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# Venue DataStore Client API

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## Abstract

The venue datastore provides a mechanism for the venue to store data on behalf of the venue's users. The client API described here provides easy access for the clients of a venue to access the data therein.

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## 1 Introduction

## 2 `AccessGrid.VenueDataStoreClient` — Client API to a venue-based data store

This module defines the interface to a Venue datastore, as available beginning with AGTk version 2.0.

**`GetVenueDataStore`**(*venueURL*)

Return a `DataStoreClient` instance representing the default datastore on the venue with url *venueURL*.

## 3 `AccessGrid.DataStoreClient` — Client API to the Venue DataStore

```
class DataStoreClient (uploadURL, datastoreURL)
    A DataStoreClient instance provides access to the datastore represented by uploadURL and datastoreURL.

class DataStoreShell (datastoreClient)
    A DataStoreShell instance provides a command-line interface to the files in a datastore.
```

### 3.1 DataStoreClient Objects

The DataStoreClient class defines the following methods:

```
LoadData ( )
    Reload the client's cache of venue data information.

QueryMatchingFiles (pattern)
    Return a list of filenames in the venue that match the unix-style file glob pattern.

QueryMatchingFilesMultiple (patternList)
    Return a list of filenames in the venue that match any of the unix-style file globs in patternList.

GetFileData (filename)
    Return the metadata in the cache for file filename. The metadata is returned as a Python dictionary. Keys of interest in this dictionary include

    name Name of the file
    size Size of the file, in bytes
    checksum MD5 checksum of the file
    uri DataStore URL for the file.

Download (filename, localFile)
    Download filename to the local file localFile.

    Raises a FileNotFound exception if filename does not exist in the repository.

Upload (localFile)
    Upload local file localFile to the datastore. The uploaded file will be named with the basename of localFile. If that file already exists, an exception will be raised.

RemoveFile (file)
    Remove the file named file from the venue datastore.

OpenFile (file, mode)
    Open a venue file named file.

    If mode is "r", the file will be opened for reading. In this implementation, the file will be downloaded and a filehandle to that local file returned.

    If mode is "w", the file will be opened for writing. In this implementation, a file handle to a new local file will be returned. When the file handle is closed, the file will be uploaded to the venue.
```

### 3.2 DataStoreShell Objects

The DataStoreShell class defines the following methods:

```
run ( )
    Start the command processor.
```

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