

RACF/SDCC Network Operations Status Report (August 29, 2019)

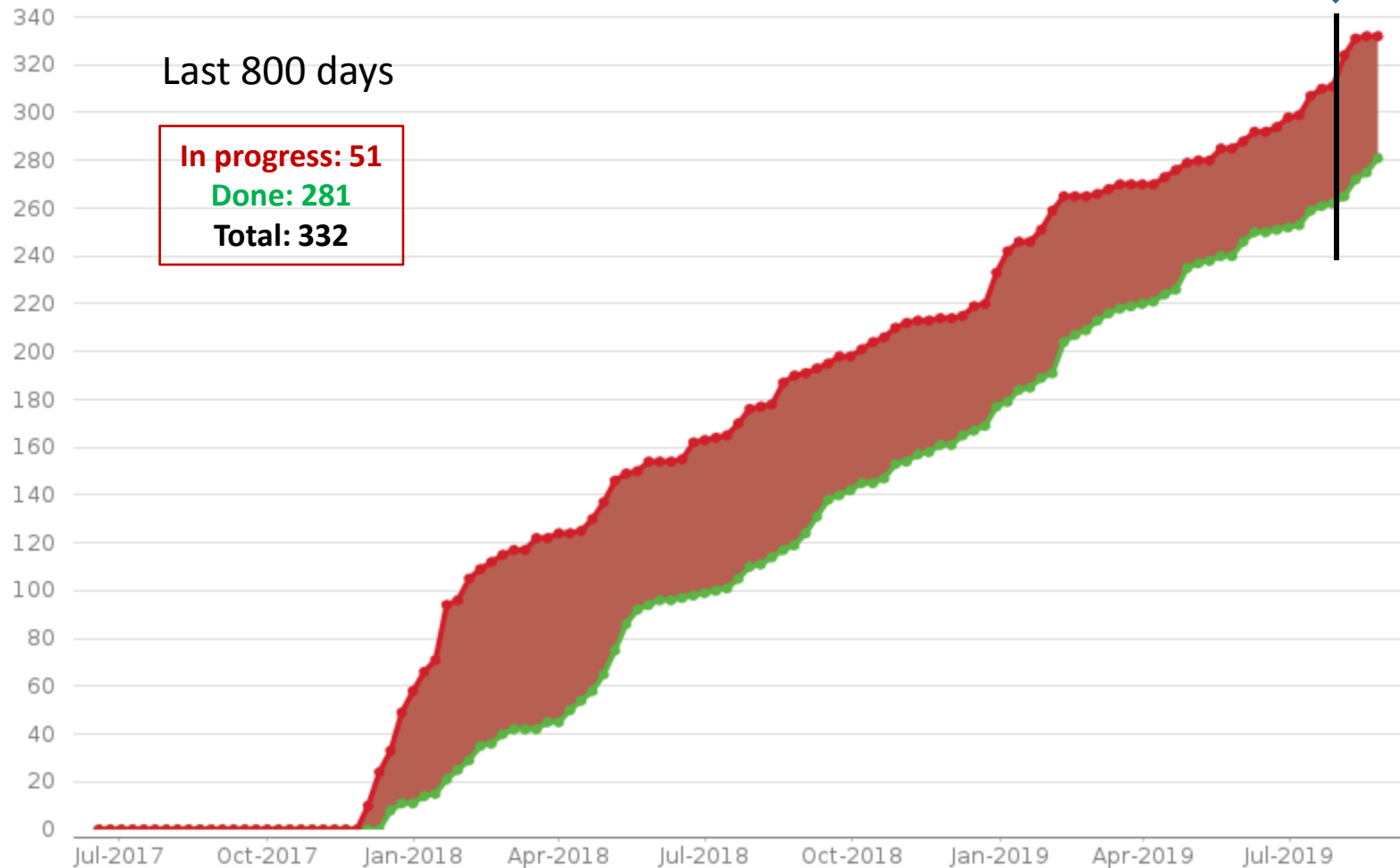
Alexandr ZAYTSEV
alezayt@bnl.gov

Project: Post RHIC Migration BCF & CDCE Cleansing & Service Normalization (2018Q1-2019Q4)

Chart

This chart shows the number of issues **created** vs. the number of issues **resolved** in the last **800** days.

