

Managing processing

fr_FR.png [...version française de cette page](#)

Step Manager

The **steps tree** is managed in the **Step Manager**. This component allows you to create a valid step hierarchy. Once processing is performed, each step contains also the results it has created.

Step Manager *after creating a steps tree, but before processing:*

StepManager			
Nom	Progression	Temps / Afficher	Debug
▲ *extrait_bure_04.xyb	0%	0h:0m:0s:0ms	●
▲ *OE_StepExtractPlot (87)	0%	0h:0m:0s:0ms	●
▲ *OE_StepExtractSoil03 (88)	0%	0h:0m:0s:0ms	●
▲ *OE_StepHorizontalClustering04 (89)	0%	0h:0m:0s:0ms	●
▲ *OE_StepFilterClustersBySize (90)	0%	0h:0m:0s:0ms	●
▲ *OE_StepDetectSection06 (91)	0%	0h:0m:0s:0ms	●
▲ *OE_StepMergeNeighbourSections04 (92)	0%	0h:0m:0s:0ms	●
▲ *OE_StepMergeEndToEndSections04 (93)	0%	0h:0m:0s:0ms	●
*OE_StepFitAndFilterCylindersInSections (94)	0%	0h:0m:0s:0ms	●

Step Manager *during the processing of the steps tree:*

StepManager			
Nom	Progression	Temps / Afficher	Debug
▲ extrait_bure_04.xyb	100%	0h:0m:5s:454ms	●
CT_ResultPointCloud	100%		
▲ OE_StepExtractPlot (87)	100%	0h:0m:7s:104ms	●
Placette extraite	100%		
▲ OE_StepExtractSoil03 (88)	100%	0h:0m:12s:897ms	●
Densité de points sol	100%		
Modèle Numérique de Hauteur	100%		
Modèle Numérique de Surface	100%		
Modèle Numérique de terrain	100%		
Triangulation 2D	100%		
Scène sol	100%		
Scène végétation	100%		
▲ *OE_StepHorizontalClustering04 (89)	9%	0h:0m:1s:602ms	●
▲ *OE_StepFilterClustersBySize (90)	0%	0h:0m:0s:0ms	●
▲ *OE_StepDetectSection06 (91)	0%	0h:0m:0s:0ms	●
▲ *OE_StepMergeNeighbourSections04 (92)	0%	0h:0m:0s:0ms	●
▲ *OE_StepMergeEndToEndSections04 (93)	0%	0h:0m:0s:0ms	●
*OE_StepFitAndFilterCylindersInSections (94)	0%	0h:0m:0s:0ms	●

Step Manager after the end of processing:

Nom	Progression	Temps / Afficher	Debug
▲ extrait_bure_04.xyb	100%	0h:0m:5s:454ms	<input checked="" type="checkbox"/>
CT_ResultPointCloud	100%	<input type="checkbox"/>	
▲ OE_StepExtractPlot (87)	100%	0h:0m:7s:104ms	<input checked="" type="checkbox"/>
Placette extraite	100%	<input type="checkbox"/>	
▲ OE_StepExtractSoil03 (88)	100%	0h:0m:12s:897ms	<input checked="" type="checkbox"/>
Densité de points sol	100%	<input type="checkbox"/>	
Modèle Numérique de Hauteur	100%	<input type="checkbox"/>	
Modèle Numérique de Surface	100%	<input type="checkbox"/>	
Modèle Numérique de terrain	100%	<input type="checkbox"/>	
Triangulation 2D	100%	<input type="checkbox"/>	
Scène sol	100%	<input type="checkbox"/>	
Scène végétation	100%	<input type="checkbox"/>	
▲ OE_StepHorizontalClustering04 (89)	100%	0h:0m:15s:471ms	<input checked="" type="checkbox"/>
Scène clusterisée	100%	<input type="checkbox"/>	
▲ OE_StepFilterClustersBySize (90)	100%	0h:0m:0s:722ms	<input checked="" type="checkbox"/>
Scène clusterisée (COPY)	100%	<input type="checkbox"/>	
▲ OE_StepDetectSection06 (91)	100%	0h:0m:1s:259ms	<input checked="" type="checkbox"/>
Sections	100%	<input type="checkbox"/>	
▲ OE_StepMergeNeighbourSections04 (92)	100%	0h:0m:33s:484ms	<input checked="" type="checkbox"/>
Sections Fusionnées	100%	<input type="checkbox"/>	
▲ OE_StepMergeEndToEndSections04 (93)	100%	0h:11m:54s:306ms	<input checked="" type="checkbox"/>
Sections Fusionnées	100%	<input type="checkbox"/>	
▲ OE_StepFitAndFilterCylindersInSections (94)	100%	0h:0m:0s:547ms	<input checked="" type="checkbox"/>
Sections Fusionnées (COPY)	100%	<input type="checkbox"/>	

