
Software Requirements Specification

for

DropIt

Requirements for Version v6.0

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21 January, 2014

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1. Introduction

1.1 Purpose

The goal of this document is to provide support information on the *DropIt project* (current version v6.0). It will attempt to explain the functionality of the program and the features it provides. Note: it will not fully describe how the program works or how the user should use it. For that purpose one should read the user's manual, which is written by the creators of the project.

1.2 Intended Audience and Reading Suggestions

This Software Requirements document is intended for:

- Developers who can review project's capabilities and more easily understand where their efforts should be targeted to improve or add more features to it (design and code the application – it sets the guidelines for future development).
- Project testers can use this document as a base for their testing strategy as some bugs are easier to find using a requirements document. This way testing becomes more methodically organized.

- End users of this application who wish to read about what this project can do.

1.3 Project Scope

DropIt is a tiny, flexible, hard-working tool to automate processing & organizing files and folders. When you need to organize files, DropIt can eliminate much of the drudgery of searching and manually opening folders and moving files around.

Drop a group of different files and folders on the floating DropIt image and it sorts them to defined destination folders, compresses or extracts them, opens them with associated programs or performs other defined actions.

You can define how filter your files (by name, directory, size, date, properties, content or regular expressions) and associate one of the 18 available actions to perform. You can also organize your associations in profiles and automatically scan monitored folders at a defined time interval.

1.4 References

The official website of the project contains a brief description of the project, screenshots, links, tutorials and of course it gives users the ability to download and contribute to the project in different ways, since it is an open source project:

<http://www.dropitproject.com/>

If you have any questions about this program, don't hesitate to join the forum:

<http://www.portablefreeware.com/forums/viewtopic.php?f=4&t=5441>

2. Overall Description

2.1 Product Perspective

DropIt is a very useful and timesaving program for those who like to organize their files and folders in their computer. All you have to do is download it for free, install it and you are done.

2.2 Product Features

DropIt provides users the following functions/features:

- Drag-and-Drop: Process files and folders simply dropping them on the target image.
- Filter files & folders: By name, directory, size, dates, properties, content or regular expressions.
- Folder Monitoring: Process files and folders automatically monitoring defined directories.
- Profiles: Collect associations in profiles and assign an image to easily recognize it.
- Comprehensive Path Support: Support absolute paths, relative paths, UNC paths for shared folders.
- Abbreviations: Support internal, custom and system environment variables.

- **Alternative Usages:** Support SendTo and Command-Line to process files and folders.
- **Multi-language:** Available with multi-language interface.
- **Profile Encryption:** Support encryption to protect your profiles with a password.
- **Automatic Update:** Support automatic software update.
- **Activity Log:** Support log file creation to verify processing operations.
- **Unicode:** Support for Unicode encoding.
- **Optimized Versions:** Available in both installer and portable versions for 32/64-bit Windows.

Finally, DropIt offers users 18 different actions on matching files and folders:

- ✓ **Move:** to move files/folders to the defined destination folder (for example to organize your files in folders).
- ✓ **Copy:** to copy files/folders to the defined destination folder.
- ✓ **Compress:** to compress files/folders in one of the supported destination archive formats (*ZIP, 7Z, Self-Extracting EXE*).
- ✓ **Extract:** to extract supported archives in the defined destination folder (*7Z, APM, ARJ, BZIP2, CAB, CHM, CPIO, DEB, DMG, EXE, FAT, FLV, GZIP, HFS, ISO, JAR, LHA, LZH, LZMA, MBR, MSI, MSLZ, NFTS, NSIS, ONEPKG, RAR, RPM, SMZIP, SQX, SWF, TAR, UDF, VHD, WIM, XAR, XZ, Z, ZIP*).

