Towards an HPC Certification Program

https://hpc-certification.org

Fifth SC Workshop on Best Practices for HPC Training and Education
Outline

1. The Program
2. The HPC Certification Forum
3. Summary & Future Work
The HPC Certification Program

Goals

- Standardizing HPC knowledge representation
- Supporting navigation and role-specific knowledge maps
- Establishing international certificates attesting knowledge
The Program

The HPC Certification Forum

Summary & Future Work

Content of the Certification Program

- Skill is characterized by unique key, background, knowledge covered
- Skill tree defining the organization of the competences
- Certificates bundle several skills into attestable unit

**Figure:** Top-levels of the skill tree

- Content is **NOT** covered and subject to content providers
  - We may link good content on our page
Status

- A first version of the skill tree is released (35 basic skills)
  - Technically implemented as XML
  - Contribution to GitHub
    https://github.com/HPC-certification-forum/curriculum

- JavaScript for visualization of skill tree
  - Can be embedded in your webpage and adapted
    - Role/software-specific knowledge
    - What should people know to effectively work in your environment?

- The work was bootstrapped and is supported by the PeCoH project\(^1\)

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\(^1\)PeCoH was supported by the German Research Foundation (DFG) under grants LU 1353/12-1, OL 241/2-1, and RI 1068/7-1.
The HPC Certification Forum

The HPC-CF the central authority for the development of the program

Organization Details

- An independent international body
- Organized into
  - Steering board
  - Full members with voting rights
  - Associate members

Responsibilities

- Curating and maintaining the skill tree and certificates
- Providing tools and ecosystem around the competences
Summary & Future Work

- Goals: standardizing HPC knowledge representation
- If you are interested, visit us and join our mailing lists:
  https://hpc-certification.org

Next steps

- Finalizing the first version of the skill-tree (V1)
- Releasing a seal that can be added to training material
- Finalizing the documentation how to create views with the JavaScript