

# OPeNDAP in the Cloud

OPeNDAP

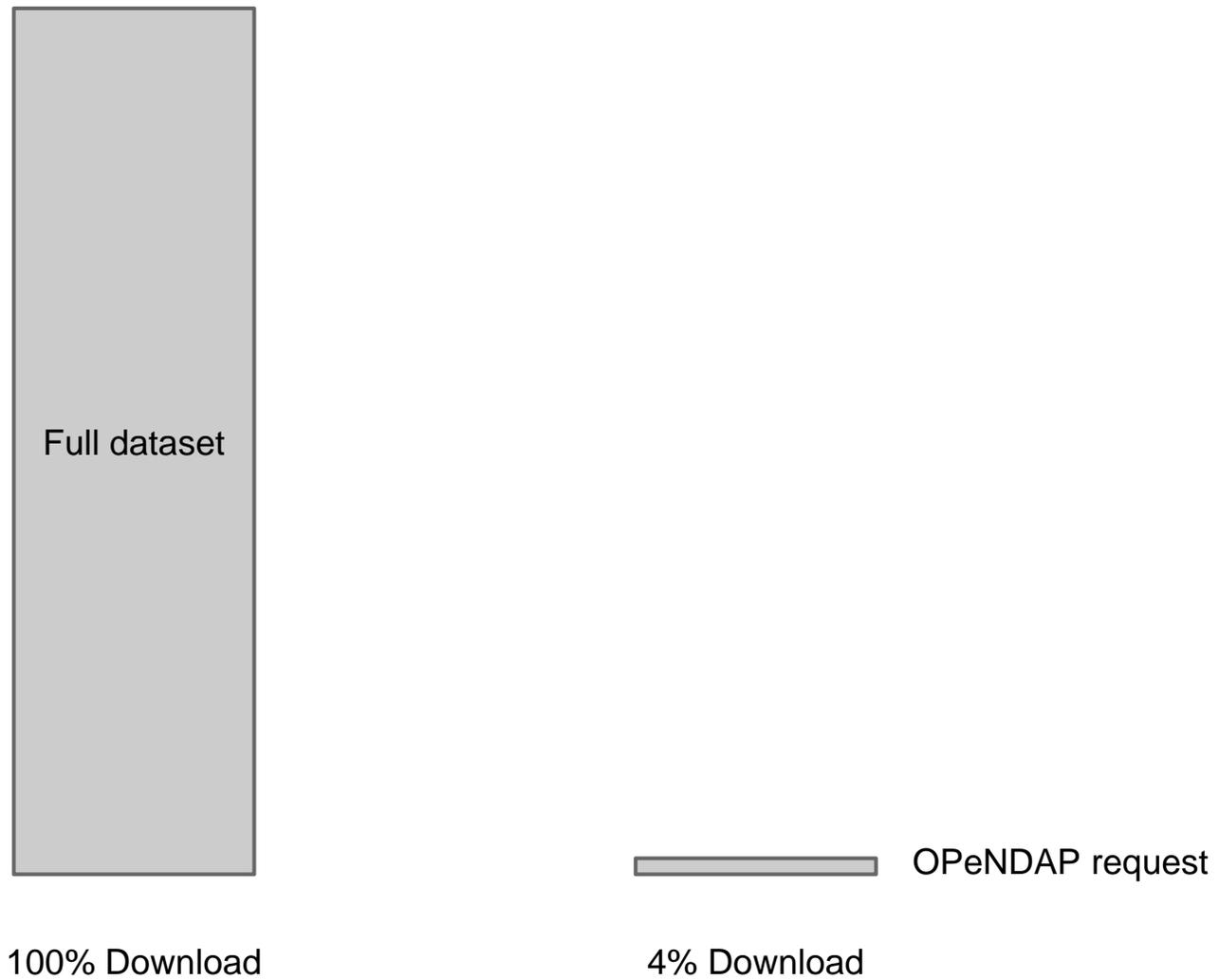
James Gallagher, Nathan Potter

and

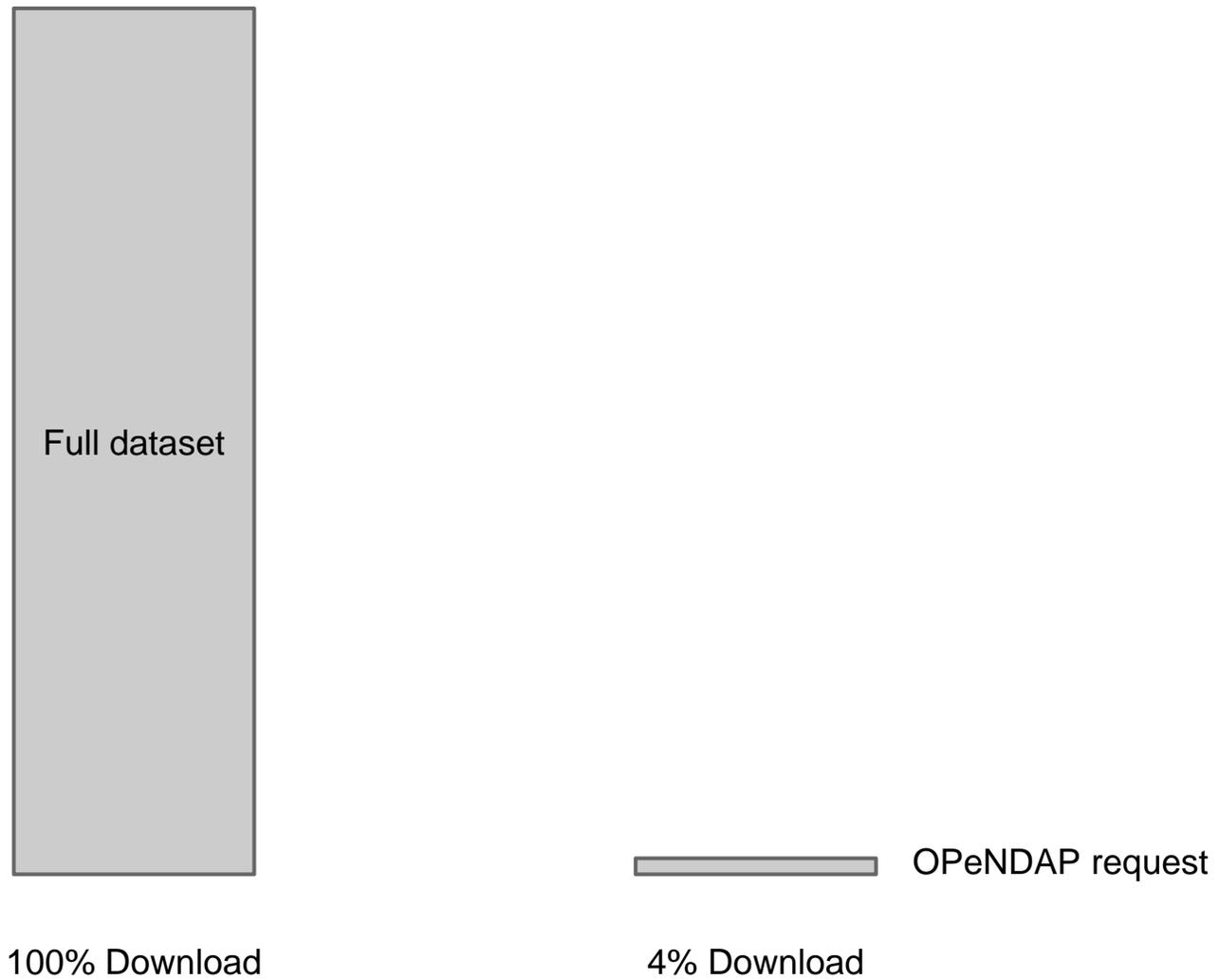
NOAA/NODC

Deirdre Byrne, Jefferson Ogata, John Relph

