

Intro to Baskerville

EPSRC Tier 2 HPC System
University of Birmingham

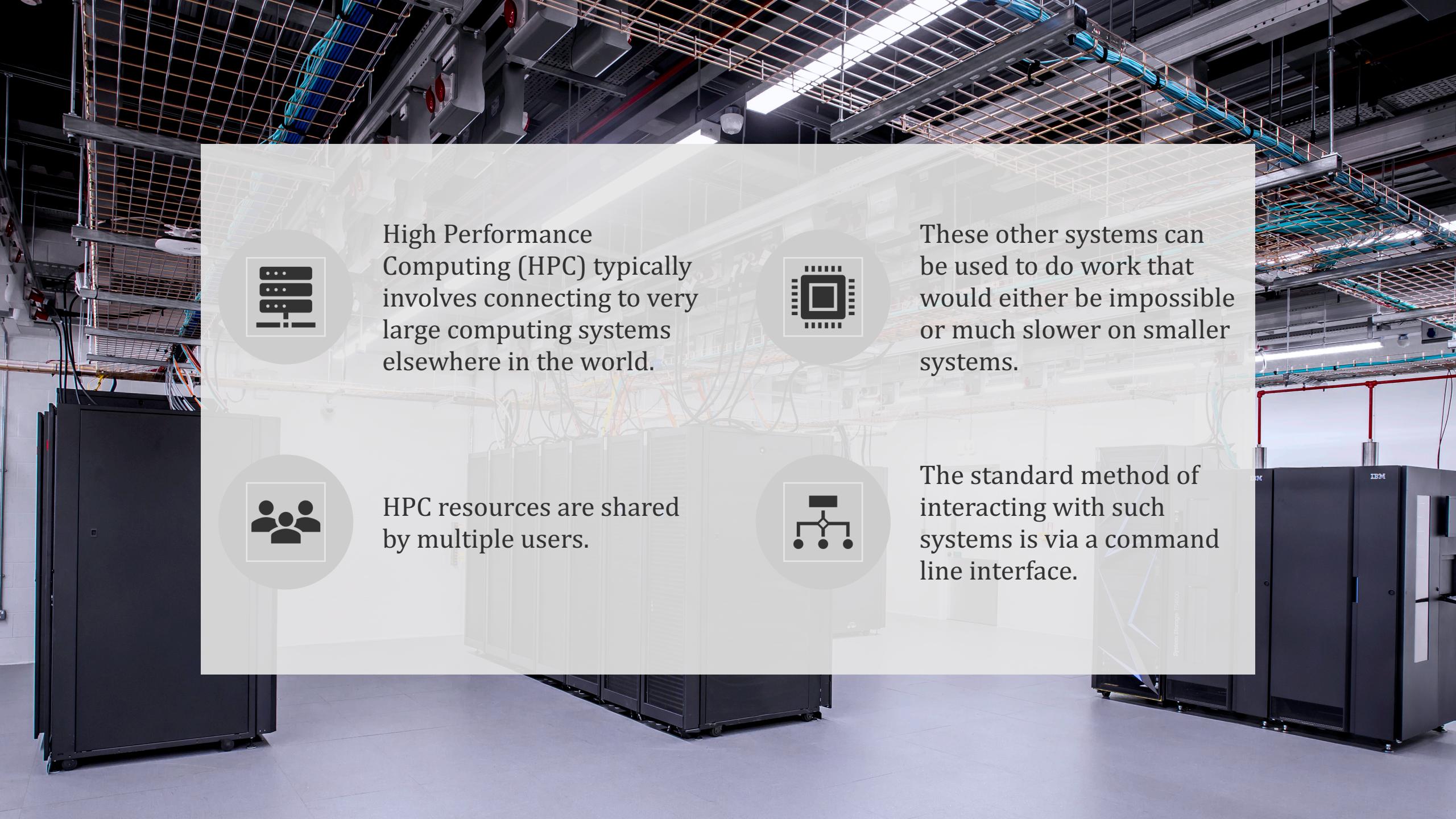
Housekeeping

- Day 1 HIC | Day 2 ATC
- Toilets
- Fire alarms
- HackMD - <https://hackmd.io/@wongj/HyxjDPIGp/edit>

Overview

1. How can High Performance Computing benefit you?
2. Connecting to Baskerville
3. System Architecture

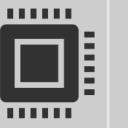
1. How can High Performance Computing benefit you?



High Performance Computing (HPC) typically involves connecting to very large computing systems elsewhere in the world.

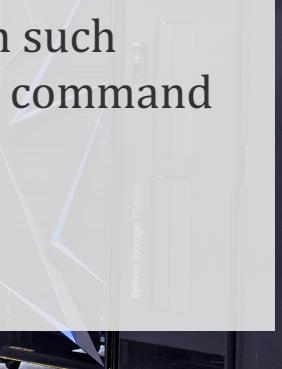


HPC resources are shared by multiple users.



These other systems can be used to do work that would either be impossible or much slower on smaller systems.

The standard method of interacting with such systems is via a command line interface.



2. Connecting to Baskerville

Connect using an SSH Client.

