

# Document Flow Manager

SYSPRO 8

Reference Guide

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# Document Flow Manager

## Exploring

### Where it fits in?

SYSPRO's **Document Flow Manager** facilitates collaborative commerce by providing a means of automating document processing from within or outside the organization. These can be incoming and outgoing documents, such as sales orders, purchase orders, etc.



When using the **Document Flow Manager**, you are licensed to use all business objects via the DFM.

The **Document Flow Manager** uses two services:

- **SYSPRO 8 Document Flow Manager Folder Poller**  
This service monitors specified folders and uses the contract details to determine if the files in the folders should be sent to the DFM queue.
- **SYSPRO 8 Document Flow Manager Queue Poller**  
This service monitors and processes files in the DFM queue.

## Terminology

### DFM Contract

A contract defines the folders which **Document Flow Manager** must monitor, the type of document to look for, what to do with the document once it's located, which business object to call, and what to do with the response from the business object (e.g. transform the document using XSLT before and/or after processing by the business object).

# Starting

## Prerequisites

- You must be licensed to use **Document Flow Manager**.

Ensure that the same `license.xml` file that was imported to install DFM under the core product, is imported for e.net Solutions.

- The **Document Flow Manager** services must be running:
  - SYSPRO 8 Document Flow Manager Folder Poller
  - SYSPRO 8 Document Flow Manager Queue Poller

These services are installed using the **SYSPRO Installer**.

# Solving

## Error messages

### Document Flow Manager Executable error

#### Synopsis

The DFM services abort with messages indicating that the *Document Flow Manager* executable encountered a problem and needs to close.

#### Cause

This is typically as a result of the **SYSPRO 8 Document Flow Manager Folder Poller** or **SYSPRO 8 Document Flow Manager Queue Poller** services starting before the SQL service has finished loading.

In a SQL server environment the SQL service must be running before the *Document Flow Manager* services are started.

#### Solution

You need to add MSSQL to the **DependOnService** list in the registry for all DFM services. This will force the SQL service to finish loading before the *Document Flow Manager* services start.

1. Open the **Registry Editor** (*Start > Run*).
2. Navigate to the folder containing the local machine system services (*HKEY\_LOCAL\_MACHINE > SYSTEM > CurrentControlSet > Services*).
3. Locate the DFM service and add a new **Multi-String Value** to the data pane.
  - a. Right-click the pane and select **New**.
  - b. Enter **DependOnService** at the **Value name** field.
  - c. Right-click the **DependOnService** entry and select **Modify**.
  - d. Enter **MSSQL** at the **Value data** field.
  - e. Select **OK**.
4. Exit the **Registry Editor**.

## Warning messages

### Spurious failures during document processing

#### Synopsis

Although *Document Flow Manager* doesn't typically try to retrieve a file until processing is complete, it can happen that an incomplete file is retrieved and an attempt is made to process the file.

Usually, even if you placed a large file in a folder that is being polled, *Document Flow Manager* won't try to retrieve the file because the operating system retains a lock on the file until the writing process is finished.

However, if a large file is transmitted to a folder that is being polled using infrared (e.g. in a demonstration environment) it is possible that the first part of the file is retrieved and an attempt is made to process it before the document is completely written to the folder.

#### Cause

This occurs because infrared writes the file in pieces and the lock is removed from the file after writing each piece. The lock is reapplied when the next part of the document arrives. If the folder is polled during the time that the lock is released (but before the file is complete) then the file is retrieved and an attempt is made to process it.

Similarly, it is possible that a file which is being written to by a third-party application incrementally, is retrieved in a partial state if the lock is released by the application. An attempt will be made to process this partial document.

#### Solution

We recommend that you build the file in a folder that is not being polled by *Document Flow Manager* and then move the completed file to the polled folder.

## FAQs

### General

#### Why do XML documents need to be transformed?

Incoming and outgoing files that aren't in the required format must be transformed using XSLT.

You can define the transformation detail at the **Transform XML document** section of the **DFM Setup** program.

You can specify the XSLT file that must be used to transform the file before it passes to the business object.

You can also specify that the outgoing file from the business object must be transformed before it is saved to the **Outgoing** folder.

