The Workshop of Change for the Information Craftsman

JPL Open CAE and Open MBEE
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Open MBEE Vision

- Provide an open portfolio in a shared environment that seamlessly connects engineers developing missions and systems.
    - Open - The portfolio that CAE provides is open in every sense of the sprit of open source. Our processes, code, apps, services and artifacts are accessible by JPL users as well as vendors and partners.
    - Shared - CAE is more than a collection of licenses and tools, its a shared environment for engineering. The diverse community of users, developers partners and vendors are able to contribute innovation and work more effectively by reducing the overhead.
    - Connected - the CAE Environment connects engineers allowing them to collaboratively construct and analyze the precision products needed to develop Missions and Systems at JPL using the CAE environment. This is done without the overhead of traditional manual exchanges of information. Engineers can connect with each other and find relevant engineering data and information reducing redundancy and increasing value of the engineering products and analysis produced by the flight project.

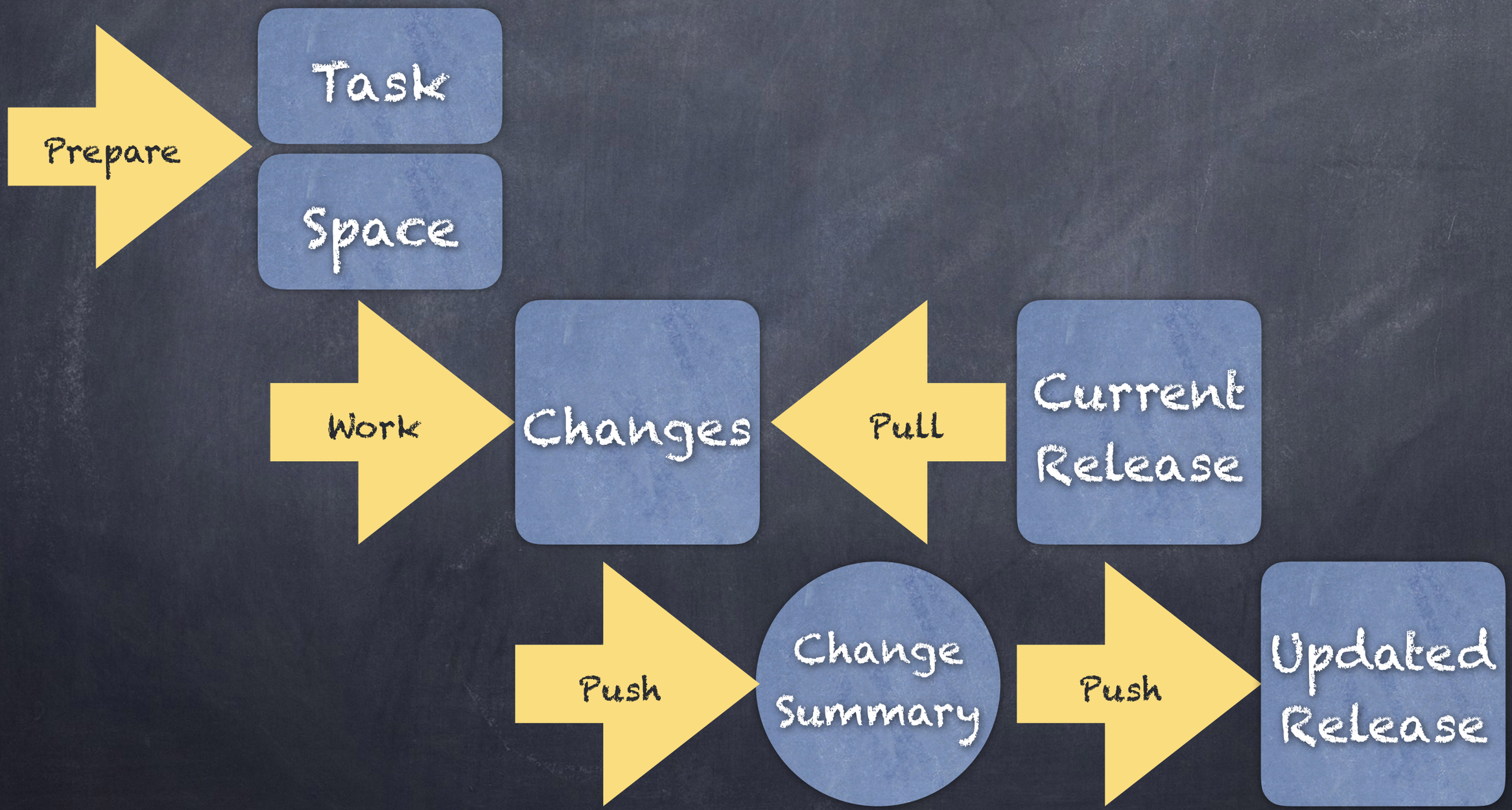
Open MBEE Mission

- Develop the CAE environment from a user centered architecture leveraging vendor partnerships using robust life cycle processes.
  - Vendor partnerships - CAE works closely with Vendors providing them crucial feedback and insight into how thier products are serving the needs of the
  - User centered architecture - to achieve the vision of Open CAE, the technical architecture for CAE is driven by the needs of the practitioners who use the environment and the needs of the projects that are served by it.
  - Life-cycle process - the life-cycle processes for CAE provide the integrity of the the applications services and support provided by cae.

The workshop of change

- Decide to change something
- Capture description what the intent of the work is
- Prepare space for doing work
- Do the work
- Review changes
- Release changes

The workshop of change



Platform Architecture

- Portfolio of Apps and Services
- Pipelines for Development and analysis
- Connections for Integration services
- Engineering Desktop for seemless provisioning of end-user environment

Information Concepts

Models and Data	Project and mission models and data
Libraries	Standard reusable models, data, patterns etc
Modeling Languages	Languages for modeling
Composite Structure Graph and Expressions	General purpose nodes and relations
Key-Value	UID access to all data

Environment for SE

Engineering Apps

Analysis Platform

Information Services

Environment for SE

Engineering Apps

- Jupiter Notebooks
- DOORS NG
- Matlab
- View Editor
- Jira
- Magic Draw
- Mathematica
- Tom Sawyer
- Maple
- Phoenix

Analysis Platform

- Analysis Framework
- Job Control

Information Services

- Web Services
- Files
- Models
- Data
- Timelines
- Code
- Files

CAE Devops Environment

Open MBEE Links

- Github https://open-mbee.github.io/
- Slack openmbee.slack.com
- Facebook https://www.facebook.com/openmbee/