Solid server – Proposed architecture v1.0.0 *(status: superseded)*

Ruben Verborgh – May 9, 2019

LDP and Access Control

HTTP

≪interface≫
HttpHandler

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

HttpServer

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

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Authentication

≪interface≫
CredentialsExtractor

+ extractCredentials(HttpRequest) : Promise<Credentials>

creates

Credentials

1

LDP

LdpHandler

+ LdpHandler(OperationFactory)

TargetExtractor — creates → **ResourceIdentifier**

1

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

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PreferenceParser — creates → **RepresentationPreferences**

1

ResponseWriter — writes → **HttpResponse**

1

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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

Authorization

≪interface≫
Authorizer

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

uses

AclBasedAuthorizer

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Storage

1

≪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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