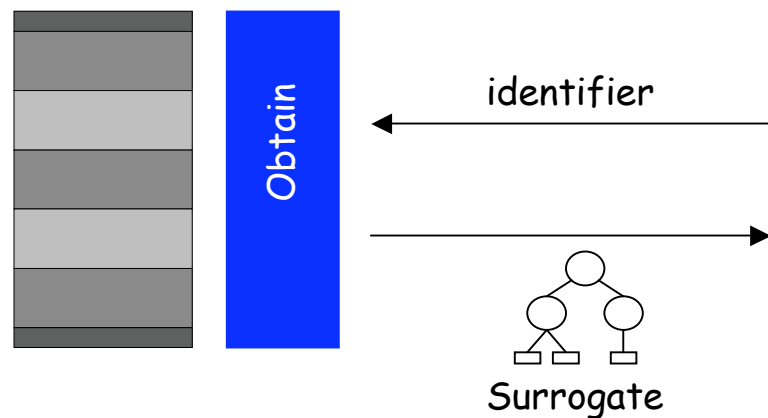


Obtain functionality



Herbert Van de Sompel
Research Library
Los Alamos National Laboratory, USA

This work was supported by NSF award number IIS-0430906 (Pathways)



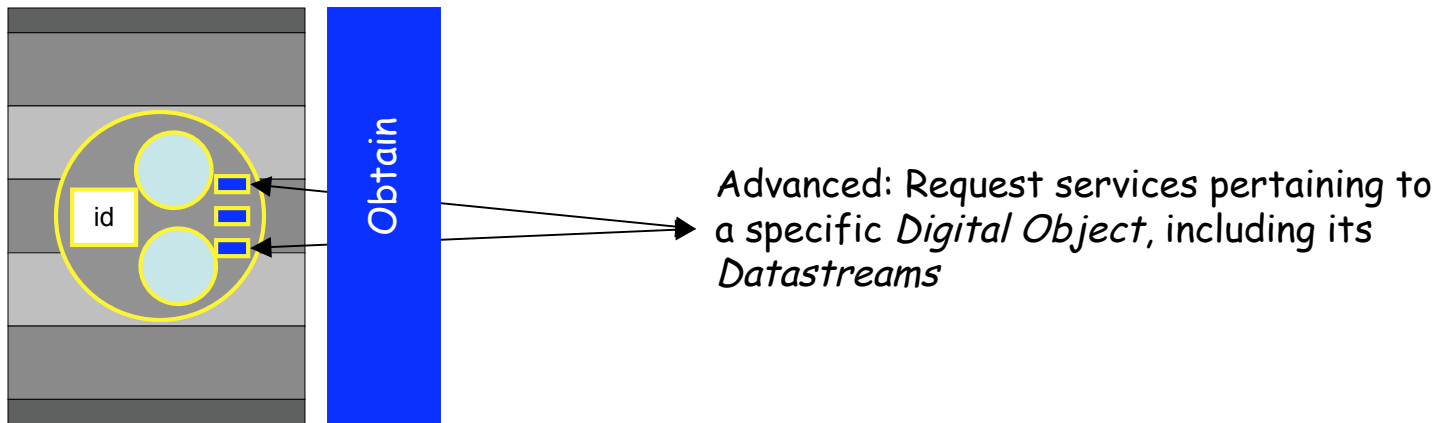
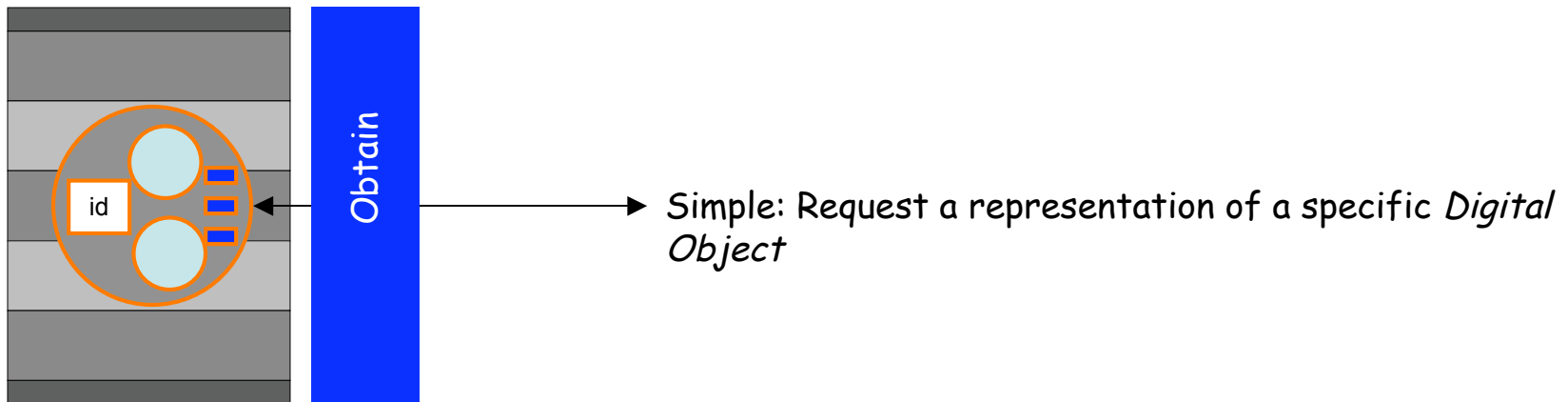
Obtain functionality

