
Configuration Setup Guide Automation AIS-Document Agent v2.1

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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.

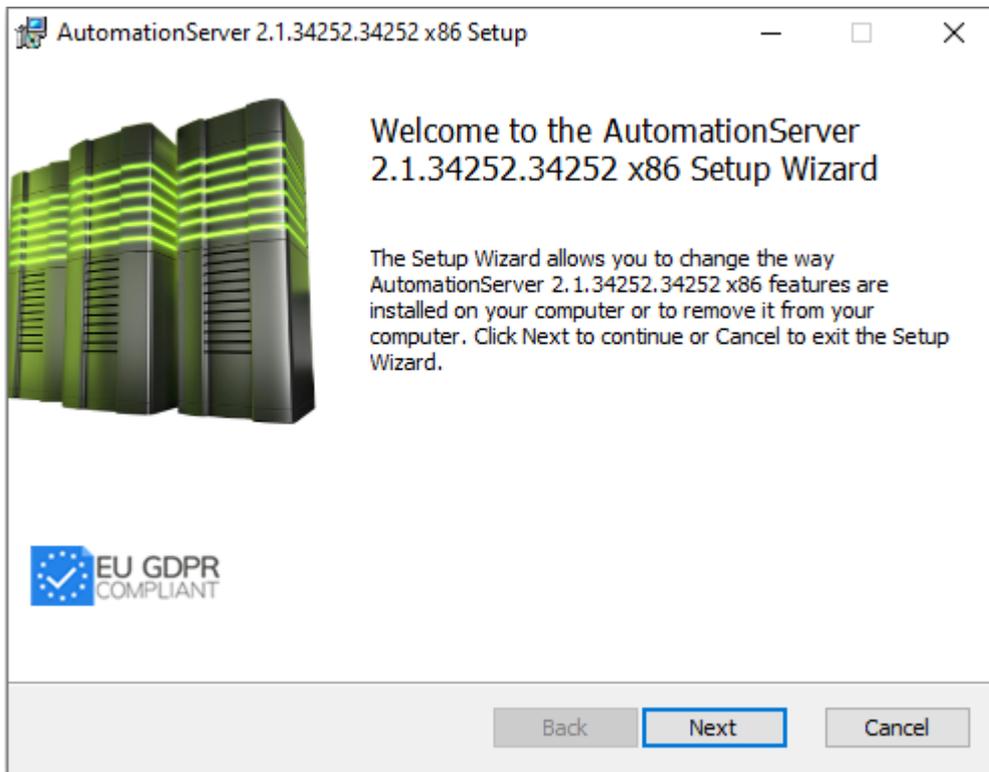


Figure 1 – Setup Wizard

The Automation Server is installed through an MSI package. Run the .msi file and follow the installation wizard.

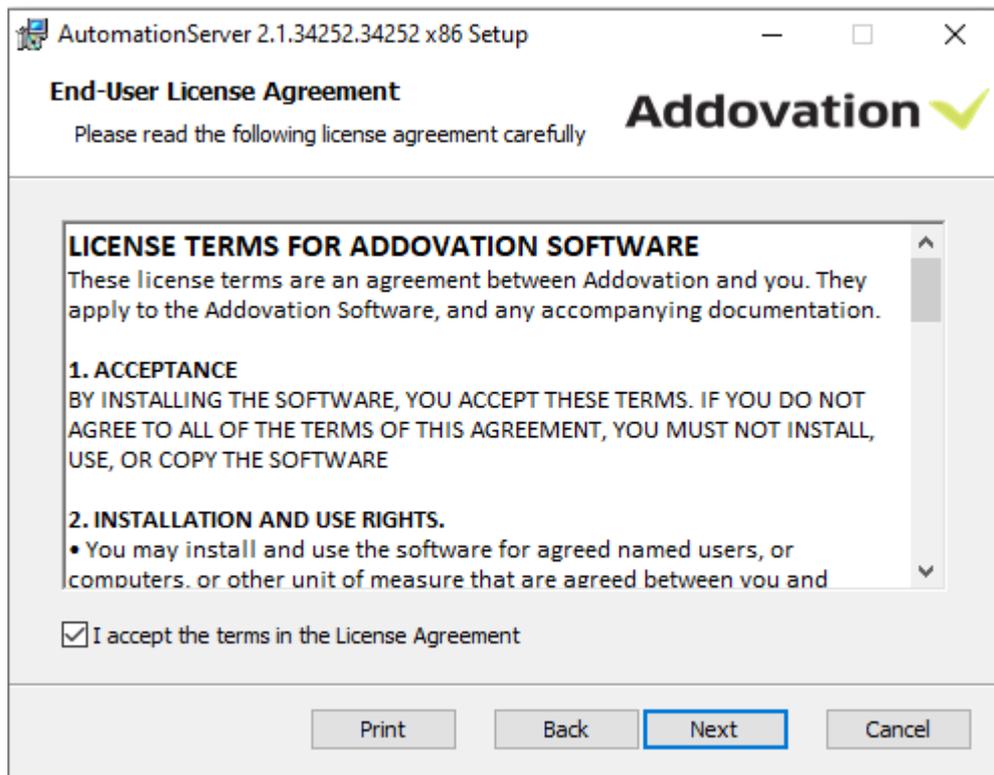


Figure 2 – End-User License Agreement

1.2 Environmental Configuration

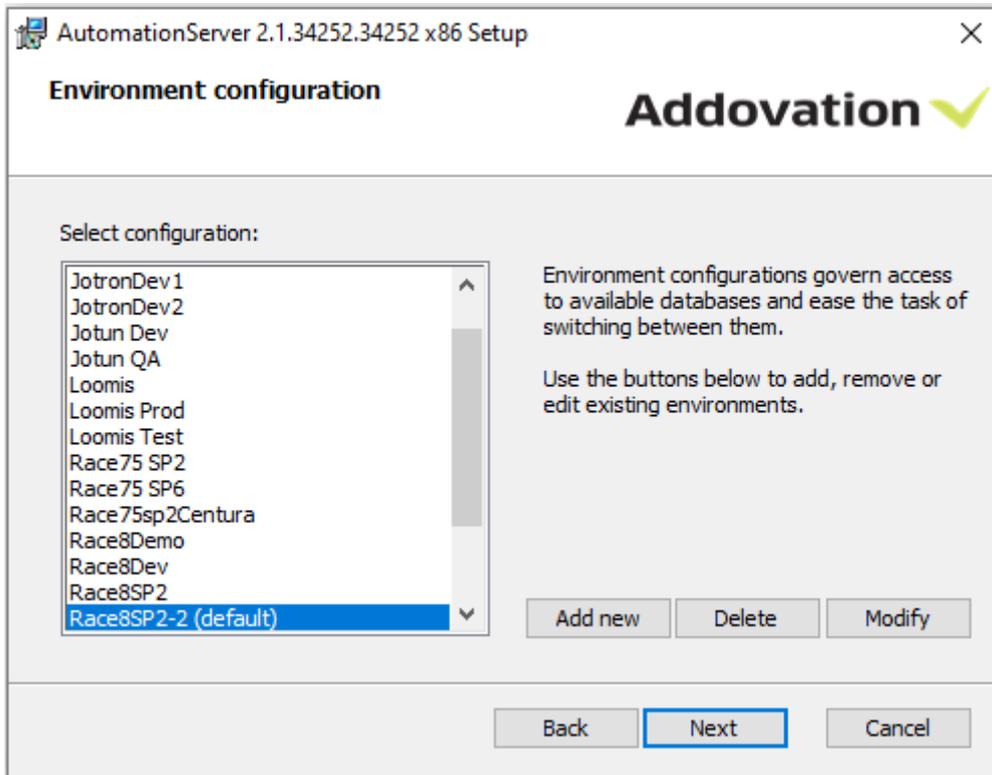


Figure 3 – Environmental Configuration

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.

You will be able to choose between the environments in the AIS login dialog, from any of the supported MS Office applications.

1.3 Configuration Settings

The configuration settings allow you to customize your installation.

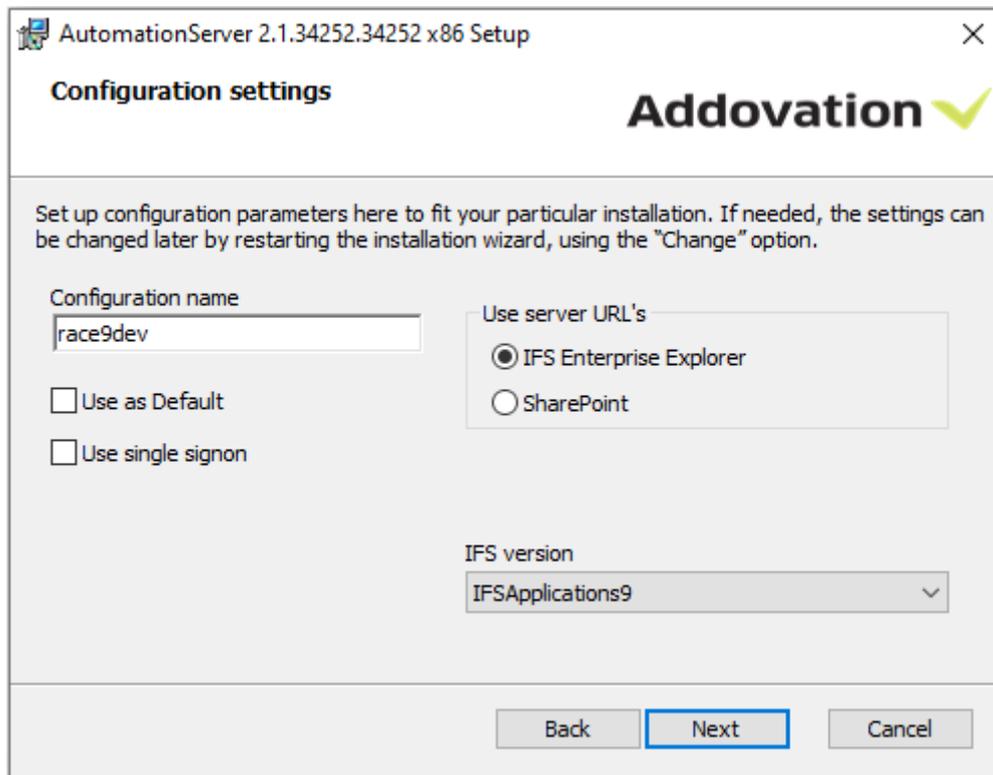


Figure 4 - Configuration Settings

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.

Server URLs: Select the server URL of your choice

IFS Version: Choose your IFS version

If you are not sure what options to check, leave the default values. You can change the values temporarily from within the application at any time.

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/>).

