

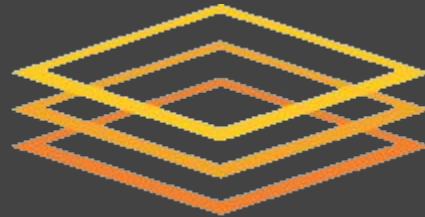
Adding Network Measuring to Data Federation Caches



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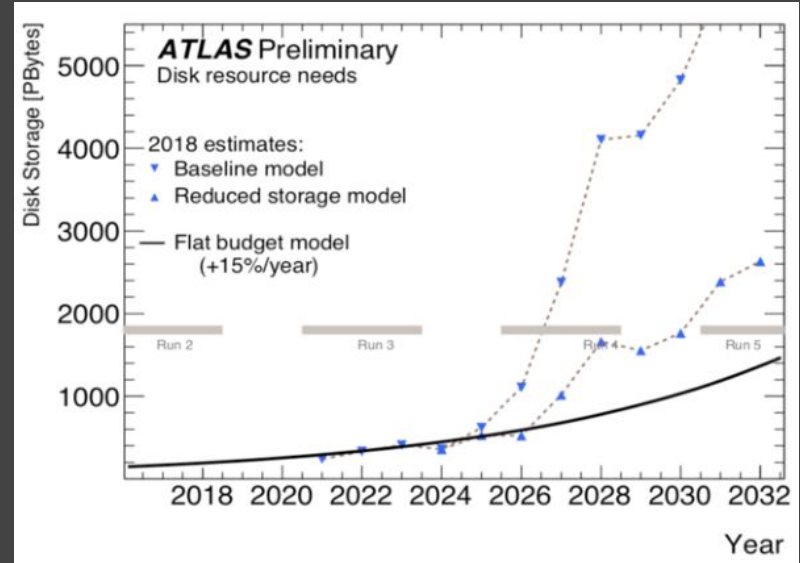
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Motivation

- HL-LHC experiments will bring a huge increase in data volume.
- It is critical to ensure that the transfer and reuse of data work well in distributed data federations.



Data Federation

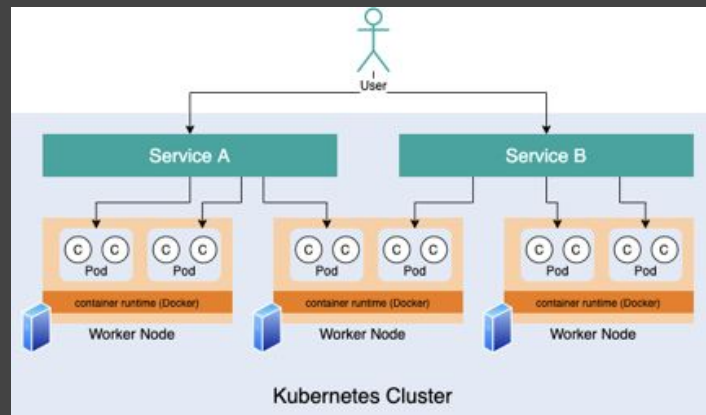
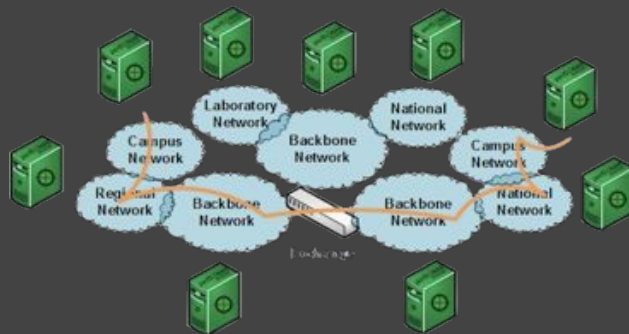
- It is provided by OSG.
- LHC experiments store data on origin servers.
- Data is streamed from data origins to distributed data caches all over the world.



Network Measuring

- Use perfSONAR to test all nodes on the network path and looks for areas of low performance
- Deploy the network measuring software using Kubernetes
- Kubernetes helps orchestrate cache and perfSONAR containers

perfSONAR



Thanks!

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