RACF/SDCC Network Operations
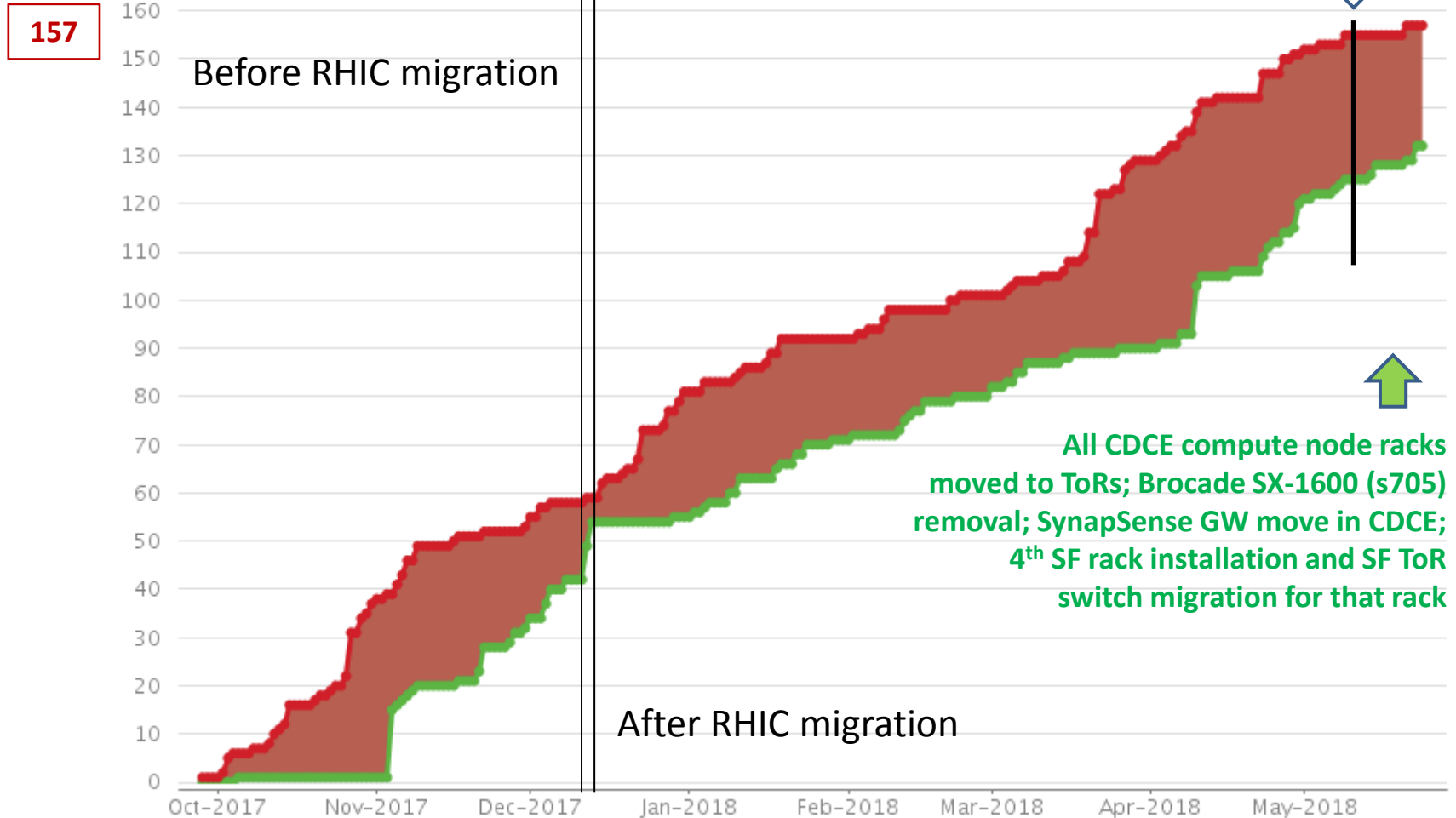## Status Report (May 24, 2018)

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Project: RACF/SDCC Network Operations & Interventions
Chart

This chart shows the number of issues **created** vs the number of issues **resolved** in the last **238** days.

