



Can Atlas use an HTTP-only* DPM?

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*In fact HTTP and GridFTP

DPM wants to create the simplest possible storage system

- Consolidate on a single protocol
 - HTTP, but still need GridFTP for now

Can such a system be used by Atlas?

- No SRM
- No XRootD
- File Transfer via GridFTP only
- Everything else via HTTP

- GridFTP only transfers with redirection
 - Directories instead of space tokens

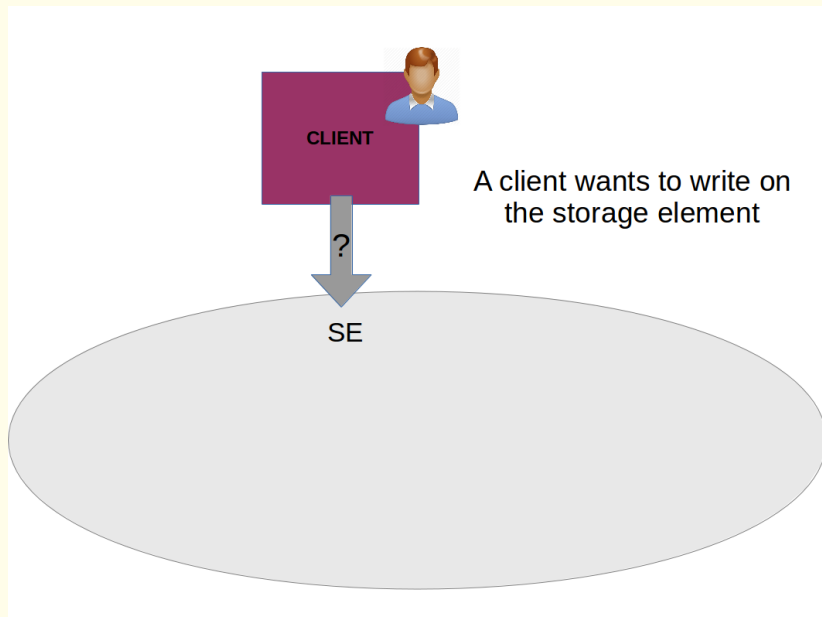
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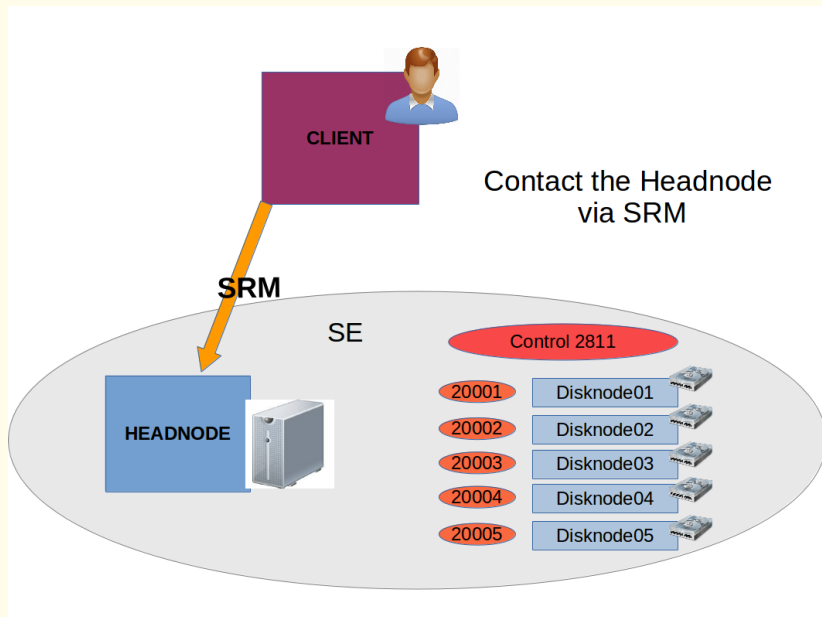
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- Writing from WN to SE via HTTP
- File Deletion over HTTP or GridFTP
- Space reporting via HTTP