Previous Report

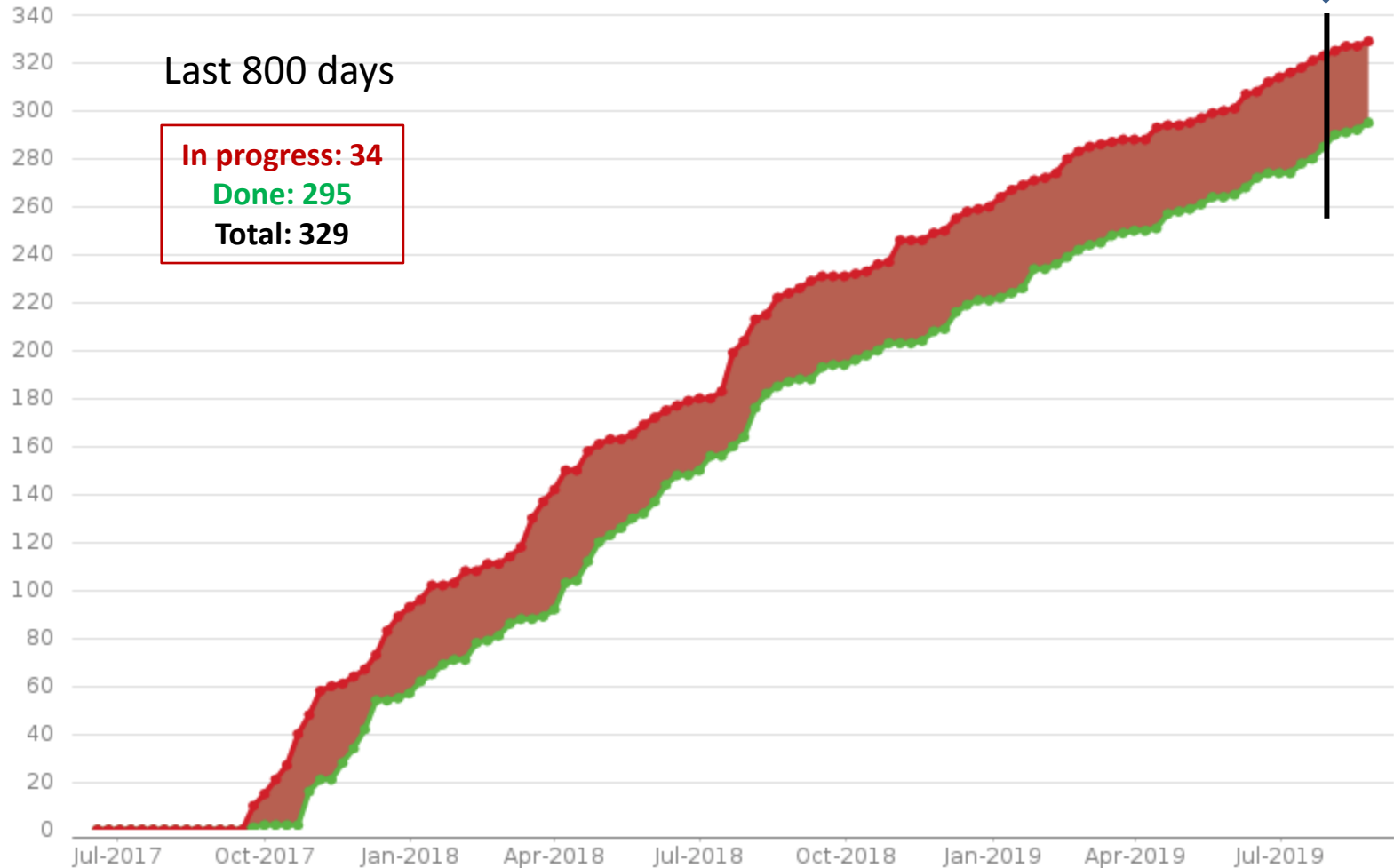


Project: RACF/SDCC Network Operations & Interventions

