Raven – Release Notes (December 16th, 2023)

The **Raven** release aimed at improving the functionality and user experience across various modules and components of our system. The release incorporates a comprehensive set of changes for the **NTRR** instance which spans across various modules; especially the **Meta Study** module. The team also upgraded the application to **Java 17** version which was a major accomplishment and worked on **several tech initiatives and performance optimizations** across the application. Please review the detailed release notes below for a comprehensive overview of the changes and updates included in this version.

NTRR Enhancements

FITBIR only-NTRR- Accounts Changes

- Added the option to create either a FITBIR or NTRR Account when requesting a new account. Additionally, all the existing FITBIR accounts have been tagged as FITBIR account
- The FITBIR or NTRR users should have default search selection for FITBIR or NTRR user list based on their primary entity
- Added Admin capability to grant Data Access to the secondary entity for FITBIR/NTRR. Based on this permission, the user can either access FITBIR or NTRR data or data from both the entities
- Auditing information logs have been added to capture the information under the Account Action History table when the user's data access gets updated
- FITBIR only-NTRR-Data Repository
 - The FITBIR or NTRR users should have default search selection for FITBIR or NTRR studies based on their primary entity
 - Additionally, all the existing FITBIR studies have been tagged as FITBIR studies
- FITBIR only-NTRR-Query Tool
 - Separated the FITBIR/NTRR users so that they can query their data in the Query Tool based on the Data Access Privilege
- FITBIR only-NTRR-Meta Study
 - The FITBIR or NTRR users should have default search selection for FITBIR or NTRR meta studies based on their primary entity
 - Additionally, all the existing FITBIR meta studies have been tagged as FITBIR meta studies
- FITBIR Only- NTRR-Subject Management
 - NTRR user should have the ability to create NTRR prefixed GUIDs

Redesign Meta Study

- Updated Meta Study's UI
 - \circ ~ Updated the UI ~ from accordion based information sections to tabular structure ~
 - Added additional columns to the View Table
 - Added/Updated Search filters in the left navigation
 - Regrouped fields/labels and their location in Meta Study Overview/Create/Edit Pages
 - \circ $\;$ Added "Estimated Number of Subjects" to the Meta Study Details tab
- Data Upload Capability

- Added robust data upload capability to upload multiple files of various types and formats
- Implemented File Size Limit Error Messages
- Data Download Capability
 - Added the capability to download data from the Data and Documentation tab by adding the data to the Download queue/tool
- Meta Study-Administration
 - Developed brand new Meta Study Administration UI and workflows under "Manage Meta Studies"
 - Added Administration capabilities such as Publish Meta Study, Assign DOI under this interface
 - Added the File Size Configuration where the admins can update the individual meta study file size as well as total file size for a specific meta study based on request

<u>Java 17 Upgrade</u> – The team ensured that after the JDK upgrade all the following continued to work as expected and made changes as needed to support Java 17:

- brics-scheduler
- Microservices
- Portal
- Query Tool
- ProFoRMS
- Import-restful
- Updated the POM file/configuration

ProFoRMS Enhancements

- Added Print button to eForms under the My Visit Types page
- Added the auto-complete search feature to the GUID and Visits Type in "Schedule Visit"
- Added an icon to show fields that are pre-populated during the Data Collection

Data Dictionary Enhancements

- Create Form Structure Page
 - Removed default selection from the Disease Dropdown when creating a Form Structure
- Data Element Import
 - Added the capability to maintain CDE UMLS CUIs in the same order as provided in Excel

Data Repository Enhancements

- Repository- Create/Edit Mode and View Mode
 - \circ $\;$ Regrouped the fields/labels and their location in Study Overview tab
 - o Added the Permissions tab to the study view for Study specific users and admins
- Data Repository Create Study Page

