

Xenon

A uniform interface to distributed storage and compute resources

 <https://github.com/NLeSC/Xenon>

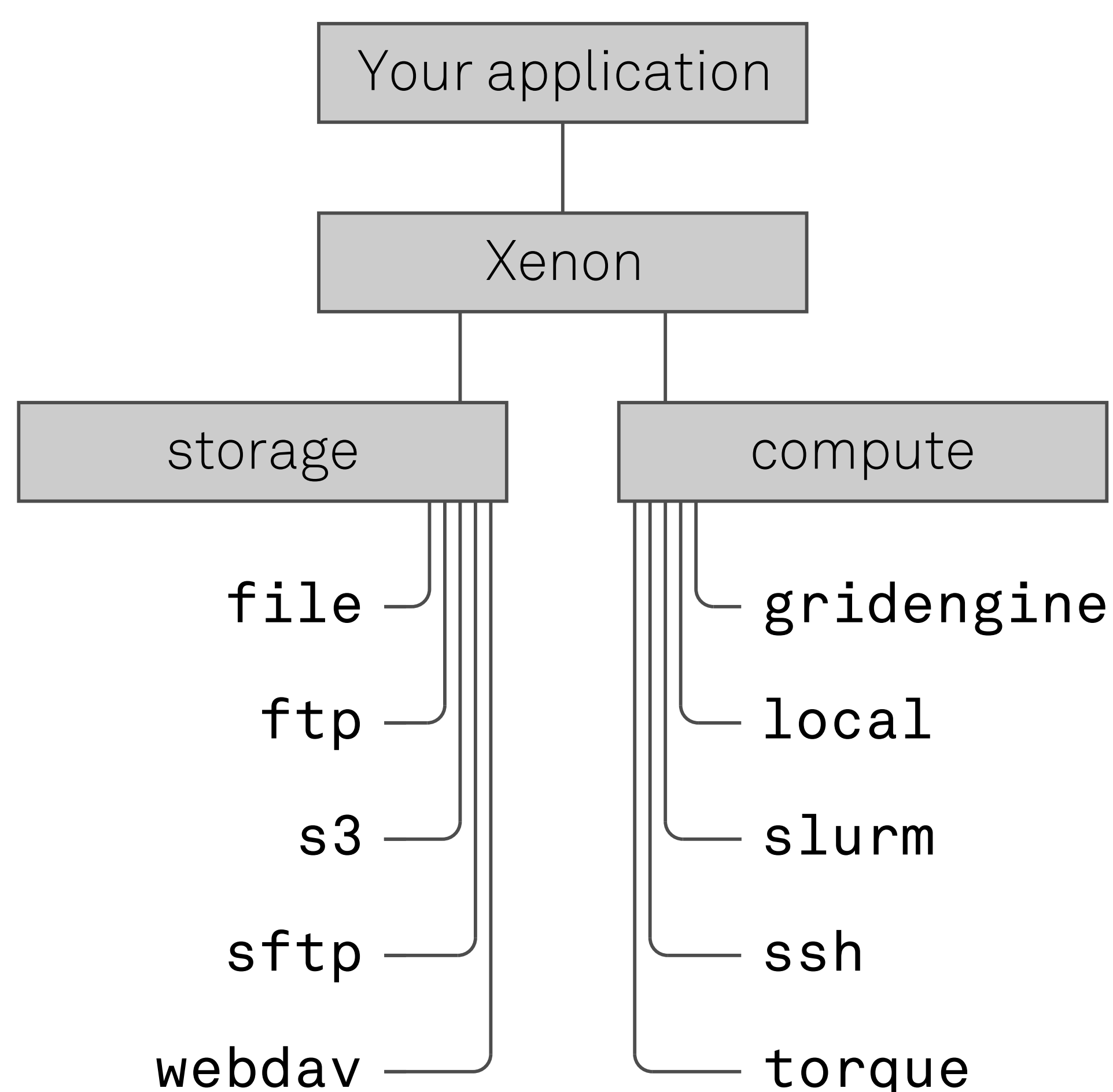
What

problem does Xenon solve?

Many applications use remote storage and compute resources. To do so, they need to include code to interact with the scheduling systems and file transfer protocols used on those remote machines.

Unfortunately, many different scheduler systems and file transfer protocols exists, often with completely different programming interfaces. This makes it hard for applications to switch to a different system or support multiple remote systems simultaneously.

