
Setup Guide Automation AIS-Plugin Executer v2.1

Updated: Date 2022-10-31

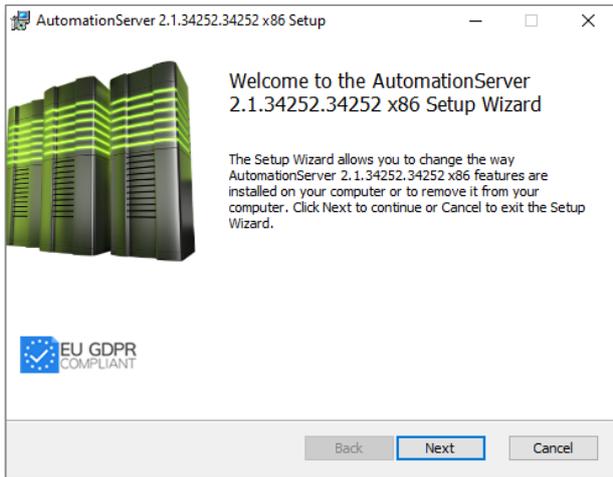
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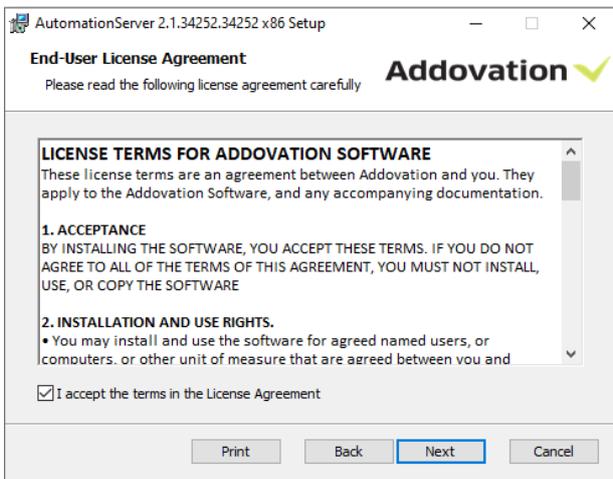
1 Installation Guide

1.1 Pre-installation instructions

Before the module is uninstalled, changed, or repaired, make sure that config files in the Directory and web config file with related message Tracking folder in inetpub are backed up properly. Continue by clicking on the MSI file and the installer will open up:



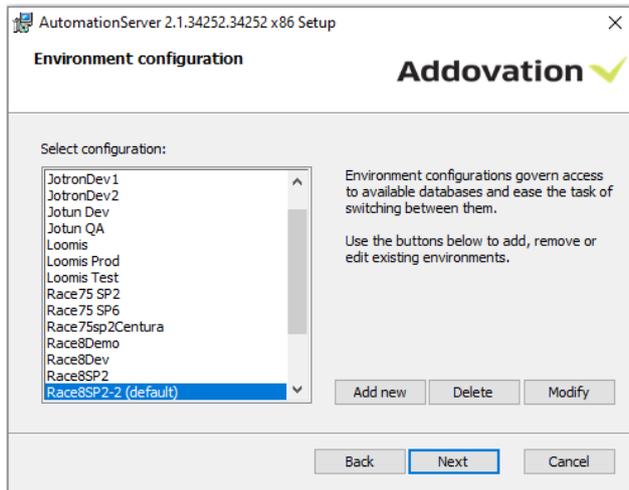
Proceed by clicking next and you will be presented with the end-user license agreement:



Accept the license agreement and proceed by clicking Next which will take you the environment configuration. The environment configuration is used for defining various IFS Applications instances.

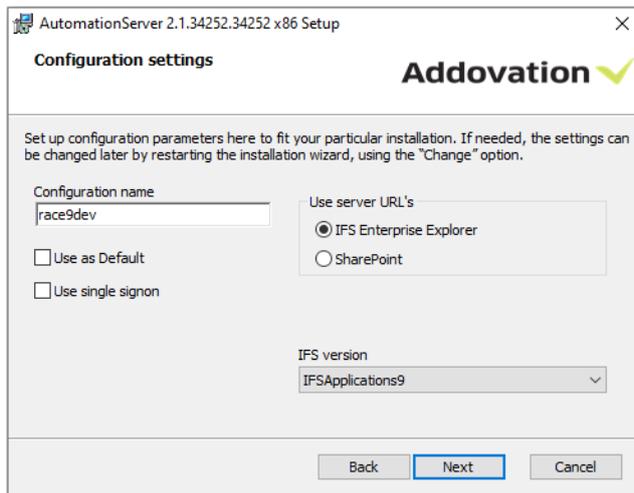
1.2 Environmental Configuration

When installing the software for the first time, you will need to specify which environment(s) you wish to be able to connect to. You do this by clicking the Add new button. When upgrading to a new version, or modifying an existing installation, you may choose to retain the current settings and simply click Next or make changes to the environment configuration by clicking Modify.



1.3 Configuration Settings

The configuration settings allow you to customize your installation.



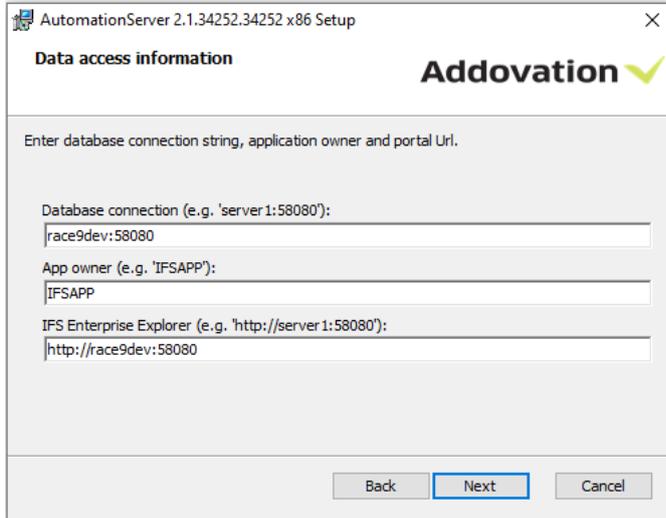
Configuration name: Choose a name that describes the configuration (e.g. Race 8 demo), if it should be the default logon choice, and whether IFS is configured for single sign-on. For most integrations which is the purpose of the plugin executor, single signon is not used.

Server URLs: Select the IFS Applications server URL of your choice.

IFS Version: Choose your IFS version.

If you are not sure what options to check, leave the default values.

To add a new environment, you need to specify the address to IFS Extended Server (e.g. server1:58080), the Application owner (e.g. IFSAPP) and the IFS portal (e.g. <http://race75sp6:58080/>).



AutomationServer 2.1.34252.34252 x86 Setup

Data access information **Addovation **

Enter database connection string, application owner and portal Url.

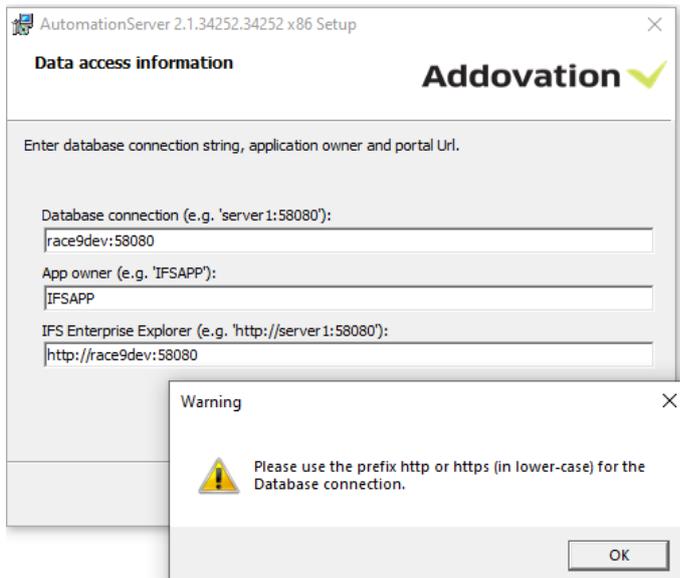
Database connection (e.g. 'server1:58080'):
race9dev:58080

App owner (e.g. 'IFSAPP'):
IFSAPP

IFS Enterprise Explorer (e.g. 'http://server1:58080'):
http://race9dev:58080

Back Next Cancel

The Database connection must use the prefix HTTP or HTTPS (in lower-case).



AutomationServer 2.1.34252.34252 x86 Setup

Data access information **Addovation **

Enter database connection string, application owner and portal Url.

Database connection (e.g. 'server1:58080'):
race9dev:58080

App owner (e.g. 'IFSAPP'):
IFSAPP

IFS Enterprise Explorer (e.g. 'http://server1:58080'):
http://race9dev:58080

Warning  Please use the prefix http or https (in lower-case) for the Database connection.

OK

AutomationServer 2.1.34252.34252 x86 Setup

Data access information Addovation ✓

Enter database connection string, application owner and portal Url.

