



## Enabling Grids for E-sciencE

## **HTTPS for SRM**

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**Enabling Grids for E-sciencE** 

- HTTPS to replace HTTPG
- Why?
- When and how: migration path
- Is there interest?



# **HTTPS** replacing **HTTPG**

Enabling Grids for E-science

### Replacing HTTPG by HTTPS for SRM

- Only SOAP transport layer, not data transfer!
- HTTPG was for SRM Copy
- GridSite delegation works over plain HTTPS + WS-I SOAP
- GT4/delegation works over HTTPS + WS-RF

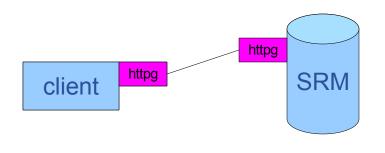
SRM Copy can work over plain HTTPS



- HTTPS works out-of-the-box
  - simplified client development
  - easier server side deployment (load balancing)
- most of the SRM calls do not require delegation
- HTTPS only environments: browser/JavaScript

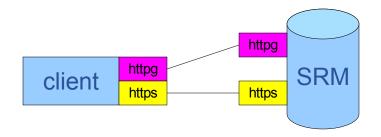
# Migration path

1. HTTPG only



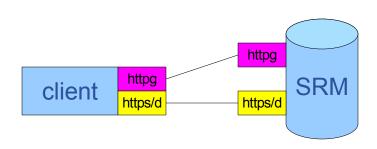
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2. Hybrid clients



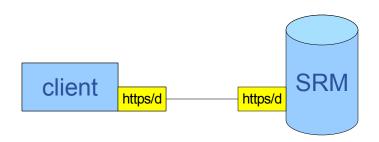
Existing SRMs enable HTTPs endpoint too.

3. HTTPS with delegation



New SRMs may choose to implement HTTPS only.

4. HTTPS only



#### **Enabling Grids for E-sciencE**

- Is there interest for simplified clients?
- Is there interest for simplified servers?
- Feasibility of enabling HTTPS endpoint, beside HTTPG within the lifetime of SRM v2.x?
- Could SRM v3.x be HTTPS only?