User'smanual

PricesTracker

V 2.6

I) The operation of PricesTracker

To navigate in our module, use in your Prestashop menu , the PricesTracker tab which is at the bottom.

To do tariff monitoring, there are 3 steps :

1) Retrieve the products of your competitors : Go to PricesTracker > Analysis> Manage competitors. Enter the name and the URL of your competitors. Once done, you need to tell PricesTracker **how to extract the information** . Each site is different and therefore each configuration of a competitor is different. If competitors' product sheets simply include a price and a product name to retrieve, use the two regular expressions of price and name. You can use Notepad ++ or Dreamweaver to test regular expressions on page source code. You can also use the " Test on a competitor's page " function to verify that the correct information is correctly extracted . This step is highly recommended. If you want to **extract the declensions of the competitors** , break an AJAX protection, modify a product name, pass the price in TTC or even recover decreasing prices, you can write a script in Groovy which will be executed on the source code on each page found e . If **need help with writing scripts and the term regularly** , our company is at your disposal. You can ask us to fully configure your competitors. Once the competitors have been set up, the analysis must be performed. **The box " Check for the existence of new products from competitors "** is the most important, if it is the first run, it must be checked. It allows you to browse the entire competitors' site. For the next analyzes, if you want to check only the products associated with your products, for more speed, uncheck it. If in Modules> PricesTracker > Configuration, you uncheck " Update only the products already associated ", instead of only checking the associated products, this will check all the products found in the last analysis but without browsing the whole site **An algorithm of artificial intelligence** makes it possible to make crossovers between the names of your products and those of your competitors to facilitate matching . This analysis is carried out after the crawling (course of a site) of your competitor. To not execute it, check the box " Do not calculate textual similarities ". If you want to do only this analysis check " Analyze only textual similarities " in order to ignore the crawling step . The " Write the log to a file on the Desktop " box will copy the contents of the analyzer's console to a text file on your Desktop. The file is called log PricesTracker .txt . " Do not add the products if the name already exists " duplicates the products on the name. Please note, if two of the competitor's products bear, for example, name name " Black shoe ", only one of the two will be imported with this option. Uncheck it if it is not the desired behavior. The option is useful because sometimes the same product can have two separate URLs, for example http://site.com/categorie/produit.html and http://site.com/categorie/sous-categorie/produit.html. If this option was not checked you would find several times the same product at the time of associating it, which is not very annoying but little to cause confusion. " Update the price history " and " Execute the price rules " allow to launch these two operations at the end of the script. Validate the configuration and then download the two files run.jar and LAUNCH.bat in the same folder. run.jar is a final file that contains the crawler code. By cons LAUNCH.bat takes into account your personal configuration. If you tick different box, remember to download it again after validation. Double-click LAUNCH.bat (java must be installed) and the analysis starts. Now we have to wait. You will be notified at

the end. Do not hesitate to leave it running overnight, but deactivate the automatic standby. You can continue working alongside. **Sometimes the analysis never ends** .

You can see where it is with the F2 key. If you find that there is always more links to crawl and that no product is added, it surely means that the number of links on the site is potentially infinite (for example on a search page, the store offers to filter products from 0 to 51.02 € and when you click on this option, this brings up a page which offers to filter products from 0 to 85.43 €, the argument of the link is therefore always different). The best way to solve this problem is to block links containing certain strings by using the " Regular expression for URLs to avoid " field in the competitor's configuration. To see problematic links use F6 , F8 or F9 . You can also start the analysis for a relatively long time then stop it after a few hours and launch the proximity analysis separately with " Calculate only textual similarities ". You can run the analysis only on certain competitors by deactivating it in Manage competitors, you can also specify in which order they should be treated.

2) Once the analysis is done, you have in base all the products of your competitors, go to PricesTracker > Product matching to do the matching . The matching is done **to establish correspondences between your products and those of competitors** . For example if your product is called " Kevin Klein Red T-shirt ", it will correspond for example to " Kevin Klein Tee-shirt Scarlet Collection " at the competitor's. Several competing products can be associated with the same product. You must make the associations for each competitor. You can click on the **small outgoing arrow** to see the product sheets of your competitors or yours. You can search for one of your products by name or by reference and use defined favorites. **The first products are the products found by the AI algorithm (in blue)** . But you can also do **manual searches** with the field above the Search button as well as searches by **close price** , in fact the prices of your competitors are often close to yours. Once the product is found, **click on it to associate or disassociate it** . An associated product is in green. At the end of the page list, you have an Associations option which summarizes all the established product associations.