- ✓ **Rename:** to rename files/folders with the defined new name (using abbreviations to customize it).
- ✓ **Delete:** to delete files/folders with the defined method: *Directly Remove* (files are removed, but they could be restored using a recovery tool), *Safely Erase* (files are overwritten with the “DoD 3-pass” wiping method, to make them unrecoverable), *Send to Recycle Bin* (files are sent to recycle bin and are still available from there).
- ✓ **Encrypt:** to encrypt files/folders in the defined destination folder (to protect your personal data).
- ✓ **Decrypt:** to decrypt files/folders in the defined destination folder (previously encrypted with DropIt).
- ✓ **Open With:** to open files with the defined destination program (parameters supported).
- ✓ **Upload:** to upload files/folders to a server using *FTP* or *SFTP protocols*.
- ✓ **Send by Mail:** to attach files/folders to a mail and send them using *SMTP protocol*.
- ✓ **Create Gallery:** to create a image gallery in the destination folder (*HTML*). In particular you can create galleries with several themes like Brochure, Circles, Default, Pile, SquareHeads and many others.
- ✓ **Create List:** to create a list of files/folders in one of the supported destination file formats (*HTML, PDF, XLS, TXT, CSV, XML*). In particular you can create HTML lists with several themes

like Arrowistic, Casablanca, DeepGreen, Default, Precision and many others.

- ✓ **Create Playlist:** to create a playlist of files in one of the supported destination file formats (*M3U*, *M3U8*, *PLS*, *WPL*).
- ✓ **Create Shortcut:** to create file/folders shortcuts in the destination folder.
- ✓ **Copy to Clipboard:** to copy the desired file information to the system Clipboard.
- ✓ **Change Properties:** to change file date, time and attributes.
- ✓ **Ignore:** to ignore files/folders and skip them during process.

2.3 User Classes and Characteristics

All kind of users:

DropIt is a powerful, yet easy program to use so, all users with some basic experience with computers are able to use it efficiently.

Open source software developers and contributors:

- Software Developers: People with very good knowledge of programming language project, in order to understand and be able to extend project's source code
- Translators: People of all age groups with very good knowledge of a language not included in the current translation list.

- Anyone who wants to help FOSS community. The whole project is based on the conception of Free and Open Source Software, so all people are welcome to contribute any way they can/like.

2.4 Operating Environment

DropIt should run on Operating Systems: Win2K / WinXP / Vista / Win7 / Win8. It is written in a windows-depended language so unfortunately it won't run on a linux-based system or mac.

2.5 Design and Implementation Constraints

DropIt is under the GNU General Public License Version 2, June 1991. Everyone, that does or is going to develop or use DropIt, should agree and fully accept the terms of this kind of license.

2.6 User Documentation

User documentation components are available on project's official website:

<http://www.dropitproject.com/>

Don't hesitate to ask a question at the project's forum:

<http://www.portablefreeware.com/forums/viewtopic.php?f=11&t=5441>

3. System Features

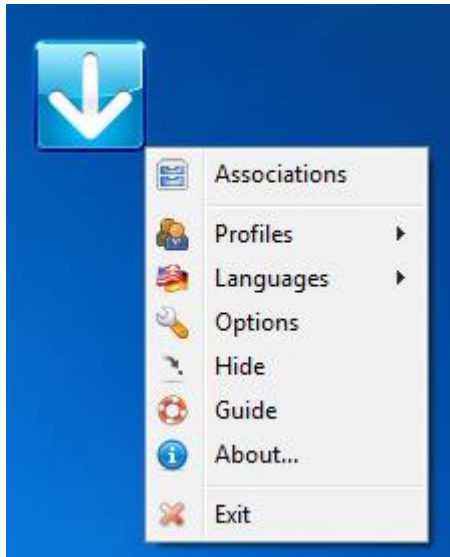
This section describes the functional requirements of the application and the features it provides. System features are described in detail to help the future extension and testing of the system. Features stated here are already parts of the implemented system so no prioritization is needed. Priority is needed for features to be developed that will be added to this document later.

When the program is installed, the user will see the following “icon” on his working space:



Note: The icon is visible all the time, not only in desktop (except for full-screen applications).

