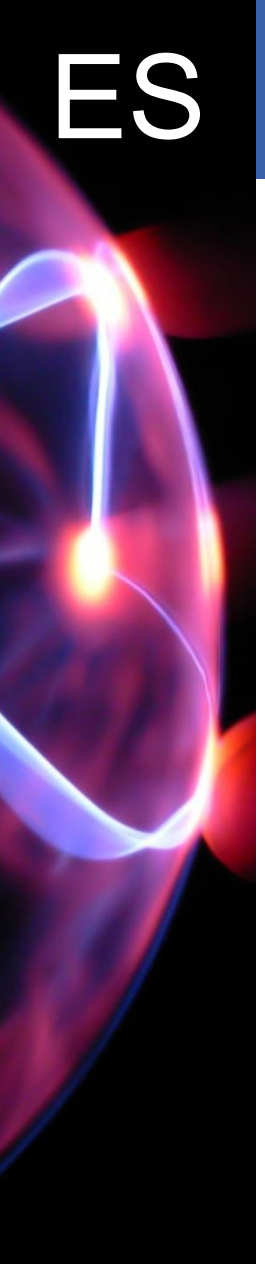

Commissioning T2Ds

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Introduction

- T2Ds: T2s directly connected to T1s of different clouds
  - "directly" in the DDM topology
- T2Ds should
  - demonstrate "good" connectivity from/to every T2
  - provide a certain level of commitment
- T2Ds could be de-commissioned if they degrade
- We identified 13 candidates T2Ds
  - US: SLAC, MWT2, AGLT2
  - DE: DESY-ZK, DESY-HH
  - ES: IFAE, IFIC
  - FR: GRIF-LPNHE, TOKYO-LCG2
  - IT: NAPOLI, ROMA1
  - UK: MANCHESTER, GLASGOW
- There is no "maximum number" of T2Ds

Commissioning metrics

- Measurements from http://bourricot.cern.ch/dq2/ftsmon/sonar_view/cached/
  - Last 15 days, include SONAR + production transfers
- See also the single channel history http://bourricot.cern.ch/dq2/ftsmon/test_view/
- Metrics on single file transfer:

Avg(ByteRate)+StD(ByteRate)

SMALL	<0.05MB/s	<0.1MB/s	>=0.1MB/s
MEDIUM	<1MB/s	<2MB/s	>=2MB/s
LARGE	<10MB/s	<15MB/s	>=15MB/s

Number of files transferred

SMALL	<=3	4	>=5
MEDIUM	<=2	3	>=4
LARGE	<=1	2	>=3

Definition of priorities

		SOURCES			
		TIER 0	TIER 1	TIER 2	TIER 3
DESTS	TIER 0	9	9	CLOSE: 7 4	0
	TIER 1	10	9	CLOUD: 8 CLOSE: 7 4	CLOUD: 3 0
	TIER 2	CLOSE: 7 4	CLOUD: 8 CLOSE: 7 4	CLOUD: 6 CLOSE: 5 2	0
	TIER 3	0	CLOUD: 3 0	CLOUD: 1 0	0

ES Commissioning

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Show 1000 entries

Search all columns:

