https://hpc-wiki.info

HPC Wiki

Workshop HPC-Schulung, -Ausbildung und –Dokumentation
Hamburg 31.07.2019

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RWTH AACHEN UNIVERSITY

Site-independent HPC Knowledge Base: Wh

Log in

HPCWIKI

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Getting Started

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Access or "How-to-be-allowed-onto-the-supercomputer"

Depending on the specific supercomputer, one has to either register to get a user account or write a project proposal and apply for computing resources that way. The respective pages are linked in this overview.

After this is done and login credentials are supplied, one can proceed to login .

Login or "How-to-now-actually-connect-to-the-supercomputer"

Most HPC Systems are unix-based environments with shell (commandline) access.

To log in, one usually uses ssh to reach the respective Login Nodes (computers reserved for people just like you that want to connect to the supercomputer). Sometimes this access is restricted, so you can only connect, when you are within the university/facility and its network. To still access the Login Nodes externally, one can 'pretend to be inside the network' by using a Virtual Private Network (VPN).

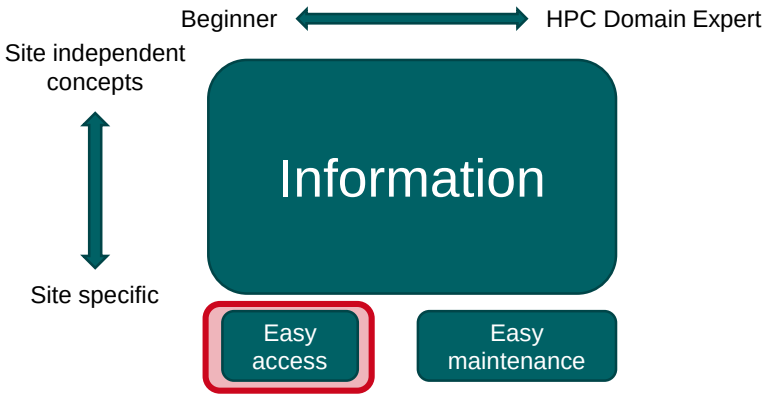
Once there, the user can interact with the system and run (small) programs to generally test the system/software.

File Transfer or "How-to-get-your-data-onto-or-off-the-supercomputer"

To get your data (files) onto the supercomputer or back to your local machine, there are usually different ways. Sometimes there are computers specifically reserved for this purpose called copy nodes.

Site-independent HPC Knowledge Base: Challenges

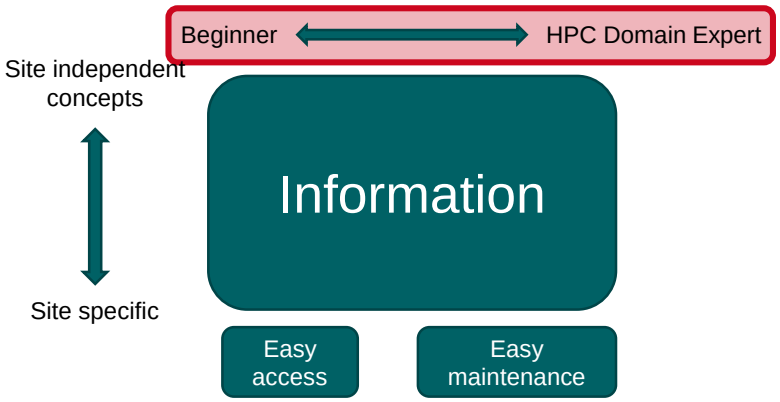
Site-independent HPC Knowledge Base: Technology



Mediawiki:

- Intuitive Interface
- Publicly readable
- Moderation possible
- Protected Sections possible
- Authentication per Shibboleth (eduGAIN) for patrolled editing

Site-independent HPC Knowledge Base: Target groups



Differentiating by:

- Pre-existing knowledge
- Abstraction level/ level of detail
- Terminology
- What information is presented/provided

HPC Admin

HPC Expert (performance engineering, …)

HPC Methods (storage, IO, numerical analysis, …)