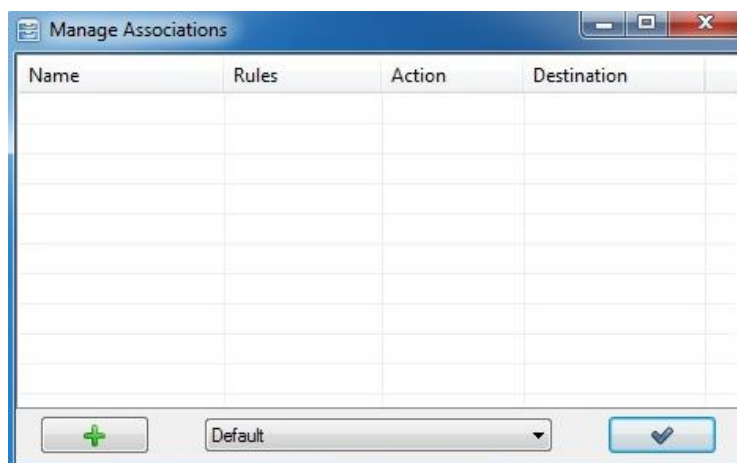
If the user right-clicks on the icon the main menu of the program comes out, which contains all the application features, as seen on the following screenshot:




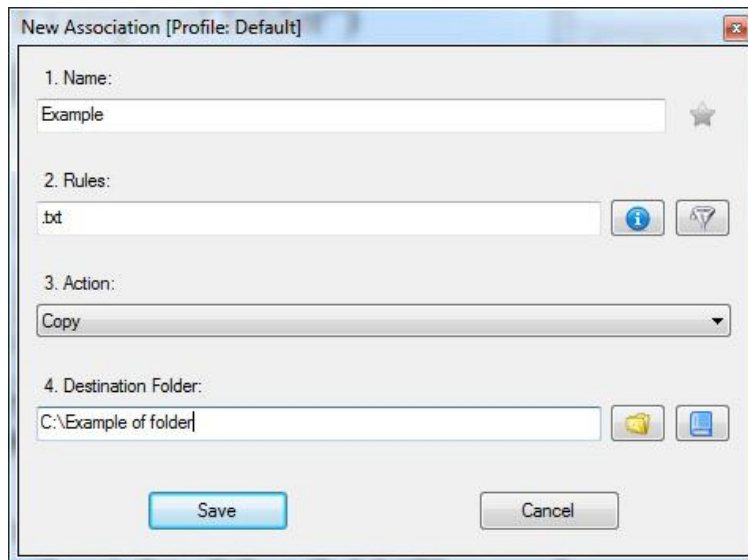
As you can see, the menu has 8 options for the user, which we will describe now in detail.

3.1 Associations


To manage your associations just click “Associations” and it will show the following window:

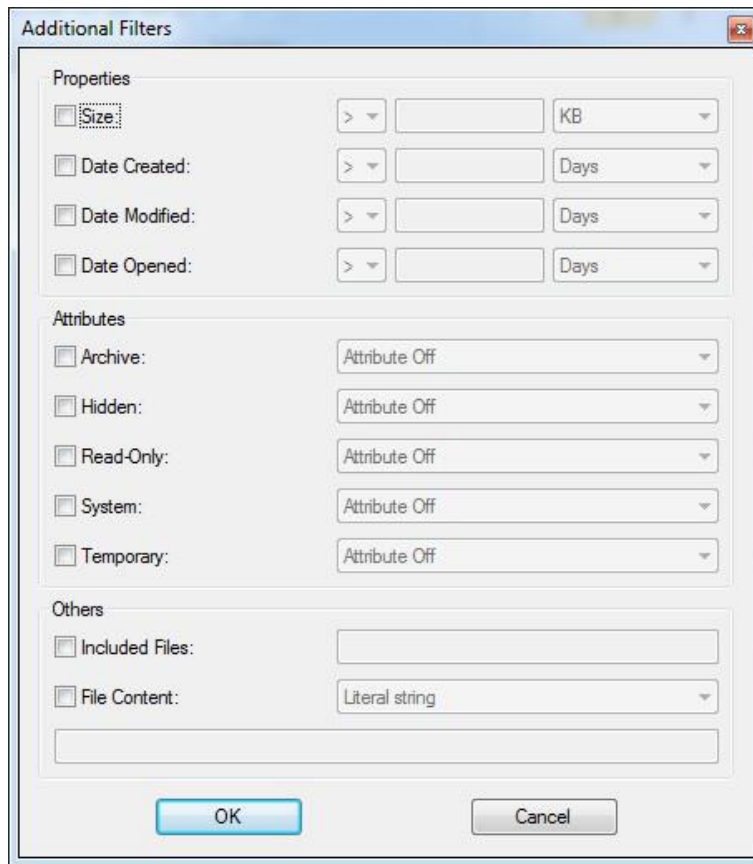




Now you can click the  button or double-click the empty table to create a new association. The opened window allows you to create and edit associations.