3) Your products are now associated, go to PricesTracker > Competitor prices to do your price watch. A table lists all your products and identifies with a **color code** if they are more expensive than those of your competitors. You can quickly edit the price of your product with the first icon under your product or by double clicking in the table on your price . For convenience, you can **create favorites** for products to be monitored more frequently . Start by creating a favorite by clicking on the big yellow star at the top right . Options are available for mass associating products with your favorite. To add all the products in a category, find your ID in Catalog> Categories. Then associate your product with the favorite in PricesTracker

> Competitors' prices with the little yellow star below the product. To filter, use the drop-down list next to the big yellow star. To **set the update frequency of the product** , use the option present in the Update date column. These products will not be updated during partial analyzes if they are too recent. The **palette** allows you to see the variations of the product. You can create programmed thresholds using the small thermometer. This allows to modify the **threshold of the product** and not to take the price of your product but for example the price minus 1 €, the price HT (return $ product -> getPrice (false);) or the price of the declination 154 (return $ product -> getPrice (false, 154);). For this use the Prestashop API . The last step to be really operational is the **pricing rules** . They allow you to automatically adjust your price compared to that of the competitor or to receive an email alert. Click on the large rudder at the top right to create a ruler. Start by creating the price rule PHP script. If necessary, you can call on our company . Then go about your product in PricesTracker > Prix competitors and associates z good rule by clicking on the small rudder, then selecting the rule in the dropdown list. The following box allows arguments to be put to the rule such as a price below which one should not go down. The operation is the same as that of an Excel function. For example " Adjust upward (below X , high limit) " increases your price if the competitor increases his own. The first argument allows to be for example 1.50 € below the competitor, the second allows not to exceed an increase of for example 210.30 €. To put these values in the field enter " 1.5 , 210.30 ". You can also mass associate a rule. This association is only possible on a favorite. You must therefore first create the favorites encompassing all the products concerned before associating a mass price rule.

II) Common problems

1) The applet displays an error but continues its analysis

Mistakes can happen, it's not alarming. They are displayed to you to diagnose possible problems not necessarily because it is worrying. Here are some common mistakes !

- Error 401 : it is that the page you are looking for requests authentication and rejects you
- Error 403 : the competitor's site refused to show you the page for an undisclosed reason
- Error 500 : this generally comes from your server, probably in development which requests a password by the Digest method, you must deactivate this protection . It can also come from an unavailable host.

- Intermittent error 500 : a limitation causes a ban, generally it is necessary to increase the size of the post_max_size directive in php.ini
- Error 503 : You must deactivate the Maintenance mode of Prestashop during the analysis .
- MalformedURL : the link the crawler tried to access does not comply with standards

2) ' java ' is not recognized as an internal or external command, an executable program or a batch file.

You must install Java before : https://www.java.com/download/

3) I can't launch LAUNCH.sh on Mac

The equivalent of .bat on mac is .sh. But Apple has chosen to disable this possibility in the latest versions. Here is the procedure :

1) Download the run.jar and the LAUNCH.sh in the same folder
2) Open a Terminal
3) Enter "sh " (sh followed by a space without the quotes)
4) Drag and drop LAUNCH.sh into the terminal, this will write the path of LAUNCH.sh after the command
5) Press Enter

If this does not work, open LAUNCH.sh with a text editor, write the absolute path (right click> Information> Location) of run.jar just before the text " run.jar " in the editor . Make sure that " /usr/bin / " is in front of the java command. Save the file and reissue the command in the terminal.

III)   Technical problems encountered with CRON

1) The java version installed on the server is not up to date

Java version problems cause a variety of problems. If you have a " curious " bug the first thing to do is to update java.

