



# Reptor

## A Status Update

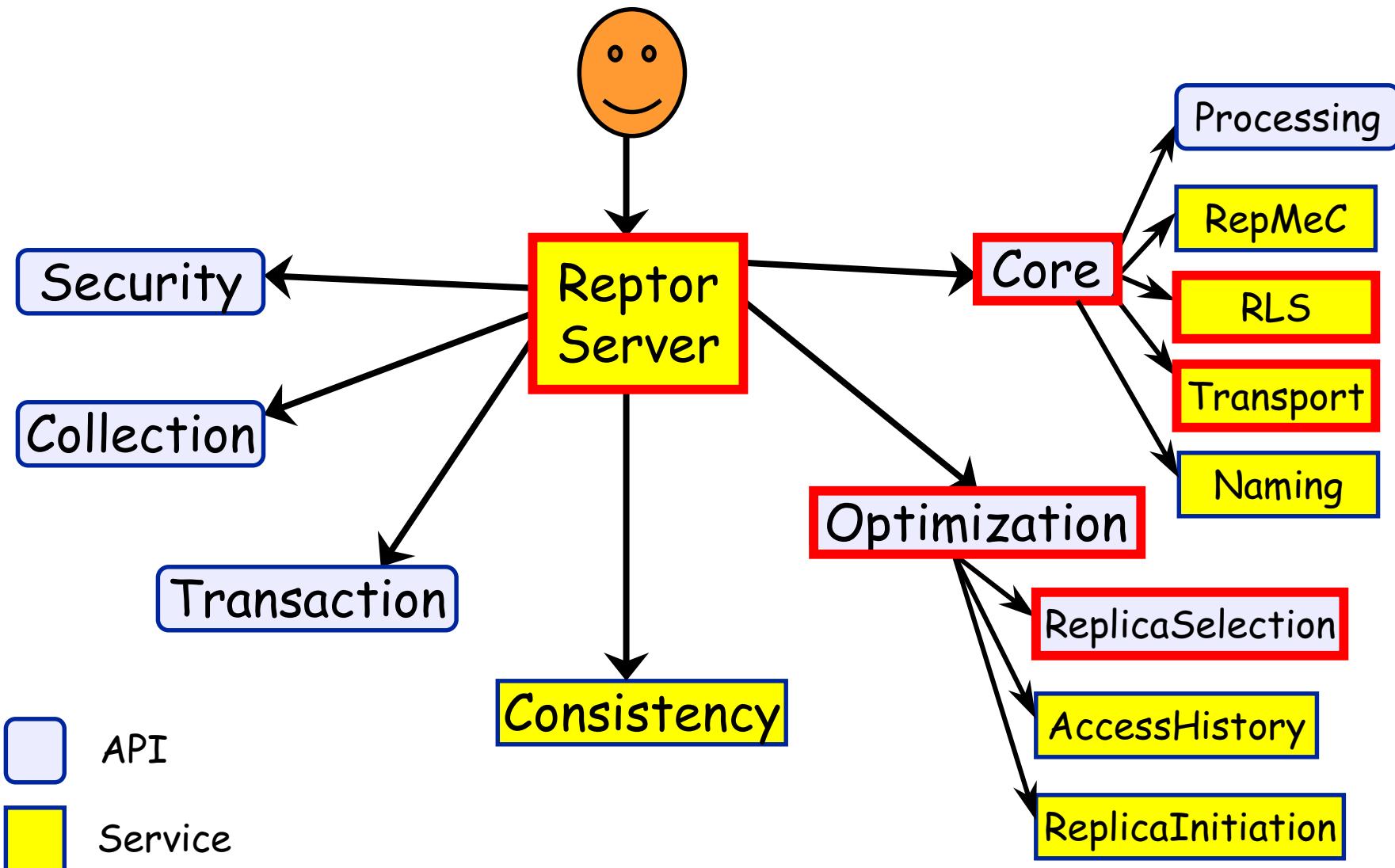
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WP2 (Data Management) - EU DataGrid Project

