1 Overview

This document is a Technical Design document for the Read component of the eSciDoc Technical Prototype.

The eSciDoc Technical Prototype is a proof-of-concept that the development tools and technologies proposed during the planning phase of the eSciDoc project fit together and are suitable for the eSciDoc requirements.

The intention of this document is to describe in detail how the Read component described in the *eSciDoc Prototype Functional Design* will be implemented. The document should be detailed enough for the developer to base the development on it.

The Read component offers a two-stage functionality. First a list of all Files currently stored in Fedora should be requested by the Control-Component. Also for each File the upload – date should be requestable. Secondly there should be a functionality for retrieving single Files by the Fedora PID.

The scope of this document only comprises specifics for the Read component. General technical details and assumptions are not included, but can be found in the document *eSciDoc Prototype Technical Specification*. Furthermore, no functional description is included in this document. For such information, please refer to the *eSciDoc Prototype Functional Design* document.

1.1 Class Diagram

shows the class diagram for the Read component of the eSciDoc Technical Prototype.

de

fiz

escidoc

prototype

ejb

ReadBean
+readStorage: ReadStorage
+ejbCreate() +RetrieveFileList(): Vector +RetrieveFile(pid: String): String

exceptions

<<exception>> **ApplicationException**

<<exception>> **FedoraApplicationException**

<<exception>> **SystemException**

<<exception>> **FedoraSystemException**

read

ReadStorage
+fedoraClient: FedoraClient
+retrieveFileList(): Vector +retrieveFile(pid: String): String

beans

FedoraFile
+FileId: String +UploadDate: Date

persistence

fedora

FedoraClient
+apia: APIA +apim: APIM
+retrieveFileList(): Vector +retrieveFile(pid: String): String +createSoapStub() raises FedoraSystemException +ingestFOXML(BYTESFOXML: [] bytes) raises FedoraApplicationException, FedoraSystemException