Domain Expert, Computational Scientist

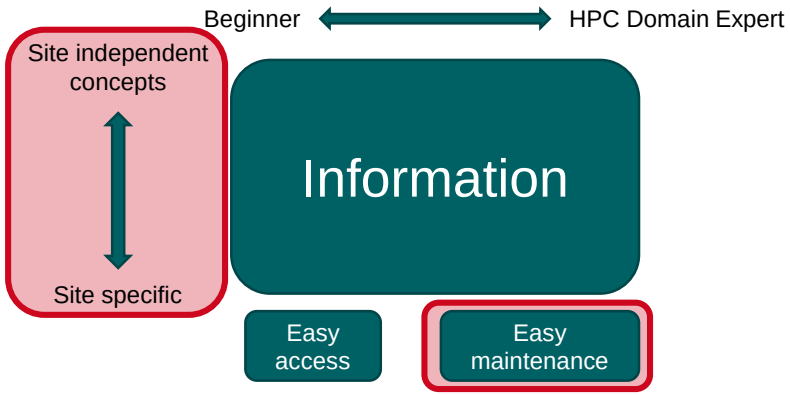
HPC Developer (parallel programming)

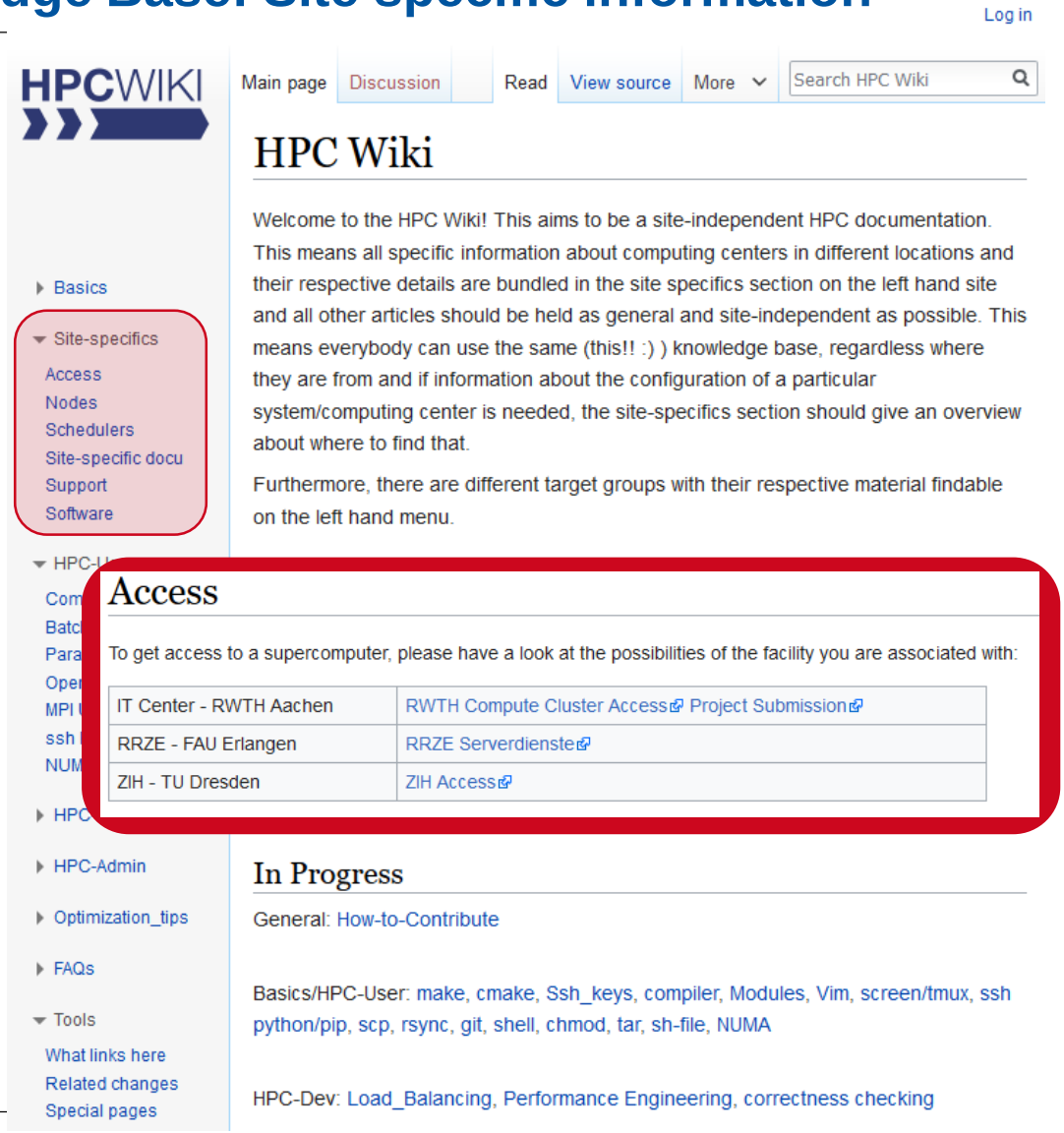
HPC User (parallel applications)

