

RACF/SDCC Network Operations Status Report (Apr 12, 2018)

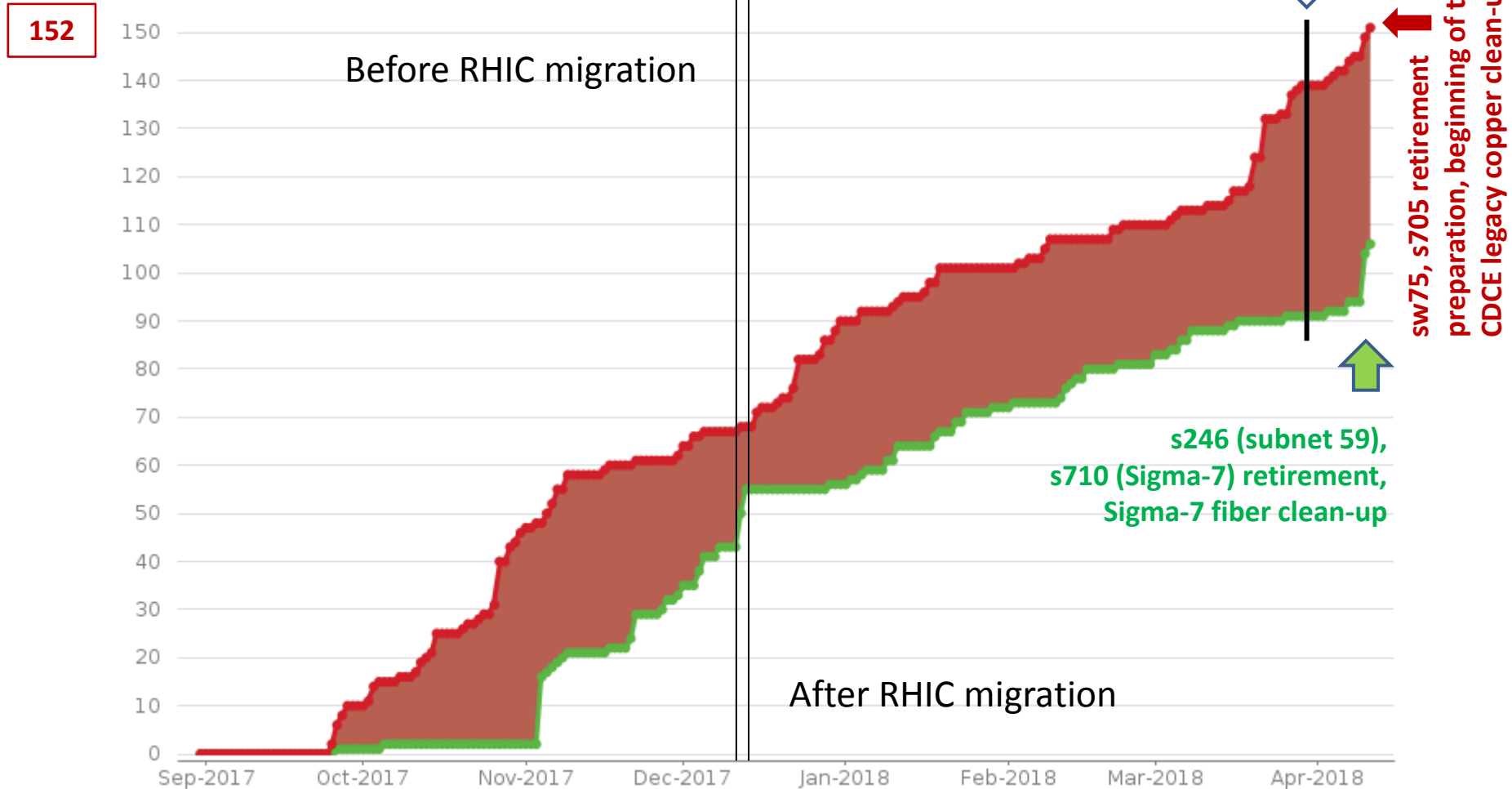
Alexandr ZAYTSEV
alezayt@bnl.gov

Project: RACF/SDCC Network Operations & Interventions

Chart

This chart shows the number of issues **created** vs the number of issues **resolved** in the last 224 days.