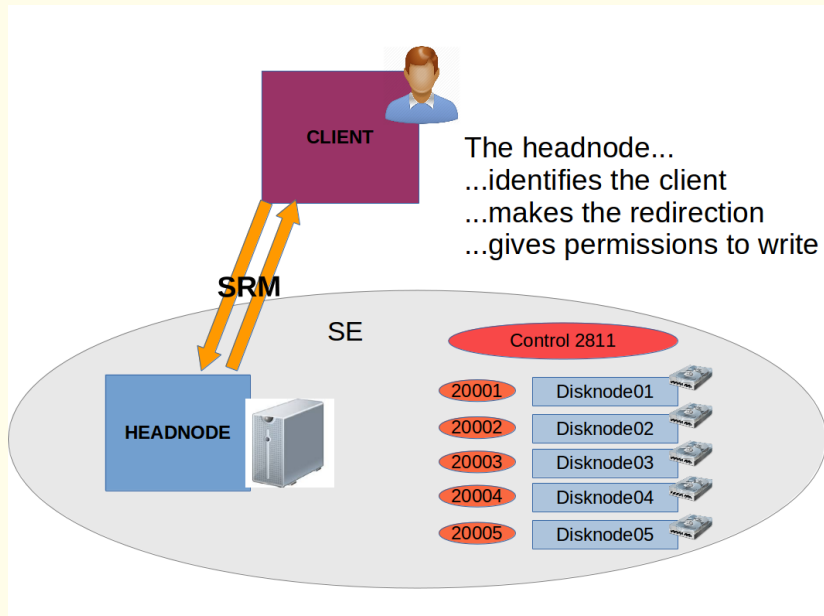
- Storage Resource Management (SRM) is being used in the whole grid
- Its inconvenient is that the redirection on disks is really slow
- GridFTP can replace SRM for the redirection and use only one protocol



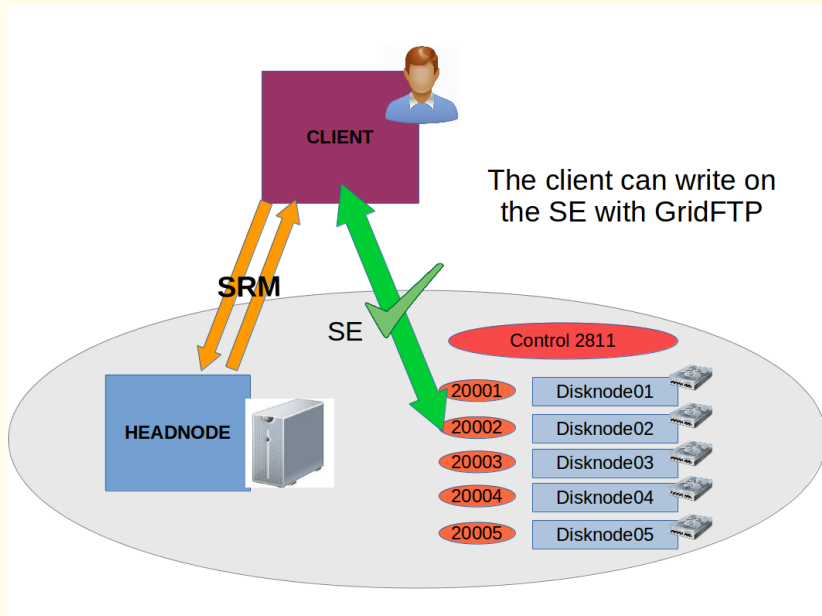
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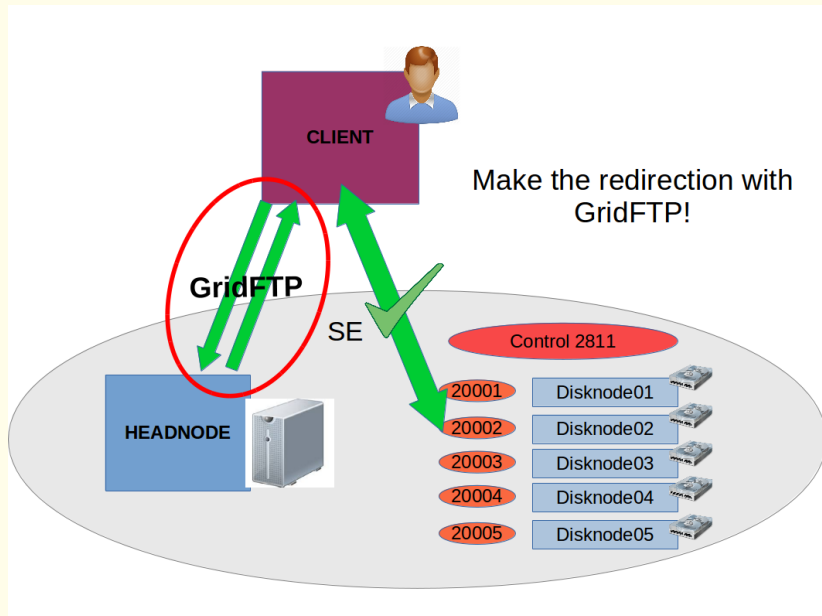


