

## Release Notes

v2.0 – Nov 5, 2024

**Redesigned FDSA User Interface (UI):** The FDSA UI has been completely reimaged to prioritize intuitive design, user-friendliness, and enhanced workflows, making it easier than ever to manage federated data sharing.

- **Intuitive Design and User Experience:** The UI now features a modern and streamlined look, focusing on a smoother, more accessible experience for all users. Navigation has been simplified to ensure that essential tools and features are always within reach.
- **Guided Setup/Configuration Dashboard:** FDSA admins are greeted with a post-installation guided checklist, providing clear "Call to Action" items to simplify the initial setup process and ensure all necessary configurations are completed seamlessly.
- **Enhanced Multi-File Type Task Viewer:** Admins can now review outputs from researcher models directly within the app. Different file types are organized into tabs, allowing for secure, organized, and convenient reviews without the need for downloads.
- **Improved Data Access Request (DAR) Approval Workflows:** FDSA introduces automatic DAR approvals for datasets like synthetic data. This streamlines the review process and reduces manual intervention, enabling faster decision-making.
- **Quarantine Process for Remote Query Data Results:** Remote query results can now be securely quarantined for review. This ensures that sensitive or unexpected outputs are flagged for further inspection before release, enhancing data integrity and control.
- **Streamlined Support with Automatic Log Sharing:** When requesting assistance, admins can now opt to include system logs with their support requests, enabling the FDSA Support team to diagnose and resolve issues more quickly and effectively.
- **Notifications for New Users:** FDSA now features an improved notification system for new users. When an admin invites a new user, they will receive a detailed welcome email with helpful information, guiding them through their initial setup and providing links to key resources for a seamless onboarding experience.

**Enhanced Installation Capabilities:** We've made significant improvements to the installation process to better support diverse partner environments:

- **Intranet Setup Support:** FDSA can now be configured more easily for intranet-only deployments, ensuring seamless operation within private networks.

- **Customized Firewall Rules:** The installation process has been enhanced to accommodate partner-specific firewall configurations, enabling precise control over restricted incoming and outgoing traffic. This ensures compliance with security policies while maintaining connectivity.

**Scalability:** We've upgraded FDSA to provide robust scalability and reliability for demanding environments through load balancer support in FDSA infrastructure:

- **Eliminating Single Points of Failure:** FDSA is now fully optimized to operate behind production-grade load balancers, ensuring uninterrupted service by distributing traffic and mitigating potential points of failure.
- **Disaster Recovery Ready:** Load balancer integration enhances disaster recovery capabilities, enabling seamless failover to backup systems in the event of an outage.
- **Multi-Instance Workload Management:** FDSA now supports multi-instance deployments, allowing you to efficiently distribute processing workloads across multiple servers for improved performance and scalability as usage grows.

**Improved Error Handling:** We've enhanced the error handling mechanisms to create a better experience for researchers and smoother interactions with FAIR catalog services:

- **Clearer Error Messages:** Researchers submitting data access requests (DARs) through the FAIR catalog will now receive detailed, user-friendly error messages that provide specific guidance on resolving submission issues.
- **Enhanced User Feedback:** Error prompts now include actionable suggestions, helping users quickly identify and correct mistakes in their requests.
- **Streamlined Communication:** Improved error logs and messaging ensure that admins and support teams can diagnose and address issues faster, reducing resolution times.
- **Better FAIR Integration:** Adjustments to the DAR error-handling process improve compatibility and communication between FDSA and FAIR catalog services, ensuring a seamless data-sharing experience.
- **Proactive Error Detection:** System checks now identify and highlight potential issues earlier in the submission process, minimizing disruptions and ensuring more successful DAR submissions.

**Comprehensive API Documentation with Swagger:** FDSA now includes robust API documentation designed to empower developers and facilitate seamless integrations:

- **Fully Documented Endpoints:** Developers can access detailed Swagger documentation for all FDSA API endpoints, providing clear guidance on how to use and integrate FDSA functionalities.

- **Admin API Docs:** <https://<fqdn>/docs/admin>
- **Common API Docs:** <https://<fqdn>/docs/common>
- **Support for System Extensions:** The API layer has been enhanced to allow integration with third-party systems, enabling partners to extend FDSA capabilities and build custom workflows.
- **Developer-Friendly Features:** Documentation includes examples, parameter definitions, and response schemas, helping developers quickly prototype and test integrations.
- **Interoperability for Multi-System Environments:** APIs are designed to work seamlessly with other tools and platforms, making FDSA a central hub for federated data-sharing operations.
- **Streamlined Integration Process:** Clear documentation and consistent API standards simplify the process of connecting FDSA to external systems, reducing development time and complexity.
- **Future-Proof Design:** The API architecture supports scalable and modular extensions, making it easy to add new functionalities or connect to emerging technologies in the future.

