



PARTNERSHIP FOR ADVANCED COMPUTING IN EUROPE

PRACE Service to Science

Janne Ignatius

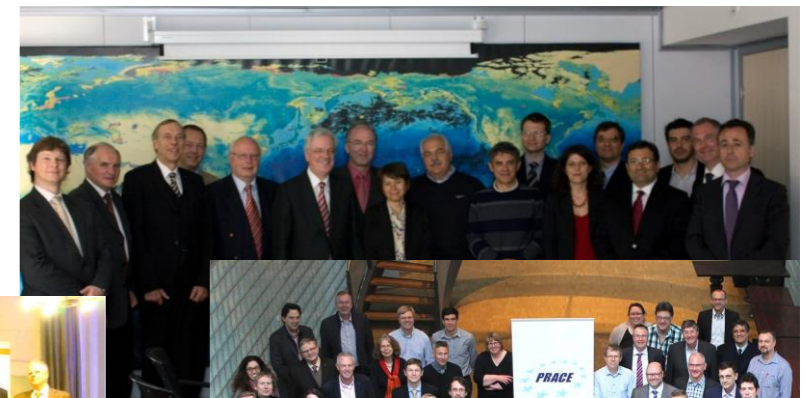
PRACE Council Chair

CSC - IT Center for Science, Finland



PRACE History

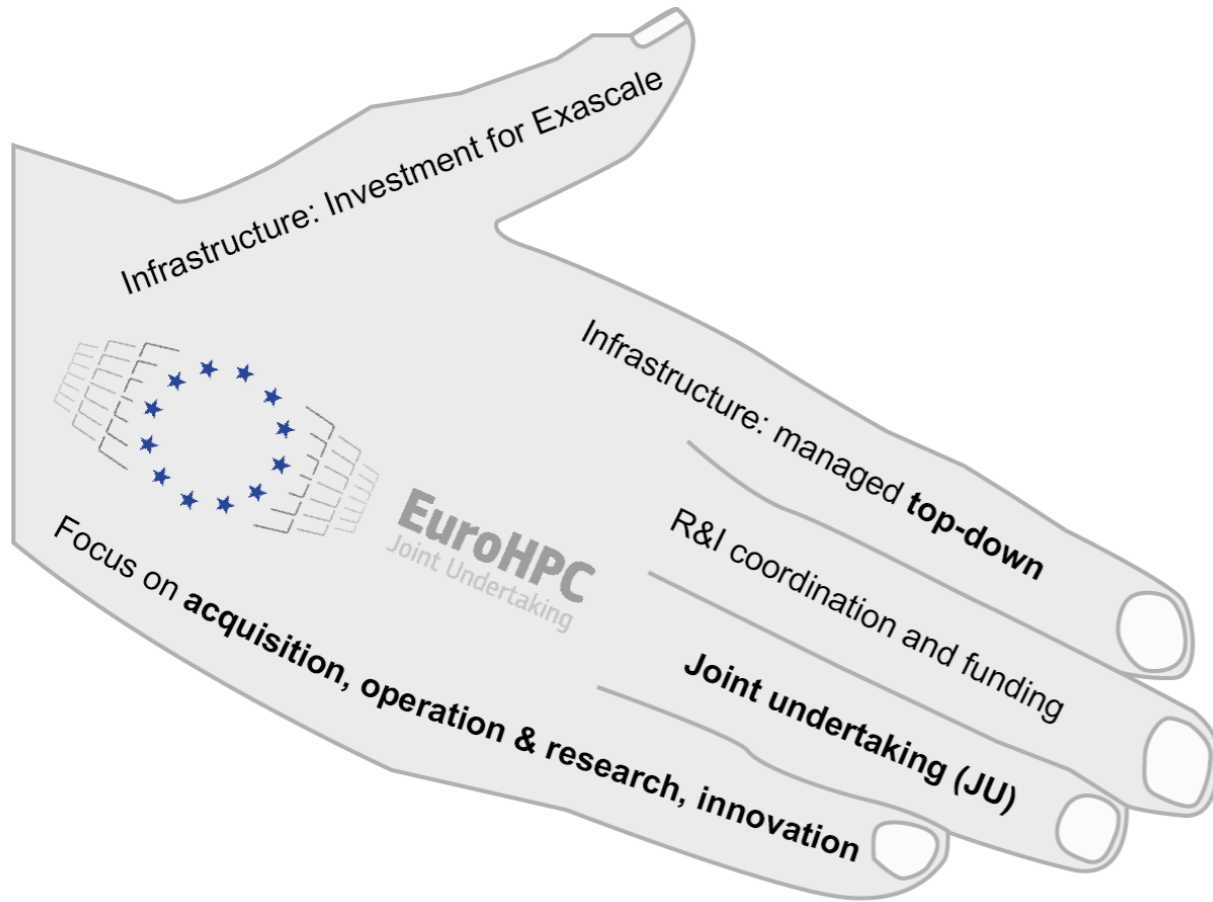
- ▶ Precursor The DEISA Project (Victor Alessandrini, F)
- ▶ First Ideas 2003 – HPC-Euro Interest Group (Hugh Pilcher Clayton, UK)
- ▶ Closing in 2006 – HPC in Europe Task Force (HET) (Kimmo Koski, FI)
- ▶ ESFRI 2006 – HPC on the Roadmap
- ▶ PRACE MoU 2007 (Alain Lichnewsky, F, Achim Bachem, D)
- ▶ PRACE Signing 2010 (Achim Bachem, D)
- ▶ PRACE II 2017 (Anwar Osseyran, NL)
- ▶ PRACE III Work in progress