These are the main fields available:

1. The association name to recognize it in your collection of associations (e.g. "Example"). In this field you can also select the star on the right to give priority to the specific association in case of multiple matches.
2. The rules to define what files will be processed with this association (e.g. "*.txt"). By clicking the "Rule settings" button you can find some examples of rules for files and folders, or check the "Consider as Regular Expressions" option. From the next button  you can also configure additional filters, as seen on the image below:

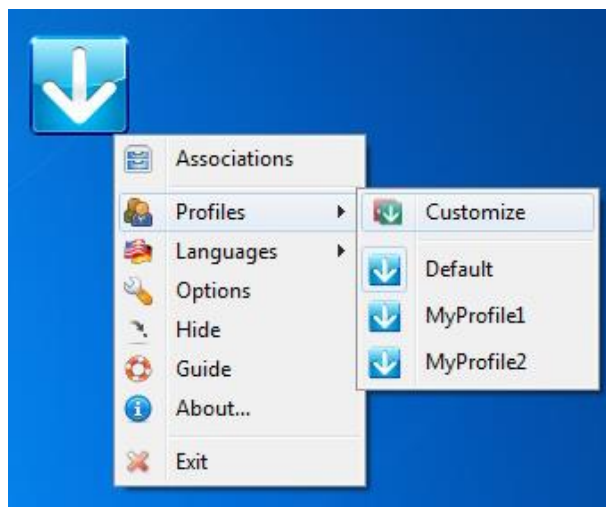


3. The action that will be used on your files (e.g. “Copy”).
4. The destination related to the selected action (e.g. “C:\Example of folder”). Of course you can search your computer for a path with the  button or click the “Abbreviations” button  for extra help. The destination field instead is different for each action, but it is essentially a configuration of the action itself. For example some actions allow to define a “Destination Folder” where position files processed with that association.

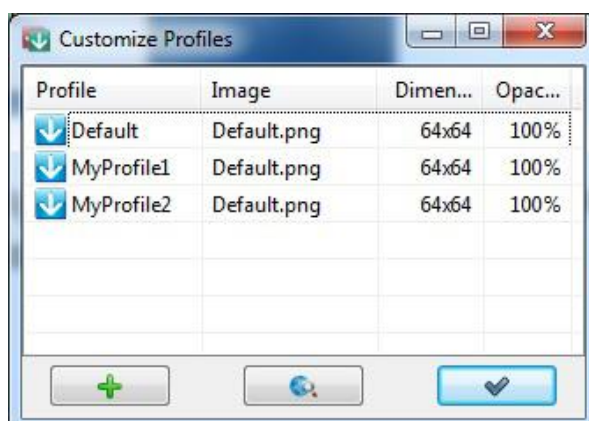
Completed the association creation, you can “Save” it and drag&drop files on the target image to process them. Files will be filtered and processed with the matching associations.

3.2 Profiles

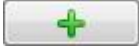
To manage your profiles go over the “Profiles” option and then you can either choose one of the existing profiles or create your own profile by clicking on the “Customize” button, as seen below:

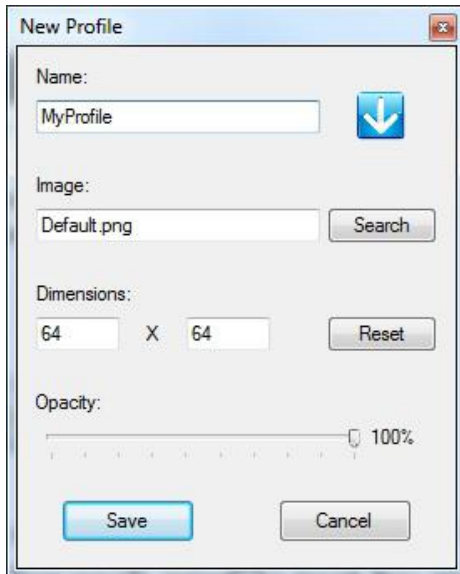


By selecting the “customize” option you will get the following window, which contains all the profiles you have created (including the default profile).