157

Previous Report

Before RHIC migration

After RHIC migration

All CDCE compute node racks
moved to ToRs; Brocade SX-1600 (s705)
removal; SynapSense GW move in CDCE;
4th SF rack installation and SF ToR
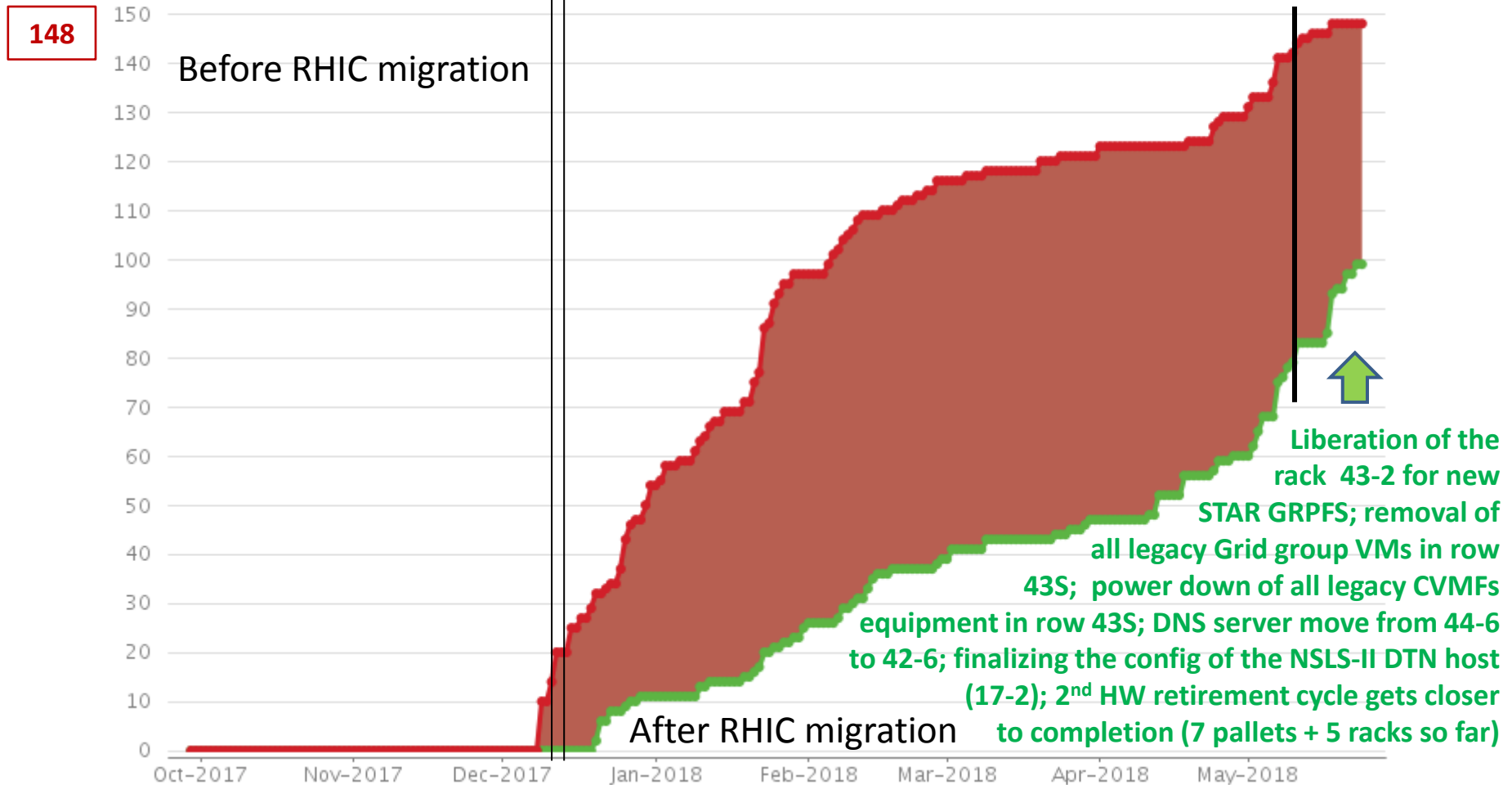switch migration for that rack

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 **238** days.

