

Hybrid analysis pipelines in the reana reproducible analysis platform

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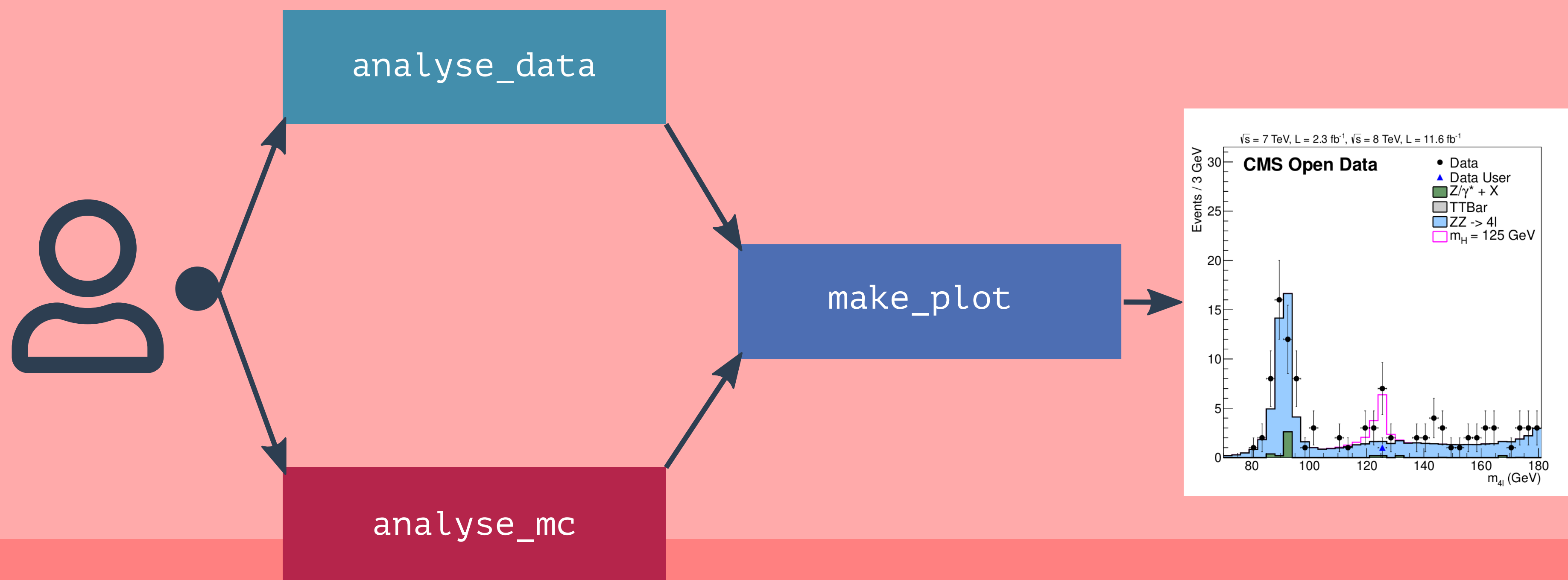
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Higgs-to-four-lepton data analysis