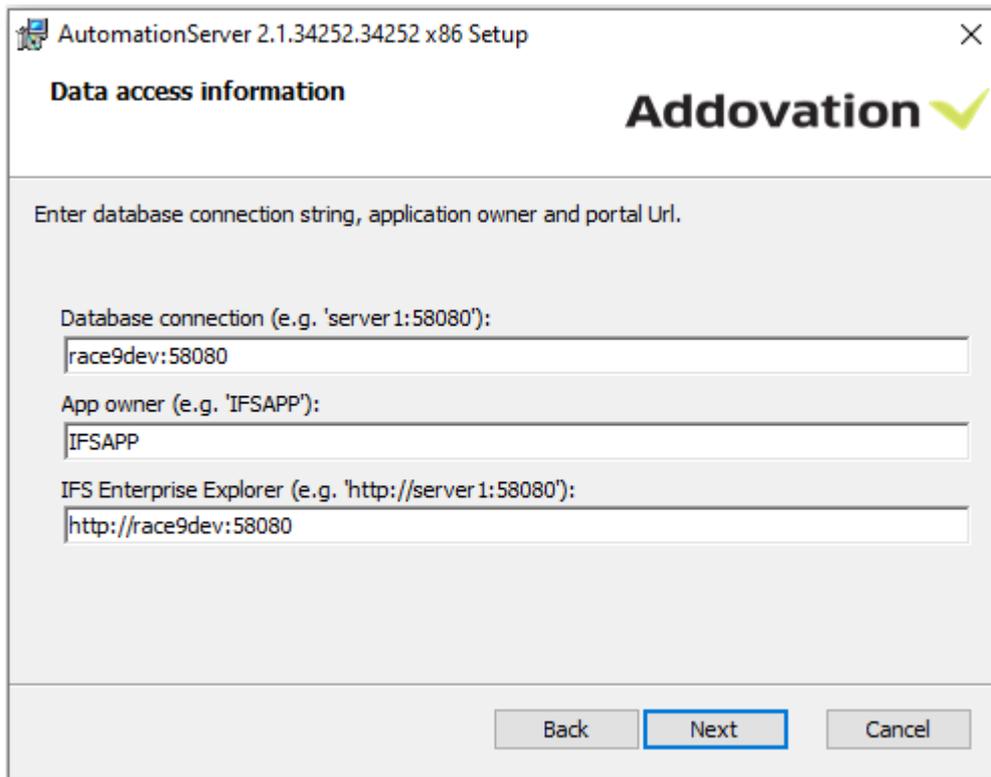


Figure 5 - Data Access Information

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

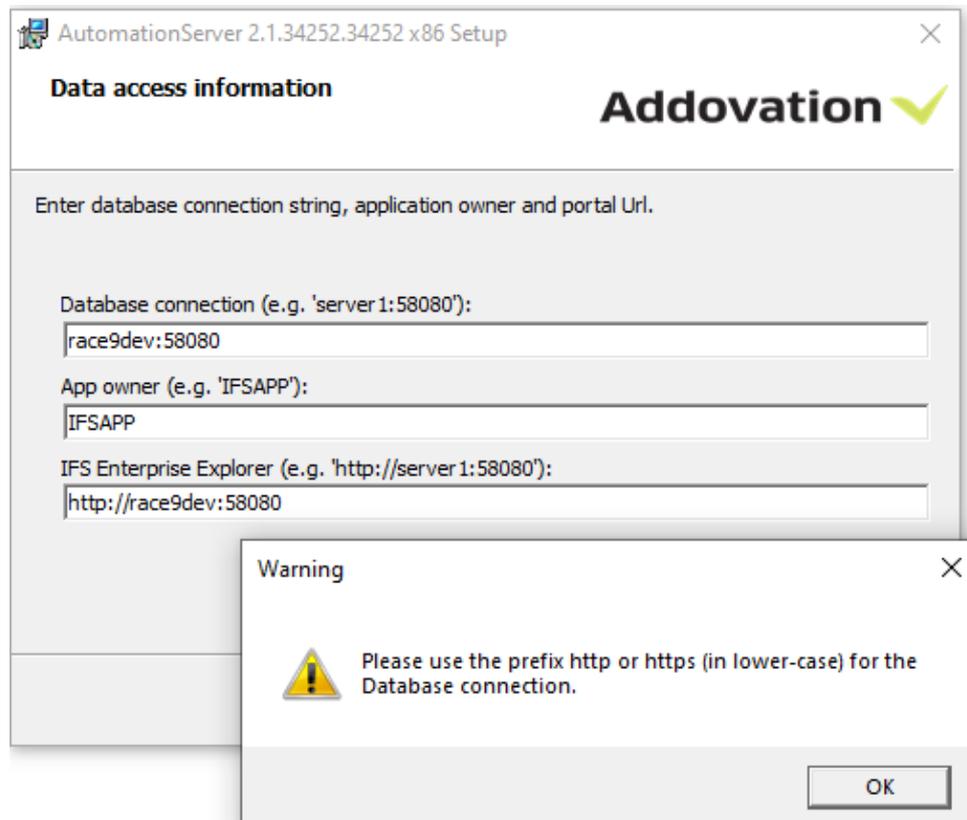


Figure 6 - Data Access Information

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 1:58080'):

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

IFS Enterprise Explorer (e.g. 'http://server 1:58080'):

Back Next Cancel

Figure 8 - Data Access Information

1.4 Additional Settings

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

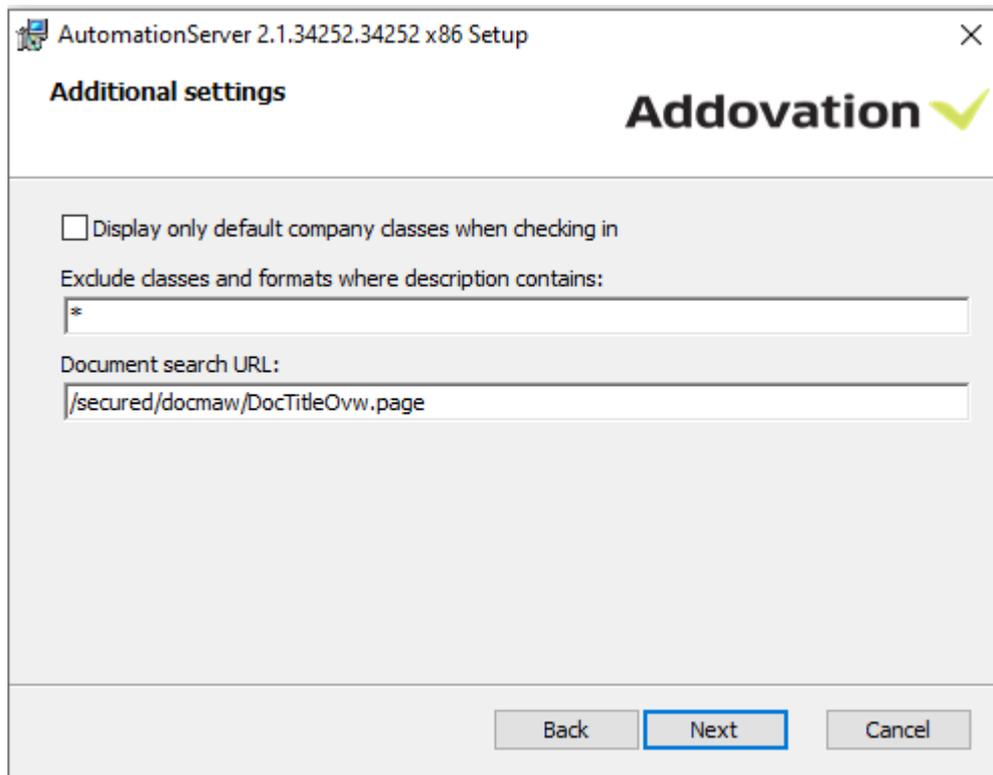
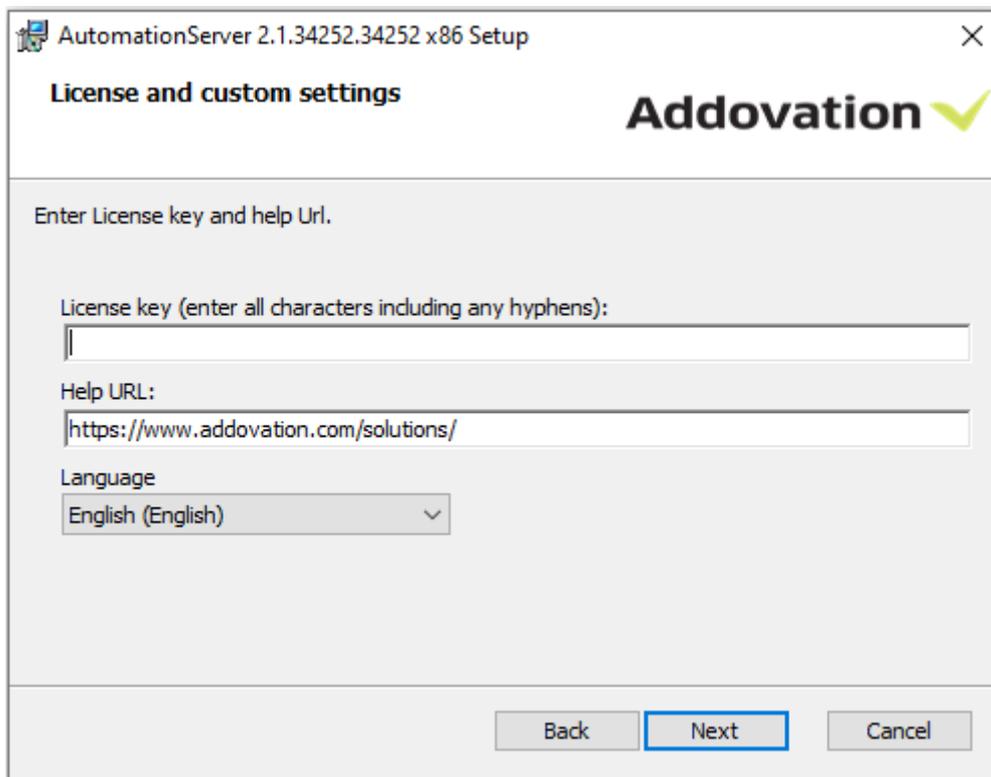


Figure 9 – Additional Settings

1.5 License Key

You will have received a license key from Addovation upon purchase of the AIS. Please enter the license key during the configuration of the software.



The screenshot shows a Windows installation window titled "AutomationServer 2.1.34252.34252 x86 Setup". The main heading is "License and custom settings" with the Addovation logo. Below the heading, it says "Enter License key and help Url." There are three input fields: "License key (enter all characters including any hyphens):", "Help URL:" (containing "https://www.addovation.com/solutions/"), and "Language" (a dropdown menu set to "English (English)"). At the bottom, there are three buttons: "Back", "Next" (which is highlighted with a blue border), and "Cancel".

Figure 10 - License and custom settings

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.

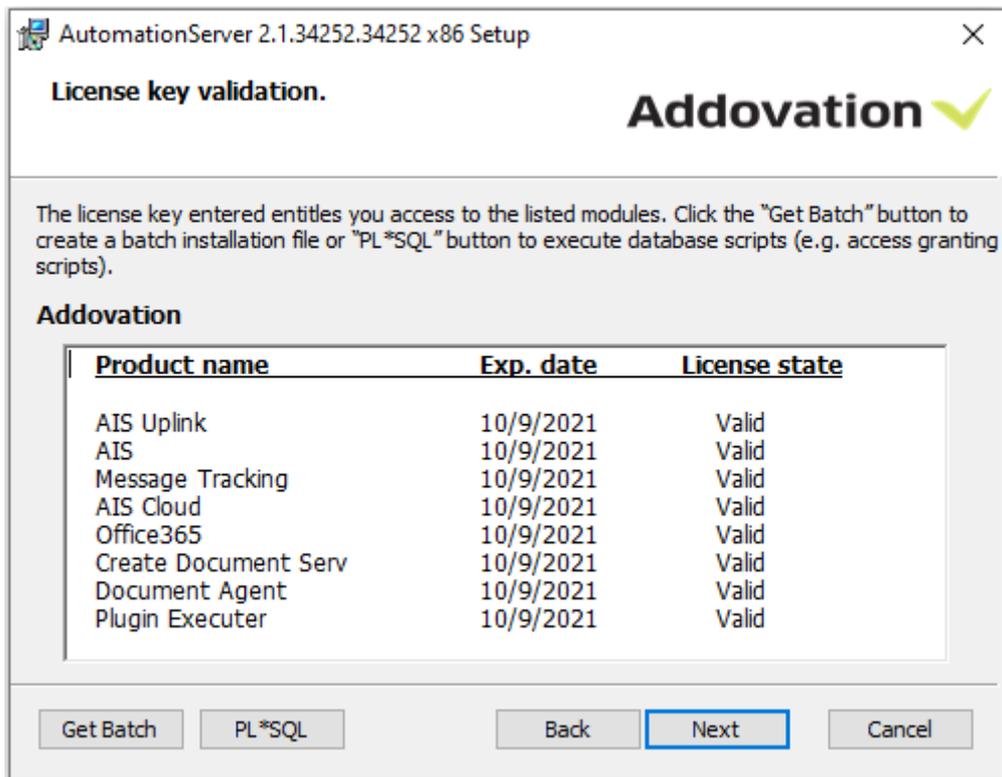


Figure 11 – License key validation

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.

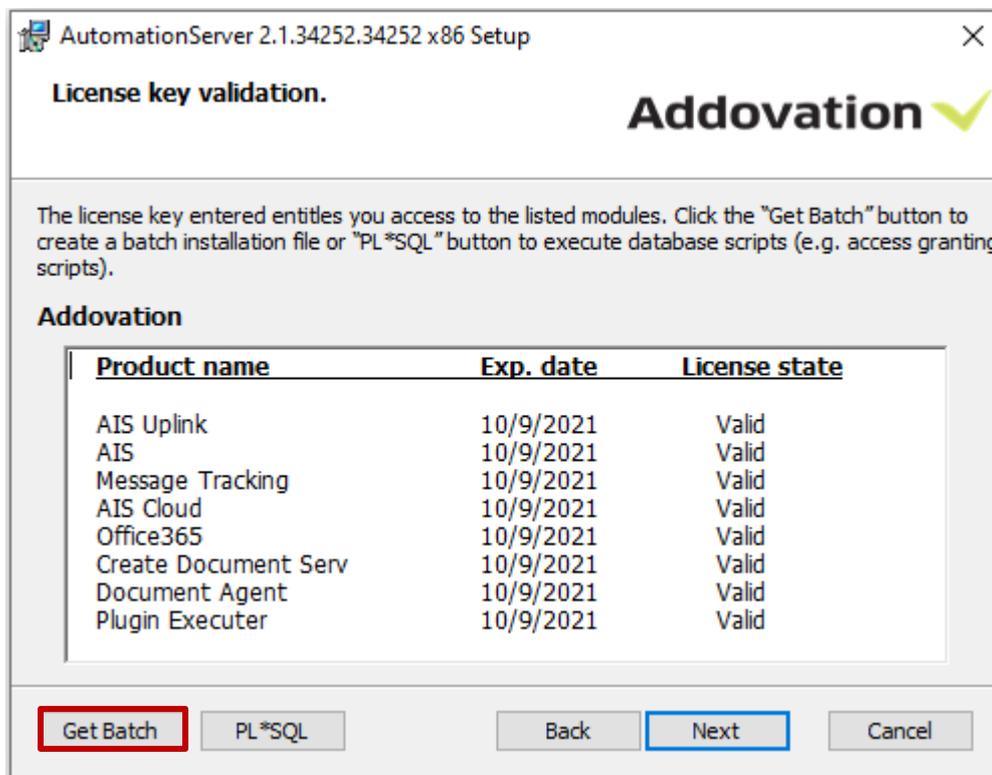


Figure 12 – Get Batch

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.