Previous Report

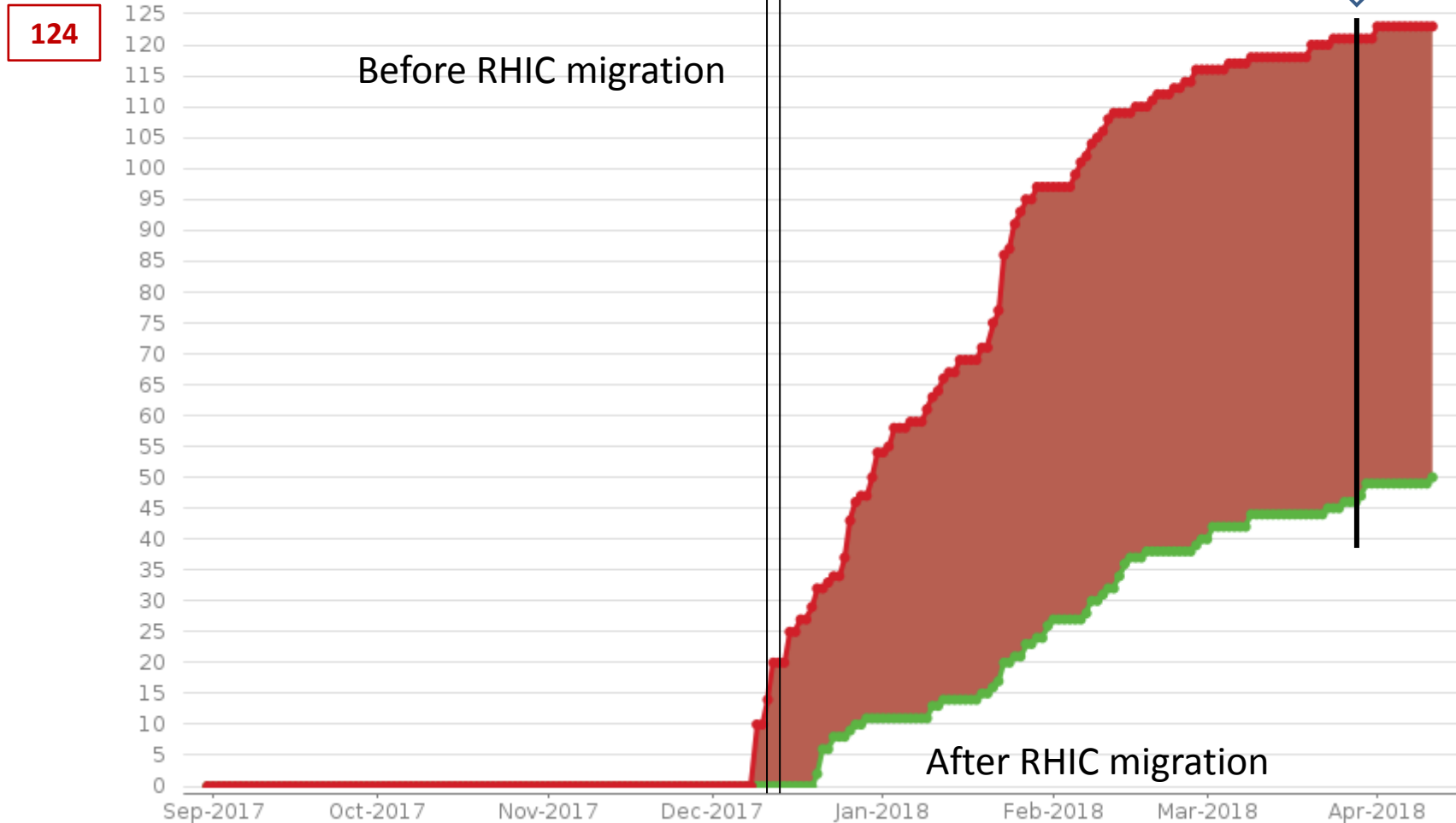


Project: Post RHIC Migration BCF & CDCE Cleansing & Service Normalization (2018Q1-3)

Chart

This chart shows the number of issues **created** vs the number of issues **resolved** in the last 224 days.

