boldonjames by HelpSystems



September 2021



Copyright Terms and Conditions

Copyright Help/Systems LLC and its group of companies.

The content in this document is protected by the Copyright Laws of the United States of America and other countries worldwide. The unauthorized use and/or duplication of this material without express and written permission from HelpSystems is strictly prohibited. Excerpts and links may be used, provided that full and clear credit is given to HelpSystems with appropriate and specific direction to the original content. HelpSystems and its trademarks are properties of the HelpSystems group of companies. All other marks are property of their respective owners.

202109130155

Table of Contents

Introduction	5
Audience	5
Standard Registry Keys	6
Registry Keys and Locations	6
Required Classifier Registry Entries	7
Active Directory	7
File Store	8
Web Config	9
Recommended Registry Keys	. 11
Performance-Related Registry Keys	11
Microsoft Office Product Resiliency Keys	13
Microsoft Office 2013-2019 and Microsoft Office 365 Resiliency Keys	. 14
Office Resiliency Keys	14
AddinList	14
Using Group Policy with the Microsoft ADMX Templates to Configure Resiliency	. 15
DoNotDisableAddinList	17
DontDisplayHKLMAddins	. 19
DisableLMAddinOverwrite	
Preventing Add-ins Disablement Microsoft Office 2013-2019 & 365 via the Registry	.21
Email Classifier Registry Settings for Office Products	22
File Classifier Registry Settings	24
Deploying Classifier Software and Associated Configuration	. 28
Troubleshooting	30
Using the Classifier Support Tool	30
Installing the Support Tool	. 30
Capturing System Information	30

Using the Classifier Support Tool	
Using BJ Trace Logs	
Common Issues	
Add-in Crashed or Disabled	
Office Templates	
Conflicts With 3rd Party Add-ins	
Conflicts With VBA Macros	
Performance	
Incorrect Registry Settings	
Checking for the LoadBehavior Entry Manually or via GPO	

Introduction

This guide describes the registry keys that are used to deploy Classifier software and associated labelling configurations along with a Troubleshooting section. Classifier and its applications will reference certain registry keys during its operation.

Audience

This document is aimed towards Administrators, Desktop System Managers and users who want to use the registry keys to deploy Classifier software and related configurations. There is also a Troubleshooting area to help fix common issues.

Standard Registry Keys

The standard registry keys have different types of storage locations. The configuration files are XML files that define how data classification is presented by Classifier software. The Classifier configuration files need to be available for the Classifier software to operate. These registry keys tell the Classifier products where the configuration can be retrieved from and which policy should be used on each machine.

Registry Keys and Locations

Classifier registry settings can be added to multiple locations; when the same key is specified in multiple locations, the highest location from the list below will be used.

Locations that are marked with an asterisk are set via Group Policy should not be manually updated.

- HKEY_CURRENT_USER\SOFTWARE\Policies\Boldon James\ConfigManager*
- HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Boldon James\ConfigManager*
- HKEY_LOCAL_MACHINE\SOFTWARE\Boldon James\ConfigManager

When using 32-bit Classifier applications on a 64-bit Operating System, the registry settings need to be placed under the equivalent Wow6432Node location:

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Boldon James\ConfigManager

If a customer's environment consists of 64-bit OS machines running a 32-bit version of Microsoft Office, the following should be considered when deploying File Classifier 64-bit and Email and Office Classifier 32-bit. To ensure both applications are covered, the registry keys should be created under one of the three sets:

File Classifier will use the 64-bit location (1) and Email and Office Classifier will use location (2).

The HKLM\SOFTWARE\Policies area is shared by both 32 and 64-bit applications.

- 1. HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Boldon James\ConfigManager OR
- 1. HKEY_LOCAL_MACHINE\SOFTWARE\Boldon James\ConfigManager
- 2. HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Boldon James\ConfigManager OR
- 1. HKEY_CURRENT_USER\SOFTWARE\Policies\Boldon James\ConfigManager
- 2. HKEY_CURRENT_USER\SOFTWARE\WOW6432Node\Policies\Boldon James\ConfigManager

You can generally set up relevant entries under any of the supported registry locations. However, the algorithm expects to find the following as 'pairs' under a sub-tree:

- Label Configuration + Policy
- ServerRootType + ServerFileSystemRoot (if relevant)

Name	Туре	Value
LabelConfiguration	REG_SZ	The name that was given to the label configuration in the Administration application.
Policy	REG_SZ	The name that was given to the policy in the Administration application.
ServerFileSystemRoot	REG_SZ	Note: Only required if ServerRootType = 0 Note: For remote locations, this value should be
		specified as a full UNC path, rather than using Drive letters.
		The path to the location that holds the Classifier Configuration folder.
ServerRootType	DWORD	This defines the chosen publishing method:
	(32-bit) Value	1. For Active Directory
		0. For File Store

Required Classifier Registry Entries

Classifier has a small set of mandatory entries. The registry entries that are required to configure Classifier vary depending on where the configuration is stored.

Active Directory

Active Directory defines the users and computers inside the organisation. The database can be extended to store the Classifier configuration.