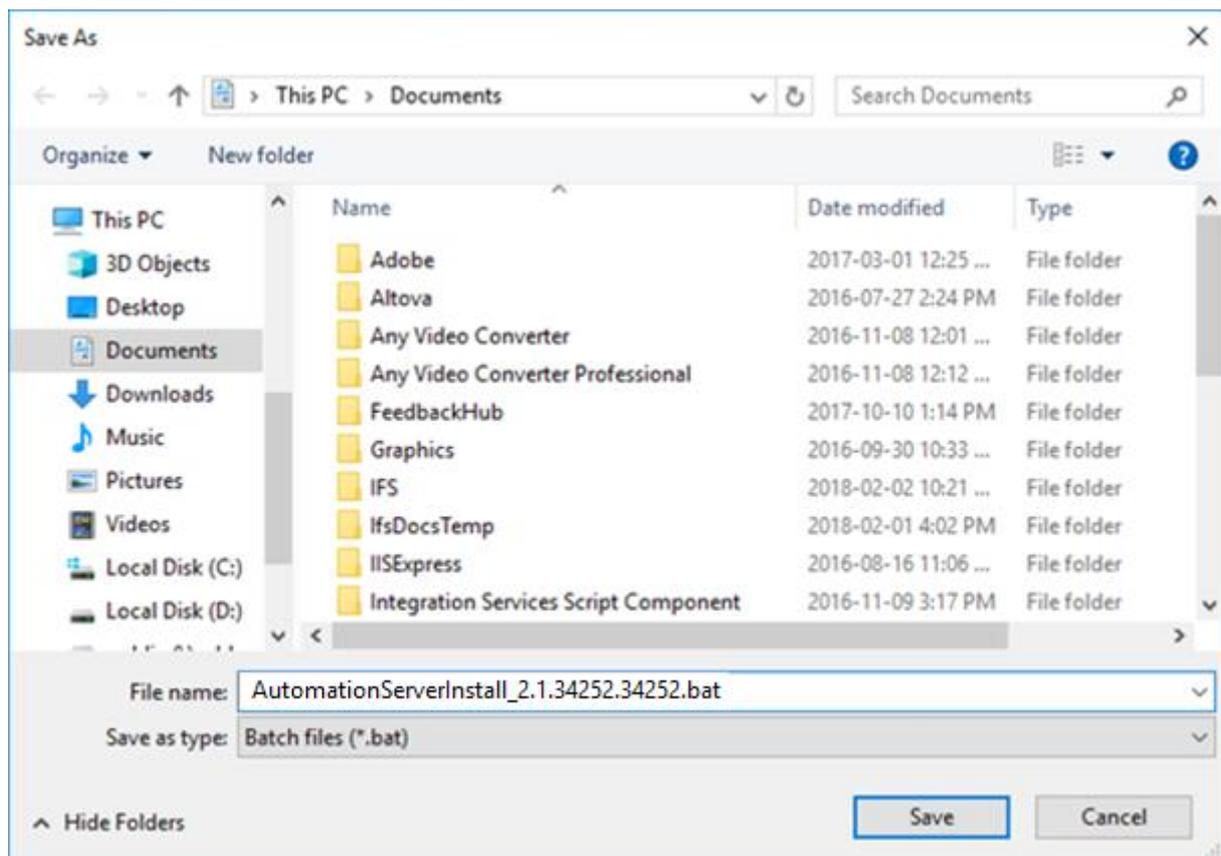


Figure 13 – Save batch file

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.

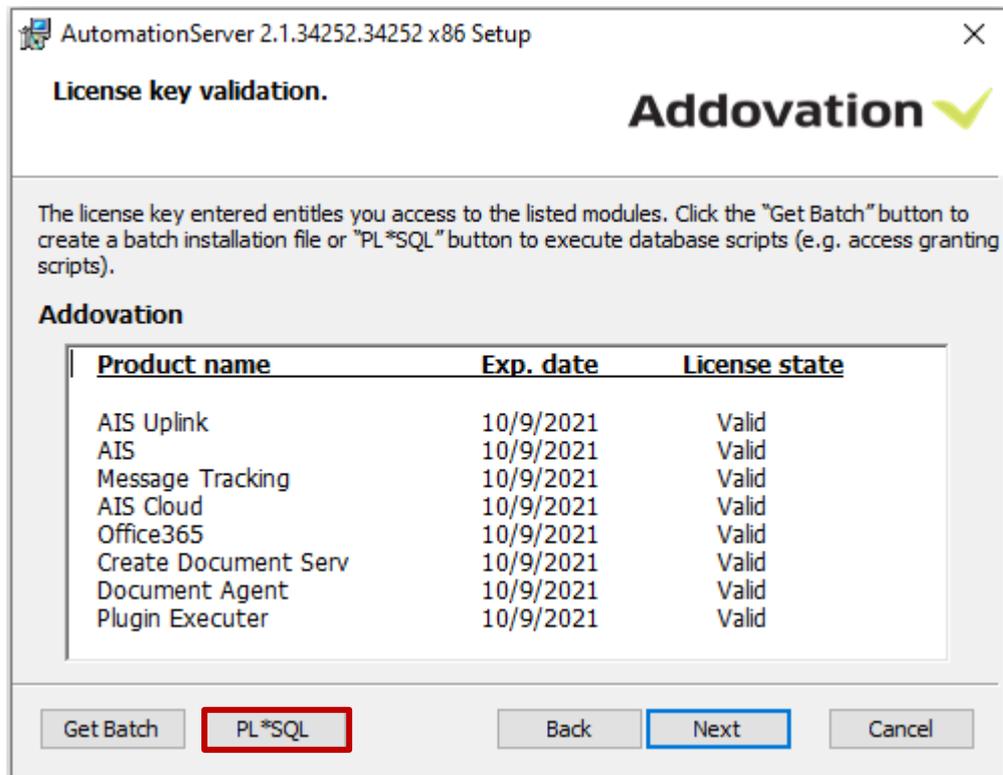


Figure 14 – PL*SQL

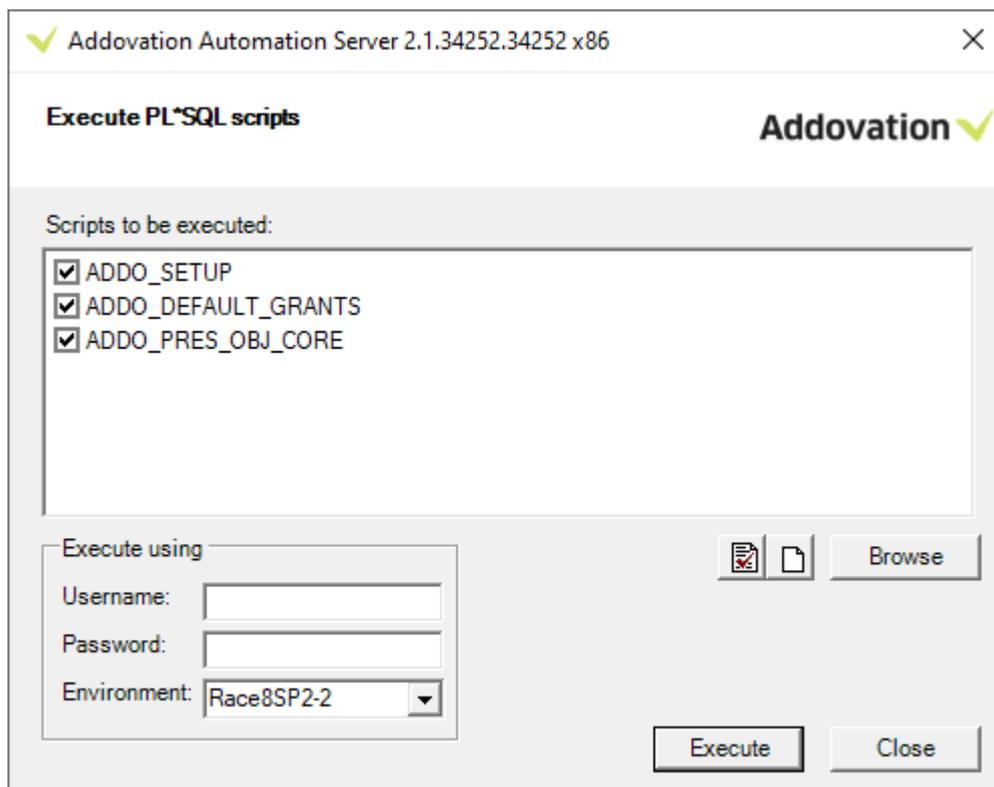


Figure 15 – Execute PL*SQL scripts

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.

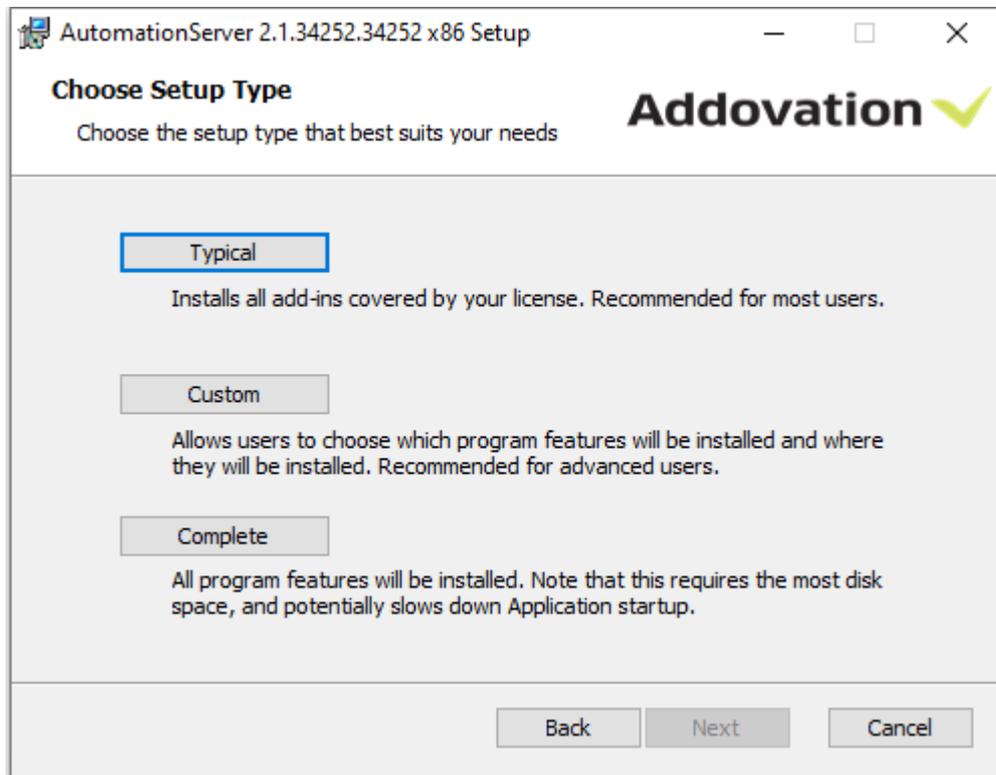


Figure 16 – Setup Types

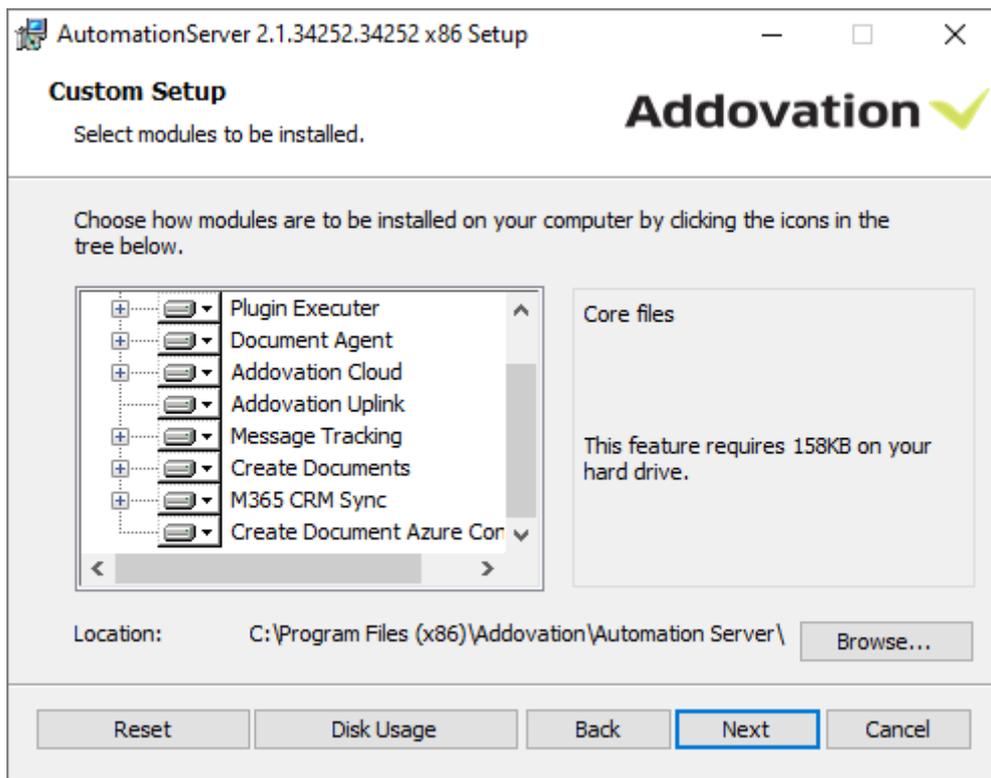


Figure 17 – Custom Setup

Components

- IFS to SQL Server Plugin
- Plugin Executor
- Document Agent
Reads files or emails from configured folder or mailbox and does stuff like create work orders or other IFS items.
- Addovation Cloud
- Addovation Uplink
- Message Tracking
- Create Documents
- M365 CRM Sync
- Create Document Azure Consumer

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.

