2018-06-21 CHEESE Planning

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Related to

NDS-1251 - CHEESE project setup and planning CLOSED

Project organization/development process

- Purdue: PI, PM, 20% dev
- ISDA: PI, Dev
- Quarterly showcases

Organization option:

- We discussed a few things around project organization.
- The NDS team currently mixes NCSA's OpenSource Atlassian tools (Confluence, JIRA) and Github for source control
- We'd like to continue this process for Workbench development for CHEESE
- · We recognize that CHEESE needs to develop it's own community
- Suggest a new github/dockerhub organization
 - o "cheesehub"?
 - Will contain catalog of specs used by Workbench and Docker image definitions
 - Community can build using standard Github tools (issues/wikis/pull requests, etc).
 - Provisioning (terraform/cloudformation templates)

Features:

- 12+ containers from Try-CybSI
 - O Network security, secure coding, cybersecurity research, cryptography
- Usage tracking/reporting
- "Community engagement extensions"
 - Message boards, ticketing systems, leader boards
 - Can this be centered around Github?
 - Application requests
 - Leaderboard
 - o Soft rewards
- Docker/Kubernetes security (high risk)
- Jupyter Notebook support
- Usability
- AWS in year 3

Concerns/issues:

- · Retaining access to unpatched images (private registry?)
- Conference targets/deadlines

Security:

- · OS choice, update strategy (NCSA security recommendation)
- UID/GID management
- Egress filtering
- Audit
- Kubernetes RBAC/Security Policies
- Logging/syslog (NCSA security)
- · Qualys scanning, when relevant
- · Image signing?