ARM Data Services

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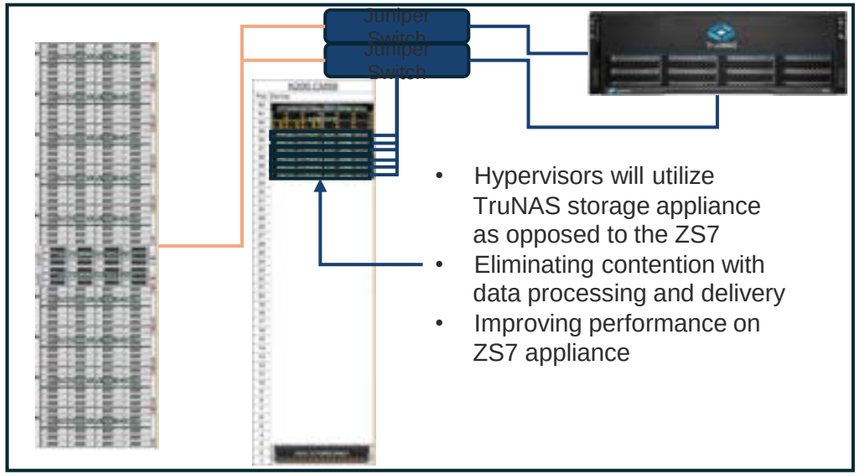
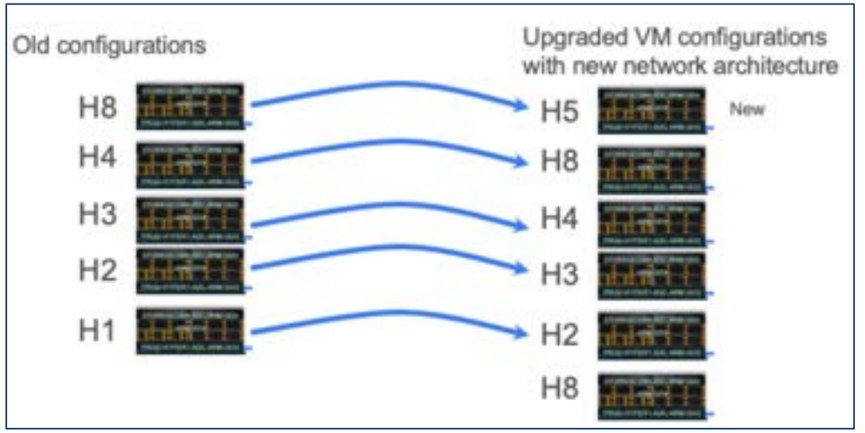
ARM Data Center - System Upgrade Status

