# IES Alerter Dispatch User Manual.

# What is it?

IES Alerter Dispatch is a service which dispatches emails via the internet and SMS's via the 3G/4G network. It also services document conversion functions for IES. It can be installed on the same server as IES or on any other machine on the local network.

# Quick start.

To get up and running quickly without all the details, please go to "Installation". Otherwise, please continue reading for more details.

# Architecture.

IES Alerter Dispatch is a service which is installed on a server on your network.
It manages data transmission folders which is used as a temporary store for emails and sms's. It sees these folders as queues from which it accepts work items from IES which it then processes in the background.

# Configuration.

## Service Configuration

The IES Alerter Dispatch service is configured using the configure application which can be found in the **bin** directory after installation. This configure application is run by default during installation allowing the user to check and modify configuration settings as needed. The application can also be accessed using the start menu, and is located in the Infolab program group :
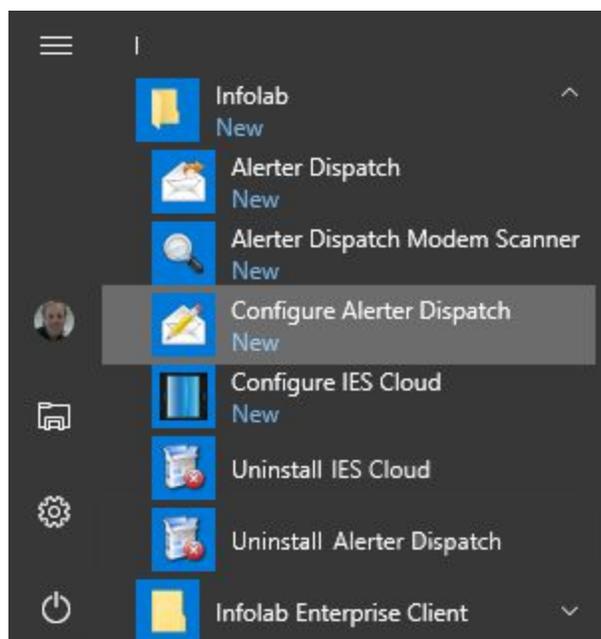


The following is a screen capture of the configure interface :

**Modem Detection List:**
This is a comma separated list of modem names to use for transmission of SMS messages. Please see 'Setting up Modems' for further information.

**SMS Transfer Folder:**
This is the folder used for outgoing SMS messages.

**Mail SMTP Host:**
This is the SMTP server address to use for mail transmission.

**Mail Account Address:**
The email address for the account which EMails are sent from.

**Account password:**
The password for the mail account.

**Mail Transfer Folder:**
This is the folder used for outgoing EMail messages.

**Document Translate Folder**
This is the folder used for document translation purposes such as converting documents to PDF.

When all the settings have been reviewed, *Update Settings* can be clicked to save.
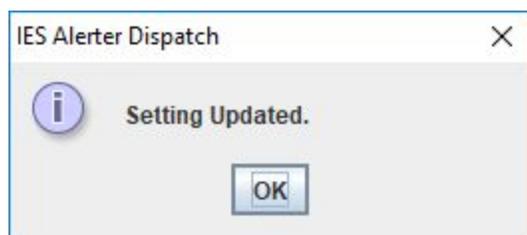


The above dialog will be displayed to confirm that settings has been saved.

## Setting Up Modems :

Modems for SMS transmission is detected using the modem scanner application which can be found in the **bin** directory. The application can also be accessed using the start menu, and is located in the Infolab program group :
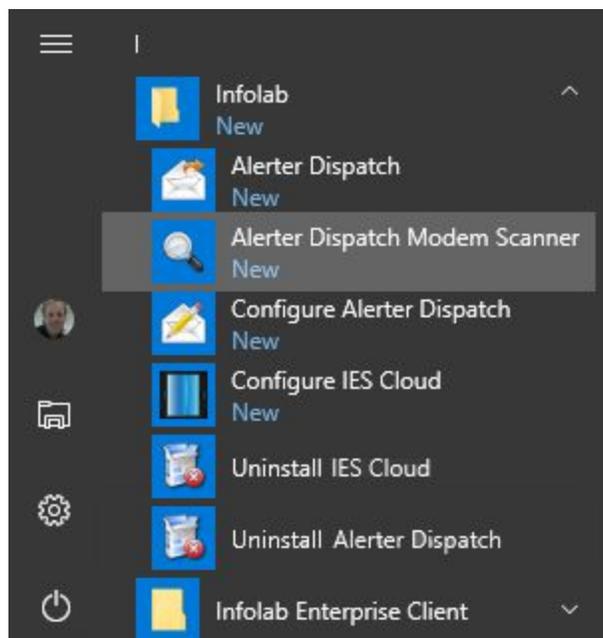


