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# Action Items

— Communication/Site Monitoring —

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WBS 2.3 Facility Coordination

# Introduction

- After a recent event at SWT2\_CPB, Rob asked that me to suggest actions to improve procedures to reduce the chance of similar occurrences.
  - I will not discuss details of the event at SWT2\_CPB so I can focus on doing better.
- I will also take a look at using current US ATLAS Europe team members to help with the US-CERN communication. (Also Rob's suggestion.)
  - This section will focus on what US ATLAS funded people should do.
  - This is just some trial ideas of my own and an official proposal to make changes.

Thanks to Ofer for his help in editing/improving the talk!

Any remaining errors/problems are my responsibility.

# Actions

# Actions: Understand the Tools

- List all of the systems for monitoring for issues, tracking issues, and communication and determine which to use.
  - There are an enormous number of tools to use - so many that I fear none of them are used enough to do a good job.
  - We somehow need to have a reasonably authoritative list of the tools with some indication of what each each is good for and its relative worth.
  - For example there are at least 4 ticketing systems (BNL, GGUS, ADC JIRA, and OSG) and also GitLab where people can record comments about code changes.
  - Monitoring is the worst case here. I have been looking into the accuracy of various accounting/monitoring systems for 9 months but I keep finding ones I missed.

# Action - Technical (noted for the record)

- The maximum timeout before a Rucio transfer fails should be reduced.
  - I personally have seen timeouts of over 10,000 s on transfers that would have take a few minutes if they succeeded.
  - The timeout varies widely from file to file
  - It would be best to have a short timeout or to set it based on network speed/file size.
    - Ofer pointed out to me that we need to be careful here when the file is being staged from tape with the associated long delay.

# Actions - Communication

- AGIS should be modified to send automatic notifications to site administrators when AGIS parameters are changed.
  - Changes were made without all affected parties being informed
  - Changes were made without the site doing tests that they were OK
  - There is a concern here about overloading the site administrators with too many emails but the consequences of a mistake can be severe.
- US-based site administrators should have regular, direct communication with EU-based ADC/ADP team members.
- Rob asks:
  - Collect action items from weekly ADC TCB and Ops meetings
  - How do we get the action items from ADC Dailies?

# Actions - Monitoring

- We should define a single, concise set of monitoring plots/checks to ensure that all sites are functioning properly.
  - “We” means all parties: the sites, the ADC monitoring team, ADC production team, WBS 2.3.5 Operations team, etc. Need to more clearly define the role of US Operations Team.
  - The monitoring should be as lightweight as possible as site administrators don’t have many hours for looking at monitoring.
- All sites should systematically monitor/check the site each working day.
  - Don’t let things fall through the cracks.
- Sites should ensure that the necessary monitoring will remain fully available after making major changes.
  - Don’t change a major site element (software, middleware, queuing) without having the ability to fully monitor the site afterwards.

# US Operations in Europe



# US ATLAS People in Europe

- Clearly US ATLAS people based at CERN are in the best position to facilitate communication between the US and CERN.
  - They have the tightest connection to CERN-based groups with many personal friendships.
  - They are also in the right time zone
- So what can we do to improve things using this talent (given what we have learned from the event at CPB?)
  - In that event changes were made without the necessary communication including a situation where it appears that the US and EU people were making conflicting changes to AGIS. Changes were made, reversed, made again, reversed again...
  - Apparently nothing was done to check that the site was not adversely affected. An AGIS change took the site down, and after this was fixed, a similar change was made again.

# What We Might Do....

- Since US ATLAS has folks on both sides of the Atlantic, they should work more closely together facilitating the evolution of the production system.
  - The CERN-based members can work with the various teams making changes that affect the production system. I believe they already osmotically have this knowledge...
  - The US-based members have good connection to the US sites and their system administrators. Again I believe they already osmotically have this knowledge...
- Particularly, when a big change occurs (e.g. to Rucio mover), they should work proactively together to plan and track the changes.
  - The team should understand the needed changes and convey that to the sites.
  - As sites make changes, issues should be fed back to the developers for quick resolution.
- However the US and CERN-based people should be working together everyday to ensure good communications in both directions.

# Final Word

- It seems to me that the key here is focused teamwork.
  - The two parts of the team should have a joint plan for each upgrade campaign.
  - The US-based team should be monitoring the sites everyday and immediately questioning the sites about about things that don't seem correct. They should also be telling the sites what changes are needed.
  - With the information from US-based team, the CERN-based team should get the issues resolved and, importantly, give feedback to the developers.
  - If we fall behind on an upgrade, the two parts of the team need to proactively work together to solve it.
  - We have the people doing this at some level but I would make it more formal.
- Given how busy the site administrators are, having more eyes looking at for problems will really help improve things.