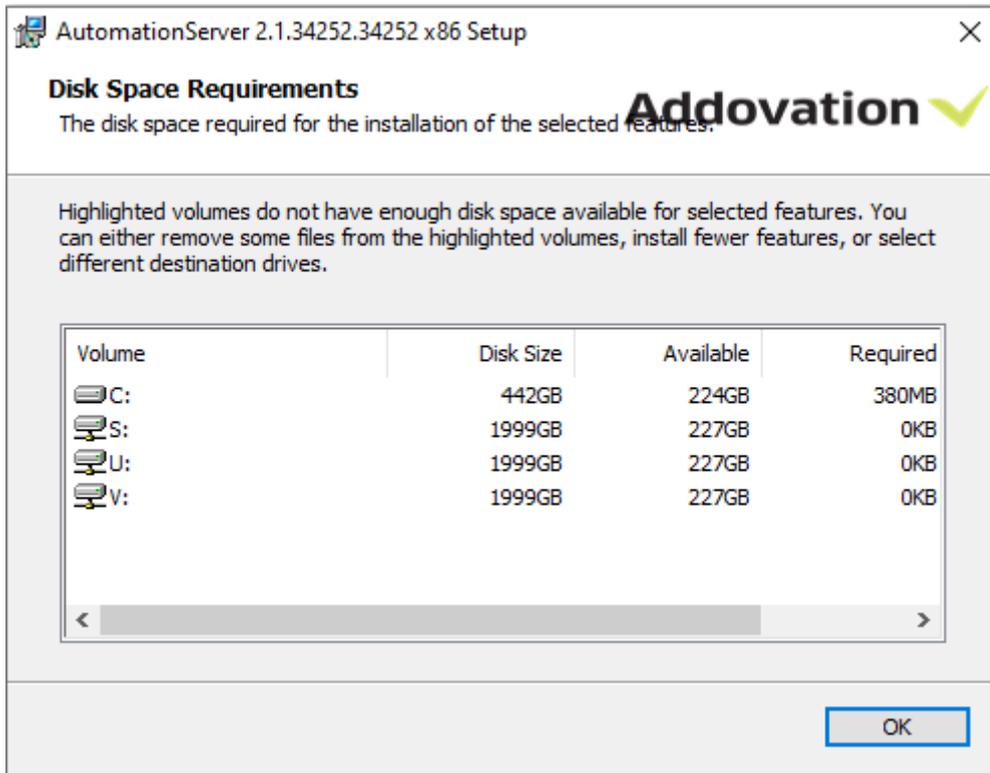


Figure 18 – Disk Space Requirements

1.10 Ready to Install

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

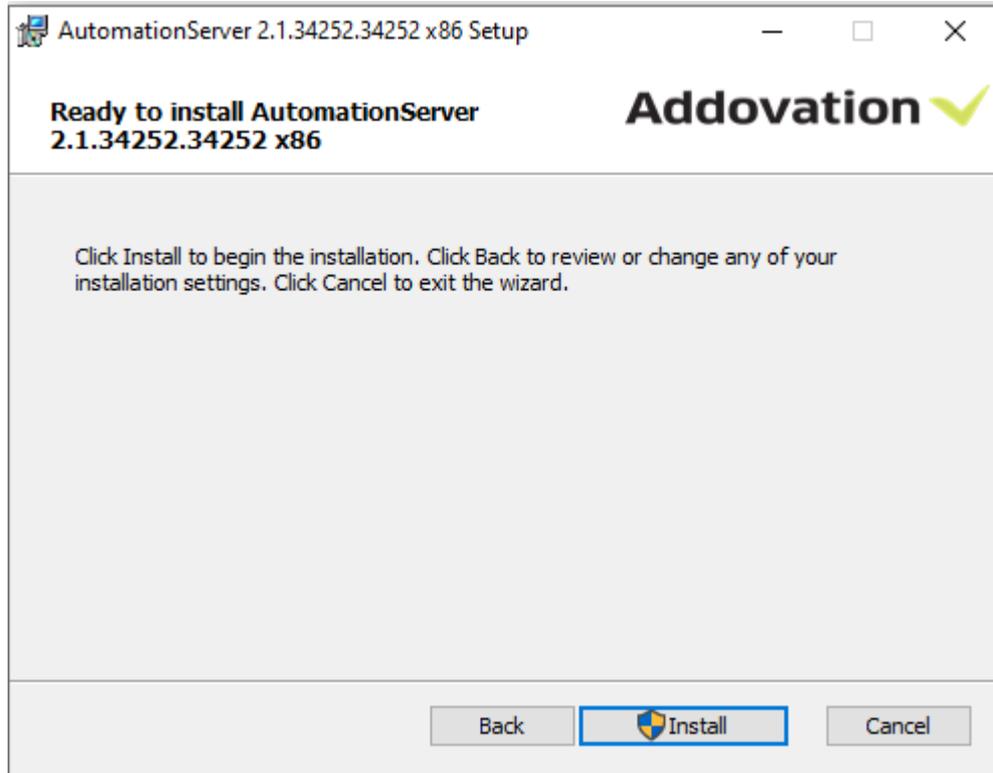


Figure 19 - Install

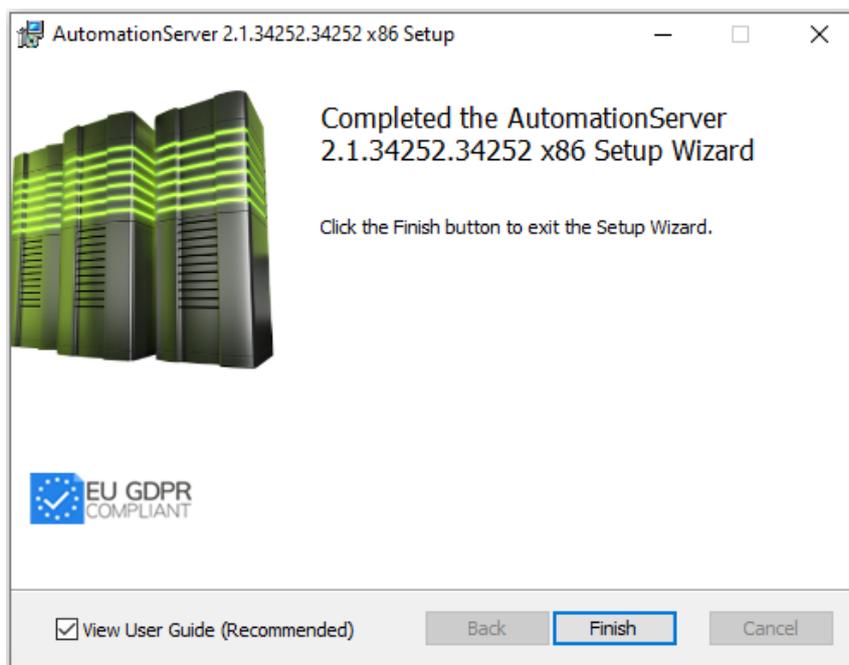


Figure 20 - Finish

2 Document Agent – Configure business logic

- ✓ Start by copying an existing business logic MFD-file e.g.

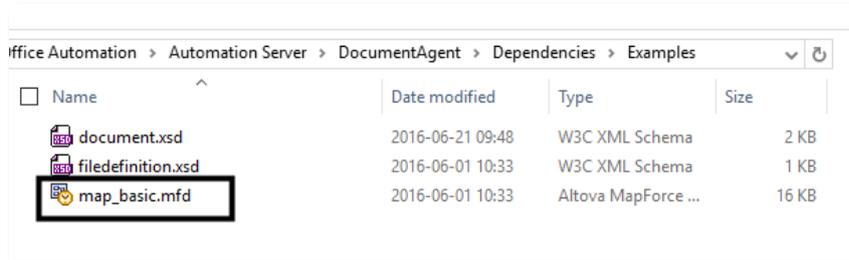


Figure 21 - Copy business logic

- ✓ To a new file with a sensible naming:

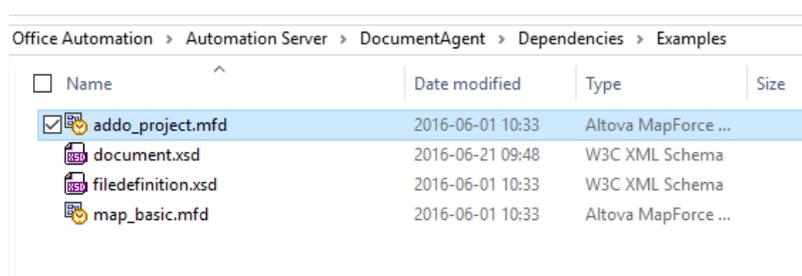


Figure 22 - New file

- ✓ Open it in Altova Mapforce, left hand side represents the file on disk e.g.
- ✓ After it has been saved from e-mail account
 - Whole e-mail or only attachments can be selected
- ✓ After file has been dropped in a folder on disk

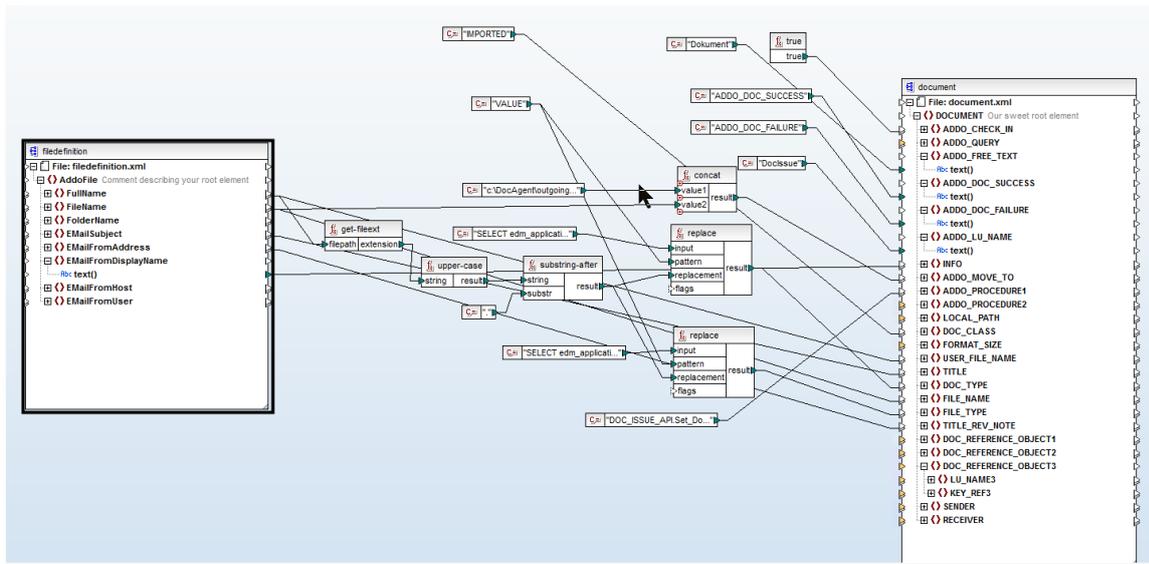


Figure 23

- ✓ The right-hand side represents all DOCUMENT management views in IFS document management which can be used e.g.

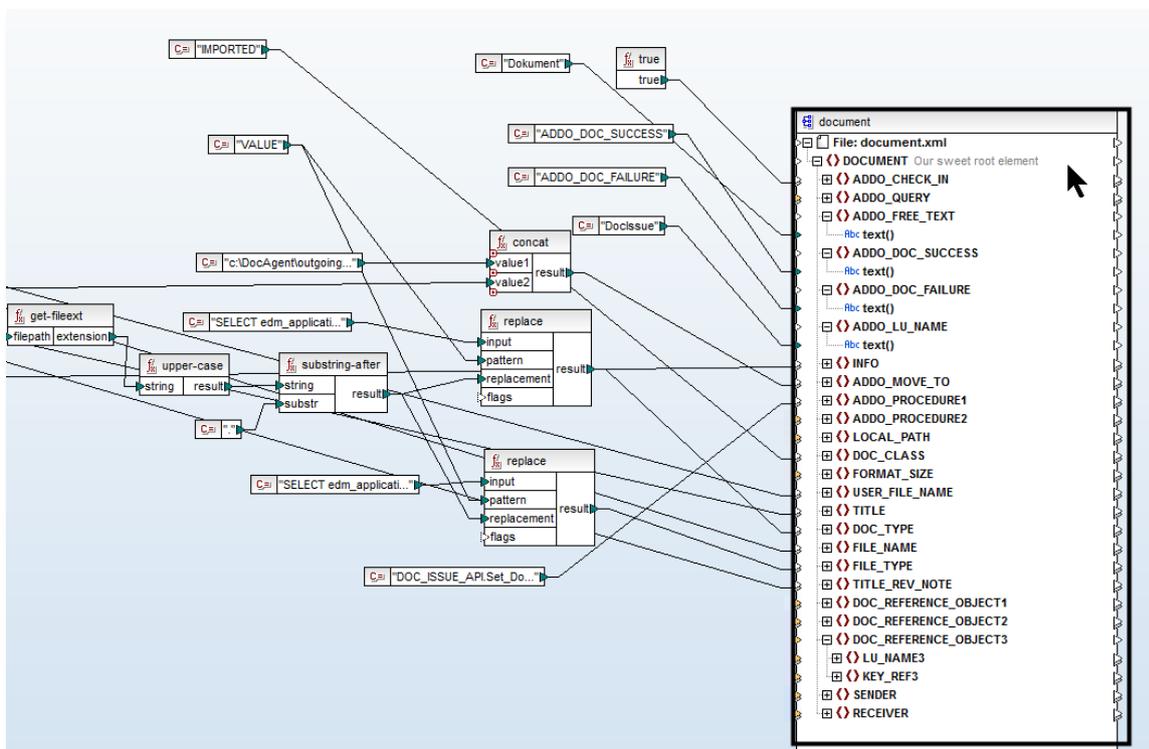


Figure 24

- ✓ The views can be DOC_TITLE, EDM_FILE, EDM_FILE_STORAGE and DOC_ISSUE.
- ✓ The ADDO_CHECK_IN is a Boolean that controls whether we should try to process the file further or if its only rubbish (because then we don't need to logon towards IFS):

