



MODERN ANALYTICS WITHIN AN OPEN SOURCE SCE

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OVERVIEW:

As sponsors increasingly look at providing open source technologies like R and Python for their biostats and programming teams, we provide an overview of the strategies to ensure this can be implemented and validated efficiently. Based on client collaborations and partnerships, we've created an innovation environment that tests and validates these technologies, maximizing analytic productivity within traditional Life Sciences confined systems

TRENDS:

- The transition to open source and away from a singular analytical platform for pharma R&D is already in motion
- Many of the fundamental technologies (e.g. Kubernetes, R, Github, etc.) are already open source and readily available
- The barrier(s) to adoption (concern about validation, lack of know-how, preference for buy vs build) are surmountable
- The market evolution will mirror the adoption of Hadoop /Cloudera/ Hortonworks and/or Linux/ Redhat, albeit likely in a slower arc



Design with the End in Mind

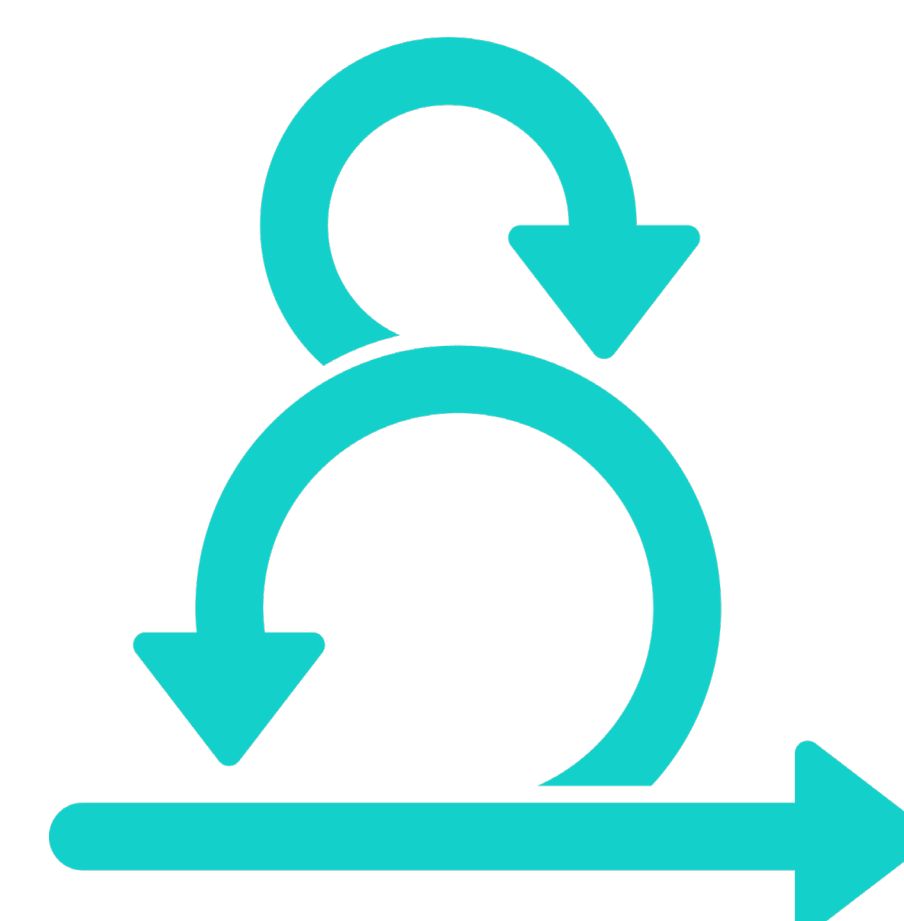
- Create the user experience from the perspective of a reviewer
- Identify review needs for Conduct to ensure efficient decision making



Prepare Analytics

- Exploratory or Regulatory options
- Dynamic Reporting for decision Making
- Register results with full traceability
- Scale up for full reporting (Batch execution)

