VOPipe

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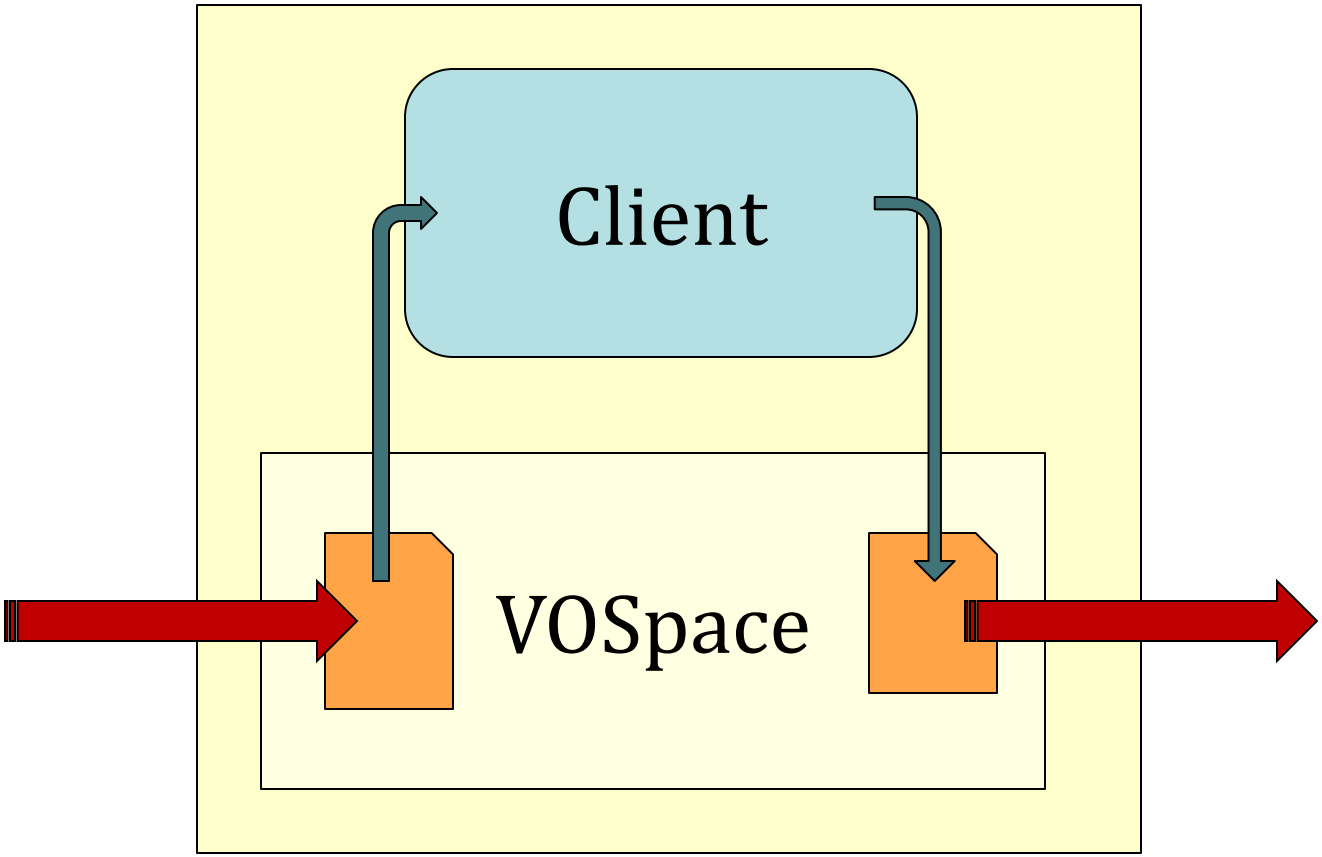
Scientific Motivation