WP2 Workshop

29-30 August 2002

# Main Reptor Components



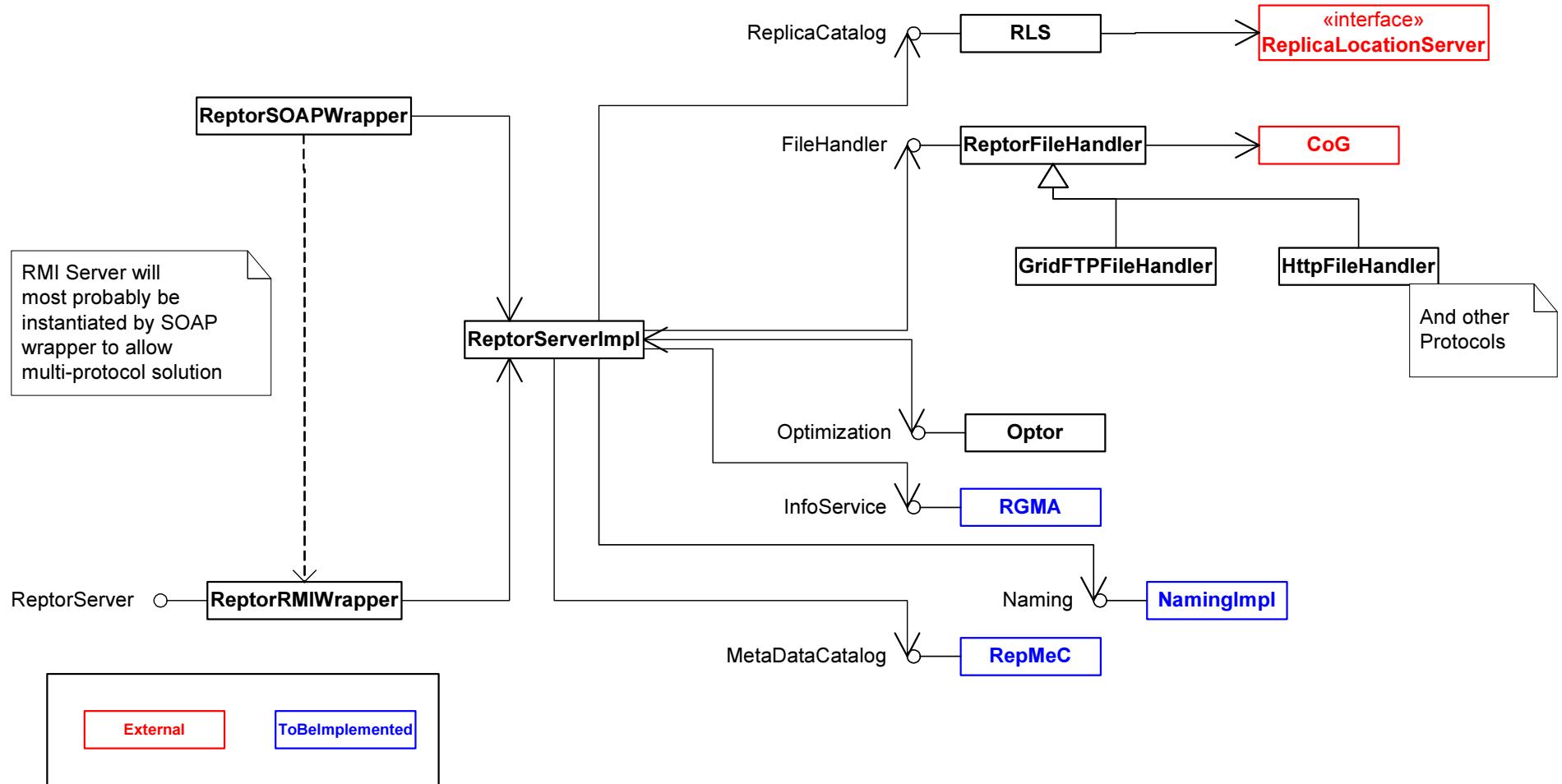


# Reptor Technology



- |                               |  |
|-------------------------------|--|
| u Reptor Server               | Java 2                                     |
| u Client/Server communication | RMI (SOAP under way)                       |
| u Client API                  | Java (remote interface)<br>C++ through JNI |
| u Replica Catalog             | RLS (Giggle) through JNI<br>interface      |
| u Transport                   | CoG (Java Globus)                          |

# Reptor Structure





# Reptor Core API



- u **registerEntry** (lfn, source)
- u **unregisterEntry** (lfn, source)
- u **copyFile** (source, destination, protocol)
- u **copyAndRegisterFile**(lfn, source, destination, protocol)
- u **replicateFile**(lfn, source, destination, protocol)
- u **deleteFile**(lfn, source)
- u **listReplicas**(lfn, [ce|se])