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PRACE in the EuroHPC era





PRACE Services today

- ▶ **Open access** to leadership HPC systems for EU researchers
- ▶ **Peer Review** at European level – science led (SSC)
- ▶ **Access to** architectural variety meeting most algorithmic needs
- ▶ **User support** by HLSTs, Preparatory Access, support for CoEs etc.
- ▶ **Operation** of a large set of HPC services, unified over all providing centers
- ▶ **Training** by PRACE Training Centers, Seasonal Schools, etc
- ▶ **Enabling** of Industry on European HPC systems (... SHAPE)
- ▶ **Market Watch** to create competence for HPC procurements





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Who is Servicing ?





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PRACE Achievements

- ▶ **916** scientific projects enabled
- ▶ **>32** billion core hours awarded since 2010
- ▶ Of which **63%** led by another PI nationality than the HM
- ▶ R&D access to industrial users with **>65** companies supported
- ▶ **>17 000** people trained through PRACE Training
- ▶ **~220** Petaflops of total peak performance on **7** world-class systems
- ▶ **25** PRACE members, including **5** Hosting Members (France, Germany, Italy, Spain and Switzerland)
- ▶ PRACE is the **only** e-infrastructure Landmark on the ESFRI Roadmap 2016



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PRACE Virtues

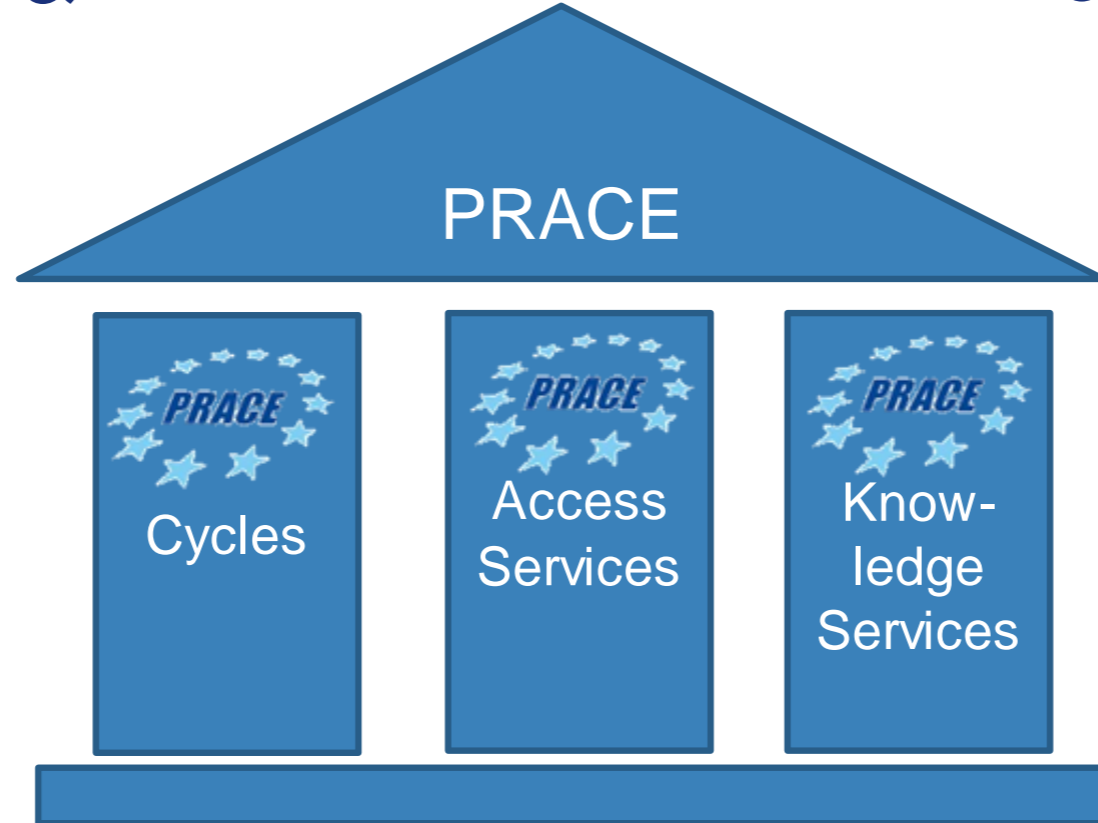
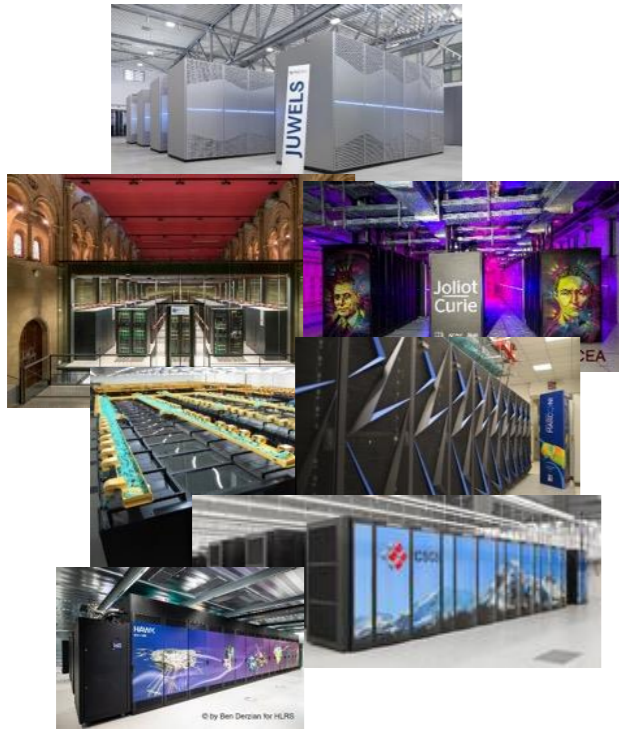
Resources

