Solid server – Proposed architecture v1.0.0 *(status: obsolete)*

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LDP and Access Control

HTTP

≪interface≫
HttpHandler

+ canHandle(HttpRequest) : Promise<boolean>
+ handle(HttpRequest, HttpResponse) : void

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HttpServer

+ HttpServer(Array<HttpHandler>)
+ listen(port : int) : void
+ handle(HttpRequest, HttpResponse) : void

Authentication

≪interface≫
CredentialsExtractor

+ extractCredentials(HttpRequest) : Promise<Credentials>

creates

Credentials

LDP

1

LdpHandler

+ LdpHandler(OperationFactory)

1 **TargetExtractor** — creates — **ResourceIdentifier**

* **BodyParser** — creates — **Representation** ← **Patch**

1 **PreferenceParser** — creates — **RepresentationPreferences**

1 **ResponseWriter** — writes — **HttpResponse**

Operations

OperationFactory

+ OperationFactory(ResourceStore)
+ createOperation(method : string, ResourceIdentifier,
RepresentationPreferences, . . .) : Operation

creates

≪interface≫
Operation

+ target : ResourceIdentifier
+ requestBody : Representation?
+ preferences : RepresentationPreferences
+ requiredPermissions : PermissionSet

+ execute() : Promise<ResponseDescription>

GetOperation

PostOperation

PutOperation

PatchOperation

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1

uses

Authorization

≪interface≫
Authorizer

+ hasPermissions(Credentials, ResourceIdentifier,
PermissionSet) : Promise<boolean>

AclBasedAuthorizer

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Storage

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≪interface≫
ResourceStore

+ getRepresentation(ResourceIdentifier, RepresentationPreferences) : Promise<Representation>
+ addResource(container : ResourceIdentifier, Representation) : Promise<ResourceIdentifier>
+ setRepresentation(ResourceIdentifier, Representation) : Promise<void>
+ deleteResource(ResourceIdentifier) : Promise<void>
+ modifyResource(ResourceIdentifier, Patch) : Promise<void>

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