Previous Report

148

Before RHIC migration

After RHIC migration

Liberation of the rack 43-2 for new STAR GRPFS; removal of all legacy Grid group VMs in row 43S; power down of all legacy CVMFs equipment in row 43S; DNS server move from 44-6 to 42-6; finalizing the config of the NSLS-II DTN host (17-2); 2nd HW retirement cycle gets closer to completion (7 pallets + 5 racks so far)

Recent Developments (1)

- Conversion of compute node racks to spine-and-leaf infrastructure in CDCE
  - All 21x ToR switches needed for replacement of legacy Dell/Force10 Exascale s705 (row 50S) and Brocade SX-1600 systems (row 48N) are received, installed and configured
  - 5 interventions scheduled by Chris Hollowell and agreed with ITD to complete the conversion of ATLAS Tier-1 and ATLAS Tier-3 sites (NETOPS-104):
    - **Apr 26, 2018 (DONE)** – ATLAS Tier-1/Tier-3 racks in row 50S
    - **May 8, 2018 (DONE)** – All remaining ATLAS Tier-3 racks in rows 47N, 50S, 50N (in parallel to the physical migration of the ATLAS Tier-3 GPFS rack from 4-6 to 41-2, and moving ATLAS Tier-3 rack 48-21 to position 47-22)
    - **May 10, 2018 (DONE)** – ATLAS Tier-1 racks 47-[15-17]
    - **May 21, 2018 (DONE)** – ATLAS Tier-1 racks 47-[18-20] – s705 is removed from CDCE)
    - **May 24, 2018 (DONE)** – All ATLAS Tier-1 racks in row 51S – sw75 (Exascale E1200i) is to be removed from CDCE in a few days
