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:

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

Step Manager during the processing of the steps tree:

epManager			Ľ
Nom	Progression	Temps / Afficher	Debug
<pre>extrait_bure_04.xyb</pre>	100%	0h:0m:5s:454ms	0
CT_ResultPointCloud	100%		
 OE_StepExtractPlot (87) 	100%	0h:0m:7s:104ms	0
Placette extraite	100%		
OE_StepExtractSoil03 (88)	100%	0h:0m:12s:897ms	0
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	0
*OE_StepFilterClustersBySize (90)	0%	0h:0m:0s:0ms	0
*OE_StepDetectSection06 (91)	0%	0h:0m:0s:0ms	0
*OE_StepMergeNeighbourSections04 (92)	0%	0h:0m:0s:0ms	0
*OE_StepMergeEndToEndSections04 (93)	0%	0h:0m:0s:0ms	
*OE_StepFitAndFilterCylindersInSections (94)	0%	0h:0m:0s:0ms	0

Step Manager after the end of processing:

StepManager

lom	Progression	Temps / Afficher	Debug
extrait_bure_04.xyb	100%	0h:0m:5s:454ms	0
CT_ResultPointCloud	100%		
 OE_StepExtractPlot (87) 	100%	0h:0m:7s:104ms	0
Placette extraite	100%		
 OE_StepExtractSoil03 (88) 	100%	0h:0m:12s:897ms	0
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) 	100%	0h:0m:15s:471ms	\bigcirc
Scène clusterisée	100%		
OE_StepFilterClustersBySize (90)	100%	0h:0m:0s:722ms	0
Scène clusterisée (COPY)	100%		
OE_StepDetectSection06 (91)	100%	0h:0m:1s:259ms	0
Sections	100%		
 OE_StepMergeNeighbourSections04 (92) 	100%	0h:0m:33s:484ms	0
Sections Fusionnées	100%		
OE_StepMergeEndToEndSections04 (93)	100%	0h:11m:54s:306ms	\odot
Sections Fusionnées	100%		
OE_StepFitAndFilterCylindersInSections (94)	100%	0h:0m:0s:547ms	\bigcirc
Sections Fusionnées (COPY)	100%		

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).

The fourth column allows for steps to enable debug mode.

details on debug modedetails 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).

o start the execution of the steps tree you must click on the button 🜔. It can also suspend using the button 🔁	
o export the tree steps as a script, you must click on the button 🧱. Scripts can then be loaded using the button 🍾	5

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 ¹/₆. 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...).

0	0 🛛 🗖	29		>> 20	a	D	t:
0	plug_base	•	•	PB_StepLo	adMultiXY	BFiles	
0	plug_generate	+					
0	plug_onfensamv2	•					
0	plug_onflsisv2	•					
0	plug_toolkit	•					

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.

0	Exécuter				
1	Informations sur l'étape				
* *	Configurer les résultats d'entrée Configurer				
×	Supprimer				
۲	Charger à partir du disque dur				
0	plug_base		Exporters	•	
0	plug_base plug_generate		Exporters AutoExporters	+ +	
0 0 0 0	plug_base plug_generate plug_onfensamv2 plug_onflsicv2	•	Exporters AutoExporters PB_StepUserItemSelection	•	
	plug_base plug_generate plug_onfensamv2 plug_onflsisv2 plug toolkit	•	Exporters AutoExporters PB_StepUserItemSelection PB_StepComputeHitGrid	•	
	plug_baseplug_generateplug_onfensamv2plug_onflsisv2plug_toolkit	• • •	Exporters AutoExporters PB_StepUserItemSelection PB_StepComputeHitGrid PB_StepSelectCellsInGrid2D Créé une grille voxel de de PB_Steprimerromsbyboording	• • ensité	de point:

Elements of the step context menu :

The first part of the menu allows modifying the current step:

- Run: starts the processing
- Step Information: opens a window with detailed information about the step. This is the same window with the menu button *Help / About plugins / Information about step* (see <u>General organization of the interface / Help menu</u>). However from here **OUT result models** are available even for copy results.
- Configure input results: change the results taken into account for input, in the case where several candidates are valid.
- Configure: opens the box for setting the current step parameters.
- **Delete**: delete step (and all its children steps).

In case of reconfiguration of *input results or of change of step parameters, an **asterisk** now precede the name of the step in the **steps tree**. This means that the launch of processing will lead to re-run the step and all its children. All relevant results will be erased before being recalculated.

Configuring a step

Once added, the step is (most of the time) to be configured.

This selection works by comparing the IN results models of the added step with OUT results models of candidates results.

In the case where multiple results are valid, the window to configure the input results is open:

		Configuration d	des résultats d'entrée	? ×
Nom des résultats	Description Scène(s)	Etape OE_StepExtractSoil03 (88) OE_StepExtractSoil03 (88)	Tour 1 + Nom des résultats Etape Scène(s) Sortie Sélection Entrée	
			ОК	Cancel

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.

		Configura	on des résultats d'entrée	? ×
Nom des résultats Scène(s) Scène végétation Scène sol	Description Scène(s)	Configura Etape OE_StepExtractSoil03 (88) OE_StepExtractSoil03 (88)	Tour 1 + Nom des résultats Etape Scène végétation OE_StepExtractSoil03 (88) Sortie de OE_StepExtractSoil03 (88) Sélection Entrée Scène végétation Groupe Points végétation Scène à clusterise	? ×
			ОК	Cancel

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 TurnsExplanation 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 #00 00 000000 00000 0000 000 000 000 is used to configure the step with different candidates results. In this cas 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:

	Configu	uration	? ×
Résolution de la	grille :	50	🚖 cm
Epaisseur du sol	:	32	🖨 cm
Densité minimur	n :	200.00	pts/m2
Voisinage (point	s isolés) :	3	Cases
		✓ Interpola	tion
		 Lissage 	
Voisinage de liss	age :	2	Cases
		ОК	Cancel

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

Previous (General Organization of the	Back to GUI summary	Next (Displaying items)
<u>Interlace)</u>		

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