This is a screenshot of the modem scanner with one modem detected :
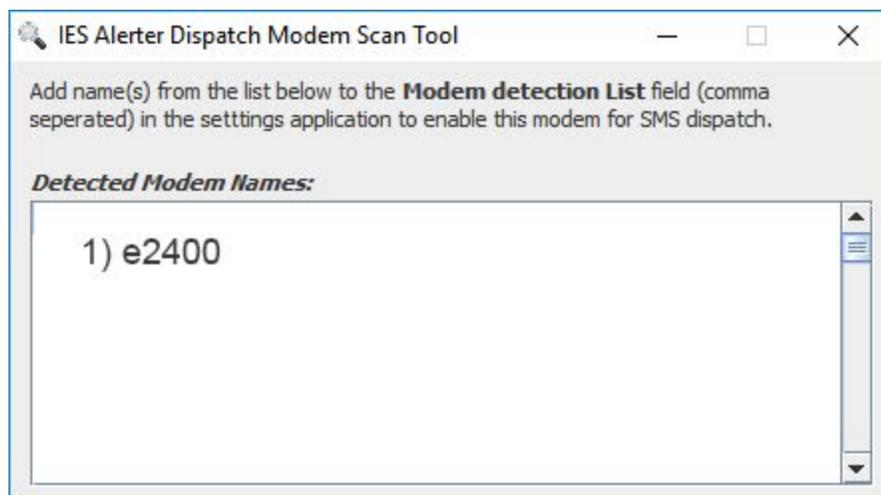


You must add any of the modem names that appear here into the Modem detection field of the configure application. Doing so will allow SMS messages to be sent using any of the modems in the list. If your modem is connected, but not listed then it might not be the correct type. Modems should use the standard 3G AT command-set and must expose a COM port on Windows.

## Logging Configuration :

The IES Alerter Dispatch service logs appropriate messages to a rolling log folder at
`/infolab/ies-ad/log`.

The logging functionality can be configured using the file `log4j2.xml` which is at `/Infolab/ies-ad/conf`:
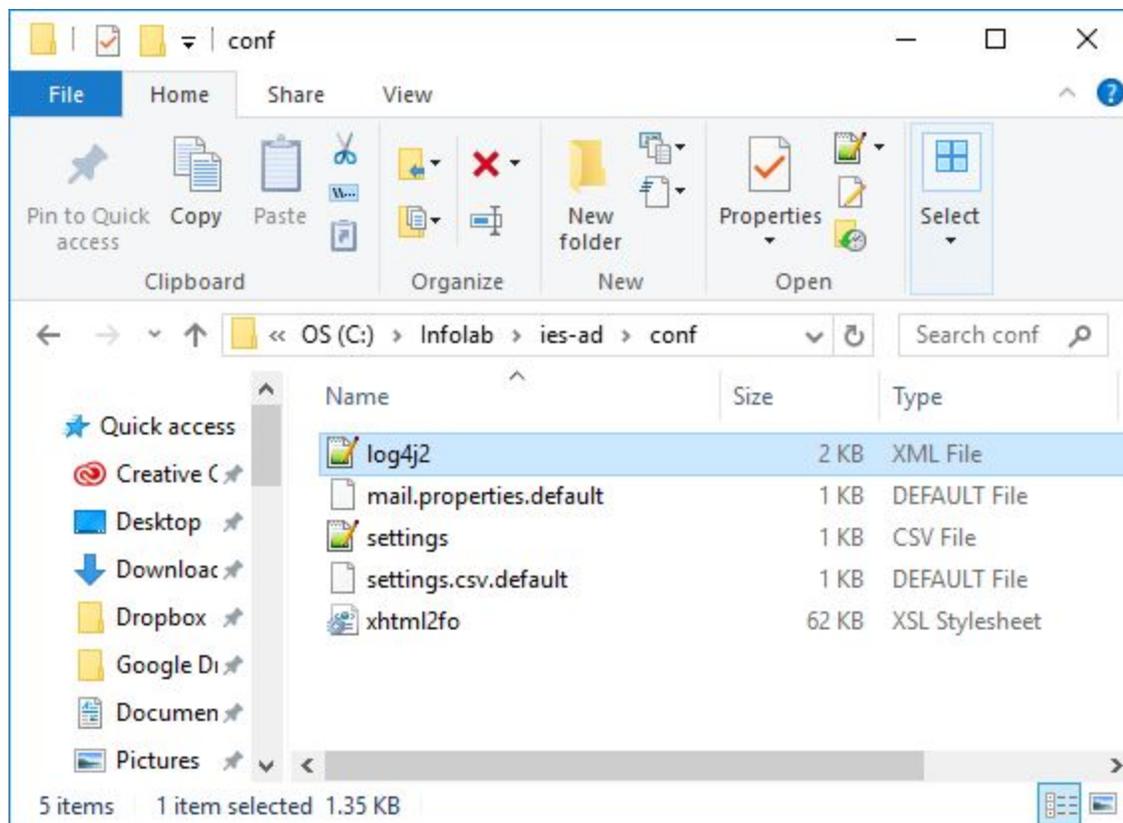


A Reference for the XML configuration in this file can be found at : Configuring Log4J 2

