

SDCC Network Operations Status Report (Dec 23, 2020)

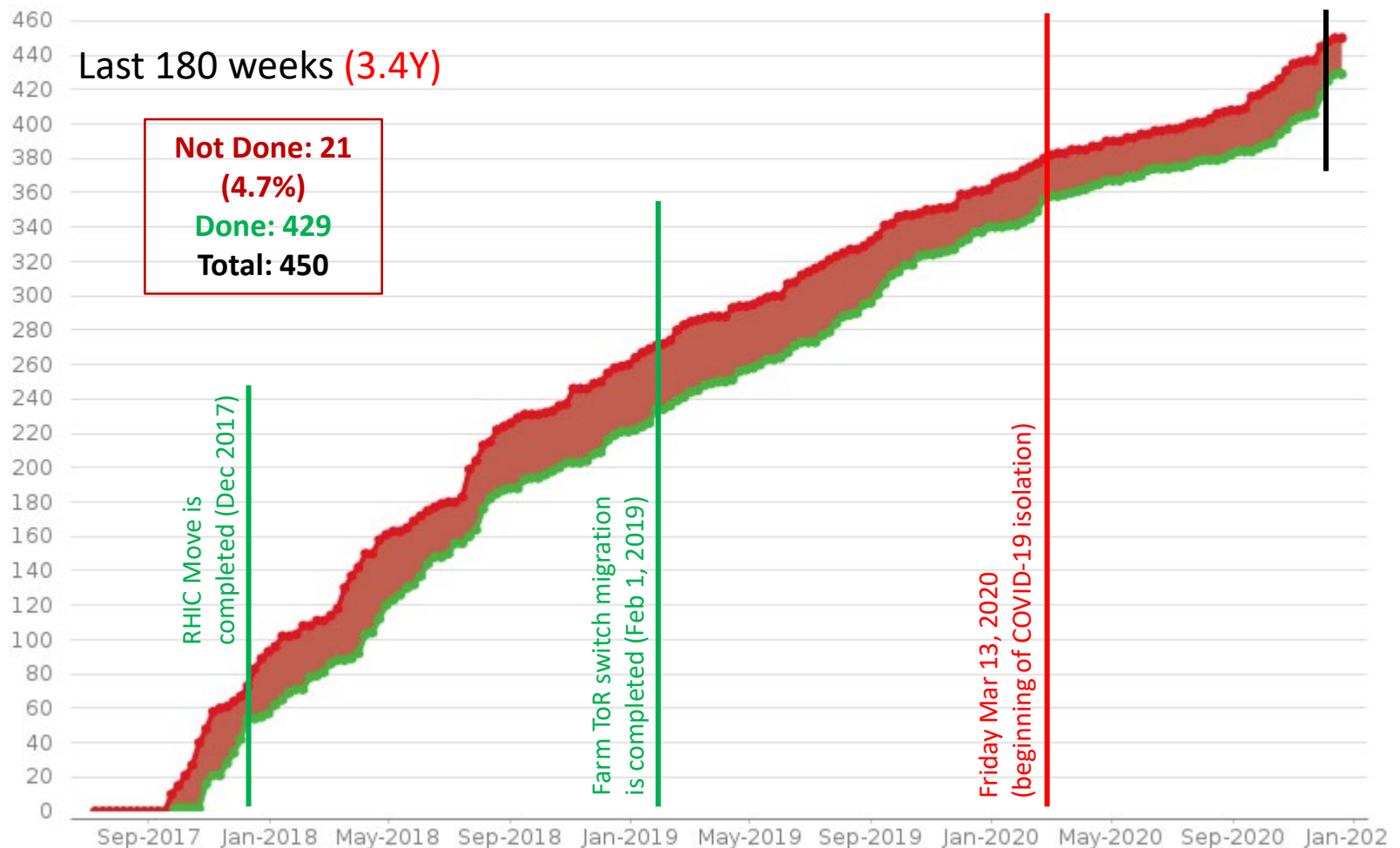
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Project: SDCC Network Operations & Interventions

Chart

This chart shows the number of issues **created** vs. the number of issues **resolved** in the last **1260** days.