You can edit, duplicate, export, delete or use some extra options for each profile just by right-clicking on the

profile you are interested in. Of course you can create a new profile by clicking the  button and filling your desired parameters (name, image, dimensions and opacity), as seen below:

A screenshot of a 'New Profile' dialog box. It contains several input fields and buttons. The 'Name' field has 'MyProfile' entered. To its right is a blue button with a white downward arrow. The 'Image' field has 'Default.png' entered, with a 'Search' button to its right. The 'Dimensions' section has two input fields, both containing '64', separated by an 'X'. A 'Reset' button is to the right of these fields. The 'Opacity' section has a slider bar with a handle at the 100% mark. At the bottom are 'Save' and 'Cancel' buttons.

New Profile

Name:
MyProfile

Image:
Default.png Search

Dimensions:
64 X 64 Reset

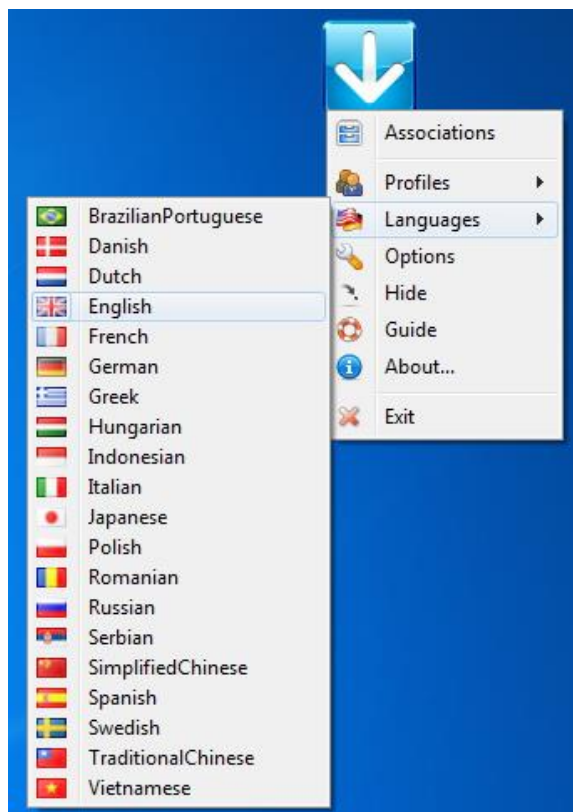
Opacity:
100%

Save Cancel

Finally you can find some target images for your profiles online by clicking on the  button.

3.3 Languages

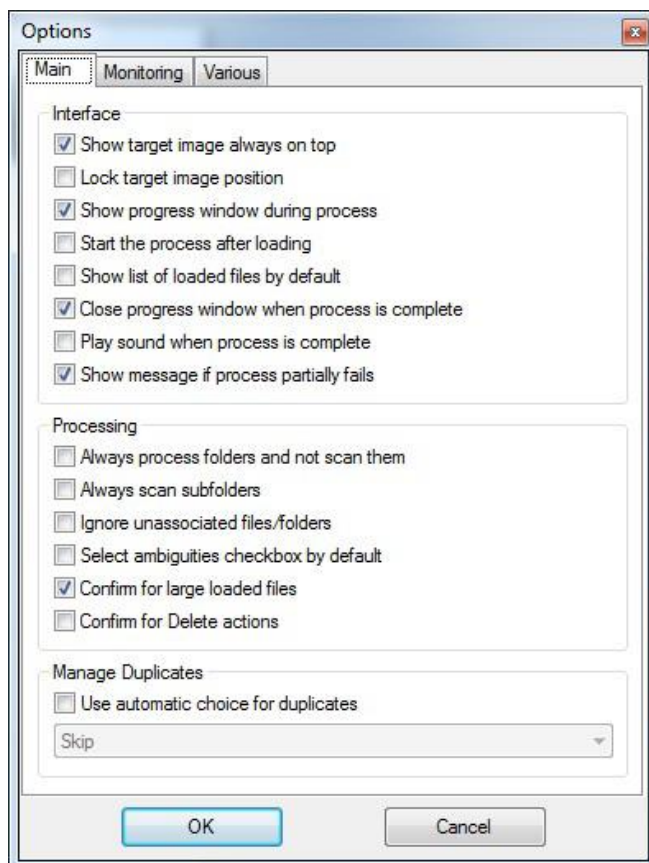
You can select one of the languages you see on the list. Currently there are 20 translations of the program, but whoever wants to translate it to their home language is more than welcome to participate.