# Installation.

In order to install the latest version of IES Alerter Dispatch, you will need to download it from the website.
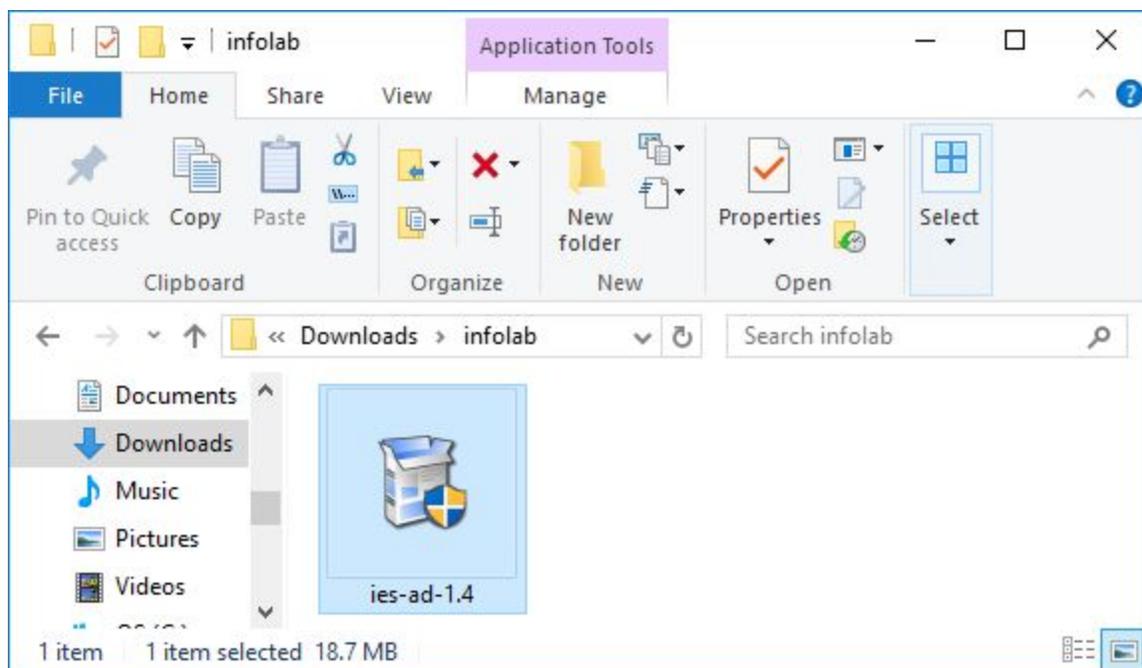


After download you can run the installer. You will receive a warning that the program requires administrator privileges. Please allow and then it will show the following dialog :

If it shows the **uninstall dialog**, then it means that you already have a copy installed and that it will be uninstalled first. See *'Uninstallation'* should this be the case.

If you do not have Java 1.8 or later installed, before executing this step, the the installer will notify you of this and direct you to the Oracle site to install Java first. It is important to have the correct version of Java for your machine, 32bit or 64bit. IES Alerter Dispatch only looks for a Java installation of the same type as your main processor, so make sure to install the correct one. See *'Java Installation'* for more information.