HPC Basics

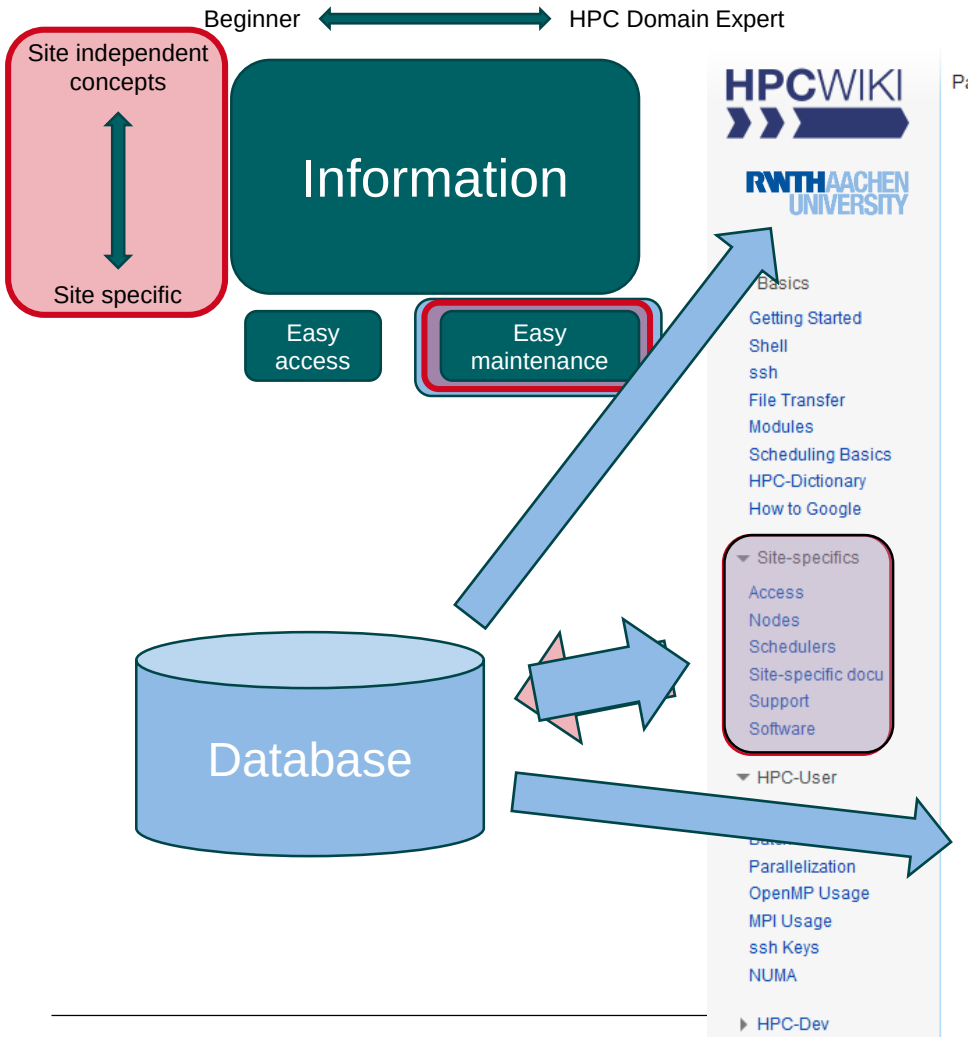
Level of Detail

Site-independent HPC Knowledge Base: Site specific information





Site-independent HPC Knowledge Base: Vision of blended content



Page Discussion Read

Getting Started

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3 File Transfer or "How-to-get-your-data-onto-or-off-the-supercomputer"
4 Schedulers or "How-To-Run-Applications-on-a-supercomputer"
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```
login.hpc.itc.rwth-aachen.de