Obtain

Obtain interface: a Repository interface that supports the request of services pertaining to individual Digital Objects (including their component Datastreams).



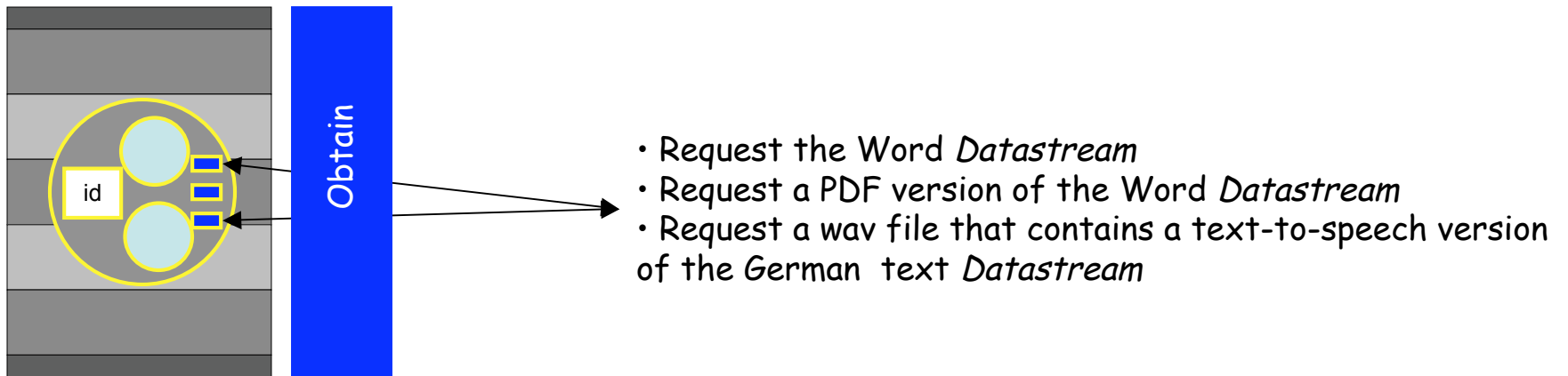
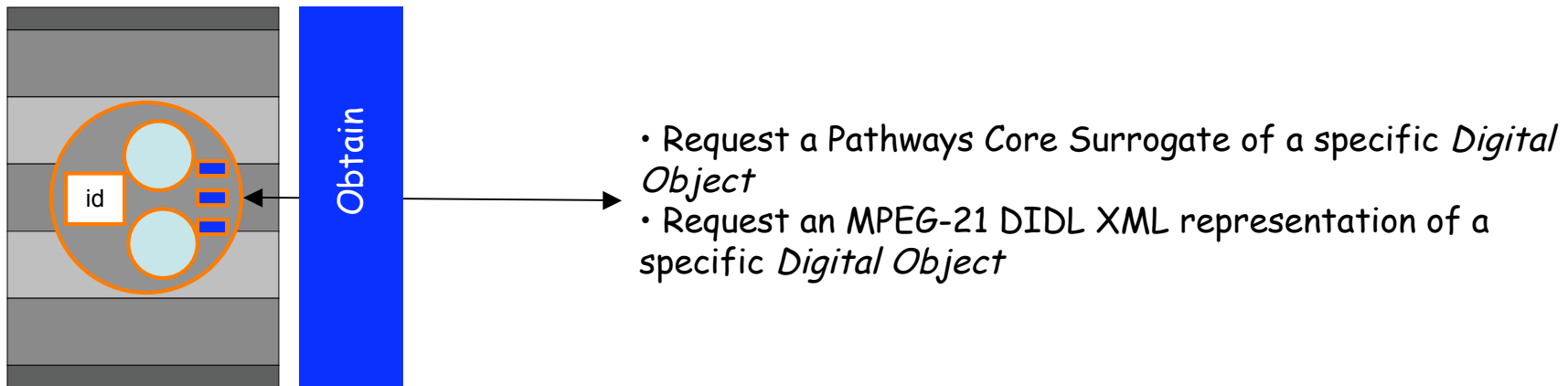
Obtain functionality: aim



