

# Official Kraken Image Optimizer plugin for Umbraco

A package to share the magic of Kraken Image Optimizer in Umbraco

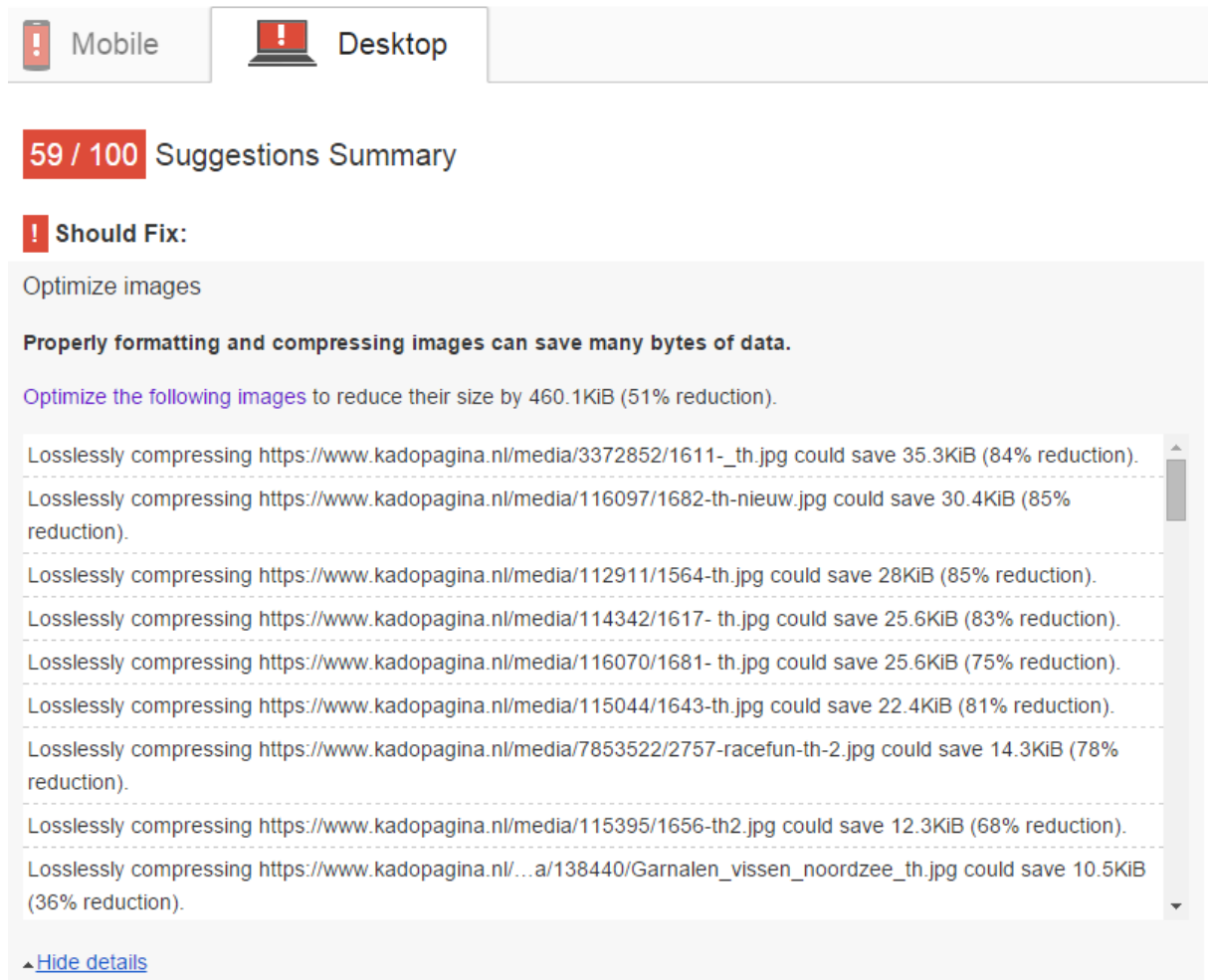
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## Introduction

Managing media for a website is a task in and of itself, no matter the CMS involved. Even after putting many hours into setting it up perfectly, it is difficult to teach clients how they should save their images for optimal quality.

