Classifier Management Agent Guide



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1 INTRODUCTION

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This document describes the features provided by the Classifier Management Agent which runs as a service on the local machine to provide the following configurable features to relevant Classifier applications.

Note: Throughout this document, Administration Guide means Administration Guide or Administration Server Guide depending upon whether you are using the Administration Console or Administration Server environment.

- 1. Manage Classifier Configuration update using a single point of contact rather than each separate Classifier Application checking for Configuration updates. This feature also improves security by removing the need for the client to have write access to the local configuration location.
- 2. Provide control over the frequency of Classifier Configuration update checks.
- 3. Monitor Email and Office Classifier applications to ensure that the Classifier extensions have not been disabled; recording in the event log should such incidents occur. Optionally, display user visible application monitoring status information.

Note: Other Classifier applications (e.g. File Classifier) are not monitored at this time.

These features are only available if:

- The installed version of an application supports the features (Email and Office Classifier version 3.8 or later and File Classifier 3.10 or later are required to make use of Classifier Management Agent features).
- Classifier Management Agent is installed and suitably configured as described in this document.
- UseManagementAgent is Enabled as described in <u>Administration Guide > Configuration</u> Deployment > Client Configuration Registry settings > Use Management Agent.

If the above are true, the Classifier Application will receive its configuration from the <u>Configuration</u> <u>Download folder</u> (aka CommonConfigFolder – default %ProgramData%Boldon James\Configuration) and will NOT cache the configuration to a separate location.

Other Classifier applications (e.g. CAD Classifier, Power Classifier for Files and previous versions of File Classifier) will receive configuration from the location identified by the ServerRootType and ServerFileSystemRoot registry entries. Furthermore, it will cache the configuration to %AppData%\Roaming\Boldon James\Client Configuration if the ClientServerOverride registry setting is not enabled.

2 INSTALLATION

Prior to installation of the Management Agent:

- 1. **Email** and **Office Classifier** (version 3.8 or later) and File Classifier (3.10 or later) should be installed and working with an operational Classifier Configuration published to a suitable location (Active Directory or file store).
- 2. The Management Agent is configured using Registry entries.

Use of Group Policy mechanisms is recommended in which case **Classifier Administration** (3.8 or later) should have been installed and the latest versions of the group Policy files

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relating to client operation (e.g. ..\Program Files (x86)\Boldon James\Classifier Administration (Server)\ClassifierConfig.adm) should have been applied. **NO** features relating to the Management Agent should be **Enabled** at this time.

See the Management Agent product Release Note for details of the supported environments.

The product is installed into the user environment as follows:

- From the Classifier Base Bundle open the Management Agent folder and run Setup.exe.
- Follow the wizard installation instruction steps to complete the installation. You will be asked to supply the name of the service that the Management Agent will appear as (default **Boldon James Classifier Management Agent**).

If installing using Command line, you may wish to override the default installed values for the following:

Item	Default	Means of changing.
Display Name of the service (MA_DISPNAME)	Boldon James Classifier Management Agent	Command LineTransform file
Description of the service (MA_DESC)	Provides monitoring and support services to Classifier Clients	 Command Line Transform file

- **Command Line** standard msiexec options apply.
- **Transform file** you can create a Transform file using an appropriate tool to specify values for the MA_DISPNAME and MA_DESC properties (in the msi property table). The transform file can then be applied as part of the installation process, or applied to the ClassifierManagementAgent.msi file to produce a new msi file.
- The Boldon James Classifier Management Agent service runs as local system.

2.1 Post installation actions

By default, installing and running Classifier Management Agent has no effect on other installed Classifier applications. Once installed the Management Agent service will run automatically with the usual Stop/Restart service actions being provided.

Classifier Management Agent operates as per the various configured settings described in <u>Management Agent Run-time Controls</u>. The defaults adopted immediately post installation mean that:

- Configuration update checks will continue to be performed by Classifier Client Applications.
- The Management Agent will not monitor Classifier Applications.