Click **Next** to proceed
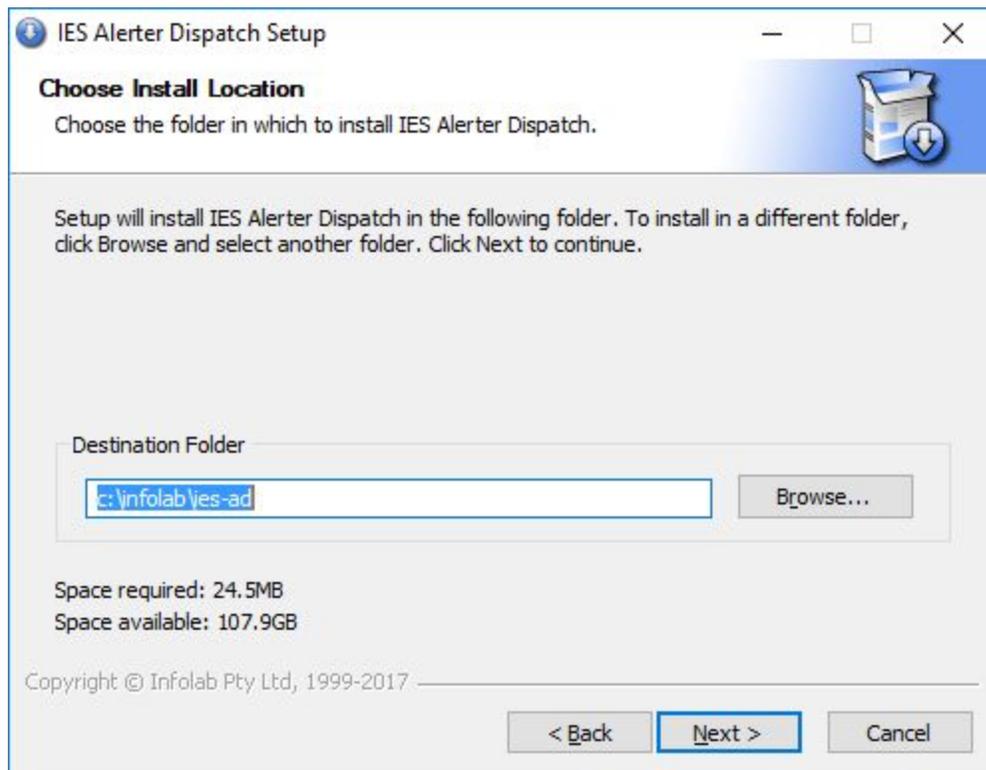


Select the install location, or leave the default as is and click **Next**.
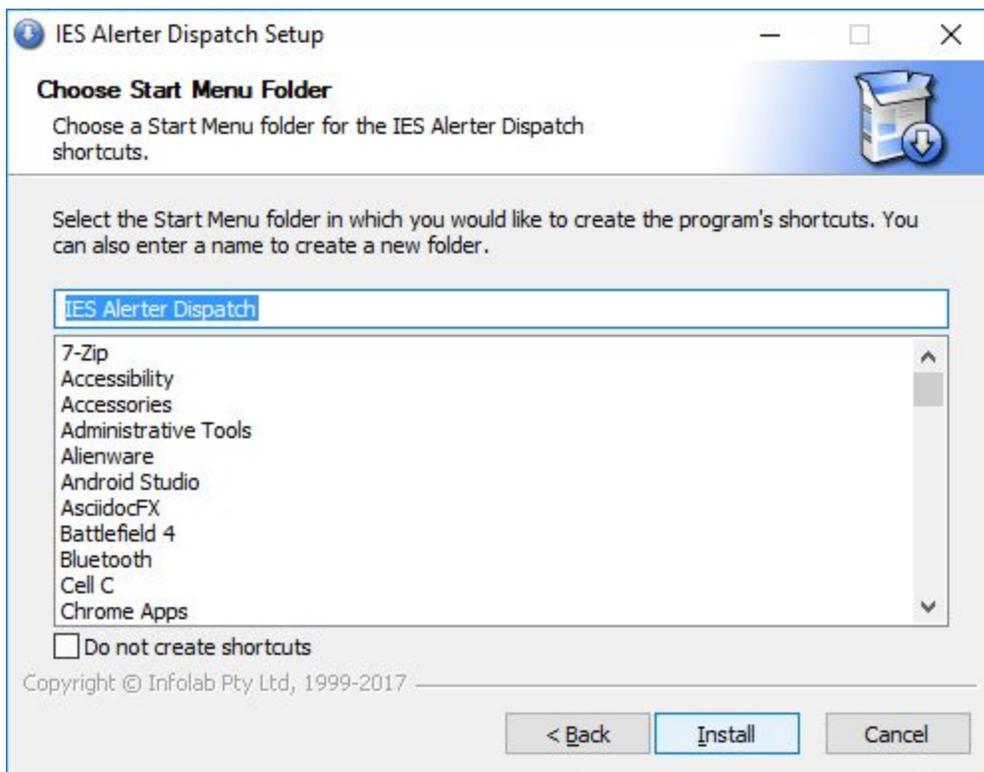
Please choose the program group to create for IES Alerter Dispatch, or leave the default alone and click **Install**.

IES Alerter Dispatch setup will proceed to copy some files.

Next, IES Alerter Dispatch Setup will create the IES Alerter Dispatch service entry and run the configure app to allow you to enter basic parameters for the installed service :
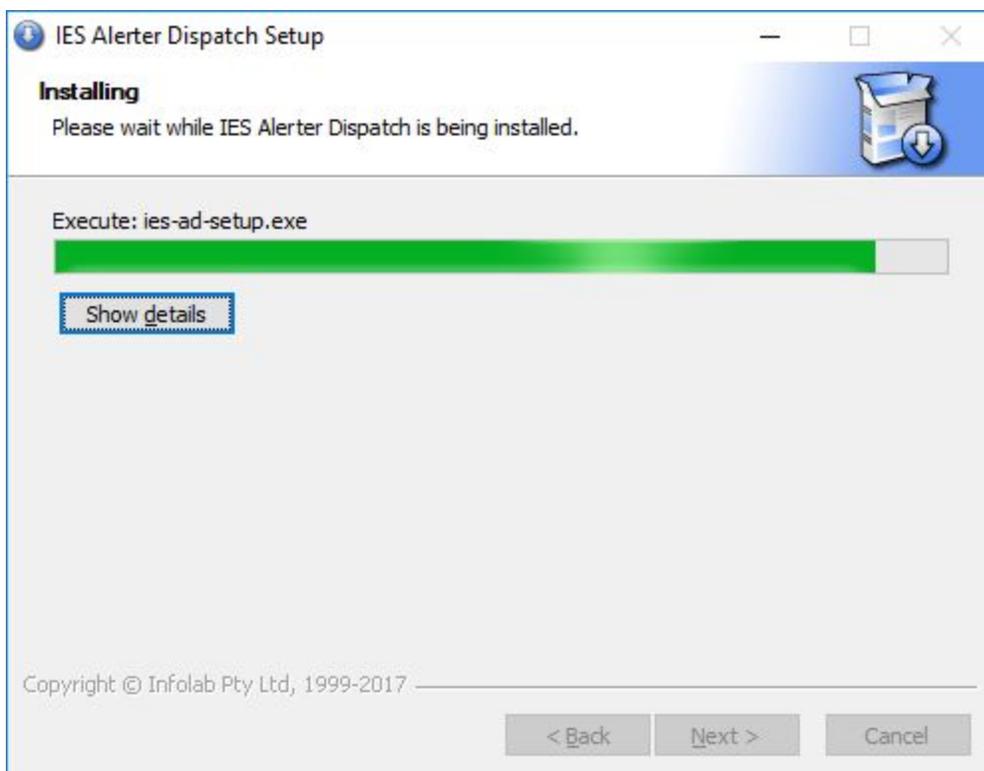
Please see the *'Configuration'* section of this document for details.
After configuration, The IES Alerter Dispatch service is automatically started.
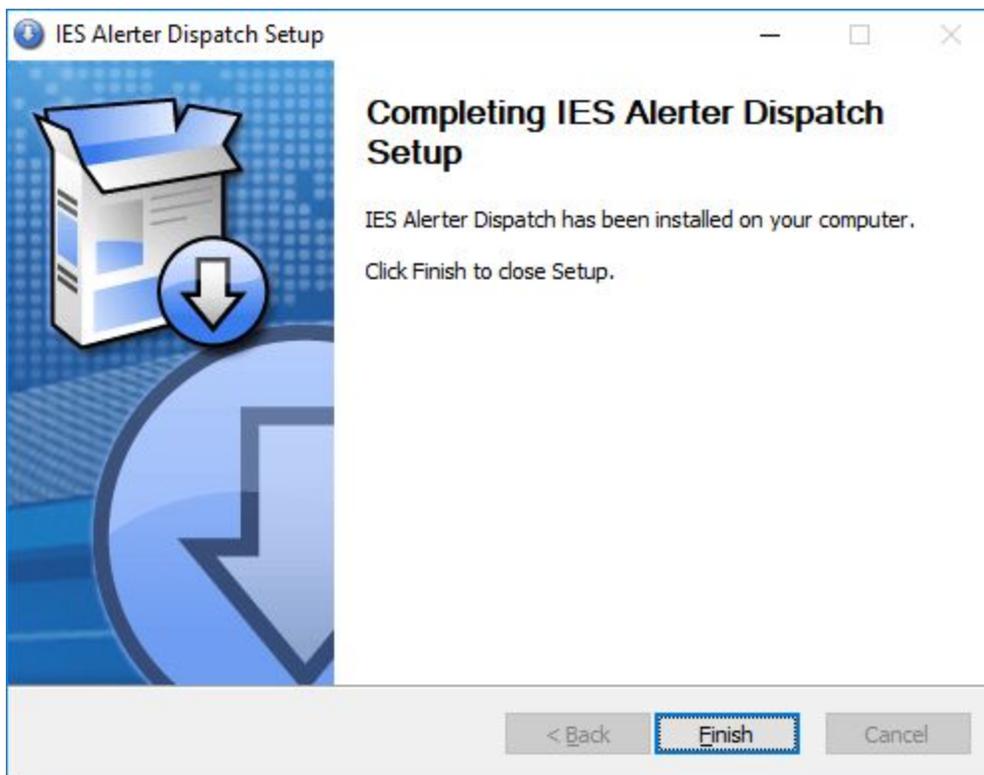