3.4 Options



A wide variety of options is offered to the user, including interface options (e.g. playing a sound when a process is complete), processing options (e.g. confirmation for large loaded files), folder monitoring options and some other general options about the program. You can have a full view of the available options in the following screenshots:



Interface:

→ **Show target image always on top**, to keep DropIt always visible on your screen.

→ **Lock target image position**, to keep the DropIt image locked in its current position (if checked press SHIFT key to move it anyway).

→ **Auto-hide target image on the left of the screen**, to hide DropIt and show it only when mouse is over it.

→ **Show progress window during process**, to have the progress window visible.

→ **Start the process after loading**, not to pause the process after files/folders are loaded.

→ **Show list of loaded files by default**, to have the list of loaded files visible by default.

→ **Close progress window when process is complete**, to close the opened window at the end of the process.

→ **Play sound when process is complete**, to alert with a sound at the end of the process.

→ **Show message if process partially fails**, to show or not the message if the process fails.

Processing:

→ **Process folders and not scan them**, to force the creation of new associations for folders if needed, instead of scanning them in case they do not match existing associations.

→ **Scan subfolders and not try to process them**, to decide if always scan subfolders to process contained files or try to check subfolders to process them.

→ **Ignore unassociated files/folders**, to skip all unknown items and allow the creation of new associations only from Associations window.

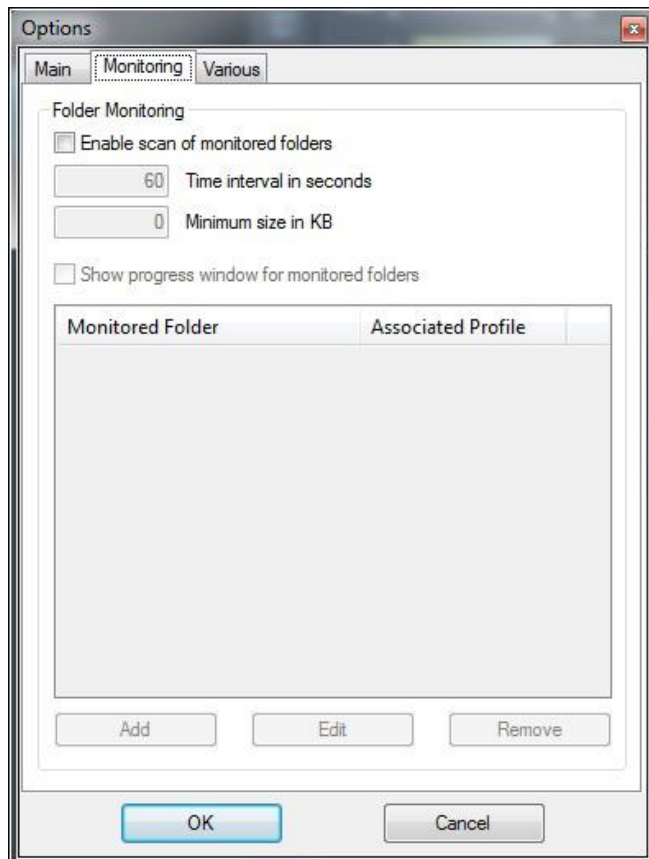
→ **Select ambiguities checkbox by default**, to have that checkbox selected by default.