To start using the Management Agent facilities:

- It is recommended that Group Policy mechanisms are used to manage the various configuration Registry settings. To this end the ClassifierManagementAgent.ADMX / ADML files supplied with Classifier Administration should be applied as described at the start of <u>Management Agent Run-time Controls</u>.
- Ensure that suitable <u>Classifier Configuration Settings</u> are configured for the Management Agent so that it knows the location of the Published Classifier Configuration. (By default the Management Agent will use the same settings as the Classifier Clients.)
- Configure the relevant Management Agent settings. Initially you may consider just checking the application monitoring features in which case the following (group policy) settings (below Boldon James\Management Agent) are relevant:

- Applications to be monitored (Enabled) Relevant applications selected
- Management Agent General Settings (Enabled)
 - Report Errors to System Tray Icon (Enabled)
- Management Agent System Tray Icon Settings (Enabled) Show System Tray Icon (Enabled)
- If you are planning to use the Configuration update single point of contact feature, then configure the CommonConfigFolder (Classifier Management Agent group policy -Configuration Download Settings/Configuration download folder).
- □ If you are planning to use a web page as the location from which to retrieve the Master Configuration, then:

Establish and maintain a suitable Web based configuration as described in Administration Guide \rightarrow Create Web Configuration.

Establish the associated registry settings as described in Administration Guide > Configuration Deployment > Label Configuration Registry Settings > Web Host Settings.

- Configure Classifier Clients to **UseManagementAgent** as described in Administration Guide > Configuration Deployment > Client Configuration Registry settings > Use Management Agent.
- The settings will take effect the next time the system is restarted (after Group Policy update has taken place for example).

2.2 Uninstallation

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Uninstallation will usually automatically close any Management Agent processes running - that is the Classifier Management Agent Service (e.g. **Boldon James Classifier Management Agent**) and the ManagementAgentClient (Management Agent System Tray Icon).

3 FEATURES

3.1 Configuration update - single point of contact

Note: This feature requires that relevant Classifier Clients are configured to Use Management Agent as described in Administration Guide > Configuration Deployment > Client Configuration Registry settings > Use Management Agent.

By default, each Classifier application checks as it starts that it is using the up to date Classifier Configuration. Whilst this overhead is small, many users starting several applications at start of day may cause a noticeable impact on the network or Active Directory depending upon the configuration deployment method in use.

Deploying Classifier Management Agent allows you to ensure that these checks for Configuration updates are only performed once (across the network) by the Management Agent, per station regardless of how many Classifier Client Application starts occur. If the master configuration has changed, Classifier Management Agent will store the updated configuration into the configured CommonConfigFolder (Classifier Management Agent group policy - Configuration Download Settings/Configuration download folder).

Management Agent will retrieve the Master Configuration according to Classifier Configuration Settings.

Once the Classifier Clients have been configured to **Use Management Agent** they will retrieve their configuration from the <u>CommonConfigFolder</u> location. Rather than using the ServerFileSystemRoot and ServerRootType registry entries.

3.2 Configuration update frequency control

The Management Agent will check for changes to the master configuration immediately upon starting, and thereafter every 'x' minutes as defined by Management Agent General Settings / Configuration Refresh Poll Interval.

3.3 Client Application Monitoring

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Note: This feature requires that Classifier Clients are configured to **Use Management Agent** as described in Administration Guide > Configuration Deployment > Client Configuration Registry settings > Use Management Agent.

The Management Agent can check regularly that all currently running local instances of licensed Email and Office Classifier include the required Classifier software. By default no applications will be monitored. You have to explicitly configure the applications to be monitored (Outlook, Word, Excel, PowerPoint, Project and Visio) using <u>Applications to be monitored</u>.

The frequency of check is configurable using Management Agent General Settings / <u>Client Monitor</u> <u>Poll Interval</u> to define the number of seconds between checks.

If any application instance is found that does not include the expected Classifier software then a windows event log entry is raised (see Management Agent General Settings / Report errors to user).

The Management Agent may detect a new instance of an application to be monitored before that application has time to register with the Management Agent. To cater for this a 'Grace period' can be configured (see Management Agent General Settings / <u>New Process Monitoring Grace Period</u>).

One cause of such alerts can be if the Classifier Add-in is disabled by the parent Microsoft application. Sometimes this is because of an unrelated hang or crash in the parent application, or load time delays may lead the Microsoft application to disable the add-in [further information on this load time issue can be found in Administration Guide > Appendix - Frequently Asked Questions (Applications)].

3.3.1 Management Agent System Tray Icon

Installing the Management Agent establishes a system tray application (**Boldon James Management Agent Client**) with a shortcut established under All Programs\Startup which ensures

that the task is always started in future sessions. The Systray icon is displayed as ^(C). Only one instance of the Management Agent Client may be active at any one time.