Click **Finish** to exit the installer.

## Upgrade.

The following steps are needed to upgrade IES Alerter Dispatch to a new version :

1) Backup the logging configuration settings in the file at `conf/log4j2.xml` – if it has been modified. General settings and mail configuration will be retained across a upgrade.
2) Ensure the server is Quiet.
3) Run the new installer.
4) Restore backed up logging settings if needed.

The new installer will stop the service if it is currently running, uninstall the previous version and install the new version thereafter. It will also start the service after installation.

## Uninstallation.

To Uninstall Alerter Dispatch, use the "Uninstall Alerter Dispatch" option under the 'Infolab' program group and follow the prompts.
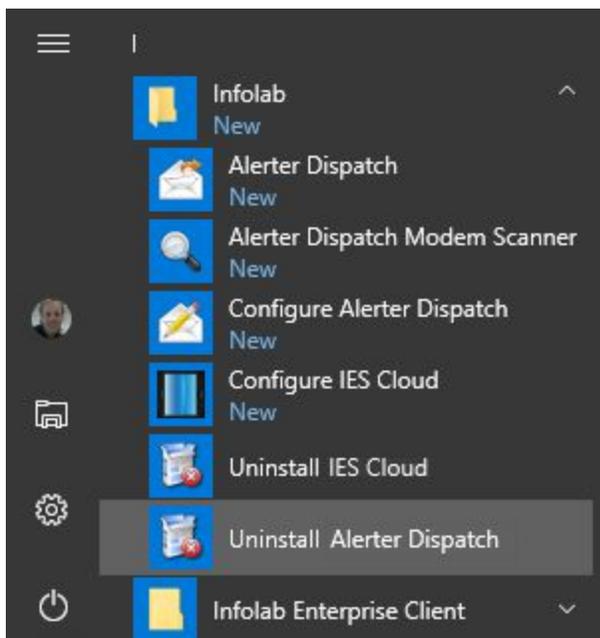
Alerter Dispatch can also be uninstalled by executing the "uninstall.exe" program in the `/infolab/ies-ad/` folder
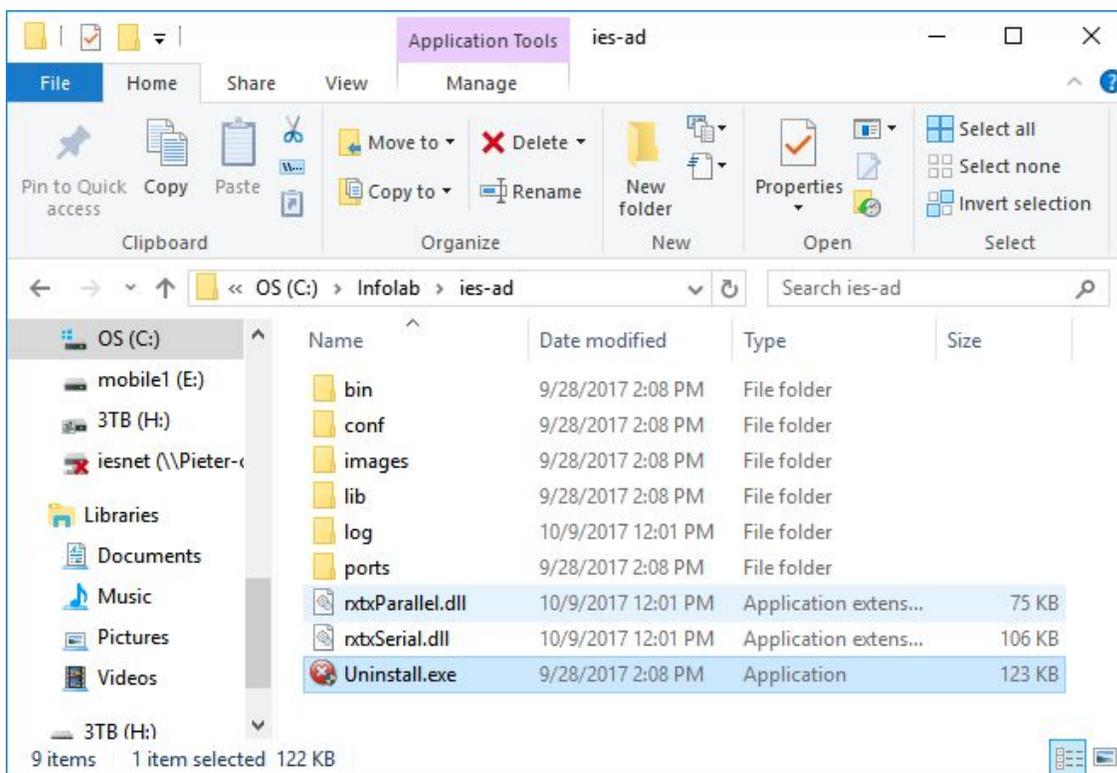


