DesignSafe CI

Planning · **Modules** · **Workspace** · **Data Depot** · **Repository** · **Publication** · **Simulation** · **Inputs** · **Outputs** · **API** · **External Repositories** · **External Files**
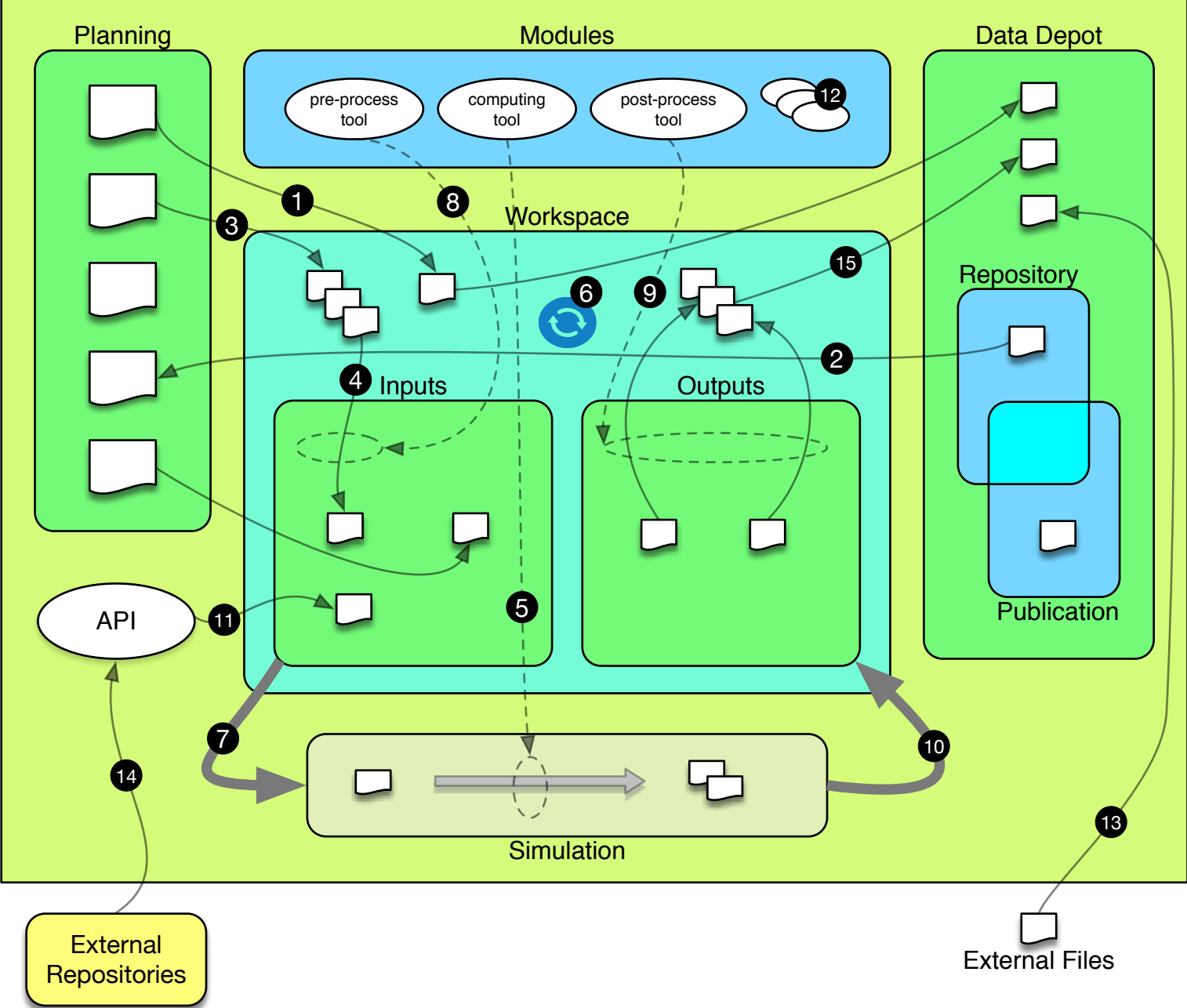
1. Planning document goes to workspace area and to data depot (may not be used as an input, but wants to be archived)

2. Planning document retrieved from repository for modification or as a starting point

3. Planning document goes to workspace area (it will be used as an input)

4. A document from the workspace area is pre-processed with some modules and it is used as an input

5. Simulation may happen inside of the CI. Modules may be available for running computations in the cloud

6. Processes in workspace can be iterated and inputs and results are kept version controlled

7. Inputs are transferred to where the simulation runs

8. A pre-process module is used to transform an input before feeding it to the simulation

9. A post-process module is used to transform outputs

10. Outputs from the simulation are transferred back to CI

11. An input file is created using a wrapped API from an external repository (see 14)

12. Multiple modules may be available for computation, processing, etc.

13. External files can be added at any stage

14. External sources can be wrapped in API's, automatically attaching provenance information

15. Result is sent to be archived (and possibly tagged for publication)