How To Get Data From SharePoint With Python

It’s sometimes convenient to have a script to get data from SharePoint. We can automate the user managed data ingesting from SharePoint. For example, business users can upload or update the user managed file and a scheduled ETL task fetch and bring it to the datalake.

Using SharePoint API is easy thanks to this amazing module called [sharepy](https://github.com/JonathanHolvey/sharepy). It helps you to authenticate and make REST calls. Microsoft provides comprehensive documentation on the SharePoint REST API. To understand how it works, start off with the article: [How the SharePoint Rest service works](https://docs.microsoft.com/en-us/sharepoint/dev/sp-add-ins/get-to-know-the-sharepoint-rest-service). The key to any API programming is to construct REST endpoint correctly. Working with [folders and files with REST](https://docs.microsoft.com/en-us/sharepoint/dev/sp-add-ins/working-with-folders-and-files-with-rest) provides you with information for fetching user managed files from SharePoint.

**Gocha!**

1. You need to type username and password in the console with sharepy. To pass authentication parameters in the program, I am using the customised module sharepy\_custom (see [How To Customise Python Module](https://www.mydatahack.com/how-to-customize-python-module/)).
2. We can get the list of files in a folder. However, adding the parameter for GetFolderByServerRelativeUrl() can be tricky. When you are working with only server url, the parameter can contain ‘/’ (GetFolderByServerRelativeUrl('/Shared Documents'))in front of shared document as described [here](https://docs.microsoft.com/en-us/sharepoint/dev/sp-add-ins/working-with-folders-and-files-with-rest).

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If you are using the REST endpoint with sever and site like http://server/site/, you cannot have ‘/’ in front of Shared Document. Otherwise you will get REST Api error “Server relative urls must start with SPWeb.ServerRelativeUrl.

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1. Constructing relative url for GetFileByServerRelativeUrl can be tricky. The url includes site name and folder name as below.

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1. Sharepy only works for Python 3. If you use Python 2.7, you will get TypeError: super() takes at least 1 artument (0 given).

**Code**

We use the [customised sharepy](https://www.mydatahack.com/how-to-customize-python-module/). It get the list of a file in the specified folder and write it into a json file and also download a file specified in the API endpoint url.

Enjoy!