

Persistent Data Services and LaunchIT

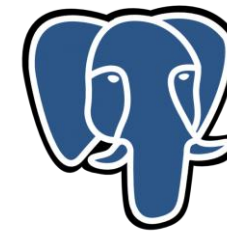
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What is Persistent Data Services (PDS)?

- 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)

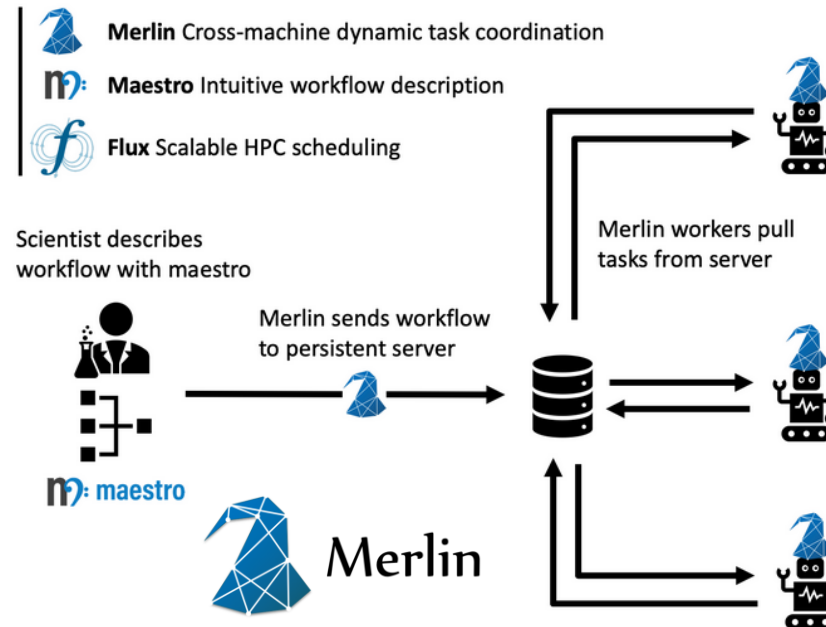
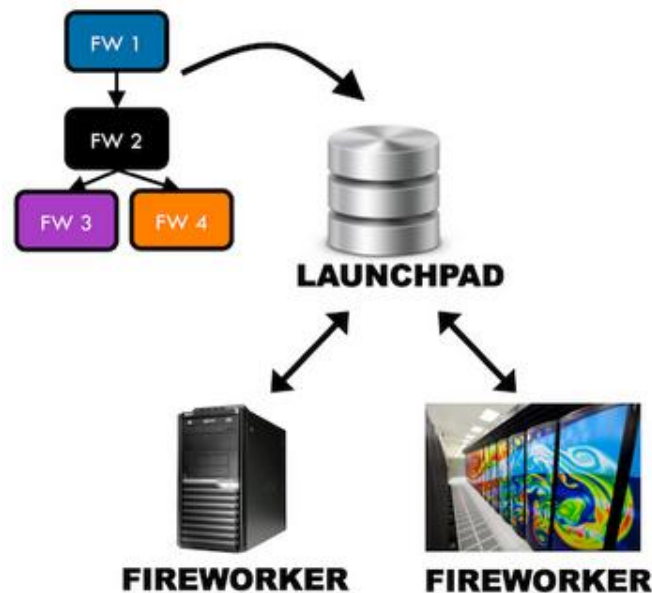


PostgreSQL



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.



LLNL / Sina Public

About

Store and query simulation (meta)data to/from various backends using friendly Python

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

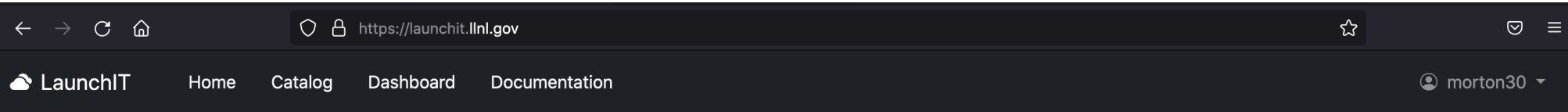
Thank You!



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Virtual Walkthrough



LC-WEG

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.




Service

LC MariaDB TLS

Provided by LC IaaS (WEG)

MariaDB database service with persistent storage.




Service

LC MongoDB TLS

Provided by LC IaaS (WEG)

MongoDB database 3.6 TLS version service, with persistent storage.




Service

LC MySQL TLS

Provided by LC IaaS (WEG)

MySQL database service, with persistent storage.




Service

LC PostgreSQL TLS

Provided by LC IaaS (WEG)

PostgreSQL database service with persistent storage.




Service

LC RabbitMQ TLS

Provided by LC IaaS (WEG)

RabbitMQ 3.8 TLS version service, with persistent storage.



Service

LC Redis TLS

Provided by LC IaaS (WEG)

Redis in-memory data structure store, with persistent storage.

Virtual Walkthrough

LaunchIT

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Persistent Data Service

Choose the service you would like to

Service

LC MariaDB TLS

Provided by LC IaaS (WEG)

MariaDB database service with persistent storage.

Service

LC RabbitMQ TLS

Provided by LC IaaS (WEG)

RabbitMQ 3.8 TLS version service, with persistent storage.

LC MySQL TLS Service Request

Service Name *

lcusers

Unique service name used to identify this particular resource

Workspace Name *

cz-morton30

The Workspace where you would like to add this resource to.

Volume Capacity *

25Gi

The volume space available for data. (e.g. 512Mi, 2Gi, etc.)

MySQL Connection Username *

lcuser

Username for MySQL user that will be used for accessing the database.

MySQL Database Name *

example

Name of the MySQL database accessed.


Cancel

Create

Virtual Walkthrough


cz-morton30 Dashboard

Select the Resource you would like to view.



PDS Resource

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



PDS Resource

rabbitmq
Status: Running
Resource Type: rabbitmq
Storage Capacity: 5Gi

Openshift Deployment

simple
Status: Running

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cz-morton30 Dashboard

Select the Resource you would like to

MySQL

PDS Resource

Icusers

Status: Running

Resource Type: mysql

Storage Capacity: 25Gi

Resource Info - Icusers

Config Files: my.cnf JSON YAML

Secret details

database-name: *****

database-password: *****

database-user: *****

service-port: *****

host: *****

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cz-morton30 Dashboard

Select the Resource you would like to

MySQL

PDS Resource

lcusers

Status: Running

Resource Type: mysql

Storage Capacity: 25Gi

Config File: my.cnf

[client]
user=lcuser
password:
host=cz-morton30-lcusers.apps.czapps.llnl.gov
port=31629
database=example
ssl

Back to Resource Info

Copy Config