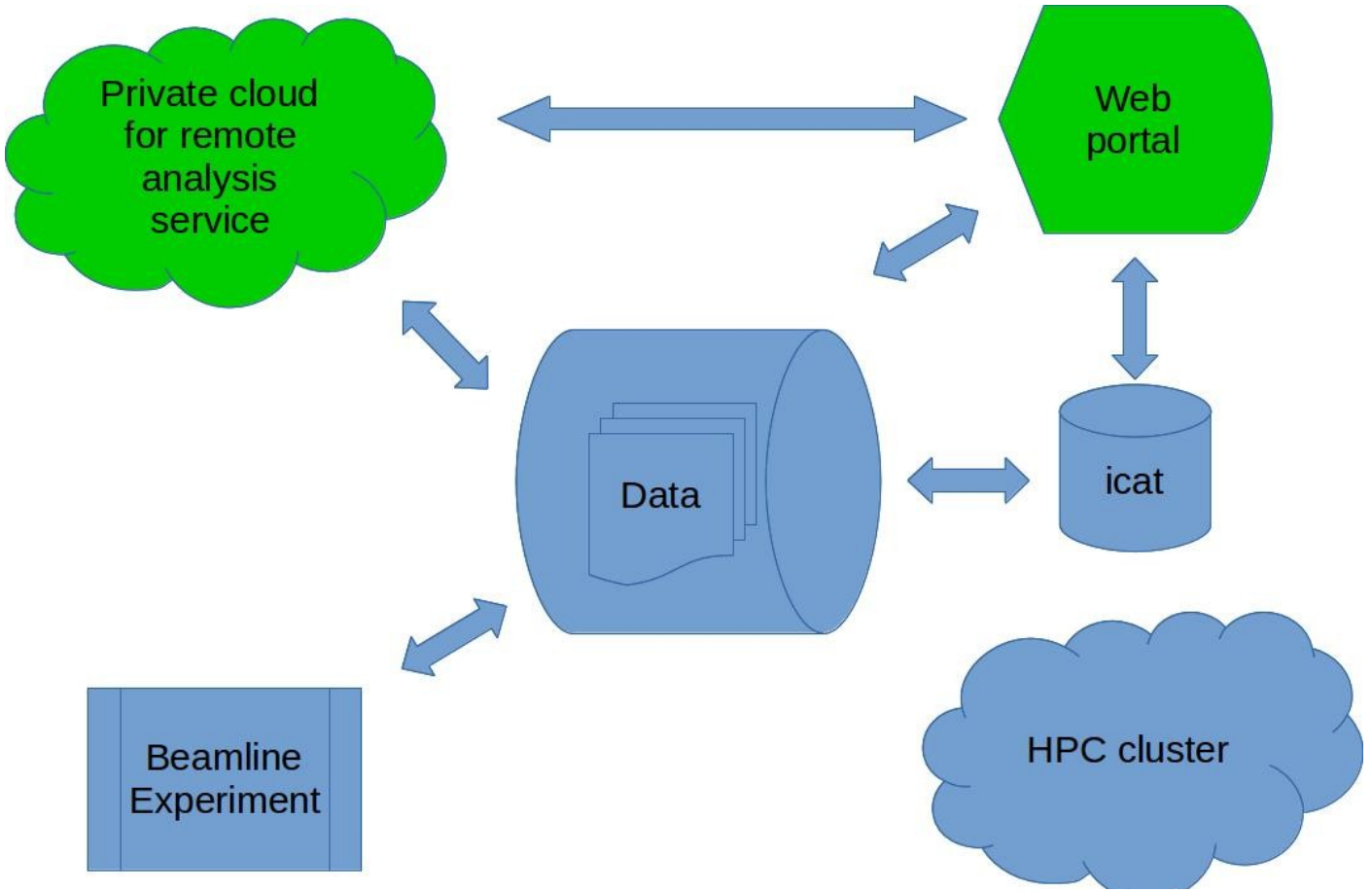
JRA2

Demonstrator of a Photon Science Analysis Service

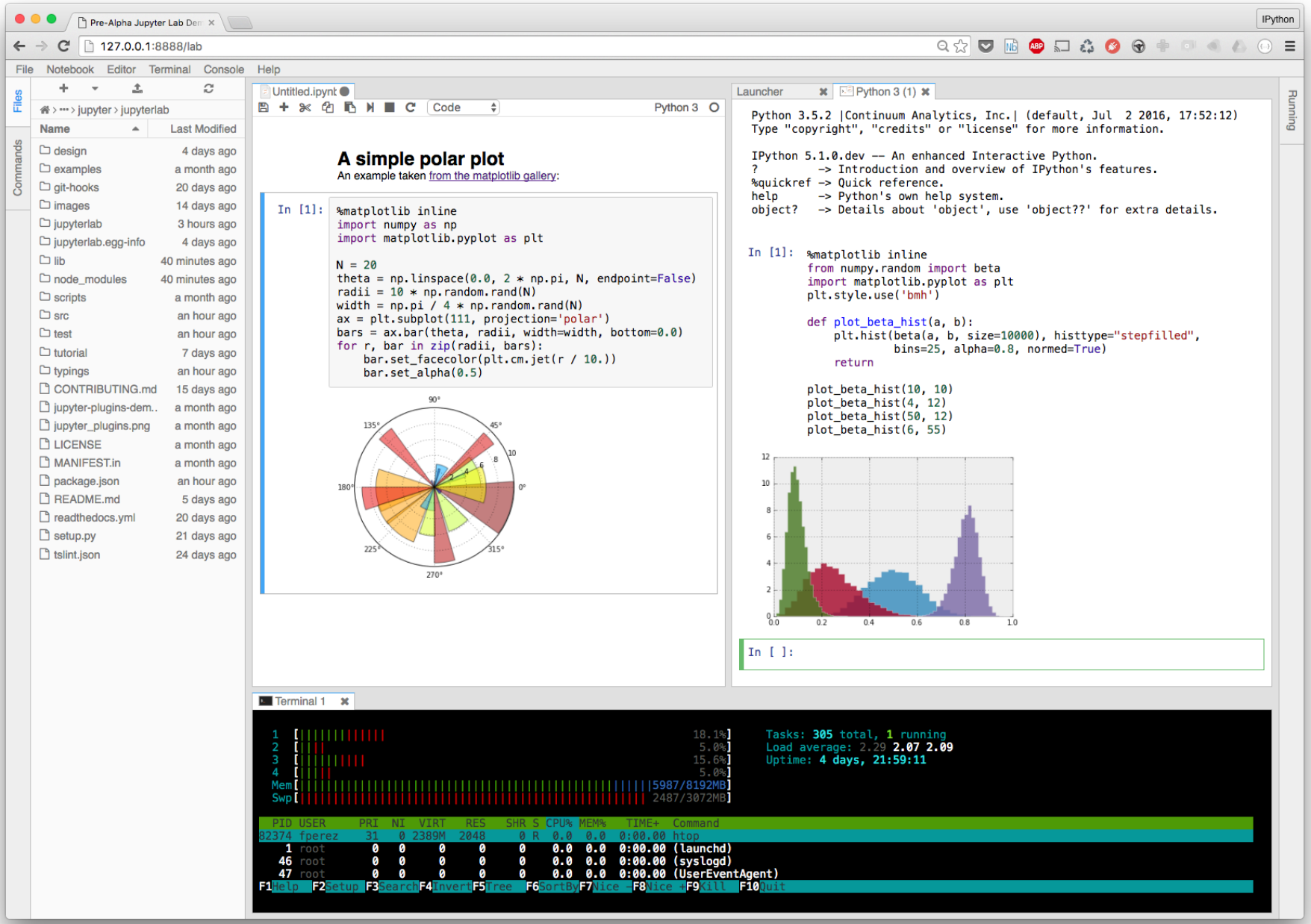
A Platform for Remote Data Analysis as a Service



Task 1 – Design a Platform for Remote Data Analysis as a Service

- Task leader - **ESRF**
- Effort - 18m
- Build on existing solutions
- Technologies – OpenStack, VMs, Docker, Umbrella
- Generic data analysis service(s) – Notebooks with JupyterHub / JupyterLab, H5Serv, ...

Task 1 – Platform to enable Generic Notebook service based on JupyterLab/Hub



Task 2 – Collect and Compare Offline Data Analysis Software

- Task leader - **PSI**
- Effort - 8m
- Use cases – SAXS, Tomography, Diffraction
- Software – To be defined
- Users – Industrial users are a good candidate

Task 3 – Implement DaaS platform on each site

- Task leader - **ESRF**
- Effort - 23m
- Sites – ESRF, PSI, ALBA, DLS, SOLEIL, ELETTRA
- Software – Stack defined in Task 1
- Users – Friendly users of Notebook service + H5Serv

Task 4 – Design and Implement DaaS platform portal

- Task leader - **ALBA**
- Effort - 16m
- Sites – ESRF, PSI, ALBA, DLS, SOLEIL, ELETTRA
- Software – Re-use existing solution
- Users – Friendly + Industrial users

Task 5 – Deploy and Package at least 2 Data Analysis software packages

- Task leader - **DESY**
- Effort - 20m
- Software – Identified by Task 2
- Users – Friendly + Industrial users

Task 6 – Extend and Deploy Umbrella as standard authentication service

- Task leader - **PSI**
- Effort - 18m
- Sub-tasks – Consolidate existing solution, integrate with eduGain, Jisc, solve sso security issues
- Extension – Integrate with ICAT

Task 7 – Test Use Cases with real Users

- Task leader - **ELETTRA**
- Effort - 6m
- Users – (non)Friendly + Industrial Users