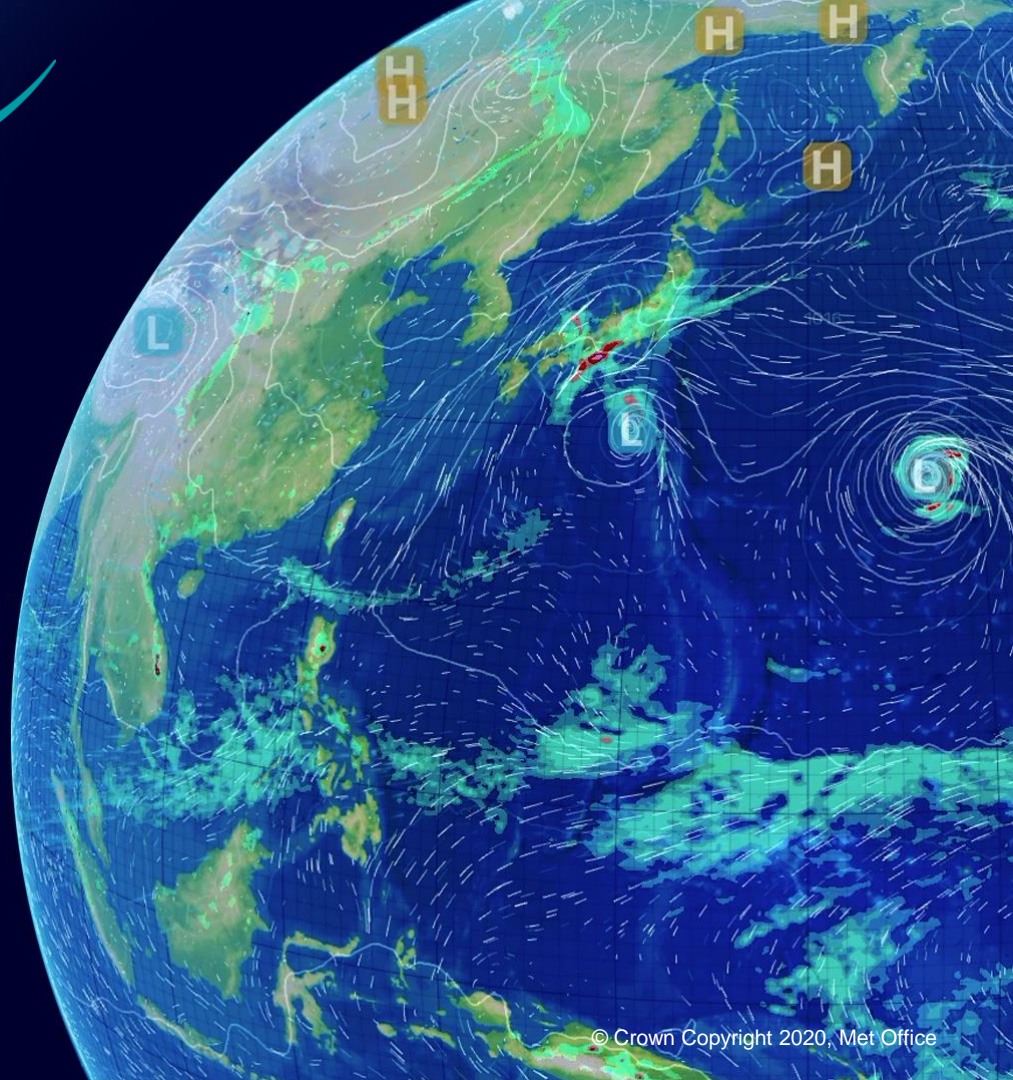




# Cylc & Rose: Latest News

IS-ENES3 1st General Assembly  
25-27th March 2020

David Matthews, Met Office



# Cylc 8

Focus of almost all our development effort

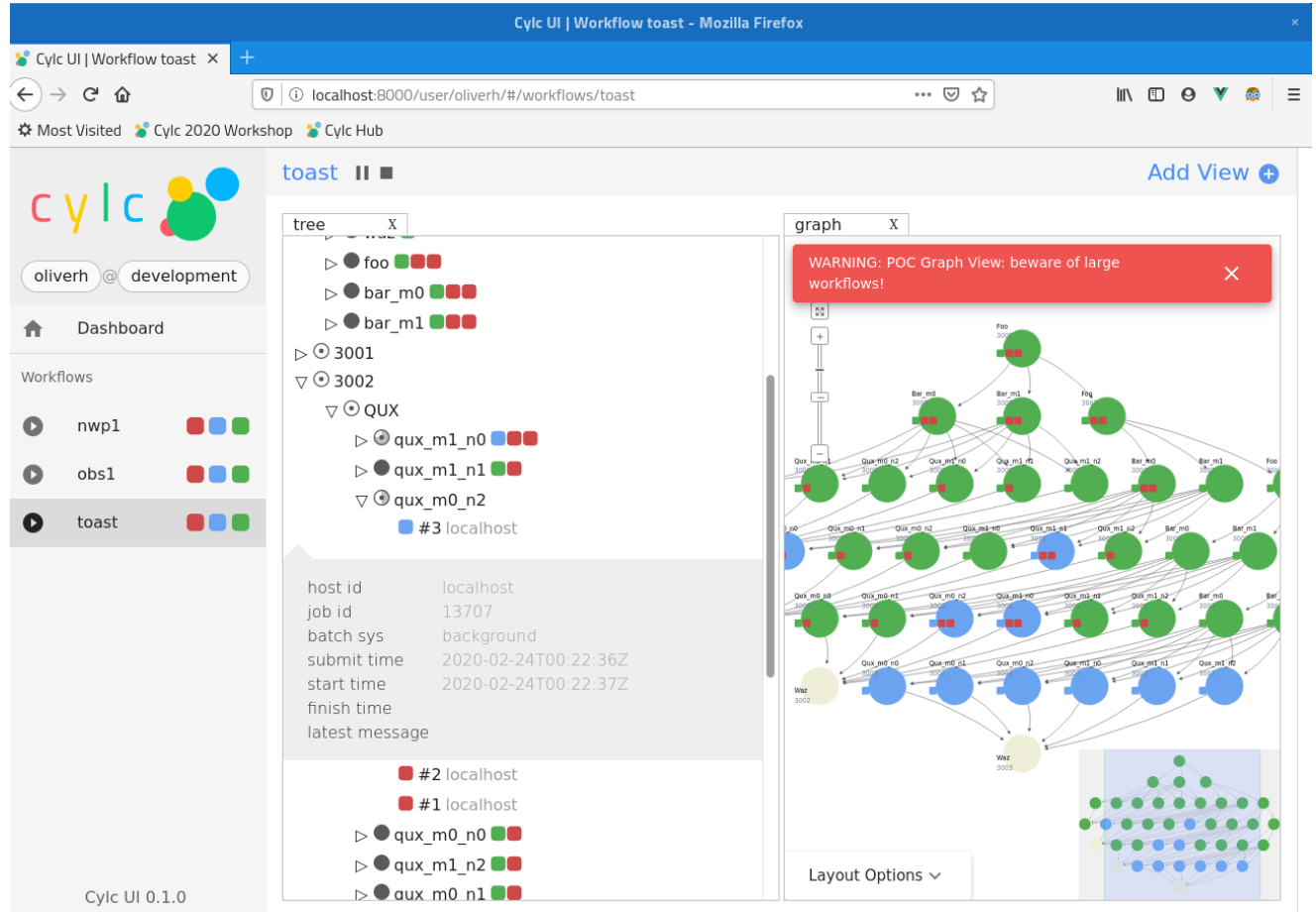
Major new release incorporating:

- Python 3 port
- Replacement of obsolete PyGTK based GUIs with web based GUI
- New architecture to support the Web UI
  - See <https://cylc.github.io/cylc-admin/cylc-8-architecture.html>
  - Using Jupyterhub (well known, documented, tested) to provide access point and user authentication
- Migration of rose suite-run functionality into Cylc
  - Will provide a unified way of running Cylc workflows
- ... and several other important changes

