# ASAP guide: description of error and warning messages

**Version 1.0**

Last updated: 21.03.2019

**Introduction**

ASAP outputs error and warning messages to aid the user in its operation and update with current status. Deeper understanding of the causes behind those messages is critical to the smooth operation of the software package. In the following, all the error and warning messages output by ASAP are thoroughly explained.

**Error messages**

`ASAP error 0: cannot write file list to disk.`

Error results during the project folder selection process.

To avoid this error, ensure ASAP has write access to the project folder.

`ASAP error 1: no path is selected.`

Error results during the project folder selection process when the user does not select a folder path when prompted using the dialog box.

To avoid this error, select a project folder when prompted.

`ASAP error 2: no image files in selected path.`

Error results during the project folder selection process when the user selects a folder path that does not contain any images for operation.

To avoid this error, select a project folder that contains at least one image of the type `.png`, `.tif` or `.jpg`.

`ASAP error 3: cannot open selected file.`

Error results during the automation script selection process when the user selects either: a corrupted, non-openable or non-text file of type `.txt`.

To avoid this error, select a non-corrupted and openable text file of type `.txt`.

`ASAP error 4: line (`*`line number`*`) cannot be read. Check for typos in property definition.`

Error results during the automation script selection process when the user selects a text file that contains a typo. As an example, the user may accidentally write `$` instead of `%` in the text file.

To avoid this error, check the text file for typos in the referred line. If unsure, refer to supplementary document 2: **ASAP guide: automation script syntax** for detailed description.

`ASAP error 5: line (`*`line number`*`) cannot be read. Incomplete property definition.`

Error results during the automation script selection process when the user selects a text file that contains one more lines with no equalities. As an example, the user may accidentally write `simulationParam.simulate1->6:false` instead of `simulationParam.simulate=1->6:false` in the text file.

To avoid this error, check the text file for the inequality in the referred line. If unsure, refer to supplementary document 2: **ASAP guide: automation script syntax** for detailed description.

`ASAP error 6: line (line number) cannot be read. Check for typos.`

Error results during the automation script selection process when the user selects a text file that contains a typo. As an example, the user may accidentally write `simlationParam` instead of `simulationParam` in the text file.

To avoid this error, check the text file for typos in the referred line. If unsure, refer to supplementary document 2: **ASAP guide: automation script syntax** for detailed description.

`ASAP error 7: line (line number) cannot be read. Check assigned value(s).`

Error results during the automation script selection process when the user selects a text file that contains a different or erroneous value type than that prescribed. As an example, the user may accidentally write `simulationParam.simulate=1->6:7` instead of `simulationParam.simulate=1->6:false` or `simulationParam.simulate=1->6:flse` instead of `simulationParam.simulate=1->6:false`.

To avoid this error, check the text file for typos in the referred line and / or correct the value of the variable according to the instructions provided in supplementary document 2: **ASAP guide: automation script syntax**.

`ASAP error 8: line (line number) cannot be read. No GPU device available.`

Error results during the automation script selection process when the user selects a text file containing the following assignment: `options.GPUComputingEnabled=1->N:true`. The message informs the user that a GPU cannot be enabled either because a GPU device is not available, or, the available GPU device is not compatible with MATLAB GPU computing.

To avoid this error, run ASAP on a computer that contains a suitable GPU device, or, change the statement to `options.GPUComputingEnabled=1->N:false`.

`ASAP error 9: line (line number) cannot be read. Check number of assigned value(s).`

Error results during the automation script selection process when the user selects a text file that contains an incorrect number of assignments. As an example, the user may set `classificationParam.assignmentNum=1->12:3` and accidentally write `classificationParam.feature=1->12:Area/Filled Area` instead of `classificationParam.feature=1->12:Area/Filled Area/Perimeter`.

To avoid this error, check that in the text file the number of assignments separated by `/` matches `assignmentNum`. If unsure, refer to supplementary document 2: **ASAP guide: automation script syntax** for detailed description.

Note: error only applies to the `classificationParam` block in the automation script text file.

`ASAP error 10: line (line number) cannot be read. Check bounds.`

Error results during the automation script selection process when the user selects a text file that contains incorrect file boundaries. As an example, the user may select a folder that contains 6 image files and accidentally set `simulationParam.simulate=1->7:false` instead of

`simulationParam.simulate=1->6:false` or
`simulationParam.simulate=1->5:false;6->6:true.`

To avoid this error, check that all statements in the text file contain the appropriate boundaries. Refer to supplementary document 2: **ASAP guide: automation script syntax** for detailed description.

Important notice: the bounds could be smaller than or equal to the number of image files. However, if the bounds of one block exceed that of a preceding block an error will be issued later. For example, the user may set `classificationParam.classify=1->6:true` and `analysisParam.analyze=1->5:true;6->6:false`. Since the data for classification has to be analyzed first it is not possible to classify 6 files, 5 of which have been only analyzed.