26 June 2013

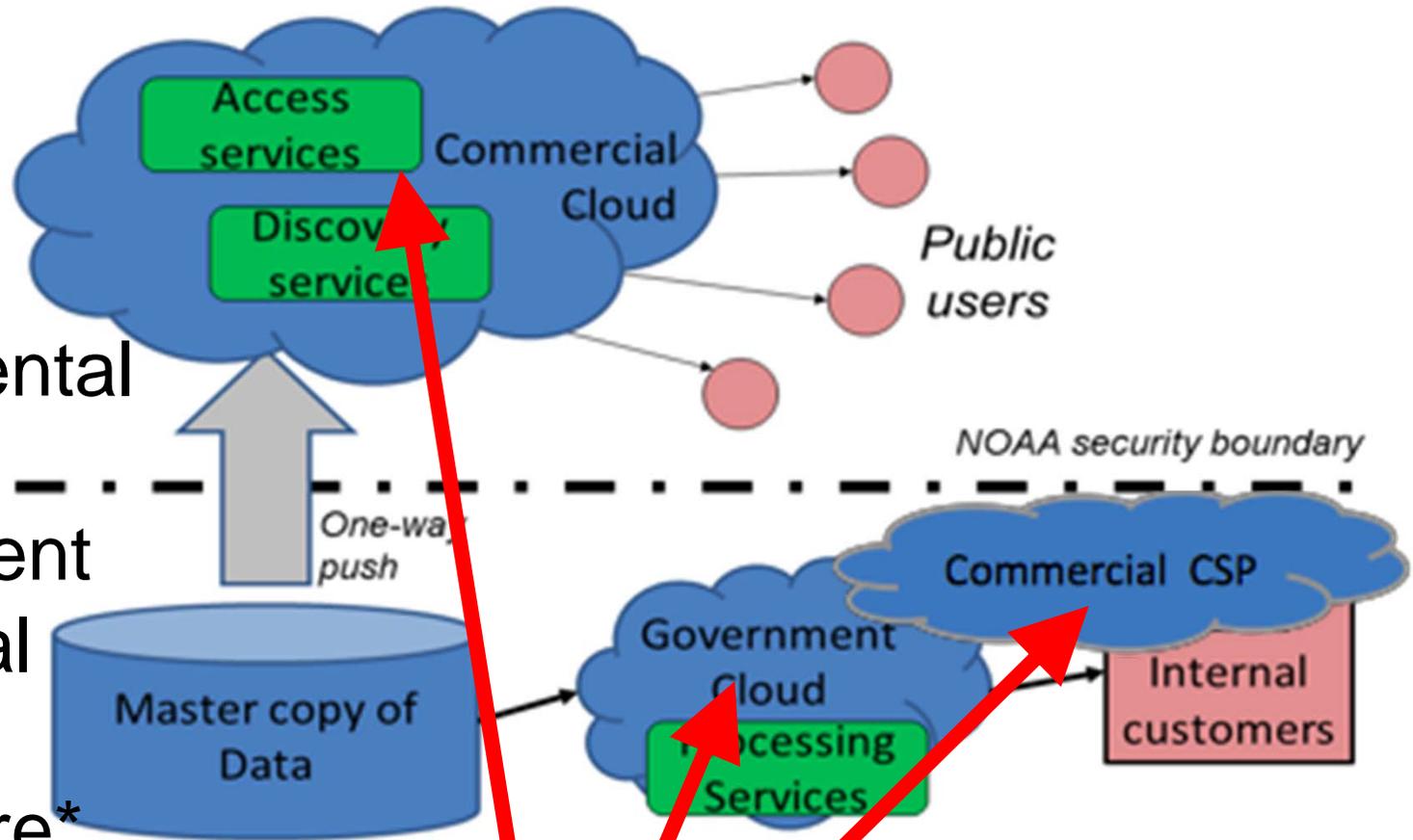


Not only is the OPeNDAP request smaller,  
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# NOAA Environmental Data Management Conceptual Cloud Architecture\*