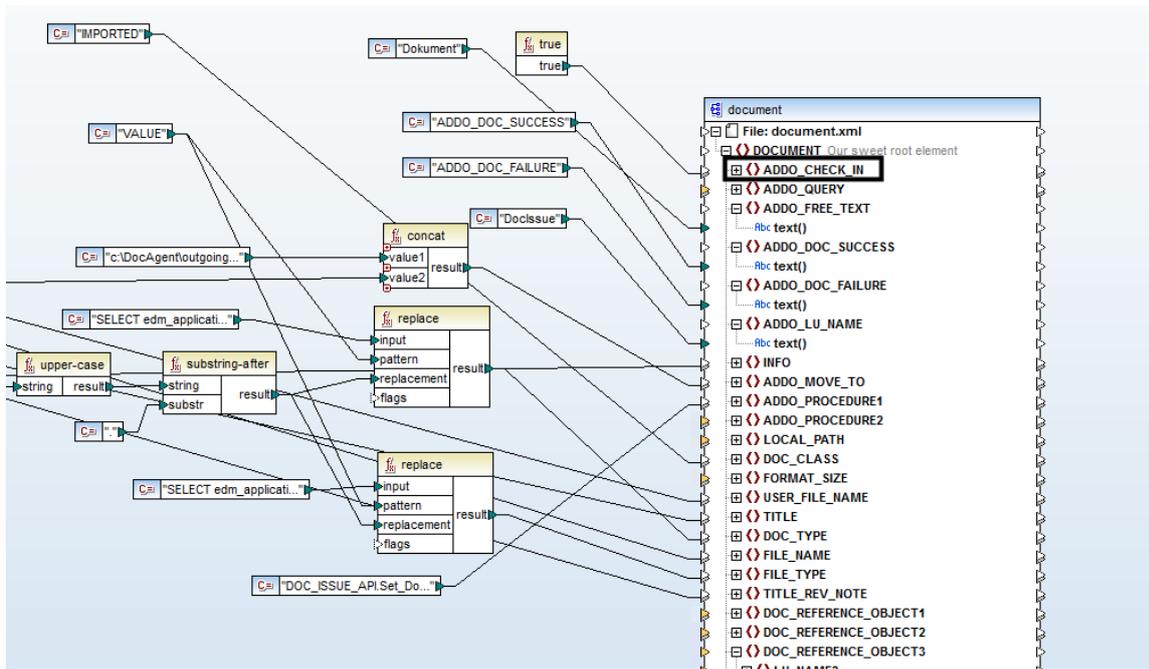


Figure 25

- ✓ Classic example is if we are looking for a certain prefix in file name, if it exists, we proceed otherwise we only move file to:

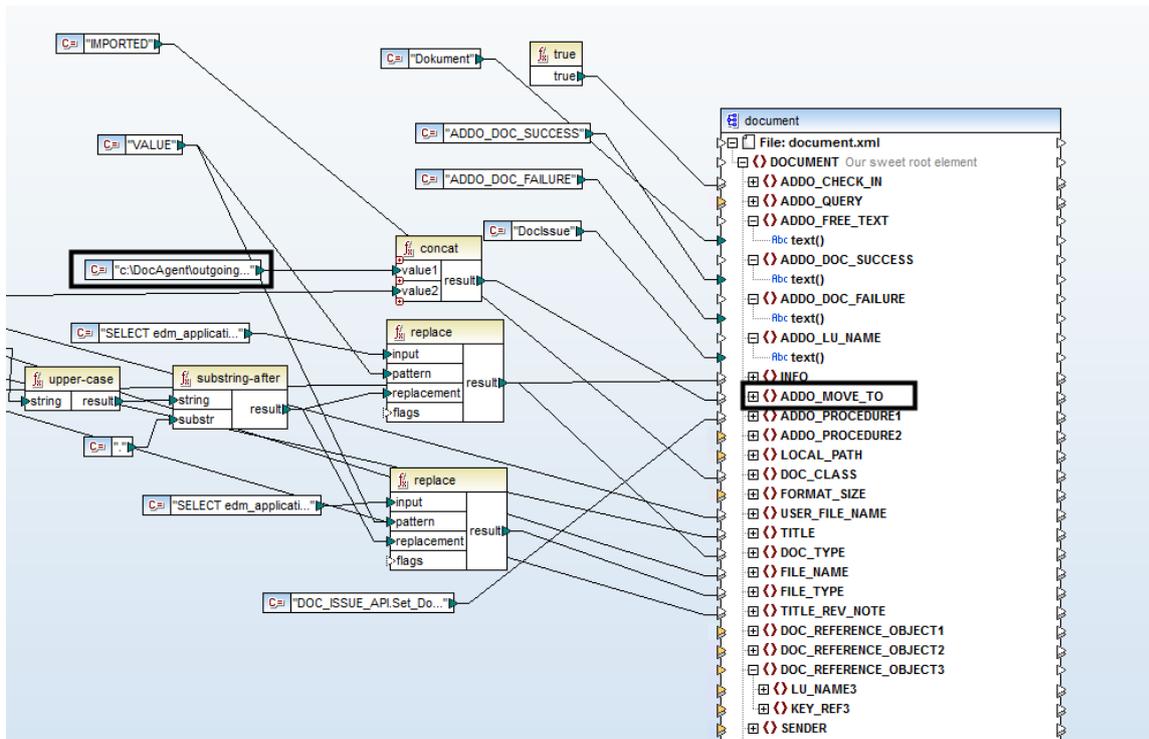


Figure 26

- ✓ The ADDO_QUERY:

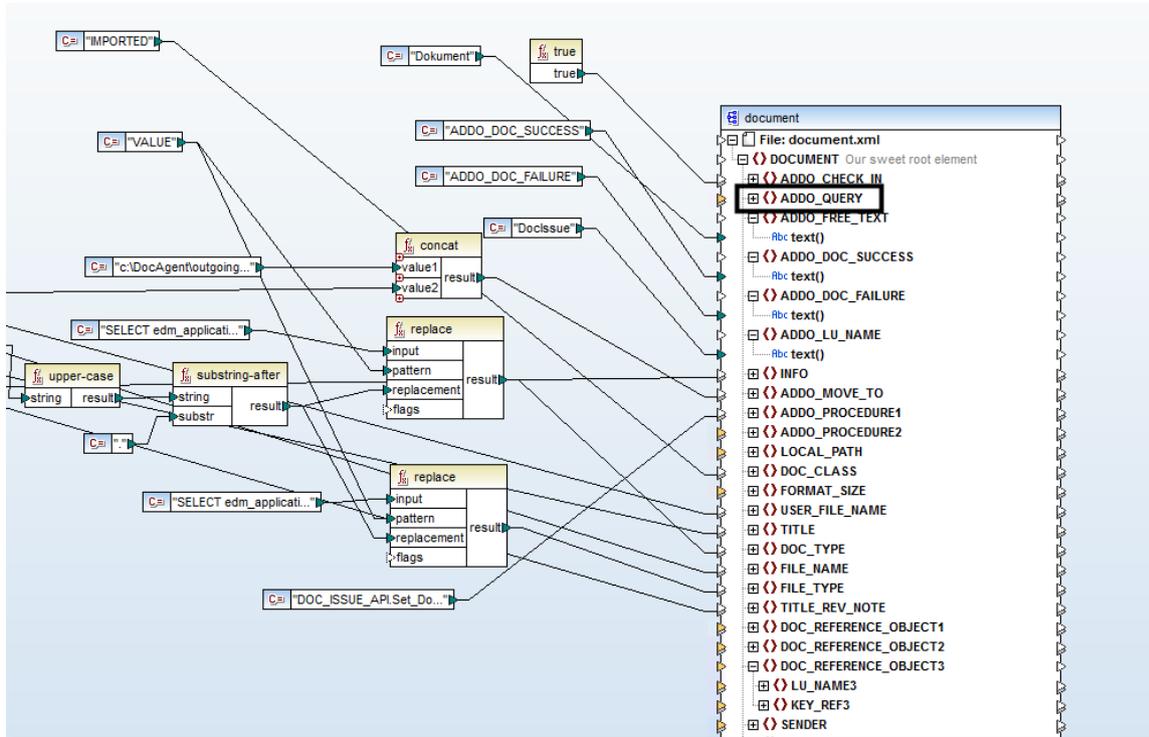


Figure 27

is a Boolean but has the power to run a SQL statement towards IFS, classic is that we check whether a work order number actually exists, if true then we try to check in file with all parameters otherwise we only move file to folder defined in ADDO_MOVE_TO.

- ✓ We can also execute custom procedures e.g. approve or release a revision by defining one or more ADDO_PROCEDUREnn:

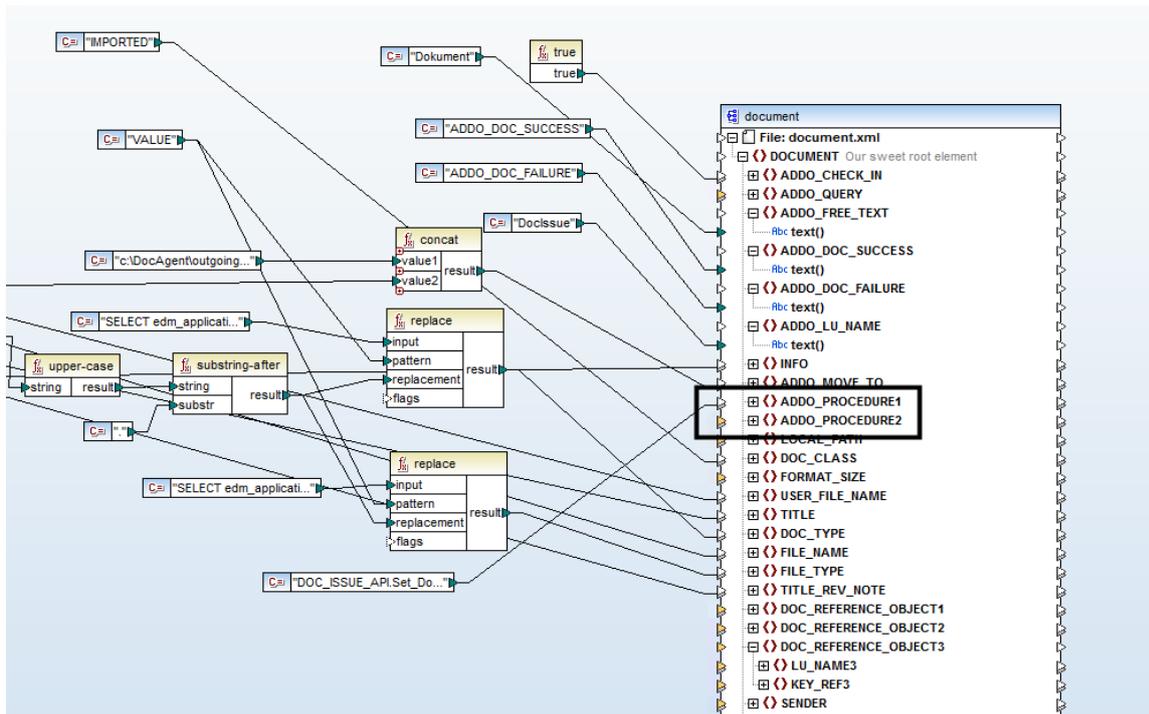


Figure 28

- ✓ We can basically run any PLSQL-statement here.
- ✓ If something goes wrong, ADDO_QUERY is false etc we can trigger 2 events:

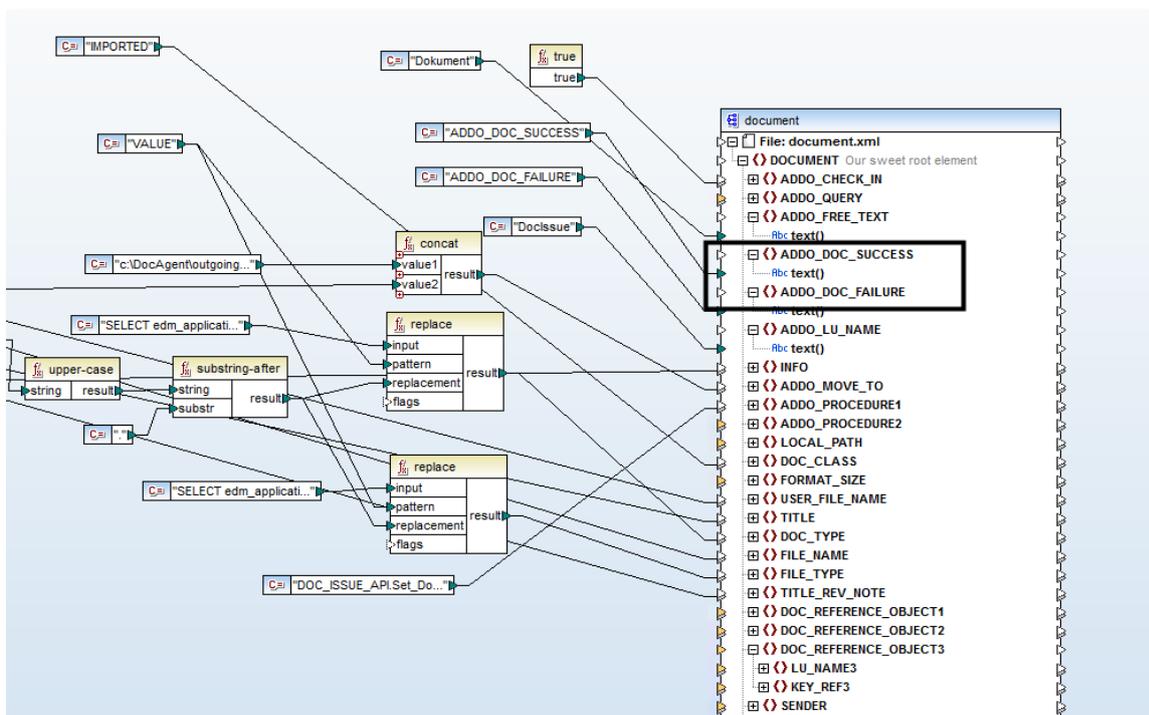


Figure 29

- ✓ Classic example is that e.g. file extension did not exist in IFS and then trigger the fail event. If document was successfully checked in, we trigger success event.
- ✓ Now, create a subfolder e.g. Xslt so we can export XSLT file to there:

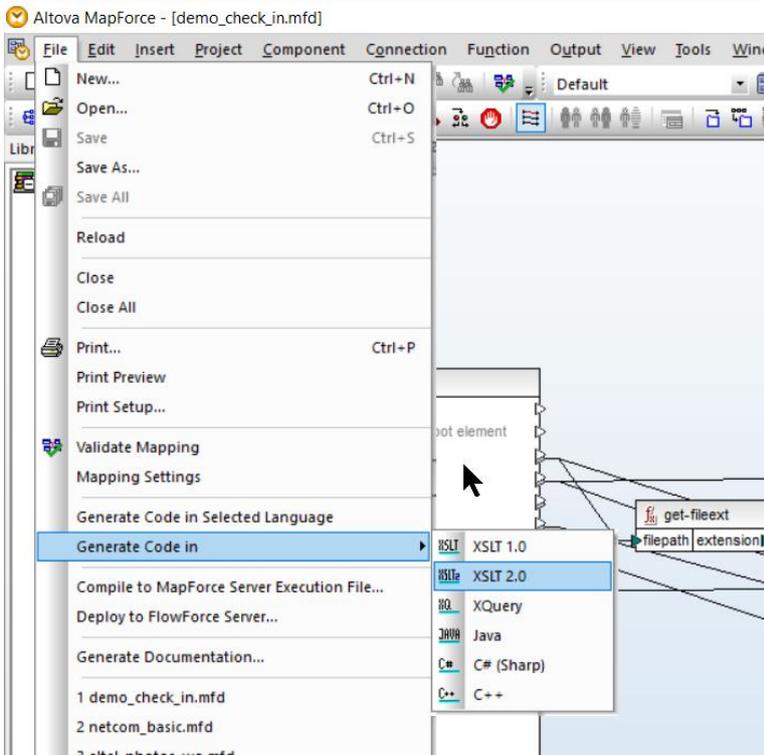


Figure 30- Export XSLT

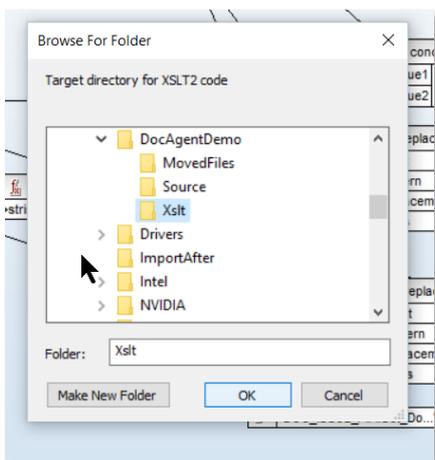


Figure 31 select folder

- ✓ Verify that a file was created:

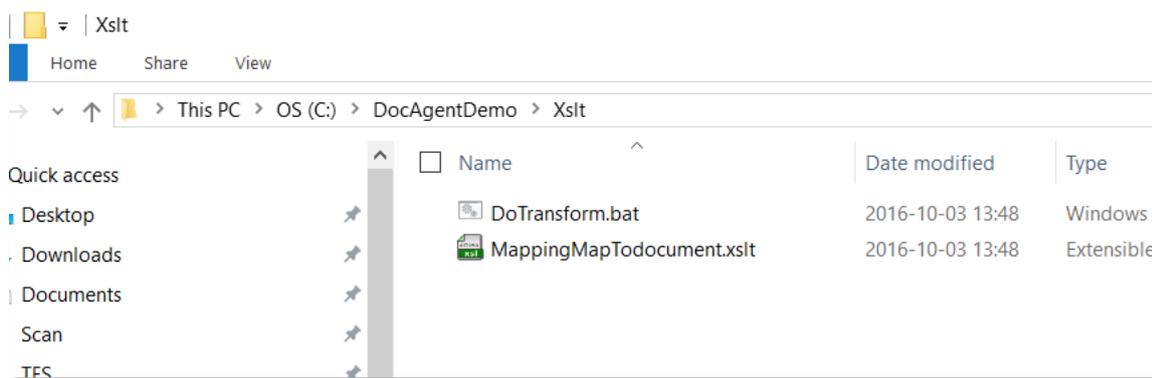


Figure 32 - Saved XSLT

2.1 Document Agent – Create new revision

One can create a new revision by supplying document class and document number of any given document. Query can be used in order to fetch / select a document number. If the document class and number combination does not exist, it will try to create a new document given that number.

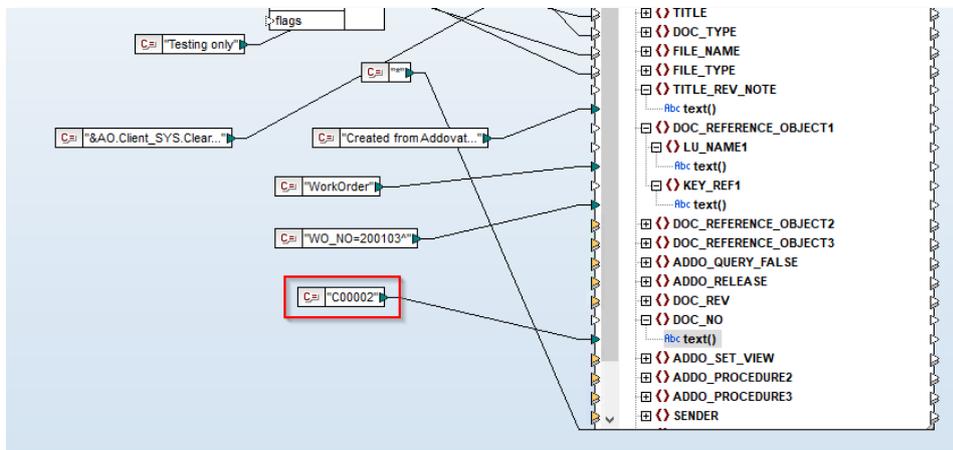


Figure 33 - Create New Revision

If the object connection already exists, DocAgent will not add it. DocAgent will also move object connections if the document class has been properly setup in IFS Applications.

3 Document Agent – Setup new channel

3.1 Document Agent configuration settings

Document Agent configuration settings should be done in the below client window.

This PC > Windows (C:) > Program Files (x86) > Addovation > Automation Server > Document Agent

Name	Date modified	Type	Size
Examples	2/5/2019 3:41 PM	File folder	
IFSAP7	2/5/2019 3:41 PM	File folder	
IFSAP8	2/5/2019 3:41 PM	File folder	
IFSAP9	2/5/2019 3:41 PM	File folder	
IFSAP10	2/5/2019 3:41 PM	File folder	
Addo.AIS.DocAgent.Configuration	2/5/2019 9:53 AM	Application	109 KB
Addo.AIS.DocAgent.Service	2/5/2019 9:53 AM	Application	103 KB
Addo.Fnd.Base.dll	2/5/2019 9:53 AM	Application extens...	364 KB
Addo.Fnd.DataAccess.dll	2/5/2019 9:53 AM	Application extens...	59 KB
Addo.Fnd.DataAccess7.dll	2/5/2019 9:53 AM	Application extens...	84 KB
Addo.Fnd.DataAccess8.dll	2/5/2019 9:53 AM	Application extens...	95 KB
Addo.Fnd.DataAccess9.dll	2/5/2019 9:53 AM	Application extens...	95 KB
Addo.Fnd.DataAccess10.dll	2/5/2019 9:53 AM	Application extens...	95 KB
Addo.Fnd.Globals.dll	2/5/2019 9:53 AM	Application extens...	181 KB
Addo.Fnd.GUI.dll	2/5/2019 9:53 AM	Application extens...	4,146 KB
Addo.Fnd.Library.dll	2/5/2019 9:53 AM	Application extens...	43 KB
Addo.Fnd.Logic.dll	2/5/2019 9:53 AM	Application extens...	1,123 KB
Addo.Fnd.Mail.dll	2/5/2019 9:53 AM	Application extens...	64 KB
Addo.Fnd.Office.dll	2/5/2019 9:53 AM	Application extens...	63 KB

Figure 34 - Doc Agent Configuration file

<p>Source folder path: Folder which source files reside.</p>	
<p>Log folder path: For the log files.</p>	
<p>Use method: Whether to read a shared folder or an incoming email.</p>	
<p>XSLT file: XSL transformation file.</p>	
<p>Unpack ZIP files: Decide if to automatically unpack ZIP files.</p>	
<p>Folder Settings: Top Directory Only: True/False. Defines the directory level to be synced</p>	
<p>Mail Settings: mail host, username, password, port, whether to save only the attachments, whether to use Secure Socket Layer (SSL) and mail format related to the email.</p>	
<p>Message Tracking Settings: Message Category, Message Type: This is to categorize Document Agent service messages Message Tracking Connectionstring: This is for the Connection string which we can track down the messages from the relevant cloud.</p>	

Figure 35 - Information for create configuration

Choose file -> Connect

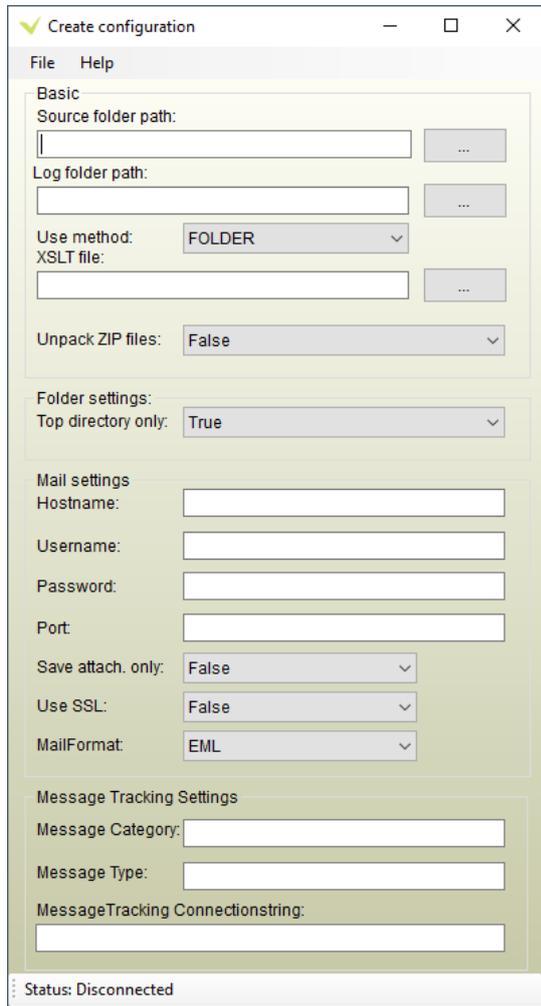


Figure 36 - Create Configuration

Login to the IFS database.

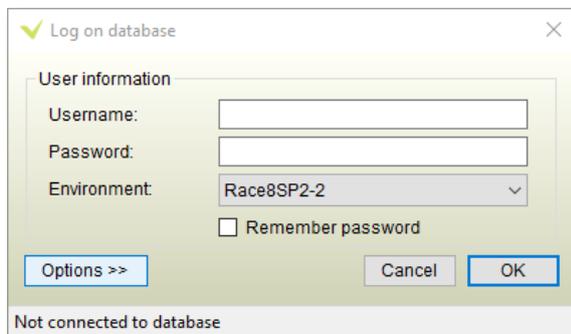


Figure 37 - Log on to IFS

Specify the folders that you will use. These folders are used for demonstration, any folder can be used. You can also write the e-mail server that will be used.

✓ Create configuration

File Help

Basic

Source folder path: ...

Log folder path: ...

Use method: FOLDER

XSLT file: ...

Unpack ZIP files: False

Folder settings:

Top directory only: True

Mail settings

Hostname:

Username:

Password:

Port:

Save attach. only: False

Use SSL: False

MailFormat: EML

Message Tracking Settings

Message Category:

Message Type:

MessageTracking Connectionstring:

Status: Disconnected

Figure 38 - Create Configuration

After you are done choose File -> Save As and save it in the Document Agent folder.