Aside from that, the speed with which a site is loaded is becoming increasingly important. More and more people visit websites on their smartphone, so the amount of kB's involved should be as low as possible to help ensure the content is downloaded quickly. And finally, isn't it annoying that no matter how much you optimize your website, Google PageSpeed still keeps complaining about optimizing your images?



The screenshot shows the Kraken Image Optimizer interface. At the top, there are two tabs: 'Mobile' (selected) and 'Desktop'. Below the tabs, a red box indicates '59 / 100 Suggestions Summary'. A section titled 'Should Fix:' contains the heading 'Optimize images' and the text 'Properly formatting and compressing images can save many bytes of data.' Below this, it says 'Optimize the following images to reduce their size by 460.1KiB (51% reduction)'. A list of eight images is shown, each with a URL and the potential savings in size and percentage reduction. A 'Hide details' link is at the bottom of the list.

Image URL	Size Reduction
<a href="https://www.kadopagina.nl/media/3372852/1611-_th.jpg">https://www.kadopagina.nl/media/3372852/1611-_th.jpg</a>	35.3KiB (84% reduction)
<a href="https://www.kadopagina.nl/media/116097/1682-th-nieuw.jpg">https://www.kadopagina.nl/media/116097/1682-th-nieuw.jpg</a>	30.4KiB (85% reduction)
<a href="https://www.kadopagina.nl/media/112911/1564-th.jpg">https://www.kadopagina.nl/media/112911/1564-th.jpg</a>	28KiB (85% reduction)
<a href="https://www.kadopagina.nl/media/114342/1617- th.jpg">https://www.kadopagina.nl/media/114342/1617- th.jpg</a>	25.6KiB (83% reduction)
<a href="https://www.kadopagina.nl/media/116070/1681- th.jpg">https://www.kadopagina.nl/media/116070/1681- th.jpg</a>	25.6KiB (75% reduction)
<a href="https://www.kadopagina.nl/media/115044/1643-th.jpg">https://www.kadopagina.nl/media/115044/1643-th.jpg</a>	22.4KiB (81% reduction)
<a href="https://www.kadopagina.nl/media/7853522/2757-racefun-th-2.jpg">https://www.kadopagina.nl/media/7853522/2757-racefun-th-2.jpg</a>	14.3KiB (78% reduction)
<a href="https://www.kadopagina.nl/media/115395/1656-th2.jpg">https://www.kadopagina.nl/media/115395/1656-th2.jpg</a>	12.3KiB (68% reduction)
<a href="https://www.kadopagina.nl/...a/138440/Garnalen_vissen_noordzee_th.jpg">https://www.kadopagina.nl/...a/138440/Garnalen_vissen_noordzee_th.jpg</a>	10.5KiB (36% reduction)

And there is just no end to this. Even if you optimize all the images, whenever your clients adds new images you're back to square one.

Thankfully, there are several brilliant packages for Umbraco that make life much simpler. Examples are [Slimsy](#), [DAMP](#) and [ImageGen](#). Brilliant as these are however, they cannot prevent the uploading of images that have been saved in a suboptimal way.

And this is where the power of [Kraken Image Optimizer](#) comes to our aid. *Kraken is a robust, ultra-fast image optimizer and compressor with best-in-class algorithms. They'll save you bandwidth and storage space and will dramatically improve your website's load times.* By pushing a single button, Kraken will optimize *all* images; drastically reducing their loading times. The result? A website that's

fast as lightning and happy visitors. And all it takes is installing the package and subscribing to Kraken. For just 5 dollars a month, you can optimize up to 500 MB of images.

The challenge was to implement the magic of Kraken in such a way that neither a developer nor user have to think about it and without the need to change even a single line of code.

## The package

The package can be downloaded from [our.umbraco.org](http://our.umbraco.org). The installation works as usual, just go to the package manager, select “install local package” and follow the instructions. After the package has been installed:

- A new datatype called “Status” has been created

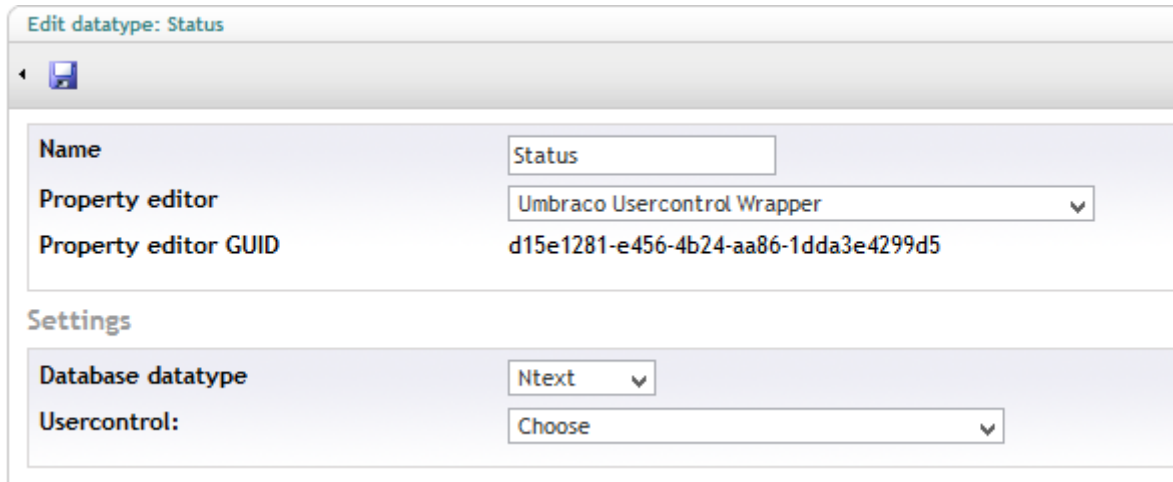


Figure 1 The datatype in Umbraco 4 and 6

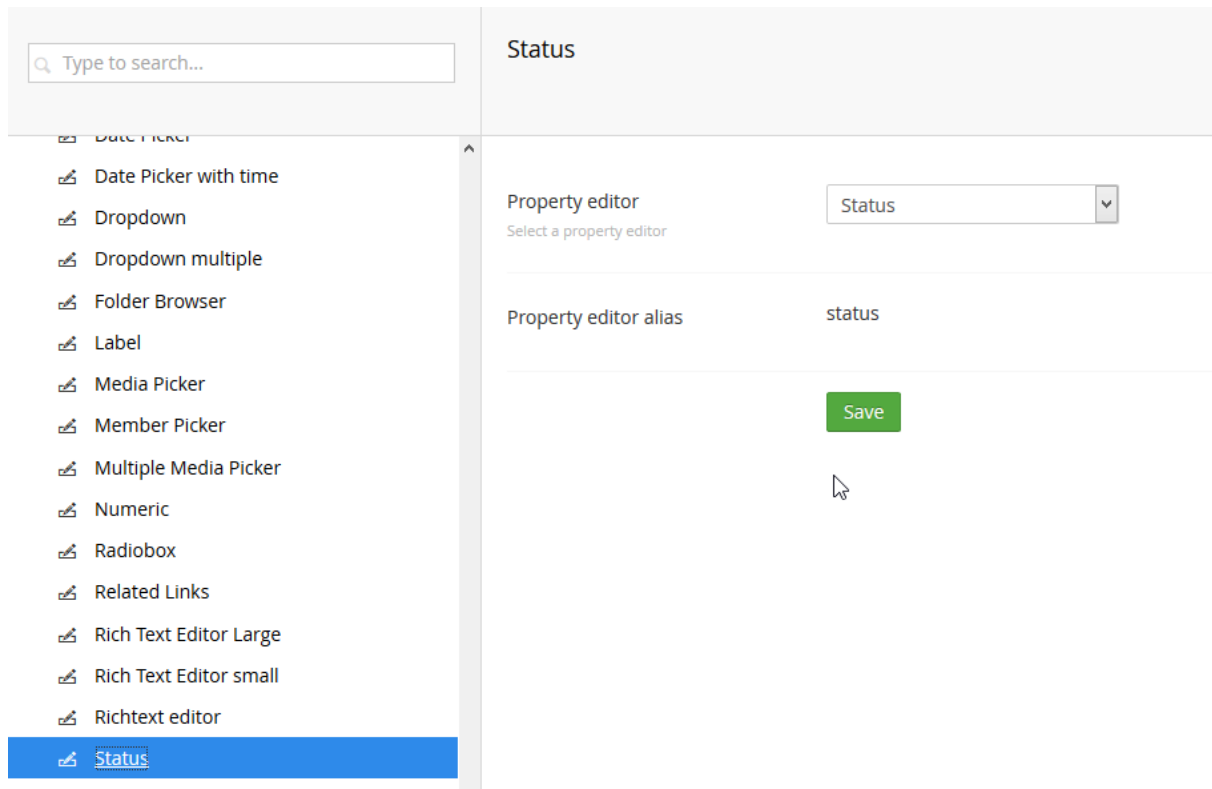


Figure 2 The datatype in Umbraco 7

- The media-section has a new tab called "Image optimizer"