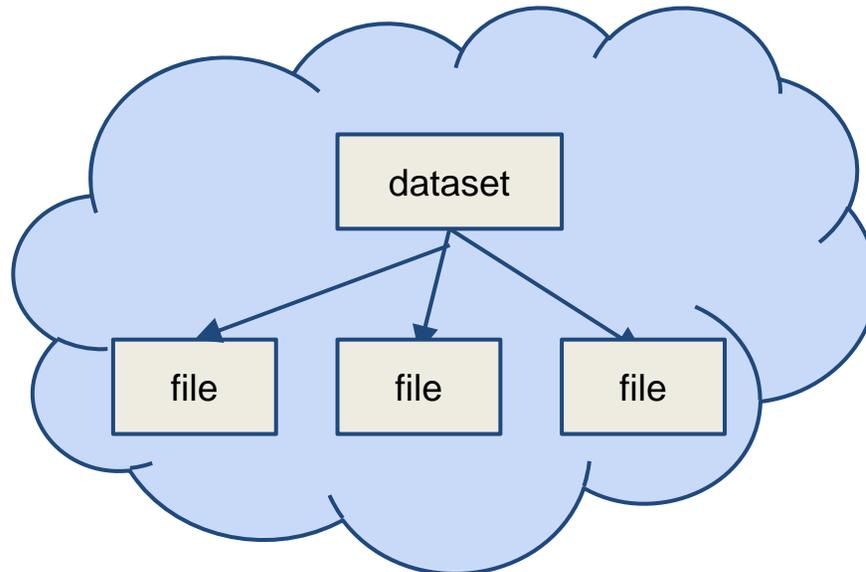


*\*Adapted from NOAA Environmental Data Management Framework Draft v0.3 Appendix C - Dr. Jeff de La Beaujardière, NOAA Data Management Architect*

Potential locations of cloud-enabled OPeNDAP instances

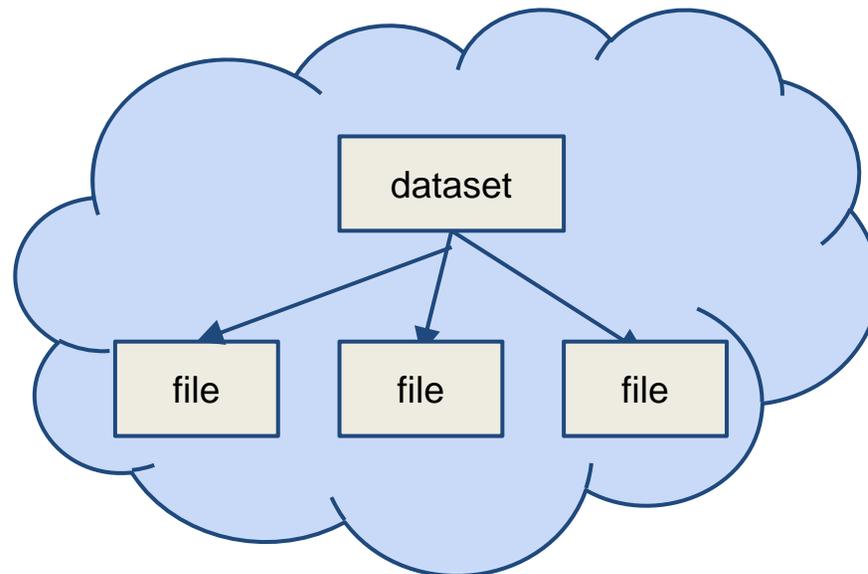
# Constraints

- No vendor lock-in! 
- No Stovepipes! - flexible storage method  
(what is the client of 2020? we don't know)
- Hierarchical/human browsable