					SMALL FILES			MEDIUM FILES			LARGE FILES		
Prio	Source	SCloud	Destination	DCloud	MB/s	MB	#Ev	MB/s	MB	#Ev	MB/s	GB	#Ev
7	DESY-HH	DE - T2	INFN-T1	IT - T1	0.62+-0.12	20.0+-0.0	5	6.54+-0.12	200.0+-0.0	5	36.21+-4.86	2.0+-0.0	5
7	DESY-HH	DE - T2	PIC	ES - T1	1.01+-0.06	20.0+-0.0	5	7.4+-1.56	200.0+-0.0	5	26.8+-11.11	1.84+-0.39	6
7	DESY-HH	DE - T2	NDGF-T1	NG - T1	1.03+-0.08	20.0+-0.0	5	8.71+-1.81	200.0+-0.0	5	31.9+-5.1	2.0+-0.0	5
7	DESY-HH	DE - T2	RAL-LCG2	UK - T1	0.38+-0.07	20.0+-0.0	5	1.77+-0.36	200.0+-0.0	5	4.18+-3.03	2.0+-0.0	5
7	DESY-HH	DE - T2	TW-FTT	TW - T1	0.52+-0.02	20.0+-0.0	5	2.41+-0.39	200.0+-0.0	5	11.91+-1.41	2.0+-0.0	5
7	DESY-HH	DE - T2	SARA-MATRIX	NL - T1	1.41+-0.04	20.0+-0.0	5	10.27+-0.93	200.0+-0.0	5	48.93+-11.71	2.0+-0.0	5
7	DESY-HH	DE - T2	TAIWAN-LCG2	TW - T1	0.31+-0.01	20.0+-0.0	5	1.83+-0.08	200.0+-0.0	5	13.78+-0.39	2.0+-0.0	5
7	DESY-HH	DE - T2	TRIUMF-LCG2	CA - T1	0.7+-0.05	20.0+-0.0	5	4.49+-0.85	200.0+-0.0	5	8.37+-1.19	2.0+-0.0	5
7	DESY-HH	DE - T2	IN2P3-CC	FR - T1	0.85+-0.32	20.0+-0.0	5	2.82+-0.27	200.0+-0.0	5	16.93+-4.96	2.0+-0.0	5
7	DESY-HH	DE - T2	NIKHEF-ELPROD	NL - T1	0.78+-0.41	20.0+-0.0	5	8.13+-0.18	200.0+-0.0	5	38.9+-11.68	2.0+-0.0	5
7	DESY-HH	DE - T2	BNL-OSG2	US - T1	0.36+-0.1	20.0+-0.0	5	3.76+-0.62	200.0+-0.0	5	20.08+-1.71	2.0+-0.0	5
7	DESY-ZN	DE - T2	INFN-T1	IT - T1	0.7+-0.02	20.0+-0.0	5	3.11+-0.82	200.0+-0.0	5	40.15+-8.66	2.0+-0.0	5
7	DESY-ZN	DE - T2	PIC	ES - T1	0.43+-0.19	20.0+-0.0	5	4.61+-1.76	200.0+-0.0	5	20.31+-0.85	2.0+-0.0	5
7	DESY-ZN	DE - T2	NDGF-T1	NG - T1	0.63+-0.09	20.0+-0.0	5	3.93+-1.35	200.0+-0.0	5	27.71+-1.71	2.0+-0.0	5
7	DESY-ZN	DE - T2	RAL-LCG2	UK - T1	0.43+-0.02	20.0+-0.0	5	3.58+-0.15	200.0+-0.0	5	11.21+-2.19	2.0+-0.0	5
7	DESY-ZN	DE - T2	TW-FTT	TW - T1	0.24+-0.05	20.0+-0.0	5	1.14+-0.09	200.0+-0.0	5	12.74+-1.25	2.0+-0.0	5
7	DESY-ZN	DE - T2	SARA-MATRIX	NL - T1	1.04+-0.06	20.0+-0.0	5	4.66+-0.83	200.0+-0.0	5	59.7+-9.47	2.0+-0.0	5
7	DESY-ZN	DE - T2	TAIWAN-LCG2	TW - T1	0.26+-0.04	20.0+-0.0	5	1.23+-0.09	200.0+-0.0	5	9.55+-1.82	2.0+-0.0	5
7	DESY-ZN	DE - T2	TRIUMF-LCG2	CA - T1	0.6+-0.06	20.0+-0.0	5	4.05+-0.6	200.0+-0.0	5	7.23+-1.06	2.0+-0.0	5
7	DESY-ZN	DE - T2	IN2P3-CC	FR - T1	0.72+-0.08	20.0+-0.0	5	4.46+-1.11	200.0+-0.0	5	18.86+-1.17	2.0+-0.0	5
7	DESY-ZN	DE - T2	NIKHEF-ELPROD	NL - T1	0.48+-0.26	20.0+-0.0	5	3.86+-0.96	200.0+-0.0	5	50.35+-12.11	2.0+-0.0	5
7	DESY-ZN	DE - T2	BNL-OSG2	US - T1	0.43+-0.12	20.0+-0.0	5	3.57+-0.46	200.0+-0.0	5	24.44+-2.62	2.0+-0.0	5
7	Filter source	DE	Filter dest	T1									

Sho g 1 to 22 of 22 entries (filtered from 5,682 to ntries)

First Previous 1 Next Last

LEGEND

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Preliminary outcome

- General:
  - transfers from T1 to T2D (25 problematic channels) generally more efficient than T2D to T1 (46 problematic channels)
  - No “transatlantic” issue
- US sites look OK
  - I propose to promote **SLAC**, **MWT2** and **AGLT2** to T2Ds
- DE sites look OK
  - I propose to promote **DESY-ZK** and **DESY-HH** to T2Ds
- ES
  - IFAE is trouble, transfers did not even succeed. Need to look.
  - **IFIC** looks good. I would promote (ES cloud support should comment)
- FR
  - **GRIF-LPNHE** looks good (I hope I picked the right GRIF). I would promote.
  - Traffic INTO Tokyo is good, out of Tokyo is problematic. On probation.
- IT
  - **Napoli** looks good. I would promote.
  - Roma suffers the Tokyo syndrome (problems exporting, OK in importing). On probation.
- UK sites need attention
  - issue in both directions for Manchester and Glasgow.

Follow up

- For the sites not passing the criteria
  - CLOUD SQUADS should react
    - FTS ad-hoc transfers
    - Investigation at the level below that (iperf to T1s)
  - Follow up in two weeks
- For commissioned T2Ds
  - please look into remaining issues (attached file)
  - FTS channels
    - For each T2D, create a “cloud channel”:
      - ALLT1-T2 (in the FTS serving the T1)
      - If you want to avoid, fine, but you better watch it.
    - In principle, all T1s should create ALLT2D-T1
      - Wait for this
  - We will change ToA tomorrow

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