Obtain functionality: a rich service framework around a specific *Digital Object*



Obtain functionality

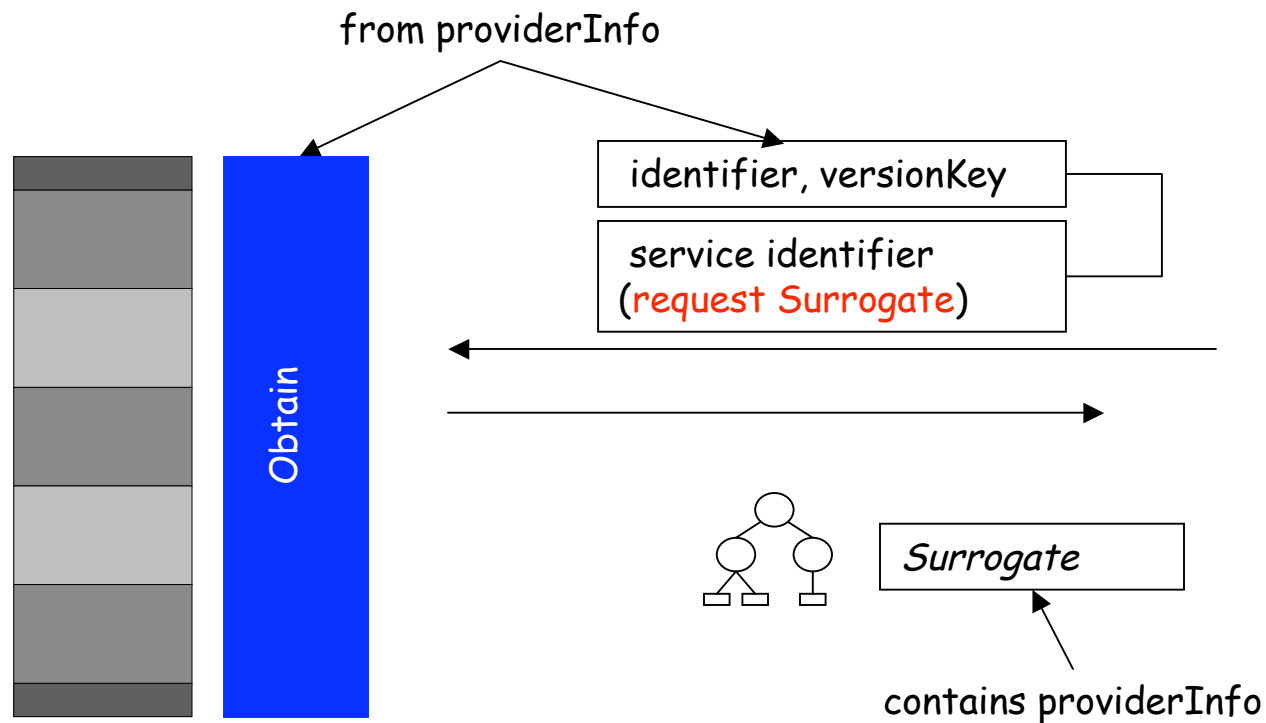


Obtain functionality: a rich service framework around a specific *Digital Object*



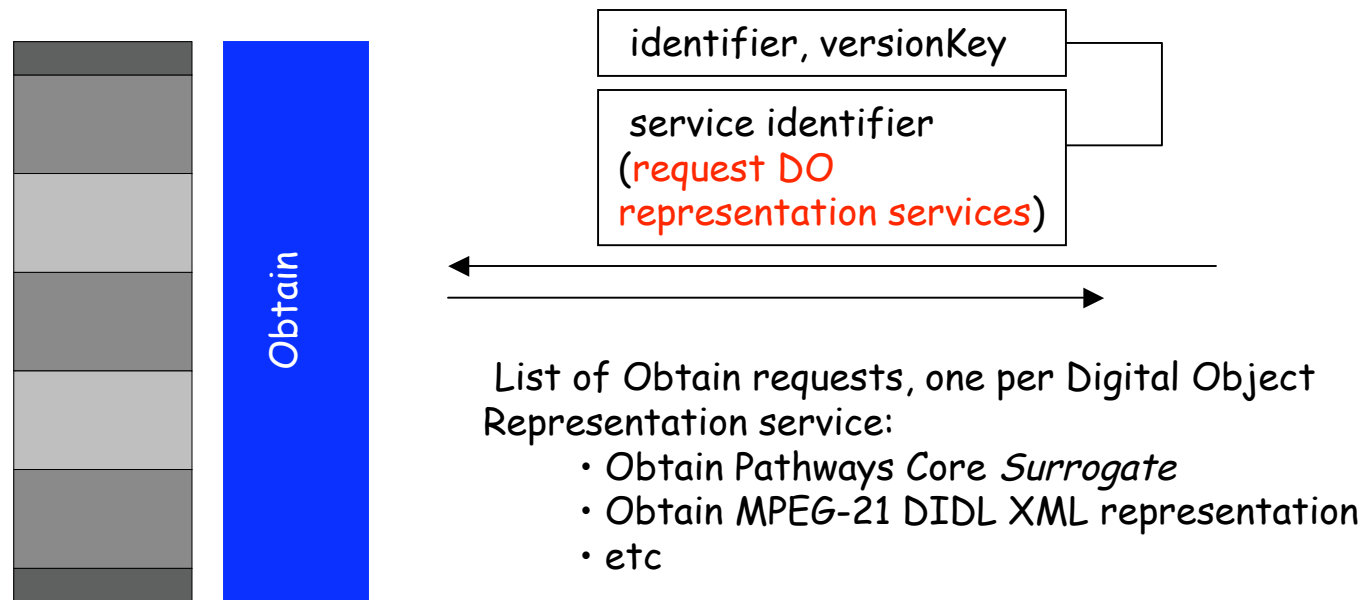
Obtain Surrogate: request *Surrogate* for a *Digital Object*

