# File Ninja

File Ninja helps you manage your files and automate tasks that are too repetitive to do manually. The Admin version includes everything from the Lite version and adds the following features:

- Fix procedures

- Parameter# field

- Toggle for *Allow Modify*

- Toggle for *Add Recommendations~*

- Toggle for *Include Hidden Files*

# Opening File Ninja

* Download and open the File Ninja p7m file.
* OR download XlsxWriter (pip install XlsxWriter) and run the Python code directly.

# Explanation of Basic Elements

## Lite

| Element | Description |
| --- | --- |
| Browse to Select | Browse to select the directory to perform operations on. |
| Browse to Exclude | Select subdirectories of the main directory to exclude from operation. Hidden directories — and their subdirectories — are automatically excluded. To remove a previously added excluded directory, either double-click or right click it. (If *Include Subdirectories* is off, this feature does nothing.) |
| Find procedures | Flags any errant files based on the selection. |
| Include Subdirectories | If on, File Ninja will peruse through all subdirectories as well. Otherwise, will only traverse the currently selected directory. Related: “Browse to Exclude”. |
| Execute | Commence execution. |
| Results | Open results directory, containing Excel files of previous executions. File names follow the convention “<>-YY-mm-DD-HH-MM-SS.xlsx”. |
| Summary | A metric detailing various metrics regarding the execution. |

## Admin

| Element | Description |
| --- | --- |
| Fix procedures | If *Allow Modify* is off, flags any errant files based on the selection, showing would-be fixes. If *Allow Modify* is on, executes said fixes. |
| Parameter# | Fix procedures that end in *#* require an argument. Input their arguments here. If running multiple Fix procedures, separate arguments using “/”, in order from top to bottom of the list of Fix procedures selected. For example: If running “Replace Character (DIR)#” and “Replace Character (FILE)#”, you may input (without the quotes) “&>and / @>at”.  All Find procedures with arguments have usable a default value. To use its default value, either input nothing in the parameter field, or separate by slashes and leave its value blank. For example: If running "Old File Find#~", "Empty Directory#~", and "Replace Character (FILE)#", you may input (without the quotes) "/ / &>and". |
| Allow Modify | If on, executes all changes irreversibly. Can not run multiple modifier Fix procedures simultaneously. |
| Include Hidden Files | If on, Find procedures will include hidden files. NOTE: Fix procedures will always ignore hidden files. |
| Add Recommendations~ | If on, procedures that end in “~” will show helpful recommendations. Red highlight indicates a stronger warning: those files should perhaps be deleted. Yellow highlight indicates a weaker warning: those files should be looked at. |
| Save Settings | Save current settings to a JSON file. After saving settings, the user is asked if they would like to create a corresponding batch file. Execute these batch files to automatically run File-Ninja-Control.exe using the JSON's settings. NOTE: The JSON and corresponding batch file must have the same name, and be in the same directory. NOTE: File-Ninja-Control.exe must not be renamed and must be in the same location as File-Ninja-Admin.exe's original location. If the batch file suddenly stops working, load the JSON's settings and re-save it, creating a new batch file. |
| Load Settings | Load settings from a JSON file. |

# Find Procedures

| Name | Description |
| --- | --- |
| List All Files | Lists all files within their respective directories. |
| List All Files (Owner) | Lists all files within their respective directories. Includes an owner column, displaying the owner of each file in the format “DOMAIN(SID\_TYPE)”. |
| Identical File | Flags duplicate files. Error count is incremented for each duplicate found. For example, if a group of 5 identical files are found, the error count is incremented by 4. (Includes owner column.) |
| Large File Size | Details a summary of each file extension found. Flags any extension found to have an average size over 100MB. |
| Old File | Flags any file that has not been accessed in over 1095 days (3 years). NOTE: Windows has a glitch regarding the “last accessed” attribute for a file, in that a file may be considered accessed even if it was not explicitly opened. Therefore, run this Find procedure first and foremost before perusing through your files. (Includes owner column.) |
| Empty Directory | Flags any directory that holds 0 folders and 0 files within. |
| Empty File | Flags any file that is 0 bytes. NOTE: Some file types may be empty but are not 0 bytes, such as most Microsoft files. For instance, an empty excel file is still roughly 6kb in size. (Includes owner column.) |
| Space Error (DIR) | Flags directory names with spaces. |
| Space Error (FILE) | Flags file names with spaces. |
| Bad Character (DIR) | Flags directory names with bad characters. A bad character is any character that is either not alphanumeric, not a hyphen (-), or is a double hyphen (–). |
| Bad Character (FILE) | Flags file names with bad characters. A bad character is any character that is either not alphanumeric, not a hyphen (-), or is a double hyphen (–). |
| Exceed Character Limit | Flags file paths over 200 characters. These files are not backed up. |

# Fix Procedures

| Name | Description |
| --- | --- |
| x | y |
| Delete Empty File~ | Deletes any file that is 0 bytes in size. Read “Empty File Error” find procedure for more information. (Includes owner column.) |
| Replace Space w Hyphen (DIR) | Same as the file version, except for directory names. |
| Replace Space w Hyphen (FILE) | Replaces all instances of spaces within file names with a hyphen and fixes bad hyphen usage. Example 1: “Engagement Tracker.txt” -> “Engagement-Tracker.txt”. Example 2: “- Engagement - - Tracker -.txt” -> “Engagement-Tracker.txt”. Example 3: “Engagement–Tracker.txt” -> “Engagement-Tracker.txt”. |
| Replace Character (DIR)# | Same as the file version, except for directory names. |
| Replace Character (FILE)# | For file names, replaces substring with another substring, using a “>” as separator between the replacer and replace pair, and “*” as a separator between pairs. Requires argument. WARNING: If running multiple pairs of arguments, one pair’s replacer can undo the work of an earlier pair’s replace; order can matter if not careful. Always double-check your output if unsure. Example 1: With the argument set to ”& > -and-”, all instances of ”&” will be replaced with ”-and-”. Example 2: With the argument set to ”@>-at-*  &-and-”, all instances of “@” will become “-at-”, and all instances of “&” will become “-and-”. |

# Hints

* Middle-click anywhere in the window to alternate between light and dark mode.
* ctrl+w to close the window.