- Fiber infrastructure deployment in CDCE rows 41-43, 46 to accommodate the following new systems to be deployed in May-June 2018 timeframe:
  - STAR GPFS (rows 42-43): position 43-2 was liberated on May 18, 2018 thanks to J. Hover and J. De Stefano, the new rack frame to be installed in this position by the end of the week
  - Home directory NFS appliance and Shared RHEV NFS appliance (row 41-[3-4])
  - Belle II dCache storage upgrade (row 46) – headnode is in the rack and plugged to network
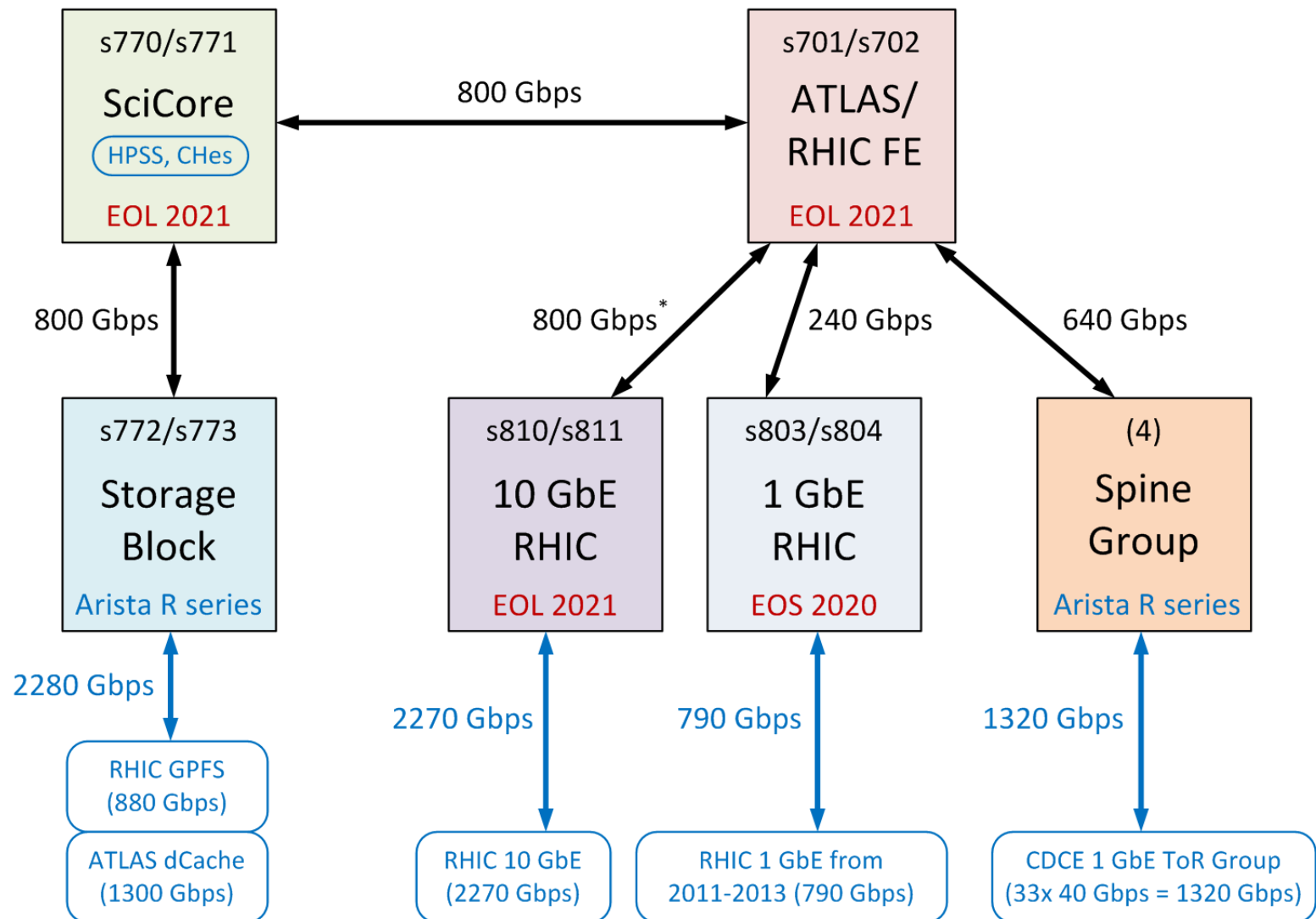
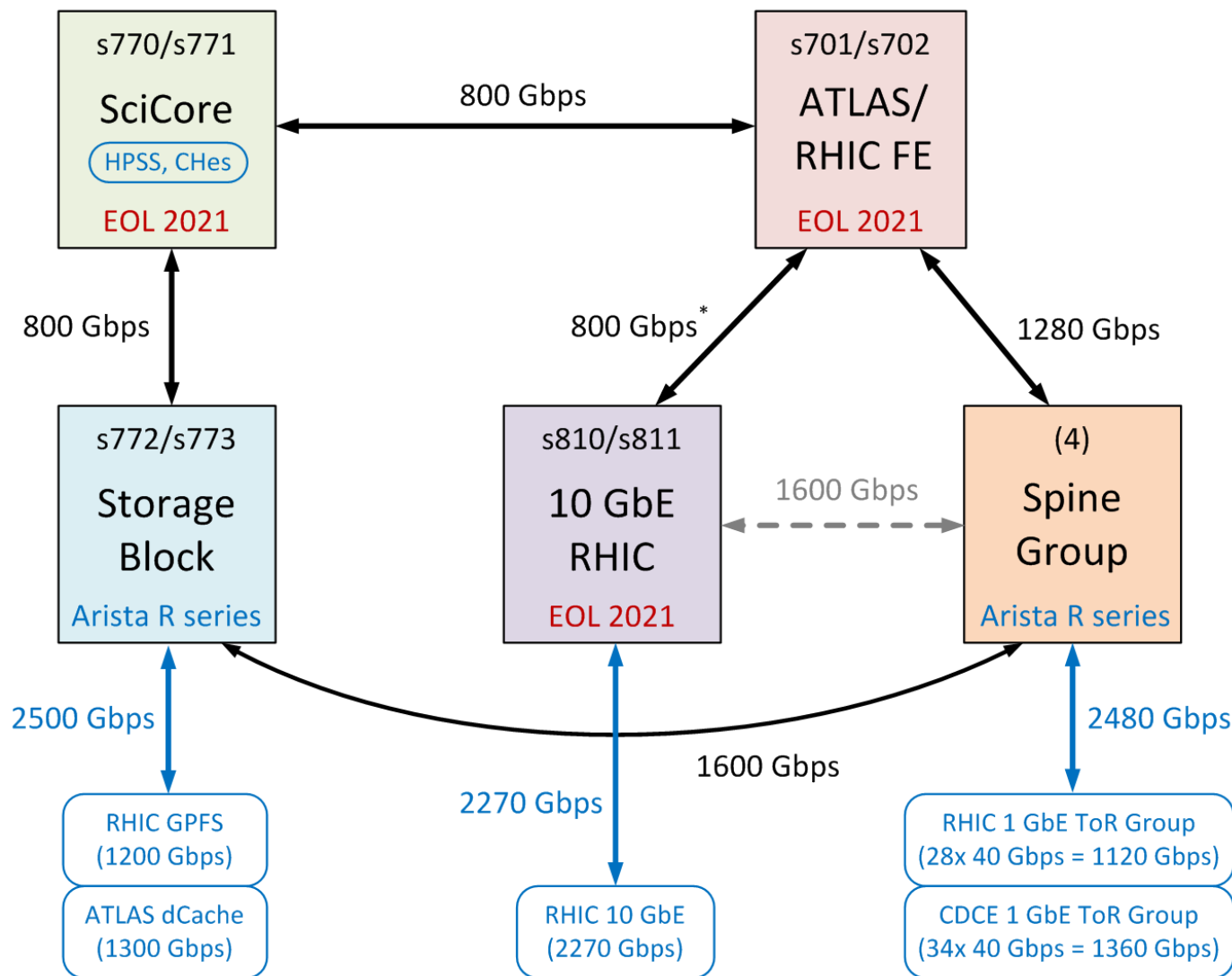# Legacy Network Equipment Replacement Timeline
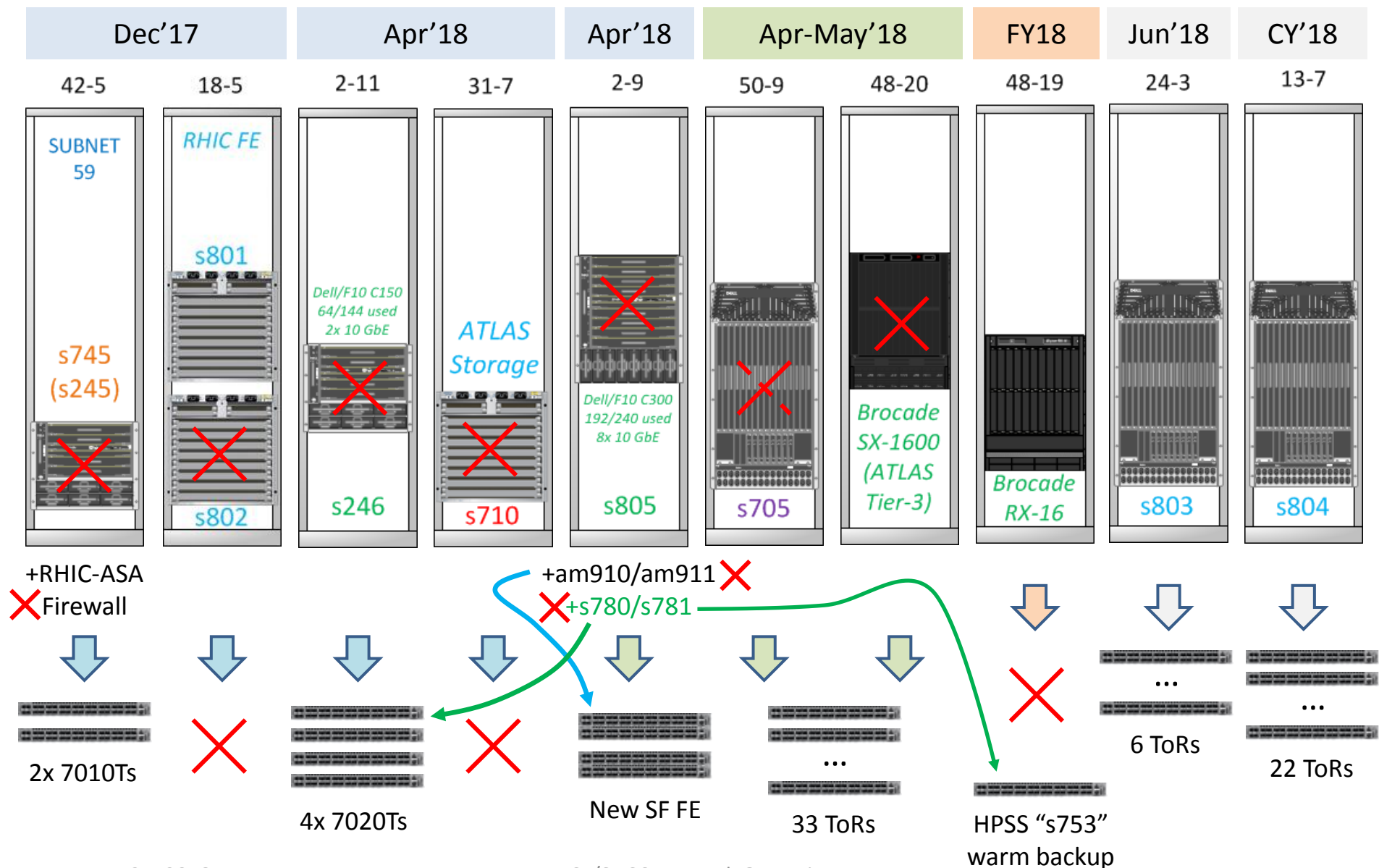
Recent Developments (2)