- Made the Approved Data Submission Document optional for PDBP, cdRNS and NEI
- Download Manager Notification Email
 - Updated the text for the Download Manager notification email by adding the location on it. It was modified to say "Your requested data is now available in the **Download Tool in the Data Repository**".
- Data Repository Admin Report
 - o Added Study Title (column) to the Study Information Report
 - o Added more columns to the Study Submission Report
- Data Repository API
 - o Added a new API to return dataset information without Dataset File-Set

Submission Tool Enhancements

- Modified the logic to upload multiple datasets independently so that if any of the submissions fail, the previous successful uploads do not need to be resubmitted
- Reduced time user needs to spend in the submission tool by uploading the user files first and letting the data loader run/complete later thus allowing the users to exit the page sooner
- Added the capability to continue with the file upload after a minor network disruption
- Added a feature to automatically sanitize invalid XML characters that used to get added when data was imported through BTRIS for CRISPI analysis
- Optimized the load and validate time for a dataset with 25k associated files
- Optimized the time taken to create the submission package for studies with long list of datasets
- Fixed the Validation Tool Future Date Issue for CRISPI data upload
- Updated the Extra Validation bypass keys
- Added a message to inform the user about the upload process of the Submission Tool
- Added more content to validation error messages to explain that the user should only reference associated files within Form Structure's same folder or any subfolder
- Disabled the Validation Tool tab once the user is on the Upload tab
- Disabled Flag and Description fields on UI when the user clicks on Start Submission Upload

Query Tool Enhancements

- RDFGen Process
 - Optimized the RDFGen process by chunking the data by record IDs so that it does not go out of memory for CRISPI data
 - Optimized it furthermore by parallelizing meta data cache, triples generation and repo data generation
- Query Tool
 - Made the "Hide Not Available" checkbox checked by default.
 - Added tooltip to GUID and Orderable-Biosample ID filters letting the user know the entry limit
 - Updated the wording of the error message for the Knowledge Graph option for DEs that are not applicable

Accounts Enhancements - There were a few minor changes in the Accounts module:

- Account Request Page
 - Updated wording for DSR (Data Submission Request) privileges on the Account Request Page for FITBIR
- Accounts Module
 - Added a checkbox for Private Groups Permissions to show/hide the groups when requesting accounts
 - Updated the Query Tool API permission so that it is granted to the user when they request the Query Tool privilege. This would help the users view the imaging data using Volview in Query Tool
 - Added an API-accessible endpoint to retrieve a login token to GUID

<u>BRICS UI Enhancements</u> - A few UI changes were made across the website to streamline the interface:

- Portal Sites
 - Made the "Select all that apply" text as the default option for multi-select dropdowns
 - o Made the radio buttons consistent across the system modules
 - Updated instance specific color tokens as the preliminary work for User Experience changes

File Repository Enhancements

- Migrated Data Set Files to the File Repository Store Pushed this to Raven Minor due to an issue, should not have any impacts on the current behavior
- Migrated Download Related Files to the File Repository Store

Public Site Changes

- FITBIR Updated D3 Library version
- FITBIR On meta study table, modified the PI name display order to show last name, first name. Used to be first name, last name
- PDBP Updated menu to add items under specific columns
- CNTR Rebuilt the old NTI Public website
- NEI Fixed 508 issues

Drupal Performance and Architecture updates

- Drupal Performance and Architecture updates BRICS
- Drupal Performance and Architecture updates BRICSIM
- Drupal Performance and Architecture updates BRICSEX
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Miscellaneous

Updated struts core to 2.5.33 version

- Completed analysis work for replacing Repo PostGres DB with MongoDB and accomplished the following:
 - Created Java modeling proof of concept for Data store MongoDB data model version B
 - o Performed Impact analysis for repository migration
 - o Documented the affected areas and estimate
 - Completed Proof Of Concept for RDF Gen Impact due to repository migration
- Modified Property Files to support Raven changes
- [NEI] Set X-FRAME-OPTIONS in Apache to list allowed origins
- Updated Google Analytics for Public and Portal sites
- Currently, working on setting up the code coverage tool JaCoCo and integrating it with Jenkins