



JRA1.3: SRMSEC

(for security)

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(on behalf of JRA1.3)

SRM

- Protocol for controlling storage
 - Uses SOAP over HTTP over GSI.
- Activity may require delegation
 - SRM v2.2 is agnostic to delegation
 - Can't discover which methods require delegation,
 - Could be all, some or none of them.
 - Current deployment has only one method.
 - Clients either always or never delegate.
 - No “hooks” in protocol for client to discover the delegation service.

GridFTP

- Data transfer protocol
 - FTP with some optional extras
 - see RFC 2228, GFD.20, GFD.21, GFD.47
 - Widely used for WAN transfers
 - Separate control and data channels
 - Control: FTP GSS with GSI
 - Clients (typically) never delegate.
 - Data: unencrypted and unauthenticated.
- Migrate GSI to SSL?
 - This is **out of scope** of SRMSEC.

Current status

- SSL transport: demonstrated with a modified server and client
 - Modified dCache server and client,
 - Hardcoded protocol (GSI or SSL) for srmCopy,
 - No delegation, so no support for srmCopy when using SSL.
- ***Nothing decided yet*** about DS
 - Currently in a decision-making process
 - Appreciate input from security group
 - We have some external constraints

Open questions

- DS discovery:
 - same as or derived from SRM, use service discovery (GLUE), smuggle end-point into protocol, adjust SRM protocol, ...
- Technology?
 - SOAP or REST? SRM uses SOAP. SRM+GDS somewhat tested, REST not.
- When to delegate?
 - Client always delegates? Update SRM?
- Many more “details”
 - See EMI TWiki list of open question.



Thank you!

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