Do " java –version " to control the version. To update your java follow the following procedure :

```
cd /tmp
sudo apt-get update
sudo apt-get purge openjdk-7-jdk openjdk-6-jdk openjdk-8-jdk
sudo wget http://javadl.sun.com/webapps/download/AutoDL?BundleId=83376
sudo mv AutoDL?BundleId=83376 Java.tar.gz
```

```
sudo tar xvf Java.tar.gz
sudo mv jre1.7.0_51 /opt/
sudo update-alternatives --install /usr/bin/java java
/opt/jre1.7.0_51/bin/java 1
sudo update-alternatives --set java /opt/jre1.7.0_51/bin/java
sudo java -version
```

Note : You may need to replace the texts in red with more current values (see
http://www.java.com/fr/download/manual.jsp)

2) Error X11

This means that your server does not have a graphical interface and that the program tries to display
it. 3 actions allow to resolve the problem :

- Delete the display in the environment variables with « export DISPLAY=:0.0 » or « setenv DISPLAY :0.0 »
- Disable the display of our module by adding in the second argument nodisplay;
- - Specify the folder where to write the logs as a second argument with workpath=/folder/of/logs; If you do the last two actions, your CRON will look like this for example :
  export DISPLAY=:0.0 && java -Djdk.http.auth.tunneling.disabledSchemes="" -Djdk.http.auth.proxying.disabledSchemes="" -Dsun.net.http.allowRestrictedHeaders=true -Xms1g -Xmx40g -jar /var/www/vhosts/httpdocs/www/modules/pricestracker/applet/run.jar http://www.site.com/modules/pricestracker/pages/communication.php?clef=802124441 nodisplay-workpath=/tmp/;

3) I don't know where to set up a CRON in general OR it doesn't work from my administration interface

We can distinguish 2 types of CRON, General Cron which launches a program and Web Cron which
opens a page in PHP which contains a script.

Here the program is launched with Java and must be launched as classic CRON. So if you are used to
only entering in the CRON box a web address starting with http, then this is not the right place.

To set up the CRON you must connect in SSH (or on a Cpanel or Webmin type server administrator)
and set up the CRON in the crontab . The procedure in SSH is as follows :

`crontab -l` : list cron

`crontab -e` : opens the Cron editor

```
0 1 * * * java -Djdk.http.auth.tunneling.disabledSchemes="" -
Djdk.http.auth.proxying.disabledSchemes="" -
Dsun.net.http.allowRestrictedHeaders=true -Xms1g -Xmx40g -jar
/var/www/vhosts/httpdocs/www/modules/pricestracker/applet/run.jar
http://www.site.com/modules/pricestracker/pages/communication.php?clef=8021
24441
```
: once the editor is open, this allows you to insert a daily Cron at 1 a.m.

To save the changes to the crontab , Esc and then Please type " x " and Enter

To save the console output modify your cron as follows :
```
java -Djdk.http.auth.tunneling.disabledSchemes="" -
Djdk.http.auth.proxying.disabledSchemes="" -
Dsun.net.http.allowRestrictedHeaders=true -Xms1g -Xmx40g -jar
/var/www/vhosts/httpdocs/www/modules/pricestracker/applet/run.jar
http://www.site.com/modules/pricestracker/pages/communication.php?clef=8021
28021 >> /home/john/logs/backup.log 2>&1
```

Reminder: the syntax is mm hh dd MMM DDD task. DDD is the day of the week (0 = Sunday, 1 = Monday , …)
For each numerical value (mm, hh , dd , MMM, JJJ) the possible notations are:
   *: to each unit (0, 1, 2, 3, 4 …)
   5.8: units 5 and 8
   2-5: units from 2 to 5 (2, 3, 4, 5)
   * / 3: every 3 units (0, 3, 6, 9 …)
   10-20 / 3: every 3 units, between the tenth and the twentieth (10, 13, 16, 19)

4) " Cannot open shared object file: No such file or directory " error

a) "libXext.so.6: cannot open shared object file: No such file or directory" => sudo apt-get install libxtst6
b) " libXrender.so.1: cannot open shared object file: No such file or directory " => sudo apt-get install libxrender1

5) Some useful commands :

- History of CRON ICIM : grep CRON.*run.jar /var/log/syslog
- List of programmed crons : crontab -l
- Activity of your server programs : top
- Check if the CRON is currently running : ps - ef | grep java
- Force Java to stop : killall java