ElasticR

Connecting the dots of scientific computing from the pi to the clouds
Science and the 4th paradigm

Experimental Science → Theoretical Science → Computational Science → e-Science / Data-intensive Science

\[
\left(\frac{\dot{a}}{a}\right)^2 = \frac{4\pi G \rho}{3} - K \frac{c^2}{a^2}
\]
The failure of the Grid paradigm

The Dancing Bear
The townspeople gather to see the wondrous sight as the massive, lumbering beast shambles and shuffles from paw to paw.

The bear is really a terrible dancer, and the wonder isn't that the bear dances well but that the bear dances at all
Take the compute to the data,
Run real-time events-driven R+Python engines anywhere

Public Clouds  Private Clouds  Compute Clusters  Raspberry Pi / IoT
Hyper-Agile data science

- RAD framework for big data
- Agile parallel computing
- Real-time, events-driven R engines in the Cloud
- Real-time, events-driven Python engines in the Cloud
Access from anywhere

Browser, Html 5 virtual workbench

Word

Excel

R Library

Python Library
ElasticR
Real-Time collaboration and reproducible research

Online Collaboration  E-Learning  Sharing  Reproducible Research
ElasticR
Design overview
Demo