The first column contains the **name of the steps**, with arrows at left to collapse the hierarchy affiliated with each step.

After processing, it also contains the name of the results produced.

The second column contains a **progress bar** to monitor the progress of processing.

Some multi-threaded steps do not monitor progress, and remain at 0 % throughout processing, and then suddenly go to 100 % at the end of execution.

The third column stores **processing time** of steps (updated at the same time that the progress bar).

In the case of results, this column contains a checkbox. Checking this box, allows you to “send” the result to **Model Manager**. This has the effect of displaying the **OUT result model** of the step in the **Model Manager** #000 000000 0000 00000000 000 0000000000 00 00 section [Displaying items](#)).

The fourth column allows for steps to enable **debug mode**.

[details on debug mode](#)[details on debug mode](#)

When the step was designed in this way, and the **debug mode** is enabled, you can perform processing step by step, and see the result in transitory states.



The **debug mode** is managed using the buttons on the main **toolbar**:



debug.png

The **first button** is used to start the execution of the **next iteration** of the step.

The **second button** will jump n iterations, where n is determined by the value that follows.

Each step is uniquely identified (number in parentheses).



To **start the execution** of the steps tree you must click on the button . It can also suspend using the button .

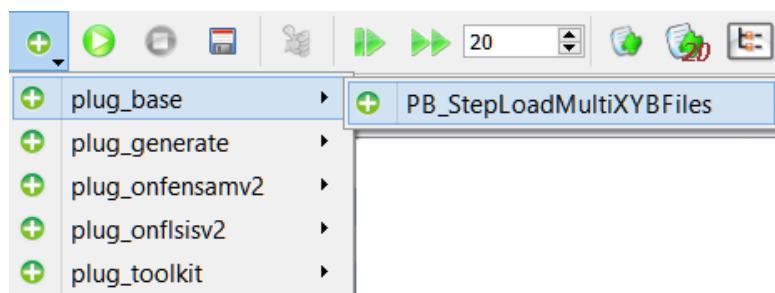
To **export the tree steps** as a **script**, you must click on the button . Scripts can then be loaded using the button .

Initialization of the steps tree

To initiate a sequence of steps, we must first insert an **initial step**.

It can be inserted:

- A **Load File Step** using the button . In this case, a file selection window opens, and loads data, once the file selection has been validated.
- An **Initial Step**, using the button . In this case you must select the step in the plugins sub-menu that contains it. This step type allows for more complex loading (multiple files of different types, settings before loading, data creation...).

