README BwlUserStats

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This application loads information about user activities for a given period of time from the Blueworks live REST API and writes it as csv (comma-separated values) files in the local file system. This data can be further evaluated, for example with Excel.

Content

    BwlUserStats.java, BwlUserStats.class
                        Java source code and the compiled version of the program

    commons-io-2.4.jar, wink-json4j-1.3.0.jar
                        required libraries, sources:
                        https://commons.apache.org/proper/commons-io/
                        http://mvnrepository.com/artifact/org.apache.wink/wink-json4j

    compile.bat, run.bat
                        Windows batch files to compile and run the program. Works as well as a
                        shell command on UNIX/Linux after replacing ";"with":".

Compile

This step is optional. With an installed Java SDK and the correct path settings, you can simply call the batch file "compile.bat" or copy the included command, and run it in a command window.

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

This command creates the compiled version: `BwlUserStats.class`

Run

With an installed Java runtime and the correct path settings, you can simply call the batch file "run.bat" or copy the included command and run it in a command window. A simple call without any additional command line arguments results in an error because of missing arguments, but also gives a help message with all available options, e.g.

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

```
ERROR: missing command line arguments, 3 arguments required
Usage: BwlUserStats <user> <password> <account> [optional_arguments]
Optional arguments:
  -h          This help message
  -d <path>   Directory to store csv files, default=./userstats
  -s <date>   Start date (YYYY-MM-DD), default(100 days)=2015-04-02
  -e <date>   End date, default(today)=2015-07-10
  -sl         Skip login data
  -sc         Skip comment data
  -su         Skip update data
  -sv         Skip view data
```

However, before the batch file can be used, the required arguments such as name, password, and Blueworks live account name must be adapted by using a text editor of your choice. The command in "run.bat" will then download information about activities of the last 100 days.

The behavior can be controlled in more detail using the optional command arguments. With the flag "-s", for example, the start date can be specified. With the following command you would download information data from the first of the month (for July in the example) until today (default).

```
java -cp .;commons-io-2.4.jar;wink-json4j-1.3.0.jar BwlUserStats
YOURUSERNAME YOURPASSWORD YOURACCOUNT -s 2015-07-01
```

```
User statistics for Blueworks Live account IBM70 requested by user westphal@de.ibm.com
Will store files in directory: ./userstats
Period: 2015-07-01 ... 2015-07-10
--------------------------------------------------------------------------
Retrieving info for 2015-07-01 ... 2015-07-10
 => 34 login records found
 => 2 comment records found
 => 678 update records found
 => 173 view records found
--------------------------------------------------------------------------
Found 34 login records and stored in logins.txt
Found 2 comment records and stored in comments.txt
Found 678 update records and stored in updates.txt
Found 173 view records and stored in views.txt
DONE
```

Please note:

As the API call allows only a maximum time range of 31 days, several calls of consecutive periods are created to cover also longer time ranges. In these cases you will see the line "Retrieving info for..." several times in the log output. The results are collected and stored together in the output files.

As you can see in the example above for 10 days you could get a large count of records for longer time ranges, especially for updates and views.
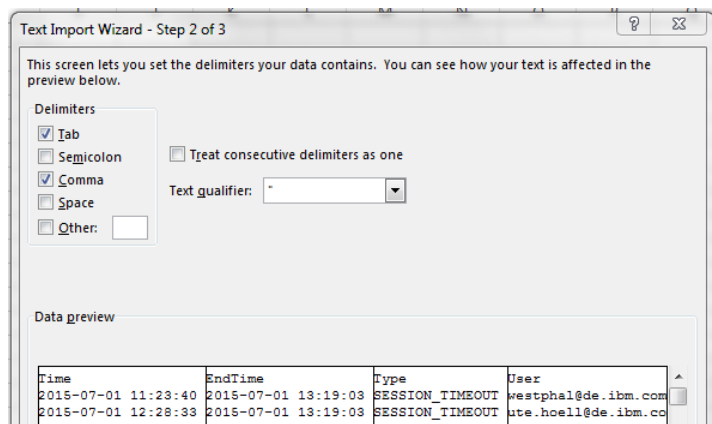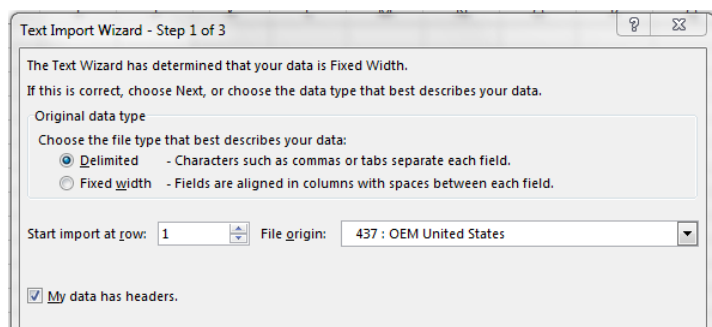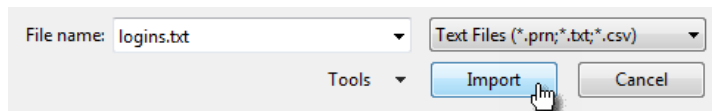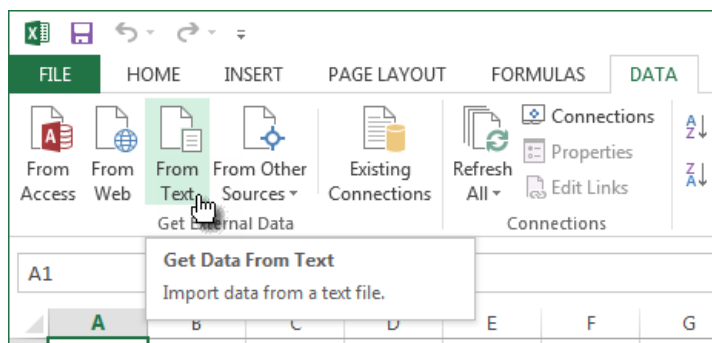
Outputs