Name	Туре	Value
ServerRootType	RootType REG_	Service Mode Configuration Distribution Server Type
DWORD	1 The configuration is held in the Active Directory.	

Label REG_SZ		Service Mode Label Configuration Name	
Configuration		The name of the label configuration to use. for example. Classifier test.	
Policy	REG_SZ	The name of the Classifier policy to use in the Label Configuration.	

File Store

The File Store is any readable file system, network, or local where the Classifier software is running can retrieve the configuration files.

Name	Туре	Value
ServerRootType	REG_ DWORD	Service Mode Configuration Distribution Server Type
		Note: This is only required if the deployment is using File Store or Active Directory (i.e. this setting is not required if the deployment is using Web Config).
		 The configuration is held in File Store (ServerFileSystemRoot key is then significant).
		1. The configuration is held in Active Directory.
ServerFileSystemRoot	REG_SZ	Note: Only required if ServerRootType = 0
		Note: For remote locations, this value should be specified as a full UNC path, rather than using Drive letters.
		The path to the location that holds the Classifier Configuration folder.
LabelConfiguration	REG_SZ	Service Mode Label Configuration Name
		The name of the label configuration to use. e.g. Classifier test.
Policy	REG_SZ	The name of the Classifier policy to use in the Label Configuration.

Web Config

The Classifier configuration can be retrieved from a password-protected zip file stored on a web server or a file store.

Name	Туре	Value
UseWebServer	REG_ DWORD	0 (Default): Disabled. The relevant applications will retrieve the Master Configuration according to other configuration settings (e.g. File Store). 1 Web config will be enabled. The location is defined by the
		WebServerConfigFile and other settings defined in this table.
WebServerConfigFile	REG_SZ	A valid URL to the file containing the zipped version of the Master Configuration on your web server, e.g. <u>http://yourserver/classifier/config.zip</u>
		or file://\\localhost\c\$\classifier\config.zip or file://\\yourserver\sharedfolder\config.zip
WebConfigKey	REG_SZ	The string returned by Classifier Administration when the Web Config is
		published.
WebClientTimeout	DWORD	An optional setting only needed in unusually slow network environments, a DWORD value which specifies the number of milliseconds allowed before the web request for Classifier configuration times out.
		0 (Default): The relevant network default timeout applies (e.g. 20 seconds).
		>0 The number of milliseconds allowed before the attempt to retrieve the Master Configuration times out.

WebServerCertificate Validation	DWORD	Determines whether Classifier will attempt to check for a valid SSL cert (HTTPS).
		 Ignore errors. Certificate validation errors on https sites will be ignored. (Default if not defined) Stop if errors. The download will fail if https sites return errors.
LabelConfiguration	REG_SZ	The name of the label configuration to use. e.g. Classifier test.
Policy	REG_SZ	The name of the Classifier policy to use in the Label Configuration.

Recommended Registry Keys

Before you start using registry keys, consider:

- re-enabling the Classifier Add-in requires modifications to the registry. As such, administrator permissions may be required.
- If the issue has affected a large number of users, configuring Office Resiliency should be considered to prevent the issue going forward. Further information regarding the relevant registry keys can be found in the following Microsoft article: <u>Support for Keeping Add-ins</u> <u>Enabled</u>
- If disabling an Add-in is affecting a large number of users, the suggested registry-based fixes can be applied to all user machines via Group Policy or similar deployment mechanisms.

Performance-Related Registry Keys

These performance-related registry keys can be used when a Classifier-enabled Microsoft Office application is taking a long time to start up.

Performance-related registry key	Туре	Value
DeferredConfigDownload	REG_ DWORD	This setting controls configuration download behaviour for the Client mode only.
	(32-bit) Value	0. (Default if not configured) Immediate: If an updated configuration is detected by a new instance of a client application, the download completes before the application proceeds.
		1. Deferred: If an updated configuration is detected by a new instance of a client application, the application does not wait for the new configuration download to complete. Instead, the application proceeds using the existing configuration and the configuration download proceeds as a separate thread. It will then continue to use the cache configuration until the user restarts the application. Once restarted the new configuration will be loaded.

ValidityPeriod	REG_ DWORD (32-bit) Value	0. The centrally held Configuration (held in File Store or AD) is checked for validity at the start of each session. This is the default assumed if the entry is not set.
		> 0. The time in hours for which the local (cached) copy of the Configuration is assumed to be valid.
		No further downloads of the Configuration will be performed until the ValidityPeriod has expired, even if the central version is updated. This setting can be useful for some workstation environments where there is a slow connection to the network (e.g. VPN connection). It should be used with care as it may result in the users operating with out of date configurations.

UseManagementAgent	REG	Use Management Agent
e contanagementa gent		
	DWORD	Note: This entry is only supported under HKEY_LOCAL_MACHINE.
		This entry controls whether the Classifier Client applications use Classifier Management Agent.
		Other registry keys are required to run the Classifier Management Agent (see the Classifier Administration Server User Guide [1] for further details).
		0. (Disabled: The default if not configured). Classifier Client applications will continue to retrieve configuration directly and will not register with the Management Agent.
		1. (Enabled): Classifier Client applications will use the management Agent.
		Each Classifier client will obtain its configuration via the Management agent and not check for a more recent configuration as described in the Management Agent Guide. The Email and Office Classifier clients register with the Management Agent as part of Client Application Monitoring.

