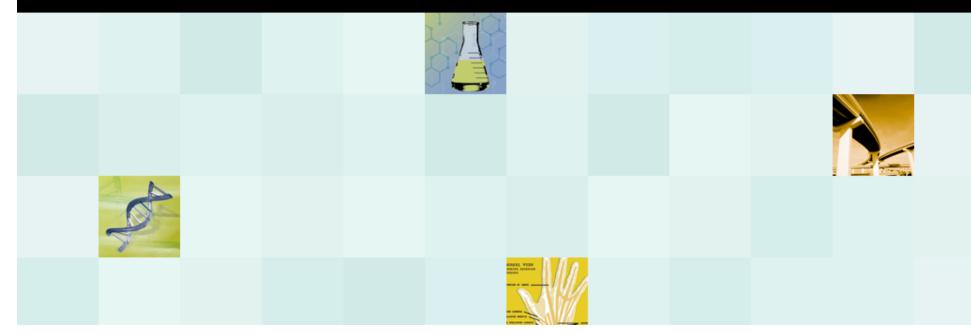




THE NATIONAL SCIENCE DIGITAL LIBRARY

Biodiversity Analysis Pipeline

Paul Allen Cornell Lab of Ornithology



Biodiversity Analysis Pipeline

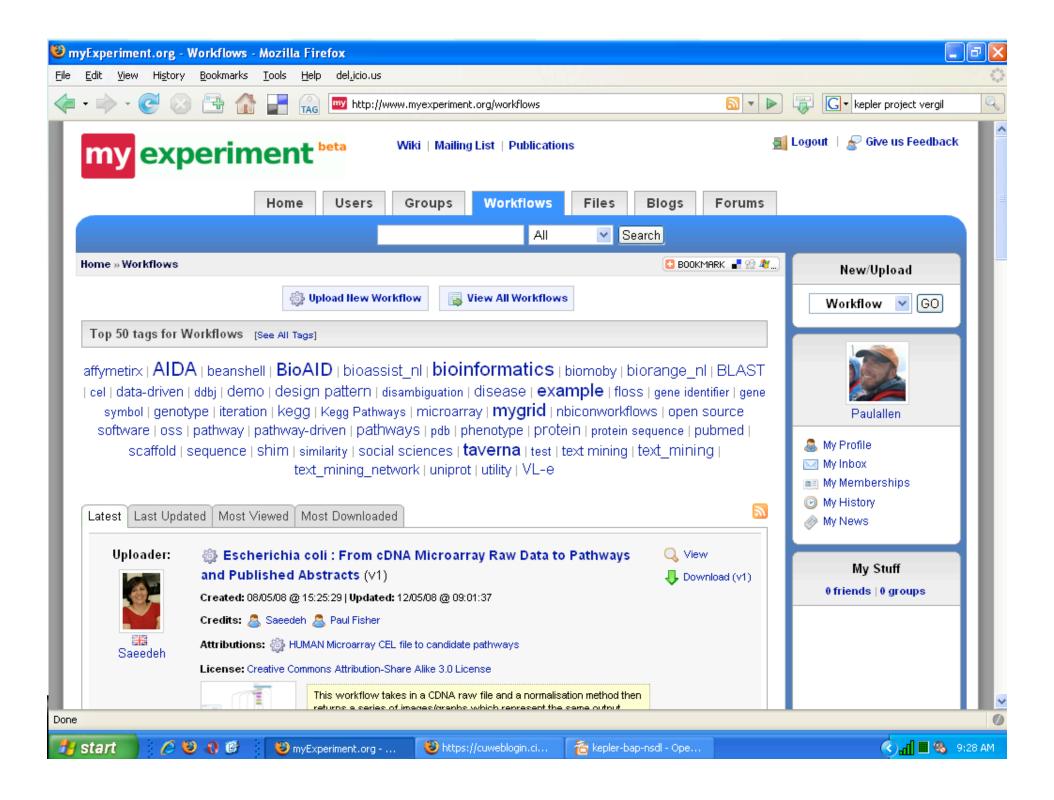
Web-based

- workflow execution, like Hydrant
- authoring environment, like Yahoo! Pipes
 - controlled "vocabulary" of actors
- workflow sharing & community, like myExperiment
- results accessible as web resource/service
- Kepler integration
 - running headless to execute workflows
 - scale by adding CPUs running Kepler





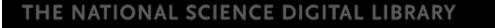
😻 Pipes: editing 'Photos Ne	ear Napa Wineries' - Mozilla Firefox	
<u>File Edit V</u> iew Hi <u>s</u> tory <u>B</u> o	okmarks <u>T</u> ools <u>H</u> elp del <u>.</u> icio.us	÷
🦛 • 🗼 • 💽 🛞 🖞	🗄 🏠 📑 🙀 Ktp://pipes.yahoo.com/pipes/pipe.edit?_id=bMPFtO342xGrr53VyzUFzw	kepler project vergil
Photos Ne	ar Napa Wineries*	(Q
Layout Expand All C	collapse All	Back to My Pipes New Save a copy
 Sources Fetch CSV Feed Auto-Discover Fetch Feed Fetch Data Fetch Data Fetch Data Fetch Data Fetch Data Fetch Site Feed Fet	Yahool Local Find text [wired] Find text [wired] exact item in input feed, set attribute flickr for Each: Annotate For each item in input feed, set attribute flickr Find 1 images of item.title near What Nampings item.flickr.description Copy As v description Position Debut Mappings item.description.des Rename Item.Rating.Averagef	Search near (e.g. Naps ? Name: locationinput1 Prompt: Search near (e.g. Nap: Position: numbe; Default: Yountville, CA Debug: Yountville, CA Debug: Yountville, CA tto Find (e.g. Wine ? re: textinput2 npt: What to Find (e.g. Win; tion: numbe; nult: winery ug: winery
Done		
🛃 start 🖉 🥹 🚯 🕲 Pipes: editing 'Photos 🕲 https://cuweblogin.ci		



Biodiversity Analysis Pipeline

Audience

- NSDL users
- students, teachers (grades 6-12)_
- resource/land managers (decision support tool)_
- citizen scientists
- Things I worry about
 - big datasets
 - caching results of intermediate actors
 - versioning of workflows, actors, data
 - workflow authoring without Vergil



Biodiversity Analysis Pipeline

Contributions

- reduce learning curve
 - composite actors
 - sharing workflows
- result dissemination
 - "always on" web accessible results
 - workflows as web service
- Collaboration