By default this feature is **Enabled** (**Show**) to provide the features described below. This default operation can be changed using the <u>Show System Tray Icon</u> setting to '**Hide**' the Systray icon.

Management Agent Client is used to allow the user to check Management Agent status information (e.g. last Classifier configuration update) and optionally to directly inform the user of unregistered Classifier applications.

You can control how many days of significant historic information the System Tray Icon will present using <u>Historic Events Period</u>.

Users can be notified immediately of the detection of unregistered Classifier applications as controlled by <u>Report Errors To System Tray Icon</u>. An example of the default 'unregistered application notification' dialog is as follows:



On-screen alert

Double clicking on the MA Task Tray icon presents a dialog showing the current status, last configuration update and history information (you may have to press **Refresh** to get the latest information).

0	Classifier Status	_ 🗆 X
Classifier Status		Refresh 💽
Home History		
Current Status		
Item Microsoft Word Microsoft Outlook Microsoft Excel Microsoft PowerPoint	Status Classifier loaded Classifier not loaded Classifier loaded Classifier loaded	
<	ш	>
Last configuration download: 06/07/15 14:45:52	Last status update: 06/07/15 14:45:52	
		× 8

Status window

The various text items displayed in the dialogs above can all be configured as described in Administration Guide > User Interface Library. The specific settings appear under the User Interface Library > Management Agent topic, with the Systray icon Show/Hide context menu settings under the User Interface Library > Menus topic.

4 MANAGEMENT AGENT RUN-TIME CONTROLS

Various aspects of Management Agent operation are controlled by Registry settings. You can deploy registry settings using Group Policy mechanisms using the ADML and ADMX files supplied with the Classifier Administration product. These files can be used as follows:

□ **Copy** the following two files from the installation folder (e.g. ..\Program Files (x86)\Boldon James\Classifier Administration (Server)):

..ClassifierManagementAgent.admx to Windows\PolicyDefinitions

- .. ClassifierManagementAgent.adml to Windows\PolicyDefinitions\en-US.
- Start the Group Policy Management tool.
- Select a group policy object and choose **Edit...** from the context menu.
- Open Computer Configuration > Policies > Administrative Templates ... > Boldon James > Classifier Management Agent.

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Group Policy settings

You can then configure any or all of the supported settings which are grouped as shown below. Each group of settings is described under a separate sub-section:

- Applications to be monitored
- <u>Classifier Configuration Settings</u> (These may actually be used by various Classifier applications)
- <u>Configuration Download Settings</u>
- Management Agent General Settings
- Management Agent System Tray Icon Settings
- □ You can use **gpupdate** */***force** to ensure that the latest settings are applied to the current environment.

The Management Agent looks for its control registry settings under the following keys (in the order listed):

1. HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Boldon James\

Or if you are establishing the keys directly then below:

2. HKEY_LOCAL_MACHINE\SOFTWARE\Boldon James\

Or for 64-bit systems under:

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Boldon James\

If equivalent entries exist beneath 1 and 2 above, then the Policies setting takes precedence.

In the sections below ... indicates whichever of the above you are using as a prefix to the registry location.

4.1 Applications to be monitored

This entry should be established below ...\ClassifierManagementAgent:

Name \ApplicationsToBeMonitored (Applications to be monitored)

Type Applications to be monitored is a **Key** below which individual application executable names are configured. The application names supported are **EXCEL**, **OUTLOOK**, **POWERPNT**, **VISIO**, **WINPROJ** and **WINWORD**.

Each application entry is a REG_DWORD configured as:

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Data 0 (Default if the application entry does not exist) The Management agent will not monitor the application.
 The Management Agent will require the application.

1 The Management Agent **will** monitor the application.

4.2 Classifier Configuration Settings

(These items can be administered using the Group Policy established by ClassifierConfig.ADM documented in Administratio Guide \rightarrow Applying supplied ADM / ADMX/ ADML files)

By default, the Management Agent will use the same **ServerRootType** and **ServerFileSystemRoot** settings described below as Classifier Clients. However, it is **strongly recommended** that ServiceMode entries are established which the Management Agent will use. This will avoid confusion with the settings used by Classifier Client applications on the same station.