# Cylc 8 Progress

- Python 3 port complete for Cylc and Rose (CLI only)
- New architecture to support Web UI in place
- Cylc Web UI developing rapidly
- First alpha release of Cylc 8: Sep 2019
  - Second alpha release due very soon
- Not planning to start developing replacement Rose GUIs (e.g. Rose edit) until Cylc 8 nearing completion
- Development slightly behind where we hoped to be (due to resourcing issues) but massive progress has been made
  
- Note: Cylc 7 workflows will run at Cylc 8 without modification (assuming they validate without any warnings) but interface for running workflows will change

A recent screenshot of the new web UI showing live workflow data:



The screenshot shows the Cylc UI web interface in a Mozilla Firefox browser window. The browser address bar shows the URL: localhost:8000/user/oliverh/#/workflows/toast. The page title is "Cylc UI | Workflow toast - Mozilla Firefox".

The interface displays the following information:

- Navigation:** Dashboard, Workflows, and a list of workflows: nwp1, obs1, and toast.
- User:** oliverh @ development
- Workflow Tree:** A tree view showing the workflow structure. The selected workflow is "toast", which is running on "#3 localhost". The tree includes nodes like foo, bar\_m0, bar\_m1, 3001, 3002, QUX, qux\_m1\_n0, qux\_m1\_n1, and qux\_m0\_n2.
- Job Details:** A table showing job information for the selected workflow:

host id	localhost
job id	13707
batch sys	background
submit time	2020-02-24T00:22:36Z
start time	2020-02-24T00:22:37Z
finish time	
latest message	
- Graph View:** A graph view showing the workflow's execution flow. A warning message is displayed: "WARNING: POC Graph View: beware of large workflows!". The graph shows nodes like foo, bar\_m0, bar\_m1, qux\_m0\_n0, qux\_m0\_n1, qux\_m0\_n2, qux\_m1\_n0, qux\_m1\_n1, qux\_m1\_n2, and waz, connected by arrows representing dependencies.
- Layout Options:** A dropdown menu for layout options.

The Cylc UI version is 0.1.0.

# Cylc Development Workshop

10-14 Feb 2020, NIWA,  
Wellington, New Zealand

- Review progress
- Plan remaining work



Report: <https://cylc.github.io/cylc-admin/feb2020-workshop-report>

# Cylc 8 Timescales

Aiming for:

- Sep 2020: Cylc 8 beta release available to start heavy user testing
- Mar 2021 (or earlier): Cylc 8 production ready
- Rose GUIs to follow later (timescale unclear at this stage)

