

Visceral Participant Image Upload Tool

The *Visceral Participant Image Upload Tool* is a Java command line application that uploads user-annotated images from a user-specified directory to a specific location on the Windows Azure Storage. In order to evaluate the annotated participant images the Visceral team will download afterwards the annotated images directly from the Windows Azure Storage.

Requirements to run the application

The participants virtual machines (VM) have Java 1.6 or higher installed and the Java path included in the PATH/Environment variable. In case this is missing from the VM settings please add it for the tool to be functional.

- Download the application *Visceral Participant Image Upload Tool* from <http://fast.hevs.ch/temp/vpiu.jar>

Usage

- Open the command line on your Operating System
- The syntax to run the application is as follows:

```
participant@AzureVM:~$: java -jar vpiu.jar <image directory path>
```

- Example:

```
participant@AzureVM:~$: java -jar vpiu.jar  
/home/participant/images/annotated
```

How the application works internally

1. The application checks if the image directory path was specified as an argument.
2. The application reads test image filenames from an external file and holds them in memory.
3. The application checks if the local directory path for the annotated images exists and reads the image paths into memory. The upload tool only considers 'nii.gz' volumes and '.fcsv' files on the root level of the specified image directory path. It does explicitly *not* consider images contained in subdirectories. Images contained in subdirectories will therefore not be uploaded.
4. At the same time image filenames are checked to be in the right format and to always contain the same participant ID throughout all filenames. With the purpose of guaranteeing that an existing test image was annotated, the test image filenames are compared to the participant image filenames. In order to validate the participant ID the application makes sure a directory named after the participant ID in the Windows Azure Storage. If the directory does not exist the application throws an exception indicating that the participant ID is not valid.
5. The last number before the file ending in the image filename indicates the parameter configuration. There can be at most 1 configuration meaning the configuration number should be 1. A file with different configuration numbers will be rejected and the application will exit and not upload any images.
6. After the success of the above described validations, the annotated images are uploaded in one batch. Any file located already in the participants directory in the Windows Azure Storage will be deleted with a new upload. Please make sure all of the files are uploaded in the same call.
7. The application shows progress after the successful upload of each image in the batch. On one

hand it shows the relation of the number of images uploaded to the total number of images in the batch. On the other hands it shows the relation of the distinct number of images uploaded (i.e. not counting multiple configurations) to the total number of test images.

8. If an exception occurs (e.g, network problems) during the upload the application will stop and have to be re-run at a later point.

Remarks

- For any question concerning the *Visceral Participant Image Upload Tool* please contact ivan.eggel@hevs.ch or oscar.jimenez@hevs.ch providing the participant ID.
- Participant's *must* run the application only from their virtual machines on Windows Azure and not from their local machines. This prevents the VISCERAL Administration from being charged for the uploads.