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ClassifyIT v.5.4

ADMIN GUIDE

ClassifyIt, an Add-In for Outlook, Word,
Excel, PowerPoint



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ClassifyIt 5.4 – Technical Manual

ClassifyIt is an Add-In for Outlook and Word, of the Microsoft Office 2010 Suite and later products. Testing has been conducted on Office 2010 Suite which is compatible with Office 2013 and Office 2016.

ClassifyIt is SHAREWARE software and must be licensed when used after the test-period.

Installation

During the installation of ClassifyIt please ensure that all Office applications are closed to permit ClassifyIt to properly register as an Add-In to Outlook, Word, Excel and PowerPoint. The registration could fail if any of the applications is still running (check with the Windows TaskManager).

During the installation process the ClassifyIt Add-In application and configuration files are installed in the %PROGRAM FOLDER%\ClassifyIt directory (e.g. C:\Program Files\ClassifyIt). This program directory can not be changed.

After installation the Add-In is directly usable, however the configuration file (ClassifyIt.json) must be revised to support the classification requirements of the user(s). If help is needed, contact support@ugarbe.de.

After installation the ClassifyIt toolbar is available on all opened or new created emails, Word documents, Excel spreadsheets and PowerPoint presentations.

Initialisation Process

The ClassifyIt Add-In is a library which runs in the Microsoft Office context, as such it is programmed as a Dynamic Link Library (dll). After the setup this add-in is the following file: %PROGRAM FOLDER%\ClassifyIt\ClassifyIt.dll

When the ClassifyIt Add-In is started (within the Office context) it needs to load its configuration file, which is formatted in a JSON syntax – by default the configuration file is the following file: %PROGRAM FOLDER%\ClassifyIt\ClassifyIt.json

The file-name and location of the configuration file is set by the Registry key HKEY_LOCAL_MACHINE\SOFTWARE\CLASSIFY_IT\ConfigFile – the key can be a URL or file-system path.

First Start

When the ClassifyIt Add-In starts for the first time (e.g. by starting Outlook, Word, Excel or PowerPoint) the following files are created under the users CSIDL_APPDATA folder (e.g. C:\Documents and Settings\username\Application Data\Roaming):

- ClassifyItUserData.json
Used for ClassifyIt User Data
- ClassifyIt.log
Used for logging information of ClassifyIt
- ClassifyIt.json
local copy of the configuration file. This file is overwritten whenever the applications are started (Outlook, Word, Excel, PowerPoint) and a central configuration file is available.

Integrity of Configuration-File (ClassifyIt_Signer)

The ClassifyIt.json configuration-file has a signature value, which is verified by the ClassifyIt plug-in when the configuration-file is loaded. The signature value must be calculated by the ClassifyIt_Signer.exe. This signing application shall only be available to administrators who keep control of the configuration settings.

1. Start the ClassifyIt_Signer application with administrator privileges.
2. Select the configuration-file.
3. The configuration file gets properly signed and a success message is shown.

Configuration

Registry and Configuration File

ClassifyIt is controlled by a Registry Key and a Configuration-File:

1. Locator of Configuration-File
 1. Registry Key: **HKLM\SOFTWARE\CLASSIFY_IT** [holds two values with the path or URL and name to the Configuration-File]
 1. **ConfigFile**: [first try of ClassifyIT Add-In to load the Configuration-File]
 2. **AlternateConfigFile**: [alternative if file specified by ConfigFile does not exist, is not reachable or is corrupt]
 2. Configuration-File
<**classifyIt.json**> [holds all configuration parameters of ClassifyIt in a JSON formatted file]

HKLM\SOFTWARE\CLASSIFY_IT

Two keys specify the fully qualified file-name of the <classifyIt.json> file.

ConfigFile=<PATH\FILE_NAME> or
<URL>

AlternateConfigFile=<PATH\FILE_NAME> or
<URL>

Explanation:

The ConfigFile key specifies the location of the preferred location of the <classifyIt.json> file. If the preferred file is not available the alternative configuration file will be loaded and during the the start of Outlook, Word or Excel. The configuration file could be on a local or shared drive, or on a web-server where the URL is to start with 'HTTP://'.

If no configuration file is available ClassifyIt will try to load a previous copy of the configuration file in the users' CSIDL_APPDATA folder.

If none of the files is available then an error message is displayed to the user. If any of the files is not available or corrupt, an error/warning is written in the classifyit.log file.

Example:

ConfigFile='http://classifyit.eu/ClassifyIt.json'
AlternateConfigFile='c:\configData\classifyit.json'

<classifylt.json>

Controls content and behaviour of the ClassifyIT Add-In.

Note: The standard setup uses the filename: "ClassifyIt.json", however any other name can be used (as specified by the Registry Key HKLM\SOFTWARE\CLASSIFY_IT\ConfigFile

Format:

The configuration file is JSON (www.json.org/) formatted. It is important that the syntax of the configuration file is fully JSON compliant. Use a syntax checking editor to modify or generate the configuration file (e.g. Notepad++, notepad-plus-plus.org/, with a JSON plug-in, nppjsonviewer).

Content:

"admin_mode": <BOOLEAN>

Boolean value, controlling if administration features are available in ClassifyIt. Admin features enabled:

- **Reload Config:** A button on the ClassifyIt Outlook menu which reloads the configuration file (helps during the creation of the configuration file).

Example:

true: button is visible and active in Outlook
false: [default] button is not visible

"version_control":

Is a list of objects which define the date, time and version number of the configuration file:

"date" <STRING> date of the configuration file.
"time" <STRING> time of the configuration file.
"versionNumber" <STRING> version number of the configuration file.
"signature" <STRING> integrity string for the configuration file. Whenever the configuration file is changed the signature is to be recalculated. (new with version 5.0). **Note:** the signature is to be calculated with 'ClassifyIt_Signer.exe' program, which is provided to administrators.

Example:

```
{"date": "20160321",  
 "time": "220415",  
 "versionNumber": "5",  
 "signature":  
   "87C00A514B34E725C24A1A75B2E3072B7B9A53AC"}, }
```

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"classifications":

Is a list of objects which define each available classification. Each classification is defined through the following attributes:

"real" <STRING> the real classification name as it will appear on the document (email) when selected.

"additional" <STRING> text which might be required in addition to a classification.

"trans" <STRING> the translated classification name as it will appear on the document (email) when the classification is selected and when a translation is required (controlled through "requiresTranslatedLabel" of the "classification_formatting" settings).

"color" <STRING> the color value (RGB) of the classification;

"x-class" <STRING> the X-Header value of the classification which will be inserted to the 'email envelope'.

"descr": <STRING> a description of the classification which will be shown in the ClassifyIt classification menu as a 'hint'.

Example:

```
{"real": "OPEN",
 "additional": "[PROTECTED BY REGULATION § 1.2]",
 "trans": "OFFEN",
 "color": "0x000000",
 "x-class": "O",
 "descr": "no protection required can be shared with
public"}
```

"release_markings":

Is a list of objects which define each available release marking. Each release marking is defined through the following attributes:

"real" <STRING> the real release marking as it will appear on the document (email) when selected.

"trans" <STRING> the translated release marking as it will appear on the document (email) when a translation is required (controlled through "requiresTranslatedLabel" of the "classification_formatting" settings).

"x-rel" <STRING> the X-Header value of the release marking which will be inserted to the 'email envelope'.

"descr": <STRING> a description of the release marking which will be shown in the ClassifyIt classification menu as a 'hint'.

"as": [<STRING>] (list of strings) can be used for more complex classifications which require release markings in a format related to the classification. IMPORTANT, if used this list needs to have as many entries as classifications in the "classifications" section. The feature is controlled through the "requiresRelAs" variable of the "classification_formatting" section. (new with version 4.7)

Example:

```
{"real": "MANAGEMENT",
 "trans": "LEITUNG",
 "x-rel": "MAN",
 "descr": "Senior Management Staff of Company",
 "as": ["MANAGEMENT OPEN", "MANAGEMENT RESTRICTED"]}
```

"release_groups":

Is a list of objects which define groups of release markings. Each release marking group is a collection of release_markings. Each release marking group is defined through the following attributes:

"display" <STRING> the display name for the group.
"group" [<STRING>] (list of strings) important this value(s) must be one of the "real" values of the "release_markings" section. The group is then representing all the release markings. Examples:
 ["MANAGEMENT", "HUMAN RESOURCES"]
"descr" <STRING> a description of the release group which will be shown in the ClassifyIt classification menu as a 'hint'.

Example:

```
{ "display": "GROUP1",
  "group": ["FINANCE", "ENGINEERING"] },
{ "display": "GROUP2",
  "group": ["PUBLIC", "FINANCE", "HUMAN RESOURCES"] }
```

"classification_paragraph":

Is a list of attributes which define the formatting of the paragraph/text which will be inserted by ClassifyIt. The following attributes are defined:

"bold": <BOOLEAN> defines weather the characters of the classification text is inserted bold or not.
"center": <BOOLEAN> defines weather the classification text is centered (if 'false' the text is aligned to the left).
"size": <INT> defines the size of the characters of the classification text.
"font": <STRING> defines the font style of the classification text.

Example:

```
{ "bold": true,
  "center": true,
  "size": 16,
  "font": "Arial" }
```

"classification_formatting":

A list of attributes which define the formatting of the construction of the classification text which will be inserted by ClassifyIt. The following attributes can be defined (please note the a line break must be inserted by using
, do not use \n):

"beforeClassification" <STRING> text before the classification.

"beforeClassificationEmail" <STRING> text which is put in front of the complete classification, but only for emails.

"afterClassification": <STRING> text after the classification.

"beforeAdditionalClassification": <STRING> text before an additional classification, only if the additional marking is not empty.

"afterAdditionalClassification": <STRING> text before an additional classification, only if the additional marking is not empty.

"beforeReleaseStrings": <STRING> text before the release marking, only if the release marking is not empty.

"betweenReleaseStrings": <STRING> text/character between the release markings, only if the release marking is not empty and if more than 2 release markings.

"afterReleaseStrings": <STRING> text after the release marking, only if the release marking is not empty.

"afterCompletedClass": <STRING> text/character after the completed classification and release marking.

"requiresRelAs": <BOOLEAN> (default false) to specify if the "AS" markings defined in the "release_markings" section will be used. (new with version 4.7)

"requiresTranslatedLabel": <BOOLEAN> to specify if a translation of the classification and release markings is added to the overall marking.

"beforeTranslatedClassification": <STRING> <see beforeClassification>

"afterTranslatedClassification": <STRING> <see afterClassification>

"beforeTranslatedReleaseStrings": <STRING> <see beforeReleaseStrings>

"betweenTranslatedReleaseStrings": <STRING> <see betweenReleaseStrings>

"afterTranslatedReleaseStrings": <STRING> <see afterReleaseStrings>

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"afterTrlanslatedCompletedClass": <STRING> <see
afterCompletedClass>

Example:

```
{"beforeClassification": "",
 "beforeClassificationEmail": "Classification: ",
 "afterClassification": " ",
 "beforeAdditionalClassification": "<BR>",
 "afterAdditionalClassification": "<BR>",
 "beforeReleaseStrings": "REL TO: ",
 "betweenReleaseStrings": "\\ \\ \\ \\",
 "afterReleaseStrings": "",
 "afterCompletedClass": "<BR>",
 "requiresRelAs": false,

 "requiresTranslatedLabel": true,
 "beforeTranslatedClassification": "Einstufung: ",
 "afterTranslatedClassification": " ",
 "beforeTranslatedReleaseStrings": "FREIGABE AN: ",
 "betweenTranslatedReleaseStrings": ", ",
 "afterTranslatedReleaseStrings": "",
 "afterTrlanslatedCompletedClass": "<BR>"}
```

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"x_header_config":

A list of attributes which define the X-Header information in an email. The following attributes are defined:

"xClassificationName" <STRING> the name which will appear in the email's envelope as an X-Header for the classification.

"xReleaseName" <STRING> the name which will appear in the email's envelope as an X-Header for the release.

"xReleaseCodeDelimiter" <STRING> which will separate release statements in the xRelease string.

Example:

```
{"xClassificationName": "X-ClassificationName",  
 "xReleaseName": "X-ReleaseName",  
 "xReleaseCodeDelimiter": "-"}
```

"quick_select": [changed with 4.6: part of user data]

~~A list of objects which define the entries of the Quick-Select Menu of ClassifyIt. The following attributes are defined per quick select menu entry:~~

~~"display" <STRING> the entry shown in the quick select menu. (Note: should be short and easily remembered).~~

~~"classification" <STRING> important this value must be one of the "real" values of the "classifications" section. The quick select is then representing this classification.~~

~~"release": [<STRING>] (list of strings) important this value(s) must be one of the "real" values of the "release markings" section. The quick select is then representing all the release markings. Examples:~~

~~_____ [] empty list, no release~~
~~_____ ["MANAGEMENT", "HUMAN RESOURCES"]~~

Example:

```
["display": "R rel FIN",  
 "classification": "RESTRICTED",  
 "release": ["FINANCE"]},  
 {"display": "R rel MAN+FIN",  
 "classification": "RESTRICTED",  
 "release": ["MANAGEMENT", "FINANCE"]}]
```

"outlook_control":

A list of attributes which define for the Microsoft Outlook application how it behaves. The following attributes are defined:

"banned_filetypes" [<STRINGS>] (list of strings)
 defining filetypes which the user is not allowed to send by email. IMPORTANT is to specify the preceding '.' as well.

"allowLowerClassification" <BOOLEAN> specifies if a forward or reply to an email could have a lower classification than the original email.

"warnLowerClassification" <BOOLEAN> specifies if for forwarded or replied emails a lower classification would be allowed. If a forward or reply has a lower classification than the user would receive a warning message.