Impact of coronavirus not accounted for yet 😞

# Cylc 7 in maintenance mode

Essential maintenance and bug fixes only

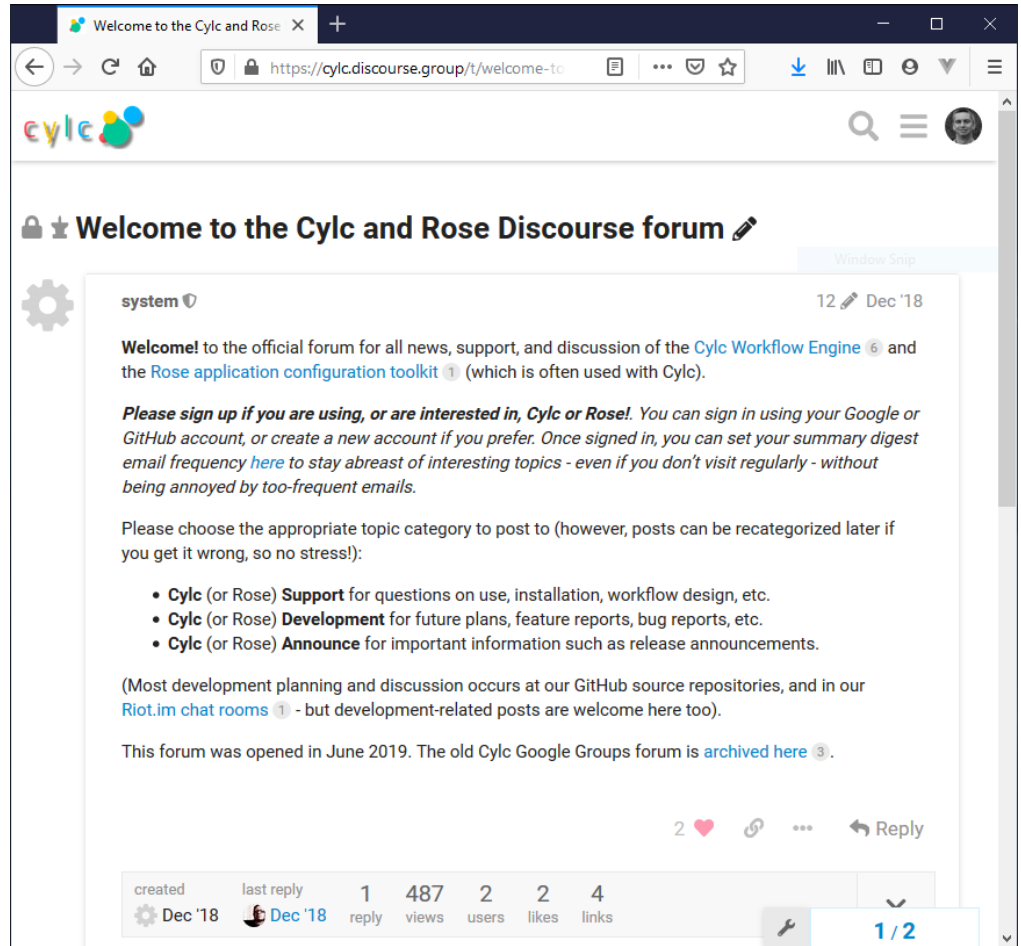
New maintenance releases due very soon:

- 7.9.0 - Python 2.7 only (new version of Jinja2)
- 7.8.5 - Python 2.6

# Discourse Forum

- New forum in use since June 2019
- Proving much more effective than google group used previously.

<https://cylc.discourse.group/>



>Welcome to the Cylc and Rose Discourse forum

system 12 Dec '18

**Welcome!** to the official forum for all news, support, and discussion of the [Cylc Workflow Engine](#) and the [Rose application configuration toolkit](#) (which is often used with Cylc).

*Please sign up if you are using, or are interested in, Cylc or Rose!* You can sign in using your Google or GitHub account, or create a new account if you prefer. Once signed in, you can set your summary digest email frequency [here](#) to stay abreast of interesting topics - even if you don't visit regularly - without being annoyed by too-frequent emails.

Please choose the appropriate topic category to post to (however, posts can be recategorized later if you get it wrong, so no stress!):

- **Cylc** (or Rose) **Support** for questions on use, installation, workflow design, etc.
- **Cylc** (or Rose) **Development** for future plans, feature reports, bug reports, etc.
- **Cylc** (or Rose) **Announce** for important information such as release announcements.

(Most development planning and discussion occurs at our GitHub source repositories, and in our [Riot.im chat rooms](#) - but development-related posts are welcome here too).

This forum was opened in June 2019. The old Cylc Google Groups forum is [archived here](#).

2 ❤️ 🔗 ... ↩ Reply

created	last reply	1	487	2	2	4
Dec '18	Dec '18	reply	views	users	likes	links

1 / 2



# 99.6 %

- 11,787,785 jobs (!) were run across the 3 Met Office HPC systems during February 2020
- 99.6 % of them were submitted by Cylc

## Observations:

- Cylc is critical to the Met Office!
- The detailed logging provided by Cylc is very useful for diagnosing system issues and makes it much easier to provide user support
- The high uptake means that the efficiencies which come through using Cylc (e.g. minimising load on the login nodes) have a big impact on our systems