### DFM Services

#### Where should the DFM folder poller service be installed?

The **SYSPRO 8 Document Flow Manager Folder Poller** service can be installed on any server(s) and/or machine(s).

The service communicates to the queues using the **SYSPRO 8 e.net Communications Load Balancer** service and business objects. Therefore, installing on various machines reduces the load on the SYSPRO application server.

In earlier versions (e.g. SYSPRO 7 Update 1) this service could only be installed on the SYSPRO Application server.

#### Why should I install multiple DFM folder poller services?

Installing multiple **SYSPRO 8 Document Flow Manager Folder Poller** services lets you spread the load over multiple servers, ensuring that the polling of folders runs more efficiently.

In earlier versions (e.g. SYSPRO 7 Update 1) you could only install one DFM poller service.

#### Where can I set the polling type for DFM services?

Although the following flags can't be maintained in the **DFM Service Setup** program, you can edit them in the `SYSPRODFMQueuePoller.exe.config` and `SYSPRODFMFolderPoller.exe.config` configuration files:

- ZeroFileSizeDeleteTime
- ConfigPollType (defaults to `ss` - seconds)

- FolderPollType (defaults to `ss` - seconds)
- PollType (defaults to `ss` - seconds)



This will be addressed in a future release.

## Why don't the DFM Services start?

The password held against the operator used to start the services may have changed. This could occur automatically by the operating system, depending on the password policy setup.

### Solution

- Review the password settings defined against the operator who is starting the services.
- Review the message logs within the **Event Viewer**.

## Why don't the DFM Services start on installation?

This is most likely due to an invalid operator/password combination or the operator doesn't have sufficient permission to access the folder contents.

### Solution

Review the message logs within the **Event Viewer**.

## How do I add SQL Server as a dependency for DFM services

The following steps describe how to add SQL Server as a dependency for the **SYSPRO 8 Document Flow Manager Folder Poller** and **SYSPRO 8 Document Flow Manager Queue Poller** services.

This will force SQL Server to finish loading before the services start.

1. Open the **Registry Editor** (*Start > Run*).
2. Navigate to the folder containing the local machine system services (*HKEY\_LOCAL\_MACHINE > SYSTEM > CurrentControlSet > Services*).
3. Locate the DFM service and add a new **Multi-String Value** to the data pane.
  - a. Right-click the pane and select **New**.
  - b. Enter **DependOnService** at the **Value name** field.
  - c. Right-click the **DependOnService** entry and select **Modify**.
  - d. Enter **MSSQLat** at the **Value data** field.

- e. Select **OK**.
4. Exit the **Registry Editor**.

## Where do I define the 'file size delete time' for the DFM folder poller service?

Although you can't currently maintain the `FileSizeDeleteTime` in the **DFM Service Setup** program, you can edit this in the following configuration files:

- `SYSPRODFMQueuePoller.exe.config`
- `SYSPRODFMFolderPoller.exe.config`

## Configuration

### Why are the changes I made not implemented immediately?

Any configuration changes made using the **DFM Service Setup** program only takes effect when next the service polls for a change in configuration information.

This interval can be specified at the **Config Interval** column of the **DFM Service Setup** program.

### How do I configure the processing of XML documents?

You can configure how SYSPRO processes incoming, outgoing and failed XML files using the **XML Document Control** program (*Program List > Business-to-Business Trading*).

The following configuration can be defined:

- Queue type for which you want to keep history.
- Number of days you want to retain historic documents.
- Number of days you want to retain failed documents (actioned and unactioned).
- History path for all documents.
- Destination paths where historic customer and supplier documents are stored.
- Destination path of failed documents.

## Problem Solving

### Where can I find the DFM event log?

The event log is created when DFM is installed. The log is output to the following folder, which you can review for diagnosing any problems you may encounter:

*Control Panel > System and Security Administrative Tools > Event Viewer > Applications and Service Logs*

You can open each entry in the log to view the error or warning details.

The event log is only available if you have selected **Yes** at the **Log required** option in the list view of the **DFM Service Setup** program.

## Why do documents remain in the polling folder?

Likely causes are that the document is not being picked up at all, or is being picked up but the **Document Flow Manager** user doesn't have permission to delete the original document from the folder.

If the document is not being processed, then there are a number of possible causes:

- The contract is configured to poll a different folder.  
Check the relative pathing from which the service is run.  
If the folder is on a remote workstation, ensure that the machine is running and that the SYSPRO application server can see both the machine and the share/mapped drive.
- The file does not match the file type defined against the contract.
- The contract is disabled.
- The **SYSPRO 8 Document Flow Manager Folder Poller** service doesn't have permission to access the folder.
- The file is defined as read-only.  
Review the attributes against the file.
- The **SYSPRO 8 Document Flow Manager Folder Poller** service is not running.

## Why are there no results for documents in the polling folder?

The **SYSPRO 8 Document Flow Manager Queue Poller** service is not running, or the contract is not configured to output the results from the business object.

### Solution

- Review the contract to ensure that it is configured to output the results from the business object and that the correct folder is specified.
- Check that the operating system user who is starting the **SYSPRO 8 e.net Communications Load Balancer** service has been granted write-access to the folder.
- Check that the user for the **SYSPRO 8 e.net Communications Load Balancer** service has been granted write-access to the `Failed` folder.

## Why is the Security tab missing from the folder properties?

This typically occurs on demonstration machines and prevents you from setting folder access permissions.

## Solution

- Ensure that your operating system is supported by *e.net Solutions* and *Document Flow Manager*.
- Review the file system type being used by the operating system.  
FAT or FAT32 file systems don't allow you to set folder permissions, which could explain why the **Security** tab isn't visible.
- Although you can change the file system type using the `convert` command line utility, this should only be done after considering the effects on other applications already running on this machine.

## Why are 3 error messages written to the 'Failed' folder for every failed process?

Error message files are written to the `Failed` folder in triplicate for you establish where the error occurred.

The message file names are the same, except for the last character (e.g. `00000008e.xml`, `00000008s.xml` or `00000008t.xml`):

- Files ending in `e` contain the error message.
- Files ending in `s` contain the original incoming document.
- Files ending in `t` contain the details after transformation.

This allows you to view the actual error message and compare the original incoming document to the transformed document.

# DFM Setup

## Exploring

### Where it fits in?

This program lets you add, configure and delete contracts for the **Document Flow Manager**.

Things you can do in this program include:

- Add new contracts.
- Maintain and delete existing contracts.
- Disable contracts.
- Disable all contracts for a company.
- Configure SMTP settings for email notifications.

### Navigation

- This program is accessed from the **Program List** pane of the SYSPRO menu:  
*Program List > Administration > Document Flow Manager*

# Starting

## Prerequisites

- The **Document Flow Manager** services must be running:
  - SYSPRO 8 Document Flow Manager Folder Poller
  - SYSPRO 8 Document Flow Manager Queue Poller

These services are installed using the **SYSPRO Installer**.

## Other considerations

### Licensing

- Ensure that **e.net Solutions** licensing has been configured for your SYSPRO installation.

This can be established using the **Configure e.net License** function from within the **System Setup** program.



If you are licensed to use **e.net Solutions** then a window is displayed enabling you to apportion licenses to the required operators. Otherwise you will be required to import the `license.xml` file.

- Ensure that your SYSPRO installation is licensed to use **e.net System Manager** and the **Document Flow Manager**

**Document Flow Manager** is typically licensed by the number of concurrent SYSPRO users.

The license includes DFM access to any business object. If you're only going to use business objects from DFM, then you only need to license the **e.net System Manager** and **Document Flow Manager**.



This doesn't mean that you can merely license the **e.net System Manager** and **Document Flow Manager** and access all the business objects from your own custom development, or from the **Web-based Applications**. These would still need to be licensed in the normal way.

## Encoding considerations

- Under MSXML 3.0, the default encoding message written out to a new XML file is UTF-16 even if the file is in UTF-8 format.

Although it doesn't appear possible to write out a UTF-8 encoding message, you can prevent an encoding message from being written out by changing the `xsl:output8` section to include `omit-xml-declaration="yes"` in your XSL file.

### FOR EXAMPLE:

If you already had the entry:

```
<xsl:output method="xml"
encoding="UTF-8" version="1.0" indent="yes" />
```

then you could resolve the problem by changing it to:

```
<xsl:output method="xml" omit-xml-declaration="yes"
encoding="UTF-8" version="1.0" indent="yes" />
```

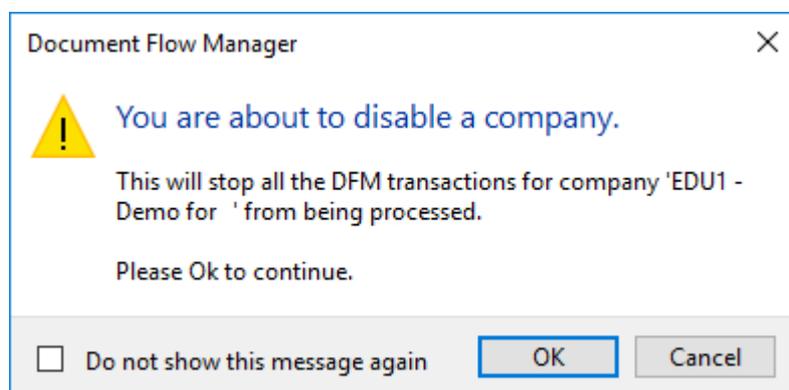
## Restrictions and Limits

- If the **Document Flow Manager** is required to poll a folder on another machine on the network (not a mapped drive environment) then the DFM services user must have permission to access that folder (i.e. read and write).
- Although **Document Flow Manager** can process contracts for any company id (regardless of the company used to create the service) a contract created within one SYSPRO company is, however, specific to that company. All companies with active contracts must be licensed to use the DFM. If you have more than one SYSPRO company and is licensed to use **Document Flow Manager**, you must import the `license.xml` file for each company.

# Solving

## Warning messages

### You are about to disable a company



### Synopsis

This warning message is displayed if you selected the **Company disabled** option from the **DFM Setup** program toolbar.

### Solution

You can disable all contracts for the selected company by clicking **OK** or keep the contracts enabled by clicking **Cancel**.

## FAQs

### Configuration

#### How do I configure the processing of XML documents?

You can configure how SYSPRO processes incoming, outgoing and failed XML files using the **XML Document Control** program (*Program List > Business-to-Business Trading*).

The following configuration can be defined:

- Queue type for which you want to keep history.
- Number of days you want to retain historic documents.
- Number of days you want to retain failed documents (actioned and unactioned).
- History path for all documents.
- Destination paths where historic customer and supplier documents are stored.
- Destination path of failed documents.

## General

### Why do XML documents need to be transformed?

Incoming and outgoing files that aren't in the required format must be transformed using XSLT.

You can define the transformation detail at the **Transform XML document** section of the **DFM Setup** program.

You can specify the XSLT file that must be used to transform the file before it passes to the business object.

You can also specify that the outgoing file from the business object must be transformed before it is saved to the **Outgoing** folder.

### How do I query XML documents?

1. Open the the **XML Document Control** program.
2. Select the type of document, operator and date range for which you want to conduct a search.
3. Select **Start Processing** to start the search process.

Depending on your selections, a list of documents is displayed in the list view.

# Using

## Hints and Tips

- Create the DFM folder structure before adding new contracts.
- Columns in a list view are sometimes hidden by default. You can reinstate them using the **Field Chooser** option from the context-sensitive menu (displayed by right-clicking a header column header in the list view). Select and drag the required column onto the list view.
- Press `CTRL+F1` within a list view or form to view a complete list of functions available.

# Referencing

## Menu and Toolbar

Field	Description
<b>File</b>	
Exit	This exits the program.
<b>Edit</b>	
Add	This adds a new data record. The <b>Add New Contract</b> wizard is displayed and takes you through the steps to create a new contract.
Change	This lets you change details for the highlighted data record.
Delete	This deletes the data record currently displayed.
<b>View</b>	
SMTP Options Setup	This configures the SYSPRO settings required for <i>Document Flow Manager</i> .
<b>Display</b>	
Structured view	Select this to view a list of contracts in a treeview style. The list is sorted by: <ul style="list-style-type: none"> <li>▪ Company</li> <li>▪ Business object class</li> <li>▪ Method name</li> <li>▪ Invoked business object</li> </ul>
Flat view	Select this to view a list of contracts in a list view style.
<b>Refresh view</b>	This refreshes the list of contracts in the <b>Documents</b> pane.
<b>Company disabled</b>	This disables the DFM functionality for the company, which stops all DFM transactions from being processed.

## Documents

Column	Description
Documents	This indicates the document name. In <b>Structured view</b> mode, the company, business object class, method name and invoked business object is also displayed.
Program	This indicates the business object that is invoked.
Enable/Disable contracts	This lets you enable or disable a contract.
Contract disabled	This indicates whether the contract is disabled.
Company disabled	This indicates whether the company is disabled.  <div data-bbox="598 808 647 873" data-label="Image"> </div> <p>When a company is enabled or disabled, all contracts for that company are automatically enabled or disabled.</p>
Operator	This displays the operator code of the operator saved against the DFM contract.
Folder to poll	This displays the folder that is polled for documents.

## Document Flow Manager Control Setup

This is displayed when you select the **SMTP Options Setup** from the **View** menu.

Fields in the wizard may be pre-populated depending on the e.net business object class.

Field	Description
User company settings	Tick the <b>User company SMTP details</b> field if you want to enforce the company SMTP details.
SMTP server IP address	Enter the IP address of the SMTP server from which you want to forward outgoing email.  This only applies if you selected to send response emails on the contract.
Default Email address	This is the default email address to which messages are sent.  This email address is used when a contract stipulates that an email should be sent, but no email address has been specified on the contract.  This address is used if emails are being sent from an SMTP server. Alternatively, you can use this address to identify the smart host through which all outgoing messages for remote domains must be routed (instead of sending them directly to the domain).  This allows messages to be routed over a connection that may be more direct or less costly than other routes.  Enclose the IP address in brackets [ ] to increase system performance. The brackets identify the value as an IP address and because Microsoft SMTP service checks for a name before checking for an IP address, the DNS look-up is bypassed.  The smart host is similar to the route domain option for remote domains. The difference is that once a smart host is designated, all outgoing messages are routed to that server. With a route domain, only messages for the remote domain are routed to a specific server. If a smart host has been configured, then you can still designate a different route for a remote domain. The route domain setting overrides the smart host setting.
Username	Enter the domain username (used to authenticate the SMTP server).
Password	Enter the password for the domain username.
Server port	Enter the SMTP server port.

## Add New Contract Wizard

This wizard is launched when you select to add a new contract and helps you create a new contract between a document type and the **Document Flow Manager**.

The contract is saved in the `DfmQueueDetail` table with a unique `QueueID`.

Field	Description
<b>Contract details</b>	
Contract name	Enter the contract name that will be used to identify the contract.
Business Object class	<p>Indicate the type of business object that is used for this contract.</p> <p><b>Build</b></p> <p>Adds a business object to the contract that is used to build entities.</p> <p><b>Query</b></p> <p>Adds a business object to the contract that is used to perform queries.</p> <p><b>Setup</b></p> <p>Adds a business object to the contract that is used for creating, changing and deleting semi-static information.</p> <p>You can select the method at the <b>Method name</b> field.</p> <p><b>Transaction</b></p> <p>Adds a business object to the contract that is used to change transactions that occur against the items created using the Setup class.</p> <p>You can select the method at the <b>Method name</b> field.</p>
Business Object name	Select the business object you want to use for this contract.
Business Object to invoke	<p>This displays the description of the business object invoked for this contract.</p> <p>This depends on the business object selected and can't be edited.</p>

Field	Description
Method name	<p>Select the method you want to use when invoking the business object.</p> <p>The following methods are only available for <b>Setup</b> and <b>Transaction</b> business object classes:</p> <p><b>Add</b></p> <p>This adds information to the relevant tables using the selected business object.</p> <p><b>Update</b></p> <p>This updates existing information on the relevant tables using the selected business object.</p> <p><b>Delete</b></p> <p>This deletes information from the relevant tables using the selected business object.</p> <div style="border: 1px solid #0070C0; border-radius: 10px; padding: 10px; margin-top: 10px;">  You can't select the method for the <b>Build</b> and <b>Query</b> business object classes, as these are configured to build or query something by default and can't be changed. </div>
<b>Operator to log in as details</b>	
Operator code	<p>Enter the code of the SYSPRO operator to use when the contract is run. This can be any operator (with or without specific securities applied) and doesn't need to be the same operator code used by the DFM services.</p> <p>The operator code entered here is displayed against the transaction in the <b>XML Document Query</b> program.</p>
<b>Disable this contract</b>	
Disable contract	This disables the contract (i.e. the files and folders are no longer monitored).
<b>Polling folder</b>	

Field	Description
Folder to poll	<p>Indicate the folder that must be monitored and require polling. A valid folder or file must be entered before you can continue. The folder can reside on the SYSPRO application server or a different server.</p> <div style="border: 1px solid #0070C0; padding: 5px; margin-top: 10px;">  The <b>SYSPRO 8 Document Flow Manager Folder Poller</b> service must have permission to read and delete the file in the specified folder. </div>
File type	<p>Indicate the type of file that must be polled for this contract.</p>
<b>Please enter the XML parameters for Business Object</b>	<p>This lets you enter XML parameters that indicate how the document should be processed. The XML parameters are applied to each document that arrives in the queue.</p> <p><a href="#">Load File</a></p> <p>Select <b>Load File</b> to load a sample file with XML parameters.</p> <p><a href="#">View Schema</a></p> <p>Select <b>View Schema</b> to display the scheme document (SDK) which specifies the parameters that can be used.</p> <div style="border: 1px solid #0070C0; padding: 5px; margin-top: 10px;">  This screen is only displayed for <b>Setup</b> and <b>Transaction</b> business object classes. </div>
<b>Notify operator when transaction occurs</b>	
Inbox message required	<p>Enable this option to specify that a message should be sent to an operator's Inbox within SYSPRO.</p>
Operator to notify	<p>Indicate the code of the SYSPRO operator to whom you want to send the message.</p>
Program to call	<p>Optionally enter the program to run when the operator opens the message.</p>
Inbox message	<p>Enter the message you want to send to the operator.</p>

Field	Description
<b>Set up response Email messages</b>	
Send response Email	<p>Enable this option to indicate that a response email message should be sent to an operator's inbox, notifying them of the status of the process.</p> <p><b>None</b> No response email message is sent.</p> <p><b>Failed</b> A response email message is sent for every failed contract.</p> <p><b>Success</b> A response email message is sent for every successfully completed contract.</p> <p><b>Both</b> A response email message is sent for both completed and failed contracts.</p>
Add success message	Select <b>Configure</b> to enter the message you want to send to the operator, indicating that the process completed successfully.
Add fail message	Select <b>Configure</b> to enter the message you want to send to the operator, indicating that the process failed.
<b>Keep history of XML documents</b>	

Field	Description
XML history required	<p>This lets you specify which historical XML documents must be retained.</p> <p>You can specify the location of historic XML documents in the <b>XML Document Control</b> program.</p> <p><b>None</b> No historical XML documents are retained.</p> <p><b>Incoming</b> All incoming XML documents are retained.</p> <p><b>Outgoing</b> Only outgoing XML documents are retained.</p> <p><b>Both</b> Both incoming and outgoing XML documents are retained.</p>
<b>Save Business Object output XML</b>	
Save documents	<p>This lets you indicate whether the results from the business object should be written out to a folder where it can be accessed by another application such as Microsoft's BizTalk server.</p> <p>The name allocated to the output file depends on whether you are retaining history.</p> <p>If you are retaining history, the file name is constructed of the company id followed by DO (i.e. Document Out) and then the next number to use. The suffix is <code>.XML</code> unless you are performing an XSLT transformation on the file.</p>
Outgoing folder	Enter the folder to which the document must be saved.
<b>Transform XML documents</b>	This section applies to documents that aren't in the format required by the business object and need to be transformed using XSLT. Incoming and/or outgoing files can be transformed.

