

DUNE CCB Minutes

12th Nov 2002

Virtual meeting only

FINAL MINUTES

Agenda: <https://indico.fnal.gov/event/46301/>

CCB Mail list: DUNE-CCB@FNAL.GOV

Present:

Country/Lab	Name	Present or apologies
Chair	P.Clarke	Present
BR	E.Kemp	Apologies from Helio
CH	M.Weber	Present
CZ	M.Lokajicek	Present
ES	I.Gil Botella.	Present
FR	E.Pennacchio	Present
IT	S.Bertolucci	
NL	J.Templon	Present
UK	A.McNab	Present
USA	H.Schellman	Present
FNAL	S.Fuess	Present
BNL	<i>P.Laycock</i>	<i>Present</i>
CERN	Xavier Espinal	Present
<i>Ex-officio</i>	<i>M.Kirby</i>	<i>Present</i>

1. Introductions

P.Clarke opened the meeting and welcomed members. SA short introduction was given to remind the CCB of its role.

2. DUNE Capacity requirements 2020-2022

M.Kirby presented the current capacity requirement estimates (see slides). These have been approved by the FNAL CRSG. The summary is in the table below. These #'s are maintained in DUNE docdb 20515.

	2020	2021	2022
Disk (PB)	15	20	26
Tape (PB)	19	29	40
CPU (kHS06-years)	33.1	50.2	52.5
CPU (cores) (@15HS06 per core)	2200	3460	3540

3. DUNE Site classifications, pledges and CRIC

H.Schellman and A.McNab presented slides on the current thinking of site classifications. The intent being that when countries/consortia/sites eventually “pledge” resources, they need to know what service level of site they are pledging. See slides.

A.McNab also presented the plan to use CRIC to record requirements and pledges (CRIC is used by the WLCG)

4. Mock-up Pledge Sheet

As a precursor to use of CRIC, and to get a first view of the situation, P.Clarke presented the numbers in a mock up pledge spreadsheet:

NOTE: ALL NUMBERS ARE ASSUMED TO BE CUMULATIVE FOR THE YEAR IN QUESTION

https://urldefense.proofpoint.com/v2/url?u=https-3A_drive.google.com_file_d_180JGdW4ezFfx9BEzMRIzTDPbYjjk27U_view-3Fusp-3Dsharing&d=DwIFAg&c=gRgGjJ3BkIsb5y6s49QqsA&r=jeHi1-RL3P-sHbpkWNhJnAZHXqw5c73CyYOhgKQ45Vo&m=OF5TdzAlZ5yAM8bkwm0O1ZwXXri1j-owlB44CofWycg&s=p9TDRqSoSZie5TfZ6byTL8Kjd55ENBx5ztV32smp50c&e=

A	B	C	G	H	I	J	K	L	M	N	O	P
				2021				2022 (for info only)				
				CPU Cores)	Disk (PB)	Tape (PB)		CPU Cores)	Disk (PB)	Tape (PB)		
	DUNE Requirments at FNAL			750	5	15		885	6.5	20		
FNAL				3310	2.2	24.2		3310	2.8	34.7		
	DUNE Requirments outside FNAL			2750	15	15		2655	19.5	20		
Pledges												
Country	Site (optional)											
BNL				100	0.5			100	0.5			
USA - other	(OSG opportunistic)			1150				1150				
CERN				1330	4							
UK	RAL Tier-1			500	1	3		500	1			
	All othe GridPP sites			500	1.3			500	1.3			
FR	CCIN2P3			310	0.5	2						
ES	PIC Tier-1			500	0.5			500	0.5			
	CIEMAT Tier-2											
NL	NL/LHC Tier-1			696	1.9	0		696	1.9			[3]
CZ	CZ-Prague-T2			1560	0.3	0		1560	0.3			0 [4]
IT												
CH												
BR												
Total				6646	10	5						

Notes:

1. DUNE resource request taken from presentaiton by Kirby at CCB meeting 20 Nov 2020
2. [NL] 2022 is a factor of six increase wrt 2021; to follow this will likely require additional funding. Until that funding is
3. [CZ] We show the capacities for DUNE + NOvA available in CZ, capacities for 2021 and 2022 will be upgraded under flat

The screenshot shows current state of thinking of each country that has responded. One can observe that:

- **TAPE:** The model has changed so that 50% of the tape is requested outside of FNAL. Raw data is currently stored with one copy at CERN and one at FNAL. Simulation and reconstructed samples also need tape backup and institutions are invited to contribute. This

means that as of now tape contributions are requested at the major non-FNAL sites. We should be able to meet this from the “Tier-1” like sites who are already providing tape to LHC. But any site who can provide a good proven tape service can contribute.

- **Size of pledges: 5% - 10% - 20%.**

The pattern above is meant to remind all that at the present time we do not set expected national shares strictly by membership fraction. Instead, a more pragmatic approach is that for countries represented on the CCB (i.e. a “significant computing contributor”) then

- Please try to provide a minimum 5% contribution as a baseline
- A standard contribution would be more like 10%
- Those who are keen and able to provide more, then use a 20% target

- **Providing more than pledge:** The pledge is to formally cover the request. Countries can provide more of course as they wish.

- **Site quality requirements:** Please inspect the slides from A.McNab. If in doubt, please contact Andrew McNab directly on the CCB email list (so we can all see the answer). My quick summary is:

- Site should implement at least ~ LHC Tier-2 service level
- Sites should respond to WLCG or OSG tickets
- Sites should have a WAN network connection commensurate with their proposed processing load (> 10 Gbit/s, but note ~40 Gbit/s is common and ~100 Gbit/s for Tier1 like sites).

- **What should you pledge:** Provide at least one of:

- DUNE Compute Element
- DUNE Storage Element (presumably along with a compute element)
- Tape

Data Cache is taken as read as being in front of any CPU site

If you wish to propose a disk only site - with no CPU - please talk to Heidi, Andrew or Kirby first.

- **Note on Tape added by Heidi**

		2020	2021	2022
Cummulative Tape Copies	Raw (TB)	7820	12430	18193
Cummulative Tape Copies	Test (TB)	250	250	325
Cummulative Tape Copies	Reco (TB)	5808	8144	11205
Cummulative Tape Copies	Sim (TB)	4700	7200	9400
Cummulative Tape	All (TB)	18578	28024	39123

is the breakdown by type - raw data should be stored at both CERN and FNAL but copies of reconstructed and simulated data can be more distributed.

5. AoB

There was no AoB at the meeting

6. Next meeting

No next meeting was set.