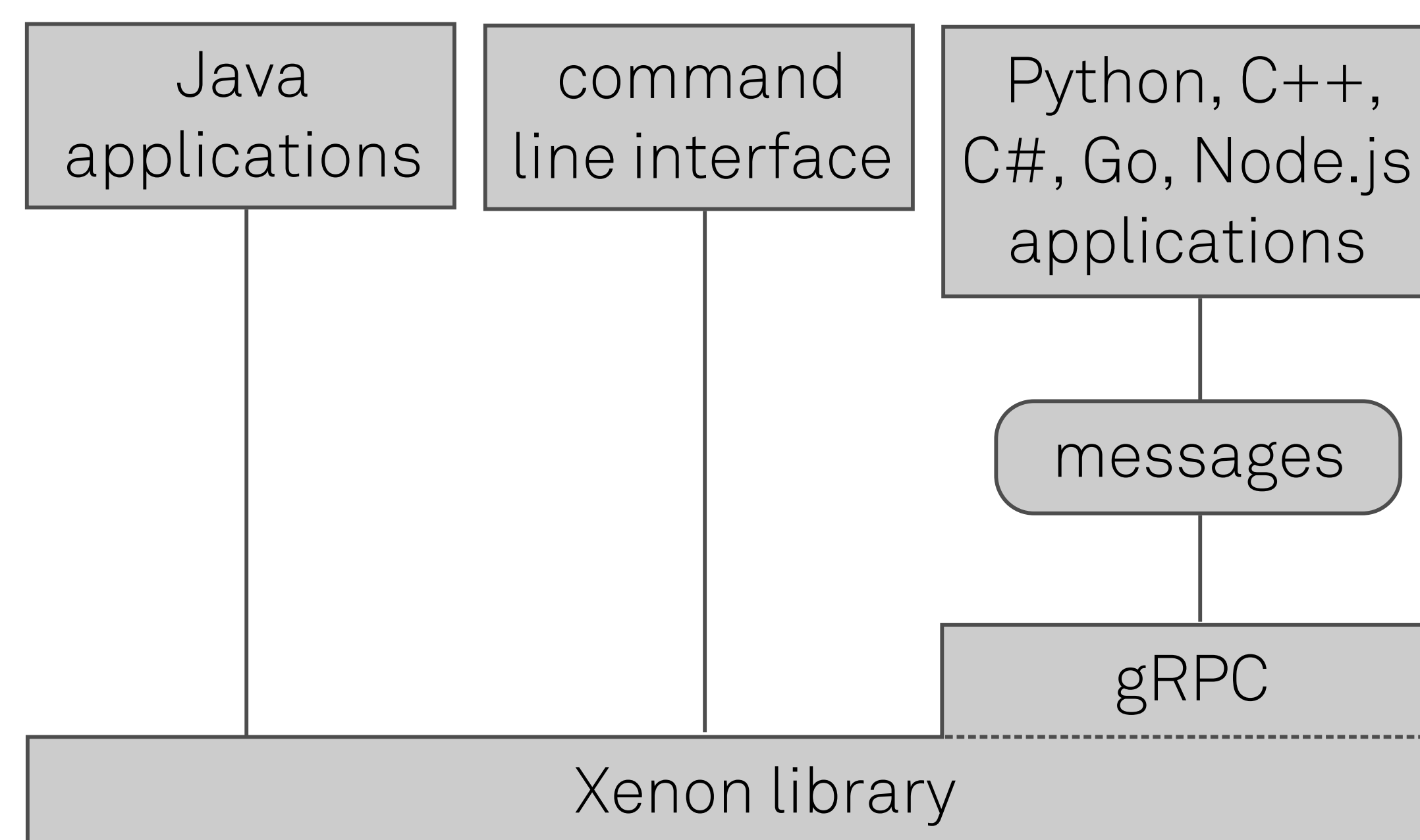
Xenon solves this problem by providing a single programming interface to many different types of remote resources, allowing applications to switch without changing a single line of code.



How

does Xenon work?

Xenon is an abstraction layer that sits between your application and the remote resource it uses. Xenon is written in Java, but is also accessible from other languages (e.g. Python) through its gRPC interface.



Where

has Xenon been applied?

- metabolomics: automatic identification of molecules from LC/MS
- oceanography: coupled fluid dynamics model and large eddy simulation models
- astronomy: coupled gas cloud model and star evolution models

Do the tutorial!

<http://xenonrse2017.readthedocs.io>