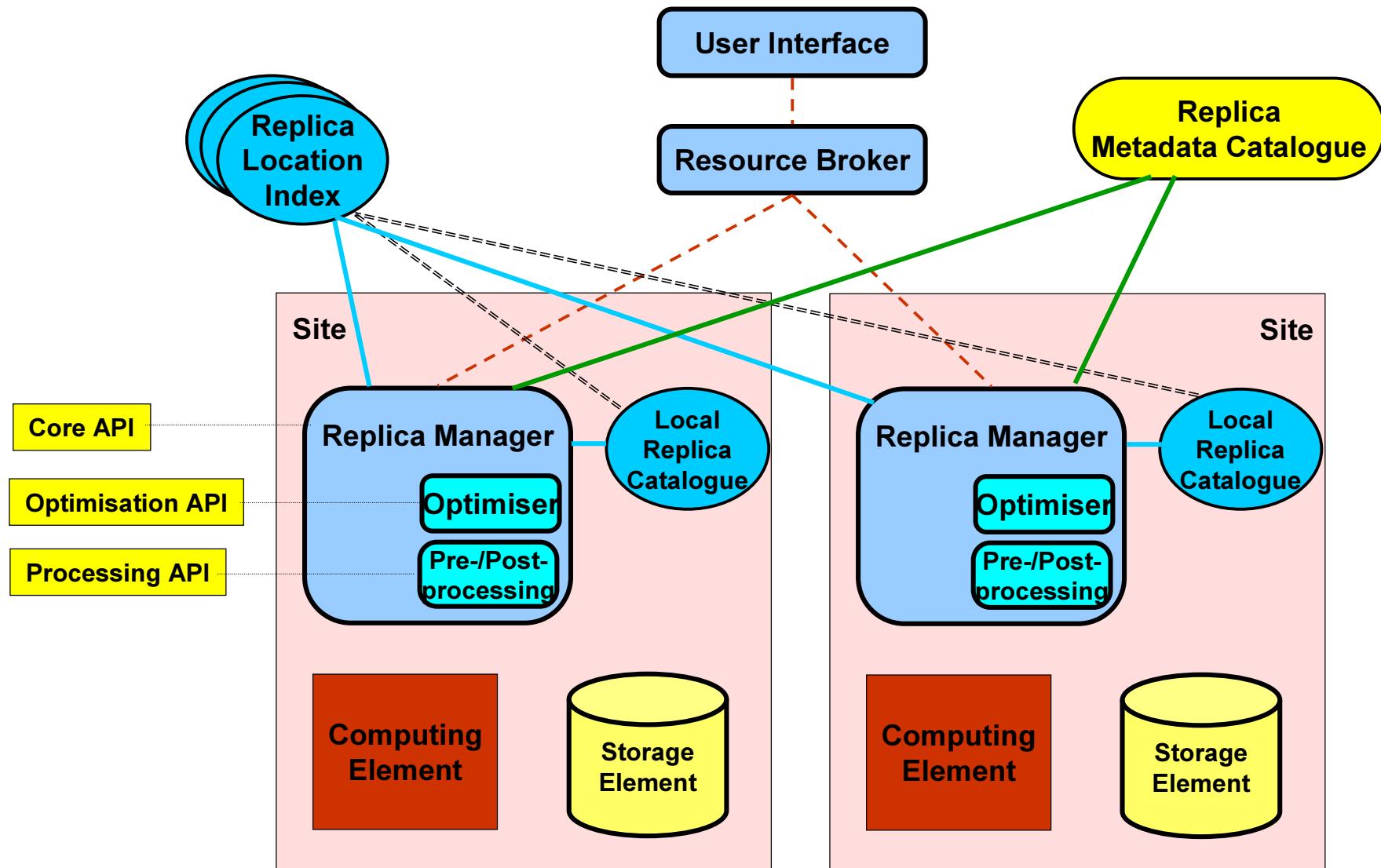


# Optimization API (Optor)

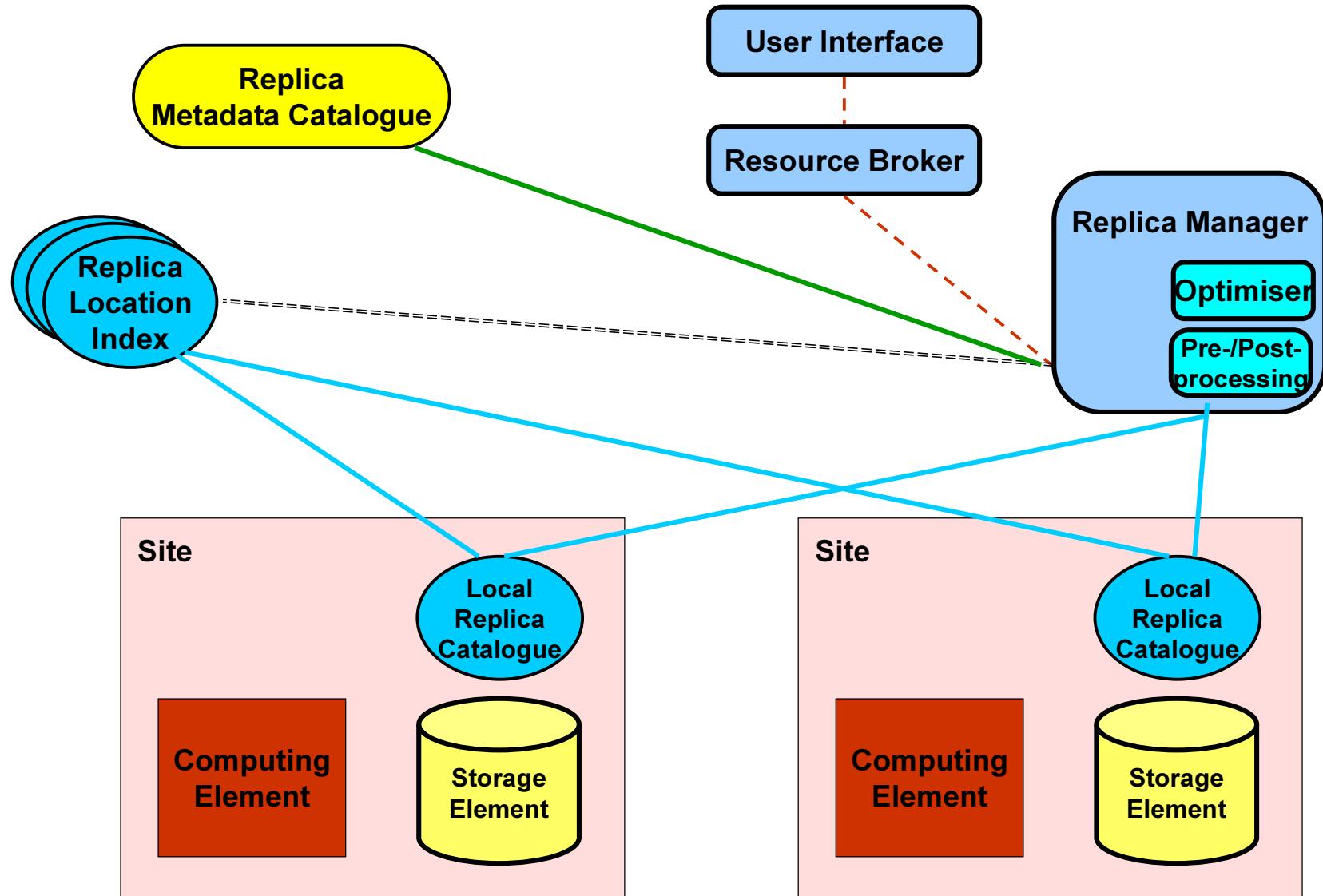


- „ **getAccessCost** (String[] lfn, String ce, String[] protocol,  
float[] fileFraction)
  
- „ **getBestFile** (String[] lfn, String destinationSE,  
String[] protocol, float[] fileFraction)

# Possible Reptor Deployment I



# Possible Reptor Deployment II





# Open Issues for TB 2.0



- u RepMeC connection
- u Name Generator
- u R-GMA connection
- u RLS deployment (multi-VO support)
- u Security
- u SOAP interface
- u Testing (unit + functionality)
- u SE (VO + storage dir from R-GMA)



# Priorities for TB 2.x



- u Consistency
- u Transaction/Fault Tolerance
- u Pre/Post Processing
- u Collection
- u Advanced Optimization