The Obtain Surrogate request asks for a *Surrogate* of a *Digital Object* given its identifier (and optional versionKey)



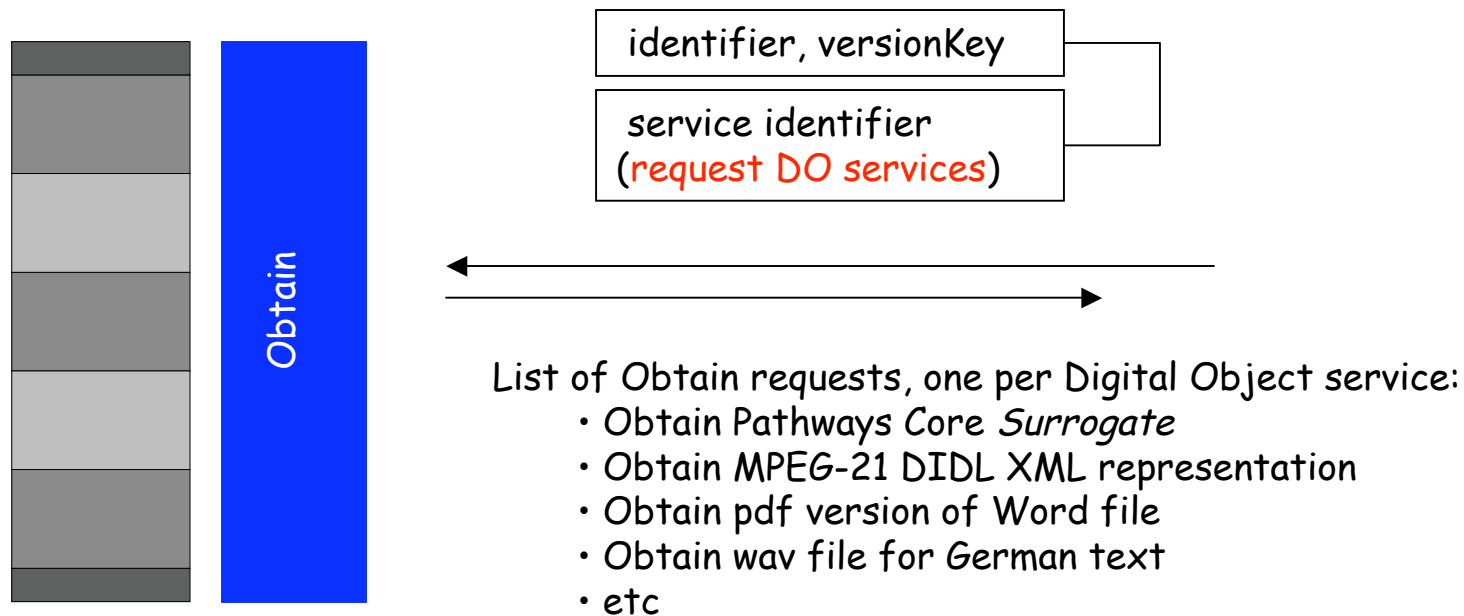
Obtain Digital Object Representations

The Obtain Surrogate request can be embedded in a framework (Obtain Digital Object Representations) to request various representations of a *Digital Object*