CHARACTERISTICS



Create an Analytics Ecosystem

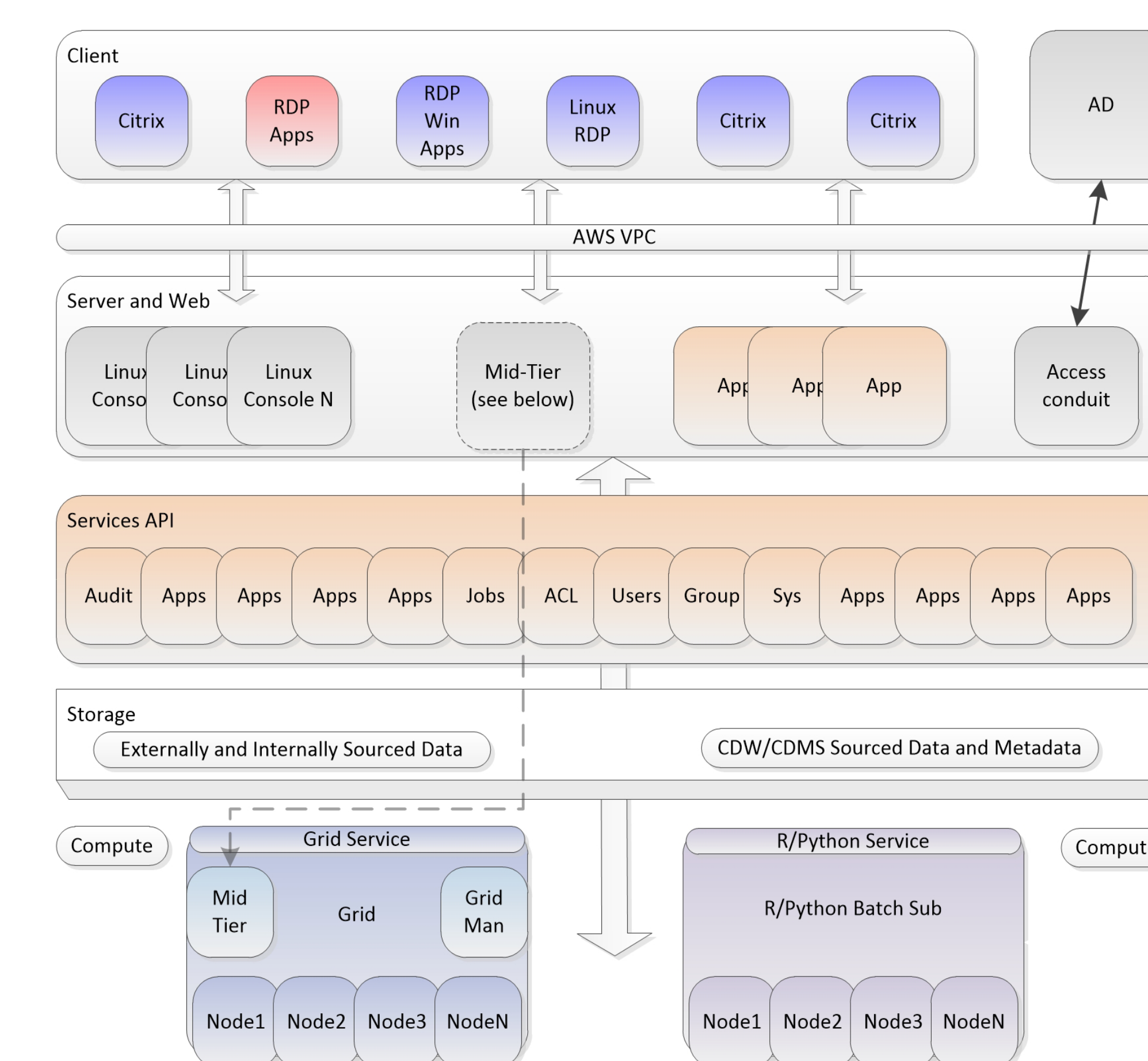
- Fire up container with selected analytics
- Load Data
- Run analyses



Share the Results

- Registered centrally
- Access governed
- Curated/Stewarded
- Robust – ready for reignition

Potential Architecture



CHALLENGES:

1. Technology is not the most important component, but you need to know how to get the best from it
2. Maintain business as usual whilst we change
3. Keeping control (Validation)

FUTURE:

1. Unstructured data
2. Process change
3. Focus on collaboration
4. Partnerships are key



SCAN ME