→ **Confirm for large loaded files**, to require a confirmation if more than 2 GB of files are loaded.

→ **Confirm for Delete actions**, to be sure of what files/folders are removed during process.

Manage Duplicates:

→ **Use automatic choice for duplicates**, to directly process files/folders received by DropIt without asking which operation to perform (Overwrite, Rename, Skip).



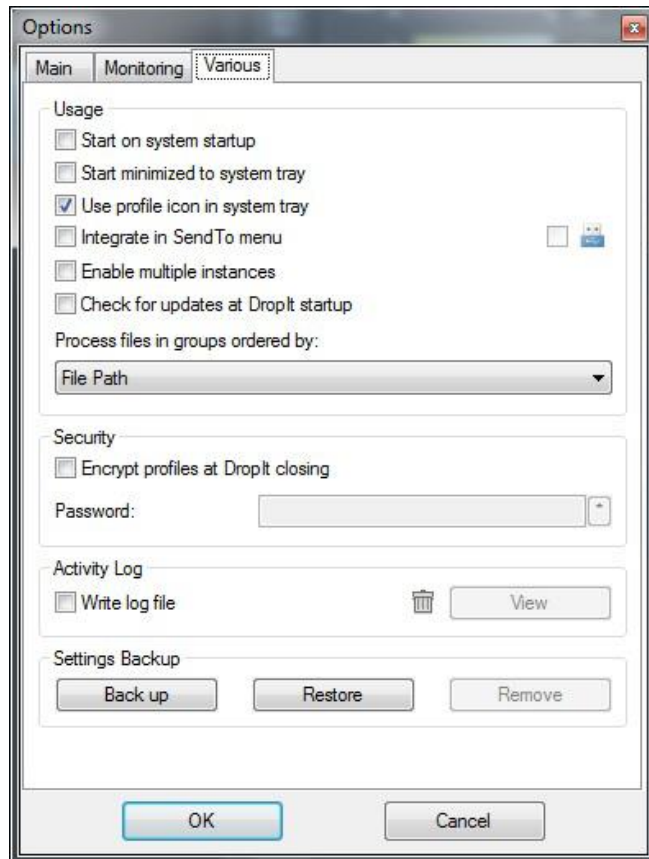
In the Monitoring section you can activate the automatic Folder Monitoring and configure:

→ **Enable scan of monitored folders**, to use, or not, this automation feature.

→ **Time interval in seconds**, to scan selected folders every defined seconds (to optimize performance, we recommend you to use a time interval between 30 and 60 seconds).

→ **Minimum size in KB**, to scan only folders bigger than defined size.

→ **Show progress window for monitored folders**, to show progress window also when a monitored folder is automatically processed.



In the Various section usage and additional settings are available.

Usage:

→ ***Start on system startup***, to launch DropIt when Windows starts.

→ ***Start minimized to system tray***, to launch DropIt hidden in the tray.

→ ***Use profile icon in system tray***, to tell you the profile in use when DropIt is minimized.

→ ***Integrate in SendTo menu***, to have a link in the system SendTo menu for each DropIt profile (*Portable Mode* can be activated on the right, to remove integration at software closing).

→ ***Enable multiple instances***, to use several profiles at the same time.

→ ***Check for updates at DropIt startup***, to automatically check for new DropIt versions.

→ ***Process files in groups ordered by***, to decide the order to process file groups. The list of dropped files is optimized at the beginning to process files in groups: files are ordered by action, then by destination and finally by a third defined parameter selected by the user. It is useful, for example, to create a playlist of files in a single process and to decide their order in the playlist.

Security:

→ ***Encrypt profiles at DropIt closing***, to store profiles in a secure format (“Profiles” folder is encrypted when DropIt is closed and the password will be requested at DropIt startup).

Activity Log:

→ ***Write log file***, to create a “LogFile.log” in the settings directory and save a history of processed items (you can click *Read* to open this file and verify your operations, or click the trash icon to remove the log file).

