



Pegasus Users Group

MEETING



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PegasusHub.io

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“ ...collections of workflows exist but do not come with any execution capabilities... ”

Workflows Community Summit, Jan 2021

inspired by:





PegasusHub

A Community-enabled Workflows Repository for Pegasus

PegasusHub provides a **curated** collection of open source [Pegasus](#) workflow repositories hosted at [GitHub](#). Currently, the hub hosts **10** workflow repositories.

Recent Repositories

diamond-workflow

23 Feb 2021

Pegasus Diamond Workflow

[training workflow](#) [diamond-workflow](#) [example-workflow](#)

freesurfer-osg-workflow

23 Feb 2021

A Pegasus workflow for running FreeSurfer on the Open Science Grid

[brain-imaging](#) [freesurfer](#)

lung-instance-segmentation-workflow

23 Feb 2021

Instance segmentation with U-Net/Mask R-CNN workflow using Keras & Ray Tune

[cnn-keras](#) [machine-learning](#) [ray-tune](#)

pipeline-workflow

23 Feb 2021

Pipeline workflow example

[training workflow](#) [example-workflow](#) [pipeline](#)

A Community-enabled Workflows Repository for Pegasus

*** To be officially released with Pegasus 5.1



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montage-workflow-v3

A Montage workflow for Pegasus 5.0

Latest Release	No release available
Pegasus Version	5.0.0
Dependencies	Montage 6.0, AstroPy 1.0
License	Apache License 2.0
GitHub Repository	https://github.com/pegasus-isi/montage-workflow-v3
Topics	astronomy

montage-workflow-v3

NOTE: This is a Montage workflow version which requires Pegasus 5.0. For a version that works with Pegasus 4, please use `montage-workflow-v2`

A new Python DAX generator version of the classic Montage workflow. This workflow uses the [Montage toolkit](#) to re-project, background correct and add astronomical images into custom mosaics.

Prerequisites

- [Pegasus](#) - version 5.0 or later
- [Montage](#) - version 6.0 or later
- [AstroPy](#) - version 1.0 or later

Plan a Montage Workflow

The `./montage-workflow.py` Python script sets up a `data/` directory with a Pegasus DAX, image tables and region headers. For example:

```
./montage-workflow.py --center "56.7 24.0" --degrees 2.0 \  
--band dss:DSS2B:blue --band dss:DSS2R:green --band dss:DSS2IR:red
```

This will create a 2x2 degree mosaic centered on 56.7 24.0, with 3 bands making up the red, green, and blue channels for the final JPEG output. A 2 degree workflow has a lot of input images and thus the workflow becomes wide. I simplified version of the workflow looks like:




Collection of metadata maintained by the workflow developer

- workflow releases
- dependencies
- license
- example usage

Automated collection of **GitHub metrics** including issues, stargazers, contributors, etc.






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Feb 23

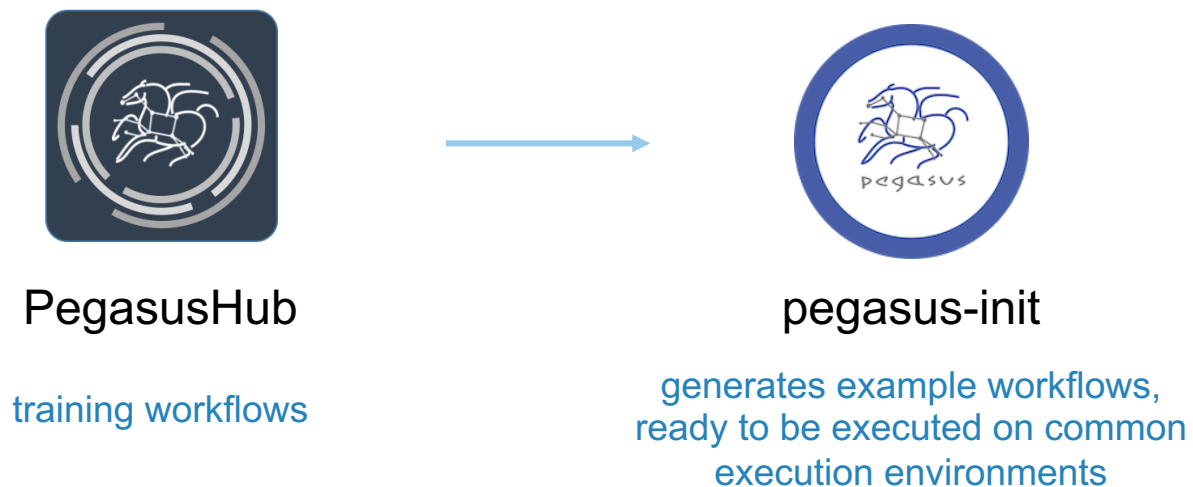
- 0
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 Training Workflow

diamond-workflow

Pegasus Diamond Workflow

Latest Release	No release available
Pegasus Version	5.0.0
Dependencies	No dependencies information available
License	No licence available
GitHub Repository	https://github.com/pegasus-isi/diamond-workflow
Topics	diamond-workflow example-workflow





If you are a **current** or **future** Pegasus user, you are invited to contribute to the PegasusHub!

Start contributing **today** by reaching out to us on **Slack** or via *pegasus@isi.edu*



Thank You!