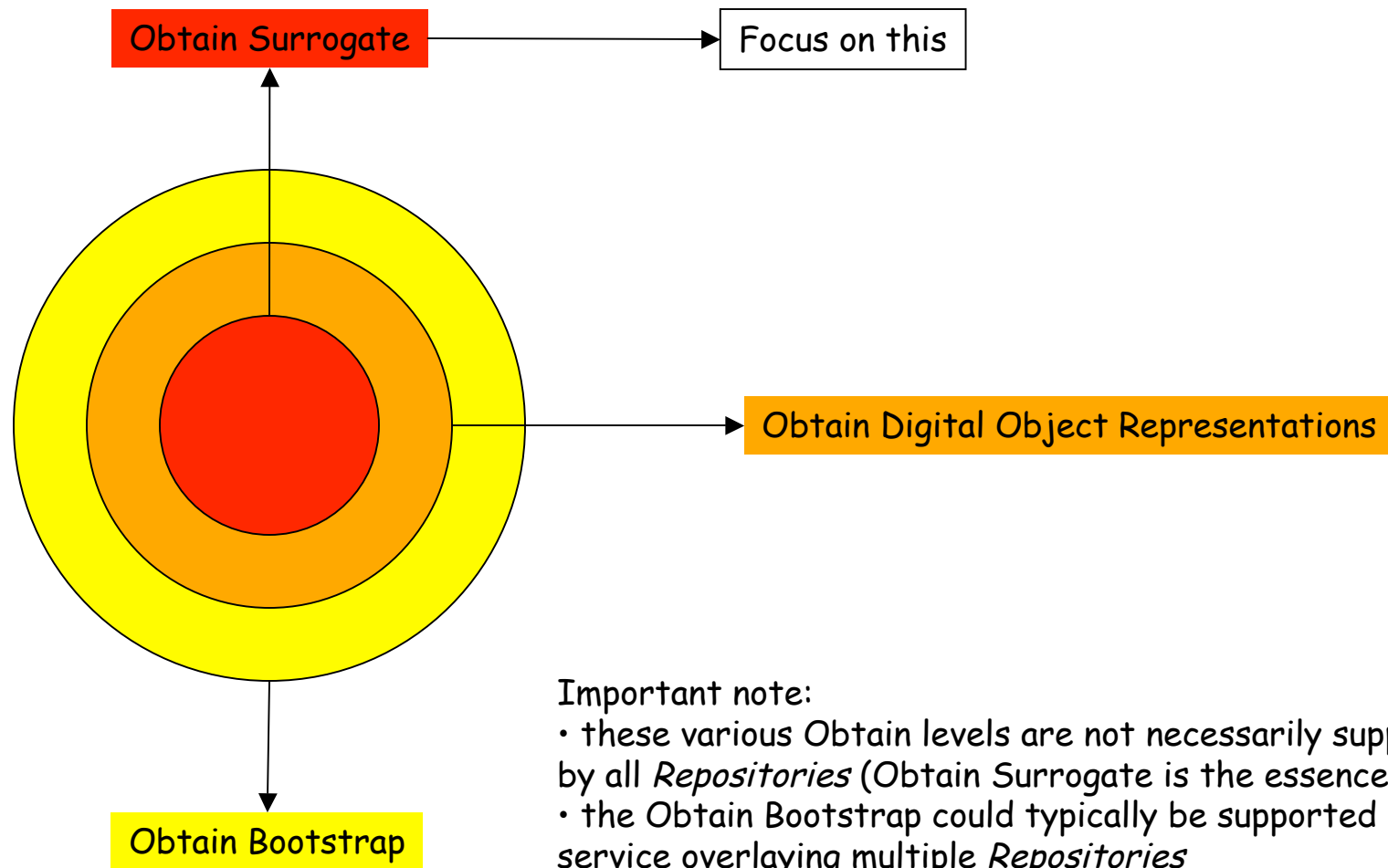


Obtain Bootstrap

The Obtain Digital Object Representations request can be embedded in a framework (Obtain Bootstrap) to request various services pertaining to a *Digital Object*, including its *Datastreams*