On uninstallation you will see the following prompt :

On clicking **Next**, the following dialog is displayed :
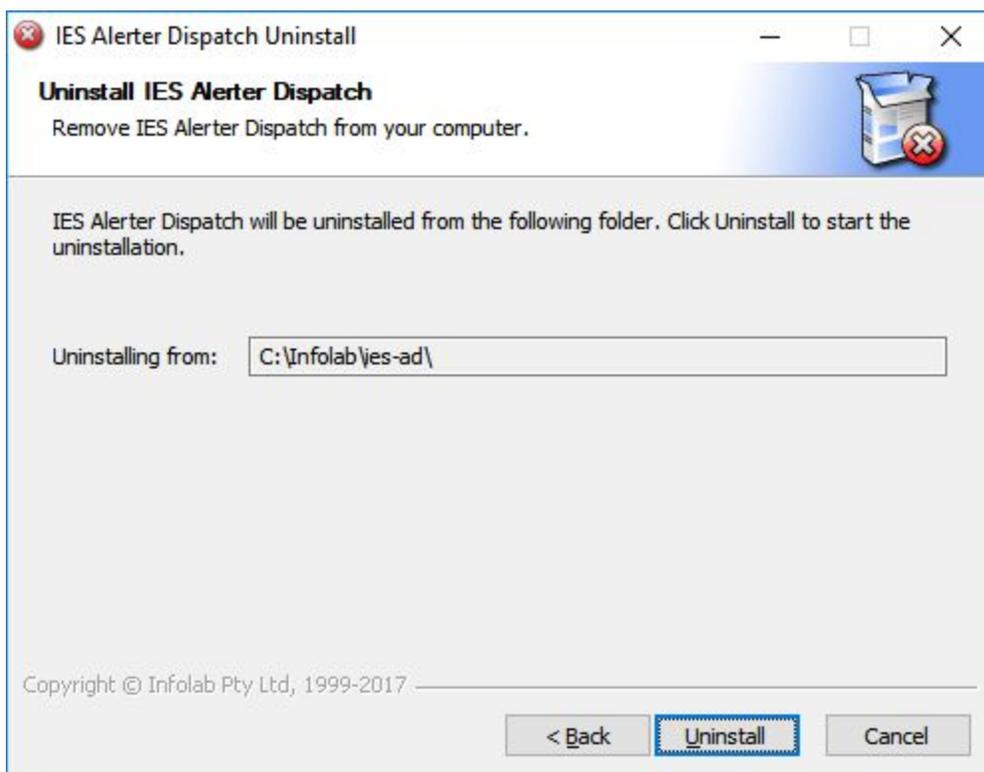