Microsoft Office Product Resiliency Keys

In Office 2013 or later, Add-ins can be disabled either manually by the user or automatically for failing to meet specific performance criteria, as established by Microsoft. You can implement Microsoft Office Resiliency keys on Classifier client machines to prevent disabling Add-ins.

NOTE: Office application cannot disabled Microsoft Office 2010 Add-ins automatically for performance reasons. However, by default, you can disable them manually.

Add-ins should not take an average of more than 500ms to start, over 5 successive occasions.

This performance criterion will often be exceeded, due to delays which can be introduced when retrieving the Classifier configuration during the launch of the relevant Office application. This situation will result in the Classifier Add-in being automatically disabled by the Office application.

However, this situation generally only affects the Outlook application.

Microsoft Office 2013-2019 and Microsoft Office 365 Resiliency Keys

In Microsoft Office 2013, 2016, 2019, and O365 Add-ins can be disabled by both users and Office applications. Users can manually disable them using the COM Add-ins menu. Microsoft Office applications can disable them automatically if they cause the application to crash or result in performance issues.

Microsoft provides several options to prevent these issues from occurring. To prevent Classifier from being disabled, administrators can include Classifier in the list of managed Add-ins.

Depending on the requirements of the organisation, there are two Microsoft Office Resiliency Registry keys that can be used:

Resiliency\AddInList

This can be used to prevent users from manually disabling Classifier.

• Resiliency\DoNotDisableAddinList.

This can be used to prevent the Office application from automatically disabling the Add-in, whilst retaining the ability for users to manually disable the add-in.

Office Resiliency Keys

These are a set of registry keys that, when deployed to a machine running Office 2013 or later, will prevent both the end-user and the Office application from disabling a specific COM Add-in.

Implementing these is highly recommended for any customers using Office 2013 or later in their environment. The locations where these registry keys should be established are described below:

AddinList

This Office Resiliency method requires the relevant Office application's Registry key to be set under the Group Policy ('Policies') registry area. Go to:

HKEY_CURRENT_ USER\Software\Policies\Microsoft\office\<version>\<application>\Resiliency\ AddinList

Name	Туре	Value
BoldonJames.SAFEoffice.Addin.Connect	REG_SZ	1 Enabled
		0 Disabled

Because the AddinList must be configured under the Group Policy (Policies) area of HKEY_ CURRENT_USER, we recommend you deploy the AddinList method of Office Resiliency to user machines using a GPO which points to an updated ADMX template for your corresponding version of Microsoft Office. This will create the necessary Registry key and values for AddinList in the appropriate Group Policy area of the Registry on the user machines. For further information, see the relevant section, entitled <u>Use Group Policy with</u> the Microsoft ADMX Templates to Configure Resiliency.

A sample registry key file which sets Office Resiliency ('AddInList') for all Office applications in Office 2016:

Windows Registry Editor Version 5.00

[HKEY_CURRENT_ USER\Software\Policies\Microsoft\office\16.0\excel\resiliency\addinlist] "BoldonJames.SAFEoffice.Addin.Connect"="1"

[HKEY_CURRENT_

USER\Software\Policies\Microsoft\office\16.0\project\resiliency\addinlist] "BoldonJames.SAFEoffice.Addin.Connect"="1"

[HKEY_CURRENT_ USER\Software\Policies\Microsoft\office\16.0\outlook\resiliency\addinlist] "BoldonJames.SAFEoffice.Addin.Connect"="1"

[HKEY_CURRENT_ USER\Software\Policies\Microsoft\office\16.0\powerpoint\resiliency\addinlist] "BoldonJames.SAFEoffice.Addin.Connect"="1"

 $\label{eq:linear} $$ [HKEY_CURRENT_USER\Software\Policies\Microsoft\office\16.0\visio\resiliency\addinlist] $$ "BoldonJames.SAFEoffice.Addin.Connect"="1" $$$

[HKEY_CURRENT_ USER\Software\Policies\Microsoft\office\16.0\word\resiliency\addinlist] "BoldonJames.SAFEoffice.Addin.Connect"="1"

Using Group Policy with the Microsoft ADMX Templates to Configure Resiliency

You can deploy the AddinList registry settings via Group Policy using the office Administrative Template relevant to your version of Office.

- 1. Download the Office Admin Templates (ADMX files) from the Microsoft website, for the version of Office that you are using. Make sure that you select the relevant 32-bit or 64-bit template version.
- 2. Copy the relevant executable to the Domain Controller, then run the .exe as an Administrator user. This will extract the ADMX template files to the folder that you specify, for example, C:\Office 2016 Admin Templates.
- In the folder location created in step 2, go to the admx folder and copy all of the ADMX template files to [system drive]:\Windows\PolicyDefinitions on the Domain Controller:
 Each ADMX template must include its corresponding ADML template file so you can view the Office 2016 template files using the Group Policy Editor. If you do not have the matching ADML files in the correct location, then you will see errors when attempting to edit the relevant GPO using the GPO editor.
- 4. Open the Group Policy Management MMC and select Forest: <your domain> > Domains > <your domain> > Group Policy Objects. Right-click the name of the folder you created in step 2, and click Edit.
- 5. Set the Value name to: BoldonJames.SAFEoffice.Addin.Connect and set the value to: 1.
- 6. On the server, in an elevated CMD prompt, run the GPUpdate /Force command.
- 7. Run the same command on the test Office client (or log off and then log back in).

This will help to prevent Classifier from being disabled in Outlook and also prevent the user from disabling the Add-in under Manage [COM Add-ins]. You cannot disable the 'Classifier' Add-in from the list of available Add-ins. You should see a system administrator message to inform that: *The Add-in you have selected is enabled by your system administrator*.

If the 'AddInList' method of Outlook Resiliency is enabled:

- the Classifier Add-in will be set to Always Enabled in the relevant Office application where AddInList has been set.
- you are prevented from disabling the Classifier Add-In via the Office application's COM Add-Ins dialog. The screenshot below illustrates the AddInList method of Office resiliency having been correctly configured on an Office 2016 machine.

File Ho	ome Send /	Receive	Folder	View	OutlookSpy	♀ Tell me what you	want to do		
New New Email Items •	ি Ignore 🍋 Clean Up 🇞 Junk শ	Delete	Reply R	eply Forw	ard 🔄 Meeting	[™] TEST □ Team Email ♀ Reply & Delete	← To Manager ✓ Done ダ Create New	+	
New	Delet	e 🖌		Respo	nd	Qui	ck Steps	F _{2ℓ}	
▷ 🛃 Inbox 2			All Unrea	id					
Drafts			! \$ B @	FROM	SUBJECT		CLASSIFICATION	MES	
Fent Item	15		Date: Last	Week					
💿 Deleted It	tems	COMA	d-ins					7	
D 🛄 Calendar		comm	ia nis					1 _	
▷ 🔙 Contacts	Contacts		l-ins available:						
🖲 Journal	_			Outlook Au		ection and Labising			
🐻 Junk Ema	Junk Email		Microsoft Exchange Add-in Microsoft SharePoint Server Colleague Import Add-in						
Notes		Micro	osoft VBA for	Outlook A	ddin				
Outbox			JOK SOCIAL CO	milector 20	10				
RSS Subs	criptions							<u> </u>	
Suggeste	d Contacts	Location	C:\Pr	ogram Files	(x86)\Boldon Jam	es\Email and Office Clas	sifier\ClassifierShim.dll	l,	
D Svnc Issu	les 3	Load Beh	avior: Load	at Startup					
Tasks		The add-	in you have	selected is	enabled by your sy	ystem administrator.			
							-		
Search Fo	biders		0		<u></u>				
			Keply IE	A Keply All	Forward				

DoNotDisableAddinList

This particular Office Resiliency method involves a Registry key which only applies to the Outlook application.

If an Add-in name is added under the DoNotDisableAddinList Registry key, Outlook cannot disable the Add-in, even if it is considered to perform slowly when loading.

With DoNotDisableAddinList configured, you can still manually disable the Add-in from the Outlook 'COM Add-Ins' dialog.

NOTE: Configuring DoNotDisableAddinList does not guarantee that Outlook will be prevented from disabling the Classifier Add-in.

In Classifier v3.14.0 and later, an updated GPO ADM template is provided with the Classifier Administration application. This will create a registry key to fix the problem of the Email Classifier Add-in being automatically disabled by Outlook. The

DoNotDisableAddinList Registry key will set the Add-in to 'Always Enabled' so that you cannot disable the Add-in, even if it is considered to be performing too slowly.

The location of this registry key will be established after configuring the relevant Boldon James- supplied GPO ADM template is shown below:

 $\label{eq:hkey_current_user} \\ HKey_current_user \ Microsoft \ Office \ version \ Outlook \ Resiliency \ DoNotDisable \ AddinList$

Name	Туре	Value
BoldonJames.SAFEoffice.Addin.Connect	REG_DWORD (32-bit)	1 Enabled
		0 Disabled

If the DoNotDisableAddInList method of Outlook Resiliency has not been configured, you will see following banner will be presented to the user, beneath the Office ribbon. This will occur after five consecutive occasions where the Email Classifier Add-in is considered to have been too slow to load during each Outlook launch:

ADD-IN PROBLEM A problem was detected with an add-in and it has been disabled. View Disabled Add-ins...

The screenshot below shows the user option to set the Add-in to Always enable this Add-in:

Outlook detected a COM add-in problem

These COM add-ins decreased performance or caused Outlook to crash.

Classifier			
Classifier Protective Labelling		2.734 seconds	
This add-in caused Outlook to start sl	owly.		
Always <u>e</u> nable this add-in			

If the 'DoNotDisableAddInList' method of Outlook Resiliency is enabled, the Add-in will be set to **Always Enabled in Outlook**. In this situation, you will see the following dialog:

Outlook detected a COM add-in problem

These COM add-ins decreased performance or caused Outlook to crash.



You can still disable the Add-in via the Office application's Manage COM Add-ins dialog.

