

How to run a simulation in the cloud

1. You have to specify a simulation pattern first, to perform a simulation in the cloud. Therefore, the CloudSME platform provides two solutions:

- Specify a pattern using an online application in the CloudSME AppCenter.
- Specify a pattern from a desktop application that you can download in the CloudSME AppCenter or on the vendor's website.

2. To create a simulation pattern using a desktop application, you must navigate to the store of your chosen application in the AppCenter and download it by clicking the "Download" button on the left. In some cases, you may also need to refer to the software from the manufacturer's website.

3. The CloudSME AppCenter provides two solutions to compute the patterns from desktop-applications.

- Calculate directly from the desktop-application.
- Calculate from the AppCenter by uploading the files that need to be computed.

In this tutorial, we would like to show you how to use the AppCenter to simulate a test file of the animation software "Blender".

4. The first step is to download the test data for your job. The test data for our Blender simulation can be found in the following link.

[Download test input](#)

5. Then navigate to the software's shop page and click on the "Run job" button (Fig. 1). A new modal window opens (Fig. 2), where you must upload your test data and specify an argument string. The argument string for the test data can be taken from the following line:

```
-b 46bda883-f3d2-4d62-8714-f60433d04272.blend -o dolphin_ -a
```

Blender

€ 9.97
Balance for running calculations

Run job Refill balance

Provided by:
CloudBroker Demo

Version:
2.x

Description Calculations

Blender is free and open source software. Free to use purpose, forever.

Blender is a professional free and open-source 3D computer graphics software product used for creating anin effects, art, 3D printed models, interactive 3D applications and video games. Blender's features include unwrapping, texturing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle body simulation, sculpting, animating, match moving, camera tracking, rendering, video editing and composit modeling features it also has an integrated game engine.

Usage example

Use Blender to create an animated 3D model of a dolphin. To do this, please follow the steps below:

1. Download an example input file available via this link.
2. Launch Blender cloud application:
 - o Provide the following argument string in the Argument String in the corresponding field of a "Run job" button.
 - o Provide the input file downloaded on the step 1. Please note, that **the name of the input file should as provided in the argument string** (e.g. if your input file is `46bda883-f3d2-4d62-8714-f60433d04272.blend` the same file should be indicated in the argument string: `-b 46bda883-f3d2-4d62-8714-f60433d04272.blend -o dolphin_ -a`)

(Fig. 1: „Run job“-Button)

Run job

Please upload an input data file for calculation. Please provide .zip or .tar.gz archive in case the input data is contained in several files.

Datei auswählen 46bda883-...272.blend

Specify argument for the calculation. You can find the information about arguments in the manual for the software.

Argument string

-b 46bda883-f3d2-4d62-8714-f60433d04272.blend -o dolphin_ -a

Run

Documentation

(Fig. 2: Modal-window)

6. Do not forget that you need to have credits to run a simulation. If you do not know how to charge your credit, please read the *"Charge credits and review your payment history"* tutorial.

7. When you click the "Run job" button, you will be redirected to a new tab (Fig. 3) showing your current simulation status. You can read the current status of your simulation, the start time of your simulation, and any errors that occurred during the simulation.

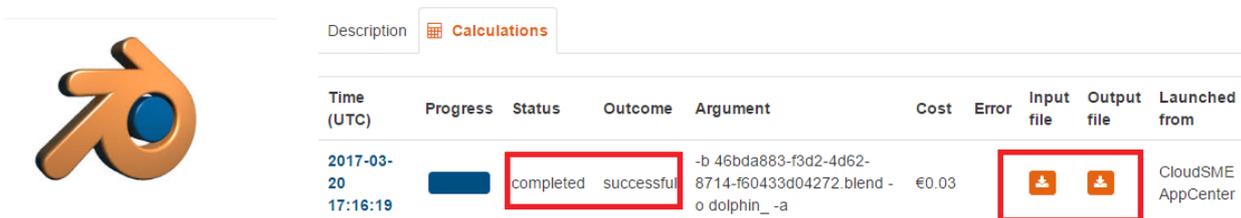


The screenshot shows a web interface with a 'Calculations' tab selected. Below the tab is a table with columns: Time (UTC), Progress, Status, Outcome, Argument, Cost, Error, Input file, Output file, and Launched from. A single row is visible with the following data: Time (UTC) is 2017-03-20 17:16:19; Progress is a yellow progress bar; Status is 'assembling'; Outcome is 'unknown'; Argument is '-b 46bda883-f3d2-4d62-8714-f60433d04272.blend -o dolphin_-a'; Cost is '€0.00'; Error is empty; Input file has a download icon; Output file is empty; Launched from is 'CloudSME AppCenter'.

Time (UTC)	Progress	Status	Outcome	Argument	Cost	Error	Input file	Output file	Launched from
2017-03-20 17:16:19	<div style="width: 20%; background-color: #ffc107;"></div>	assembling	unknown	-b 46bda883-f3d2-4d62-8714-f60433d04272.blend -o dolphin_-a	€0.00				CloudSME AppCenter

(Fig. 3: Job Status)

8. If the status bar indicates that the simulation has completed successfully, you can download the output file by clicking the "Output file" button (Fig. 4).



The screenshot shows a web interface with a 'Calculations' tab selected. To the left of the table is a large orange arrow icon pointing to the right. The table has the same columns as in Fig. 3. A single row is visible with the following data: Time (UTC) is 2017-03-20 17:16:19; Progress is a full blue progress bar; Status is 'completed'; Outcome is 'successful'; Argument is '-b 46bda883-f3d2-4d62-8714-f60433d04272.blend -o dolphin_-a'; Cost is '€0.03'; Error is empty; Input file and Output file both have download icons. Red boxes highlight the 'completed successful' status and the two download icons.

Time (UTC)	Progress	Status	Outcome	Argument	Cost	Error	Input file	Output file	Launched from
2017-03-20 17:16:19	<div style="width: 100%; background-color: #007bff;"></div>	completed	successful	-b 46bda883-f3d2-4d62-8714-f60433d04272.blend -o dolphin_-a	€0.03				CloudSME AppCenter

(Fig. 4: Location „Output file“-button)