This comprehensive API layer ensures that FDSA is not just a standalone solution but a powerful component in your broader data-sharing ecosystem.

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## Release Notes History

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### v1.3.35 – May 14, 2024

- **FAIR Data Steward Token Validation:**
    - Tokens associated with datasets are now validated automatically during addition or updates.
    - This ensures compliance with governance protocols and prevents unauthorized modifications or access.
  - **Automatic DAR Approval Notifications:**
    - When automatic Data Access Request (DAR) approvals fail five times, an email notification is sent to all FDSA admins.
    - The email includes detailed information about the failed DAR and the associated errors, enabling admins to quickly investigate and resolve the issue.
  - **UI Enhancements for DAR Screen:**
    - Added “Auto Approved” and “Auto Approve Failed” statuses to provide better visibility into the status of DARs processed automatically.
    - Renamed the "Trust Level" column to "Tasks Trust Level," now showing refined statuses like “Quarantined,” “Trusted by Project ID,” and “Trusted by Dataset,” for more granular insight into data trustworthiness.
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### v1.3.32 – May 9, 2024

- **Automatic DAR Approval:**
    - Admins can now configure datasets for automatic approval of all associated DARs.
    - This significantly reduces manual workload by automatically handling requests for datasets such as synthetic data or those not requiring additional reviews.
    - Includes built-in safeguards to notify admins in case of repeated failures in the approval process.
  - **Enhanced Welcome Emails:**
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- The welcome emails for new users have been upgraded to include the FDSA base URL and detailed onboarding instructions.
  - These emails guide users through accessing the system and provide links to key resources, offering a smoother onboarding experience.
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## v1.3.22 – April 23, 2024

- **Streamlined DAR Reviews with FAIR Tokens:**
    - A FAIR Data Steward token is now required for reviewing DARs, ensuring all reviewers meet governance standards.
    - A new column in the datasets view indicates whether a token has been saved, improving visibility and tracking for compliance purposes.
  - **Improved Upgrade Script:**
    - The upgrade script has been optimized to enhance the reliability and speed of the update process.
    - Reduces downtime and minimizes errors during version upgrades.
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## v1.3.13 – April 8, 2024

- **Performance Optimizations:**
  - Bash scripts have been fine-tuned to enhance operational efficiency and reduce system resource usage.
  - This results in smoother system performance and a more resilient codebase.

### **Bug Fixes:**

- Fixed connectivity issues that disrupted communication between components after updates.
  - Resolved an issue preventing FDSA from restarting properly after server reboots.
  - Improved the license update process, allowing admins to update licenses even if the existing one is invalid.
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### v1.3.0 – March 22, 2024

- **Enhanced Support Experience:**
  - A single-click option now allows admins to attach logs when submitting a support request, speeding up issue resolution.
  - Includes system diagnostics and error reports for detailed analysis by the support team.
- **Advanced Whitelisting Capabilities:**
  - Admins can now specify IP addresses allowed to access the DAR API.
  - This feature improves security by ensuring only authorized systems or users can interact with sensitive datasets.
- **Improved DAR Logs:**
  - Logging for DAR API errors has been enhanced to provide detailed insights into the cause of failures.
  - This allows for faster troubleshooting and improved system reliability.

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### v1.2.153 – March 13, 2024

- **Multi-Table Query Support:**
  - Users can now query datasets containing multiple associated tables.
  - Optimized for performance when table indexes are configured in advance.
- **Remote Querying for Distributed Data:**
  - Researchers can query record-level data remotely from datasets hosted in contributor environments.
  - This is governed by robust approval workflows to ensure security and compliance.
- **Enhanced Admin Configuration Options:**
  - Admins can now manage remote queries and federated datasets more efficiently via the Admin UI.
  - Includes configuration for distributed and federated data access.

#### **Bug Fixes:**

- Addressed error handling issues for MFA resets and dataset additions, providing clearer error messages and smoother resolutions.
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## v1.2.100 – December 13, 2023

- **PostgreSQL Views Support:**
  - Users can now utilize PostgreSQL views for advanced dataset operations and analytics.
- **Improved Task Management:**
  - New options to test SMTP configurations before saving changes.
  - Ability to process multiple tasks simultaneously with scalable worker instances.