The folder is ok as is, click **Uninstall**.
The uninstaller will proceed to stop the service and remove all the installation files :
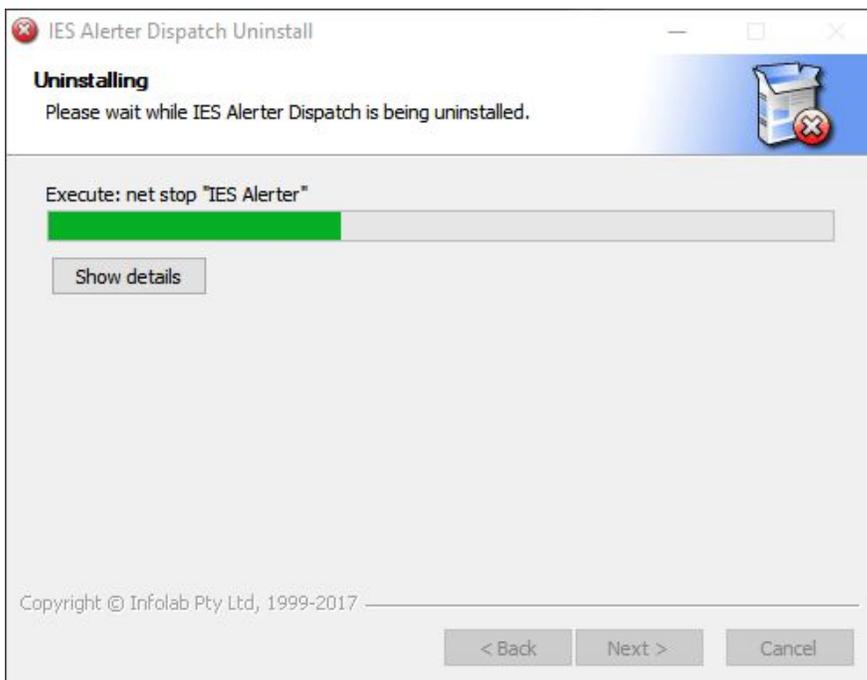
Once uninstallation has completed, you will see the following dialog :
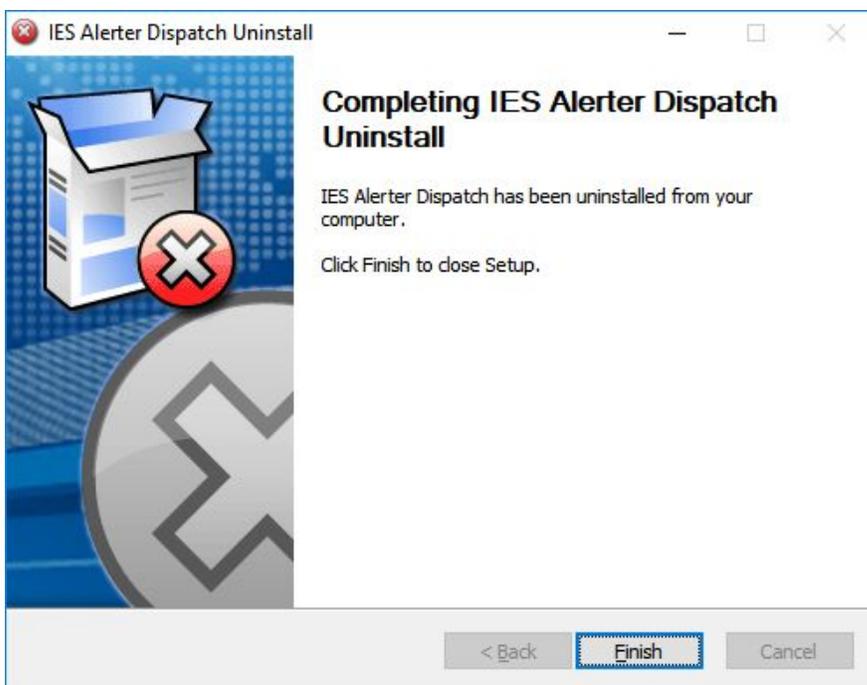


The uninstaller will not clear your `conf/` and `log/` folders, you can remove the files when you no longer need them.

# Managing the Service.

The IES Alerter Dispatch service runs as a Windows service and can be accessed by pressing **Windows+R** keys to open the Run dialog, typing '`services.msc`' and pressing Enter.
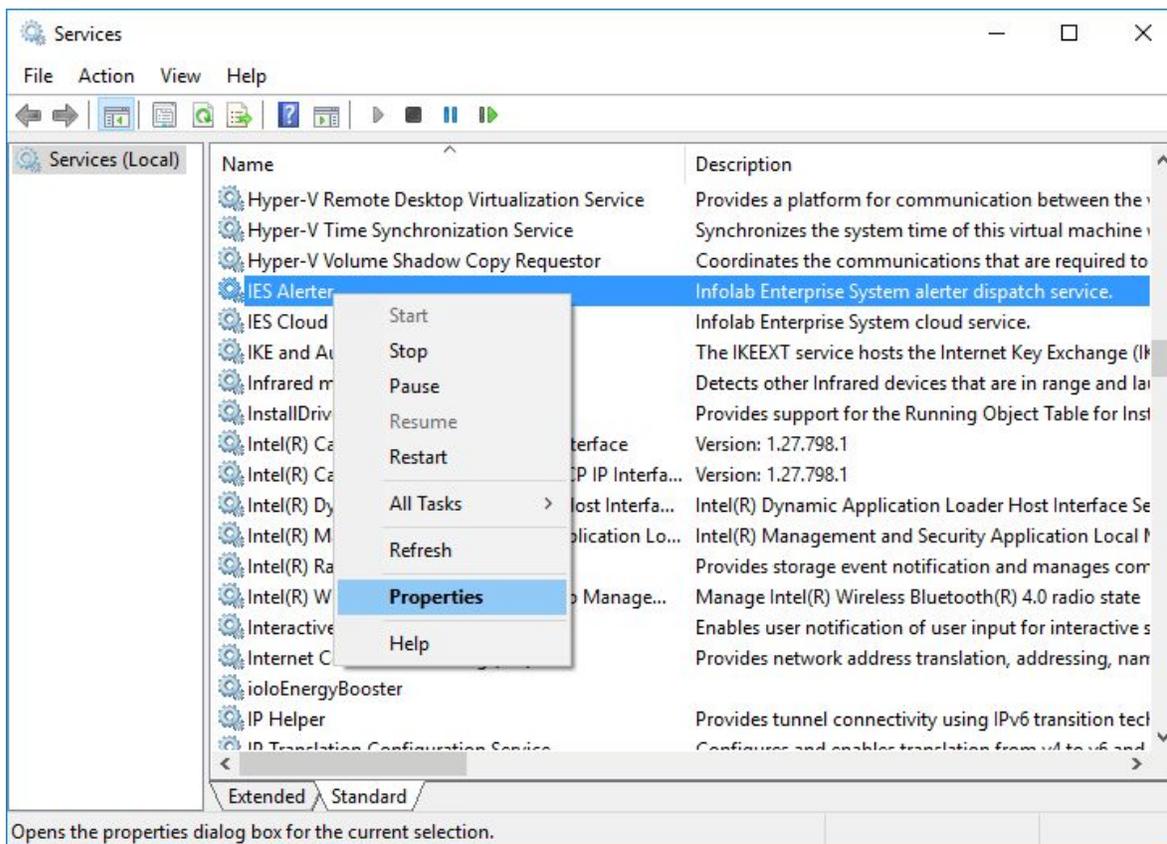
You can scroll down to the entry for IES Alerter Dispatch to manage the service.