Various Levels of Obtain

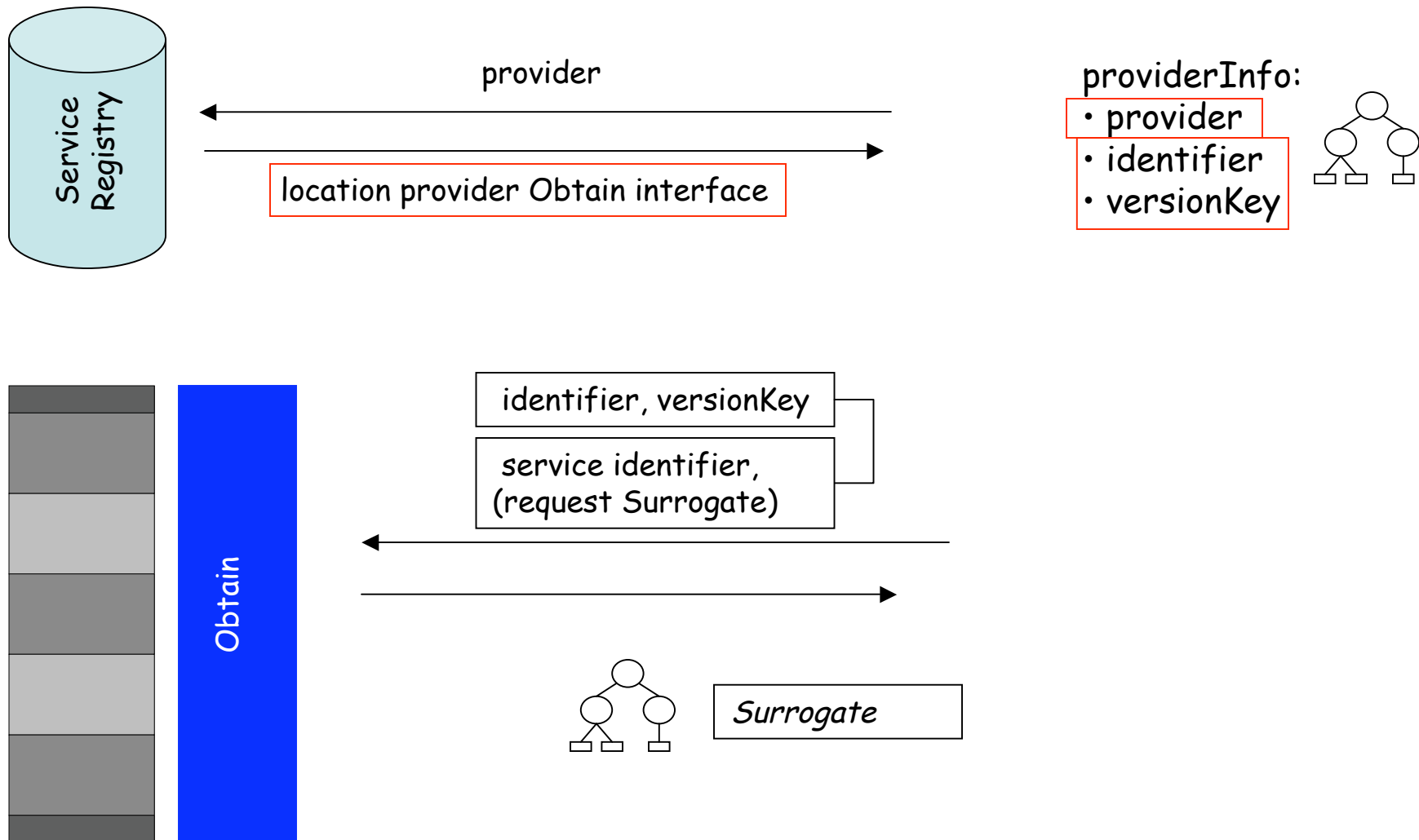


Important note:

- these various Obtain levels are not necessarily supported by all *Repositories* (Obtain Surrogate is the essence)
- the Obtain Bootstrap could typically be supported by a service overlaying multiple *Repositories*