Database connection (e.g. 'server:58080'):
http://race9dev:58080

App owner (e.g. 'IFSAPP'):
IFSAPP

IFS Enterprise Explorer (e.g. 'http://server:58080'):
http://race9dev:58080

Back Next Cancel

1.4 Additional Settings

In the Additional Settings dialog, you can define a string that exclude classes and formats with this particular text. This field is defaulted to the asterisk string. You can also define the Document Search URL in this dialog.

AutomationServer 2.1.34252.34252 x86 Setup

Additional settings Addovation ✓

Display only default company classes when checking in

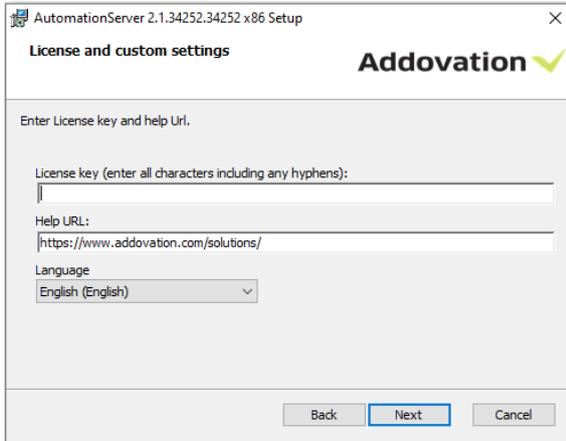
Exclude classes and formats where description contains:
*

Document search URL:
/secured/docmaw/DocTitleOvw.page

Back Next Cancel

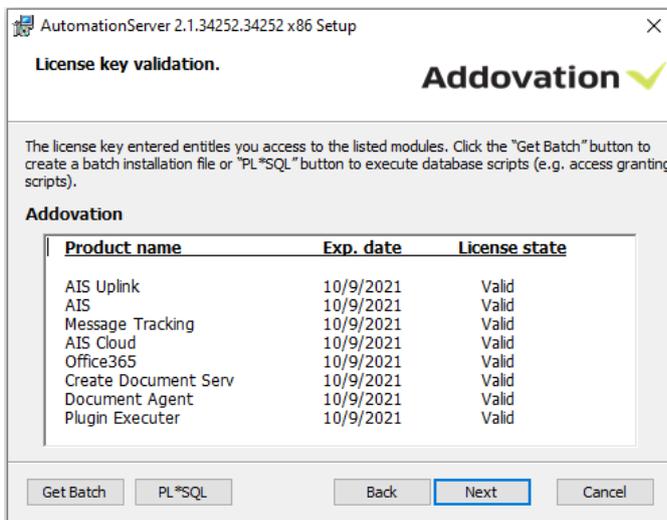
1.5 License Key

Please enter the license key during the configuration of the software.



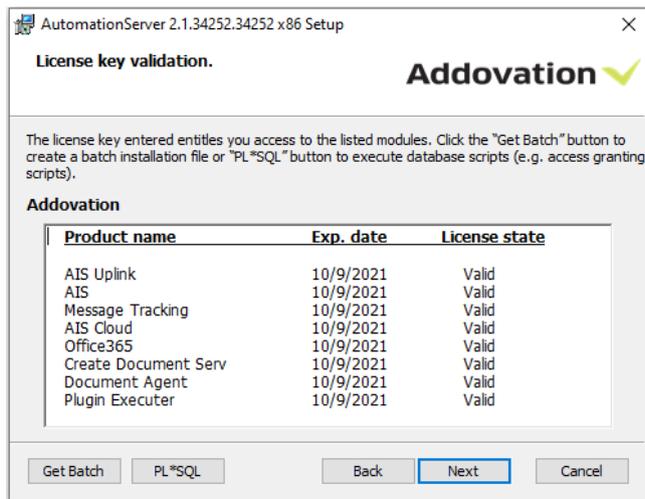
In the Help URL field, you can specify what the help symbol in the AIS will point to. Included in the AIS is an online user documentation. The link is normally already filled in, so if you don't want to provide your own information, you can leave it as is.

When you have entered the correct license key, you will receive a validation listing the products and their date of expiry.



1.6 Simple distribution – ‘Get batch’

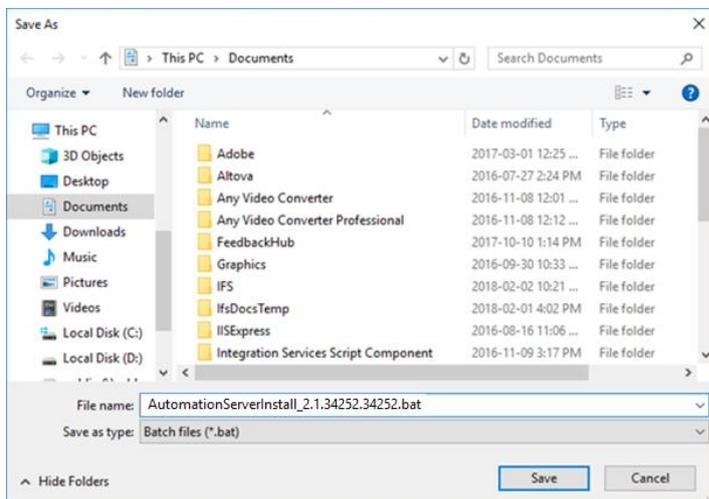
The ‘Get batch’ option allows you to install the software on several machines, without having to enter your settings multiple times.



When you click on the button 'Get Batch', a .bat file is created, which will launch the .msi using the settings you defined in the current installation.

Observe the following with generating the batch file:

- The batch file must be executed by a user having administrator rights
- If you experience problems running from a network drive, try to copy the installation file to a local drive
- The batch file created can only be used to install 32 bit or 64-bit version, depending on the installation file.

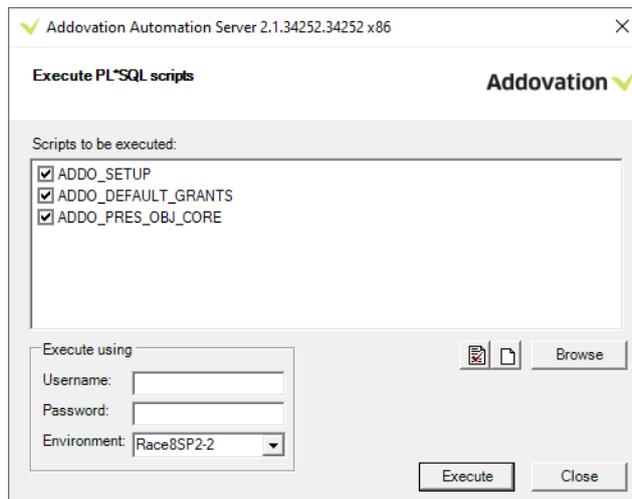
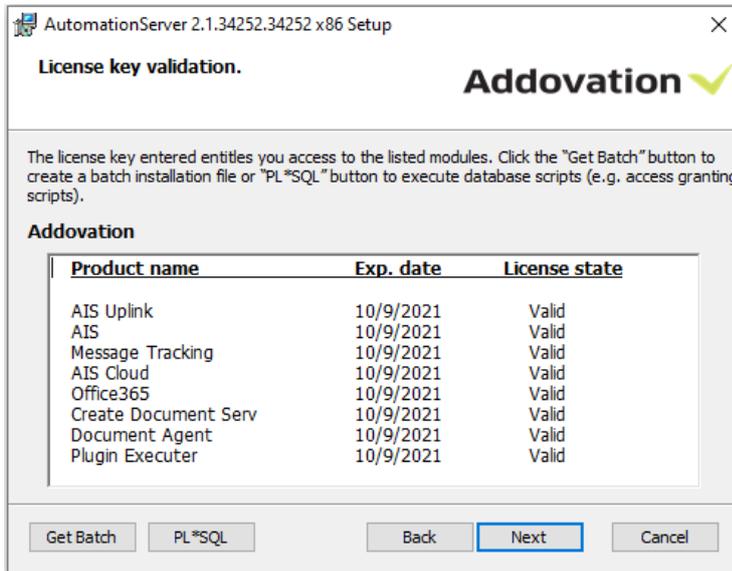


A .bat file and a .PS1 file is generated at your chosen location.

When you want to distribute the software to other computers, download the .msi, the .bat and the .PS1 file to the chosen computer. Open the .bat file and right click 'run as administrator'. The installation file will then run with your chosen parameters, installing AIS on the computer.

1.7 Automatic installation of scripts – PL*SQL

If this is the first time you run the AIS installation, you need to run the PL*SQL function.

