

NDGF and Nordugrid

What's up in the Nordic Dimension



norden

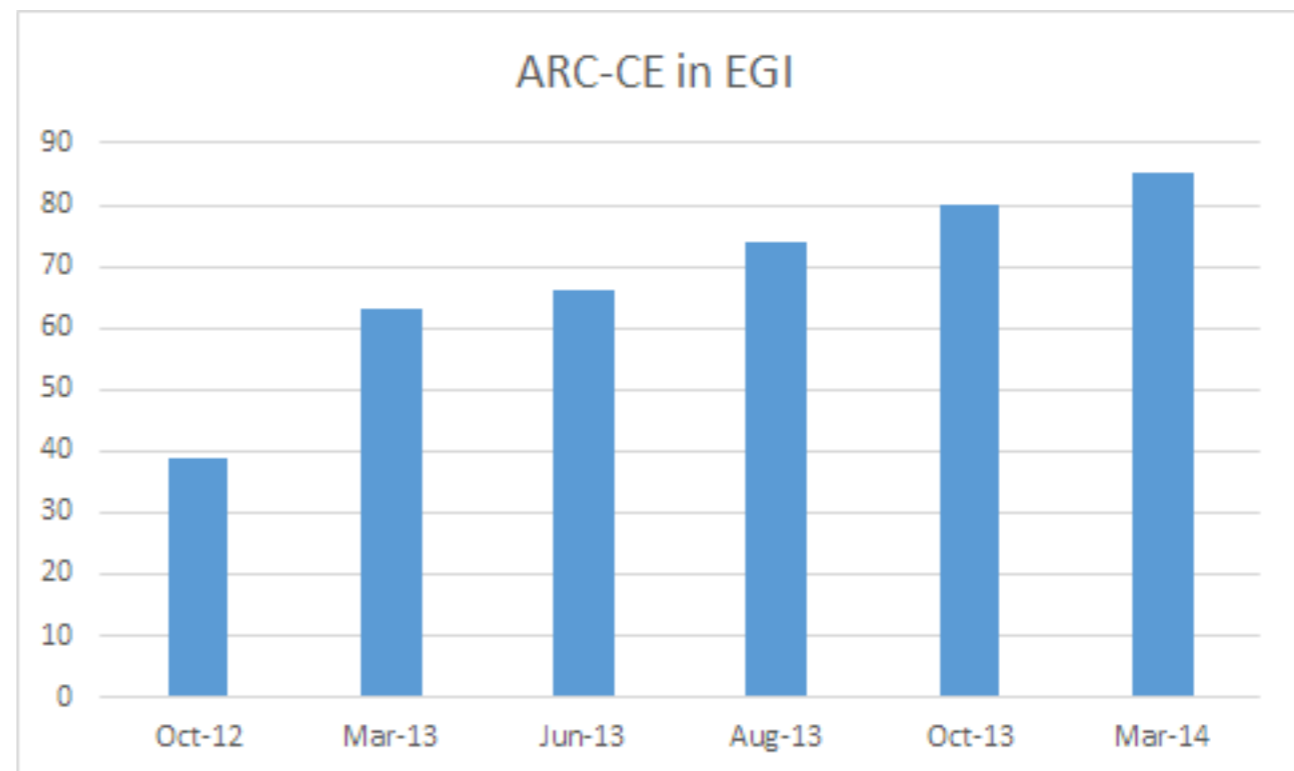
NordForsk



Nordic e-Infrastructure
Collaboration

ARC

- Seen increased uptake the last couple of years
- Mainly down to EMI improvements in “EGI integration”
- “New” backends:
 - HTCondor at RAL
 - BOINC at IHEP



ARC

- EGI integration outcome of EMI
 - Standard SAM tests
 - APEL accounting
 - dreaded Glue1 translator
- Makes uptake much easier outside the Nordics
- Both data models possible
 - ARC data staging to local shared cache
 - Direct WN access from close SE
- “Fairly robust community-based support and development model” – i.e. patches very welcome :)

NDGF News

- Hosted by NeIC
- Still distributed among 7 sites
 - Means 7 different procurement and commissioning cycles
 - > Unlikely to sync up with the proper pledge cycle
- Moved towards pledges by small WLCG/grid share on large-ish HPC clusters with ARC in many places
 - Typically FS target of 2-10% out of up to 15k core clusters
 - Opportunity for plenty of extra time by backfill of short jobs
- Looks like Nordic countries are going to stay in EGI
- We have 2 full-time developers, one dCache and for ARC

NDGF current concerns

- We pay the “full cost” of networking
 - Internal LHCOPN links, routers, external LHCOPN links, staff
 - And IP transit, including LHCONE, which is really expensive
 - 4Gbit/s of LHCONE/transit capacity costs 2.5 times as much as the 2 x 10Gbit/s LHCOPN links to NL and CH together
 - Price driven driven by GEANT “cost sharing model”
 - Not feasible to increase this by much due to cost
 - We bought a dedicated link to Slovenia in order to save money...
 - Is going to be a problem with the “any to any” data movement ideas that recently have come up

NDGF Current Concerns