```

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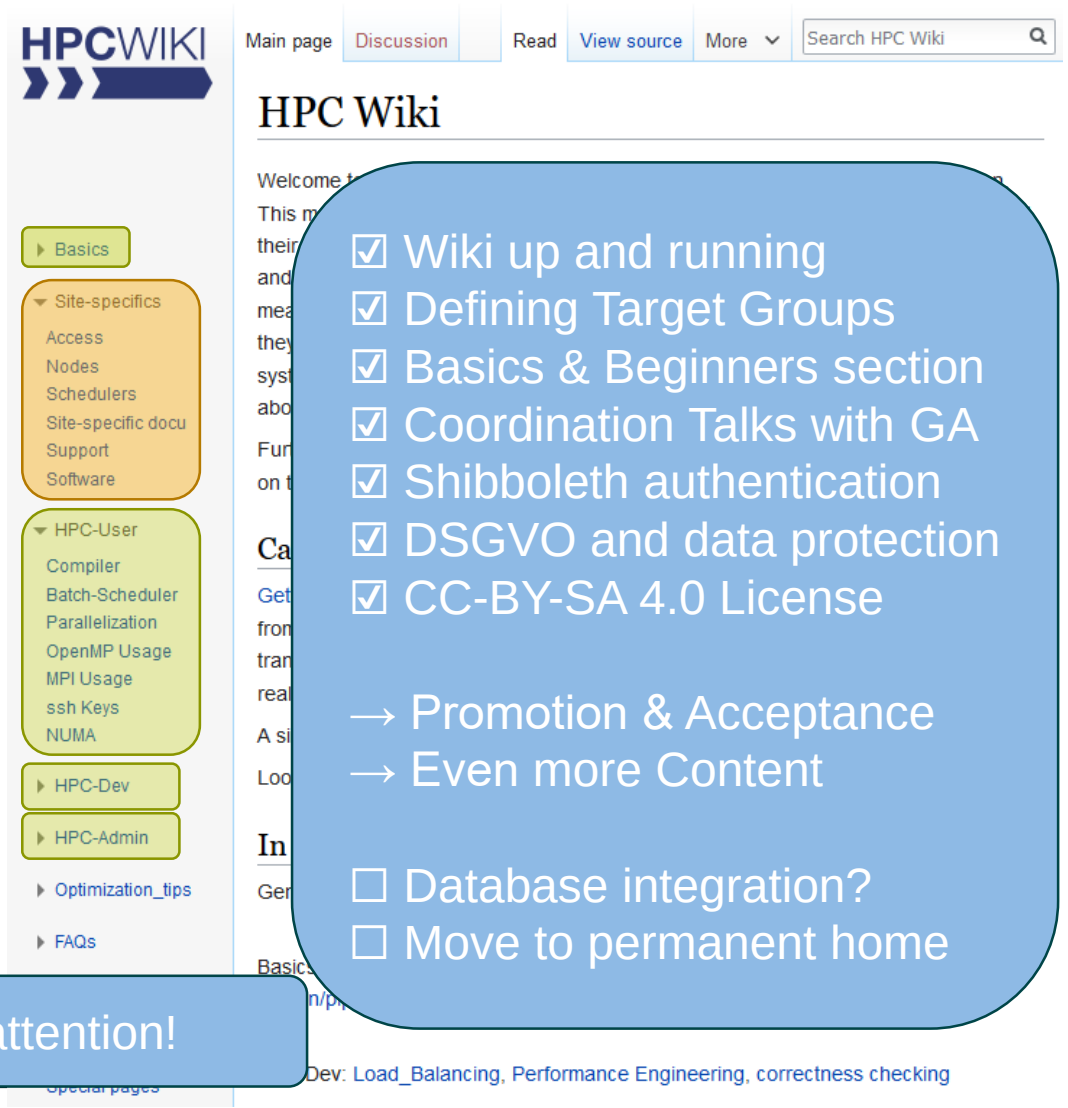
Mediawiki:

- Ease of use
- Read access for everyone
- Authentication per Shibboleth (eduG



☑ Wiki up and running
☑ Defining Target Groups
☑ Basics & Beginners section
☑ Coordination Talks with GA
☑ Shibboleth authentication
☑ DSGVO and data protection
☑ CC-BY-SA 4.0 License

→ Promotion & Acceptance
→ Even more Content

☐ Database integration?
☐ Move to permanent home

Thank you for your attention!