Persistent Data Services and LaunchIT

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What is Persistent Data Services (PDS)?

- Dave Fox PI – ISCP FY2020
- Provides LC users with access to databases, key/values and queues
- Containerized, deployed and managed via OpenShift by WEG.
- Object Storage (S3 compatible)
Why is this important?

- Workflow management tools support data-centric science that involves the movement of data, multi-stage processing, and visualization at scales where manual control becomes prohibitive, and automation is needed. Workflow technologies can improve the productivity and efficiency of data-centric science by orchestrating and automating these steps.
How can I use this?

- LaunchIT is a user friendly web UI that allows LC users to request their own PDS deployments.
- Available in the CZ and RZ (SCF coming soon!)
  - CZ: https://launchit.llnl.gov
  - RZ: https://rzlaunchit.llnl.gov
- Users can request new deployments, and view connection details.
- Requires LC accounts and authenticates using RSA Pin + Token
- Demo Time: launchit.llnl.gov
What is next for LaunchIT? - new features

- **In Active Development**
  - LaunchIT in SRD Network
  - Password Reset Capabilities
  - PDS Deletion

- **DevOps InTernship (DOIT) Development**
  - Frontend Refresh
  - Add/Remove users from Workspaces
  - Object Storage Integration
  - New means of deploying PDS on the backend
  - Logging to MatterMost

- **Coming Soon**
  - Additional PDS Applications
    - MongoDB + Fireworks
    - CDash
    - Nginx
    - Plotly

- **Suggestions? Email to** [lit-help@llnl.gov](mailto:lit-help@llnl.gov)
Thank You!
Virtual Walkthrough

Get started with LaunchIT
Quickly and easily deploy Persistent Data Services (PDS) with our new LaunchIT web application. Choose options from our Catalog and launch your PDS with the push of a button.

Cloud Services
Learn more about the cloud services offered by Livermore Computing by heading to our documentation page.

Guides
Read more detailed information about connecting to, and using Persistent Data Services (PDS).
Virtual Walkthrough

Persistent Data Services

Choose the service you would like to deploy.

- **LC MariaDB TLS**
  Provided by LC IaaS (WEG)
  MariaDB database service with persistent storage.

- **LC MongoDB TLS**
  Provided by LC IaaS (WEG)
  MongoDB database 3.6 TLS version service, with persistent storage.

- **LC MySQL TLS**
  Provided by LC IaaS (WEG)
  MySQL database service, with persistent storage.

- **LC PostgreSQL TLS**
  Provided by LC IaaS (WEG)
  PostgreSQL database service with persistent storage.

- **LC RabbitMQ TLS**
  Provided by LC IaaS (WEG)
  RabbitMQ 3.8 TLS version service, with persistent storage.

- **LC Redis TLS**
  Provided by LC IaaS (WEG)
  Redis in-memory data structure store, with persistent storage.
Virtual Walkthrough
Virtual Walkthrough

cz-morton30 Dashboard

Select the Resource you would like to view.

- **icusers**
  - Status: Running
  - Resource Type: mysql
  - Storage Capacity: 256i

- **rabbitmq**
  - Status: Running
  - Resource Type: rabbitmq
  - Storage Capacity: 56i

- **simple**
  - Status: Running
Virtual Walkthrough
Virtual Walkthrough

**cz-morton30 Dashboard**

Select the Resource you would like to manage.

**Docker Resource**

Status: Running
Resource Type: mysql
Storage Capacity: 25Gi