"allowLowerAttachmentClassification" <BOOLEAN> specifies if an attachment to an email could have a lower classification. IMPORTANT, only Word and Excel attachments are checked. IMPORTANT, if set to 'false' this value will stop emails from being sent if there are Word or Excel files without a classification (or with a lower classification than the email itself).

"warnLowerAttachmentClassification" <BOOLEAN> if it is allowed to send emails with attachments which have a lower classification the user would at least receive a warning message. IMPORTANT, only Word and Excel attachments are checked.

"automaticallyEncryptAllAttachments": <BOOLEAN> specifies if attachments are automatically encrypted. Use with care, since the attachments can only be de-crypted if the recipient also uses ClassifyIt. The user can also encrypt attachments manually. (new with version 5.0)

Example:

```
{ "banned_filetypes": [ ".dll", ".exe", ".bat" ],
  "allowLowerClassification": true,
  "warnLowerClassification": true,
  "allowLowerAttachmentClassification": false,
  "warnLowerAttachmentClassification": true,
  "automaticallyEncryptAllAttachments": false }, }
```

"word_document_control":

A list of attributes which define for the Microsoft Word application where the classifications should be added and if those are to be enforced. The following attributes are defined:

"addToHeader" <BOOLEAN> if true the classification will be added to the header of the document.
"addToFooter": <BOOLEAN> if true the classification will be added to the footer of the document.
"enforceMarking": <BOOLEAN> specifies if the user can save or print Word documents without a security marking.

Example:

```
{ "addToHeader": true,  
  "addToFooter": true,  
  "bold": true,  
  "center": true,  
  "size": 11,  
  "font": "Arial",  
  "color": "0x000000",  
  "enforceMarking": true}
```

"excel_control":

A list of attributes which define for the Microsoft Excel application where the classifications should be added. The following attributes are defined:

"addToHeader" <BOOLEAN> if true the classification will be added to the header of the document.
"addToFooter": <BOOLEAN> if true the classification will be added to the footer of the document.
"enforceMarking": <BOOLEAN> specifies if the user can save or print Excel sheets without a security marking.

Example:

```
{"addToHeader": true,  
 "addToFooter": true,  
 "enforceMarking": true}
```

"powerPoint_control":

A list of attributes which define for the Microsoft PowerPoint application where the classifications should be added. The following attributes are defined:

"enforceMarking": <BOOLEAN> specifies if the user can save or print PowerPoint slides without a security marking.

Example:

```
{"enforceMarking": true}
```

"crypto_control":

A list of attributes which define if email attachments could be encrypted. The following attributes are defined:

"allowEncryption" <BOOLEAN> if true the attachments to emails can be encrypted, and decrypted.
Encrypted attachments have the file extension .cit

Example:

```
{"allowEncryption": true}
```

ClassifyItUserData.json

This file is located in the users' roaming Application Data directory (CSIDL_APPDATA, typically: C:\Documents and Settings\username\Application Data\Roaming).

If not existing, the file is created by ClassifyIt during its startup of word. The file is edited by ClassifyIt when the users adds or removes preferences to the content of some functions. The file can be edited, however it is important that a JSON compliant file is created/maintained, otherwise ClassifyIt will not work properly.

The following sections are defined in the ClassifyItUserData.json file:

In Word Application – ClassifyIt Property Menu:

"categories" An array of strings which can be selected for adding categories to the CATEGORIES_PROPERTY
Example: "categories": ["CONTRACT", "INVOICE", "REPORT"]

"keywords" An array of strings which can be selected for adding keywords to the KEYWORDS_PROPERTY
Example: "keywords": ["TEMPLATE", "DOCUMENT"]

"templates" An array of records which the user can use to add multiple properties to all property fields. Each template has a unique name.

Example: "templates": [
 {"templateName": "Templ",
 "subject": "Subject",
 "title": "Title",
 "keywords": "Keyword1, Keyword2",
 "category": "Cat1, Cat2",
 "comments": "Comment",
 "lastauthor": "Last Author",
 "manager": "Manager",
 "format": "Format",
 "company": "Company",
 "hyperlinkbase": "LinkBase",
 "author": "Author"}]

"ECC" A list of Elliptic Curve Cryptographic information. Currently only "myCert" is defined which names the users certificate name. The sub-folder 'cli_certs' holds the users certificate (private/public keypair) and imported public keys from other users.

Example: "ECC": {"myCert", "bob@ugarbe.de"}

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"quickSelect" An array of Quick-Select records, with with "display", "classification" and "release" attributes. The values for "classification" and "release" must be the same as the X-Class and X-Rel markings. Multiple release markings are separated by the "xReleaseCodeDelimiter".

Example: "quickselect": [
 {"display": "Open rel Management/Finance",
 "classification": "O",
 "release": "MAN-FIN"}]