

SDCC Network Operations Status Report (May 7, 2020)

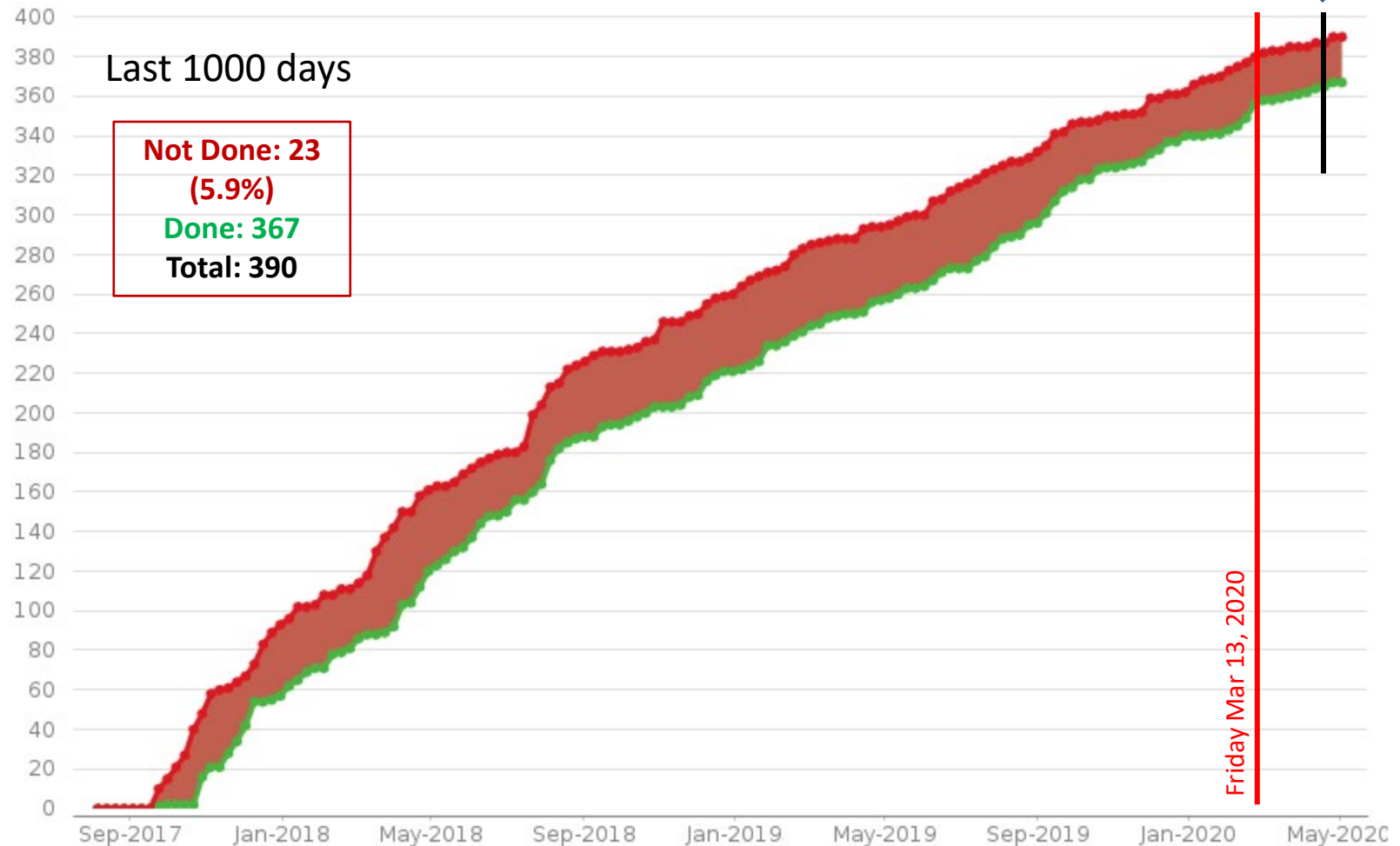
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Project: SDCC Network Operations & Interventions

Chart

Previous Report

This chart shows the number of issues **created** vs. the number of issues **resolved** in the last 1000 days.