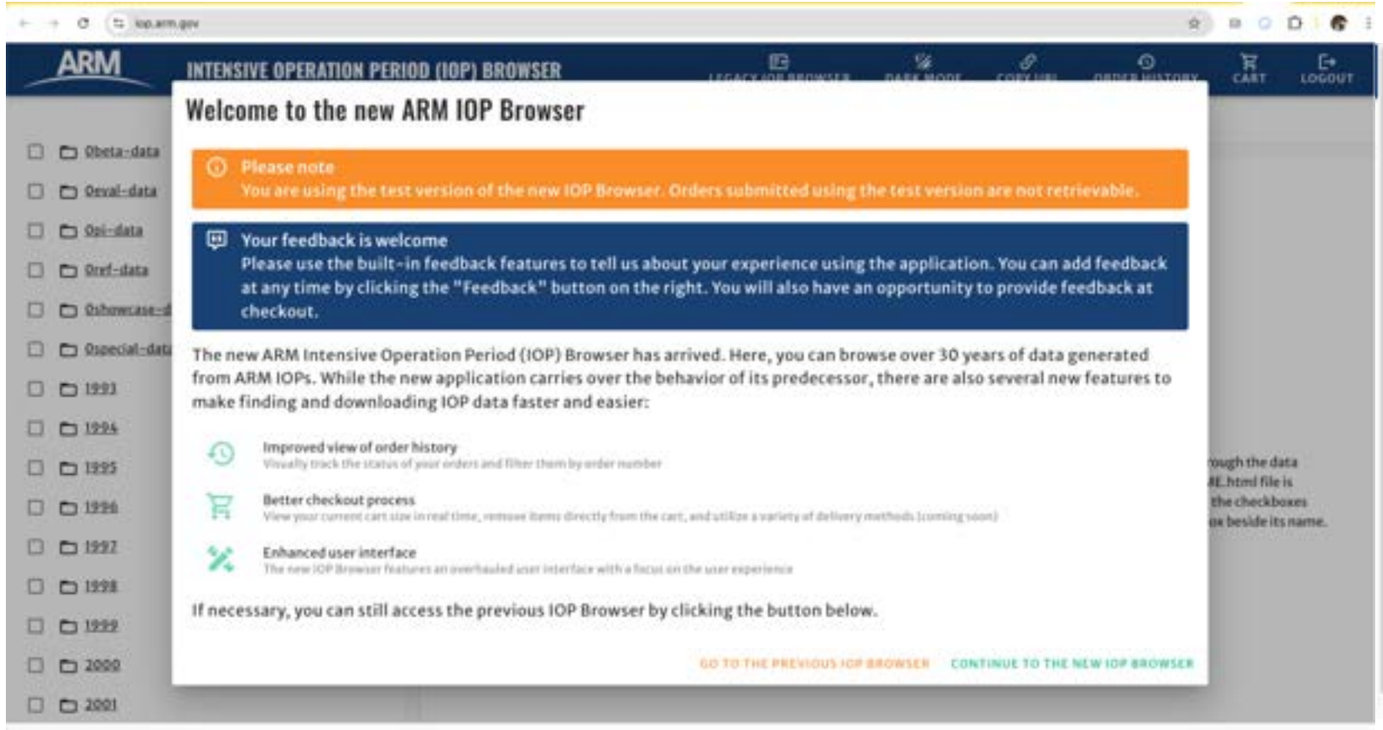
- **Major Infrastructure Upgrades Completed**
- Virtual machines and hardware upgraded
- New file server, network switches, and hypervisor being deployed
- **Ongoing System Enhancements**
- Firmware updates completed
- Network switch configurations finalized
- File server for data/archive and other resources 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

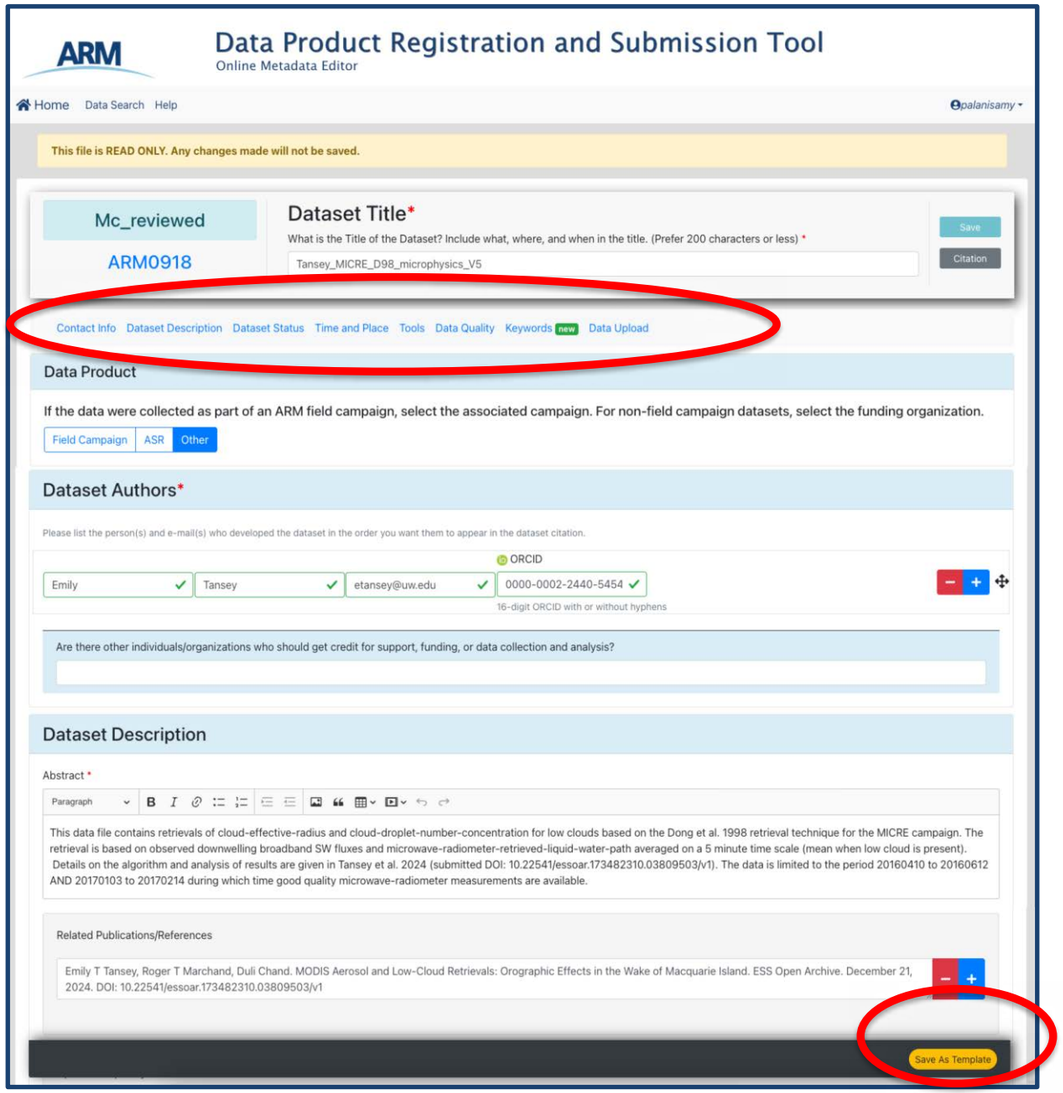
- Brand-new interface with modern and scalable software architecture
- Easy-to-navigate platform for discovering, ordering, and accessing field campaign and PI data
- Improved performance and enhanced metrics tracking
- Ongoing usability studies and active user feedback collection
- Demo and Feedback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