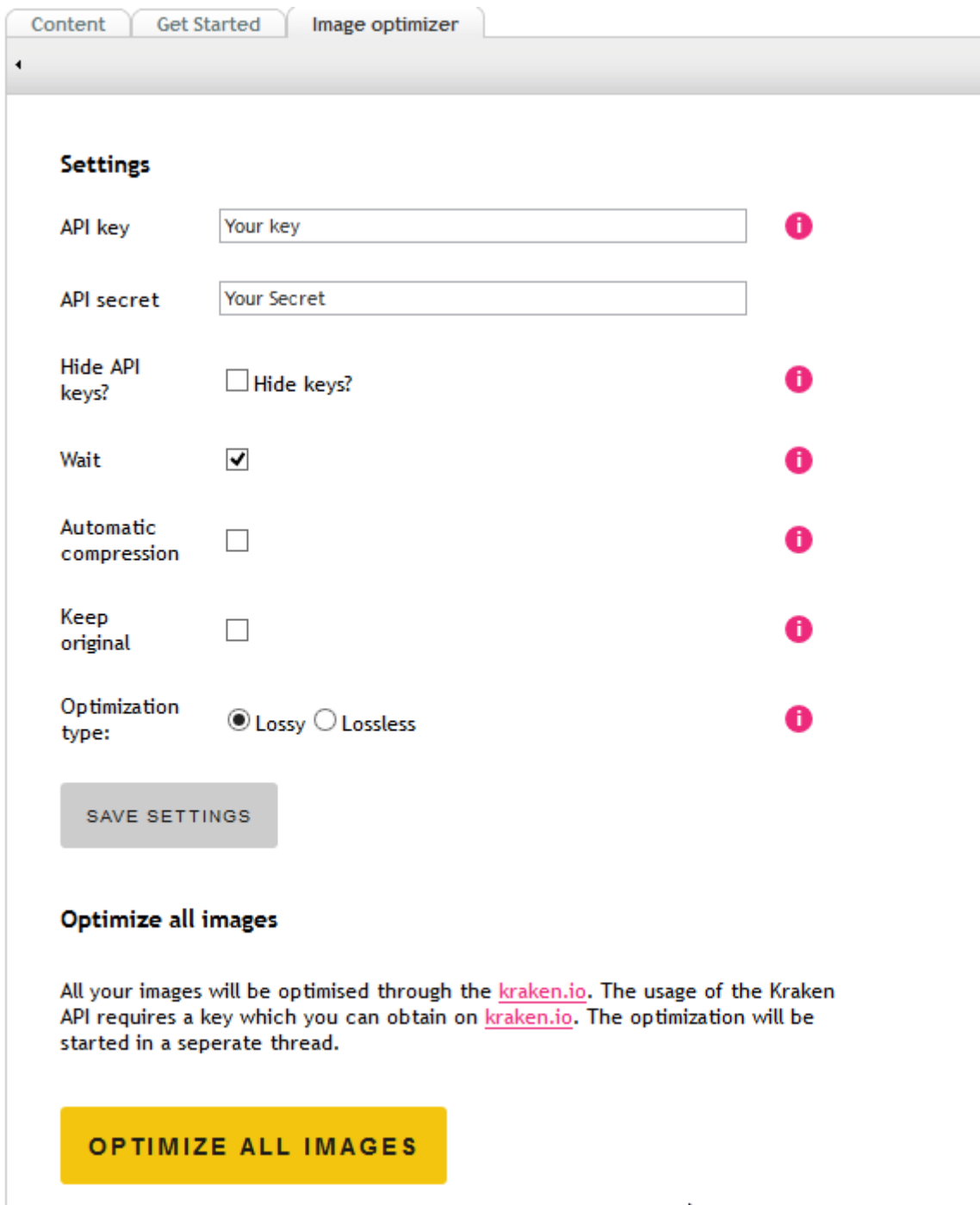


Figure 3 The media dashboard in Umbraco 4 and 6

## Media

Content **Image optimizer**

### Settings

API key  ⓘ

API secret

Hide API keys?  Hide keys? ⓘ

Wait  ⓘ

Automatic compression  ⓘ

Keep original  ⓘ

Optimization type:  Lossy ⓘ  
 Lossless

**SAVE SETTINGS**

### Optimize all images

All your images will be optimised through the [kraken.io](https://kraken.io). The usage of the Kraken API requires a key which you can obtain on [kraken.io](https://kraken.io). The optimization will be started in a seperate thread.

