

Support for code porting

Using AI – Access to  
open source models  
in house.

**Procurement**  
**Emerging tech –**  
**implementation**  
**Sustainability/Cost benefits**

**Code optimisation**  
**Network + Accelerator Implementation**  
**Efficient use of GPU's   MIG/MPS**  
**Orchestration + GPU's**  
**Which accelerator for which load**  
**Awareness of Emerging Tech**

**GPU Software Stacks/drivers**  
**Process to move beyond GPU's**  
**Awareness of options**  
**Foundation knowledge of GPU types/Use cases**



E&F involvement  
Facility level buy in  
Funders awareness

AI strategy in Datacentres  
Datacentre TRE  
accreditation  
NetZero Strategy  
Water cooling  
Limited power envelope

Use RSE's to  
stress systems

Efficiency linked to energy: priority nodes  
Power/Performance balance: dynamic boost  
Security access standards - Ethernet HPC  
Network security and performance cost  
Lifecycle & disposal WEEE/data security

Signposting info for  
RSE's Hackathons  
with SSI

Infiniband is Plug+play      AI usage in Datacentres  
Awareness of network & Datacentre teams  
Hands on time with hardware – old kit to “play” with for training  
“intuition checklist” network troubleshooting - monitoring stats

**Openstack  
Job Submission  
customisation &  
optimisation**

**Kubernetes   Cloudlike HPC Cost & Billing  
Analysis/Reporting   Cloud bursting  
Buy-in models   OOB Logging  
Monitoring & logging – regulatory  
Software – Easybuild, EESSI, Env modules**

Agile and Kanban

**Terraform Automation   Containerisation (aptainer docker podman)  
Graphana/Prometheus   Sun Grid Engine   Git/version control  
What the cloud is? (GPU Hotel)   Use of existing ansible libraries  
Knowing what to monitor/log   Ansible training & practice**

**Data Champions  
Data Stewards**

**Avoiding vendor lock-in & Migration  
between providers | Applying  
policies retrospectively  
varied policy landscape –  
uni/funder/industry**

**Review Processes**

**Data Cataloguing: starfish | On Prem vs Cloud | Apps for  
data management | Security | Data sharing platforms |  
Globus | Governance | Sensitive Data | Data Destruction  
| air gaps | Parallel FS | Data appropriate storage envs &  
techs | Storage Tiers (hot, warm, cold) & auto/manual |  
Data Staging**

**How to configure, build, operate, maintain | connect to networks | File Systems vs  
Object Stores | Hardware (Disc, solid state, tape) | Bottlenecks | Data  
formats/standardisation | Transfer technologies (globus, MPI file utils) | data growth  
| RDM best practice | data audit | Data classification | Data retention policy**

### What's Working?

Local Knowledge of Process & Systems  
Trainee roles with training  
Work life balance  
New hires – start at lower level with  
defined path

### What Opportunities?

Easy to move roles – broad experience  
Access to latest tech  
Tap into final year students  
Broad experience – touch all areas  
Access to SMEs  
Technician's commitment for RIE's RSEs

### What could work better?

Lack of official promotion track  
cross sector rationalisation  
Training for snr management about paths  
Formal training    Money  
Pathways -> management  
want fixed training periods -> promotions

### What are the barriers?

Workload/time management  
Lack of courses in this domain  
HR policies – interviews and workstreams  
Role creep    IT Policy  
Client facing roles don't exist



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## 2025-07-03 Sheffield – Secondments & Mentoring



### Barriers

Not having the right contacts. Too new  
Institutional culture Not feeling ready to mentor  
Not knowing where to start Social anxiety  
Institutional support Security and Risk (Root  
passwords!!!)  
Training Not enough time/too much work  
Operational admin and complexity of managing a  
secondment

### How to make it more attractive?

Less formal – natural A secondment that aligns  
with my career interests, Cross industry Part  
of appraisal objectives Pathway to permanent  
employment Secondment to a range of different  
places shadowing supported mentor scheme  
promote the story – reputational boost  
matchmaking process short-term covering a  
crunch put it on employment record sabbatical  
type arrangement PhD's at the end of a project –  
mutually beneficial.

### What do you want to gain?

How to communicate my skills and achievement Information Exchange and insights stakeholder  
management advice communication advice for technical to non-technical Broad exposure to  
different jobs/environments different industries/government/UKRI Mentor more experienced than  
myself Mentored by someone from my org Long lasting relationship Networking Share  
experiences and common ground New perspectives for the host bringing in a new skillset  
something for my CV cross training

**I valued**

**Chartered institute of management  
Presentation skills  
Mental health and work life balance  
EDI training  
Export Control training  
Multimedia training  
Train the trainer**

**I Want**

**Focus on tech skills  
Corporate Negotiation skills  
Effective decision making  
Planning for failure of systems  
Technical and non-tech communications  
Best practices Signposting to external courses  
UKRI/DSIT understanding  
Budgeting/Purchasing  
The research process/ research lifecycle/ what  
researchers do! Training Juniors – Experience  
Creating documentation  
Tech focussed soft skills  
Change management not ITIL**

**Please no**

**Duplicating existing external content  
Mandatory training  
Generic HR training**





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## 2025-07-03 Sheffield – Training/Learning Formats



### What learning formats work well?

Chosen courses – not mandatory  
Bespoke formats relevant use cases  
Enabling multiple types of learners in the same room | Live systems  
Content available in advance  
Captions for language needs  
CPD days, BOF, knowledge exchange days, Peer learning, away from work,  
CPD Week – like academic writing weeks  
Mission Driven – hackathon, guest logins for locals to avoid distractions  
Signposting to existing training  
Access to VM's after the course  
Video: + pause/rewind transcript examples  
Video: - Too long, don't get on with teaching style shadowing | Record of working examples  
Exercises build on examples Vendor specific

### How have you learnt your skills?

Reactive – manuals, examples, online tutorials.  
Learning by doing On-the-job  
When the expert is away  
Mandatory courses ☹️  
Mission driven = necessity  
Formal quals in networking  
PhD Peer Learning  
Unofficial Mentorships Being present, showing an interest, Good environments, In the room with collaborative peers  
Official documents (if up to date!)  
Lectures, practical training, hands-on desktops