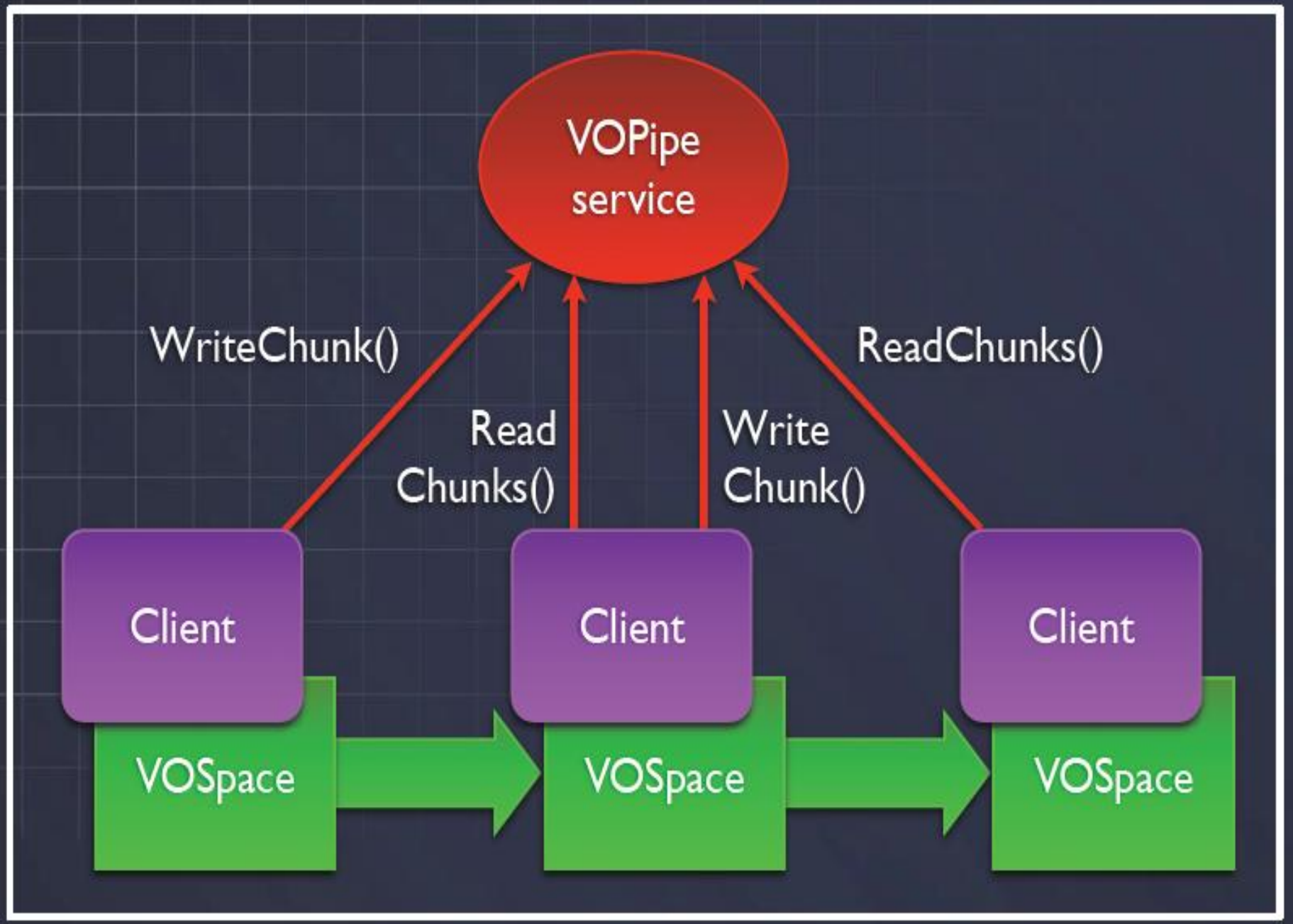
- Stream data efficiently using VOSpaces
  - Like async messaging but with performance
  - E.g., transport between SkyQuery engines
- Chain VOSpaces into data-flows
  - Easy dynamic setup for specific tasks
  - E.g., solving a crossmatch problem

VOPipe for Data Flows

- Simple interface
  - `CreatePipe (src,dest)`
  - `DestroyPipe (pipe)`
  - `WriteChunk (pipe,name)`
  - `ReadChunks (pipe,timeout,state)`
- Implementation
  - JHU prototype tested on VOSpace 1.1
  - VOSpace 2 is the highest priority now!

In Action




VOPipe service
WriteChunk()
Read Chunks()
Write Chunk()
ReadChunks()
Client
Client
Client
VOSpace
VOSpace
VOSpace

Ready… Set… Go!

- Having VOSpace 2.0 is top priority
  - Finishing touches this week?
- Advancing VOPipe
  - Develop use cases, e.g., SkyQuery
  - Iron out details to guarantee efficiency