Obtain as global Identifier-to-Surrogate Resolution protocol



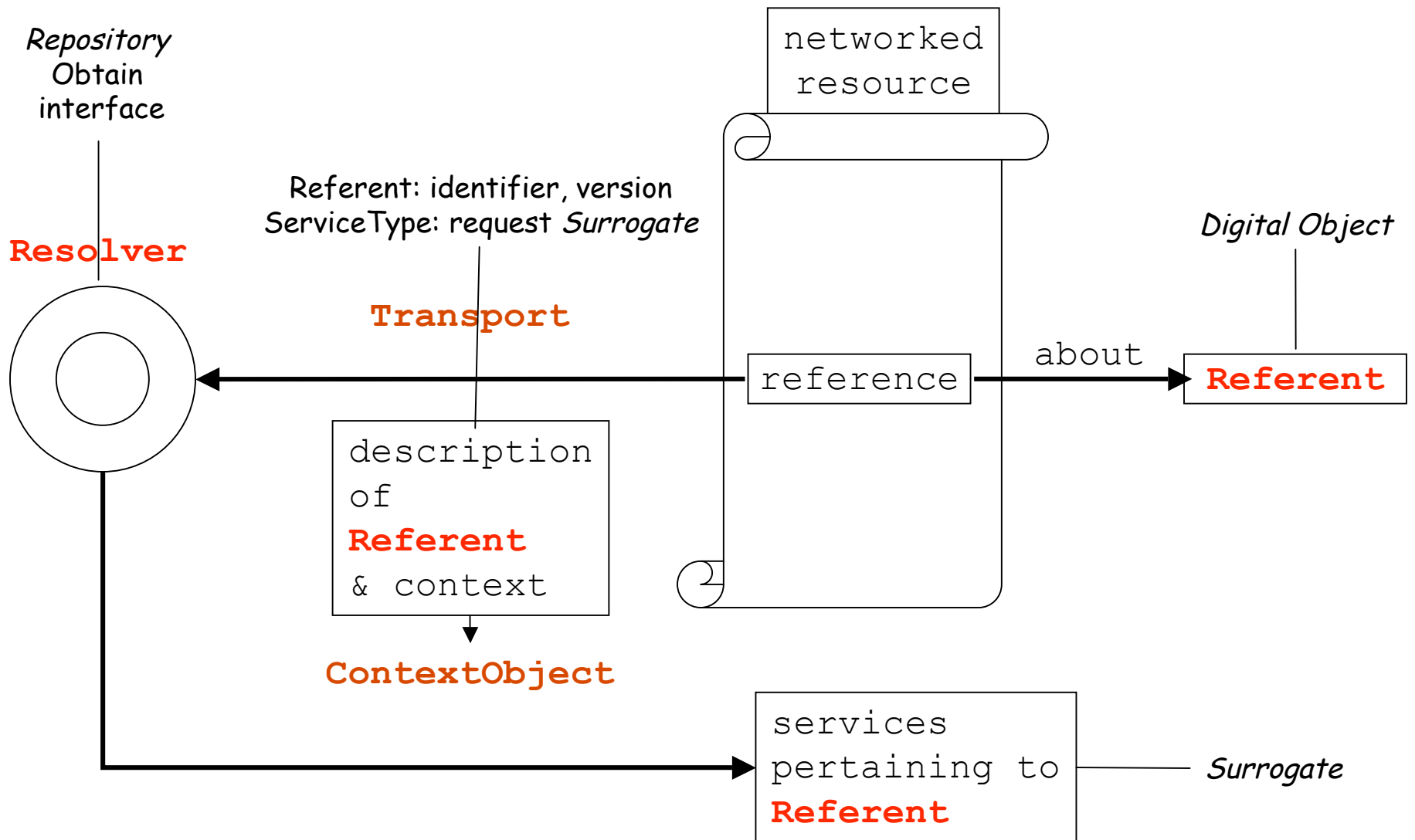
Candidate technology: OpenURL Framework Standard

- ANSI/NISO Z39.88-2004 OpenURL Framework Standard
(http://www.niso.org/standards/resources/Z39_88_2004.pdf&std_id=783):

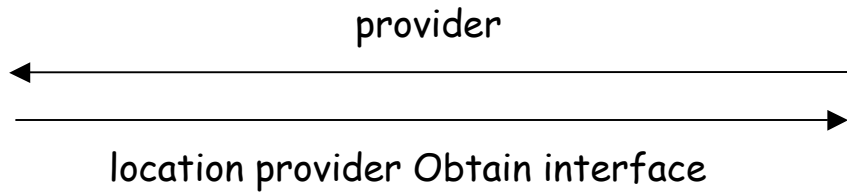
An OpenURL Application is a networked service environment in which packages of information are transported over the network. These descriptions have a description of a referenced resource at their core, and they are transported with the intent of obtaining context-sensitive services pertaining to the referenced resource.



Candidate technology: OpenURL Framework Standard

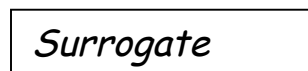
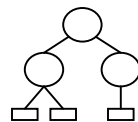
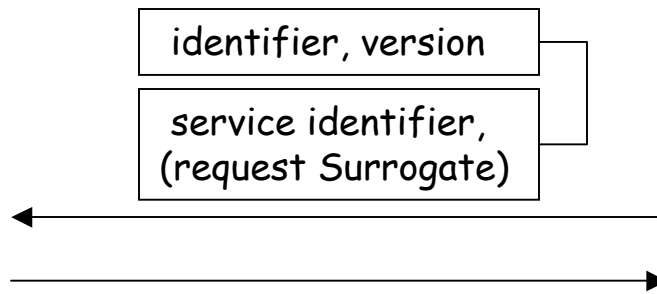
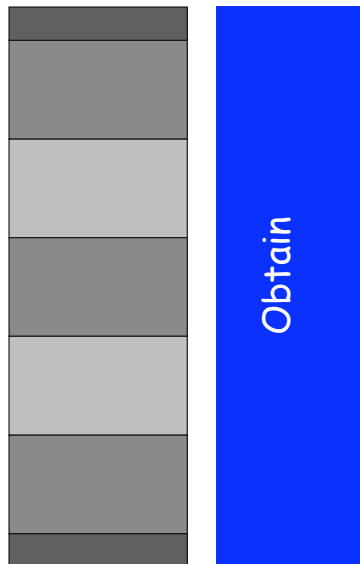
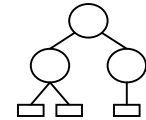