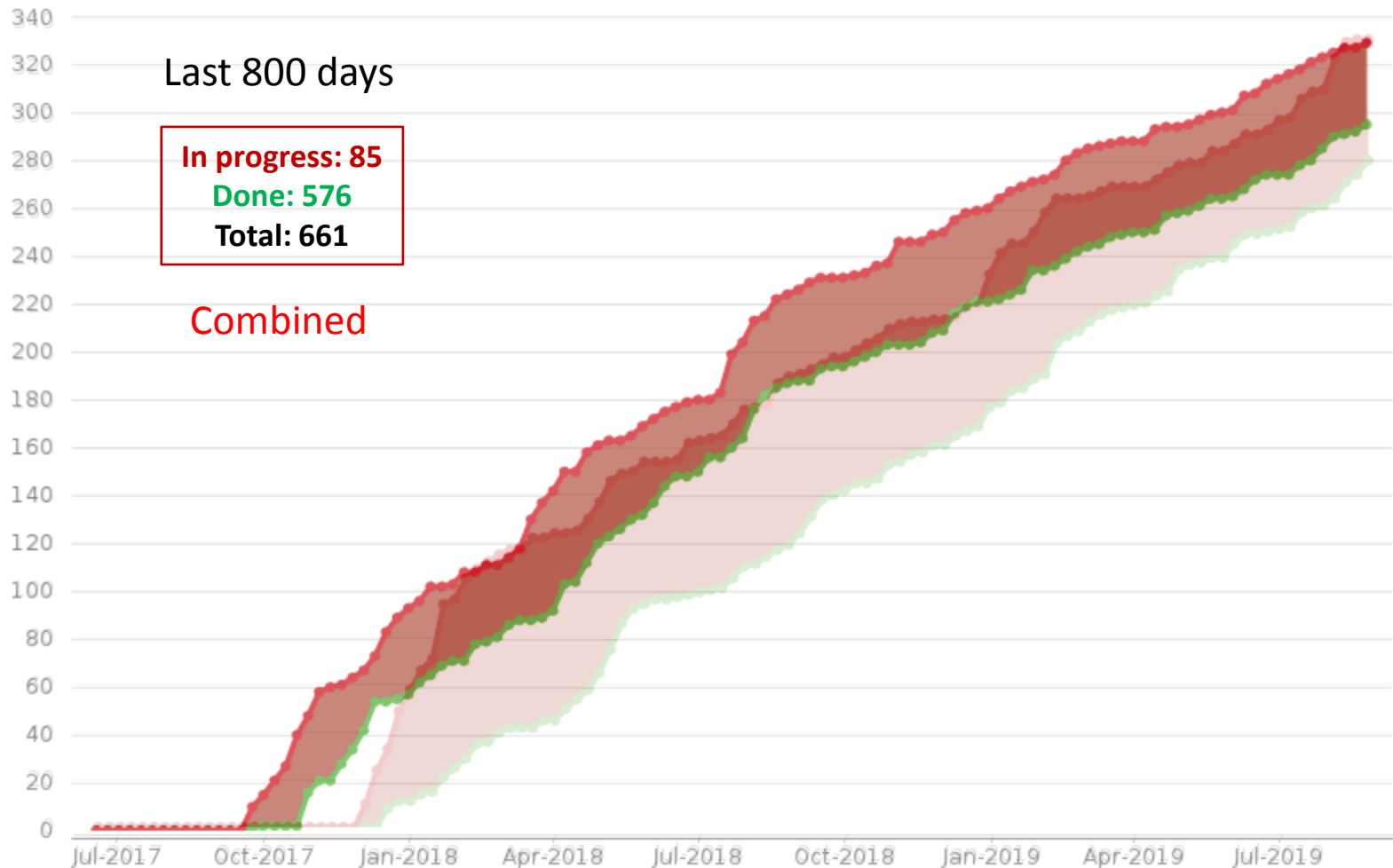
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