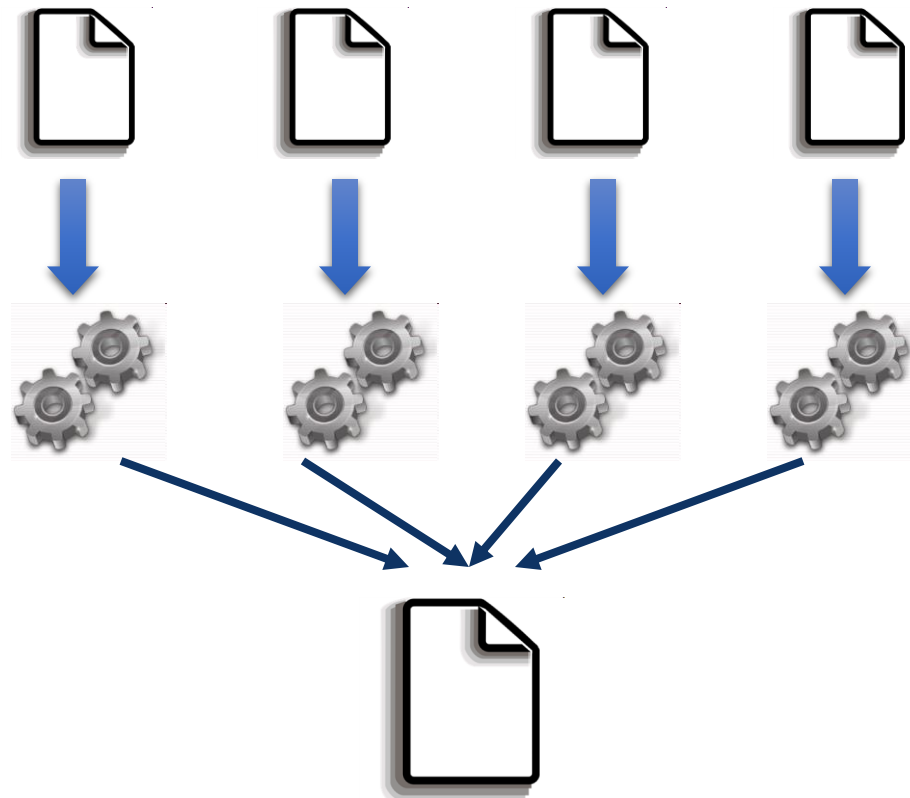
Python Hands-on demos



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Wordcount Exercise

- Counting words of a set of documents
- Parallelization
 - Phase 1: Count words of a set of documents
 - Phase 2 : Merge results





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EXCELENCIA
SEVERO
OCHOA

THANK YOU!

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