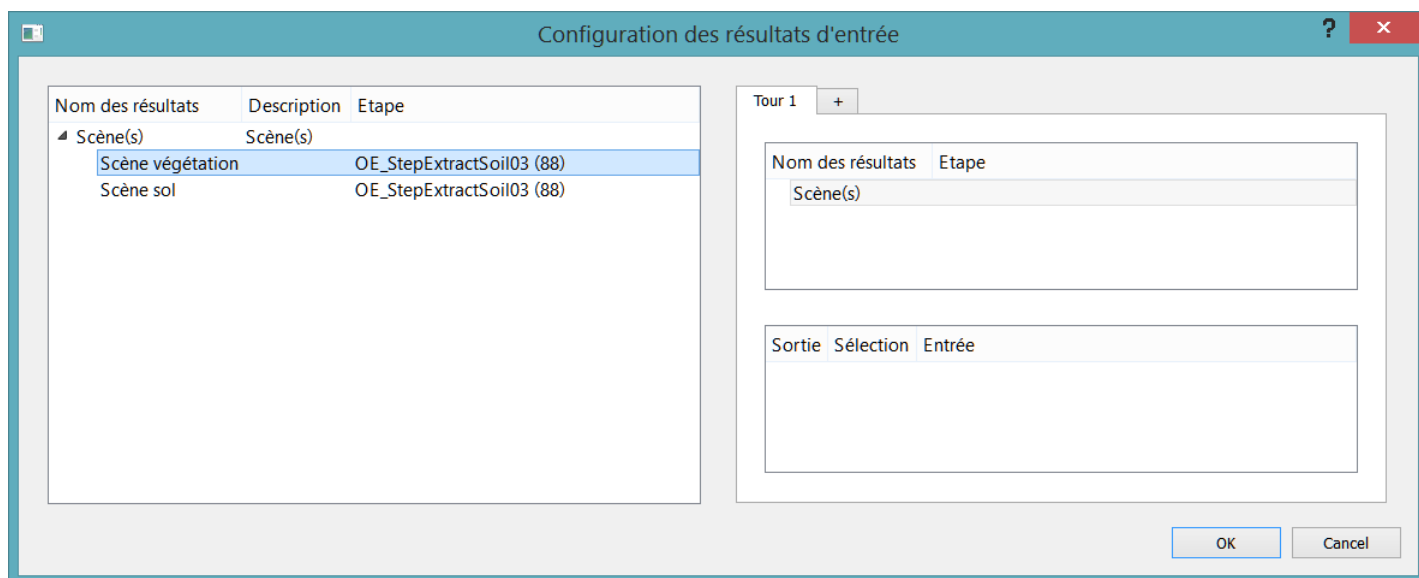


Adding children steps

Once inserted a starting point, adding other steps is done using the **context menu**: Right-click on a step for which you want to add a **child step**.

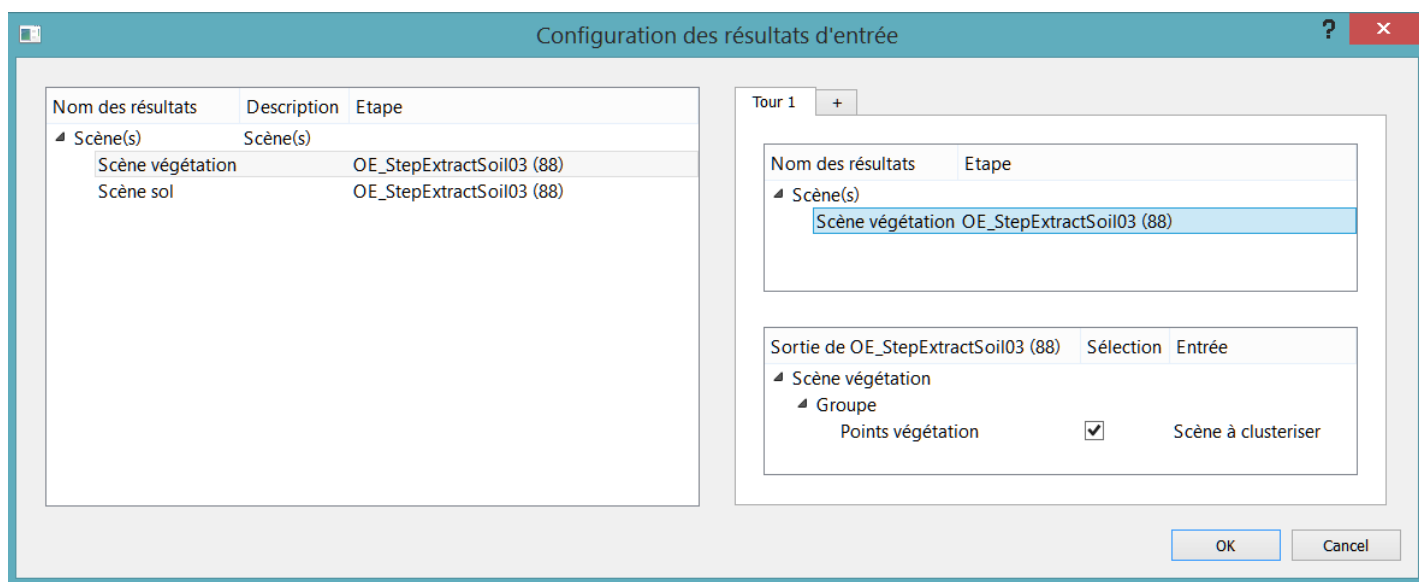
Child step addition can only be done by right-clicking on a step but not on a result.