The service manager can be used to start and stop the IES Alerter Dispatch service, but always make sure that the system is quiet and not busy processing batch dispatches.

The service manager also shows the status of the service in the top bar and the service properties can be used to set settings such as auto-start and the user credentials used for the service.

## Log Files

Log files for the service is kept at `/infolab/ies-ad/log`
The default logging strategy is to keep files daily files which rollover at 30mb, but this can be modified. See '*Logging Configuration*' in the '*Configuration*' section.

# Java Installation.

IES Alerter Dispatch requires Java 8 or later to be installed for the correct processor type.
This means that on a 64bit machine, the 64bit JRE or JDK must be installed.

Please see https://www.java.com/en/download/help/windows_manual_download.xml
for instruction on installing Java on Windows

# Instructions on using a Google email address for sending mails.

1. Go to the "Google Account Creation Page" `https://accounts.google.com/SignUp`
2. You need to fill in the following details :
   - Your **First** and **Last Name**.
   - Your **Username** and **Password.**
   - Your **Birthdate** and **Gender.**
   - Your **Mobile Phone Number** and another **Existing Email Address**.
   - Your **Country**.
3. Click **Next** to create your new email account (make sure to read the terms of service).
4. You might be presented with a verification page where it will ask to send a verification sms with a code which you must enter on the page before the mail will be usable

Once you have created the account you can test it by sending a mail to it. Once you have verified that it is working, you can run the [Service Configuration](#) application to start using the new mail settings.

## Configuring additional Mail Protocol Properties

The default mail protocol properties is stored at `conf/mail.properties` which contains the default mail protocol properties. You can use these properties to specify additional settings for the mail protocol between your SMTP host and Alerter Dispatch.

For instance, to support STARTTLS which is used for security upgrading over a plain connection :
```
mail.smtp.starttls.enable=true
```
To enable or disable authentication, use :
```
mail.smtp.auth=true
```
To set the port to use :
```
mail.smtp.port=25
```

The `'user', 'host' and 'password'` values are set from the Alerter Dispatch general Configuration.

Here is a incomplete list of supported JavaMail properties.

| mail.smtp.port | int | The SMTP server port to connect to, if the connect() method doesn't explicitly specify one. Defaults to 25. |
|---|---|---|
| mail.smtp.connectiontimeout | int | Socket connection timeout value in milliseconds. Default is infinite timeout. |
| mail.smtp.timeout | int | Socket I/O timeout value in milliseconds. Default is infinite timeout. |
| mail.smtp.localhost | string | Local host name. Defaults to InetAddress.getLocalHost().getHostName(). Should not normally need to be set if your JDK and your name service are configured properly. |

| mail.smtp.ehlo | boolean | If false, do not attempt to sign on with the EHLO command. Defaults to true. Normally failure of the EHLO command will fallback to the HELO command; this property exists only for servers that don't fail EHLO properly or don't implement EHLO properly. |
|---|---|---|
| mail.smtp.auth | boolean | If true, attempt to authenticate the user using the AUTH command. Defaults to false. |
| mail.smtp.dsn.notify | string | The NOTIFY option to the RCPT command. Either NEVER, or some combination of SUCCESS, FAILURE, and DELAY (separated by commas). |
| mail.smtp.dsn.ret | string | The RET option to the MAIL command. Either FULL or HDRS. |
| mail.smtp.allow8bitmime | boolean | If set to true, and the server supports the 8BITMIME extension, text parts of messages that use the "quoted-printable" or "base64" encodings are converted to use "8bit" encoding if they follow the RFC2045 rules for 8bit text. |
| mail.smtp.sendpartial | boolean | If set to true, and a message has some valid and some invalid addresses, send the message anyway, reporting the partial failure with a SendFailedException. If set to false (the default), the message is not sent to any of the recipients if there is an invalid recipient address. |
| mail.smtp.starttls.enable | boolean | If set to true, enables connection security upgrading using the STARTTLS extensions. |

There are other mail properties available, and new ones will be used in the future, so please see the JavaMail documentation for more information.