4.2.1 ServerFileSystemRoot

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This entry should be established below ... \ConfigManager\ServiceMode:

Name	\ServerFileSystemRoot (Path to where your configuration is stored on the server)
Туре	REG_SZ
Data	[Only required if ServerRootType indicates the master configuration is stored on the File System.]
	Should contain a network path to the folder into which your master Classifier configuration has been published, e.g. \\ICS-SVR-1\Classifier Configuration.

4.2.2 ServerRootType

This entry should be established below ... \ConfigManager\ServiceMode:

Name	\ServerRootType (ServerRootType)					
Туре	REG_DWORD					
Data	Indicates whether the master Classifier configuration is held in Active Directory or File Stor					
	0	File Store				
	1	Active Directory				

4.2.3 Classifier Configuration Web Host Settings

These settings are only relevant if wish Management Agent to retrieve the Master Configuration from a Web Page. The settings are documented in the Administration Guide > Configuration Deployment > Label Configuration Registry Settings > Web Host Settings.

4.3 Configuration Download Settings

4.3.1 Configuration download folder

This entry controls the location where the Management Agent stores its retrieved master Classifier Configuration information which is then read by relevant Classifier applications (Email and Office Classifier and File Classifier (3.10 or later).

By default, this registry entry does not exist and the Management Agent will store the configuration below **C:\ProgramData** (actually as ..\Boldon James\Configuration). This location can be changed by establishing the registry entry below:

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This entry should be established below ... \ConfigManager:

Name \CommonConfigFolder (Configuration download folder)

 Type REG_SZ
 Data Undefined (default) The Classifier Configuration is stored below ProgramData. A valid path to a folder to be used rather than ProgramData (e.g. C:\ClassifierConfig). This location must be writable by the Management Agent Service and readable by all Classifier Clients.

4.4 Management Agent General Settings

4.4.1 Client Monitor Poll Interval

This entry should be established below ...\ClassifierManagementAgent:

Name \ClientMonitorPollInterval (Client Monitor Poll Interval)

Type REG_DWORD

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- Data This entry specifies the period between the Management Agent service checking if any Classifier client applications configured under <u>Applications to be monitored</u> are running that are not registered with the Management Agent.
 - >0 The number of seconds between Client application monitoring checks. The default is 10 seconds (if not configured or an invalid value).

4.4.2 Configuration Refresh Poll Interval

This entry should be established below ...\ClassifierManagementAgent:

Name \ConfigRefreshPollInterval (Configuration Refresh Poll Interval)

Type REG_DWORD

Data The Management Agent service will check for a newer configuration (in the location configured via <u>Classifier Configuration Settings</u>) when the service starts and thereafter every "Configuration Refresh Poll Interval".

If a newer configuration is available, the service will download that new configuration to the local (Configuration Download Settings) <u>CommonConfigFolder</u> area. New instances of Classifier Client applications that start will then use that new configuration.

>0 The number of minutes between the Management Agent checking for newer configurations. The default (if not configured) is 60 minutes. Any unsupported value (e.g. 0 or excessively large) will result in the default value being assumed.

4.4.3 Historic Events Period

This entry should be established below ...\ClassifierManagementAgent:

Name \HistoricEventsPeriod (Historic Events Period)

Type REG_DWORD

- Data This entry specifies how many days of event log failure entries will be displayed in the Systray icon application 'History' tab.
 - 0 The History tab will contain no information. Current status information is still visible.

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>0 The number of days of event log failure entries to be displayed in the Systray icon application 'History' tab. The default if not configured is 7 days.

4.4.4 New Process Monitoring Grace Period

This entry should be established below ...\ClassifierManagementAgent:

Name \NewProcessMonitorGracePeriod (New Process Monitoring Grace period)

Type REG_DWORD

Data This entry specifies how long (in seconds) the Management Agent will allow a Classifier process to remain unregistered before recording the incident.

The default value is 15 seconds.

Note that the smaller the value the more likely it is that the Management Agent will detect a new process before that process has had a chance to register (e.g. whilst Outlook is waiting for the user to choose an email profile).

4.4.5 Report Errors to the System Tray Icon

This entry should be established below ...\ClassifierManagementAgent:

Name \ReportErrorsToSystemTraylcon (Report errors to the System Tray Icon)

- Type REG_DWORD
- Data This entry allows you to specify whether application monitoring errors are reported directly to the user via the system tray icon. This is only meaningful if **ShowSystemTrayIcon** is set to **Show**.
 - 0 (**Disabled** the default if not configured). The Management agent will not notify the user directly of unregistered Classifier applications.
 - 1 (**Enabled**) The user will be notified immediately (via pop-up) if an unregistered Classifier application is detected.