The left side lists **candidates** results, sorted by searched **IN results models** of the step. The number of the step bearing each result is shown in parentheses.

Double-clicking on a result will transfer the selected result as a validated correspondence to the right side (moving the result from the left side to the right side).



The right side displays the **results matches** validated above. On the right-bottom part, it is possible to select alternatives items / groups levels, if more than one possibility is valid.

[Explanation of the concept of Turns](#)

On the right part of the window, we see a tab **Turn 1** and a tab with a +. + Adds the other turns.

Each added turn is used to configure the step with different candidates results. In this case, the step will be executed once for each turn added.

The results produced by all turns will all be added to the step.

Managing multiple turns is not always taken into account by plugin developers. This can lead to application crash, if the step was not designed accordingly. If this happens, thank you to report by a demand in the plugin project page on <http://rdinnovation.onf.fr>.

Once all choices done, simply click **OK** to validate the configuration if **input results**.

Then, if necessary, the window for setting step parameters opens. It contains all the adjustable parameters of the algorithm to run.

For example their are the parameters for the *OE_StepExtractSoil03* step:

Configuration

Résolution de la grille :

50

cm

Epaisseur du sol :

32

cm

Densité minimum :

200.00

pts/m2

Voisinage (points isolés) :

3

Cases

☒ Interpolation

☒ Lissage

Voisinage de lissage :

2

Cases

OK

Cancel

Once the parameters are selected and approved, the step is actually added in the **steps tree**.

Previous (General Organization of the interface)	Back to GUI summary	Next (Displaying items)
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Files			
add.png	940 Bytes	05/07/2014	Piboule Alexandre
canbeaddedfirst.png	19.6 KB	05/07/2014	Piboule Alexandre
config_oe_stepextractsoil03.png	12.5 KB	05/07/2014	Piboule Alexandre
config_resultin_1.png	18.1 KB	05/07/2014	Piboule Alexandre
config_resultin_2.png	25.2 KB	05/07/2014	Piboule Alexandre
debug.png	2.01 KB	05/07/2014	Piboule Alexandre
folder_add_32.png	1.85 KB	05/07/2014	Piboule Alexandre
media-floppy.png	561 Bytes	05/07/2014	Piboule Alexandre
menu_contextuel_etape.png	35.7 KB	05/07/2014	Piboule Alexandre
play.png	54.6 KB	05/07/2014	Piboule Alexandre
step_manager_1.png	33.6 KB	05/07/2014	Piboule Alexandre
step_manager_2.png	53.1 KB	05/07/2014	Piboule Alexandre
step_manager_3.png	68 KB	05/07/2014	Piboule Alexandre
stop.png	42.9 KB	05/07/2014	Piboule Alexandre