&

Services

&

People



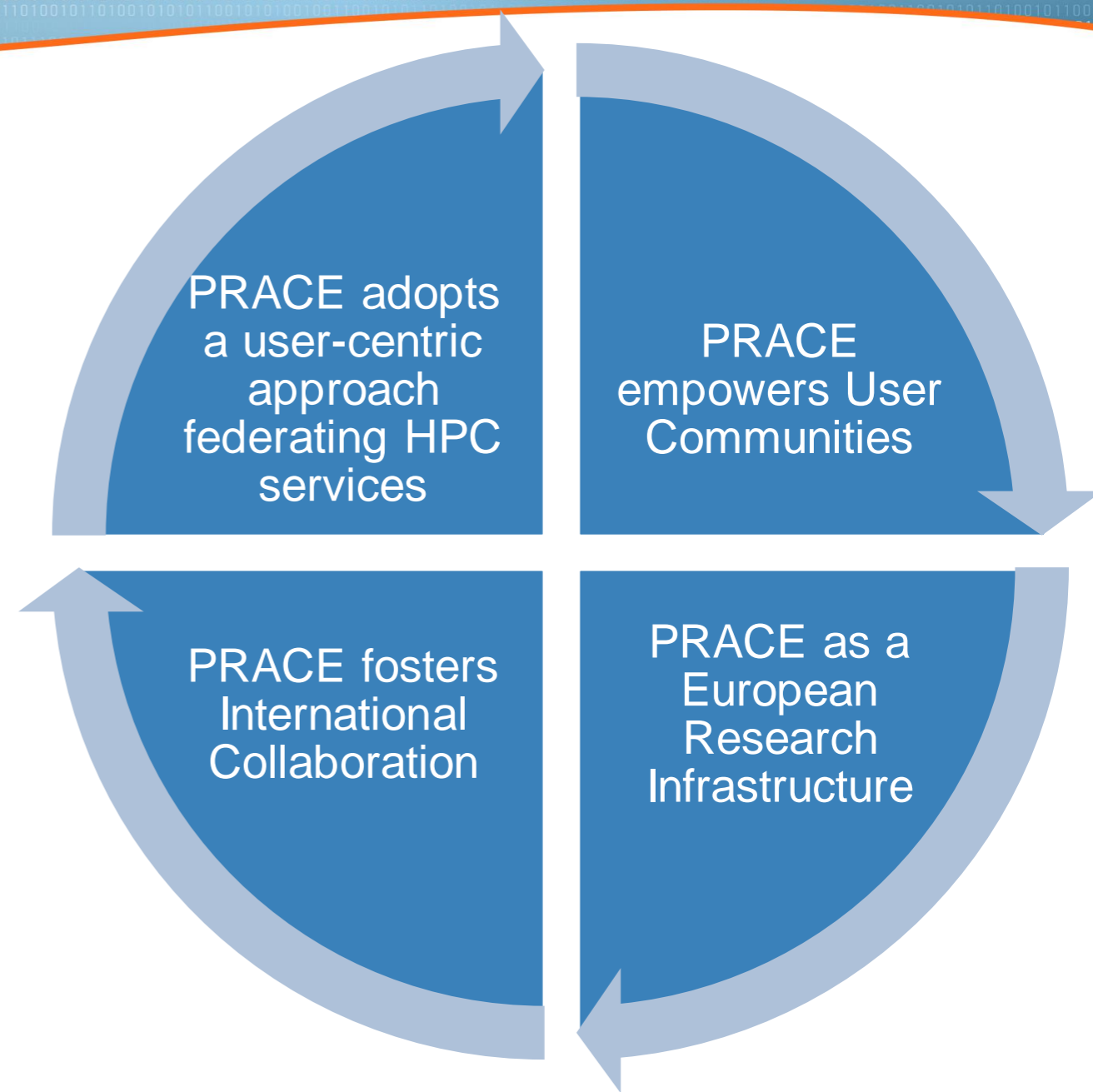
EuroHPC
Joint Undertaking

- Organisation of access calls (extreme scale, enabling, fast tracks, ...) for science & industry
- Peer Review process for Open Science
- Data services (Fenix, EUDAT)

- Dissemination & Communication
- Training & Education
- User Support
- Code Enabling & Development
- Technology assessment

PRACE 3 **The next step**

- ▶ Change from a Cycle to a Service provider
- ▶ PRACE 3 Pillars and Principles:





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THANK YOU FOR YOUR ATTENTION

www.prace-ri.eu