DontDisplayHKLMAddins

When this Registry key is set, you can view any Add-ins which are registered under the HKLM area (including the Classifier Add-in). This means that you are prevented from disabling any Add-ins through the user interface. The screenshot below illustrates what the user will see under COM Add-Ins when the DontDisplayHKLMAddins Registry setting is configured:

		COM Ad	d-Ins			? ×
					1	ОК
······						Cancel
						<u>A</u> dd
						Remove
					~	

To manually add the DontDisplayHKLMAddins registry entry:

- 1. Open the Registry Editor.
- 2. Locate the following sub key: HKEY_CURRENT_USER\Software\Microsoft\Office\ XX.0\<application>\Security where XX is the 2-digit major office version number (for example, 14 for Office 2010) and <application> is the relevant Office application.
- 3. Add the following new REG_DWORD value:

Name	Туре	Value
DontDisplayHKLMAddins	REG_DWORD	1 Enabled
		0 Disabled

When using DontDisplayHKLMAddins, you can still disable an Add-in by manually editing the registry.

DisableLMAddinOverwrite

When this Registry key is set, you can see the Classifier Add-in under COM Add-Ins. However, you will receive an error dialog to inform them that The Add-in is installed for all users on this computer and can only be disconnected by an administrator if they attempt to disable the Add-in. This is illustrated in the screenshot below:

	COM Add-Ins		? ×
Add-Ins available	e:		ОК
 Classifier 		^ [Cancel
			Add
			Remove
ocation: oad Behavior:	C:\Program Files\Boldon James\Email and Office Classifier\6 Load at Startup	classifierShim.dli	
	Microsoft Word	i	
This add-i	in is installed for all users on this computer and can only be OK	e connected or disconnect	ed by an administ
	information balaful?		

To add the DisableLMAddinOverwrite registry entry:

- 1. Open the Registry Editor.
- 2. Locate the following subkey: HKEY_LOCAL_MACHINE\Software\WOW6432Node*\ Microsoft\Office\XX.0\Common\Security, where XX is the 2-digit major office version number (for example, 14 for Office 2010, 15 for Office 2013).
- 3. Add the following new REG_DWORD value:

Name	Туре	Value
DisableLMAddinOverwrite	REG_DWORD	1 Enabled
		0 Disabled

NOTE: Both the DontDisplayHKLMAddins and DisableLMAddinOverwrite methods will affect all Add-ins registered under HKLM. If users need to retain control over a specific Add-in, then the relevant Add-in can be referenced under the HKCU node to fulfil this requirement. This can be achieved by moving the relevant Add-in entry from: HKEY_LOCAL_

MACHINE\Software\WOW6432Node*\Microsoft\Office\<application>\Addins\AddinI d to: HKEY_CURRENT_

USER\Software\Microsoft\Office\<application>\Addins\AddinId where <application> is the relevant Office application.

*WOW6432Node is only required if the Operating System and Office architectures / bitness are different.

Preventing Add-ins Disablement Microsoft Office 2013-2019 & 365 via the Registry

When the following set of registry keys are added to an Office 2013 or later machine, the relevant Office application will be prevented from automatically disabling the Classifier Add-in. This outcome cannot be guaranteed, but the presence of the following set of registry keys will significantly reduce the likelihood of the Classifier Add-in becoming disabled. Also, you cannot disable the Classifier Add-in from the Office application's COM Add-ins dialog.

The version numbers for Microsoft Office 2013 - 2019 and Office 365 are as follows:

- Version 15.0 for Office 2013
- Version 16.0 for Office 2016, 2019 and Office 365

Name	Туре	Value
Resiliency Keys 2013-2019		
HKEY_CURRENT_USER\Software\Policies\Microsoft\ <officeproduct>\<version>\ [officeapp]\Resiliency\AddinList "BoldonJames.SAFEoffice.Addin.Connect" = 1</version></officeproduct>	REG_SZ	Sets the Classifier add-in as managed by these settings.
HKEY_CURRENT_ USER\SOFTWARE\Microsoft\ <officeproduct>\ <version>\ [officeapp]\Resiliency\DoNotDisableAddinList</version></officeproduct>	REG_ DWORD	Sets the Classifier add-in as always enabled.
"BoldonJames.SAFEoffice.Addin.Connect" = 1		

Outlook Specific		
HKEY_CURRENT_ USER\SOFTWARE\Microsoft\Office\ <version>\ Outlook\Resiliency\NotificationReminderAddinData "BoldonJames.SAFEoffice.Addin.Connect\dtype" = 0</version>	REG_ DWORD	This is to set the user a notification reminder.
HKEY_CURRENT_ USER\SOFTWARE\Microsoft\Office\ <version>\ Outlook\Resiliency\NotificationReminderAddinData "BoldonJames.SAFEoffice.Addin.Connect" = 967a844d hexadecimal or 2524611661 decimal.</version>	REG_ DWORD	This setting stops the user from being notified that an Add-in has caused Outlook to start
(The value represents the number of seconds since 01/01/1970, so the example value above will prevent notifications until Saturday, January 1st 2050 at 1:01:01 AM)		slowly until the time that is represented by the registry value.
For more information, see:		
Outlooks slow add-ins resiliency logic-and how to always enable slow add-ins.		