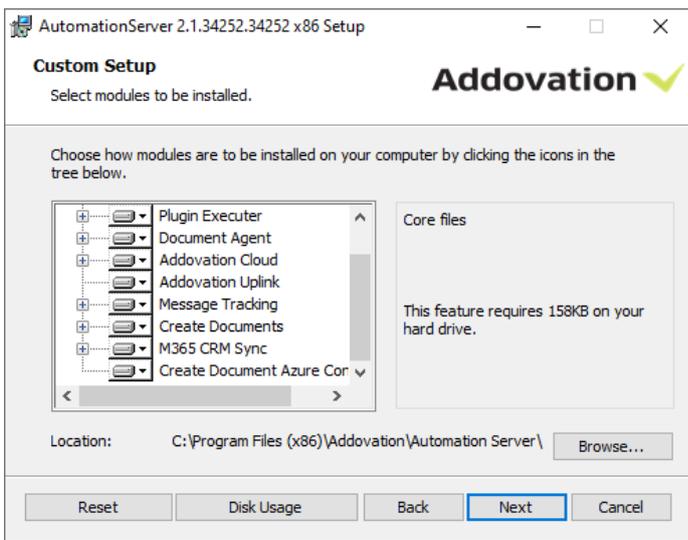
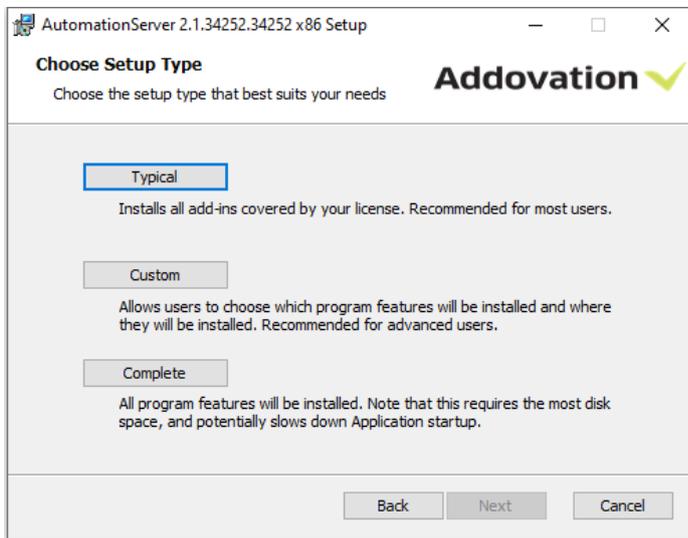


Click on the PL*SQL button and type in your username and password (Usually IFSAPP or IFSADM) and the environment where you would like to install the scripts.

If you have scripts saved to your drive, you can browse for these using the 'browse' button. Click 'Execute' to run the scripts and to give the necessary access and grants. The wizard will confirm that the scripts were run successfully. You may have to enter parameters for some of the scripts

1.8 Customized setup

Under 'custom setup' you can select the way the features are to be installed for the various MS Office components. Click on the icons in the tree list to adjust the installation for the components.



Available components controlled by license key:

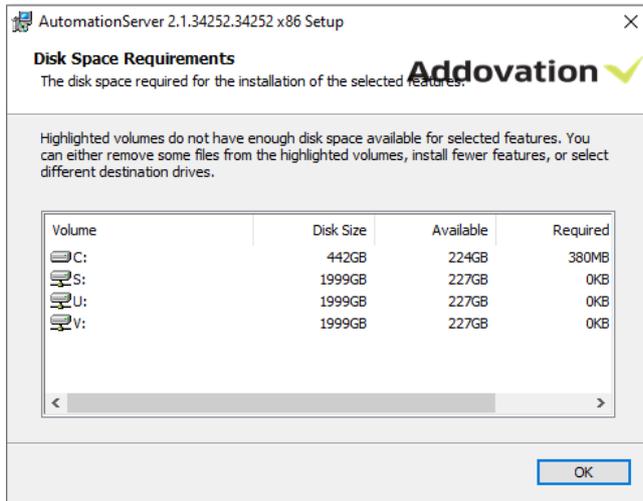
- IFS to SQL Server Plugin: Replicates information between IFS Applications and a SQL server.
- Plugin Executer: Executes custom DLLs at regular timer intervals.
- Document Agent: Parses files or e-mails in order to check in as documents against IFS Applications.
- Addovation Cloud: The on-premise version of Addovation Cloud used for mobility.
- Addovation Uplink: The module that connects an IFS Applications instance to Addovation Cloud.
- Message Tracking: Web component that handles transactions typically used in integrations.
- Create Documents: Web service used for backend automation for creating Word and PDF reports.
- M365 CRM Sync: Backend automation module that syncs CRM data between IFS Applications and Office365.
- Create Document Azure Consumer: Extension of Create Document service that allows for scalability using Azure Service Bus and multiple on-premises instances.

Location

Always try to use default location if possible. It's easier to find the folders if they are where they should be.

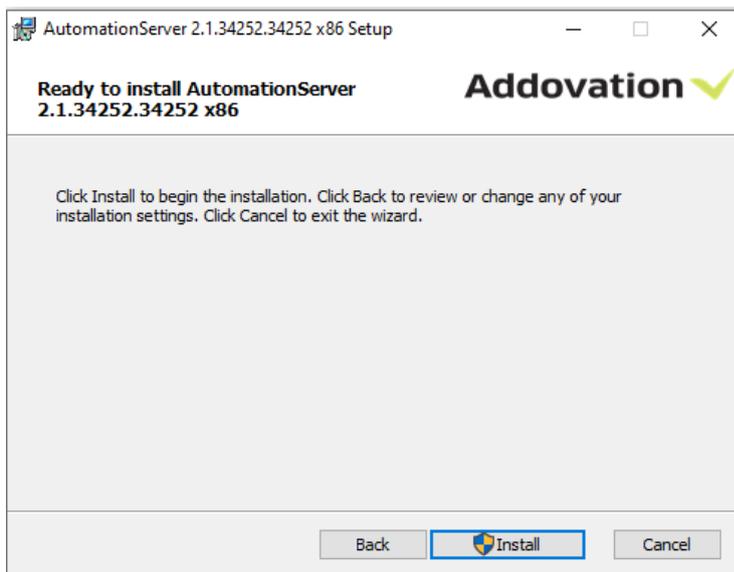
1.9 Disk Space Requirements

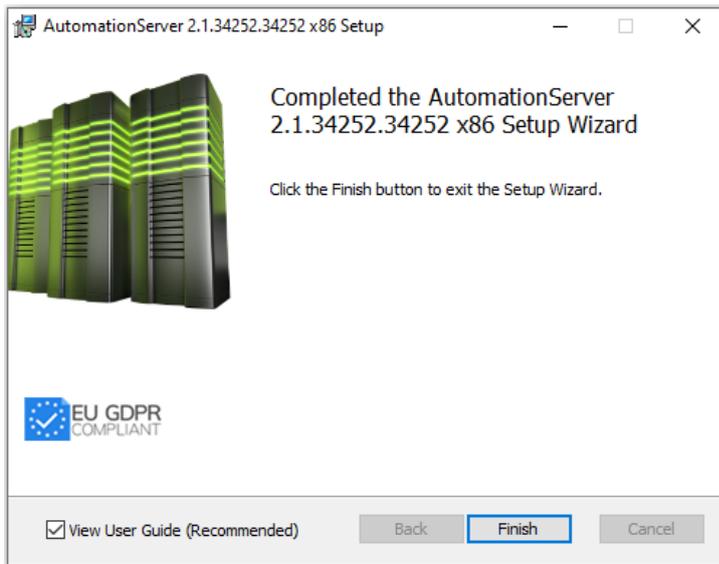
According to the selected features in the above step, disk space requirement is calculated and displayed in the Required Column. You can see this by pressing the Disk Usage.



1.10 Ready to Install

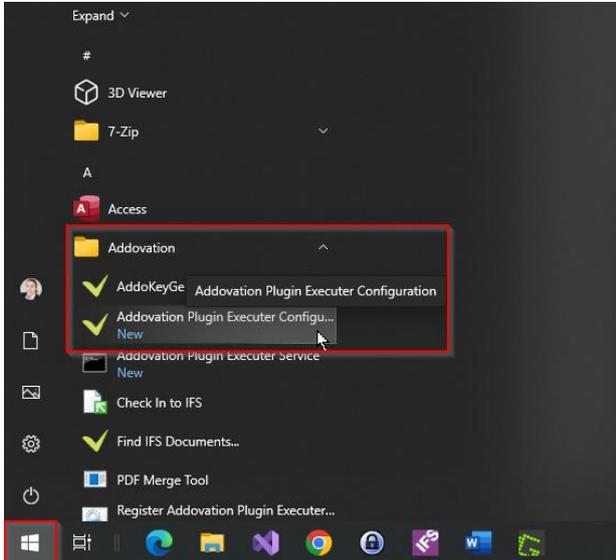
After adjusting the disk space as per the need in your local machine you can complete the installation:



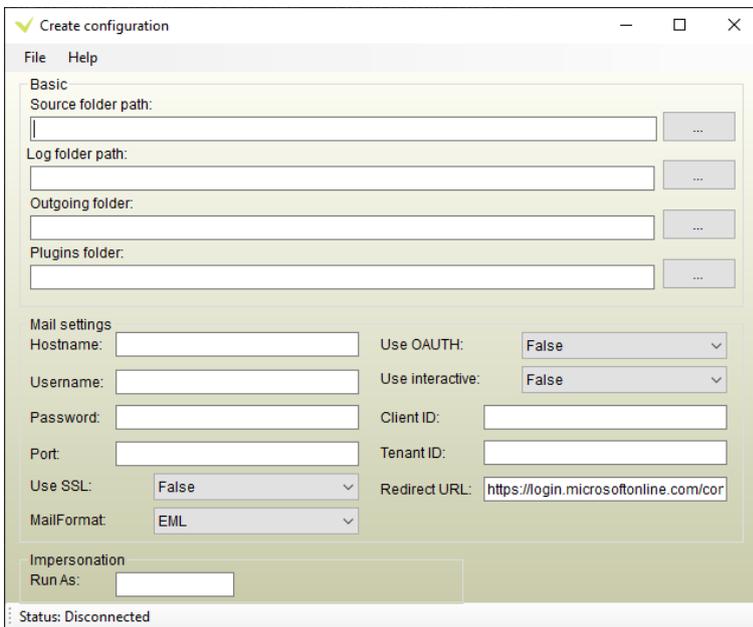


2 Create configuration file(s) that execute plugin(s)

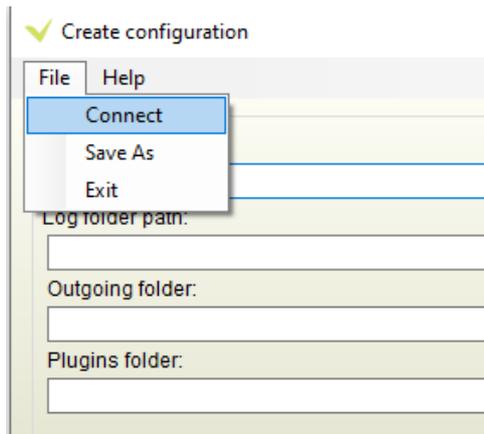
This is applicable for Microsoft Windows 10. Open the configuration window by locating “Addovation Plugin Executer Configuration” in the start menu as following:



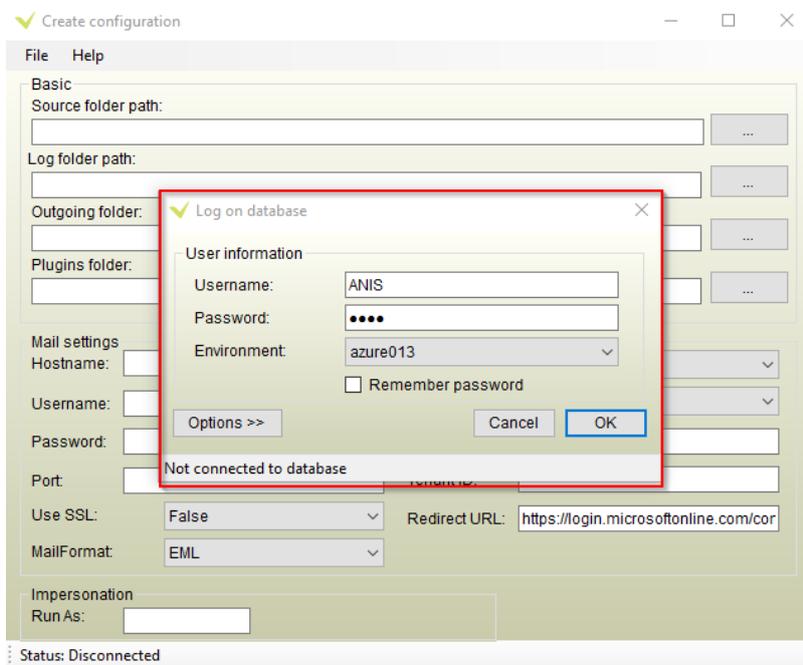
Note! The configuration window requires administrator privileges. The configuration window will open up:



Proceed by clicking in the File menu and select Connect:



Available environments as configured during the installation will be available, proceed by selecting the appropriate IFS Applications environment and enter username and password:



Proceed by pressing OK and status in lower left corner of configuration window should change to “Connected”:

Mail settings
Hostname:
Username:
Password:
Port:
Use SSL: ▼
MailFormat: ▼

Impersonation
Run As:

Connected

Proceed by selecting folders which is the minimum requirement for executing plugins:

✓ Create configuration

File Help

Basic

Source folder path: ...

Log folder path: ...

Outgoing folder: ...

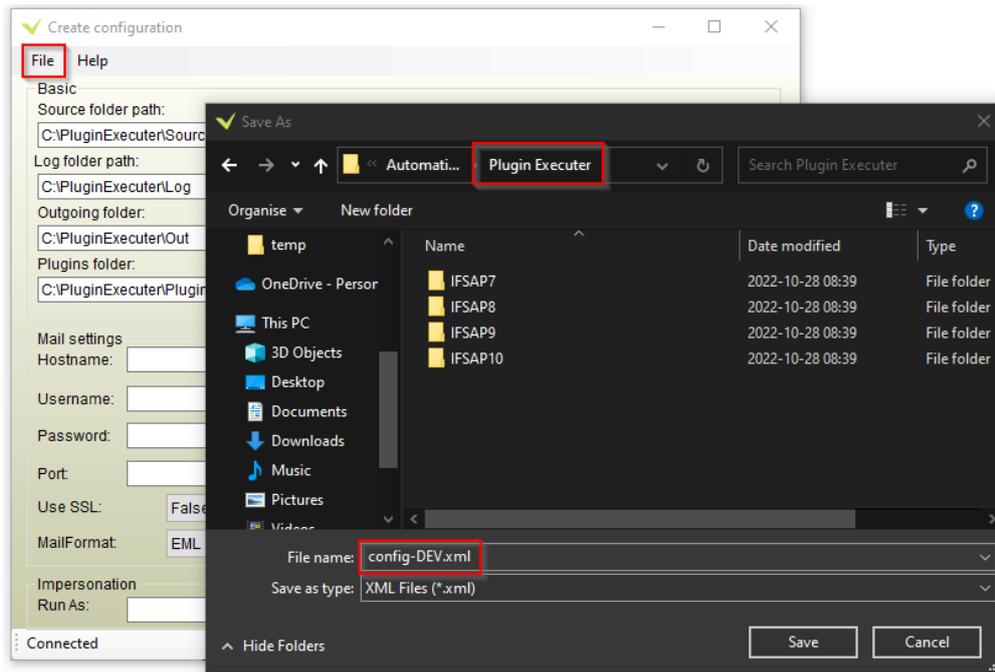
Plugins folder: ...

Mail settings
Hostname: Use OAUTH: ▼
Username: Use interactive: ▼
Password: Client ID:
Port: Tenant ID:
Use SSL: ▼ Redirect URL:
MailFormat: ▼

Impersonation
Run As:

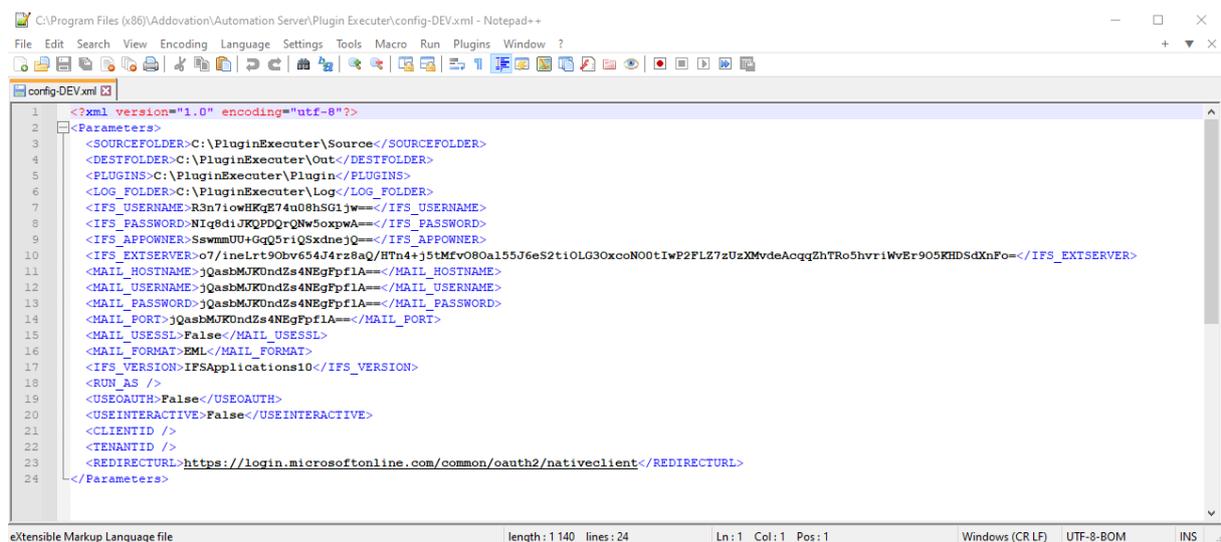
Connected

When done, go to file menu and select File and Save As:



Ensure that the configuration XML file is saved to Plugin Executer installation folder (normally C:\Program Files (x86)\Addovation\Automation Server\Plugin Executer) and name it config-<ENTER ANY NAME>.xml. The engine will then look for any file that starts with “config” and ends with .xml in upon processing. Multiple configuration files can be saved in order to process various plugins and / or channels such as different e-mail accounts.

