ACTION STATUS

ACTION STATUS

The **Action Status** function of the Life Science Analytic Framework application typically tracks three main areas of activity:

Execution monitoring: Real-time updates on whether a job typically SAS/R programs are "Pending," "Running," "Completed," or has "Failed." This is vital for clinical programmers who need to ensure that data transformations and TFL (Table, Figure, Listing) generations are processed in the correct order.

Workflow traceability: In clinical trials, specific tasks must be "Signed Off" or "Reviewed." The action status tracks where a task sits in the development-validation-production pipeline. For example, it will show if an item is awaiting a Peer Review or an Electronic Signature.

Audit compliance: Every change in an action status is recorded in the system's audit trail. This allows auditors to see when a job was initiated, who promoted a file to production, and what the outcome was.

KEY ISSUES

- Goal: Provide a new interface for Action Status that utilized company standard components and colors in an intuitive, easy to read and accessible format.
- The older version of Action Status was riddled with usability and accessibility issues that made it very difficult for users to understand what actions were successful or not, and if not why.

BEFORE

This is an example of the old user interface for the Action Status pop-up as triggered by the user clicking on an action status icon in the top bar of the LSAF interface. Usability issues are covered in depth in the next slide.

USABILITY ISSUES

- **High visual density:** Significant clutter makes it difficult for users to focus on primary tasks.
- **Poor information architecture:** Lack of clear grouping or hierarchy makes it challenging to distinguish relationships between UI elements.
- **Redundant progress indicators:** Constant display of wide 100% progress bars for completed items instead of a simple completed state creates unnecessary visual noise.
- **Color only progress indicators:** Reliance on color alone (red/green) to indicate a success or failure state is a serious accessibility problem for color blind users
- **Icon fatigue:** Over-reliance on "Information" icons creates a "sea of dots" effect, diluting their helpfulness and distracting the user.
- **Low discovery for secondary actions:** Critical utility features, such as "Copy to Clipboard," are visually buried and difficult to locate.
- **Questionable interaction patterns:** The "Show/Hide" toggles may add extra clicks without providing significant layout benefits.
- **Inefficient vertical real estate:** Excessive forced scrolling hinders quick data consumption and suggests a need for a more compact or paginated view.

AFTER

In the revised UI users are able to quickly discern what actions have completed either successfully or with errors. Users can filter the results quickly to show only selected categories, such as failed using toggle buttons above the list. Using the right arrow icon (>), user can drill into the details of each action item.

DELETE ERROR DRILL DOWN

This example shows the user interface when a user has opened an item, such as a the delete repository item error in the prior screen, to show the error details. Error information can be quickly copied to the user clipboard using the Copy to Clipboard button for troubleshooting or sharing with other users or administrators.

IN PROGRESS DRILL DOWN

Items that were in progress were modified to show a live animated progress bar indicating the percentage of completion in close to real time.

STATUS INDICATORS

The Action Status dialog opening is triggered by the Action Status button at the top right of the LSAF screen. The use of red X and green checkmark state indicators created accessibility issues such as insufficient contrast and difficulties for colorblind users. Icons were modified to provide better color contrast and add a new icon for “in progress” items.

Before:

After: