

eFLOW ePortal

Overview

Version 1.0.1

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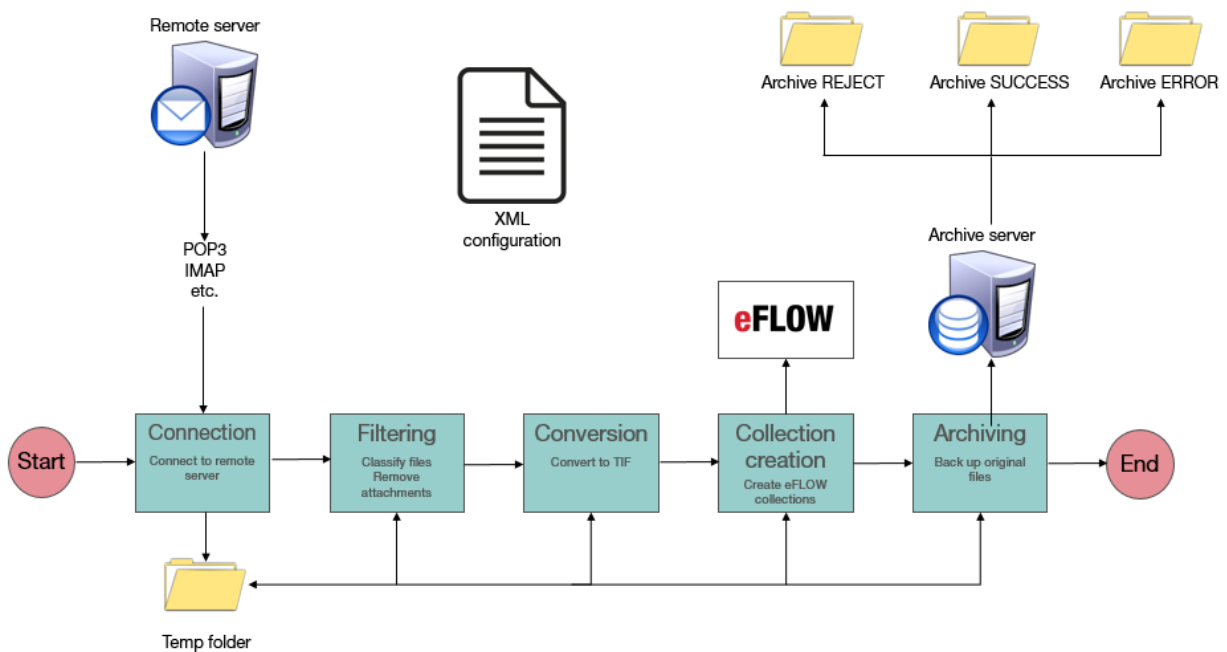
About ePortal

The purpose of the ePortal station is to import electronic documents, in particular emails, into eFLOW.

ePortal process

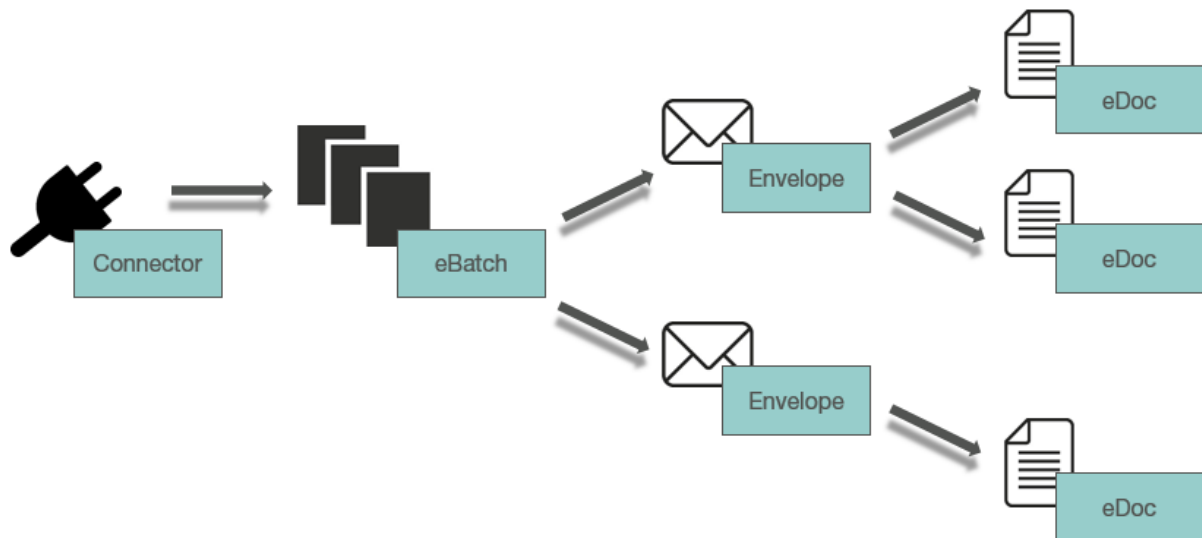
The process of importing documents into eFLOW with ePortal comprises actions to extract, filter, convert, organize, and archive the data.

The diagram below illustrates the ePortal processing stages. Each of these stages can be controlled using the ePortal configuration file.



Each of these stages processes an envelope object created by an ePortal connector.

ePortal terms



Term	Explanation
Connector	ePortal connectors retrieve documents from remote servers.
eDoc	<p>An eDoc (electronic document) is any kind of document that is available on the remote server, for example:</p> <ul style="list-style-type: none"> ■ An email ■ An email attachment ■ A TIF, PDF, XML, or other type of file
Envelope	<p>A simple envelope contains at least one eDoc as well as meta data:</p> <ul style="list-style-type: none"> ■ Reporting data ■ Global status: the envelope status ■ Detailed status: the eDoc status ■ <i>Temp</i> folder architecture <p>Typically, an email is an envelope: it contains none, one or several documents.</p> <p>There can be two files on the remote server with the same name, such as a TIF and an XML file. Complex files, such ZIP or EML are parsed before they are imported.</p> <p>Using an envelope object enables every ePortal stage to process any combination of documents, such as TIF; email; TIF + XML; TIF + JPG + PRD + XML; and so on.</p> <p>The envelope meta data is only used by the ePortal connectors for archiving and setting user tags. For example, the email subject can be set as a user tag.</p>

Term	Explanation
eBatch	An eBatch is a list of envelopes to be processed by an ePortal connector. The maximum number of envelopes to process at once is defined in the <i><MaxWorkUnit></i> property in the <i><Stations></i> section of the ePortal configuration file.
Mail Account	<p>A Mail Account allows the ePortal connector to connect to a remote server.</p> <p>The following properties are used:</p> <ul style="list-style-type: none"> ■ ID ■ Description ■ User name ■ Password <p>Several accounts can be added to the <i><MailAccounts></i> section of the configuration file, but an ePortal connector can only use the account that is linked to the station by its ID and is enabled.</p>
eDoc provider	A remote server on which electronic documents reside.
Mailbox	An electronic document source from which ePortal retrieves files.

Connection

ePortal uses connectors to retrieve data from remote servers, such as email servers. The connectors perform the following actions.

1. Connect or disconnect to or from an eDoc provider such as an email server, an SMTP server or an FTP server. The connector uses the mail accounts defined in the ePortal station configuration to connect to the server.
2. Check in the configuration file how many remote files to import as an eBatch.
3. Return an eBatch containing a list of files to import in the eFLOW workflow. An envelope can contain one or more eDocs. An eDoc is the file that is to be imported.
4. Delete, move or change the remote file properties when it is archived. Depending on the configuration, the file is archived in the SUCCESS, REJECT, or ERROR archive.

ePortal provides the following connectors:

- POP3 Connector
- IMAP Connector
- EWS Connector
- File Connector

- EML Connector
- FTP Connector
- ZIP Connector
- MSG Connector

Filtering

The purpose of ePortal filtering is to:

- Classify the eDoc of the envelope as:

Type	Description
AttachedDoc (DocAttachment)	A file to be merged with the main document.
AttachedFile (FileAttachment)	A file to be attached to the collection so that it can be exported by an export station, or used in another station; for example, an XML file.
RejectedFile	A file to be removed as an unwanted attachment. Files can be rejected depending on their size, name or extension.

- Link AttachedDocs and AttachedFiles with their main AcceptedDoc.

Conversion

Converters are used to:

- Convert the following file types to TIF CCITT4: TIF, TIFF, JPG, JPEG, BMP, GIF, PNG, PDF, DOC, DOCX, DOCM, DOT, DOTX, HTML, HTM, XHTML, MHT, MHTML, ODT, RTF, TXT, XML, XLS, XLTX, XLSX, XLTM, XLSM, ODS, CSV, PPS, PPT, POT, ODP, PPSX, POTX, PPTX
- Create JPGs from color images
- Create PRD files from searchable PDFs

Note: If no converter is defined for a specific file type, the envelope is rejected.

Collection Creation

The Collection Creation stage first prepares all eDocs of the envelope for import as a collection into eFLOW. The following options for importing the eDoc of an envelope can be configured:

- Create one collection per attachment.
- Create one collection for all attachments by merging the attachments with the main document.
- For emails only: Add the email body at the beginning or the end of the collection, or remove it.

Note: When two eDocs are merged together, it is possible that one is imported and the other is rejected.

The output of the Collection Creation step is an eFLOW collection per eDoc:

1. An eFLOW collection is created for every eDoc of every envelope of the eBatch created by the connector, provided the eDoc was not rejected due to merging or filtering.
2. The UserTags of the collection are updated from:
 - The eBatch, such as **SourceID** (AccountID: ID of the mailAccount, such as GmailAccount1, FilePortal1, ScanPortal1) and **Source** (SourceType: FilePortal, ScanPortal, IMAP, POP3, FTP, ARCH, EML, and so on).
 - The envelope, such as **remoteID** or **Email_From**.
 - The eDoc, such as **FileName**.
3. The UserTag used for routing is updated, such as **PRD_Created**.
4. The email body or the images can be set as a page attachment.
5. All files specified in the Filtering stage are attached.
6. The original file is attached to the collection as a collection attachment.

Archiving

There are three types of archive:

- **SUCCESS** – When the collection is created in eFLOW.
- **REJECTED** – When an envelope is rejected, for example, if it is empty (that is, it contains no eDoc to be imported).

An envelope may be empty in the following situations:

- The email has no attachments.
 - The files in the envelope do not adhere to the regular expression of the filter, or are too large or too small.
 - The files in the envelope cannot be converted to TIF.
- **ERROR** – When an error occurred during processing.

Each archive has its own configuration and can behave differently. Some of the settings are:

- Archive path
- Forward the envelope to another mail account
- Send an acknowledgment
- Delete the remote file
- Move the remote file

Installation

This topic explains how to install ePortal 1.0.3.

System requirements

ePortal 1.0.3 requires the following:

- eFLOW 4.5 SP6 or higher
- A Microsoft SQL database
- .NET 3.5 or higher
- Per ePortal instance an **eInvoicePortalPDF** license. See the eFLOW documentation for information on installing licenses.

Installation procedure

1. Download the installation file from the ePortal folder on the TIS FTP site <https://ftp.tis.co.il/>.

There is one MSI file for each version: 4.5, 5.1 and 5.2. Choose the specific release and the appropriate folder for your eFLOW version.

2. Run the MSI file. We recommend selecting the **Complete** installation option in the installation wizard. If you want to install to a specific folder, select the **Custom** installation option instead.

Select the server and database on which to install ePortal, as well as the authentication mode. You can also leave these fields blank and install the database manually using the *00_run_scripts.bat* file (see step 3).

If you did not change the default installation path, a new folder *ePortal5* is available in the *C:\Program Files (x86)\TIS* folder. This folder contains all files required to complete the installation, including custom code samples, a testing CAB, scripts to create the ePortal SQL database, and documentation.

The remaining files (executables and all relevant DLLs) are copied to the *Bin* folder.

3. Create the ePortal database:

Note: This step is only necessary if you do not select a server and database in the installation wizard.

- a. In the folder *...\TIS\ePortal5\DBScripts*, edit the file *00_run_scripts.bat* to correspond to your SQL server settings.

Depending on the operating system you are using, you may encounter some permissions issues. To resolve these issues:

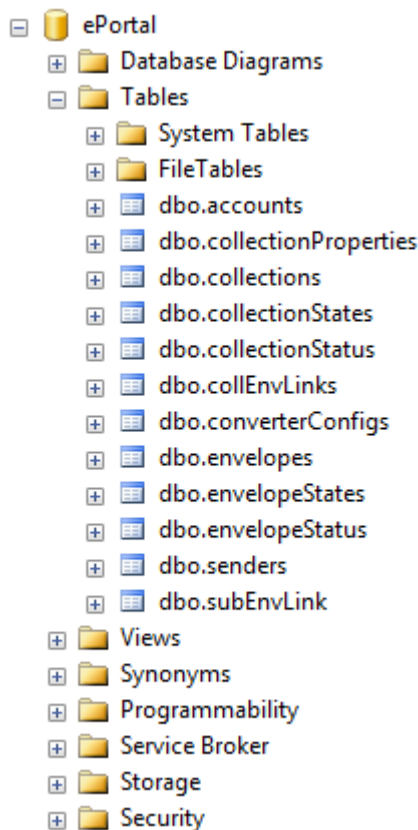
- Give the installing user the appropriate permissions, or copy the *DBScripts* folder to another location and run it from there.

- Set a specific location for the scripts. For example, if you copied the script files to the `c:\temp` folder, for each script, add the path `C:\temp\DBScripts\10_CreateDB.sql`. For example:

```
set UNAME=sa
set PASSWD=sa
set SQLINSTANCE=EFLOW
set SERVER=.

sqlcmd -U %UNAME% -P %PASSWD% -S %SERVER%\%SQLINSTANCE% -i C:\temp\DBScripts\10_CreateDB.sql
sqlcmd -U %UNAME% -P %PASSWD% -S %SERVER%\%SQLINSTANCE% -i C:\temp\DBScripts\20_CreateTables.sql
```

- Run as administrator the file `00_run_scripts.bat`. A new database **ePortal** should be available on the SQL server specified in the file.



- Use the eFLOW Administrate module to install the demo cab `... \TIS\ ePortal5\Cab\SimpleDemoEPortal_EFLOW5.cab`.
- To add an ePortal station to an existing application, in the Design module, add a simple auto station and add the following events:
 - **On Login Events:** `TiS.Import.ePortal.ePortalStation:ePortalStation:OnLogin`
 - **OnPreGetCollection:** `TiS.Import.ePortal.ePortalStation:ePortalStation:OnPreGetCollections`

See the *Design User Guide* for information on adding events.

6. If you added an ePortal station to your application, copy the *ePortal.AppConfig* file from the *SimpleDemoEPortal_EFLOW5.cab* in the *ePortal5* folder to the Setup folder of your application. To access the *ePortal.AppConfig* file, change the .cab file extension to .zip.
7. Configure the *ePortal.AppConfig* file in the *Setup* folder of the application.

The example below shows how to set up a Gmail account using POP3 connectivity. See the ePortal Setup Configuration Guide for detailed information on configuration.

- a. In the *ePortal.AppConfig* file, check that the connection string node and user name and password are correct.

```
<ConnectionString Value="DATA SOURCE=<Your server name>EFLOW;INITIAL CATALOG=ePortal">
  <UserName>sa</UserName>
  <Password>sa</Password>
```

- b. In the <Stations><ActiveAccounts> section, change the <ActiveAccount Id="account1gmailPop3SSL " Enabled="true" /> parameter to the active account you would like to use.
- c. In the <Sections><MailAccounts> section, add the mail account from the previous section. For example:

```
<MailAccount Id="account1gmailPop3SSL" DisplayName="My Gmail POP SSL=YES profile"
  Host="pop.googlemail.com" Port="995" SSL="true" IgnoreCertificateErrors="false"
  UserName="YourEnCryptedLogin" Password="YourEnCryptedPassword" Protocol="POP3">
```

- d. You can now send an email to the email account and process an image with one of the SimpleDemoEPortal_EFLOW5 stations eportal1 or eportal2.

Upgrade instructions

1. Uninstall the existing ePortal using Windows **Add or Remove Programs**.
2. Install the new ePortal (see the [Installation procedure](#)).
3. To update SQL scripts from the previous versions to the new version, run each of the scripts in the appropriate order. The scripts can be found in the folder ... \TIS\ ePortal5\ DBScripts.

Note: If you specify the server and database in the installation wizard, you do not need to update the SQL scripts manually. The wizard updates the scripts and the ePortal database automatically, preserving existing data.

4. The older configuration files *ePortal.xml* (eFLOW 4.5) and *ePortal.AppConfig* (eFLOW 5) are still supported. However, to support new features, the new settings must be added manually to the file or replaced with the latest configuration.

Configuration

You configure ePortal using the *ePortal.AppConfig* file located in the setup folder of the eFLOW application:

C:\ProgramData\TIS\eFlow 5\AppData\Server\<APP NAME>\Setup.

Configuration file

```
<?xml version="1.0" encoding="utf-8"?>
<Configuration xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <DefaultStation>Default</DefaultStation>
  <DefaultSection>Default</DefaultSection>
  <ConnectionString Value="DATA SOURCE=.\EFLOW;INITIAL CATALOG=ePortal">
    <UserName>5B4C62489605D01B</UserName>
    <Password>5B4C62489605D01B</Password>
  </ConnectionString>
  <Features> ... </Features>
  <Stations> ... </Stations>
  <Sections> ... </Sections>
</Configuration>
```

Connection String

The *<ConnectionString>* section is used to connect to the ePortal database.

```
<ConnectionString Value="DATA SOURCE=.\EFLOW;INITIAL CATALOG=ePortal">
  <UserName>sa</UserName>
  <Password>sa</Password>
</ConnectionString>
```

Features

The *<Features>* section contains the configuration for Filtering, Conversion, Collection Creation, and Archiving of images.

```
<Features>
  <Filtering> ... </Filtering>
  <Conversion> ... </Conversion>
  <CollectionCreation> ... </CollectionCreation>
  <Archives> ... </Archives>
</Features>
```

Stations

The *<Stations>* section contains the configuration of the connectors to each ePortal station, such as IMAP, POP3, EWS, EML, or FILE.

The configuration contains a node defining the default station, followed by nodes for specific stations. If a station-specific configuration is defined, that configuration is used. If no station-specific configuration is found, the default station configuration is used.

```

<DefaultStation>ABC</DefaultStation>
<Stations>
  <Station Name="ABC">
    <...>
  </Station>
  <Station Name="DEF">
    <...>
  </Station>
</Stations>

```

In the example above:

- For an ePortal station named **ABC**, the `<Station Name="ABC">` configuration is used.
- For an ePortal station named **DEF**, the `<Station Name="DEF">` configuration is used.
- For an ePortal station named **XYZ**, the default `<DefaultStation>` configuration is used.

Station properties

```

<Station Name="YourStationName">
<QueryWF Enabled="false" />
<MaxWorkUnit Value="10" />
<Acknowledgement Enabled="true" />
<UpdatePriority Enabled="true" />
<ActiveAccounts>
<ActiveAccount Id="account2gmailIMAPSSL" Enabled="true" />
<ActiveAccount Id="YourSMTPAccount" Enabled="true" />
</ActiveAccounts>
</Station>

```

Property	Description
QueryWF	Check in the eFLOW database whether the collection was created correctly.
MaxWorkUnit	Number of emails/files to process per eBatch.
Acknowledgement	Enable acknowledgment emails. You must also activate acknowledgment in the archive configuration.
UpdatePriority	Set the eFLOW collection priority according to the email priority, such as High importance or Low importance .
ActiveAccount	ID of an account defined in the <code><Sections></code> section.

Sections

The `<Sections>` section defines the specific working folder and the mail accounts used by an ePortal station when processing on a specific server.

For example, for a specific server, you can define a `<QA>` section and a `<Production>` section.

The section that is used by default is defined in the `<DefaultSection>`.

```
<DefaultSection>Default</DefaultSection>
```

Example:

```
<Sections>
  <Section Name="Default">
    <WorkDir>C:\Temp\Portal</WorkDir>
    <MachineNames>
      <MachineName>NAME_OF_CLIENT1</MachineName>
      <MachineName>NAME_OF_CLIENT2</MachineName>
    </MachineNames>
    <MailAccounts>
      <MailAccount Id="account1gmailPop3SSL">
        ...
```

Section properties

Property name	Description
WorkDir	Defines the path to the folder in which temporary files are created before being imported into eFLOW.
MachineNames	Can be empty, or set to a specific server name to use the same account with different configurations, such as a test configuration and a production configuration.
MailAccounts	List of accounts used by the ePortal connector to import emails or files into eFLOW. See Connectors for more information.

Backward compatibility of configuration files

The older configuration files *ePortal.xml* (eFLOW 4.5) and *ePortal.AppConfig* (eFLOW 5) are still supported. However, to support new features, the new settings must be added manually to the file or replaced with the latest configuration.

When you install a new version of ePortal, the ePortal engine checks the configuration file version to decide whether updates are needed. The configuration file is updated with default values.

Connectors

ePortal provides the following connectors. ePortal uses connectors to retrieve data from remote servers, such as email servers.

POP3 Connector

The POP3 Connector retrieves a batch of emails from a POP3 server.

The emails are parsed by the envelope (MessageHandler).

Each envelope has a unique ID on the POP3 server that enables the connector to retrieve it.

The POP3 Connector can only read or delete emails.

Once all emails in the batch are parsed, the connector returns an eBatch that can be processed by each ePortal stage.

Unsynchronized mode

Unsynchronized mode checks the mailbox for unread messages, and deletes the emails in the mailbox after they have been imported into the eFLOW workflow.

Synchronized mode

Synchronized mode first synchronizes the ePortal database with the POP3 server and then checks the database for unread messages. Synchronized mode does not delete the emails from the mailbox after they have been imported.

Configuration

```
<MailAccount Id="account1gmailPop3SSL" DisplayName="My Gmail POP SSL=YES profile" Host-  
t="pop.googlemail.com" Port="995" SSL="true" UserName="XXXXXX" Password="XXXXX" Protocol="POP3">
```

IMAP Connector

The IMAP Connector retrieves a batch of emails from an email server using the IMAP protocol.

With the IMAP protocol it is possible to set a message as read, delete it or move it.

Unsynchronized mode

Depending on the archive configuration, unsynchronized mode deletes, moves or sets as read the emails in the mailbox after they have been imported into the eFLOW workflow.

By default, ePortal sets imported files as READ, so when ePortal retrieves emails with the IMAP filter UNSEEN, it will import only new emails.

Synchronized mode

Not required for the IMAP protocol.

Encoding

ePortal supports the following character sets:

- ASCII
- UTF-7
- UTF-8 for:
 - BigEndianUnicode

- Unicode
- UTF-32.

You can add the values to the configuration file in the connector *<MailEncoding>* section.

IMAP Folder

By default, emails are retrieved from the *Inbox* folder, but you can use any other folder.

You can also move emails to another IMAP folder during the Archiving stage.

Filter

By default the filter is set to UNSEEN, which means that the connector only retrieves unread emails. You can use any IMAP search key to specify which emails should be retrieved. For example:

Purpose	Search key
Get all emails with either "INVOICE" or "IMPORTANT" in the subject.	OR (SUBJECT \ "INVOICE\") (SUBJECT \ "IMPORTANT\")
Get all emails since 8 th August 2015	SINCE \ "8-Aug-2015\ "
Get all unread emails	UNSEEN
Get all emails that were not answered	NOT ANSWERED
Get all unread emails with size > 10 KB	UNSEEN LARGER 10200

Configuration

```
<MailAccount Id="account2gmailIMAPSSL" DisplayName="My Gmail IMAP SSL=YES profile" Host-
t="imap.googlemail.com" Port="993" SSL="true" UserName="XXXX" Password="XXXX" Protocol="IMAP">
  <Folders>
  <Folder>INBOX</Folder>
  </Folders>
  <Filter>UNSEEN</Filter>
</MailAccount>
```

EWS Connector

The EWS Connector retrieves a batch of emails from a Microsoft Exchange Server or Office 365 using the EWS (Exchange Web Services) protocol. After all emails from the batch are parsed, the connector returns an eBatch that can be processed by each ePortal stage.

About EWS

EWS - Exchange Web Services - provides the functionality to enable client applications to communicate with a Microsoft Exchange server. EWS provides access to the same data that is available through Microsoft Office Outlook. EWS clients can integrate Outlook data into Line-of-Business (LOB) applications. SOAP provides the messaging framework for messages sent between the client application and the Exchange server. The SOAP messages are sent by HTTP on port 443.

Unsynchronized mode

Depending on the archive configuration, the emails in the mailbox are deleted, moved, or set as read after the eDocs are imported into the eFLOW workflow.

By default, ePortal sets imported files as READ, so when ePortal retrieves emails with the EWS filter `IsRead=false`, it will only import new emails.

Synchronized mode

Not implemented.

Exchange server version

The EWS protocol depends on the EXCHANGE server and must be specified in the configuration file.

ePortal supports the following Exchange versions:

- Exchange2013
- Exchange2010_SP2
- Exchange2010_SP1
- Exchange2010
- Exchange2007_SP1

Connect without credentials

To connect to the Exchange server with the same account while ePortal is running, in the `<MailAccounts>` section of the `ePortal.AppConfig` file:

- Leave **UserName** empty
- Set the password to **Use Default/Domain Credentials**

Impersonation

The EWS Connector supports impersonation. Impersonation enables an account on an Exchange server to perform actions using the permissions that are associated with another account.

It may be necessary to connect to different email accounts with the same user. The only way to achieve this is to use impersonation.

Configuration

```
<MailAccount Id="EWSAccount_Read" DisplayName="Exchange connector" Host="db3pr07.outlook.com"
Port="0" SSL="true" UserName="HRTPL@HRTPLTEST.onmicrosoft.com" Password="*****"
Protocol="EWSi">
  <Folders>
    <Folder>INBOX</Folder>
  </Folders>
  <Filter>IsRead=false</Filter>
  <ExchangeVersion>Exchange2010_SP1</ExchangeVersion>
  <Impersonate Enabled="false" UserName="" Domain="" Password=""
Description="To execute the connector with another user account"/>
</MailAccount>
```

File Connector

The File Connector retrieves files from a local file system.

In general, you should use eFLOW Collect stations rather than the File Connector to import files unless you need conversions that the eFLOW core stations do not support.

Unsynchronized mode

Unsynchronized mode checks for available files in the import folder.

By default, when file are imported, ePortal does not delete them.

To delete or move the original files, in the *<Archives>* section, set *<DeleteOnRemote Enabled="true">* for each archive.

If you set the Move option in the Archives configuration, the files are moved to a backup folder after they are imported. This backup folder is a relative path of the import folder.

Configuration

```
<MailAccount Id="fileImport" DisplayName="FileImport" Host="C" Port="0" SSL="false" UserName="" Password=""-
Protocol="FILE">
  <Folders>
    <Folder>C:\Temp</Folder>
  </Folders>
  <Filter>*.pdf</Filter>
</MailAccount>
```

EML Connector

The EML Connector imports EML files from a specific folder.

The EML files are parsed to retrieve the attachment files and create the eDoc.

The ID of the envelope is updated in the database and has the same name as the EML file.

After all emails from the batch have been parsed, the connector returns an eBatch object which can be processed by all ePortal stages.

Unsynchronized mode

Unsynchronized mode checks for available files in the import folder.

By default, after files are imported, ePortal does not delete them.

To delete or move the original files, in the <Archives> section, set <DeleteOnRemote Enabled="true"> for each archive.

If you set the Move option in the Archives configuration, the files are moved to a backup folder after they are imported. This backup folder is a relative path of the import folder.

Configuration

```
<MailAccount Id="EmIImportFolder" DisplayName="EML import
folder" Host="" Port="0" SSL="false" UserName="" Password="" Protocol="EML">
  <Folders>
    <Folder>C:\ePortal\IMPORT</Folder>
  </Folders>
  <Filter></Filter>
</MailAccount>
```

Archive Connector

The Archive Connector reads EML files from the archive folder. It is used to re-process emails and recreate collections that were archived as an .eml file.

The difference between the EML Connector and the Archive Connector is that the Archive Connector uses the EML file name to retrieve it from the ePortal database using:

- The original user tags **SourceID**, **Source**, **ImportSetId** and **ImportSetName**
- The original collection name

Thus the name of the .eml file is the envelope ID which is used in the reporting database.

Configuration

```
<MailAccount Id="EmIImportArchive" DisplayName="Import Archive
folder" Host="" Port="0" Ssl="false" UserName="" Password="" Protocol="EML_ARCHIVE">
  <Folders>
    <Folder>C:\ePortal\ARCHIVE\IMPORT</Folder>
  </Folders>
  <Filter></Filter>
</MailAccount>
```

Filtering

The purpose of the ePortal filters is to:

1. Classify the eDoc of the envelope as:
 - AcceptedDoc
 - AttachedDoc (DocAttachment)

- AttachedFile (FileAttachment)
 - RejectedFile
2. Link AttachedDocs (DocAttachment) and AttachedFiles (FileAttachment) to their main AcceptedDoc.

Filtering process

The eDocs are filtered in the following order:

1. The ePortal filter decides whether the eDoc should be accepted.
2. If the eDoc is not accepted, the filter tries to identify it as a DocAttachment.
3. If the file cannot be identified as a DocAttachment, the filter tries to identify it as a FileAttachment.
4. If the eDoc could not be classified, it is rejected.

eDocs are filtered according to:

- A regular expression on the full name (name + extension)
- Size in bytes

AcceptedDoc

The AcceptedDoc is the main file that is processed by eFLOW, such as an invoice.

```
<Accepted Description="List of files that will be imported">
<RegularExpression Enabled="true" Value="^{invoiceGUID}((?!_ATTACH).)*\.(tif|tiff|pdf)$"/>
<MinSize Enabled="false" Value="" />
<MaxSize Enabled="false" Value="" />
</Accepted>
```

AttachedDoc or DocAttachment

The AttachedDoc is the image to be merged with the accepted eDoc as an eFLOW page attachment.

```
<DocAttachment description="List of files that will be attached to the collection as is">
<RegularExpression Enabled="true" Value="^{invoiceGUID}.*_ATTACH.*\.(tif|tiff|pdf)$"/>
<MinSize Enabled="false" Value="" />
<MaxSize Enabled="false" Value="" />
</DocAttachment>
```

AttachedFile or FileAttachment

The AttachedFile is the file to be attached to the eFLOW collection as an eFLOW file attachment. The file is not merged with the collection. For example, you want to save an XML file so that it can be exported by an export station, or used in another station.

```
<FileAttachment Description="List of files that will be attached to the collection as is">
<RegularExpression Enabled="true" Value="^(.png)$"/>
<MinSize Enabled="false" Value="" />
<MaxSize Enabled="false" Value="" />
</FileAttachment>
```

RejectedFile

Rejected files are deleted. Typically these are images with signatures (PNG files).

Linking AcceptedDoc

The file name of AcceptedDoc and AttachedDoc or AttachedFile must have a common name, which can be defined using the group name of the regular expression.

To make this more readable in the configuration file, `< and >` must be replaced by `{ and }`.

For example, *Invoice1.PDF*, *Invoice1_ATTACH.PDF* and *Invoice2_ATTACH.PDF* can be linked together with the following regular expression:

```
AcceptedDoc      ^(?:{invoiceGUID}(!_ATTACH).)*\.(tif|tiff|pdf)$
AttachedDoc      (?:{invoiceGUID}.*)_ATTACH.*\.(tif|tiff|pdf)$
```

There can be more than one group name. ePortal checks every group name and if both regular expressions have the group name, they are compared.

Conversion

As electronic document providers or email servers can import a wide variety of document types into the system, conversion to files and formats that eFLOW can process is a critical step in the ePortal process.

There are many third party tools and libraries that allow you to convert from one document type to another. TIS also has its own internal convertor to perform such tasks.

To offer as much flexibility as possible, the integration of converters into ePortal is done through a plug-ins model.

Available converters

Currently the following convertors are available:

- TIS internal (default)
- Aspose (TIF, TIFF, JPG, JPEG, BMP, GIF, PNG, PDF, DOC, DOCX, DOCM, DOT, DOTX, HTML, HTM, XHTML, MHT, MHTML, ODT, RTF, TXT, XML, XLS, XLTX, XLSX, XLTM, XLSM, ODS, CSV, PPS, PPT, POT, ODP, PPSX, POTX, PPTX File. The list is constantly being updated.)
- Winnovative (html, htm, mht)
- PRD – PDFtools (searchable PDF)

Configuration

When multiple converters are enabled, ePortal first checks for a suitable converter for the specific file. If two converters can convert the same file extension, the first one in the list is chosen.

```
<Conversion Description="Use to convert pdf, jpg, tif images to tif CCITT4 with the appropriate resolution">
  <ConverterPlugins Description="List of available dlls that can convert images">
    <ConverterPlugin Name="BasicConverter" Enabled="true" AssemblyName="TiS.Import.ePortal.Converter.Basic,
Version=0.0.3.0, Culture=neutral" />

    <ConverterPlugin Name="NeeviaConverter" Enabled="false" AssemblyName="TiS.Import.ePortal.Converter.Nee-
via, Version=0.0.3.0, Culture=neutral" />

    <ConverterPlugin Name="AsposeConverter" Enabled="false" AssemblyName="TiS.Import.ePortal.Converter.Asp-
ose, Version=0.0.3.0, Culture=neutral" />
    <ConverterPlugin Name="PRDConverter" Enabled="false" AssemblyName="TiS.Import.ePortal.Converter.PRD,
Version=0.0.3.0, Culture=neutral" />
  </ConverterPlugins>
  <Resolution>300</Resolution>
  <BinarizeThreshold>128</BinarizeThreshold>
  <GenerateJPG>>false</GenerateJPG>
</Conversion>
```

Collection Creation

Collection Creation controls how emails are imported into eFLOW from ePortal.

The following options are possible:

- One collection per attachment
- One collection per email - all attachments are merged to create a single TIF file
- The email body can be added at the beginning or at the end of the collection.
- Some pages can be set as eFLOW attachments, which means they will not be processed by the OCR engines.
- The original email attachments can be attached to the collection so that they can be exported.

Configuration

```
<CollectionCreation Description="Use to merge images before to be imported"/>
<Email>
  <MergeImages Enabled="false" description="merge all images of the email"/>
  <MergeBody Enabled="true" Description="merge the body with the image"/>
  <BodyFirst Enabled="false" Description="if false the body will be the last image"/>
  <PageAttachment Description="set page as eFlow attachment"/>
  <Body Enabled="true"/>
  <Images Enabled="false"/>
</PageAttachment>
<TextFilter Enabled="false" Value=""/>
<TxtConverter Enabled="true" Description="2 solutions: HTML with XSLT or TXT (quicker)">
  <From Caption="From:" />
  <To Caption="To:" />
  <Subject Caption="Subject:" />
  <Date Caption="Sent:" FormatString="MMMM dd, yyyy"/>
</TxtConverter>
</MergeBody>
</Email>
<FileAttachment Description="Attached the original file to the collection"/>
<OriginalFiles Enabled="false"/>
</FileAttachment>
</CollectionCreation>
```

Acknowledgment

The Acknowledgment feature allows you to send an email to the sender to inform them that their files have been processed.

The acknowledgement email is sent after the imported email is archived. You must configure acknowledgement for each archive: SUCCESS, REJECT, ERROR.

Configuration

1. Set up an SMTP account:

```
<MailAccount Id="account1gmailSMTP" DisplayName="My Gmail Smtп SSL=NO
profile" Host="smtp.googlemail.com" Port="587" SSL="true" UserName="xxx"
Password="xxx" Protocol="SMTP">
</MailAccount>
```

2. Enable *<Acknowledgement>* in the *<Stations>* section:

```
<Acknowledgement Enabled="true" />
```

You can exclude specific stations from sending acknowledgement emails to the sender.


```

<Station Name="Default">
  <QueryWF Enabled="false" />
  <MaxWorkUnit Value="10" />
  <Acknowledgement Enabled="false" />
  <UpdatePriority Enabled="true" />
  <ActiveAccounts>
    <ActiveAccount Id="account1gmailPop3SSL" Enabled="true" />
    <ActiveAccount Id="account1gmailSMTP" Enabled="true" />
  </ActiveAccounts>
</Station>

```

3. Enable `<Acknowledgement>` in the `<Archives>` section:

```

<Acknowledgement Enabled="true" Description="Send an Email to the sender of the rejected email ">
  <Subject>Rejected doc: {SUBJECT:30}</Subject>
  <Body>The electronic document you submitted: "{SUBJECT}" was rejected. \nIt can be tracked down in our
system under the reference number:\n {GUID}\n\nYou may contact the system administrator for more details
at:\n Support_eportal@bigcorp.com </Body>
  <BodyHtml Enabled="false" FileName="%EPORTAL%\
Template\Reject_Acknowledgment.html" Description=""/>
  <From>
  <MailBox Address="reject@eportal.com" />
</From>
</Acknowledgement>

```

Acknowledgement templates

You can use HTML templates for the acknowledgement emails. ePortal provides default templates in the `C:\Program Files (x86)\TIS\ePortal\Template\` folder.

- If `<BodyHtml Enabled="false">`, ePortal uses the text from the parameter `<Body>` to create the body text of the email.
- If `<BodyHtml Enabled="true">`, ePortal uses an HTML template to create the body.

You can add variables to the email message. The file `C:\Program Files (x86)\TIS\ePortal\Template\AvailableTags.html` lists the variables you can use.

`%EPORTAL%` is replaced with the content of the environment variable created with the MSI.

Acknowledgement of email attachments

The acknowledgment mail can inform the sender which files were accepted and which were rejected. You can integrate this in the acknowledgement email as a simple HTML list:

```

<ul> <li>File 1 - collectionName1</li> <li>File 2 - collectionName2</li></ul>

```

You can include the eDoc properties `{FileName}` `{CollectionName}` `{State}` `{Note}` as well as custom eDoc properties.

To add a variable to the template, use the following syntax:

```
{Envelop_variable:"Text with eDoc variable"}
```

For example:

```
{IMPORTSET:"{FileName} {CollectionName}"}
```

```
{IMPORTSET:"{FileName}"}
```

```
{IMPORTSET:"the collection {CollectionName} was created with the email attachment {FileName}"}
```

Example of email sent:

List of attachments* DOC1.tif 00001427_1_EU00000502

List of rejected attachments* template.xlsx : The image must be tif, pdf or JPG.

To list	Use variable
Imported files	{IMPORT_SET}
Rejected files	{REJECT_SET}
Merged files	{ATTACHED_DOC_SET}
Collection attachments	{ATTACHED_FILE_SET}