When saving the XML it will contain the following parameters:



These can now be used in the plugin. Sensitive information has been encrypted in order to make it secure.

Here follows an explanation of all the available configuration parameters in the configuration interface:

Group: Basic

Setting	Explanation
Source folder path	Used normally as incoming folder for various files that are to be processed.
Log folder path	The folder in where all log files are produced.
Outgoing folder	Used normally as the folder in where files are moved after they are processed.
Plugins folder	The folder in one or more DLL files are located. The engine will process all the DLL files that implements the interface as explained in the development guide.

Group: Mail settings

Setting	Explanation
Hostname	The URL to the mail server e.g. if using Microsoft Office365 it will be outlook.office365.com
Username	The username for the e-mail account to be used. The username will be encrypted in the configuration XML file.
Password	The password for the e-mail account to be used. The password will be encrypted in the configuration XML file.
Port	The port to be used, e.g. if using Microsoft Office365 it is 995.
Use SSL	Defines if the e-mail server requires SSL or not. For Microsoft Office365 it should be set to true.
MailFormat	Sets what format the e-mail file should be saved as. The common format for Microsoft e-mails is MSG files while as Google uses EML. Microsoft Outlook can open both file types.
Use OAUTH	Defines if OAuth is to be used or not.
Use interactive	The first time one logs on to a newly established e-mail account in Microsoft Office365, a logon dialog is presented to the end user. This setting controls if we are to perform a first time logon or not and set if we are to be presented with a login window or not. After one has performed a first time login, the setting can be set to false.

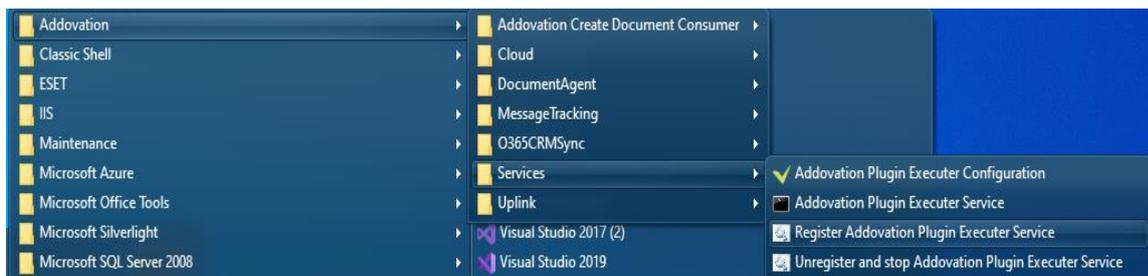
Client ID	The client ID as defined in e.g. Microsoft Azure. This setting is only required if “use oauth” has been set to true.
Tenant ID	The tenant ID as defined in e.g. Microsoft Azure. This setting is only required if “use oauth” has been set to true.
Redirect URL	The redirect URI that has been defined for the application in e.g. Microsoft Azure. The default value is the Microsoft Office365 default value. This setting is only required if “use oauth” has been set to true.

Group: Impersonation

Setting	Explanation
Run As	Defines if the plugin is to use impersonation or not. It is possible against IFS Applications to use a single integration account and then perform impersonation using other accounts. This setting needs to be explicitly granted in IFS Applications. Contact your local technician on how to do this.

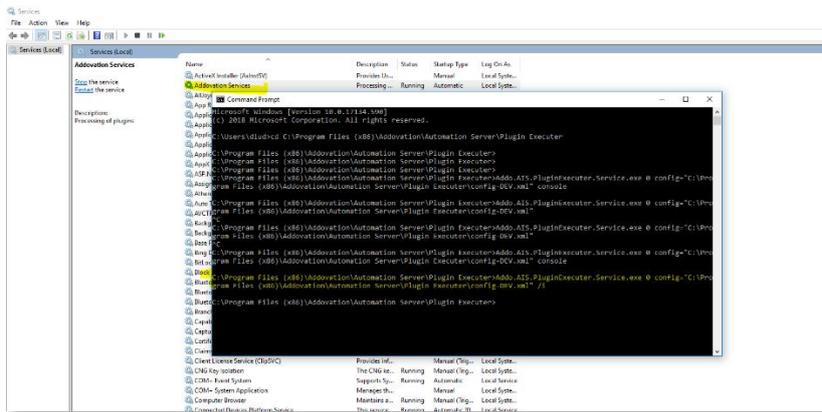
2.1 Register & start the plugin executer service

The Addovation Plugin Executer Service can be started using start menu and the command prompt.



Example of command line execution (e.g. .bat or .cmd file):

```
Addo.AIS.PluginExecuter.Service.exe" 0 config="c:\Addovation\AIS
Plugins\IFS8TEST\Addo.Agent.Demo\config-DEV.xml" /i
```



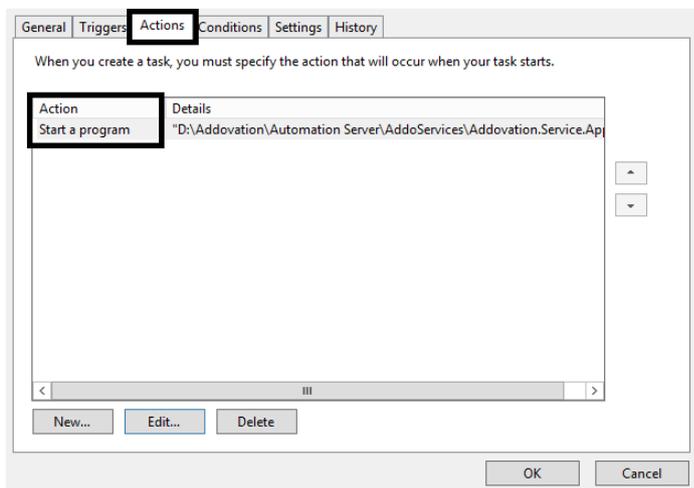
If you want to run the plugin on scheduled intervals, one can simply setup a bat file or scheduled task using the following configuration, for instance

.bat file configuration:

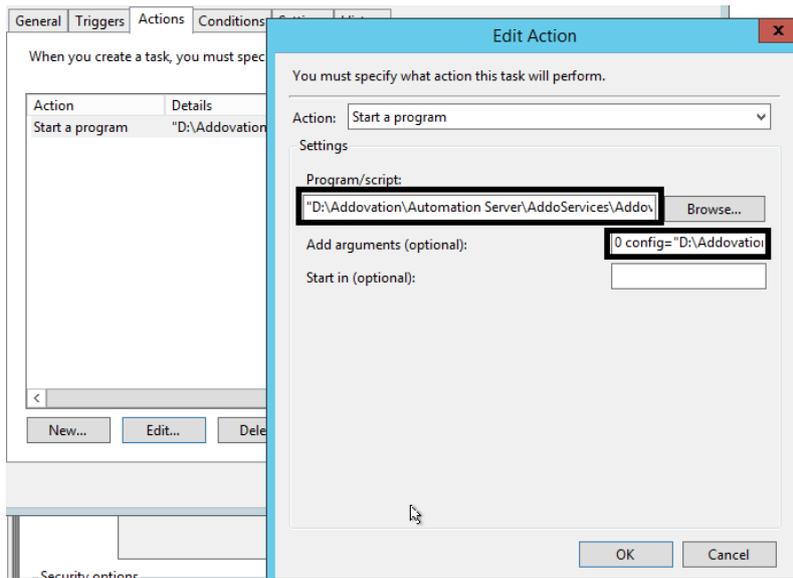
```
start cmd.exe /k "c:\Program Files (x86)\Automation Server\AddoServices\Addo.AIS.PluginExecuter.Service.exe" 0 config="c:\Addovation\AIS Plugins\IFS8TEST\Addo.Agent.Demo\config-DEV.xml" console"
```

2.2 Setup as scheduled task

Create a new scheduled task, select start a program:



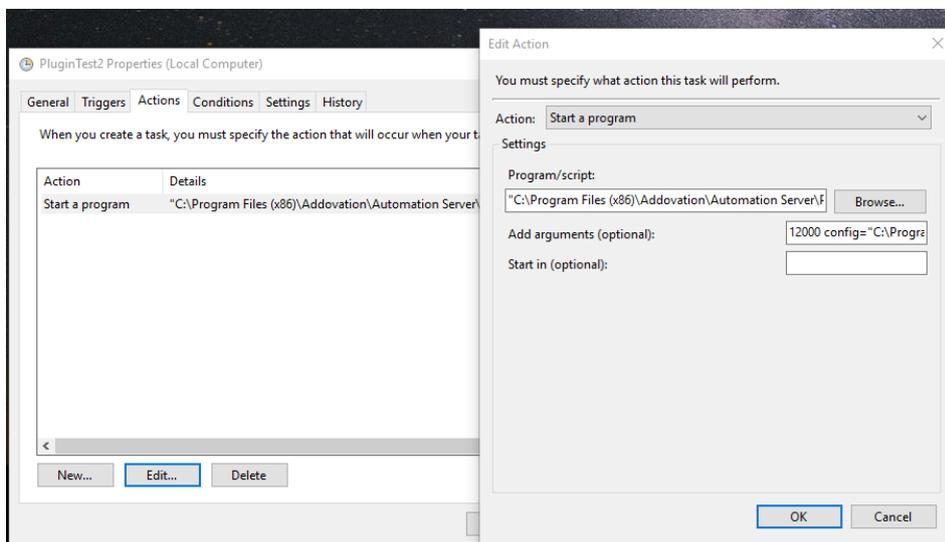
and point program / script to Addo.AIS.PluginExecuter.Service.exe



and arguments as: `0 config="c:\Addovation\AIS Plugins\IFS8TEST\Addo.Agent.Demo\config-DEV.xml"` **console**

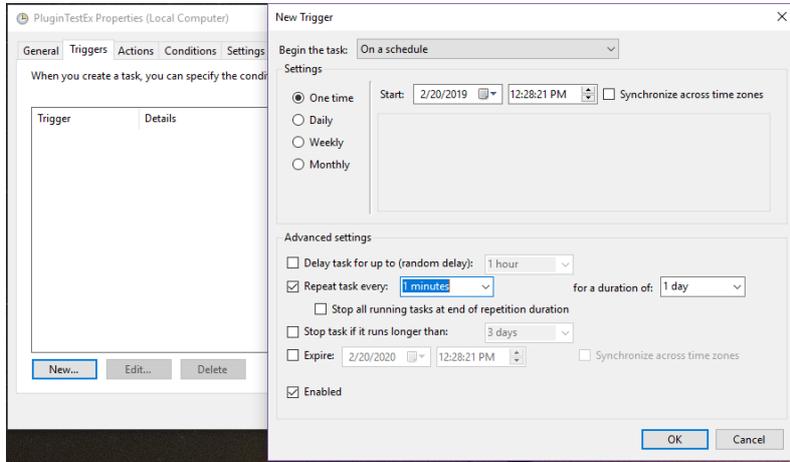
The 0 indicates to only run service once for every execution, and not repeatedly. The config points to what configuration XML file to use and last indicate to run in console mode and not as a service.

To define an interval in Task scheduler action.

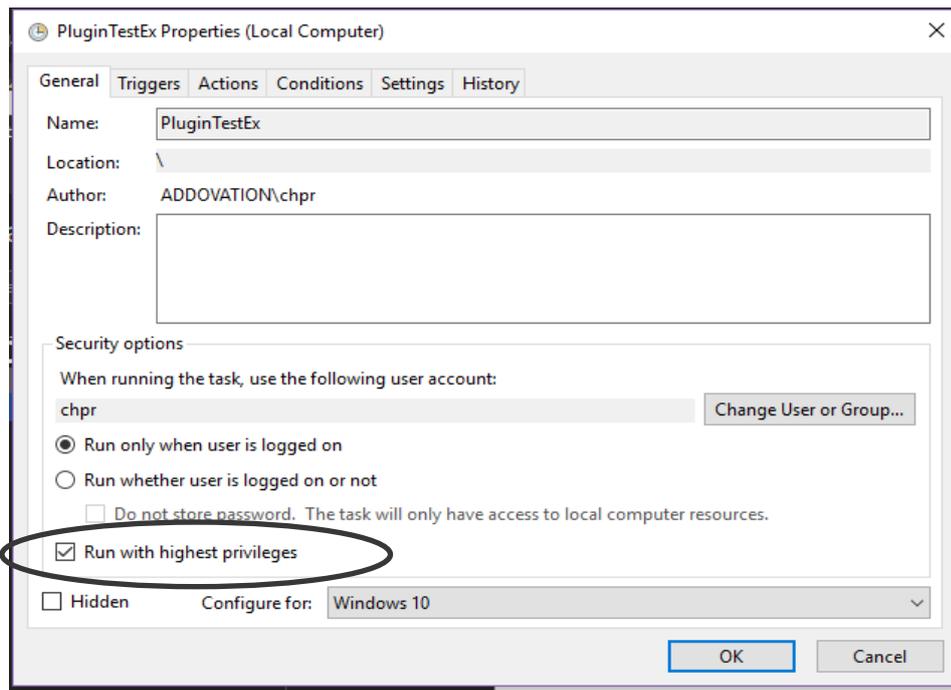


`12000 config="c:\Addovation\AIS Plugins\IFS8TEST\Addo.Agent.Demo\config-DEV.xml"`

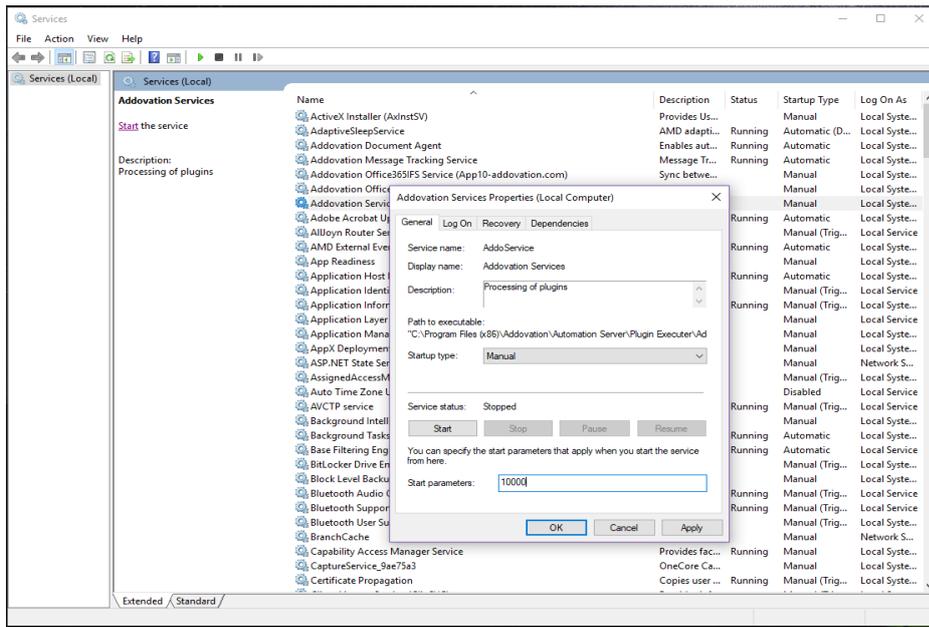
Define an interval using a trigger in the scheduler. The Minimum value that can be set is 1 minute.



To run the scheduled task. Permissions should be granted as depicted below.

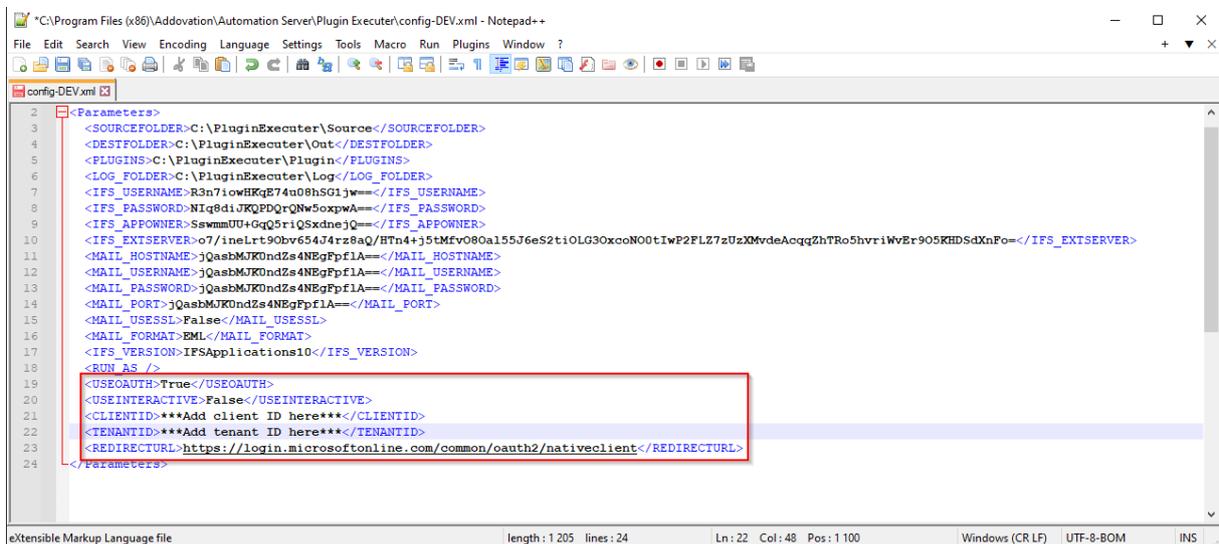


Set an interval using the service properties window.



