# **ARM Data Services**

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**LOS Alamos** 

BERKELEY LAB

Lawrence Livermore National Laboratory













Sandia National Laboratories

March 17, 2025

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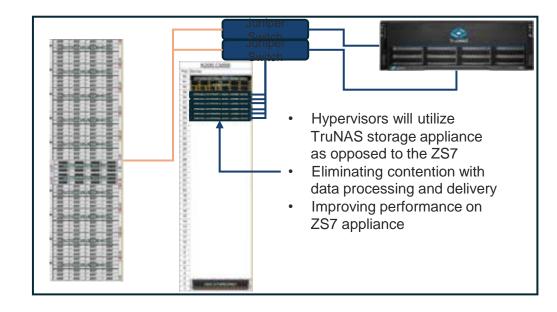
### **ARM Data Center - System Upgrade Status**

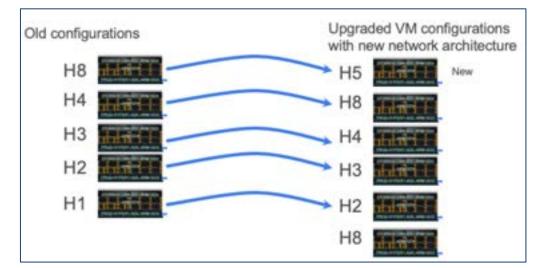
### Major Infrastructure Upgrades Completed

- Virtual machines and hardware upgraded
- New file server, network switches, and hypervisor being deployed

### Ongoing System Enhancements

- Firmware updates completed
- Network switch configurations finalized
- File server for data/archive and other resources is being stabilized
- Upcoming Data Center Relocation
- Migration of switches, storage appliances, and hypervisor completed
- Deployment of a new storage cluster for virtual machines







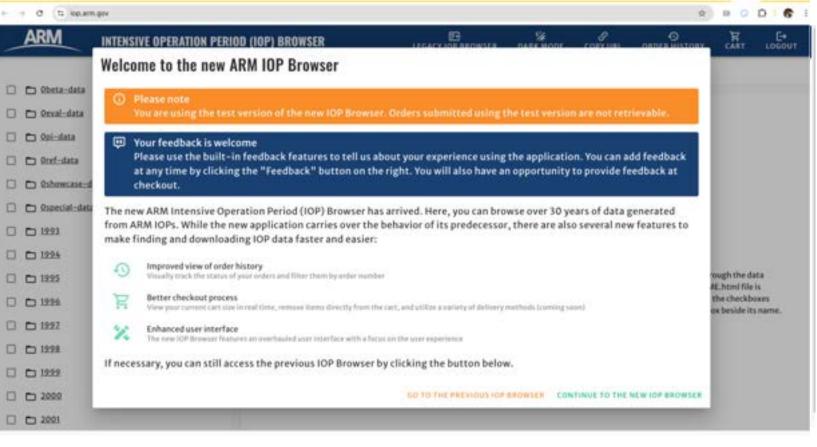


## **New IOP Browser for Field Campaign and PI Data**

- Brand-new interface with modern and scalable software architecture
- Easy-to-navigate platform for discovering, ordering, and accessing field campaign and PI data
- Improved performance and enhanced metrics tracking
- Ongoing usability studies and active user feedback collection
- Demo and Feedback Opportunities
  - Poster by Chirag Shah (Monday 5.15 pm)
  - Data booth

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### **Data Product Submission Tool Enhancements**

### A New User-Centric Interface

- Enhanced navigation and usability
- Clearer UI with navigational tabs for seamless movement across the OME record

### Form Improvements

- Tabs at the top of each form enable easy access to different sections •
- Improved clarity and user guidance

### Support for Skinny Metadata Records

- Auto-generated OME records for approved field campaign proposals •
- Helps track data submissions and provides PIs a starting point

### Save Templates and Drafts

- Enables reuse of metadata for multiple similar submissions •
- Ideal for field campaigns with recurring data submissions ۲
- Allows easy edits and future submissions •
- Uploading Data
  - Small files (<2GB) can be uploaded directly through the form</li>
  - Large files (>2GB) require secure file transfer protocol (sftp) •

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Dataset Authors*	
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	© ORCID
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## **Data Workbench Update**



- Data Studio: A no-code data analysis platform with the following features:
  - Visualization & Subsetting: Enables analysis of ARM data using open-source packages (e.g., ACT, NoSQL technologies). •
  - Multi-User Project Support: Allows collaborative data exploration and analysis. ٠

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Data & Software Publication: Will support publication through ARM Git and PI data submission workflows. •

- https://workbench.arm.gov
- https://studio.arm.gov/

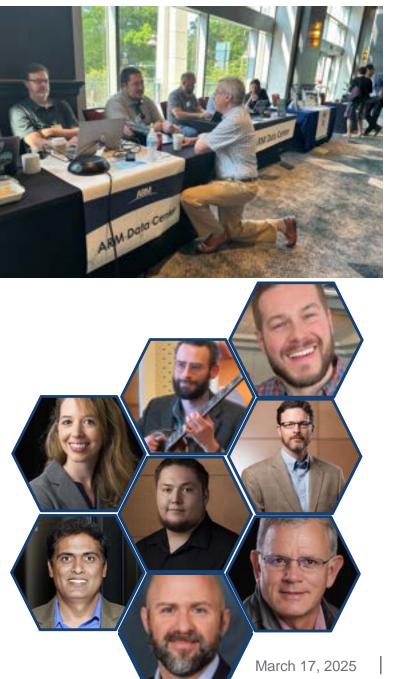


and presentation (Tuesday 8.30 am)

## Visit the ARM Data Booth!

- Stop by the ARM Data Booth to explore data resources, tools, and services available to the scientific community.
- Connect with ARM Data Services Staff and ask your questions
- Learn about data tools and open-source software available for PIs and users
- Explore HPC computing resources for large-scale data analysis
- Discuss data integration and interoperability topics with experts

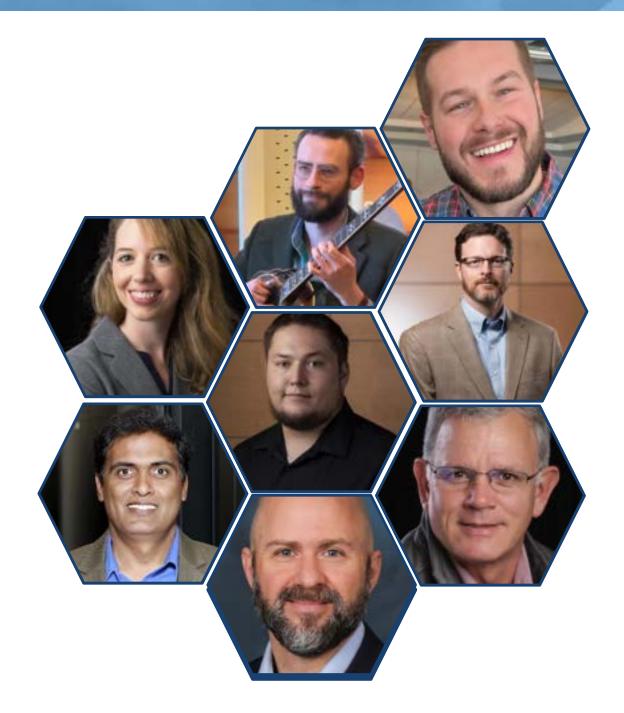








## **Data Services Operations Team**







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