Email Classifier Registry Settings for Office Products

The following registry keys override standard Outlook behaviour for the Classifier Add-ins. The version numbers for Microsoft Office:

- Version 15.0 for Microsoft Office 2013
- Version 16.0 for Microsoft Office 2016, 2019 and 365

ame	Туре	Setting		
-----	------	---------	--	--

PolicyOutlook	REG_SZ	Outlook Policy Name
		The name of the policy in the configuration that this user should use when running Outlook. All other applications will use the value defined by Policy. The entry, like in PolicyFileClassifier, will be found in the same registry key as the Policy entry. It is an optional setting; if it is not present, then the value of the Policy entry is used. There are three options:
		 HKEY_LOCAL_ MACHINE\SOFTWARE\Policies\Boldon James\ConfigManager HKEY_CURRENT_ USER\SOFTWARE\Policies\Boldon James\ConfigManager HKEY_LOCAL_MACHINE\SOFTWARE\Boldon James\ConfigManager HKEY_LOCAL_ MACHINE\SOFTWARE\WOW6432Node*\Bold on James\ConfigManager (for 32-bit apps on a 64-bit OS).
		Note: PolicyOutlook is only required if there is a need for Outlook to operate under a different Policy to the Policy which is used by the other Classifier-enabled applications.
		* WOW6432Node is only required if the Operating System and Office architectures / bitness are different.

SetOutlookResilienc	REG_	1. Outlook Resiliency Keys will be enabled.		
У	DWORD	0. Outlook Resiliency Keys will be disabled/inactive.		
		The SetOutlookResiliency setting creates a set of Registry keys and values that will configure Outlook Resiliency for the Classifier Add-in.		
		By default, Outlook will abide by the following performance checking criterion:		
		Add-ins should not take an average of more than 500 ms to start, over 5 successive occasions.		
		Outlook will, therefore, disable any Add-in that is deemed not to fulfil this performance criterion. To prevent the Email Classifier Add-In from being disabled in Outlook, Classifier's SetOutlookResiliency Registry option can be configured to prevent the Add- in from being disabled at start-up.		
		This setting can be configured under either of the following Registry locations:		
		 HKEY_CURRENT_USER\SOFTWARE\Boldon James\Classifier 		
				 HKEY_LOCAL_MACHINE\SOFTWARE\Boldon James\Classifier
		If this setting is configured, it will add and configure the following Registry keys under the HKEY_CURRENT_ USER\Software\Microsoft\Office\ <version>\Out look\ Resiliency location:</version>		
		DoNotDisableAddinList		
		 NotificationReminderAddinData 		

File Classifier Registry Settings

The following registry keys override normal behaviour for the File Classifier.

Name

Туре

Setting

PolicyFileClassifier	REG_SZ	File Classifier Policy Name
		The name of the policy in the configuration that this user should use when running File Classifier. All other applications will use the value defined by Policy. The entry, like in PolicyOutlook, will be found in the same registry key as the Policy entry. It is an optional setting; if it is not present, then the value of the Policy entry is used. There are three options:
		 HKEY_LOCAL_ MACHINE\SOFTWARE\Policies\Boldon James\ConfigManager
		 HKEY_CURRENT_ USER\SOFTWARE\Policies\Boldon James\ConfigManager
		 HKEY_LOCAL_ MACHINE\SOFTWARE\Boldon James\ConfigManager
		 HKEY_LOCAL_ MACHINE\SOFTWARE\WOW6432Node\Bol don James\ConfigManager (for 32-bit apps on a 64-bit OS).
		Note: Only required if there is a need for File Classifier to operate under a different policy to that used by other classifier applications.

EnableFileLabelCachin g	REG_ DWORD	Not currently supported by FileClassifierConfig.ADM
		When File Classifier is invoked in Windows Explorer to present Icon Overlays indicating the label, File Classifier has to open each item to determine the label, and this can take a noticeable amount of time if large files are involved.
		This EnableFileLabelCaching option can be used to cause the File Classifier to store a copy of the label in an Alternate Data Stream (for All file types) facilitating faster access the next time. File Classifier will not change the 'last modified time' when caching label values. File Classifier will look for the first instance of the registry key in the following locations:
		HKCU\SOFTWARE\Policies\Boldon James\File Classifier HKLM\SOFTWARE\Policies\Boldon James\File Classifier HKLM\SOFTWARE\Boldon James\File Classifier
		0. (Default if not defined): File Classifier will not use an Alternate Data Stream to hold a cache of the Label for all file types.
		Non-zero: File Classifier will cache the label in an Alternate Data Stream for all file types.
		Note: However, in some non-NTFS environments (e.g. NetApp ONTAP) the action to preserve modified time does not work and all files accessed end up with a modified time set to the current date/time.
SelectableFilesLimit R	REG_ DWORD	Selectable Files Limit
		0 (Default if not defined): An unlimited number of files are selectable by the user. 1 or > The number of files that may be selected for Classification. If this value is exceeded the Classify option becomes disabled.

	with the first selector value. 1. File Classifier only uses the default icon overlay.	seSingleColourREG_ DWORD0. (Default): File Classifier attempts to use all the overlays to reflect the colours associated
--	---	--

Deploying Classifier Software and Associated Configuration

To deploy our classification solutions, we provide the software in two variants; .msi and .exe installers. Both can be deployed using Group Policy or your chosen deployment solution such as System Centre. You also need a set of registry keys to be deployed to machines that you wish to run Classifier products on - these are used to activate Classifier and to control its behaviour on a machine.

