From prototype to production

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Inputs (use cases) – examples 1

EUCLID

- Object stores
- CVMFS
- Knowledge sharing
- Site "Services"

SKA (AENEAS)

- CVMFS
- (WL) DIRAC
- Large memory nodes

LSST

- UK DAC
- Knowledge sharing
- Databases
- Effort

JASMIN

- Increasing Interdisciplinary researchers
- Managed data
- Direct posix access

Inputs (use cases) – examples 2

aLIGO

- Burst onto cloud
- @Home
- GPUs
- Containers
- Federated access
- OS varies
- Scheduler varies (HTC)
- JupterHub
- Pilot factory
- Gluster/Lustre
- CVMFS

CCFE/UKAEA

- HTC
- Machine learning/ probabilistic
- European Open
 Science Cloud
- Scale-out
- Provenance
- 16GB/core. Infiband.
- Eurofusion AAI
- HDF5 NoDB. HDPA
- Data Lake into data centre performance

<u>ALC</u>

- Catalogues
- ML/AI
- Security
- SCARF
- Cloud
- GPUs

Inputs (use cases) – examples 3

DIAMOND

- Supporting end users
- Open Data
- OpenStack
- Cloud bursting
- Archiving/access
- savu

ISIS

- DAaaS (Data Analysis)
- No to certificates/ease of use
- On-call

ULTRA

Data Analysis Platform

<u>Other</u>

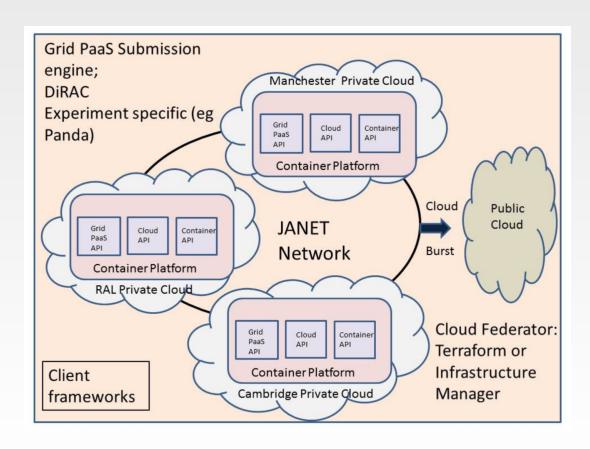
- Support to interface software
- Common tools

What are we trying to achieve in the short and long terms?

"A common e-Infrastructure for STFC sciences"

- What assumptions are being made?
- Which use-cases can and will overlap UKTO activities? (What does the proposal say about delivery?).
- Expectations clearly need aligning as we have a broad vision more details are still needed.
- Timescales/programme (important to allow evolution)
 - We will need a phased programme of work with clear priorities.
 - Initial baseline carefully share components. Which ones?
 - With what subset of UKTO members are we starting? What resources do we expect to be running and running what type of work and by when?
 - What dependencies do we have on the governance structure?

CPU – is this the whole picture for 2018?



- Details are missing.
- Who is using these resources?
- Do we need to be more inclusive?

To get the discussion started based on a <u>quick</u> survey.... current landscape

AREA	UKT0		EUCLID		UKAEA		STFC SCD/ ALC/ISIS		DIAMOND		aLIGO		LSST		SKA/Others		HEP	
Support	Now	Future							FP									
Accounting																		
Services																		
Security					!													
Monitoring																		
"Software"																		
"Core"																		
Policy/interoperation/ management																		
Ad-hoc/Dev																		
Other																		

Exists

Started

Needed