NDGF Site report

News and updates

norden

NordForsk

neic Nordic e-Infrastructure Collaboration

Overview

- News in the organisation
- Central services
- Computing
- Storage
- News from our sites

Organisation news

- Gerd Behrmann on board as full-time developer
    - dCache development, support, etc
    - But also some share in ops and NeIC as a whole
- Jon Kerr Nielsen
    - ARC development
    - ARC release management
- Magnus Jonsson
    - SGAS development
    - Strictly speaking only under NeIC hat, not NDGF
- New slides template :)

Central services

- Currently bladecenter with ~10 blades central services
  - Located in a networking colo facility where the OPN ends up
- To be replaced with 2 fat servers running VMs
  - Namespace DB on bare metal
  - dCache headnodes, nagios, ACIX, etc in VMs
  - Currently waiting for power in the colo facility

Computing

- Fewer and fewer dedicated systems

- Majority of WLCG pledge delivered as shares of larger HPC systems

  – Typical linux clusters with infiniband, the kind you expect to turn up at around #100-#200 on top500 when installed

    - 10k core Abel and 15k core Abisko do ATLAS computing

  – WLCG is a large user, but not necessairly the largest

  – CVMFS and compatibility libraries installed on nodes

  – Note that WLCG can't tell these what OS to run

    "SL5 -> SL6 migration" is met by "well, we'll decomission the old cluster next year, the new one will run newer OS"
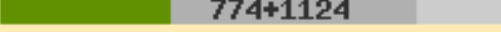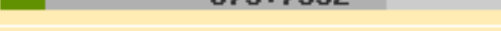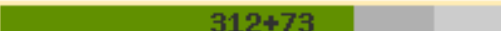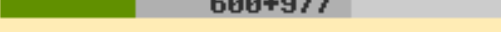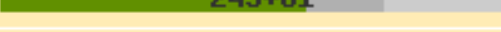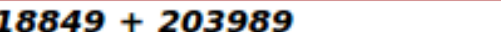
ARC as seen from ATLAS

Nordic e-Infrastructure Collaboration

NordForsk

| Country		Site	CPUs	Load (processes: Grid+local)	Queueing
🇩🇰 Denmark	●	Steno Tier 1 (DCSC/KU)	5888	832+3502	465+0
🇩🇪 Germany		LRZ-LMU	2312	1128+769	245+101
		LRZ-LMU	2312	774+1124	87+210
		RZG ATLAS HYDRA	157296	0+148344	10+0
		wuppertalprod	3268	2777+953	338+11962
🇳🇴 Norway	●	Abel C1(UiO/USIT)	10864	875+7392	90+0
	●	Abel C3(UiO/USIT)	10864	902+7380	4+0
🇸🇮 Slovenia	●	Arnes	1924	1236+0	243+0
	●	SiGNET	2194	1668+10	389+44
🇸🇪 Sweden	●	Abisko (HPC2N)	15456	442+14142	165+0
	●	Alarik (SweGrid, Luna>	3776	336+1813	81+0
	●	Ritsem (SweGrid, HPC2>	544	456+1	105+0
	●	Siri (SweGrid, Lunarc)	448	312+73	131+50
	●	Smokerings (NSC)	504	302+202	68+0
	●	Tintin (SweGrid, Uppm>	2624	11+2292	0+20
🇨🇭 Switzerland	●	Bern ATLAS WLCG T2	1352	1135+0	195+0
	●	Bern UBELIX T3	2272	600+977	135+1104
	●	Geneva ATLAS T3	402	243+61	34+0
	●	Manno PHOENIX T2	2490	742+1238	337+246
	●	Manno PHOENIX T2	192	122+20	416+384
🇬🇧 UK		arc-ce01 (RAL-LCG2)	5426	1261+3675	465+7
		arc-ce02 (RAL-LCG2)	5423	1201+3732	414+1
		arc-ce03 (RAL-LCG2)	5425	1301+3633	423+1
		cetest01 (UKI-LT2-IC->	4	193+2656	184+1075
TOTAL		**24 sites**	**243260**	**18849 + 203989**	**5024 + 15205**