Settings Backup:

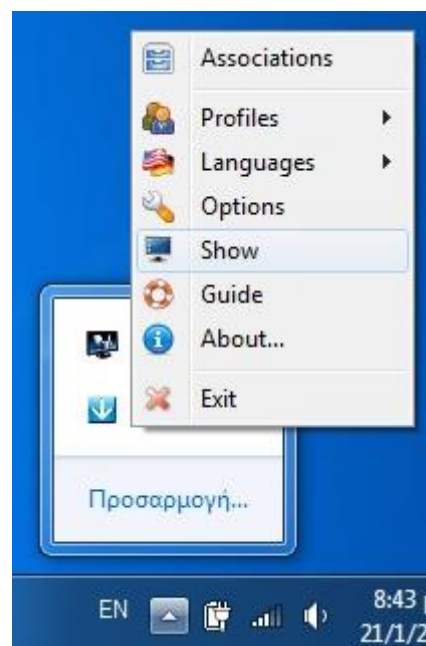
→ **Back up**, to generate a backup file of your settings and profiles.

→ **Restore**, to restore your settings and profiles from a backup file.

→ **Remove**, to delete a selected backup file from backup folder.

3.5 Hide / Show

By clicking on “hide” the program icon will disappear from your working space and the program will continue running on the background. You can check on the bottom-right of your desktop and click on “show” to make it visible again. This operation can also be done by double-clicking on the DropIt icon.

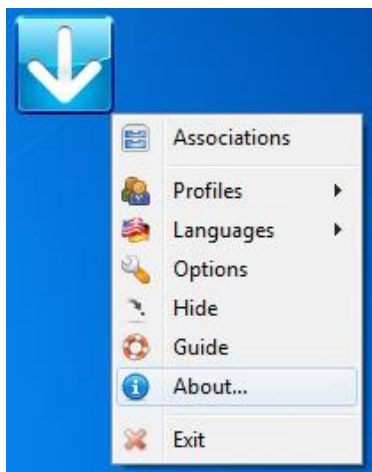


3.6 Guide

By clicking on “Guide” users are able to read a circumstantial pdf document (released by *Lupo73*) with instructions for the new users about how to use the program properly and efficiently.



3.7 About





In the “about” tab the user can see the currently installed version of the program and the creators/translators of the project. In addition he can:

- Check for updates
- View the program’s license (text file)
- View the readme file (text file)

3.8 Exit



The user can exit the program just by clicking “exit”.

4. External Interface Requirements

4.1 User Interfaces

User interface of this program is the common windows interface, nothing additional is required.

4.2 Communications Interfaces

All the program's features are available offline. You only need an internet connection to download the program, update it and (optionally) to get some target images for your personal profile (see paragraph 3.2).

5. Other Nonfunctional Requirements

5.1 Performance Requirements

DropIt is a light application that needs very few system resources in order to work. It is designed not to delay the system from other key processes and the response time of the program is direct. Furthermore, the user is able to check for new versions of the program just by clicking a button. In this way DropIt will be always up-to-date with all new supported features and bug fixes.

5.2 Safety Requirements

There have been a few reports that some antiviruses (such as Symantec AV) “see” DropIt as a potential threat. Obviously this is a false alarm, the program is 100% safe to use. Besides, DropIt is an open-source project, so anyone who has doubts is able to check the source code.

6. Appendix

6.1 Appendix A: Glossary

- A **Software requirements specification (SRS)**, a requirements specification for a software system, is a complete description of the behavior of a system to be developed and may include a set of use cases that describe interactions the users will have with the software.

Source:

http://en.wikipedia.org/wiki/Software_requirements_specification

- The **GNU General Public License (GNU GPL or GPL)** is the most widely used free software license, which guarantees end users (individuals, organizations, companies) the freedoms to use, study, share (copy), and modify the software.

Source:

http://en.wikipedia.org/wiki/GNU_General_Public_License

- **Free and open-source software (FOSS)** is computer software that can be classified as both free software and open source software. That is, anyone is freely licensed to use, copy, study, and change the software in any way, and the source code

is openly shared so that people are encouraged to voluntarily improve the design of the software.

Source:

http://en.wikipedia.org/wiki/Free_and_Open_Source_Software