FileStore Web Service Design

Version 1.0

# Description

FileStore is Web Service to persist and provide files attached to artifacts or any other kind of user files in Blueprint Web Application.

# Scope

FileStore is limited to persisting and providing files or any other large binary or textual data streams represented via file.

# Interface

## Endpoint

REST endpoint at /svc/filestore

## Methods

### POST /file

Method for uploading file into the application.

Returns string containing 32 alphanumerical characters of unique identifier (GUID) of the posted file.

GET /file/{id}  
- where {id} is string containing 32 alphanumerical characters of unique identifier (GUID) of the file to retrieve

Method for downloading file from the application.

Returns file stream.

Example: GET /svc/filestore/file/ee40d62d883d4eecb095f78883b69d63

DELETE /file/{id}  
- where {id} is string containing 32 alphanumerical characters of unique identifier (GUID) of the file to delete

Method for removal of previously uploaded file.

Returns string containing 32 alphanumerical characters of unique identifier (GUID) of the deleted file.

Example: DELETE /svc/filestore/file/ee40d62d883d4eecb095f78883b69d63

# Technology

FileStore Web Service is to be implemented using ASP.NET Web API/C#. Database is to be Microsoft SQL Server 2012.

# Behavior

## Methods

### POST /file

Method creates new database table record using file stream provided as a parameter. File identifier is generated in the database using NEWSEQUENTIALID() and returned as a 32 alphanumerical character string.

GET /file/{id}  
Method checks if database table contains the record identified by id provided as a parameter. If record is found then file is returned as file stream. Otherwise attempt is made to retrieve FILESTREAM from legacy file storage. Return value is cached.

DELETE /file/{id}  
Method checks if database table contains the record identified by id provided as a parameter. If record is found then the record is deleted asynchronously. Otherwise asynchronous attempt is made to delete the FILESTREAM from legacy file storage. Returns file identifier as it was supplied.

# Storage

Records to be stored in FileStore.File

## Columns

Id : uniqueidentifier, PK, default = NEWSEQUENTIALID()  
Stored : datetime  
Name : varchar(256)  
ContentType : varchar(64)  
Content : varbinary(max)