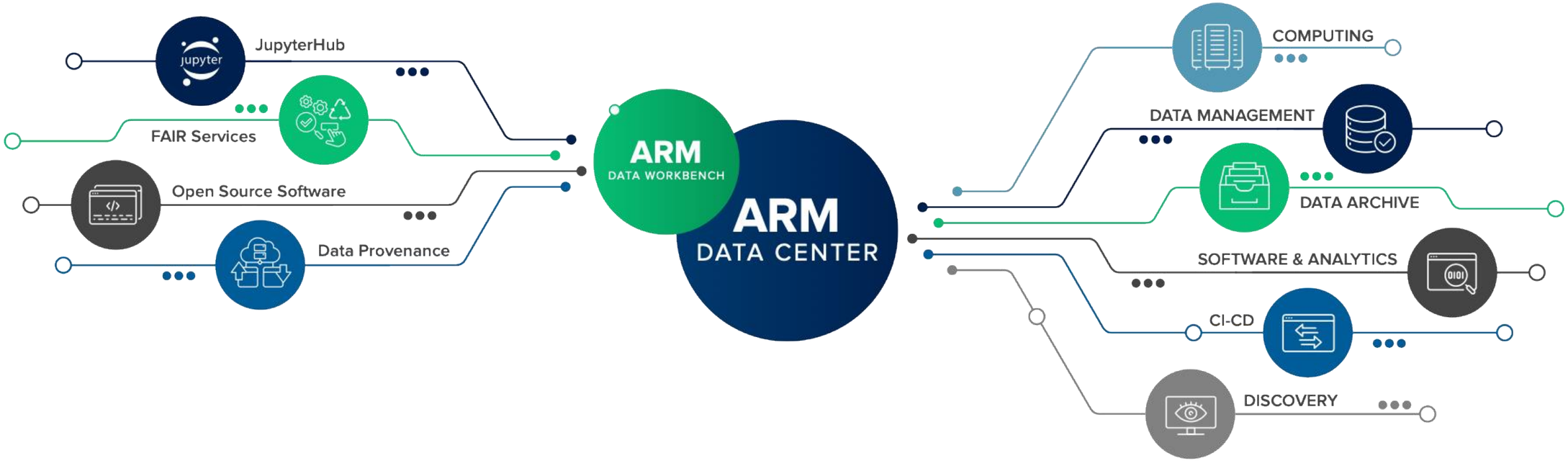
https://iop.arm.gov/

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
  - Allows easy edits and future submissions
- **Uploading Data**
  - Small files (<2GB) can be uploaded directly through the form
  - Large files (>2GB) require secure file transfer protocol (sftp)



Data Workbench Update



- Data Workbench user dashboard
- 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.
  - Data & Software Publication: Will support publication through ARM Git and PI data submission workflows.

Presentation and Demo:

- Kyle Dumas: poster (Monday 5.15 pm) and presentation (Tuesday 8.30 am)
- https://workbench.arm.gov
- https://studio.arm.gov/

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