Windows: [PuTTY](#) | [MobaXterm](#) | [Windows Subsystem for Linux](#)

MacOS or Linux: Terminal



```
$ ssh <USERNAME>@login.baskerville.ac.uk  
Password: <enter your password>  
OTP code: <enter your OTP>
```

Note: OTP – One Time Passcode

Projects and QoS

Once you are connected to a login node, run



```
[username@bask-pg0310u16a ~]$ my_baskerville
```

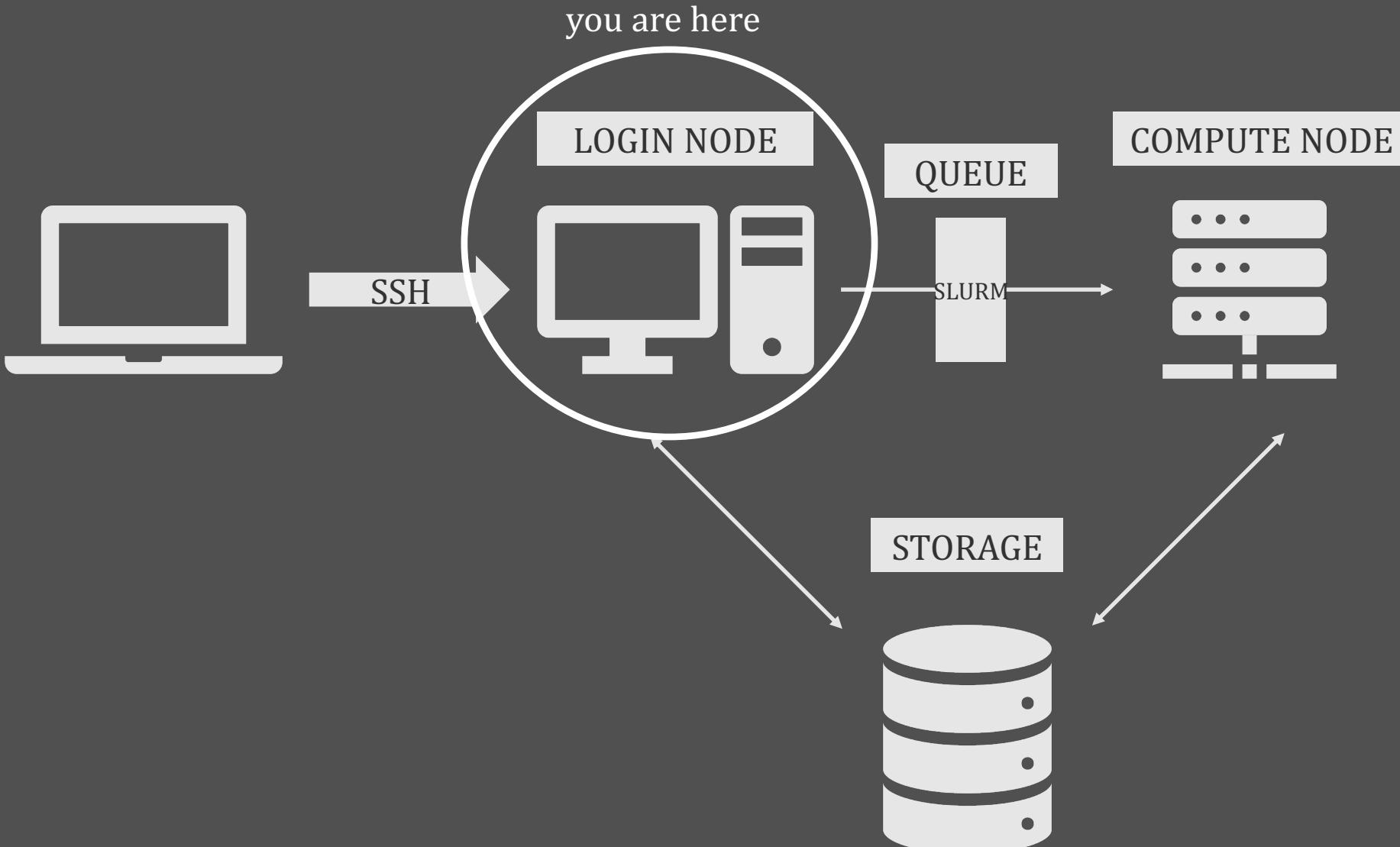
to see information about your Baskerville projects and available QoS.

This information is also available at admin.baskerville.ac.uk/.

3. System Architecture

Local: Your computer

Remote: Baskerville



Your home folder | 20GB



```
[username@bask-pg0310u16a ~]$ pwd  
/bask/homes/u/username  
[username@bask-pg0310u16a ~]$ my_quota  
Your home directory on Baskerville (/bask/homes  
/u/username):  
You are using 97.30 percent ( 19.48 GB ) of your total  
quota 20.02 GB
```

Your project folder | 1TB



```
[username@bask-pg0310u16a ~]$ cd /bask/projects/m/myproject  
[username@bask-pg0310u16a myproject]$ df -h .  
Filesystem      Size  Used Avail Use% Mounted on  
bask            1.0T   64M  1.0T   1% /bask
```

Symlink your home and project folder



```
[username@bask-pg0310u16a ~]$ ln -s /bask/projects  
/m/myproject ~/myproject
```

baskstatus - Query Available GPUs



```
username@bask-pg0310u16a myproject]$ baskstatus
Current Baskerville GPU availability:
* 1 node with 3 x A100-40 available
* 10 nodes with 1 x A100-40 available
* 2 nodes with 4 x A100-80 available
* 1 node with 2 x A100-80 available
```

Further resources

Useful links:

- <https://docs.baskerville.ac.uk/>
- <https://admin.baskerville.ac.uk/>
- <https://apps.baskerville.ac.uk/>
- <https://portal.baskerville.ac.uk/>
- <https://github.com/baskerville-hpc/intro-to-baskerville>

Email:

- baskerville-tier2-support@contacts.bham.ac.uk

