

# Beyond Silos: Unlocking Al's Full Potential with Petabit Scale Data Mobility

David Hughes, VP Engineering



#### whoami

- Background: software engineer, sysadmin, network monkey
- Techologist
- Open source developer, user and enthusiast
- Problem solver



David Hughes VP Engineering

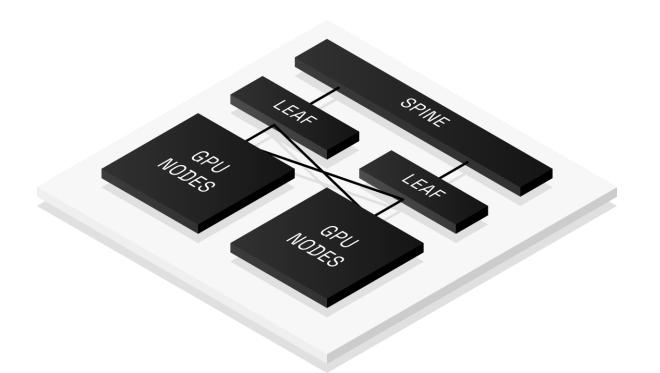


# Why are we here?

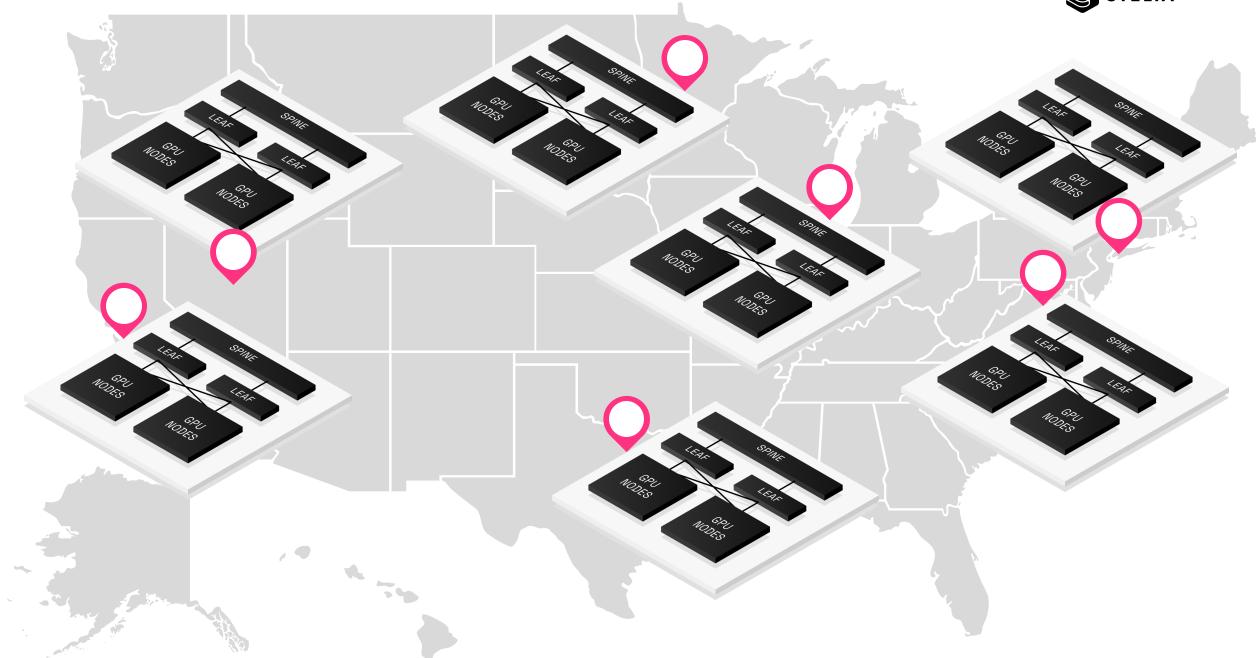


#### State of the Union

- Cloud Computing as it exists today
  - Largely siloed deployments
  - Resources deployed per location
    - Compute
    - Storage
  - Compute is performed where data lives
- Only the hyperscalers have built distributed network architecture with a global platform in mind
- This does not scale for Al