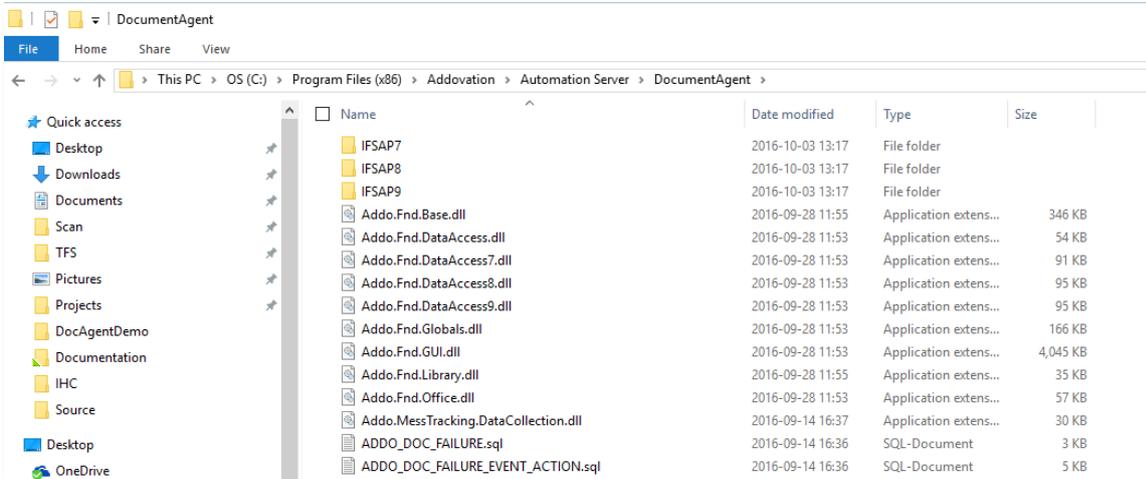


Figure 39 - Save as

Important is that you save file as **config-something.xml** and u can change the middle part e.g. config-RACE9DEV-Workorder.xml

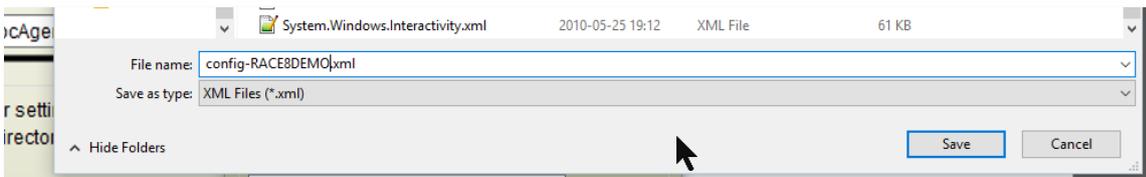


Figure 40 - Save Config file

3.2 Register DocAgent COM Server

Before starting the Addovation DocAgent service, DocAgent COM Server should be registered.



Figure 41 - DocAgent COM Server

3.3 Addovation DocAgent Service

Start Addo.AIS.DocAgent.Service.exe and make sure it finds config file:

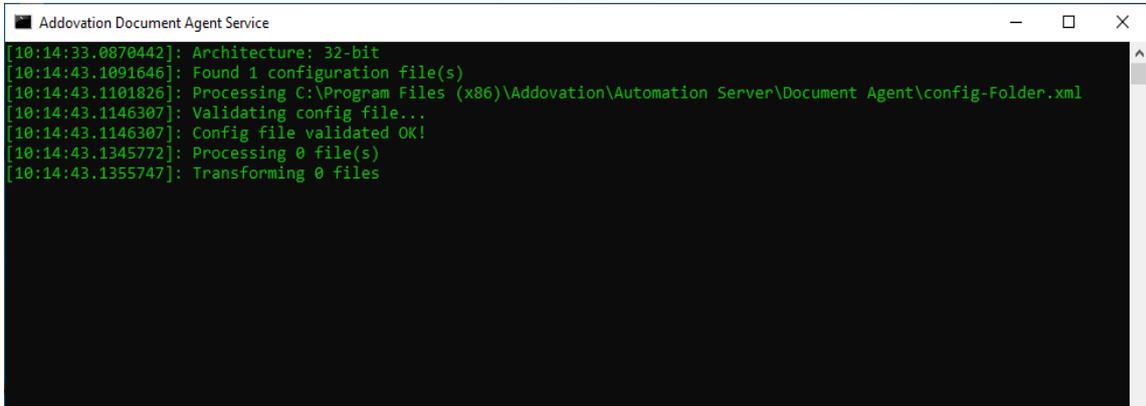


Figure 42 - Start the service

Now, drop a file in the in-folder and file is being checked in to IFS after processing:

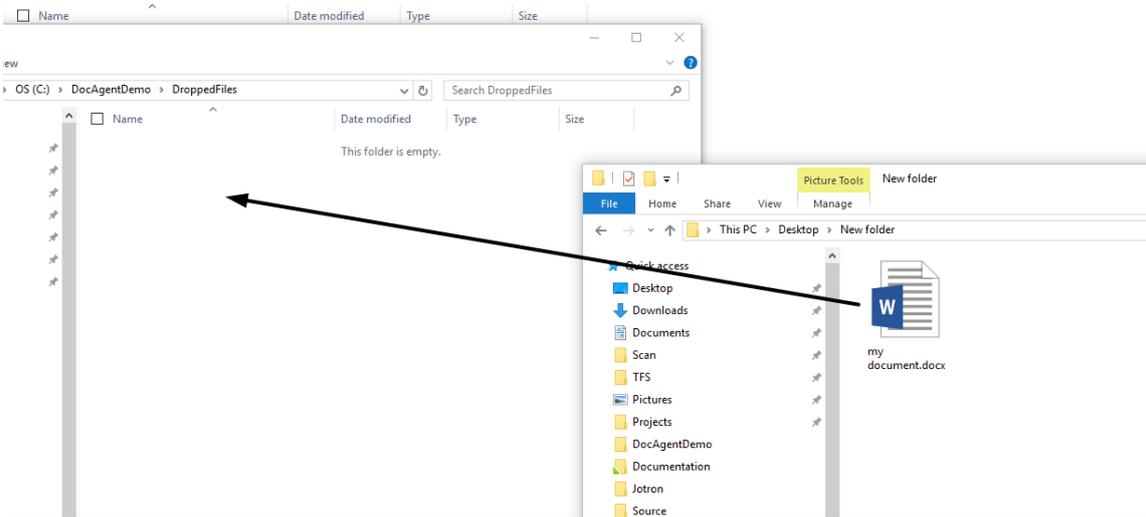


Figure 43 - Drag and drop

Results will be presented as depicted.

```
-----  
Date: 3/2/2019 11:41:59 AM Type: Information  
Event message:  
!ADDO_DOC_SUCCESS  
$NEW:FULLNAME=C:\Addovation\docagent\in\testfile2.txt  
$NEW:FOLDERNAME=C:\Addovation\docagent\in  
$NEW:FILENAME=testfile2.txt  
$NEW:ADDO_CHECK_IN=true  
$NEW:ADDO_FREE_TEXT=Dokument  
$NEW:ADDO_DOC_SUCCESS=ADDO_DOC_SUCCESS  
$NEW:ADDO_DOC_FAILURE=ADDO_DOC_FAILURE  
$NEW:ADDO_LU_NAME=DocIssue  
$NEW:INFO=some info  
$NEW:ADDO_MOVE_TO=C:\DocAgent\Out\testfile2.txt  
$NEW:DOC_CLASS=100  
$NEW:USER_FILE_NAME=C:\Addovation\docagent\in\testfile2.txt  
$NEW:TITLE=Test IFS 9 diud  
$NEW:DOC_TYPE=ORIGINAL  
$NEW:FILE_NAME=testfile2.txt  
$NEW:FILE_TYPE=TEXTFILE  
$NEW:REV_NO_APP=1  
$NEW:STRUCTURE=0  
$NEW:COPY_FLAG=OK  
$NEW:SURVEY_LOCKED_FLAG=Unlocked
```

Figure 44 - Result output

Emails will be logged to IFS automatically for the specified email in the config same as the folder option.

3.4 Support for Oauth2 to DocAgent

To make Oauth2 work with DocAgent **Email Method** you will need to specify values in the configuration file or create a new one with DocAgent configuration.

✓ Create configuration

File Help

Basic

Source folder path: ...

Log folder path: ...

Use method: FOLDER

XSLT file: ...

Unpack ZIP files: False

Folder settings:

Top directory only: True

Mail settings

Hostname:

Username:

Password:

Port:

Save attach. only: False

Use SSL: False

MailFormat: EML

Use OAUTH: False

Client ID:

Tenant ID:

Redirect URL:

Use interactive: False

← Oauth2 new configuration

Figure 45 - create configuration

```
<?xml version="1.0" encoding="utf-8"?>
<Parameters>
  <USE_METHOD>EMAIL</USE_METHOD>
  <SOURCEFOLDER>C:\DocAgent\Incoming</SOURCEFOLDER>
  <TOPDIRECTORY_ONLY>True</TOPDIRECTORY_ONLY>
  <UNPACK_ZIP>False</UNPACK_ZIP>
  <XSLT>C:\DocAgent\Xslt\config-TEST.xslt</XSLT>
  <LOG_FOLDER>C:\DocAgent\Log</LOG_FOLDER>
  <IFS_USERNAME> ***Add encrypted IFS username*** </IFS_USERNAME>
  <IFS_PASSWORD> ***Add encrypted IFS password*** </IFS_PASSWORD>
  <IFS_APPOWNER> ***Add encrypted IFS appowner*** </IFS_APPOWNER>
  <IFS_EXTSERVER> ***Add encrypted IFS access point*** </IFS_EXTSERVER>
  <MAIL_SAVEATTACHMENTSONLY>True</MAIL_SAVEATTACHMENTSONLY>
  <MAIL_HOSTNAME> ***Add encrypted POP mail server hostname*** </MAIL_HOSTNAME>
  <MAIL_USERNAME> ***Add encrypted mail account username*** </MAIL_USERNAME>
  <MAIL_PASSWORD> ***Add encrypted mail account password*** </MAIL_PASSWORD>
  <MAIL_PORT> ***Add encrypted mail port*** </MAIL_PORT>
  <MAIL_USESSL>True</MAIL_USESSL>
  <MAIL_FORMAT>MSG</MAIL_FORMAT>
  <USE_OAUTH>True</USE_OAUTH>
  <CLIENT_ID> ***Add client_id*** </CLIENT_ID>
  <TENANT_ID> ***Add tenant_id*** </TENANT_ID>
  <REDIRECT_URL>https://login.microsoftonline.com/common/oauth2/nativeclient</REDIRECT_URL>
  <USE_INTERACTIVE>False</USE_INTERACTIVE>
  <IFS_VERSION>IFSApplications10</IFS_VERSION>
  <MESSAGE_TRACKING> </MESSAGE_TRACKING>
  <MESSAGE_TRACKING_CATEGORY />
  <MESSAGE_TRACKING_TYPE />
</Parameters>
```

Figure 46 – xml file

USE_OAUTH: This will use Oauth2 to login to the mailbox of the emails given in the configuration.

USE_INTERACTIVE: At first this should be set to **True**, and it will allow you to login with an interactive login screen. You will have to provide the user account and password for the first time. After that it should be set to **False**, and it will login automatically in the background.

CLIENT_ID: This is the ID of the application in Azure. (Customer will need an app registration details in Azure to configure values. Refer section 4 for more information).

TENANT_ID: This is the ID of the Azure tenant that DocAgent will login to.

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

IMPORTANT!

1. When you use DocAgent 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 with interactive once by setting it to **True** and then you can switch back to automatic login by setting USE_INTERACTIVE to **False**.
2. If you change the password for the mailbox you need to change it in the config file.
3. 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>

3.5 Setup multi-channel

Setup Multi channel

Several configuration files containing different mail accounts in the document agent folder can be used simultaneously with the service. One xml config file should contain details relevant to one mail account.

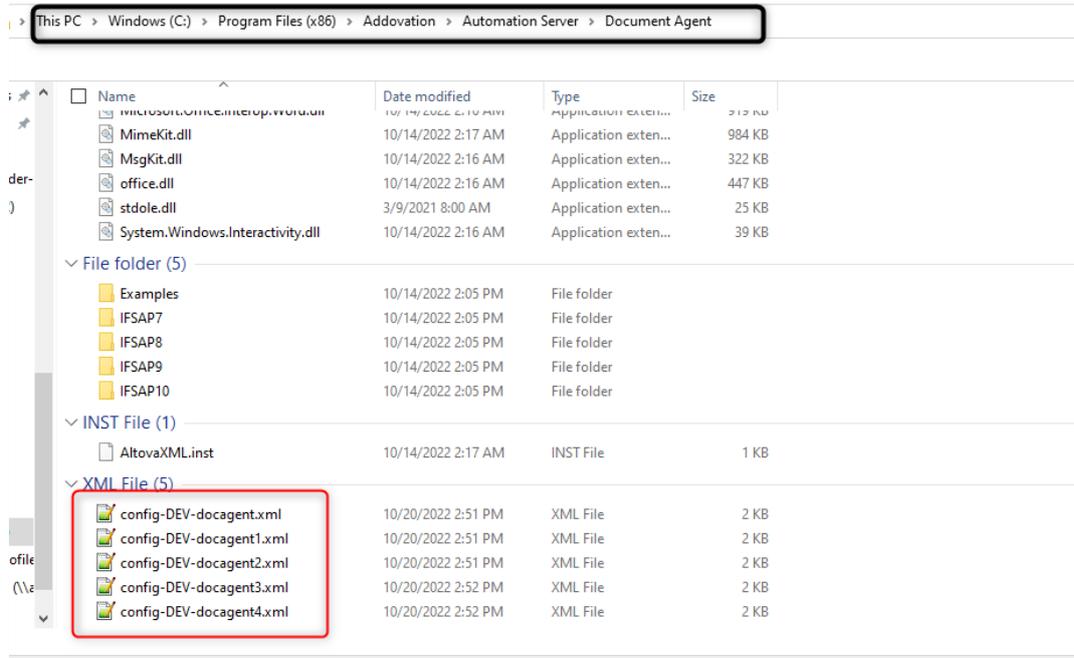


Figure 47 – Document Agent Folder

It is recommended to create several folders for each configuration file/each channel in the incoming “IN” folder and “Log” folder.