**OPTIMIZE ALL IMAGES**

Figure 4 The media dashboard in Umbraco 7

- In the API key and API secret you will need to enter your Kraken credentials as provided by [Kraken Image Optimizer](https://kraken.io). Prices start at 5 dollars a month.
- By selecting “Hide API keys?”, the boxes for the API key and API secret will no longer be visible in the Media Section. This way it becomes impossible for a user to accidentally see or change these.

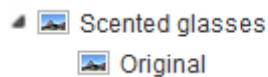
- **Wait:** When selected, the uploaded image will be send to Kraken and the program will wait for a response. Depending on the size of the image this could potentially take a while. If you do not check this box, this process will be done asynchronously. This way the user does not have to wait for a response from Kraken.

This option is checked by default.

- By checking “Automatic compression”, every image that gets uploaded to the Media Section will automatically be send to Kraken. Don’t trouble your users and let the magic happen automatically.

This option is turned off by default. However, we highly advise to turn this option on so all images get optimized automatically.

- **Keep original:** with this option, a copy of the original will be made after it has been uploaded. This can be useful during testing or while experimenting with the optimization type option. It also allows for the possibility to restore the original image. When this option has been selected, an image called “Original” will be created as a child of the current media-item.



This option is switched on by default.

- **Optimization type** determines how the image should be optimized; lossy or lossless. The best way to find out what works for you is to try.
  - **Lossy:** The image is optimized as much as possible by sacrificing a little quality that is not noticeable by the human eye. This way it is possible to reduce an image by a whopping 90%!
  - **Lossless:** The image will be optimized without changing a single pixel. Choose this method if the quality of the images is more important than shaving of file size.
- Clicking “optimize all images” will make the package check all images in the media-section and send them to Kraken for optimisation. This is all managed in a separate process, so there is no need to wait, you can simply continue with whatever it was you were doing. You can check the progress by going down the tree and simply check which images have been optimized.

- A configuration file (/config/kraken.config) has been created.

```
<?xml version="1.0" encoding="utf-8"?>
<Configuration xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <ApiKey>Your key</ApiKey>
  <ApiSecret>Your secret</ApiSecret>
  <HideKeys>>false</HideKeys>
  <Enabled>>false</Enabled>
  <Lossy>>true</Lossy>
  <KeepOriginal>>false</KeepOriginal>
  <Wait>>true</Wait>
</Configuration>
```

All Kraken settings can also be edited in this file. If the setting “Hide API keys” had been selected from the dashboard it is possible to set this option back to “false” with the config file. After making changes to this file it is necessary to restart your website. Simply touching the web.config should suffice.



- A tab called “Image optimizer” has been added to the media type “Image”. The tab contains four new properties:
  - o Status (datatype “Status”)
  - o Compression date (krakDate, datatype “Label”): Shows when the image was optimized
  - o Original size (originalSize, datatype “Label”): Shows the file size of the original image
  - o Percent saved (saved, datatype “Label”): Shows how much smaller the optimized file is (in percentages)