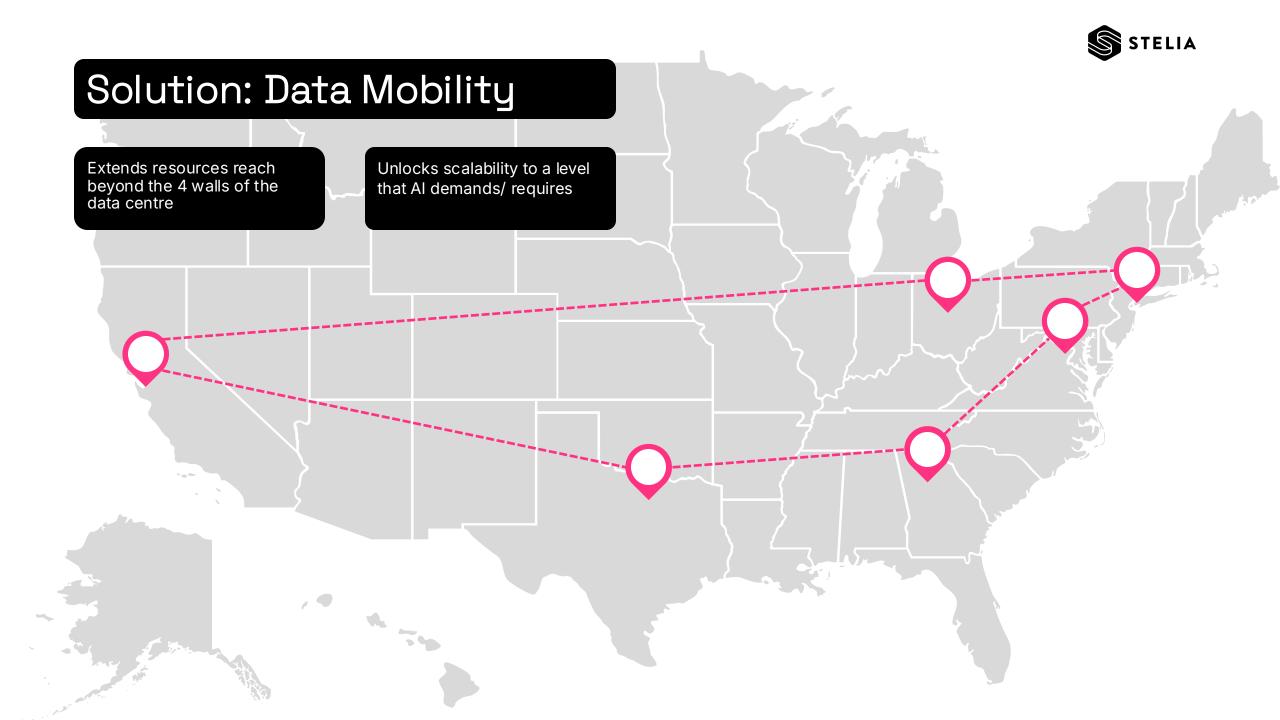


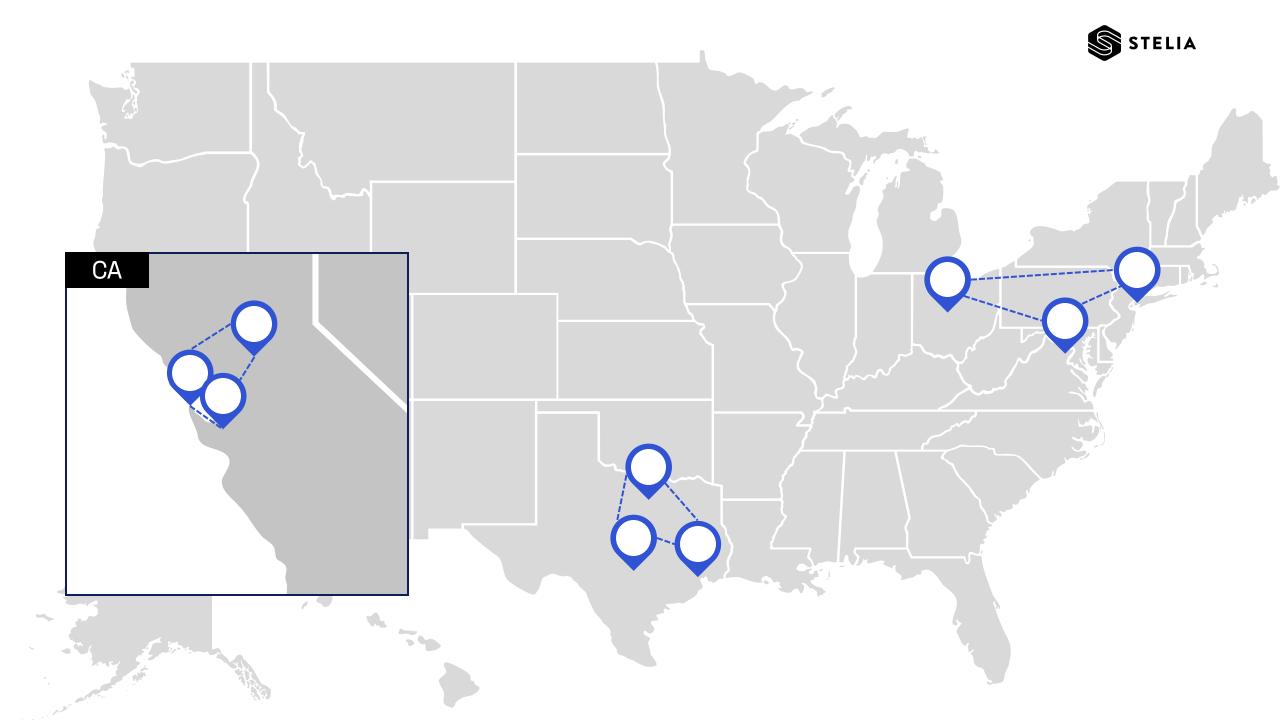
#### **Problems**

- This resource footprint assumes data does not move between sites
  - If it does you pay large sums in data transfer
- Al requires data to move between sites
  - Non negotiable
- Does not factor in end customer requirements entirely
  - Data Sovereignty
  - Disaster Recovery
- Wasted resources
  - Redeploying sizeable resources per location
  - Under utilization of deployed resources
- ... does not scale for Al



Is there a solution?

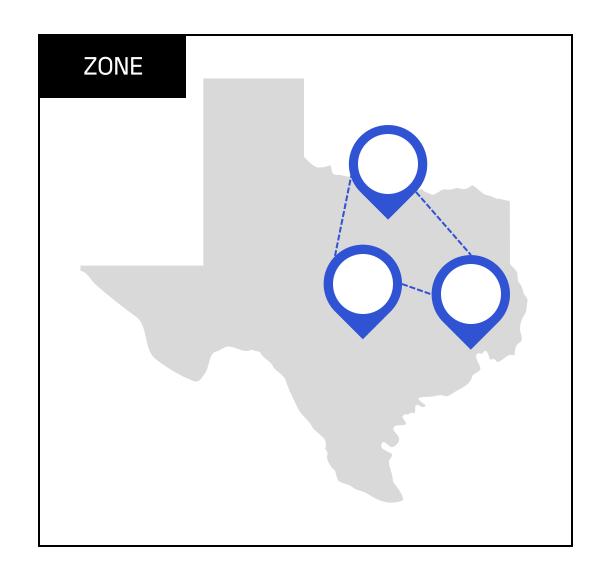






#### Interconnected, elastic resources are the future

- No more static infrastructure in isolated siloes
- Interconnected resources across a geographical area
- Available in the elastic consumption model that we have grown to know and love in the past decades
- Must allow flexible scheduling of workloads
- Must scale to the level required to service workloads of all sizes
- Cost and time savings from not having to continuously deploy the same resources per location
- Innovate further by taking advantage of smaller locations not suitable for large clusters of GPUs but very much suitable for meshing together in a geographic region e.g. London





### Closing remarks

- Think big
- Think interconnected
- Think hyperscale
- Design for hyperscale from the get-go
- Don't try and retrofit it afterwards
- Profit

## Questions

Visit the Stelia booth 1033

