

# About VSC Vienna Scientific Cluster

Claudia Blaas-Schenner  
VSC Research Center, TU Wien



07/2021

Univerza v Ljubljani



TECHNISCHE  
UNIVERSITÄT  
WIEN



VSB TECHNICAL  
UNIVERSITY  
OF OSTRAVA

IT4INNOVATIONS  
NATIONAL SUPERCOMPUTING  
CENTER



Co-funded by the  
Erasmus+ Programme  
of the European Union

This project has been funded with support from the European Commission.  
This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use  
which may be made of the information contained therein.

**VSC** – joint high performance computing (HPC) facility of Austrian universities

- [vsc.ac.at](https://vsc.ac.at)
- [vsc.ac.at/access](https://vsc.ac.at/access)
- [vsc.ac.at/training](https://vsc.ac.at/training)

VSC is primarily  
devoted to research.



- Within the limits of available resources we satisfy the **HPC needs of our users.**
- Provide and maintain the **hardware** & all **services** that are needed to use it.
- VSC-1 (2009) – 35 TFlop/s – #156 (11/2009) – #1: 1.8 PFlop/s
- VSC-2 (2011) – 135 TFlop/s – #56 (06/2011) – #1: 8 PFlop/s
- VSC-3 (2014) – 596 TFlop/s – #85 (11/2014) – #1: 33 PFlop/s
- VSC-4 (2019) – 2.7 PFlop/s – #82 (06/2019) – #1: 148 PFlop/s
- VSC-5 (2021) → coming soon...



VSC-3 (2014) → VSC-3+ (2018) → GPUs

2020 nodes

2 Intel Ivybridge CPUs

8 cores/CPU

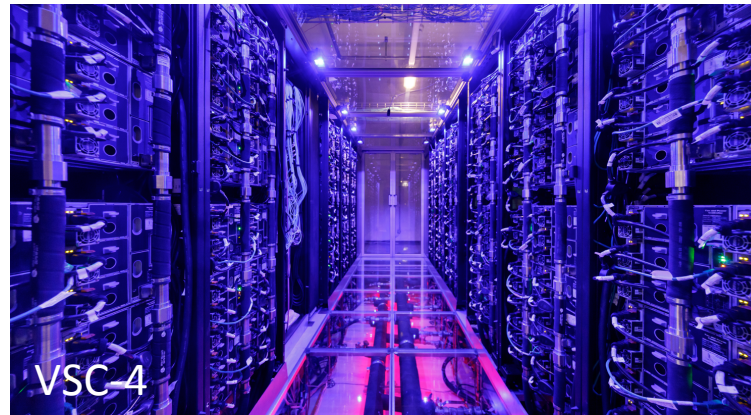
64 GB/nodes (128 GB / 256 GB)

864 nodes

2 Intel Ivybridge CPUs

10 cores/CPU

64 GB/nodes (256 GB)



VSC-4 (2019)

790 nodes

2 Intel Skylake Platinum CPUs

24 cores/CPU

96 GB/nodes (384 GB / 768 GB)

VSC-5 – soon to come

770 nodes

2 AMD EPYC Milan

64 cores/CPU

512 GB/node (1 TB / 2 TB)

60 GPU nodes 2 NVIDIA A100

VIENNA  
SCIENTIFIC  
CLUSTER





# VSC → Europe

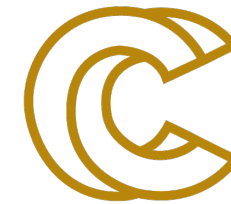
- PRACE → PTC @ VSC  
→ SHAPE  
→ access to PRACE systems



- EuroHPC → partner @ LEONARDO  
(EuroHPC pre-exascale system)  
→ access to EuroHPC systems  
→ EuroCC



**EuroHPC**  
Joint Undertaking



**EURO**  
**AUSTRIA**

Thank you for your attention!

<http://sctrain.eu/>

Univerza v Ljubljani



TECHNISCHE  
UNIVERSITÄT  
WIEN



VSB TECHNICAL  
UNIVERSITY  
OF OSTRAVA

IT4INNOVATIONS  
NATIONAL SUPERCOMPUTING  
CENTER



Co-funded by the  
Erasmus+ Programme  
of the European Union

This project has been funded with support from the European Commission.  
This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.