For Group Policy deployments, we provide ADM and AMDX template files to easily implement these. Refer to the Classifier Administration Server User Guide for further information on these templates. For other deployment solutions, a registry key file may need to be created in order to deploy them to the machines.

A combination of Microsoft Group Policy or System Centre can be used to deploy Classifier software and the registry keys that configure Classifier.

- msiexec.exe The .msi file can be run using msiexec.exe with various command-line options. It can be installed using Group Policy methods or other global install applications like a System Centre Operations Manager (SCOM). Install Options
 - <package |/i><Product.msi> Installs or configures a product.
 - /a < Product.msi> (Administrative Install) Installs a product on the network.
 - /j<ulm><Product.msi> [t<Transform List>]{/g <LanguageID> Advertises a product m to all users, u to current users.
 - </uninstall | /x> <Product.msi | ProductCode> Uninstalls the product.

Each Classifier-enabled application uses registry keys to locate the published configuration. These registry keys can be deployed using standard Group Policy mechanisms.

The ADM, ADMX and ADML templates are provided to an Administrator for setting registry entries. The templates make it easier to navigate through Classifier and associated registry keys. Classifier Administration supplies various ADM, ADMX and ADML files available from the sub-folder Classifier Group Policy Templates beneath the Classifier Administration Server folder in the Base Bundle. These can be used to extend the group policy settings.

The following types of Group Policy settings are provided for Classifier:

- Label Configuration settings
- A subgroup of settings relating to Service Mode is only available for the Local Machine.
- Client Configuration settings.

- File Classifier Settings: Only relevant if you are using File Classifier.
- Management Agent Settings: Only relevant if you are deploying the Classifier Management agent.

Troubleshooting

Using the Classifier Support Tool

The Classifier Support Tool is a diagnostic utility which provides assistance gathering with the status of computer systems and configurations as well as diagnosing common Classifier faults. It is supplied to help to identify the environmental status and system dependencies that may potentially impact the Classifier product suite and should be used for support purposes only.

The tool comes in the form of a .exe and .msi file. These can easily be installed on machines running Classifier on an individual basis when required or deployed to all machines using your chosen deployment solution.

Installing the Support Tool

- 1. Select Base Bundle AS > Support > Classifier Support Tool.
- 2. Double-click **ClassifierSupportTool.msi** and follow the instructions in the wizard.

Capturing System Information

The Classifier Support Tool collects system information from your machine, and detects common issues on the system which you can send to Support. It will warn you if an Office Add-in resiliency key has not been added. You can view and update registry settings.

- 1. Run **SupportTool** as an Administrator.
- 2. Navigate to the System Information page and select Export.
- 3. Save the information in a CSV file format and send to Boldon James First Line Support.

Using the Classifier Support Tool

In this example, Classifier has been disabled in Outlook so the load behaviour value in the registry is set to 2. In order for an Add-in to be enabled, this value must be set to 3, so we will use the Classifier Support Tool to apply this fix.

Classifier Support Tool		1. The second se		×
System Information	Find and Fix Common Problems Detect and correct any common problems that may be present on this system.			
X Diagnose & Fix	The Excel Addin is not resilient.		Fix	
Registry	 Description: The Classifier addin for Excel is not resilient. If Classifier is frequently disabled within this application, apply this fix. Solution: Set a resiliency key for the Classifier addin in Excel's registry. Elevation Required. (You meet this requirement 			
	The PowerPoint Addin is not resilient.		Fix	
	The MS Project Addin is not resilient.		Fix	
 Settings	The Visio Addin is not resilient.		Fix	
(i) About	원 Refresh Fix All	E	xport	

- 1. Run the SupportTool as Administrator.
- 2. Go into the Settings page, and set Allow fixes to True, and set Allow registry editing to True.
- 3. Navigate to the Diagnose & Fix area.
- 4. Select the Fix button next to "The Excel Add-in is not resilient".

Making this change will automatically set the LoadBehavior value for Classifier in Outlook to 3 to ensure it is loaded in that application.

Using BJ Trace Logs

BJ Trace is installed with all Classifier clients to help diagnose Classifier issues.

To run the tool:

- 1. Double-click BJTrace.exe:
 - If your machine is 32 Bit, go to C:\Program Files (x86)\Common Files\Boldon James\Logging\BJtrace.exe
 - if your machine is 64 Bit, go to C:\Program Files\Common Files\Boldon James\Logging 64\BJtrace64.exe
- 2. Click D and select either Classifier (for Office or email Classifier) or File Classifier.