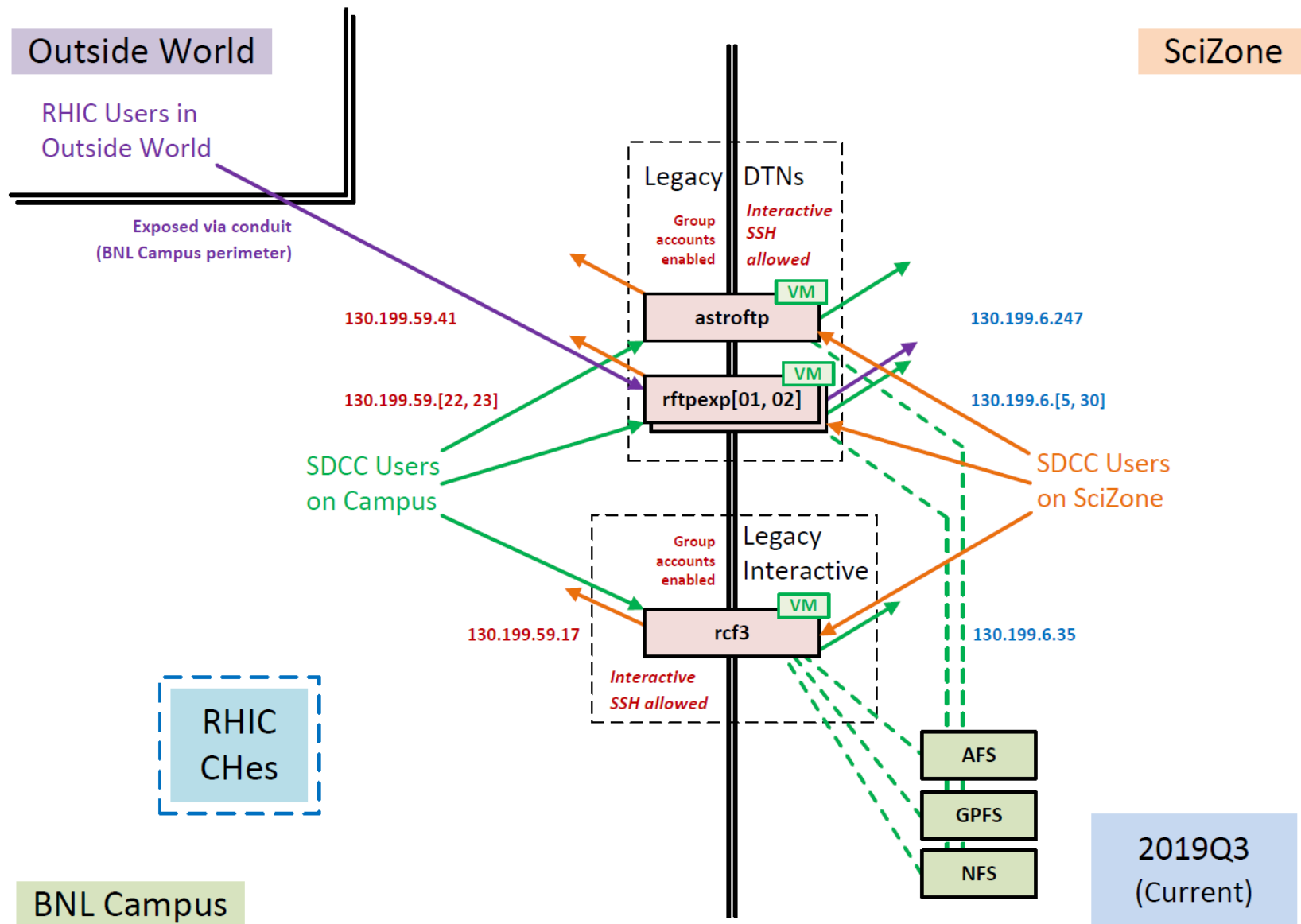
Ongoing/Upcoming Interventions and Equipment Deployment/Retirement Operations