`ASAP error 11: no script is loaded.`

Error results when the user presses the `run` button in the `project` tab without successfully loading an automation script text file.

To avoid this error, load an automation script text file by pressing the `Select automation script` button in the `project` tab.

`ASAP error 12: no path is selected.`

Error results during the simulation process when the simulator cannot find a path to retrieve the images to-be simulated from.

To avoid this error, select a project folder by pressing the `Select folder` button in the `project` tab.

`ASAP error 13: no image files available.`

Error results during the simulation process when the simulator cannot find images to be simulated.

To avoid this error, select a project folder that contains image files for the simulator. To select a project folder, press the `Select folder` button in the `project` tab.

`ASAP error 14: no image files selected.`

Error results during the simulation process when the simulator cannot find images to be simulated.

To avoid this error, select image files from the list box in the `simulate` tab.

`ASAP error 15: no position coordinates were generated for file (`*`file name`*`).`

Error results during the simulation process when the simulator cannot generate position coordinates for the referred file.

To avoid this error, check that `pixelSize`, and, (`numFluorophore` or `numEpitope`, `numStructures` and `structureSize`) are not set to 0.

`ASAP error 16: cannot simulate image file (`*`file name`*`).`

Error results during the simulation process when the simulator cannot simulate the referred image due to its large size.

To avoid this error, ensure that the referred image as well as the ratio of the `outPixelSize` to the `inPixelSize` are small enough.

`ASAP error 17: cannot write simulated image to disk.`

Error results during the simulation process when the simulator cannot write the simulates image to disk.

To avoid this error, ensure ASAP has write access to the project folder.

`ASAP error 18: cannot identify any structures in (`*`file name`*`).`

Error results during the identification process when the structure identifier cannot identify any structure(s) in the referred image file.

To avoid this error, ensure that the referred image file is not empty, the referred image is not too large and that the `identificationParam` are all within range. If unsure, refer to supplementary document 3: **ASAP guide: selection of parameters** for detailed description.

`ASAP error 19: cannot write files to disk.`

Error results during export in the identification process when the exporter can write output files to disk.

To avoid this error, ensure that ASAP has write access to the project folder and that Microsoft Excel is installed.

`ASAP error 20: no ASAP files available.`

Error results during data extraction in the `Analyze`, `Train`, `Classify`, `Cluster`, `Plot` or `Montage` modules.

To avoid this error, ensure that there are ASAP files in the selected projected folder and that the processing workflow has been followed as described in the manual.

`ASAP error 21: no ASAP files selected.`

Error results during data extraction in the `Analyze`, `Train`, `Classify`, `Cluster`, `Plot` or `Montage` modules.

To avoid this error, ensure that you ASAP files are selected in the respective list box of the landing module.

`ASAP error 22: cannot load data from (`*`file name`*`).`

Error results during data extraction in the `Analyze`, `Train`, `Classify`, `Cluster`, `Plot` or `Montage` modules.

To avoid this error, ensure that the referred file is not corrupted. If necessary, re-run module on referred file.

`ASAP error 23: no shape descriptors selected.`

Error results during training process.

To avoid this error, ensure that you select one or more shape descriptors. Refer to the **ASAP guide: user manual** for further information.

`ASAP error 24: no structures classified.`

Error results during training process.

To avoid this error, ensure that you classify (annotate) at least one structure. Refer to the **ASAP guide: user manual** for further information.

`ASAP error 25: no single classification model (.astr) file is found.`

Error results during extraction in the classification process.

To avoid this error, ensure that either a classification model (.astr) file is located in the selected project folder and that no more than one file is in the folder.

`ASAP error 26: cannot cluster data.`

Error results during the clustering process.

To avoid this error, ensure that the to-be clustered files contain enough data points or change the clustering mode.

`ASAP error 27: row number is empty in graph (`*`graph Id`*`).`

Error results during the plotting process.

To avoid this error, ensure that a row number is assigned to the referred graph in the UI.

`ASAP error 28: column number is empty in graph (`*`graph Id`*`).`

Error results during the plotting process.

To avoid this error, ensure that a row number is assigned to the referred graph in the UI.

`ASAP error 29: scale bar exceeds the size of image (`*`image Id`*`).`

Error results during the montaging process.

To avoid this error, decrease the size of the scale bar until error disappears.

`ASAP error 30: number of filtered structures is smaller than number of images.`

Error results during the montaging process.

To avoid this error, decrease the number of images in the montage.

**Warning messages**

`ASAP warning 1: no files to display in list box.`

Warning results when the user selects a project folder that does not contain either image, or, ASAP native files.

To avoid this warning, select a project folder that contains the required files for each module. To select a project folder, press the `Select folder` button in the `project` tab.