The found activity entries (called records above) are stored as one line in the following csv files in the output folder (default ./userstats):

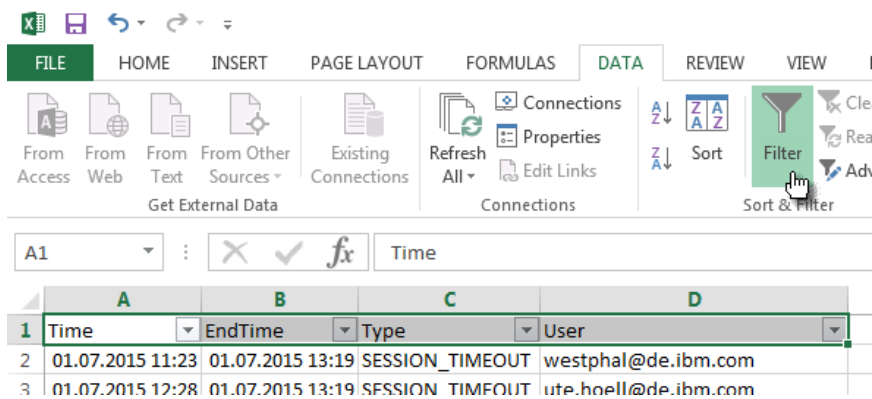| Output files	Header
comments.txt	`Time,Space,Name,Type,Activity,User,IsReply`
logins.txt	`Time,EndTime,Type,User`
updates.txt	`Time,Space,Name,Type,User`
views.txt	`Time,Space,Name,Type,User`

The first line consists of the header with names for the comma separated fields. Records start with line 2. The following screenshots give hints how to read in the output files for further analysis in Excel:
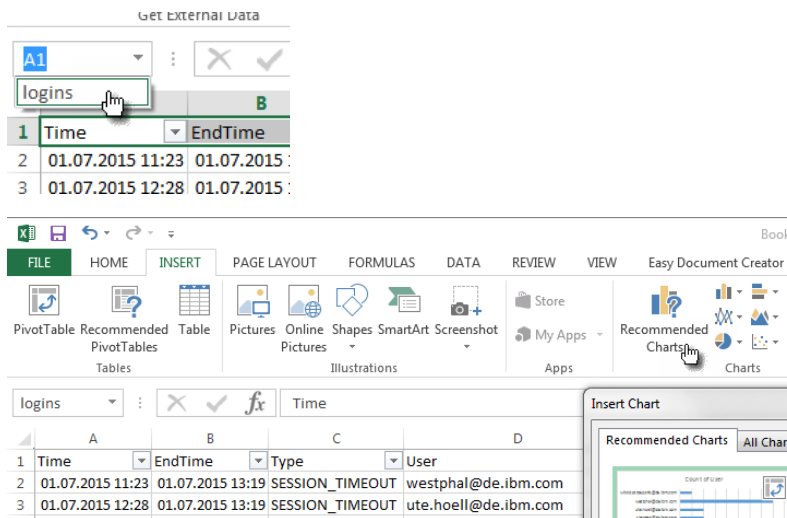
Read in a csv file:

Set filter for the headers

Simple graphical analysis

Refresh of data and charts after the output files have been rewritten