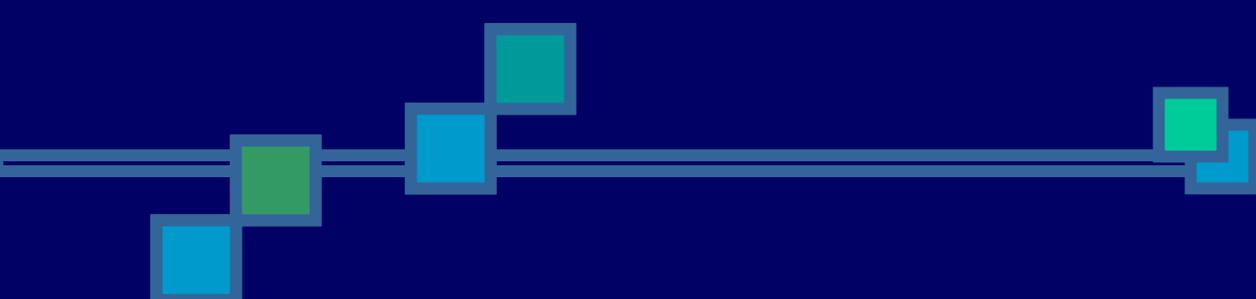


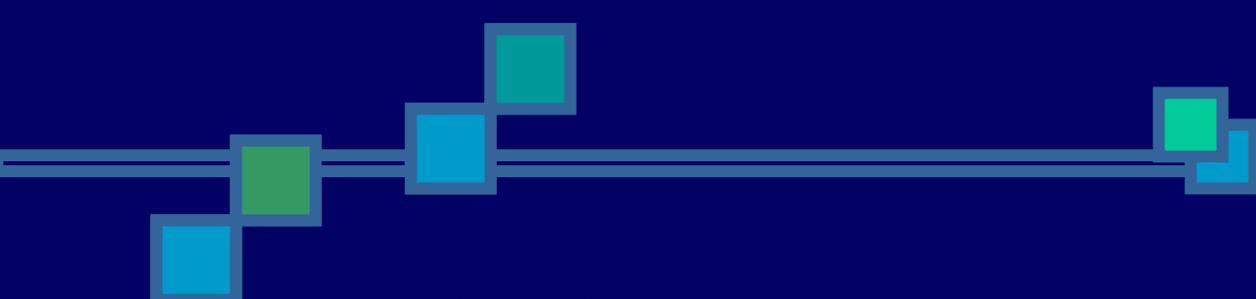
# Need for April/May Non-Functional Deployment





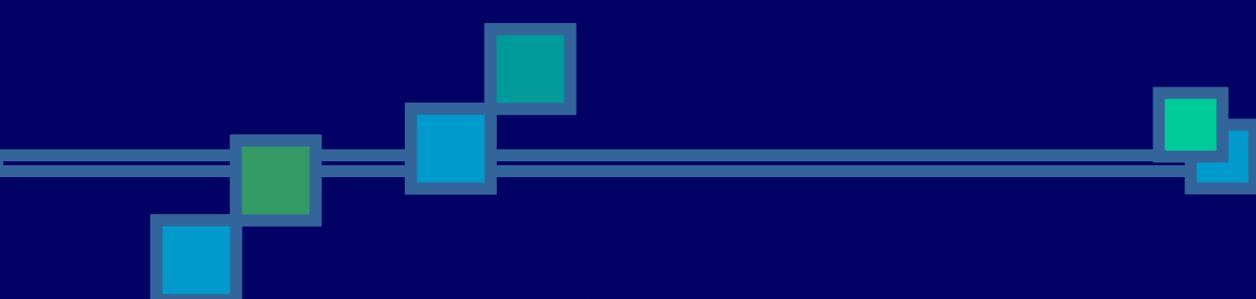
# Goal and Objectives

- Goal: Achieve as much of recommended target architecture originally proposed for March by May
  - Objective 1: Achieve scalability to accommodate expected increase in external usage
  - Objective 2: Offset potential performance issues associated with merging NIH eRA Commons and IMPAC II production databases
- 



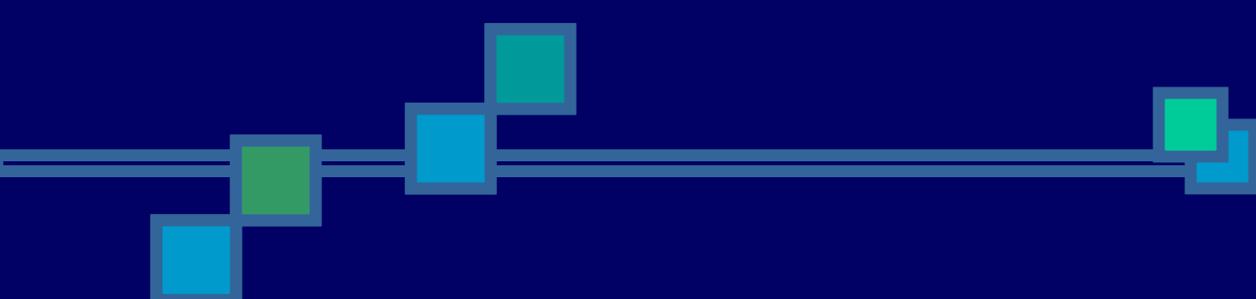
# Today's Situation: What is included

- NIH eRA Commons and IMPAC II Production database instances merged
  - Oracle 9i database migration completed
  - Oracle 9iAS upgrade completed
- 