- ATLAS/RHIC/Belle II FY19 compute addition (6 racks to be added to CDCE) – Sep 2019 ETA:
 - Additional EIC compute nodes to be deployed in CDCE as well in Aug Sep 2019
 - The deployment of these racks is to be followed by decommissioning of the 7 racks in row 1 (RHIC) – to be delayed until Nov 2019, 4 racks in row 50N (ATLAS) and 3 racks in row 25 (EIC, DayaBay, LBNE) freeing 12 ToR switches (ToRs are to be partially reused for FY20 new compute deployment)
- New HPSS movers and infrastructure components in row 44S in CDCE:
 - First rack of RHIC movers in rack 44-4 (Aug 2019) – network is provisioned, servers are deployed, the disk subsystem is expected to be deployed in Sep 2019
 - Replacement HPSS DB servers in racks 44-[2, 6] (Sep 2019) – network is provisioned
 - Replacement rstk* servers in racks 44-[2, 6] – network is provisioned, installation in progress
 - Second rack of RHIC movers in position 44-3 (Oct-Nov 2019, CDU purchase is needed)
- New CSI ML (Machine Learning) cluster in QCDOC:
 - Two new pre-assembled rack to be installed in positions 30-[4, 5] in QCDOC which is logically to become a part of the IC/LQCD cluster (end of Aug 2019 ETA for the first rack) – network rack is provisioned in position 30-3, fiber provisioning is in progress
- New ATLAS Ceph OSD nodes in Sigma-7 and CDCE (end of Aug 2019 ETA)
- One additional Farm VMMS host (rack 42-6) plus one additional (CSI) RHEV hypervisor (racks 41-[4, 5] are to be deployed in Sep 2019
- First rack of dedicated NSLS II storage (Lustre) is to be deployed in rack 79-5 in Sep-Oct 2019
- New central storage for RHIC (2 disk array + server pairs in rack 43-4) in CDCE (Oct 2019?) – quoting is in progress