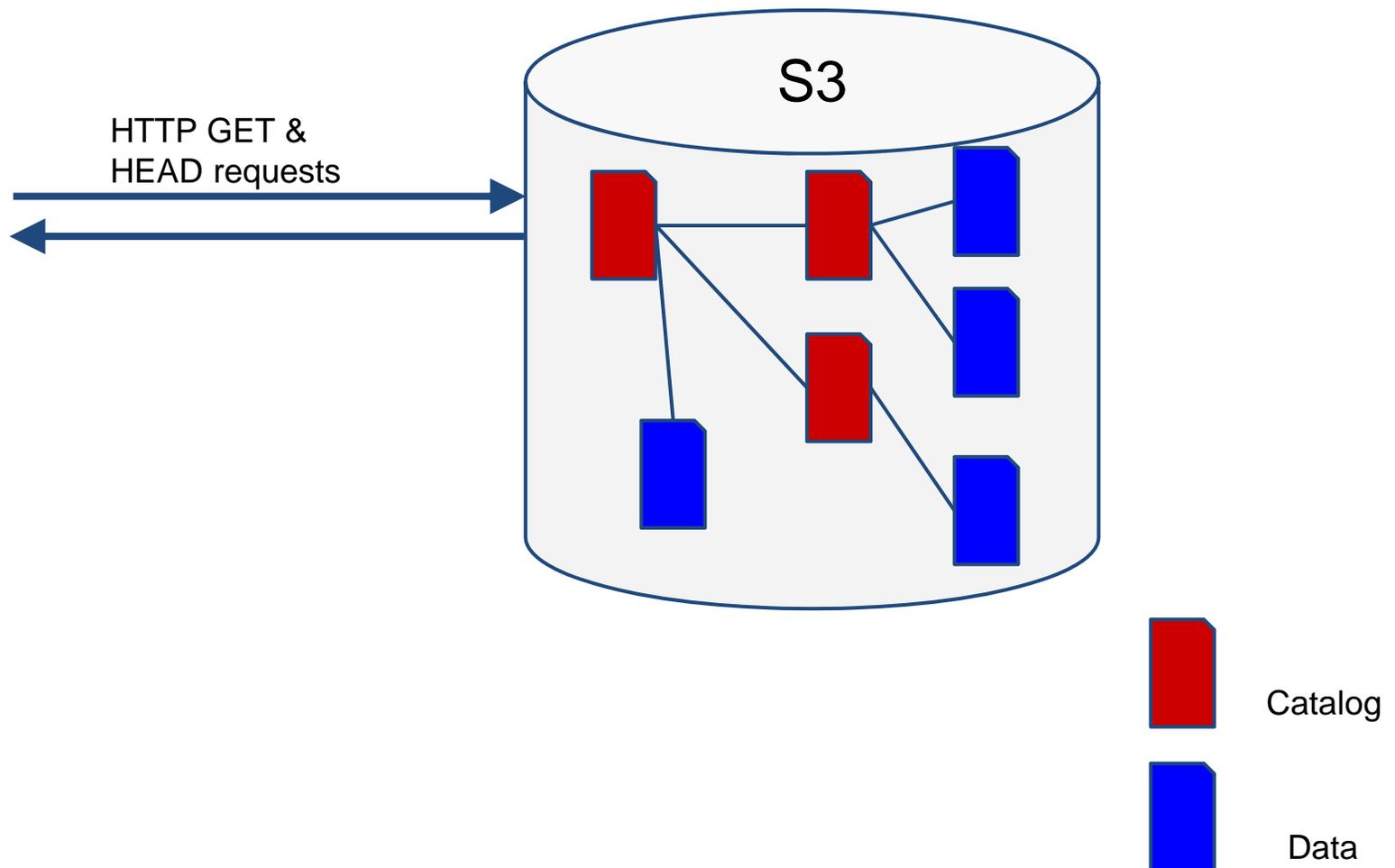


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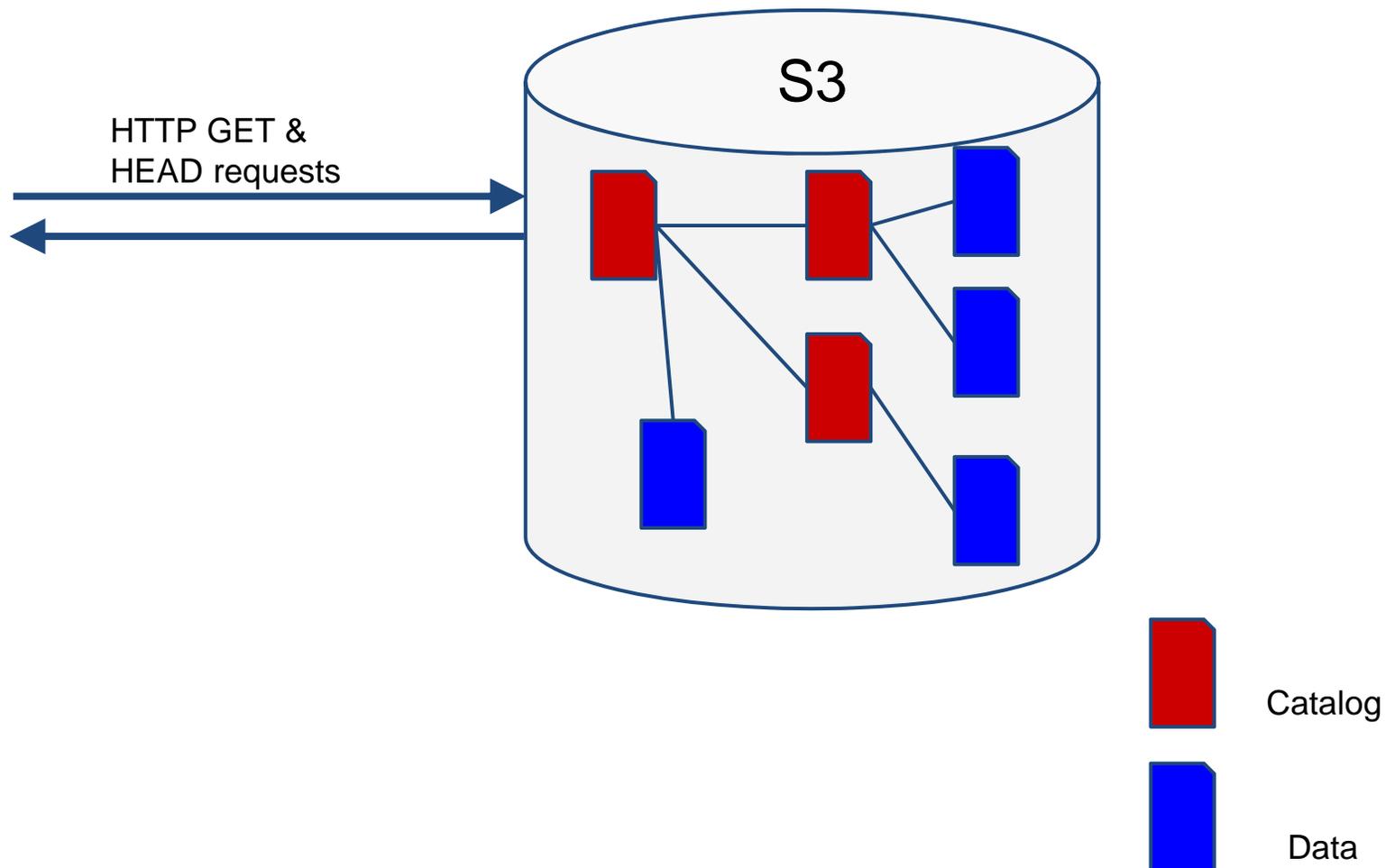