Previous Report

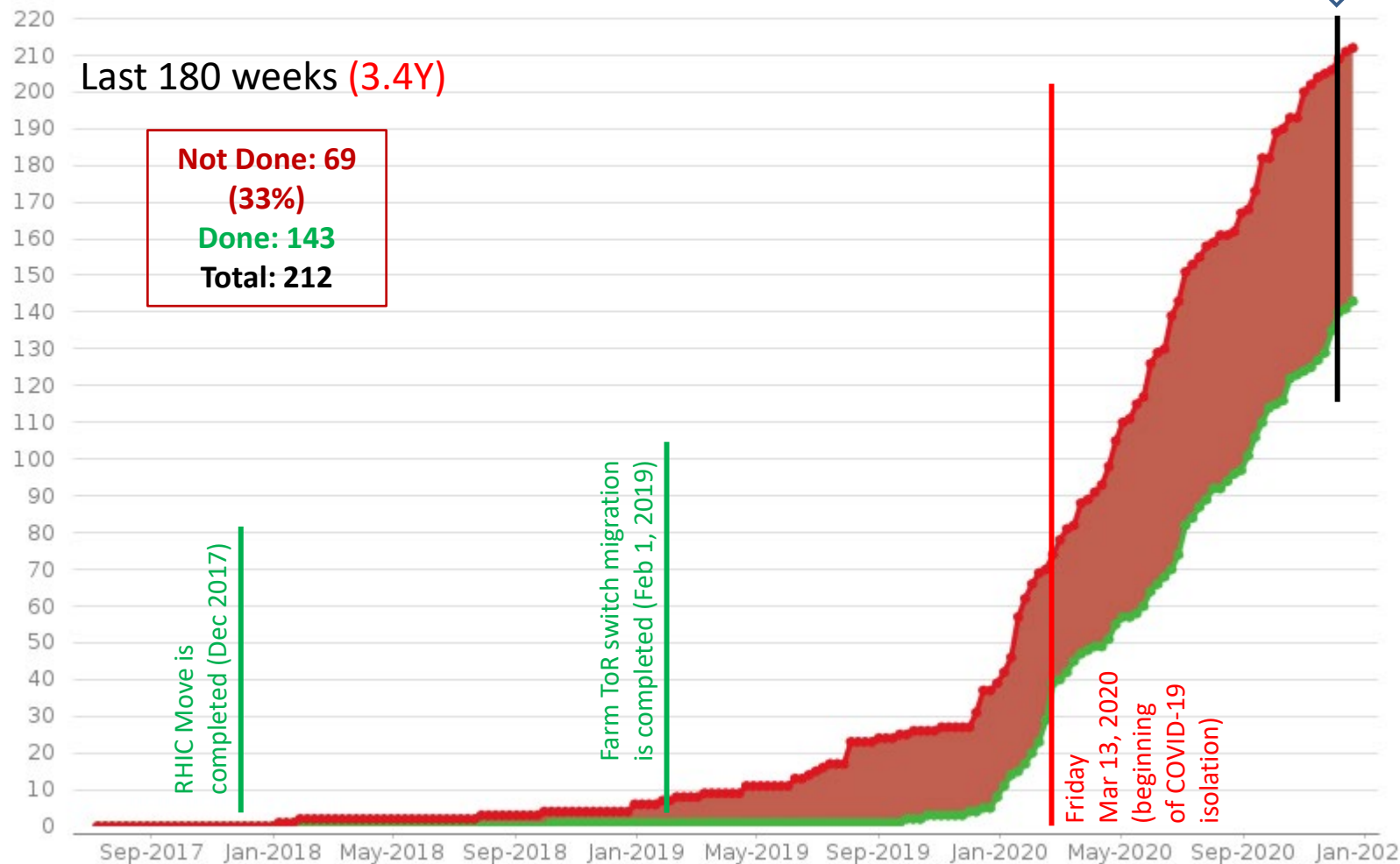


Project: SDCC Datacenter B515/B725 Transition (CY20-23)

Chart

This chart shows the number of issues **created** vs. the number of issues **resolved** in the last **1260** days.

Previous Report



Ongoing/Upcoming Interventions and Equipment Deployment/Retirement Operations

- NSLS II infrastructure addition: dedicated NSLS II RHEV, MongoDB and Kafka servers to be deployed in position 33-6 in QCDOC using the existing rack and CDU set
 - NSLS II RHEV nodes are in the rack
 - Kafka servers are received; MongoDB servers are yet to be received
 - All network uplinks are provisioned, including private network for row 33 (QCDOC)
 - Shared private network provisioning for row 33 is completed
- CFN Lustre HW refresh targeting rack position 33-8 in QCDOC
 - The rack frame is in place but the CDUs are yet to be received
 - All network uplinks are provisioned
- Belle II CPU addition of FY21 (2 new racks)
 - Targeting rack positions 51-[3, 4] with CDCE, replacing the existing CPU racks standing there
 - To be added to the set of rack to be moved to B725 in 2021Q3 (18 CPU racks in total on the move now)
 - The ToR switches and transceivers/uplinks are to be reused
- Belle II DISK addition of FY21: a single JBOD+headnode pair to be added to rack 43-4
 - Power distribution adjustment for racks 43-[4-6] was done on Dec 14, 2020 order to accommodate this additional storage in B515 datacenter before B725 datacenter is available
 - Adjustments to the physical layout of existing JBOD rack 43-4 is needed to accommodate the 5th JBOD+headnode pair is still going to be needed later in Jan 2021 as scheduled interventions on dcb1st[007, 008] and qgp005 (STAR XRootD) storage headnodes - to be figured out in early Jan 2021
 - All network uplinks are provisioned

Ongoing/Upcoming Interventions and Equipment Deployment/Retirement Operations

- DL-2 (BNL Campus subnet 59) distribution switches is to be performed before the start of the RHIC run of FY21
 - s201/s202 switch pair: all clients are redundantly attached)
 - s241/s242 switch pair: some clients are single attached including:
{mail, pobox, idm2, webmail, nfs01}.phy.bnl.gov (rack 1-10 in main BCF)
{sun, sunbelt}.star.bnl.gov (rack 4-10 in main BCF)
 - 20 min long interruption is need for each switch withing a time window of 1h
 - The disruption can be minimized to several shorter interruptions (about 1 min long each) for the single attached clients if desired
 - Executed successfully on Wednesday Dec 16, 2020 at 8:00-9:00 BNL LT
 - No other network interventions are foreseen for central network equipment before the start of the RHIC run of FY21
- On Friday Dec 18, 2020 between 10:42 and 12:50 BNL LT we experienced network connectivity issues on the Service Block of B515 SciCore affecting the SDCC RHEV and Facility web infrastructure in particular
 - The cause was localized to the operation of configuration of the new CSI IBM TS4500 library (CDCE row 50N) performed by the IBM contractor during that morning
 - The problematic ports were identified and blocked by ITD Network Engineering to resolve the issue
 - The investigation with Arista is on-going to confirm the exact cause and understand the progression of disruption ([NETOPS-463](#)) which is expected to arrive at a conclusion in early Jan 2021
 - Once the investigation is over the work on CSI TS4500 library is expected to be resumed

Questions & Comments