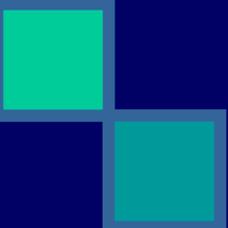


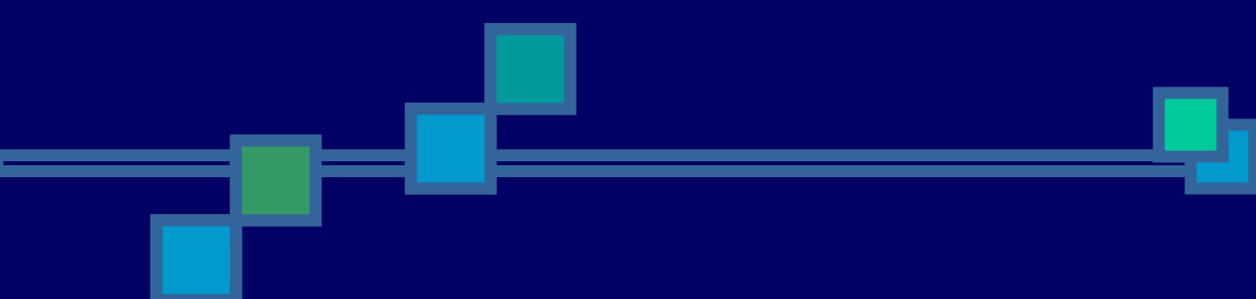
# Today's Situation: What is NOT included

- Load balancing for external applications
  - ORAC (Oracle Real Application Clusters)
  - 9iAS Infrastructure on separate servers
  - HTTPS Acceleration
  - Internal applications were not deployed in a single container configuration
- 

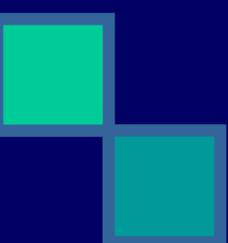


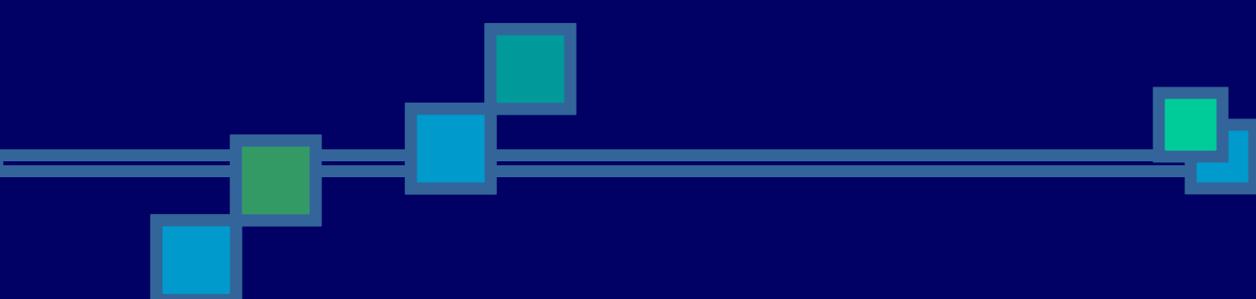
# How did we get here?

- 
- Load Balancing hardware did not arrive in time for CIT to deploy with confidence
  - ORAC deployment did not go smoothly in development
  - Combination of internal applications proved too risky for March deployment
  - Integration testing platform in development not suitable for adequate testing of deployment integration
- 

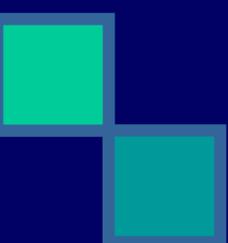


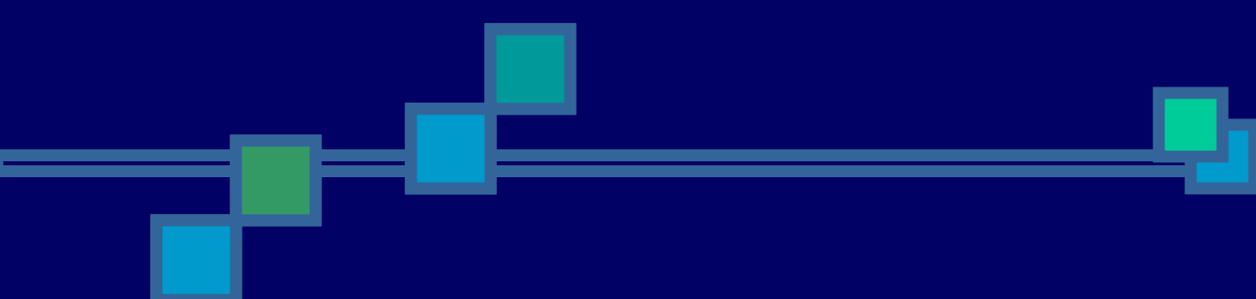
# What this means

- 
- No load balancing: unable to scale architecture to accommodate influx of external users
  - No ORAC:
    - Unable to optimize database to enhance performance for additional load
    - No provision for planned fail-over capability
  - No HTTPS acceleration: slower performance in a secure Web environment
  - Separate internal containers: unable to support internal load balancing capability when needed
- 

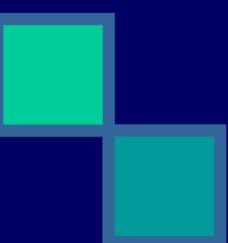


# Recommendation

- 
- Implement as much of the missing architecture in April/May as possible
  - Baseline architecture on all platforms (development, test, stage and production) to allow consistent environment for July release
- 



# Assumptions



- Hardware for Load Balancing and HTTPS acceleration will be available in time for April/May deployment
  - ORAC problems will be resolved in time to safely deploy
  - Development will have enough time to modify applications as needed for new configuration
  - Internal applications can be safely combined and deployed
  - Testing will have time to sufficiently regression test all applications before deployment
- 