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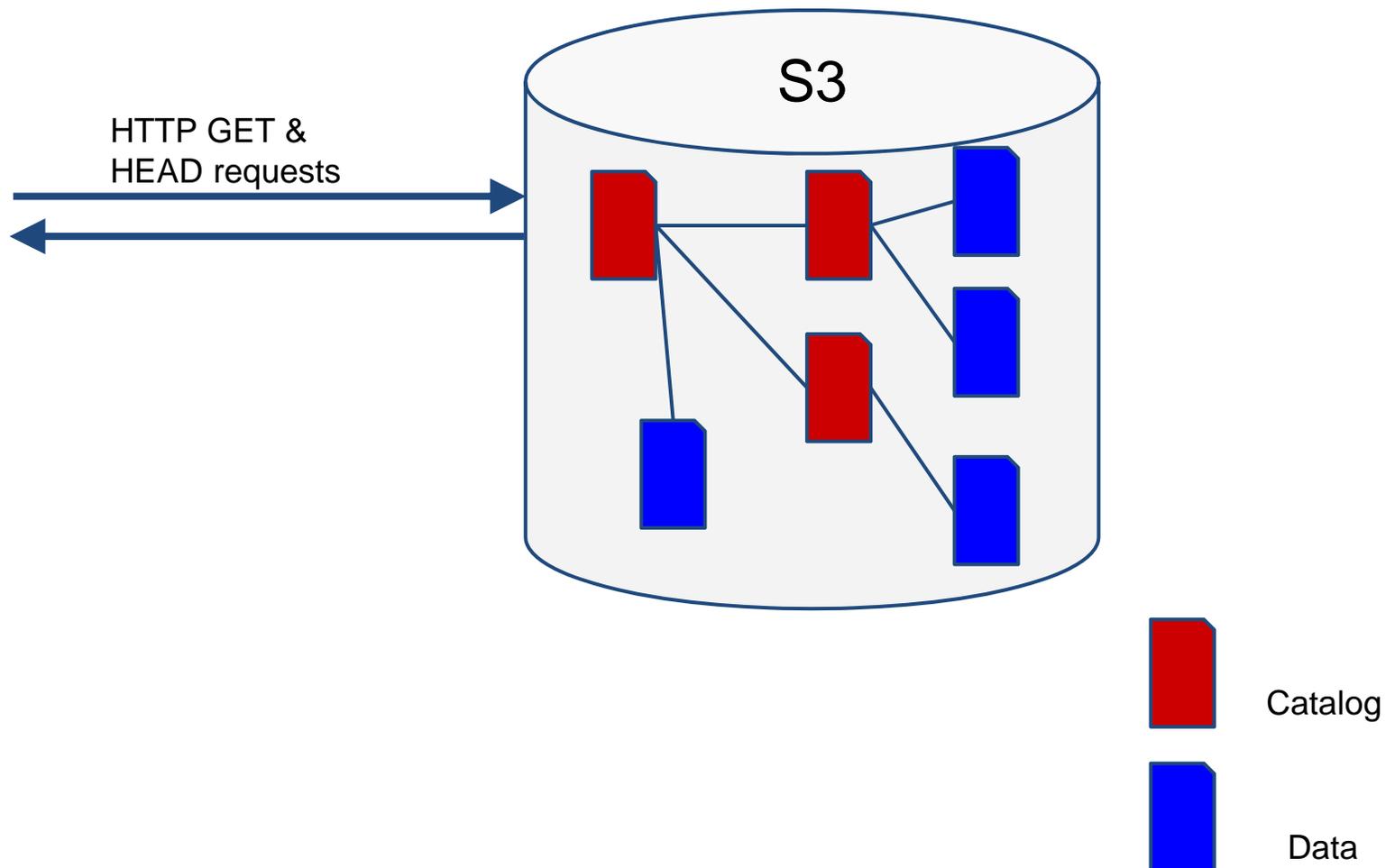
# Solution: Data Store