Previous Report



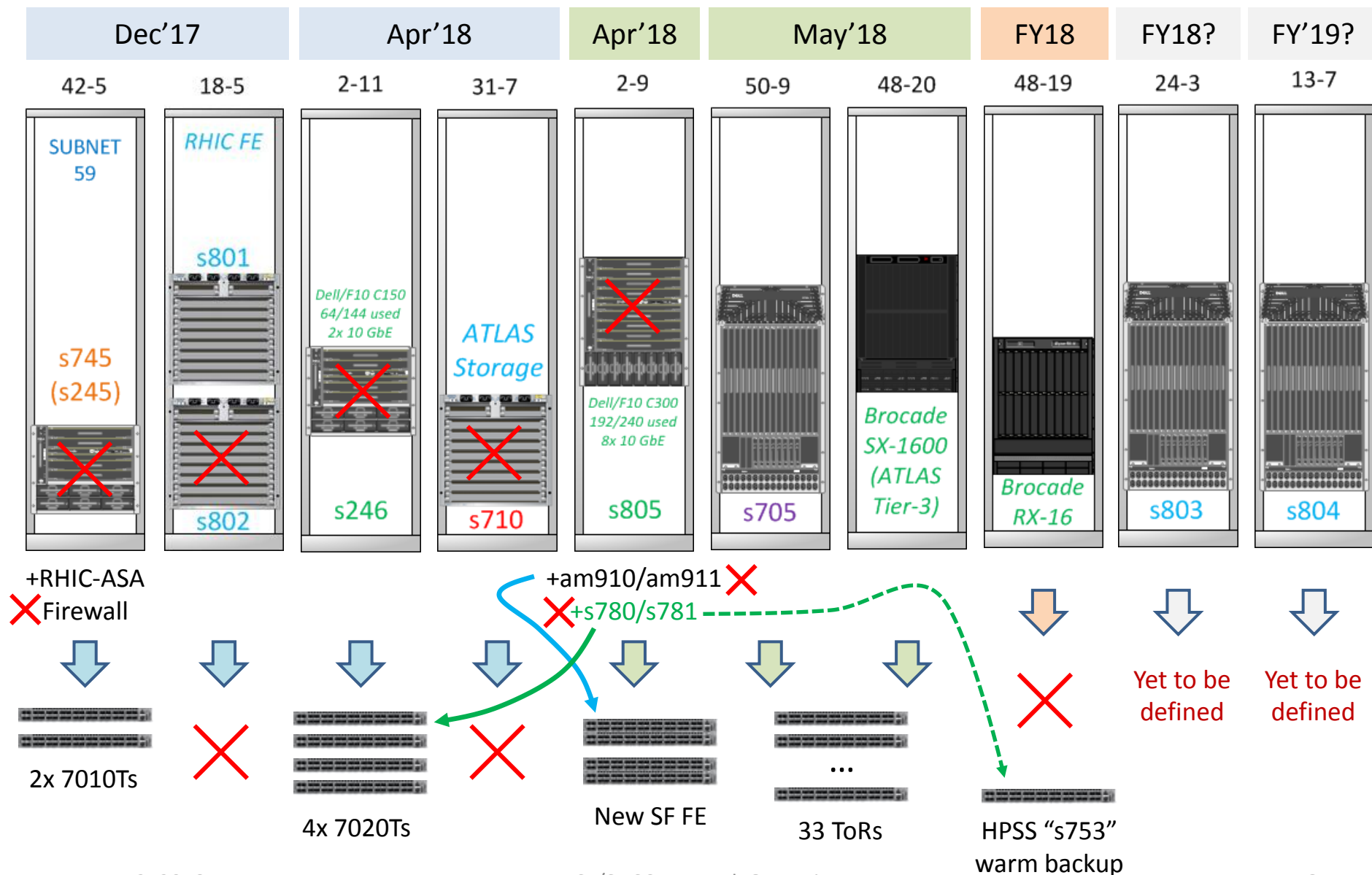
Recent Developments (1)

- Retirement of s710 (Arista 7508E) legacy switch in Sigma-7 (ATLAS Storage)
 - **DONE**; all the legacy 10/40 GbE fiber across the rows 31 and 32 in Sigma-7 are removed
 - ATLAS Ceph Test cluster (2 adjacent racks) converted to the pair of 10 GbE enabled (retired) switches with 2x 40 GbE uplinks to the SciCore, all internally interconnected with copper SFP+ cables on internal interfaces
 - This cluster has become a potential direct SFP+ copper connectivity testbed for future use in RHIC ToR switch based racks internally interconnected with 1x or 2x (LACP) 10 GbE
- Replacement of s805 (subnet 6) and s780/s781 (10.42.34.x) switches
 - 4x PHENIX dCache (legacy) servers in the rack 16-5 are the last systems connected to s805
 - Transparent intervention is scheduled on Monday Apr 16, 2018 to move these systems off s805 to a temporary patch panel – until they get retired eventually once the PHENIX dCache upgrade is finished
- Replacement of the legacy s246 switch serving subnet 59 (1 GbE)
 - **DONE**; legacy patch panel and underfloor copper uplinks removal is still pending (to be handled together with those related to the s805 switch later this month)
- IC cluster extension (2 racks)
 - Delivered with different type of the Ethernet switches that anticipated/specified in the quote (HPE 1920S series instead of 1920 series), yet they should deliverer the same functionality; configuration reset and re-deploy is pending for these