#### Tab: Image optimizer

Status (status), Type: Status

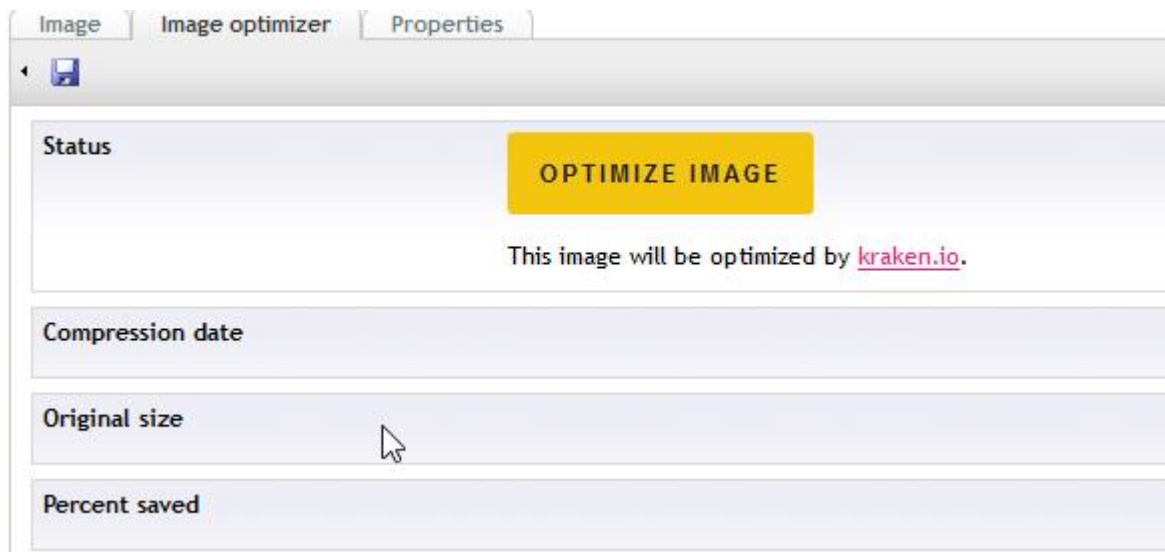
Compression date (krakDate), Type: Label

Original size (originalSize), Type: Label

Percent saved (saved), Type: Label

These properties are created on the Media Type “Image”. If you have created your own Media Type however, you can simply add these properties to it. This way, they can be optimized with Kraken as well.

It is then possible to optimize individual images.



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*\*\*\* Umbraco 7 \*\*\**

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In Umbraco 7, there is a bug while installing this package. The property editor for the datatype “Status” is set to “Label” rather than “Status”. You will need to manually change this.

Status	
Property editor	Label
Select a property editor	
Property editor alias	Umbraco.NoEdit
<ul style="list-style-type: none"><li>• 0: /App_Plugins/Kraken/status.ascx</li></ul>	

## Uninstall

If you decide you don't want to optimize your website after all, the package can be uninstalled from the package manager. If this doesn't work for whatever reason, it is possible to manually uninstall the package by:

- Deleting the datatype "Status"
- Deleting the new properties of the Media Type "Image"
- Deleting the new tab of the Media type "Image"
- Deleting the folder /App\_Plugins/Kraken
- Deleting the file /config/Kraken.config
- Deleting these files from /bin/
  - o RestSharp.dll (unless your own code uses it)
  - o /bin/Kraken.dll (for Umbraco 6 and 7 installations)
  - o /bin/KrakenLegacy.dll (for an Umbraco 4 installation)
  - o /bin/KrakenInstaller.dll (Only if something went wrong during installation. Normally this file is automatically removed after installation)

## Known bugs

- There is a known bug when installing the package in Umbraco 7. The property editor for the “Status” datatype gets set to “Label”. This should be manually set to “Status” after installation.

## Roadmap

A package is never finished and we have enough ideas and wishes for the future.

In new releases we want to:

- Check if your credentials are valid upon entering
- Hiding the button when the credentials are invalid
- Add an option “Stop kracking when we reach our monthly quota”
- A new “Optimized upload” datatype. This should be an exact copy of the default Umbraco “upload” datatype. The upload datatype however, does not use media events like AfterSave. Images uploaded this way can therefore not be kracked automatically upon uploading.
- An overview of the optimization. Allowing you to see how much space you’ve saved in a single glance.

Ideas, suggestions or found a bug, please let me know. Contact me at [jeffrey.schoemaker@perplex.nl](mailto:jeffrey.schoemaker@perplex.nl) or post a message on the forum.

## Credits

Making this package has been a coordinated effort by several members of the [Perplex Internetmarketing](#) team. Most of the work has been done by Wouter van der Beek. He has spent many hours debugging, installing, uninstalling, reinstalling and testing. I would also like to thank Jorgen Verweij, Ferdy Hoefakker, Timo Hutjens, Jeroen van Rijssen, Olaf Meul and Fedosja van der Lee for their help in designing, programming, writing and providing feedback.

Of course, none of this would have been possible without the magic of Kraken Image Optimizer and the feedback and cooperation of Karim Salman.