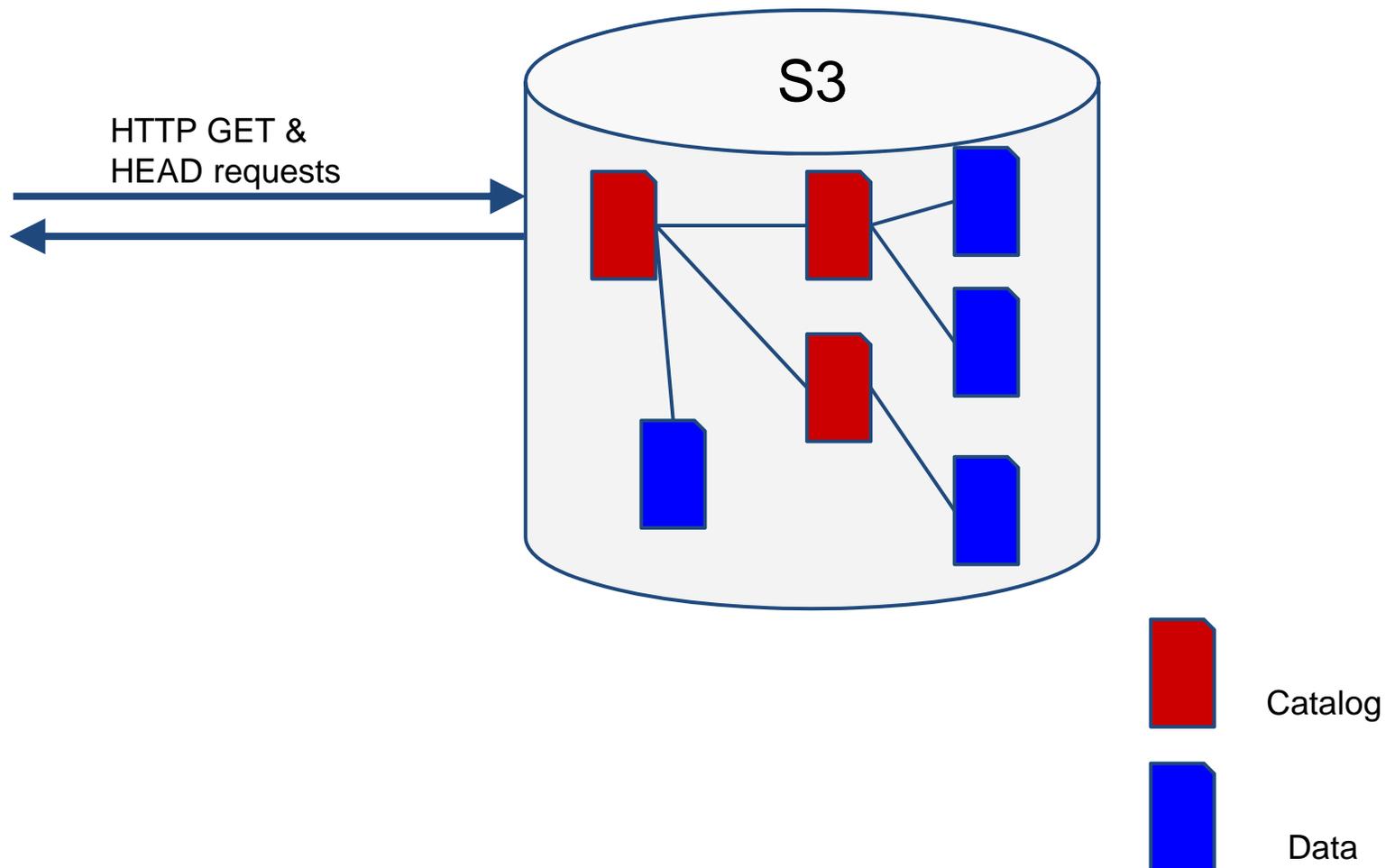
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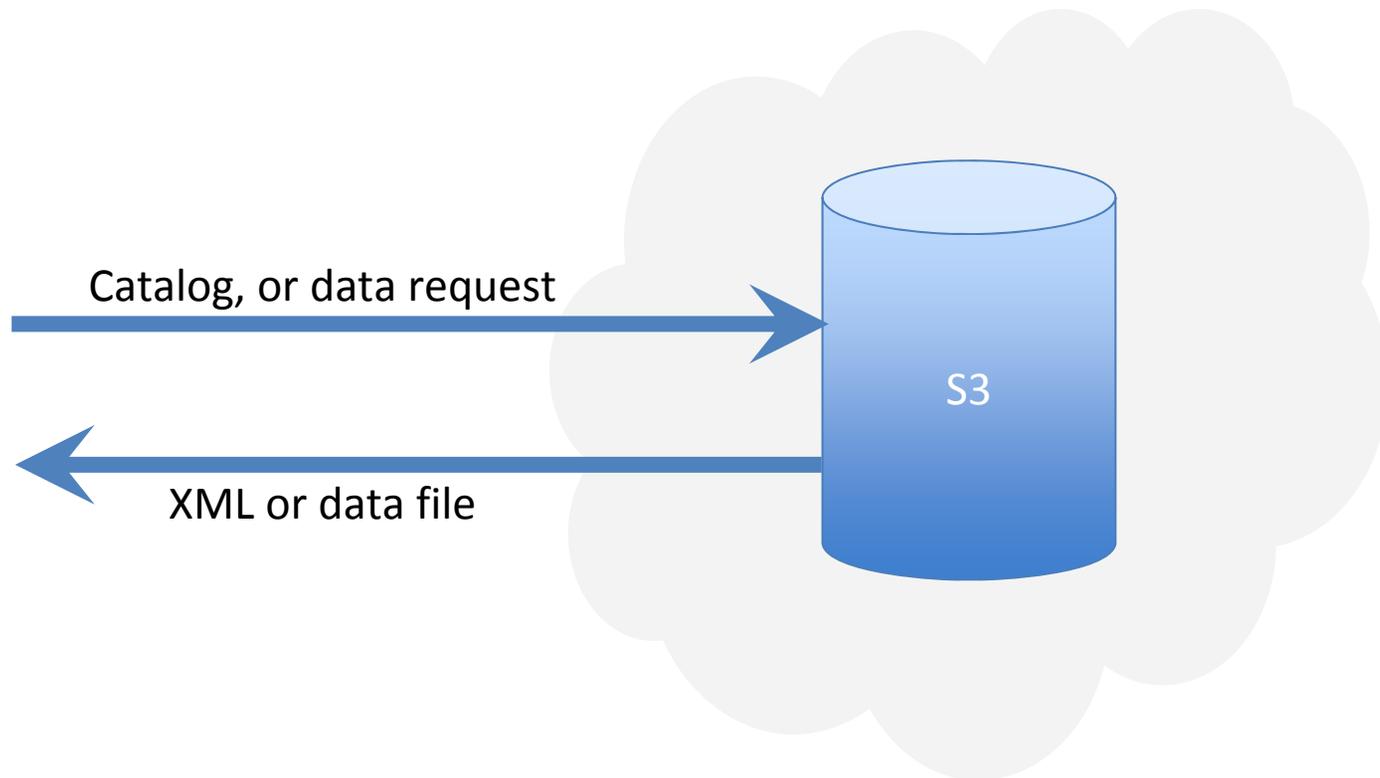