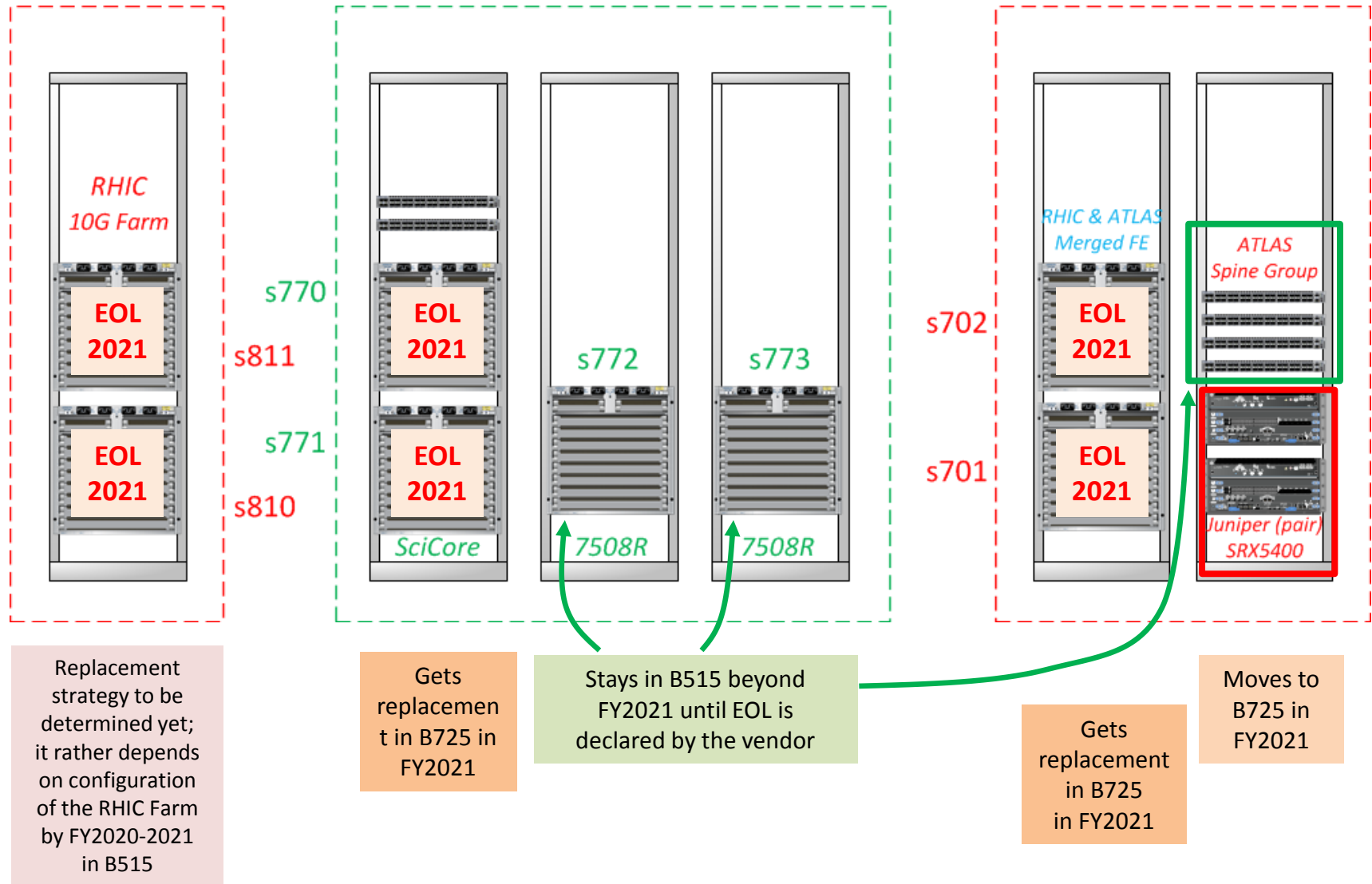
Recent Developments (2)

- New SF installation in the BGL room
 - The SF network Front-End replacement intervention was performed successfully on Monday; the previously used FE switch pair (am910/am911) is phased out completely
 - The installation and configuration of the 6x BoR 7060SX2 switches and re-configuration of the BoR 7020T BoR switches is scheduled for Tuesday next week, once the delivered three racks are energized by the Dell personnel coming on site
 - The location of two BoR 7020T switches out of 6 is going to be a temporary one, in the rear top segment of the new SF rack 79-17 (to be later moved to 79-15)
- Conversion of compute node racks to spine-and-leaf infrastructure in CDCE
 - Procurement of 21x ToR switches needed for complete replacement of legacy Dell/Force10 Exascale s705 (row 50S) and Brocade SX-1600 systems (row 48N) is in progress
 - No ETA for the switches yet; though the hope is to start the conversion process for rows 47N and 48N as part of the ATLAS Tier-3 OS upgrade expected to happen around end of Apr'18 – early May'18 to avoid double downtime
 - All the legacy overhead copper infrastructure is removed from row 49S
 - Still targeting the end of May'18 for completion of the CDCE conversion and all legacy Dell/Force10 Exascale system s705 copper infrastructure removal
- SW upgrade is now available for the SciZone perimeter firewall 1+1 pair
 - Confirmed by PHENIX; pending confirmation from STAR (RACFCL2018-24)

Legacy Network Equipment Replacement Timeline (1)



Legacy Network Equipment Replacement Timeline (2)



Questions & Comments