Storage

- Distributed dCache with pools at 8 sites
  - Not tendered by us, not bought by us, not paid by us
  - Guidlines and (Tier-1) acceptance test by us
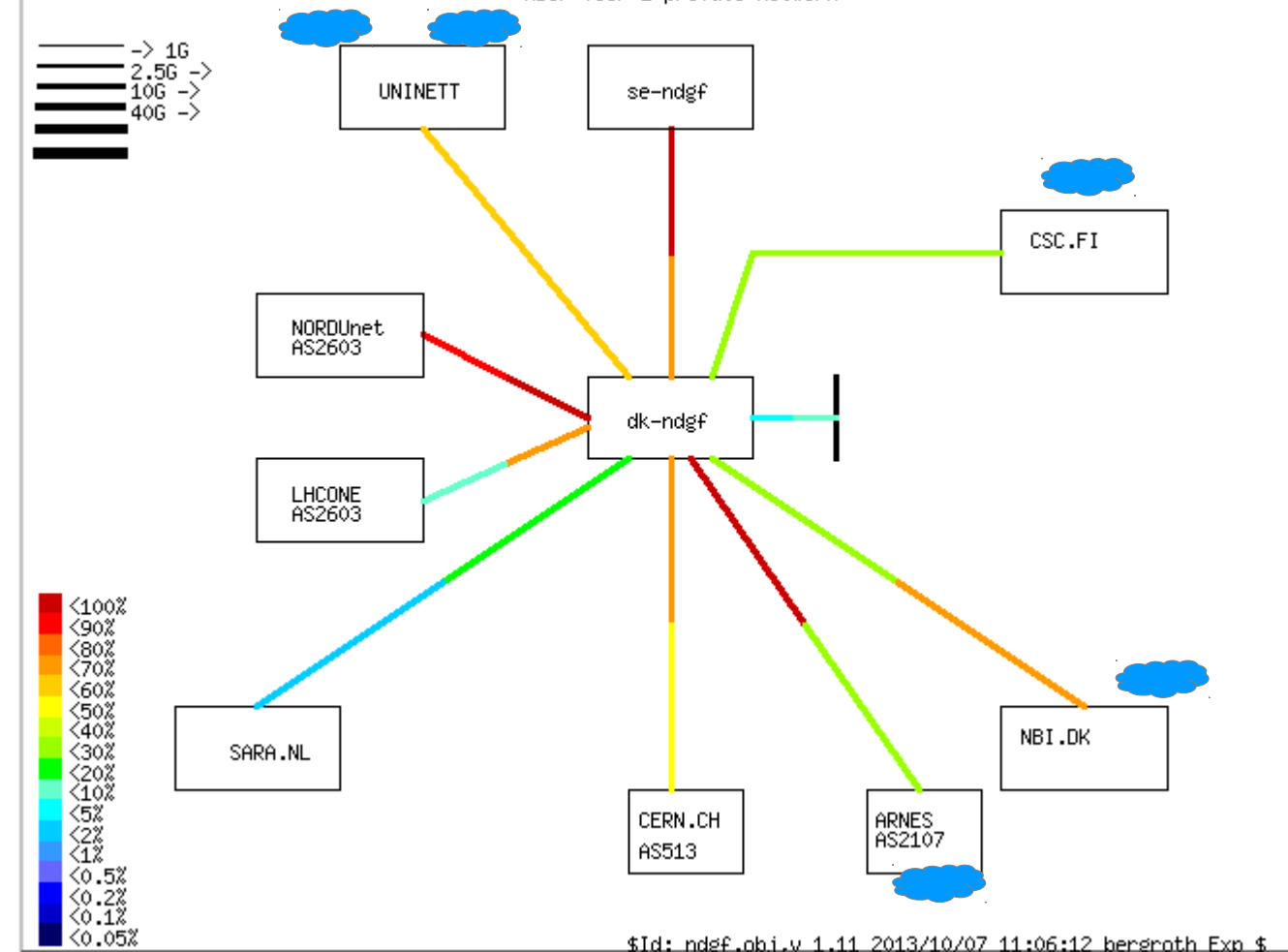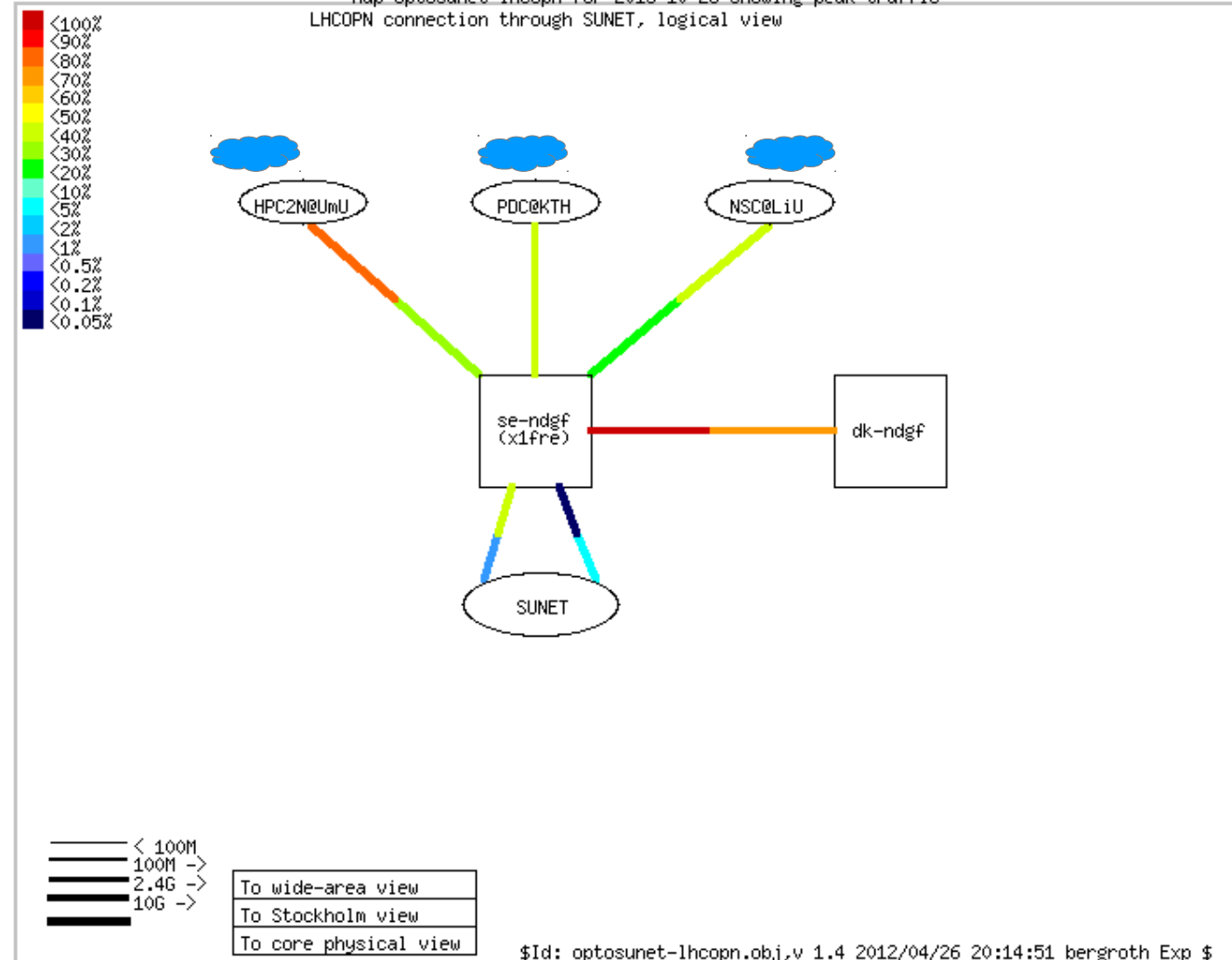
News from sites

NSC, Linköping

- First quarter of ther new 3000 m^2 computer room taken into production

- Extension of the largest academic cluster from 1200 to 1600 nodes

HPC2N, Umeå

- New TSM server
  - s/AIX@Power/Linux@amd64/
  - Just started moving clients

HPC2N, Umeå

- Put up dedicated wireframe ducting for fiber optics in old computer room

- Old solution   New solution