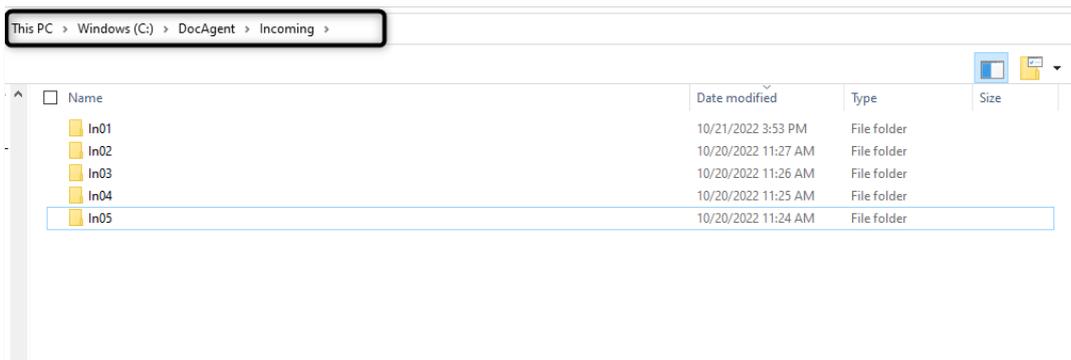


Figure 48 – Incoming Folder

4 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

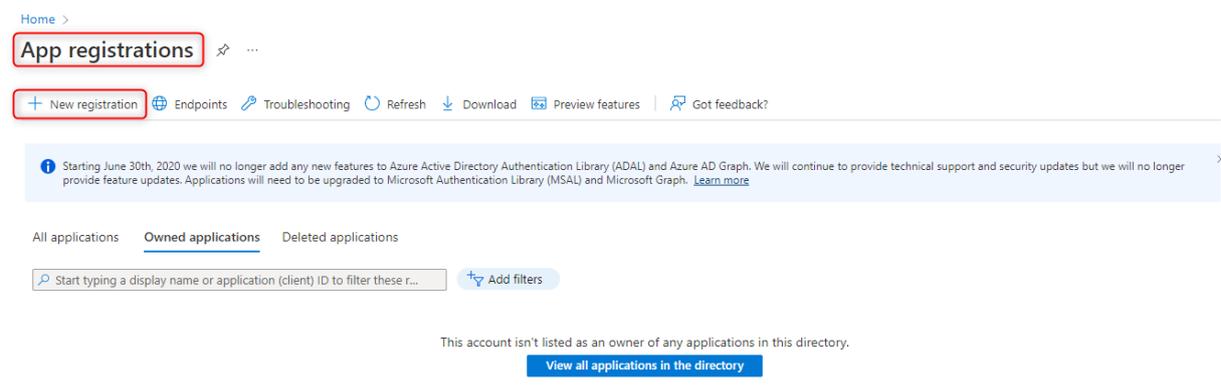


Figure 49 – New registration

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>.

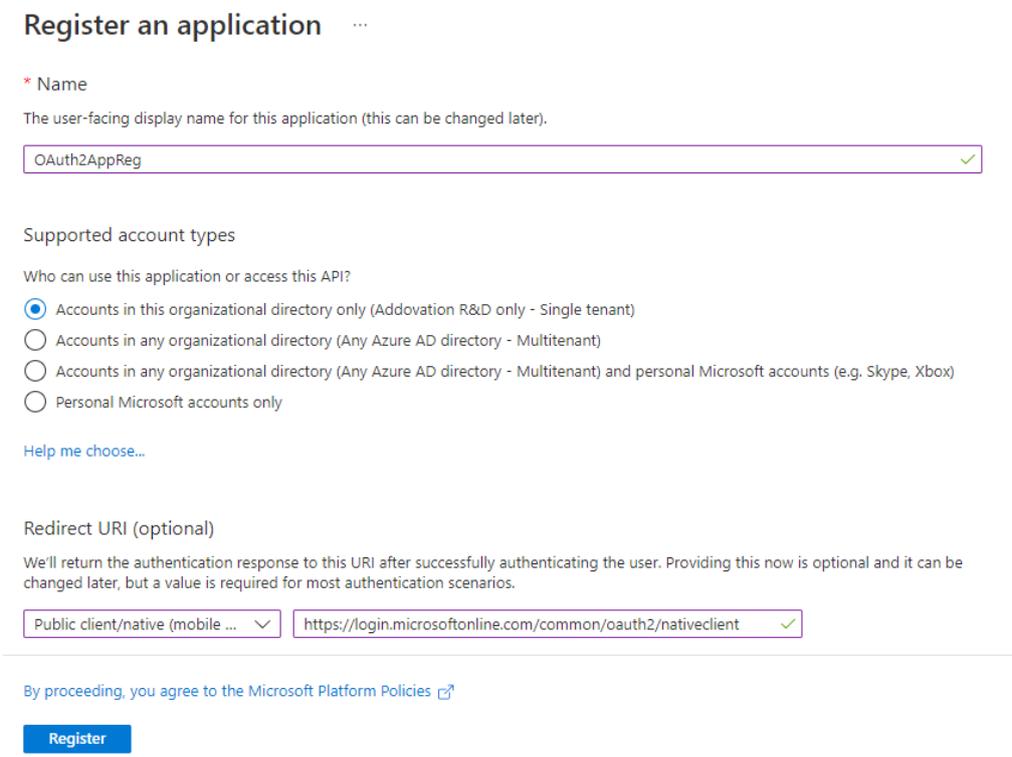


Figure 50 – Register an application

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

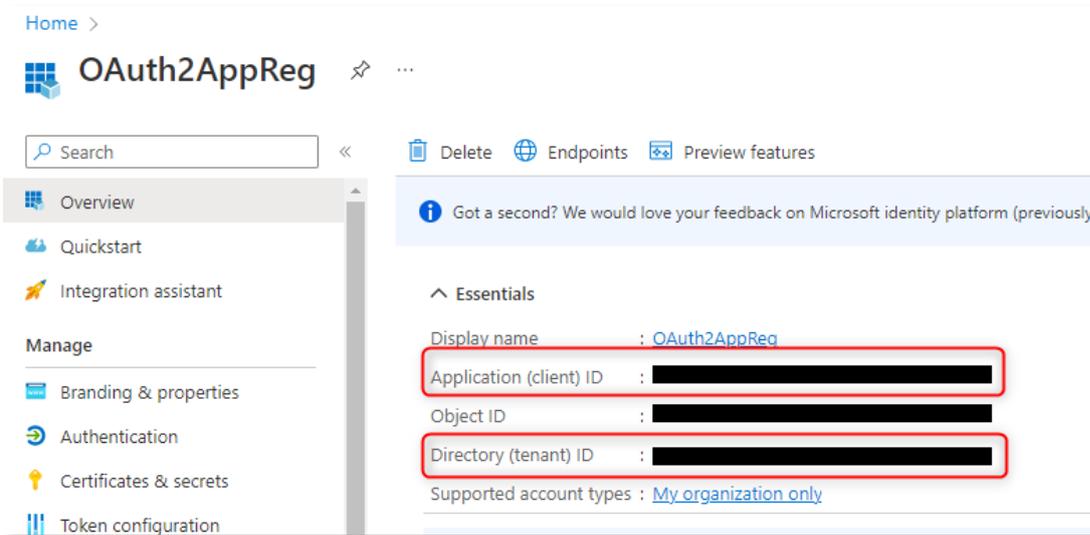


Figure 51 – Overview

Step2: Authentication

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

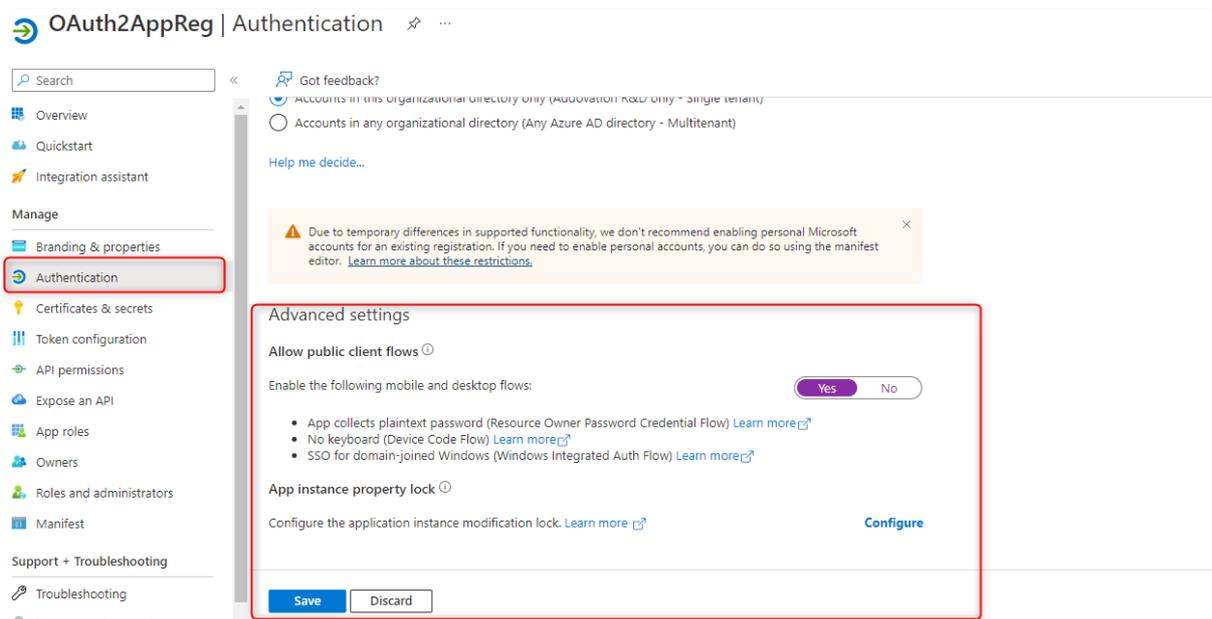


Figure 52 – Authentication

Step3: Setup API permission

On the same app registration, grant admin consent for users on the API. Following API permissions should be granted.

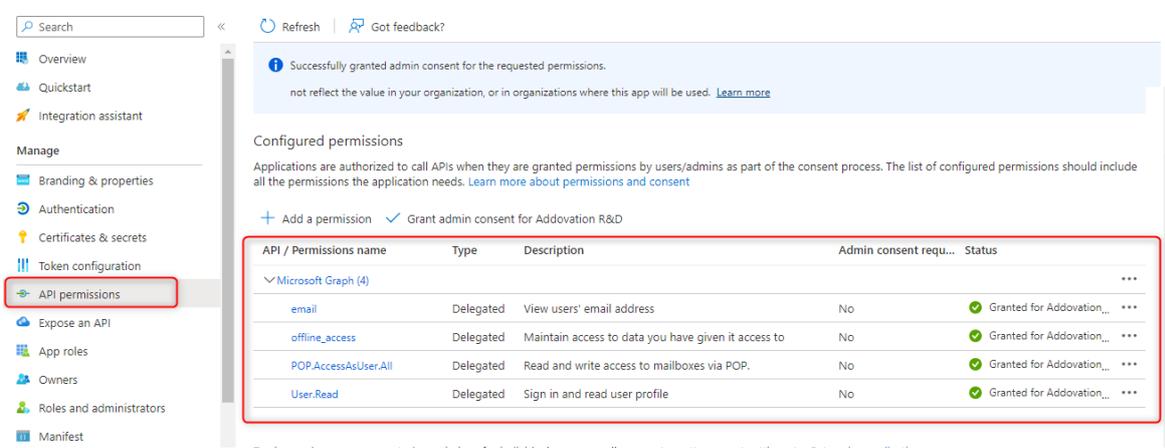


Figure 53 – API Permissions

Step4: Add details to xml file

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

```
<CLIENT_ID> ***Add client_id*** </CLIENT_ID>
<TENANT_ID> ***Add tenant_id*** </TENANT_ID>
<REDIRECT_URL>https://login.microsoftonline.com/common/oauth2/nativeclient</REDIRECT_URL>
```

Figure 54 – details in xml

5 Upgrade

5.1 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.

6 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.

Document Agent follows standard behavior using IFS API:s and basic data connected to e.g. document classes.

Document Agent does no longer check whether a LU / KeyRef combination actually exists, it just creates it even though object doesn't exist.

Unpacking of zip files

ZIP files must be zipped using Microsoft standards

- ZIP files do not need specific names, but file extension must be ZIP.
- Files included in a ZIP files is simply unpacked as is.
- An email can contain both ZIP files and other traditional file types.
- ZIP files will be unzipped using same folder structure as when zipped.
- Password protected ZIP files are NOT supported.
- ZIP files compressed using Winzip / Rarlab might work, but is NOT supported.
- TAR, ZIP and other compressed file types is NOT supported.

7 Contact

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