- SciCore (Arista 7508E) switch pair gets liberated from the direct attached clients – most of them are getting moved to the Storage Block (Arista 7508R) switch pair
  - New real hardware based CVMFS system was moved on May 10, 2018
  - CephFS cluster moved on May 18, 2018
  - Belle II dCache and HPSS to be handled gradually in CY18-19, as the systems evolve
- New SF installation in the BGL room
  - BoR Arista switch deployment in the recently delivered 4th SF rack was completed yesterday (May 23, 2018)
- Procurement of 28x Arista 7020T ToR switches plus associated copper and fiber material for complete replacement of legacy s803/s804 switches is initiated
- The intervention dates for RHIC Farm are yet to be scheduled:
  - The first intervention by the end of Jun'18 for the 1 GbE attached compute node rack in the RCF room (STAR row 21, "small experiments" row 25): s803 replacement with ToRs (to coincide with new home directory NFS cut-in) – highly depends on GS and Fabric group schedule
  - The second intervention for the 1 GBE attached compute node rack in the main BGL room (STAR and PHENIX in rows 1, 2, 12, 14 – before the end of CY18 (ideally, before the end of FY18): s804 replacement with ToRs) – possibly coinciding with an HPSS intervention (if any such intervention is to happen in the same timeframe)

Farm Network Connectivity Evolution in 2018Q3 |f⟩

Questions & Comments

RACF/SDCC Network Operations