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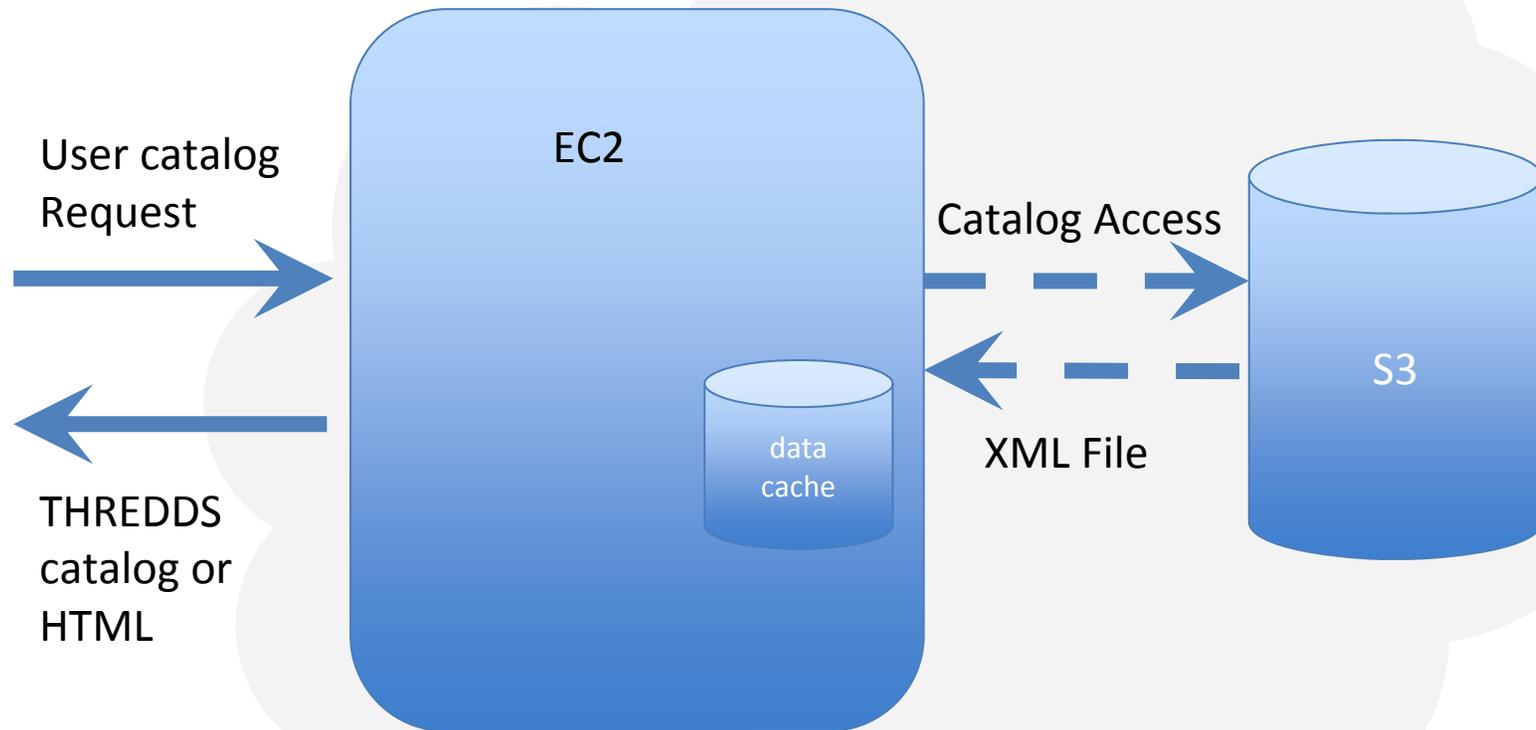
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# Web requests