Note: Errors are always reported to the <u>windows event log</u>. Current status information is always reported to the Systray icon and presented in the status table.

4.5 Management Agent System Tray Icon Settings

4.5.1 Show System Tray Icon

This entry should be established below ...\ClassifierManagementAgent:

Name \ShowSystemTraylcon (Show System Tray Icon)

Type REG_DWORD

Data This entry determines whether the Management Agent's system tray icon will be displayed.

- 0 (**Hide**). The System Tray Icon will not run and users will not be notified of unregistered Classifier applications.
- 1 (**Show** the default if not configured). The <u>Management Agent System Tray icon</u> will appear.

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5 WINDOWS EVENT LOGGING

Classifier Management Agent logs incidents and information to the Windows event log. Entries can be found below Applications and Services Logs\Boldon James Auditing\Classifier\Management Agent as per the example below.

J Event Viewer							
Eile Action View Help							
Event Viewer (Local)	Admin Number of events: 4				Actions		
Custom Views	Level	Date and Time	Source	Event ID	Task Category		Admin 🔺
A Poplications and Services Logs	(i) Information	01/06/2015 14:24:22	Management Agent	1000	Service Start		💣 Open Saved Log
Boldon James	 Information 	01/06/2015 14:24:18	Management Agent	1001	Service Stop		✤ Create Custom View
a 🛗 Boldon James Auditing	 Information 	01/06/2015 14:50:06	Management Agent	1000	Service Start		Import Custom View
Classifier	Warning	01/06/2015 14:25:58	Management Agent	2000	Client Monitoring		Clear Log
A Management Agent							Tilter Current Lon
Boldon James Management Agent	L						Pinter Current Log
Hardware Events	Event 2000, Mana	gement Agent (Boldor	n James Auditing-Classifi	ier-Manage	ment Agent)	×	Properties
Internet Explorer	General Detail						Disable Log
Key Management Service	Deneral Detail	3					👬 Find
Microsoft						*	Save All Events As
Microsoft Office Diagnostics	Process: 4032 Office Product: Microcoft Word					Attach a Task To this L	
Microsoft Office Sessions	Office Version: unknown Windows Version: unknown Issue Type: Classifier not loaded User Name: CLASSIFIER\Administrator User SID: S-1-5-21-232113315-3979818137-1130013963-500 →				View 🕨		
Windows PowerShell				=	Refresh		
				👔 Help 🕨 🕨			
							Event 2000, Management A 🔺
	g Na <u>m</u> e:	Boldon James Auditi	ng-Classifier-Manageme	nt Agent/A	dmin		Event Properties
	urce:	Management Agent	(Boldor Logged:	01/06/201	5 14:25:58		Attach Task To This Ev
	ent ID:	2000	Task Category:	Client IVIO	nitoring		Copy +
	vei:	SVSTEM	Keywords:	Audit Fail	classifier test		Save Selected Events
	L. Code:	Info	compute <u>i</u> .	105-01-1.	classifiencesc		Refresh
	are Information:	Event Log Online He	In				
							In the p
	•					•	
4 III +							

Windows Event Viewer

The following events may be logged with source of Management Agent:

Event ID	Status	Category	Meaning and other event data		
1000	Information	Service start	Service (Boldon James Classifier Management Agent) has started.		
1001	Information	Service stop	Service (Boldon James Classifier Management Agent) has stopped.		
1002	Information	Configuration update	Configuration download success		
1003	Information	Configuration update	Configuration download failure		
2000	Warning	Client monitoring	An unregistered application has been detected. OfficeProduct (value): 1 Winword 2 Excel 3 PowerPoint 4 Visio 5 Project 6 Outlook Issue type (value): 1 Classifier not loaded 2 Office in Safe Mode		



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2001	Information	Client monitoring	Application has successfully registered.		
			Office Product (value) as per preceding entry.		
			Issue Type (Value)		
			3 Classifier successfully loaded (after an entry with Entry ID =2000 and Issue type=1).		
9000	Critical	Service exception	Unexpected software condition has been detected.		