# README BwlFileDownloader

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By using Blueworks Live's REST API this application will get a list of document attachments in the given account and download these files to the local file system.

## **Updates**

Version 1.1 Added options –s, -l, -r and –n

#### Content

```
BwlFileDownloader.java, BwlFileDownloader.class

Java source code and compiled version of the program
```

```
commons-io-2.4.jar, wink-json4j-1.3.0.jar
required library files, sources:
<a href="https://commons.apache.org/proper/commons-io/">https://commons.apache.org/proper/commons-io/</a>
<a href="https://mvnrepository.com/artifact/org.apache.wink/wink-json4j">http://mvnrepository.com/artifact/org.apache.wink/wink-json4j</a>
```

```
compile.bat, run.bat, run delta.bat
```

Windows batch file to compile and run the program. Would also run as shell commands under Unix/Linux.

### Compile

This step is optional. With a Java SDK installed on your machine and the right PATH settings you can simply run either the batch file "compile.bat" or copy the command and run it in a command window:

```
javac -cp .;commons-io-2.4.jar;wink-json4j-1.3.0.jar BwlFileDownloader.java
```

This will create the compiled version: BwlFileDownloader.class

#### Run

With a Java runtime installed on your machine and the right PATH settings you can simply run the respective batch files or copy the command and run it in a command window. A simple call without any further command line arguments will complain about missing arguments but also gives you all the options, e.g.

```
java -cp .;commons-io-2.4.jar;wink-json4j-1.3.0.jar BwlFileDownloader
```

Before you can use the batch files you have to open them in an editor and replace the required arguments, namely user, password and Blueworks Live account name. The command in "run.bat" will then download all documents found in your account.

The command "run\_delta.bat" uses the additional flag "-f" that takes a "from" date written to the text file "timestamp.txt" in a previous call (or manually created). So this will only download documents from the account since that date.

java -cp .;commons-io-2.4.jar;wink-json4j-1.3.0.jar BwlFileDownloader YOURUSERNAME YOURPASSWORD YOURACCOUNT -f timestamp.txt -t timestamp.txt

Note that on a specific day x, let's say at 3pm, if you run the program it will download all documents that are available up to now and stores the date of day x. With the next call a couple of days later all documents of day x are downloaded including the documents that were uploaded by users after 3pm. So some documents (before 3pm on day x) are downloaded twice.

The option –n avoids this, because no documents of the current day (today) are downloaded. With the next incremental download all documents of that day will be covered.

Option —s creates sub directories for various types of Blueworks Live elements with attachments. For the element types app, instance and process additional sub directories are created that correspond to the name of the element. Special characters are replaced to derive a valid directory name.

With option –r files will be renamed if a file with the same name already exists. So it will not be overwritten, but instead the name of the new file will be extended with a number. Example:

```
downloads
Anpelia app
Anwendung mit Anhang
decision
Anwendung mit Anhang - Anwendung - Lauf 1
policy
post
Process
--- Engineering Change Management
Garantieabwicklung
Prozess mit Anhang
Rechnungseingangsprüfung
```

```
INFO: Will download file id=77eabc5a5a name=Anhang-Activity.pdf to downloads\process\Prozess mit Anhang
INFO: File with same name exists -> rename to Anhang-Activity_2.pdf
```