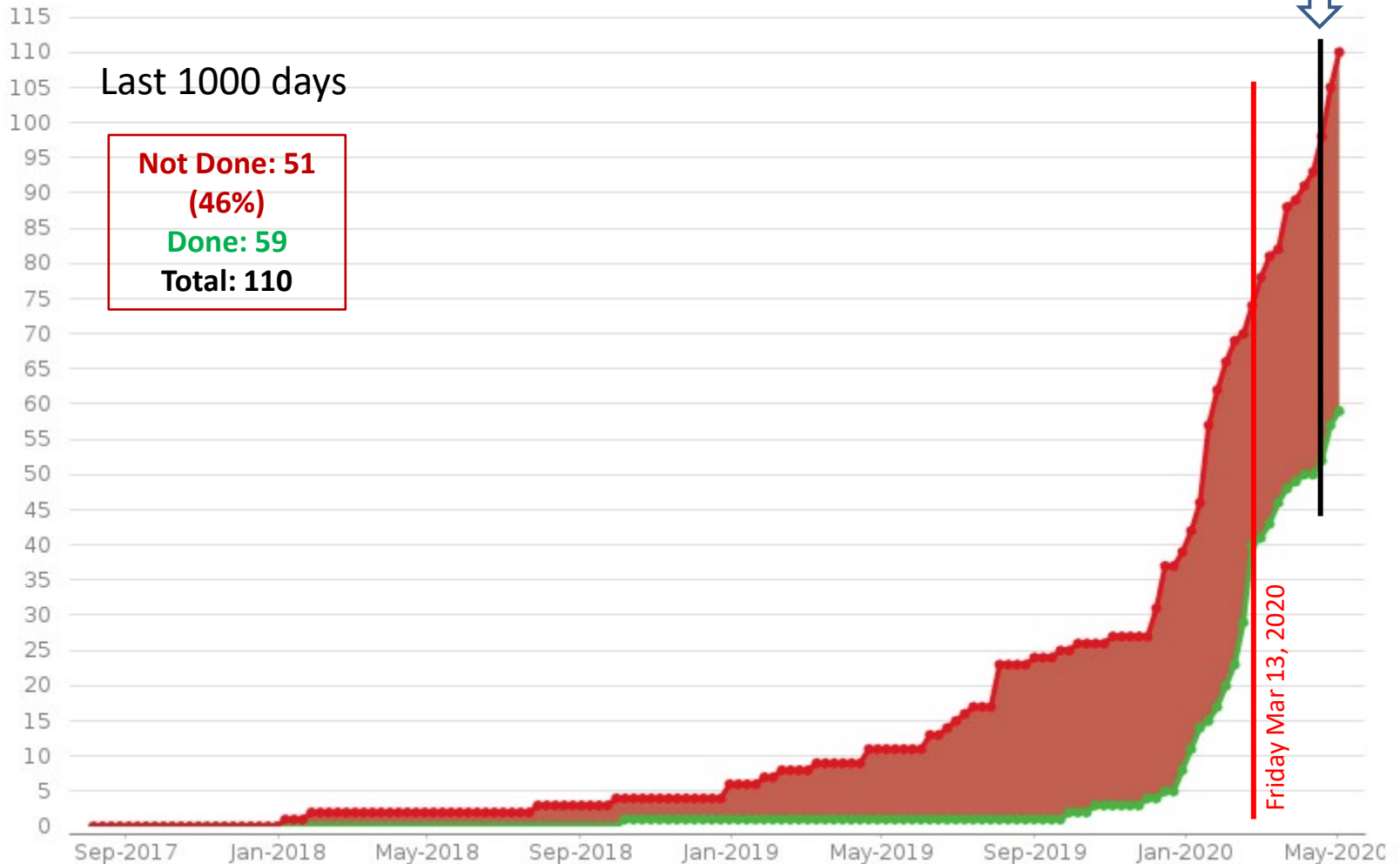


Project: SDCC Datacenter B515/B725 Transition (CY20-23)

Chart

This chart shows the number of issues **created** vs. the number of issues **resolved** in the last 1000 days.

Previous Report



Ongoing/Upcoming Interventions and Equipment Deployment/Retirement Operations

- STAR Lustre MDSes and STAR CH buffer storage (destination: rack 45-5 in CDCE) – **partially delivered on site; the ETA for the full delivery is yet unknown**
- The combined RHIC & ATLAS CPU procurement is dispatched (Farm/Fabric Group)
 - The retirement of the legacy CPU racks in row 50N is needed in order to make space & power available for 4 new CPU racks in positions 50-[20-23] in CDCE on a timescale of 2-3 months
 - Pending the beginning of sanitization process by the Farm/Fabric group
 - Patch panel and BoR switch removal, migration of CDCE Sensaphone to row 49N, un-cabling and partial offloading to the pallets – must wait until the min-safe period is over
- Two 14 TB HDD JBOD based based storage purchases are now in the procurement pipeline:
 - EIC Lustre storage (GS Group; 2x JBOD + headnode pairs) and EIC tape drives (Storage/HPSS Group)
 - Additional ATLAS dCache Storage (Storage/HPSS Group; 2x JBOD + headnode pairs)
 - The rack frame adjustment in position 45-1 in CDCE and network uplink provisioning for this rack are expected to be handled after the min-safe period is over
- Many smaller purchases are in progress
- Several large blocks of FY20 purchases for B725 are on hold waiting for the updated schedule for B725 datacenter delivery by the CFR project:
 - The first ATLAS B725 tape library, mover system and a complement of tape drives
 - LR4 transceivers for the B515/B725 interbuilding link
 - Linecards, transceivers, copper/fiber materials for ATLAS/RHIC/Belle II equipment to be moved from B515 to B725 (16 racks of latest CPU only) or deployed directly in B725 MDH in FY21
 - Rack frames, CDUs, central infrastructure components for B725 for Storage/Infrastructure rows of PS# 2

Upcoming Interventions / Milestones (2020Q3-4)

- [1] The construction of the new fiber conduit system in the B515 basement for the “last mile” of the interbuilding link – must be carried out for [3] to be performed in the most efficient way
- [2] The consolidation of HPSS system into CDCE (with many internal steps) – needs to be finished or nearly finished for [3] to be performed in the efficient way
- [3] The new B515 SciCore “cut in” intervention – full day of the Facility downtime during the working ours (9:00-17:00 BNL LT) must be performed in order to allow the B515/B725 inter-operation period to start – pre-requisite for [5] (must align with RHIC, ATLAS, Belle II, CSI and other tenants plans; at least 1 month of lead time is needed) [August 2020?]
- [4] Service blocks consolidation for B515, the retirement of the legacy ATLAS FE switch system and associated reorganization of RHEV connectivity are expected to be performed in conjunction with [3], on the same day of intervention [August 2020?]
- [5] Central network systems of B725 must be brought online and the B725 MDH and the Tape Room fiber and copper infrastructure must be deployed before the B725 datacenter can be populated with any equipment – a pre-requisite for [6]
- [6] The migration of the 16 CPU racks of RHIC/ATLAS/Belle II from B515/CDCE to B725/MDH can commence; the FY21 purchases and deployment of all sets of new equipment can commence

Pending confirmation of Lab re-opening plans, RHIC FY20 run restart and FY21 run start plans, CFR B725 delivery schedule, ATLAS/LHC FY21 restart schedule

Questions & Comments