2.3 Support for Oauth2

To make Oauth2 work with plugins such as “e-mail to case”, one can either use the configuration interface or specify values directly in the XML configuration file. If the customer has an existing config xml file, then you can just copy the necessary values into the existing config file with new values.



USEOAUTH: This will use Oauth2 to login to the mailbox of the given emails that will be processed.

USEINTERACTIVE: This will allow you to login with an interactive login screen. If **False** it will login automatically in the background.

CLIENTID: This is the ID of the application in Azure. (Customer will need an app registration details in Azure to configure values (Refer Section 3 for more information).

TENANTID: This is the ID of the Azure tenant that Mail2Case will use for OAuth.

REDIRECTURL: A value that is used to help Azure find back to the application.

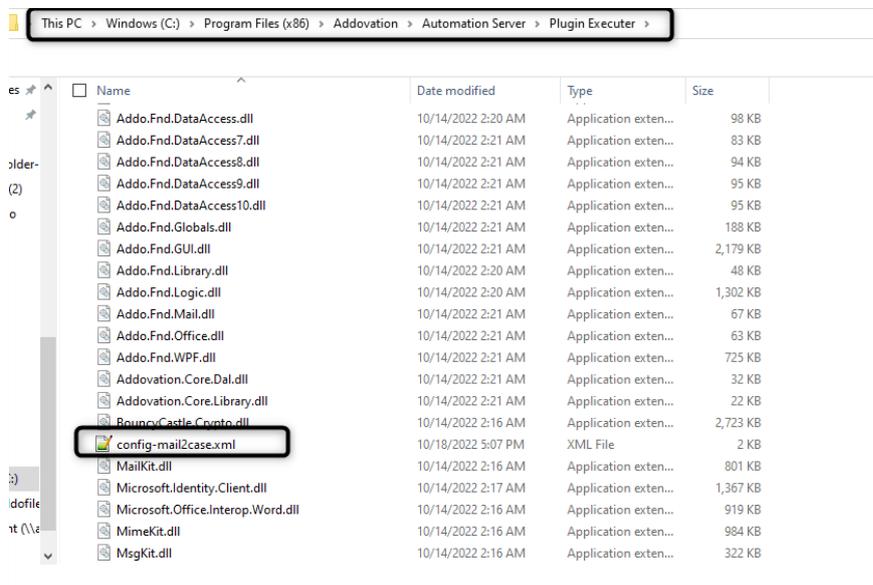
IMPORTANT!

1. When you use Mail2Case with Oauth2 for the first time, you need to use interactive login. Microsoft has a policy where interactive login needs to be used first time. Try to login to regular mailbox and 'reply' mailbox with interactive once by setting it to **True** and then you can switch back to automatic login by setting USEINTERACTIVE to **False**.
2. If you change password for mailbox you need to change it in the config file and other places where it has been used.
3. If there is a mailbox used for replying the customer needs to make sure that Smtplib authentication is used on that mailbox.
4. If the customer creates a custom Redirect URL, then they need to inform us, or we will just assume that they will be using <https://login.microsoftonline.com/common/oauth2/nativeclient>

2.4 Setup single channel and multi-channel

Setup Single channel

Step 1: Make sure that the properly filled configuration file resides in the Plugin Executer folder.



Step 2: Start the service.

Once an e.g., email is received to the channel of the used mailbox, the mail will be processed according to the plugin and values configured in the XML config file.

Step 3: Depending on the plugin (DLL), results can be found in the log file that might look like this:

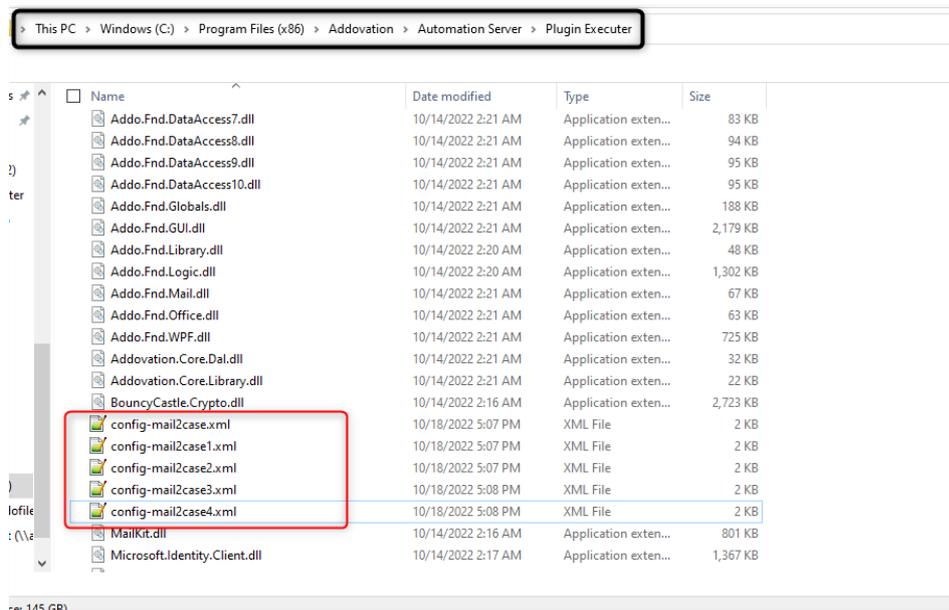
```

Message id: 0
Subject: testdocs/Case request template (80 - 122350 - 1 - A1) - 1.DOCX
Contact name: Brett Lee
Sent from: Brett Lee
Description: From: Brett Lee <addo02@andersshalden.com>
To: chpr@addovation.eu
Date: Friday, October 21, 2022 5:21 PM
Subject: testdocs/Case request template (80 - 122350 - 1 - A1) - 1.DOCX
-----

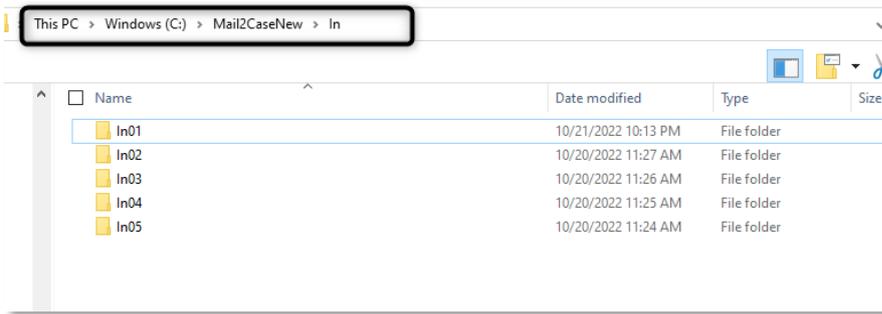
Hi John, see the attached documents. Regards ,
    John Smith
Direction: IN
Did not find case in subject testdocs/Case request template (80 - 122350 - 1 - A1) - 1.DOCX
Possible case id: False
Display name: Brett Lee
Created/updated case id 101202 successfully
Object key for custom package: 1117
Customer name: Demo Customer
First email: Y
Altered e-mail subject to "#GLB101202# testdocs/Case request template (80 - 122350 - 1 - A1) - 1.DOCX" before save due to new ca
Saving item: 0 Format: EML Fullname: C:\Mail2CaseNew\In\7cb4ae26-19d4-42f3-93b0-011d5c7c1707.eml Subject: testdocs/Case request t
Document checked in with CASE-1002124-1-A1
Deleted message id '0' from server
    
```

Setup Multi channel

Several configuration files containing different settings and / or e-mail accounts in the plugin executer folder can be used simultaneously with the service. One xml config file should contain details relevant to one mail account.



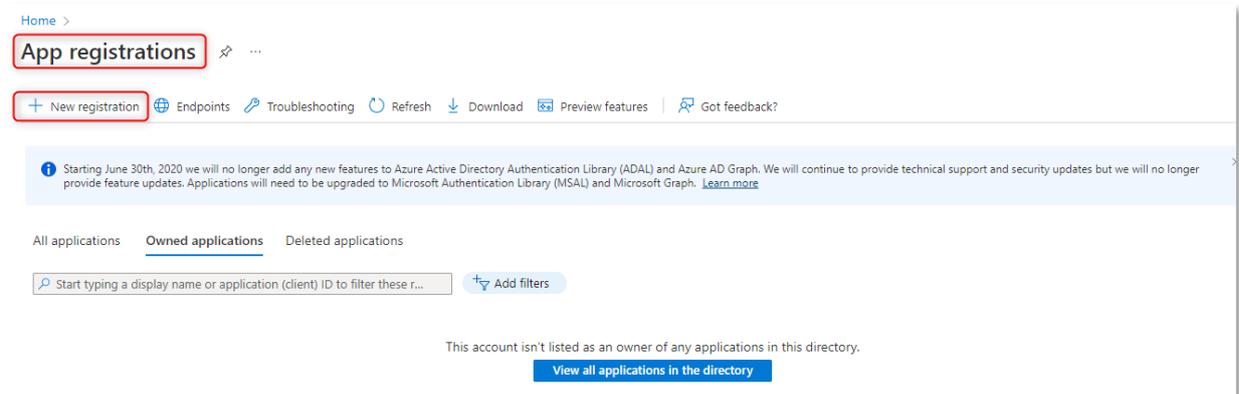
It is recommended to create several folders for each configuration file in the incoming “IN” folder and ‘Log’ folder:



3 Azure AD configuration for OAuth2

The following configuration is to be done in the Azure Portal (www.portal.azure.com) and global administration rights for the tenant is required.