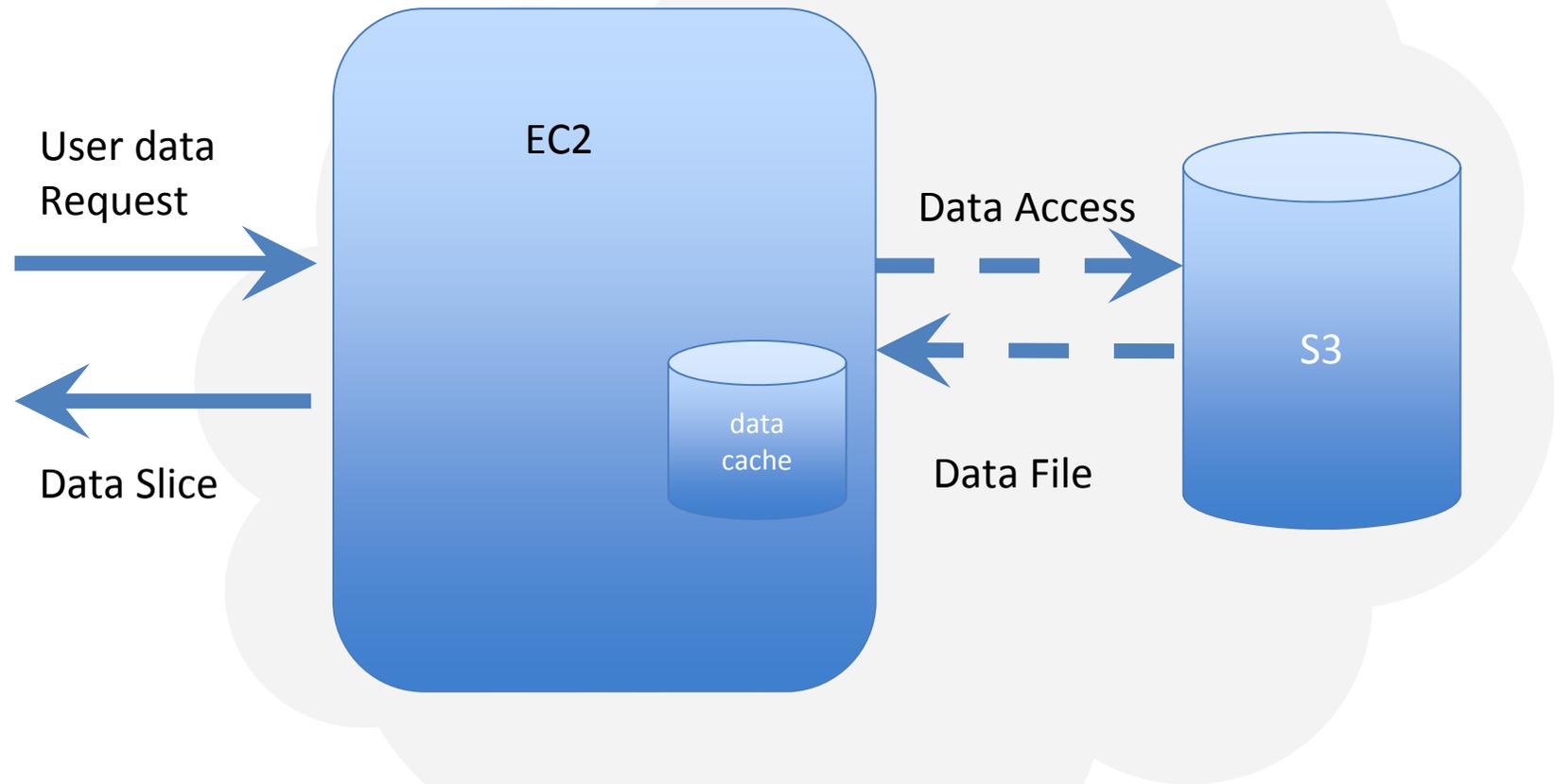


# OPeNDAP Catalog requests



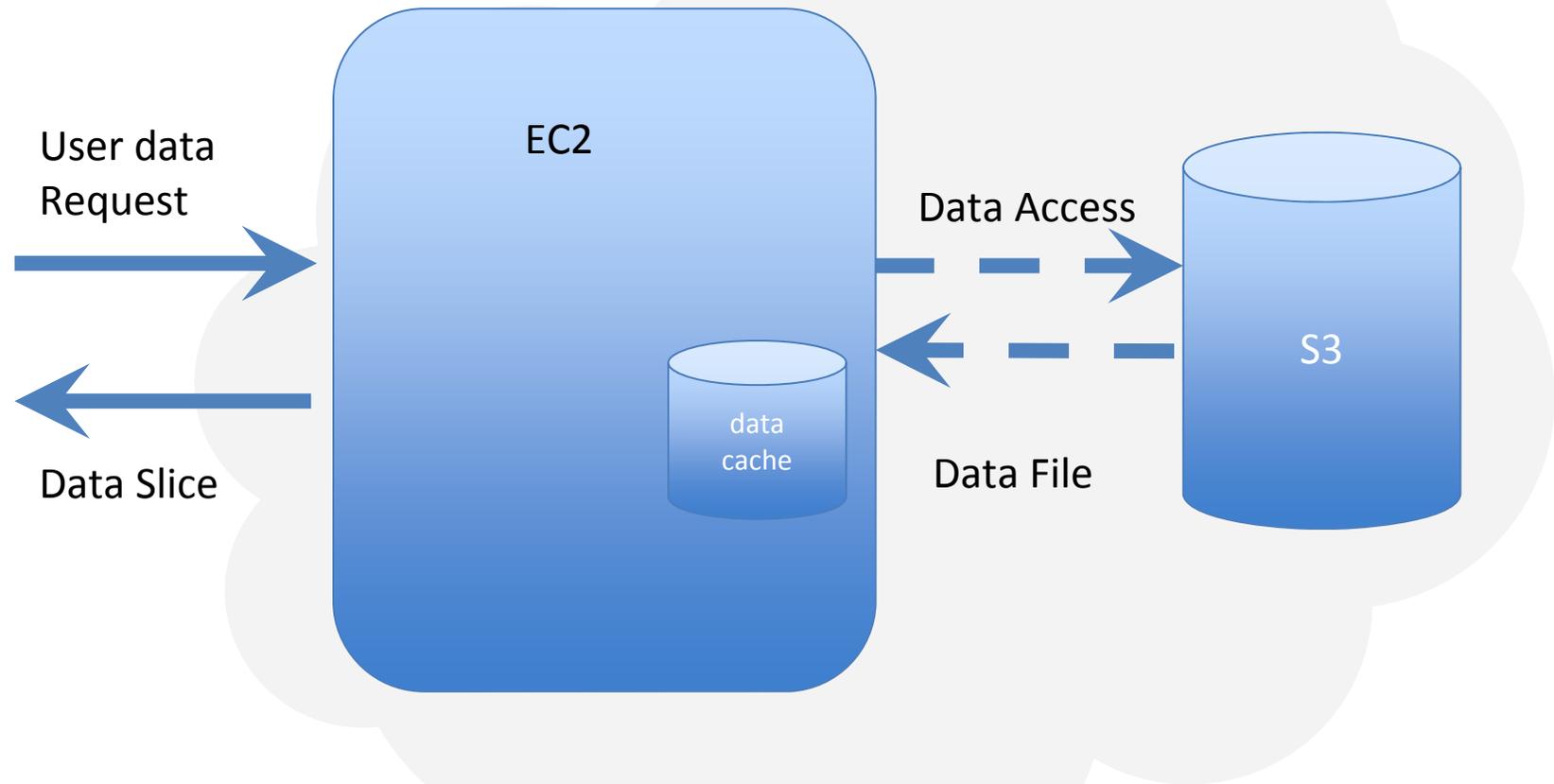
To enhance performance, data were accessed from S3 only when not already cached. 

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- Glacier: Places additional demands on clients.

# Summary

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- OPeNDAP server with minimal changes
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- Data accessible to other systems
- Solution widely applicable