- 3. Click 🖆. Set the Log information level to DATA and apply the changes.
- 4. Click \square and select Config Manager.
- 5. Click 🛍 . Set the Log information level to DATA and apply the changes.
- 6. Repeat steps 2 and 3 for each additional component* you would like to gather a BJ trace log for.
- 7. Click $\stackrel{\scriptstyle{\textstyle{\textstyle{}}}}{=}$. The logs should now be empty.
- 8. Reproduce the issue you have been experiencing, Take note the time and then in the BJTrace tool, select File > Save for each of the logs which have been generated.

*There are many additional components which could be selected in step 6 above to provide additional information for specific issues. Due to the number of options here, it is best to only select an additional component if asked to gather a specific log by a member of the Boldon James Customer Support Team.

Common Issues

Add-in Crashed or Disabled

DisabledItems and CrashingAddinsList are only created if the Add-in has crashed or disabled. If the add-in appears under one of these locations, the key can be deleted either manually or using a registry key deployed using GPO.

If an Add-in has crashed or is disabled it creates two entries; DisabledItems and CrashingAddinsList. Reference the following registry entry descriptions and locations.

Name	Туре	Value
DisabledItems	REG_ DWORD	Anything in this list has been disabled by Microsoft and not the user. Delete all entries.
		Location: HKEY_CURRENT_ USER\Software\Microsoft\Office\xx.0\Outlook\Resile nc
		y\DisabledItems
CrashingAddinsList	REG_ DWORD	Classifier conflicts with an add-in or has crashed and put into a disabled state.
		Location:
		HKEY_CURRENT_ USER\Software\Microsoft\Office\xx.0\Outlook\Resile nc y\CrashingAddinsList

Office Templates

When designing a classification policy, consider Office templates to try to ensure issues do not occur. Classifier can add various visual markings in the form of text, images, watermarks, and text boxes. Inserting these into documents that already contain visual markings can sometimes cause an issue (for example, replacing the existing text with the text added by Classifier).

To work around these issues, we provide customisation options.

For example, users are reporting an issue in Excel where Classifier is replacing existing text present in the right region of the footer when a classification label is applied. In this scenario, the 'Add footer' rule would need to be amended by enabling the Smart Selection feature. When this feature is enabled, Classifier will determine if the region of the footer is free before it adds its visual marking.

Taking this approach will ensure that Classifier running in Excel will never interfere with any existing text in these regions.

Conflicts With 3rd Party Add-ins

If a conflict occurs, please raise a ticket with <u>Boldon James First Line Support</u> for assistance with the investigation and resolution.

Conflicts With VBA Macros

VBA modules can be provided from <u>Boldon James First Line Support</u>. These provide the capability of invoking Classifier to automatically apply a classification label to a document or email during the execution of the macro.

Performance

Problem:

By default, Classifier will check for a new version of the label configuration every time a user starts an Office application, and on limited network connectivity (for example, slow Wi-Fi). This can result in the application taking longer than usual to start-up.

Solution:

There are additional registry keys that can help to prevent these from occurring:

• ValidityPeriod: This controls the frequency that Classifier checks for a new version of the label configuration. By default, this check will be performed every time an Office application starts up, so implementing this registry key alters the standard behaviour. The value for this key is defined in hours. For example, if this value is set to 24, Classifier will only check for a

new version of the label configuration once over this period. During this time, it will continue to use the current cached local version.

Name	Туре	Value
ValidityPeriod	DWORD	18 (24 Decimal number of hours)
	(32 bit) Value	

 DeferredConfigDownload: By default, if a new version of the label configuration is available, or the machine does not currently have one available, Classifier will download it during the start- up process of an Office application. Classifier will tell the Office application not to wait for the configuration to be downloaded, but instead, open a separate thread which will download it in the background. It will then continue to use the cache configuration until the user restarts the application. Once restarted, the new configuration will then be loaded.

Name	Туре	Value
DeferredConfigDownload	DWORD	1 Enabled
	(32 bit) Value	0 Disabled

Incorrect Registry Settings

If the registry keys are either not set in one of the valid locations, or include typos, this will fail to load the Classifier products.

BJ Trace Logs can be generated to help diagnose this problem which can be sent to <u>Boldon</u> <u>James First Line Support</u>.

Checking for the LoadBehavior Entry Manually or via GPO

The LoadBehavior registry entry specifies how the Microsoft Office application attempts to load the Email and Office Classifier Add-in and also the current state of the Add-in (loaded or unloaded). If Classifier is not being loaded into an Office application, it may be because the LoadBehavior registry entry is not set correctly.

For Email and Office Classifier:

- the LoadBehavior entry should already be present in one or more of the locations listed below and be set to 3.
- if the entry is present and not set to 3, change accordingly.

The LoadBehavior entry can be found in one or more of the following registry keys: HKLM\Software\Microsoft\Office\[officeapp]\Add-

ins\Boldonjames.SAFEOffice.Addin.Connect

 $HKLM\Software\WOW6432Node\Microsoft\Office\$

 $[office app] \ Add ins \ Bold on james. SAFE Office. \ Add in. Connect$

HKCU\Software\Microsoft\Office\[officeapp]\Add-

 $ins \verb+Boldonjames.SAFEOffice.Addin.Connect$