Describe

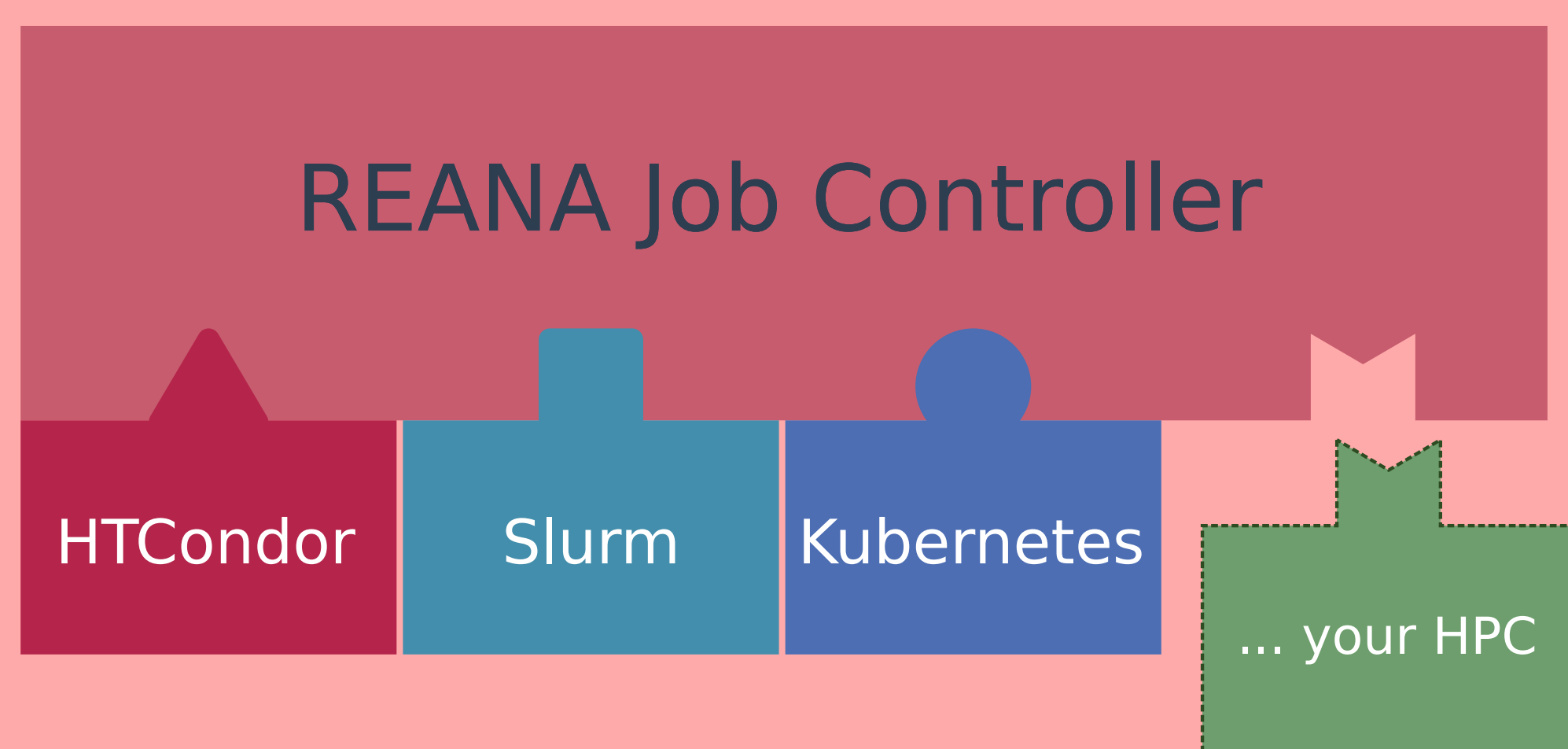
```
...
steps:
  analyse_data:
    run: analyse_data.cwl
    hints:
      reana:
        compute_backend: slurmcern
        out: [DoubleMuParked2012C_10000_Higgs.root]
  analyse_mc:
    run: analyse_mc.cwl
    hints:
      reana:
        compute_backend: htcondorcern
        out: [Higgs4L1file.root]
  make_plot:
    run: make_plot.cwl
    hints:
      reana:
        compute_backend: kubernetes
in:
  DoubleMuParked2012C_10000_Higgs: >
  analyse_data/DoubleMuParked2012C_10000_Higgs.root
  Higgs4L1file: >
  analyse_mc/Higgs4L1file.root
out: [mass4l_combine_user1v13.pdf]
...
```

Run



Extensible

Do you have an institutional HPC system? Plug it easily ...



... depending on the compute cluster:

- Python bindings + Kerberos
- Python API client + token based auth
- SSH to headnode
- How to connect to your HPC cluster?

reana is ...

Flexible

Run many computational workflow engines.

Scalable

Support for remote compute clouds.

Reusable

Containerise once, reuse elsewhere. Cloud-native.

Free

Free Software. MIT licence. Made with ❤️ at CERN.

@reanahub

info@reanahub.io

@reanahub

[gitter.im/reanahub/reana](https://github.com/reanahub/reana)

reana.readthedocs.io

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