



# Computing and Software Services II Database Services update

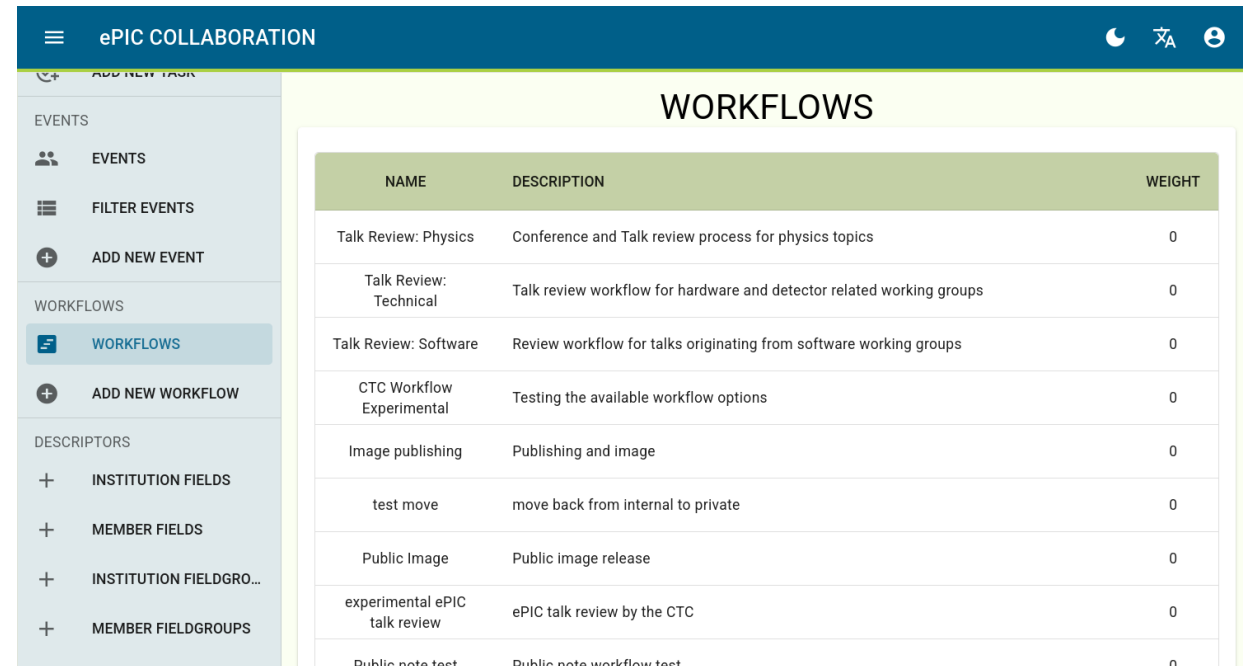
Dmitry Arkhipkin

2026-03-27

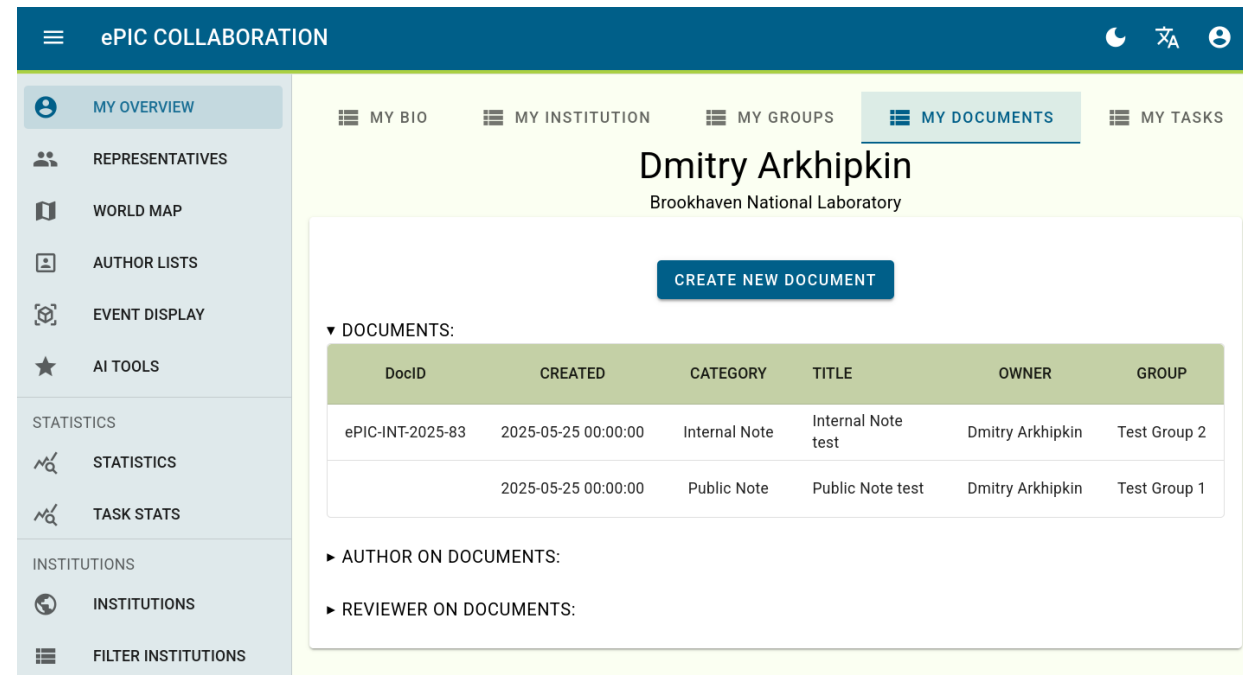


# Database updates

- ePIC CRISP (aka Phonebook):
  - more ePIC folks enrolled into CoManage and Phonebook - more feedback received
  - numerous updates to the UI, improved GraphQL interface, adjustments for Statistics dashboard (Eric)
  - Document Workflows activity resumed, mostly looks good with minor changes requested
- Vector Databases for AI:
  - ePIC AI will need a new DB type: vector databases. AI agents, RAG tools, and event search - require a local cluster capable of doing fast vector operations. Facility support is desired, aka “database on demand”.
  - While PostgreSQL and MySQL provide basic vector support, dedicated DBs do it much faster and provide more features.
  - Reviewing most popular DBs on the market, selected two candidates for further studies: Qdrant and MongoDB ATLAS
  - Selection criteria: reliable replication or clustering and failover, ability to handle significant load and data size, HTTP-based API
  - Working on local setup and syntetic stress test suite right now, followed by more realistic RAG setup based on STAR/ePIC documents and codes



NAME	DESCRIPTION	WEIGHT
Talk Review: Physics	Conference and Talk review process for physics topics	0
Talk Review: Technical	Talk review workflow for hardware and detector related working groups	0
Talk Review: Software	Review workflow for talks originating from software working groups	0
CTC Workflow Experimental	Testing the available workflow options	0
Image publishing	Publishing and image	0
test move	move back from internal to private	0
Public Image	Public image release	0
experimental ePIC talk review	ePIC talk review by the CTC	0
Public note test	Public note workflow test	0



DocID	CREATED	CATEGORY	TITLE	OWNER	GROUP
ePIC-INT-2025-83	2025-05-25 00:00:00	Internal Note	Internal Note test	Dmitry Arkhipkin	Test Group 2
	2025-05-25 00:00:00	Public Note	Public Note test	Dmitry Arkhipkin	Test Group 1

# DB backend for AI Agents

Conventional Dbs + Vector DBs

