

## **Kingfisher: Storage Management for Data Federations**

A cornerstone of translating the raw capacity of a distributed system into an effective source of shared computing power is the methodical management of all the resources. While one commonly thinks of managing processing resources - CPUs, GPUs, memory - there's surprisingly little attention paid to the management of storage resources. Questions abound: How much storage should be set aside? When can it be reclaimed? How should it be reclaimed? How can it be subdivided?

The Kingfisher project, just beginning, is planning to explore different storage management techniques through the use of its LotMan library which tracks the space usage and local policies for storage. The first intended application for LotMan is the XCache configuration of XRootD and its interaction with HTCondor.

This presentation will cover the basic concepts being developed for LotMan, the use cases we hope to tackle through the year, and be an opportunity for the XRootD developers to discuss on how to best integrate a policy engine into XCache.

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