Step1: Register the Application



Go to: Azure Active Directory > App registrations > New registration

On the registration pane, provide a name and click register. Select the account type. Select “Public client/native (mobile & desktop)” platform and provide the below redirect URL:
<https://login.microsoftonline.com/common/oauth2/nativeclient>.

Register an application

* Name

The user-facing display name for this application (this can be changed later).

Supported account types

Who can use this application or access this API?

- Accounts in this organizational directory only (Addovation R&D only - Single tenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)
- Personal Microsoft accounts only

[Help me choose...](#)

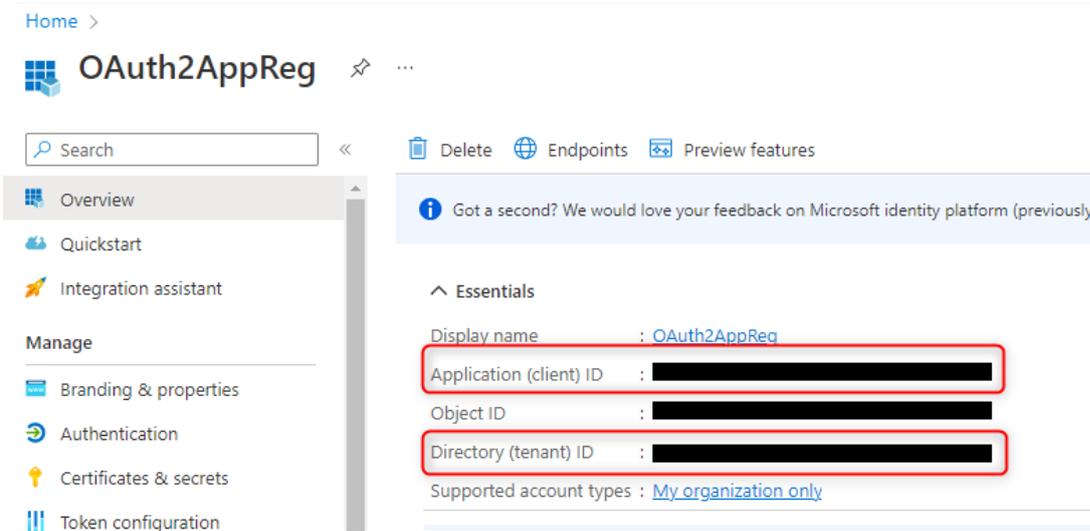
Redirect URI (optional)

We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

By proceeding, you agree to the [Microsoft Platform Policies](#)

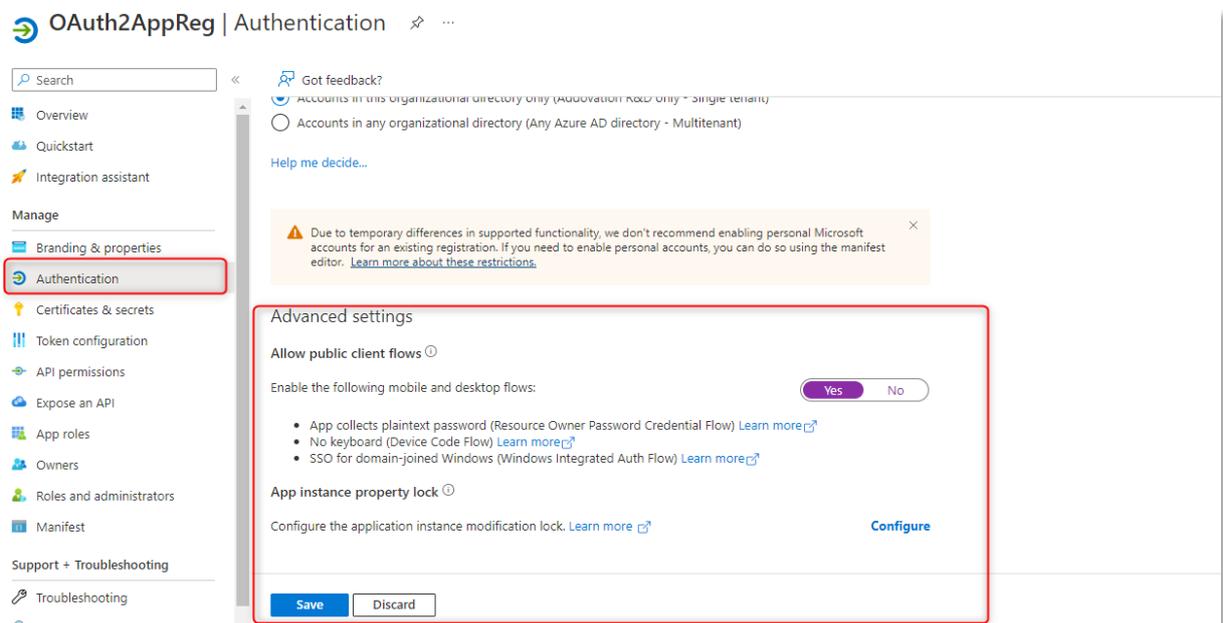
Register

Application (client) ID and Directory (tenant) ID will be displayed on Overview, and it will be required later for configuring the service for OAuth2.



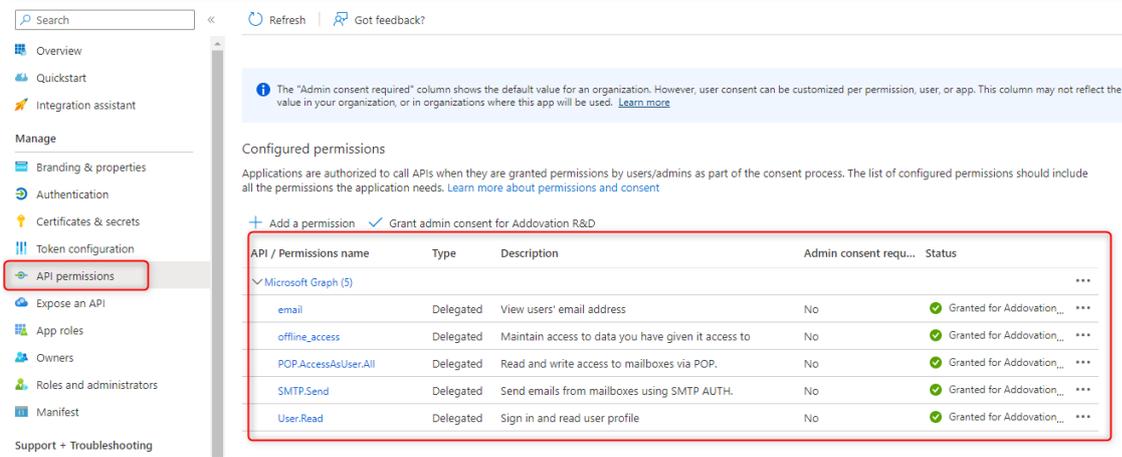
Step2: Authentication

Under authentication, enable "Allow public client flows" as below.



Step3: Setup API permission

On the same app registration, grant admin consent for users on the API Permissions as depicted below.



Step4: Add details to xml file or use configuration interface:

Application (client) Id, Directory (tenant) Id and Redirect URL should be given as values in the Document Agent configuration file.

```
<CLIENTID> ***Add client_id*** </CLIENTID>
<TENANTID> ***Add tenant_id*** </TENANTID>
<REDIRECTURL>https://login.microsoftonline.com/common/oauth2/nativeclient</REDIRECTURL>
```

4 Upgrade

4.1 Upgrading old versions to Automation Server 2.1. 33715 or higher.

While performing an upgrade, environments and license key should be added again, due to the fact that previously configured environments won't be available during and after the upgrade.

5 Limitations

Non-standard configurations in terms of authentication towards IFS Applications is not supported. Also, customizations that might affect standard API:s being used is not supported, for full list of used queries and API:s please contact Addovation if in doubt.

Installation of software requires writing to registry in local machine hive.

Addovation does not install any special views or packages in the database.

Change of e-mail authentication requires some change in the plugin DLL as well.