### **Bug Fixes:**

- Fixed dataset pagination issues and improved container health-check reliability.
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## v1.2.77 – September 28, 2023

- **Updated Task Filters:**
    - Added “Standard” and “Detailed” views for tasks, streamlining task management.
  - **Improved DAR Responses:**
    - Enhanced response information sent back to FAIR catalogs, including QBT’s URL for better integration.
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## v1.2.51 – July 21, 2023

- **Enhanced Security:**
    - Strengthened password policies and bounded token lifetimes to 365 days to reduce security risks.
    - Improved UI elements for better visibility and usability, such as trust logos for dataset identification.
  - **Installation Upgrades:**
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- Support added for Rocky OS environments, improving compatibility with diverse infrastructures.

#### **Bug Fixes:**

- Fixed idle timeout issues and improved database query execution reliability.
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## v1.2.0 – March 24, 2023

- **Custom Email SMTP Settings:**

- FDSA now supports configuring custom SMTP settings, allowing organizations to send all system communication emails using their own email service.
- This ensures that emails such as notifications, welcome messages, and alerts align with the organization's domain and branding, enhancing professionalism and email deliverability.

- **Data Access Request (DAR) Webhook Integration:**

- Introduced support for third-party Access Request systems via a new webhook feature.
- This enables seamless integration of DAR workflows with external systems, allowing organizations to extend FDSA's functionality into their existing tools and processes.

- **Improved Installation and Operations:**

- Numerous enhancements have been made to the installation process, startup scripts, and operational stability.
- These changes streamline deployment, reduce setup complexity, and improve the overall reliability of the platform.

- **Automatic Upgrade/Downgrade Capabilities:**

- FDSA now supports the ability to automatically upgrade or downgrade to a specific version, making it easier for admins to manage version changes without manual intervention.

#### **Bug Fixes:**

- **Rare Token Usage Scenario:**



- Addressed an issue where if the same database was listed in FAIR as both L1 and L2, a user with approvals for both levels could use their L2 Token with the L1 Project ID to retrieve record-level data using an L1 Query.
  - Though unlikely to occur, this bug has been identified and flagged for a fix in the next release to ensure proper data governance.
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## v1.1.0 – January 6, 2023

- **ADDI Licensing Requirement:**

- FDSA now requires a license from ADDI for operation.
- Licenses are free for organizations with a signed agreement and are valid for one year, with an easy renewal process.
- Steps for licensing:
  1. Request the FDSA License Agreement by emailing [fdsa.crm@alzheimersdata.org](mailto:fdsa.crm@alzheimersdata.org) with your organization name, intended use, and confirmation of non-commercial purposes.
  2. Receive a license key after signing the agreement.
  3. Add the license key during installation or via the Admin GUI after installation.
  4. A renewal button appears 30 days before license expiration, ensuring uninterrupted operation.
- If the license is invalid or expired, FDSA Admin functions remain active, but end-user API calls will return a license renewal error.

### UI Fixes and Improvements:

- **Role-Based Access:**

- Removed the “Tasks” tab from the Requester role as it falls outside their scope.
- Approve/Reject options for already approved tasks have been disabled to prevent redundant actions.

- **Improved Dataset Interaction:**

- Added a close button to the “Show Datasets” pop-up for easier navigation.
- A “loading” screen was introduced for dataset loading to improve user feedback during processing.

- **Login Form Enhancements:**

- Disabled auto-complete on post-login forms to prevent browsers from pre-filling user credentials, ensuring better security.

- **Whitelist Page Usability:**

- Enhanced the usability of the Whitelist Page by refining layout and controls.

- **User Management:**

- Removed unused fields such as “User Updated” in the User Info pop-up.
- Automated password generation for new users, eliminating manual password entry during user creation.

#### **Documentation Updates:**

- Training videos have been converted to HTML documents, providing a more accessible and user-friendly format.

#### **Bug Fixes:**

- **MFA Reset API:**

- Fixed an issue where the API for restoring Multi-Factor Authentication (MFA) wasn't functioning as expected. It now operates reliably.

#### **Code Quality and Security Enhancements:**

- Conducted comprehensive code testing using tools such as Semgrep, Pylint (8.5 score), SonarQube, OWASP ZAP, Bandit, Whispers, and Mozilla Rating A+.
- Achieved 83% coverage in testing and identified non-critical issues, such as cleaning up TODO comments in the Python source code.
- Performed penetration tests to validate security robustness, with no critical vulnerabilities detected.