Obtain as **long-term** global Identifier-to-Surrogate Resolution protocol

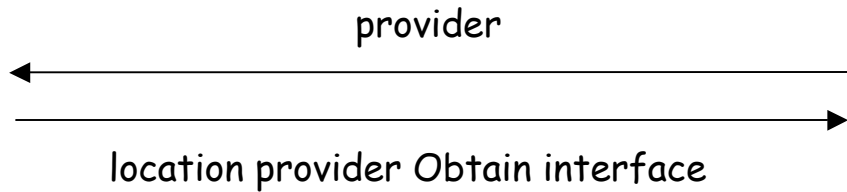


providerInfo:

- provider
- identifier
- version

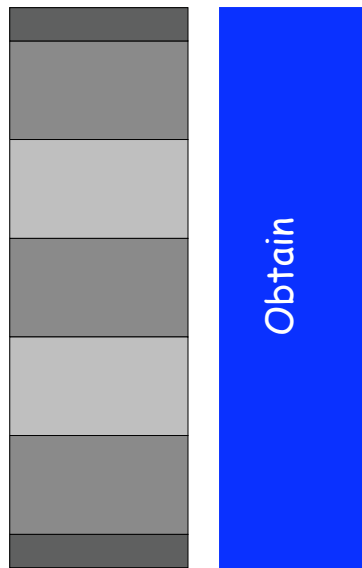
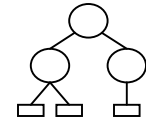


An Obtain to get started

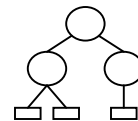
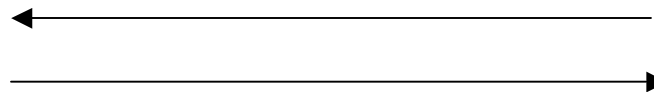


providerInfo:

- provider
- identifier
- version



http://my.repository.org/obtain?
url_ver = z39.88-2004 &
rft_id = info:doi/123.112454 &
svc_id = info:pathways/svc/pwc.rdf



Surrogate

Key/EncodedValue
ContextObject

HTTP Transport

RDF/XML
Pathways Core
Surrogate

Concrete



Obtain a Surrogate from:

- an aDORe Repository:
[http://african.lanl.gov/pwc/adore/adore-openurl-resolver-frontend?
url_ver=Z39.88-2004 &
rft_id=info:doi/10.1016/j.dyepig.2004.06.022 &
svc_id=info:pathways/svc/pwc.rdf](http://african.lanl.gov/pwc/adore/adore-openurl-resolver-frontend?url_ver=Z39.88-2004&rft_id=info:doi/10.1016/j.dyepig.2004.06.022&svc_id=info:pathways/svc/pwc.rdf)
- a DSpace repository:
[http://sts-5.mit.edu:8080/pathways/obtain.jsp?
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svc_id=info:pathways/svc/pwc.rdf](http://sts-5.mit.edu:8080/pathways/obtain.jsp?url_ver=Z39.88-2004&rft_id=hdl:123456789/5&svc_id=info:pathways/svc/pwc.rdf)
- the arXiv:
[http://beta.arxiv.org:81/openurl-resolver?
url_ver=Z39.88-2004 &
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svc_id=info:pathways/svc/pwc.rdf](http://beta.arxiv.org:81/openurl-resolver?url_ver=Z39.88-2004&rft_id=info:arxiv/cs/0106057v1&svc_id=info:pathways/svc/pwc.rdf)
- an Apache Web server:
[http://african.lanl.gov/pwc/mod_openurl/openurl?
url_ver=Z39.88-2004 &
rft_id=http://african.lanl.gov:8090/apache_pb.png &
svc_id=info:pathways/svc/pwc.rdf](http://african.lanl.gov/pwc/mod_openurl/openurl?url_ver=Z39.88-2004&rft_id=http://african.lanl.gov:8090/apache_pb.png&svc_id=info:pathways/svc/pwc.rdf)

OpenURL Framework advantages

- Nice fit: OpenURL Framework is all about service frameworks around classes of identifiable objects
- Has the necessary abstractions
 - Obtain deployable on the basis of current and future technologies
- Supports identifiers from any namespace
 - No requirement to select specific identification technology
- Potential for:
 - Adding context to service requests, i.e. Requester (user, user-agent) information
 - Defining rich service environment pertaining to identified *Digital Object* using the same technology (cf. PhD Jeroen Bekaert, aDORe OpenURL interface, Pathways InterDisseminator)

