The New SciServer: Collaborative Tools for Data-Driven Engineering and Science

What is SciServer?

SciServer is a system for Science Researchers across multiple domains to host and share their datasets, and provide query and analysis tools for collaborative research.

History and Purpose

- Started with the SDSS SkyServer
- Goal: instant access to rich content
- Idea: bring the analysis to the data
- Interactive access at the core

How to Get Involved

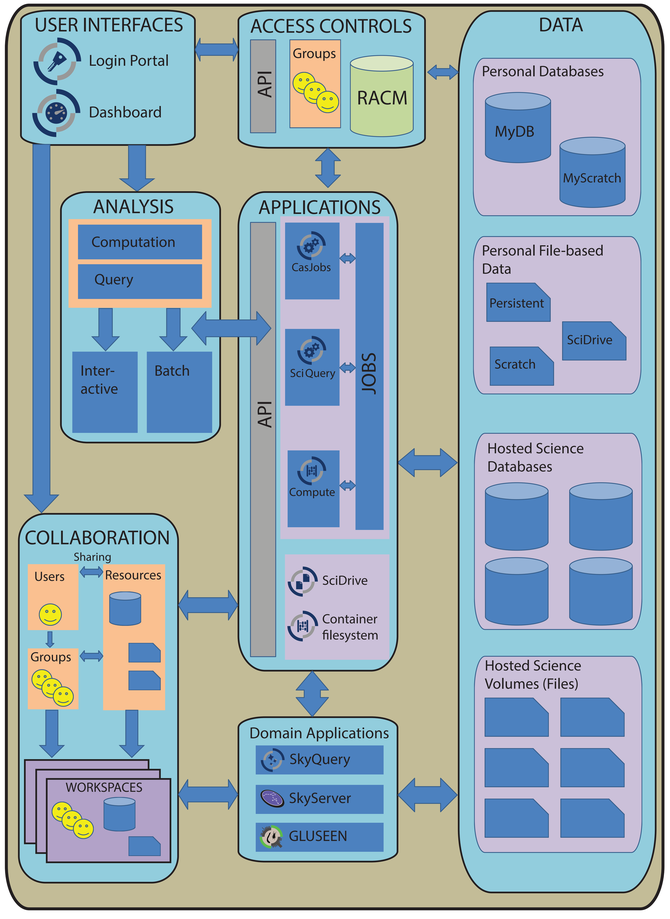
- Use our toolkit (www.sciserver.org)
- Volunteer to be an Early Adopter by emailing sciserver-help@jhu.edu
- Find bugs in our alpha system
- Suggest new features
- Let us help you share your data
- Introduce us to other teams with data to share

Team

- PI – Alex Szalay
- PM – Mike Rippin
- Team Leads – Ani Thakar, Gerard Lemson, Jordan Raddick, Bonnie Souter
- Technical: Dmitry Medvedev, Manu Popp, Jai Won Kim, Sue Werner, Victor Paul, Jan Vandenberg, Lance Joseph, Alainna White, Laszlo Dobos, Camy Chhetri, Joseph Booker

System and Features

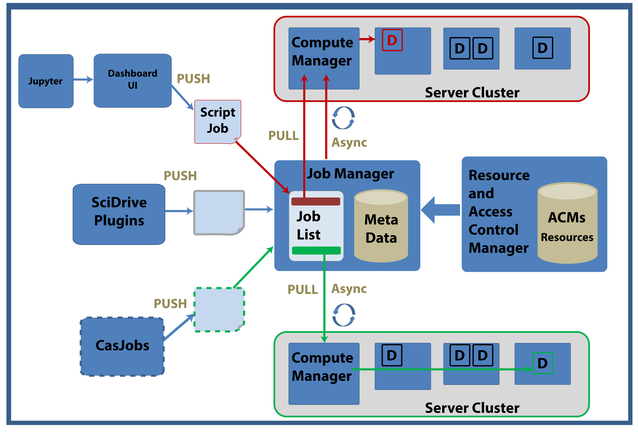
- Science Data Hosting (Files and Databases)
- Query Services
- Data Integration
- Compute Analysis
- Interactive and batch job submission
- Collaborate and Share
- Resource and access controls
- Personal Storage (Files and Database)
- Integrate with APIs
- Single Sign-On



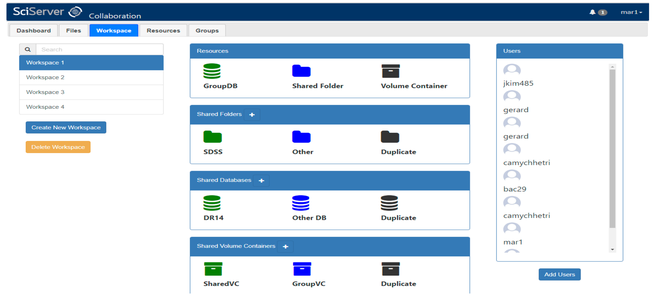
Technologies

jupyter, Linux, docker, python, R, Java, openstack, PostgreSQL, Microsoft SQL Server, MySQL, Microsoft Windows

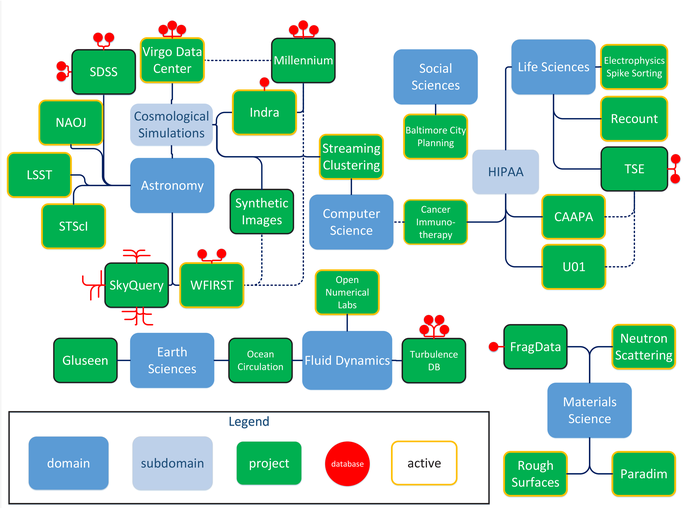
Compute and Query Job Scheduling



Collaborative Workspaces

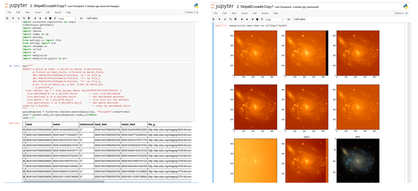


Science Collaborations

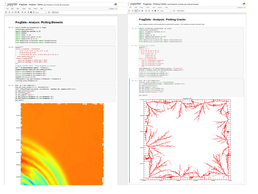


Science Applications

Astronomy



Materials Science



Turbulence