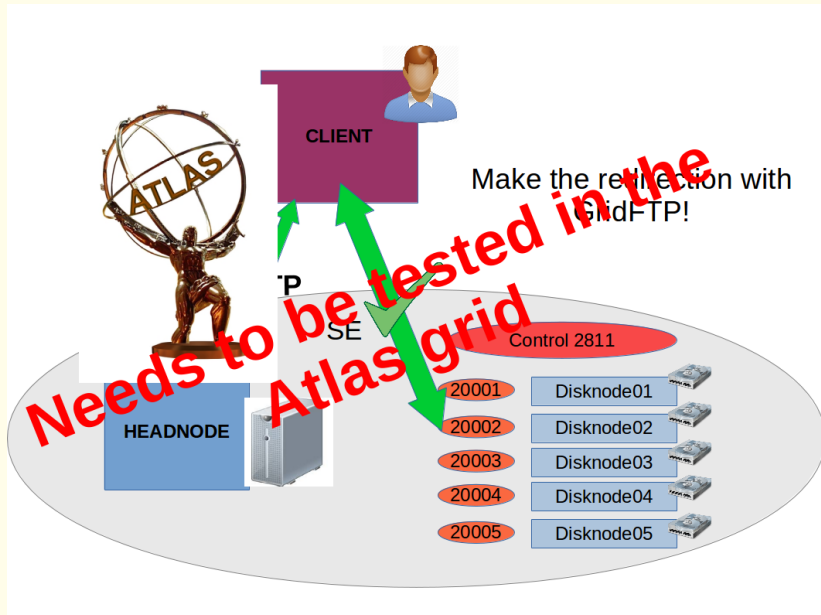
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The novelty

DPM can now work with GridFTP instead of SRM
for the redirection !!





- GridFTP redirection has already been tested on DPM but we need to test it in real Atlas conditions
- The idea is to use an Atlas site and test it
- A site in Hong-Kong needs to transfer data and want a HTTP-only site, they are a really good candidate for the tests
- Last year several site-administrator shown a great interest in having and HTTP-only DPM site

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- WebDAV can not provide the total free space yet

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Yes! WebDAV was already tested in Atlas

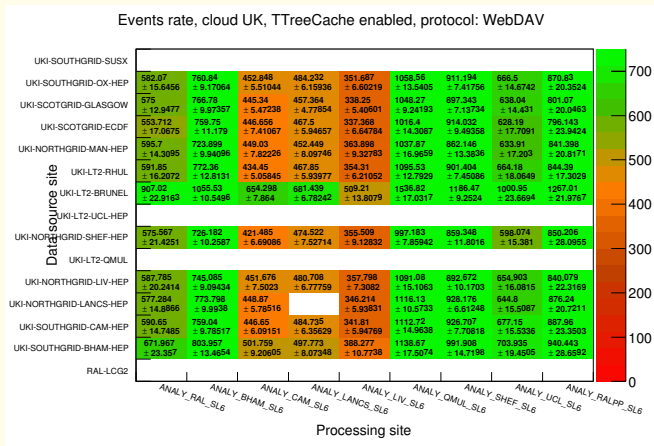


Figure: Test of remote data access with WebDAV on the UK cloud

Can Atlas use an HTTP-only DPM?

- It should !
- Several operations (deletion, writing...) have to be checked in the Atlas context
- We want to test it in an interested Atlas site in Hong-Kong
- In the specific case the site need to be part of FAX, XRootD will still be required
- This is an experiment, the idea is **NOT to impose** a "HTTP-only DPM" storage system but to **provide** it.