

An Introduction to Efficient and Scalable Pipeline Management with Nextflow

Friday 10 February 2023 10:40 (30 minutes)

Nextflow is an open-source workflow orchestration tool for data-intensive pipelines. It has rapidly become an industry standard, enabling scalable and reproducible scientific workflows. Nextflow has a vibrant community with thousands of bioinformaticians as part of the nf-core project, which provides ready-to-use pipelines, ready-to-plug-in modules, and sub-workflows. Nextflow simplifies the implementation and deployment of complex workflows across almost all compute infrastructures - from HPC job schedulers to all of the main cloud providers. It has built-in support for software packaging tools such as Docker, Podman, Singularity, conda, automatically managing workflow toolchains and facilitating scalable and reproducible scientific workflows.

In this talk I will introduce Nextflow and nf-core, explaining how the workflow manager works, the community tools available to streamline development, and how to get started building your own pipelines.

Write your pipeline once, and run it anywhere

Accelerator or Beamline

Team Contacts

Team Name

Workflow Goals

Programming Languages

Publications

Data Volume

Team Speaker

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