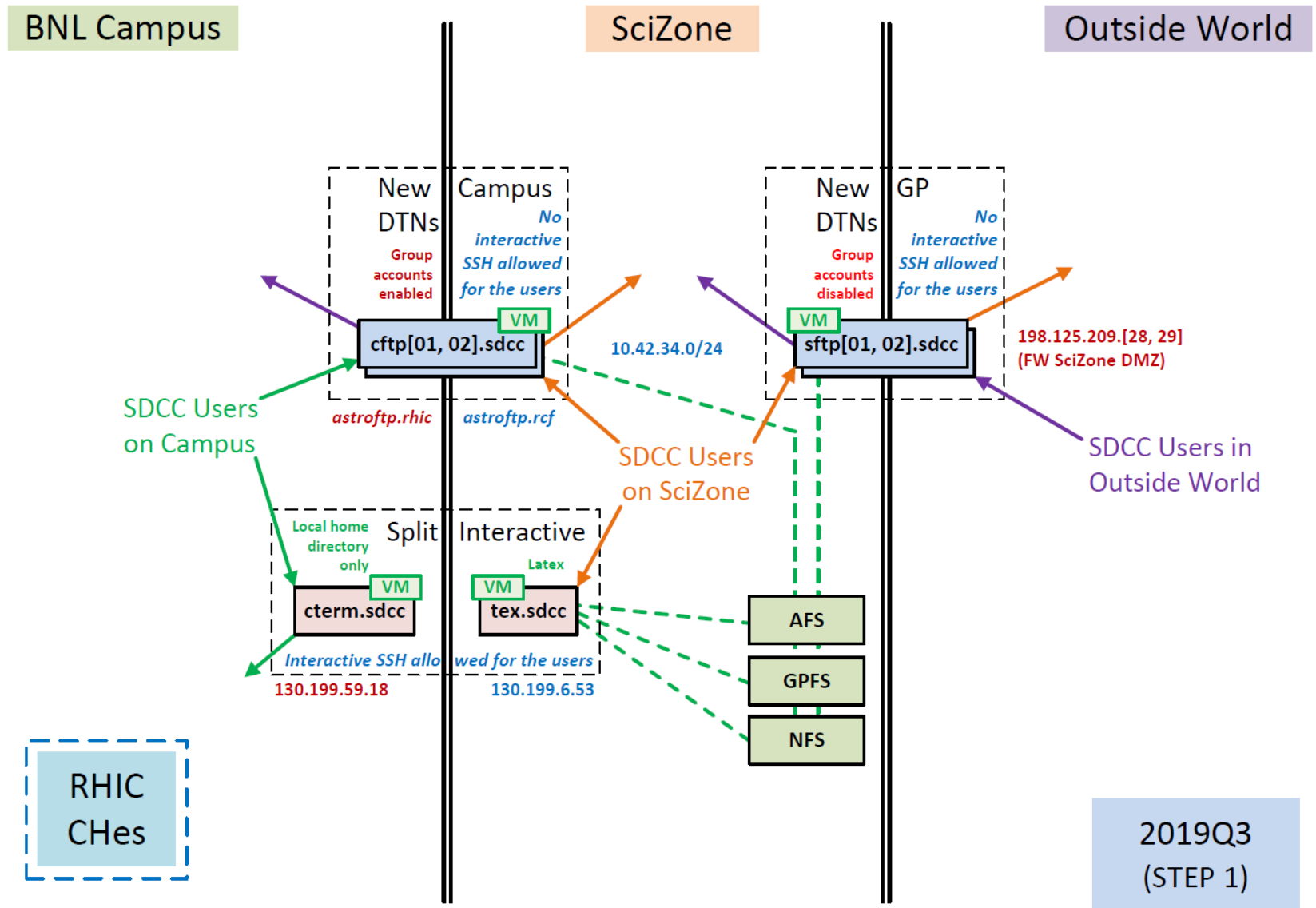
Upcoming Network Equipment Upgrades and Interventions

- DL2 (s201/s202) switch pair replacement:
 - 30 min disruption of subnet 59 and RHIC Ches Ethernet connectivity within 1h window
 - Preferred date / time: Tuesday-Thursday, 7:00-8:00 or 8:00-9:00 or 9:00-10:00 BNL LT
 - The disruption will affect:
 - User exposed SDCC Facility systems with direct BNL Campus connectivity such as Campus to SCiZone DTNs (*astroftp, rftpexp**), interactive login hosts (*cssh* gateway group, rcf3*), STAR webserver (*sun, sunbelt*) – confirmation / date-time selection needed
 - Ethernet connectivity of STAR and PHENIX Counting Houses to BNL Campus, and subsequently, to the Outside World and the SciZone, but not the direct HPSS uplink of the STAR CH to the B515 Science Core – confirmation / date-time selection needed
 - Physics Department systems hosted in rack 1-10 (*[vm*, pobox, idm*, *mail, nfs*]* .phy.bnl.gov) – confirmed, no specific date-time preferences (T.Throw)
 - Staff exposed SDCC Facility systems (*staff SSH gateways, SDCC supported syslog and build infrastructure*) – confirmed, no specific date-time preferences (J.Smith and C.Hollowell)
 - Once the preferred date and time is confirmed, the intervention is to be announced to broad user community
- SciZone perimeter FW upgrade (Oct 2019?) – waiting for the SW update from the vendor (Juniper)
- B515 SciCore replacement / migration to CDCE and merging of the RHIC/SDCC and ATLAS service blocks into one served of the new SciCore
 - Waiting for the Arista 7500R3 series equipment availability on the market
 - Tentative schedule for the intervention – late Nov 2019

BNL Campus to Science Zone Legacy DTN and Interactive SSH Infrastructure Reorganization



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Questions & Comments