Field	Description
XSL transform required	<p>Enable this option to indicate that the XML documents must be transformed.</p> <p><b>None</b> No file transformation is required.</p> <p><b>Incoming</b> All incoming files must be transformed.</p> <p><b>Outgoing</b> All outgoing files must be transformed.</p> <p><b>Both</b> Both incoming and outgoing files must be transformed.</p>
Incoming XSL filename	Select this to perform the transformation of the incoming document before it's processed by the business object.
Outgoing XSL filename	Select this to perform the transformation of the outgoing document (i.e. the result from the business object).
Outgoing file extension	This lets you indicate the extension of the outgoing XSL file.
Test XSL transform	Select <b>Test XSL transform</b> to test the transform process against the XSL.
<b>Folder poller service</b>	
Service name	As more than one poller can be installed, this lets you indicate the specific poller service that monitors the folder.
Server name	This is the name of the server where the folder is located (i.e. the folder can reside on the SYSPRO application server or a different server).
<b>Contract type</b>	This lets you select the order in which the contracts are processed.

Field	Description
Queue type	<p><b>Dependent</b></p> <p>This polls files in chronological order (i.e. the previous contract must be successfully processed before the next one is started).</p> <div data-bbox="598 488 1430 689"> The dependent queue information is saved in the <code>DfmQueueDetail</code> and <code>DfmQueueDep</code> table using the same <code>QueueID</code> in both tables.</div> <p><b>Non-dependent</b></p> <p>This polls files in any order (i.e. the next contract is started even if the previous one has failed).</p> <div data-bbox="598 896 1430 1097"> The non-dependent queue information is saved in the <code>DfmQueueDetail</code> and <code>DfmQueueNonDep</code> table using the same <code>QueueID</code> in both tables.</div>

## Setup Success Email Message

This is displayed when you select the **Configure** from the **Set up response email messages** section in the **Add New Contract Wizard**.

Field	Description
<b>Email priority</b>	Indicate the priority rating for the email message.
<b>Address from</b>	Enter the email address of the sender.
<b>Address to</b>	Enter the email address of the recipient. Multiple email addresses can be entered if separated by a semi-colon (;) as a delimiter.
<b>Subject</b>	Enter an appropriate subject line for the email message.
<b>Body</b>	Crete an appropriate message for the email. A document resulting from the business object will be attached to the email.

# DFM Queue Query

## Exploring

### Where it fits in?

This program lets you view and edit the documents that were retrieved by the **SYSPRO 8 Document Flow Manager Folder Poller** service and placed in the queue.

Things you can do in this program include:

- View queue contents.
- View failed XML documents and determine the cause.
- Edit the input XML, if this caused the failure.

### Navigation

- This program is accessed from the **Program List** pane of the SYSPRO menu:  
*Program List > Administration > Document Flow Manager*

# Starting

## Security

### Activities

You can restrict operator access to **activities** within a program. These are configured using the **Operator Maintenance** program.

### Fields

You can restrict operator access to the **fields** within a program. These are configured this using the **Operator Maintenance** program.

### eSignatures

You can restrict access to the eSignature transactions within a program at Operator, Group, Role or Company level. You configure these using the **eSignature Setup** program. Electronic Signatures provide security access, transaction logging and event triggering that gives you greater control over your system changes.

### Groups

You can restrict operator access to programs by assigning them to groups and applying access control against the group. This is configured using the **Operator Groups** program.

### Passwords

You can restrict operator access to functions within a program using **passwords**. Passwords are defined in the **Password Definition** program. When defined, the password must be entered before you can access the function.

# Referencing

## Menu and Toolbar

Field	Description
<b>File</b>	
Exit	This exits the program.
<b>Options</b>	
Show all records	Select this to view all records.
Record limit	This lets you limit the number of records you see in the list. The record limit is set to 1000 by default.
<b>Functions</b>	
Purge	Select this to purge the records displayed in the <b>DFM Queue Messages</b> pane.
<b>Time filter</b>	This lets you select a time reference to filter the list of queue messages.
<b>Edit Input XML</b>	This lets you edit the input XML of the selected file, typically if the transformation of the document fails.
<b>Edit Parameter XML</b>	This lets you edit the parameter XML of the selected file, typically if the transformation of the document fails.

## DFM Queue Messages

Field	Description
Date	This indicates the date the file was placed in the queue.
Status	This indicates the status code and current position of the document in the queue.
Contract name	This indicates the name of the DFM contract that was specified when the contract was created.
Company	This indicates the SYSPRO company for which this document was polled and transformed.
Body length	This indicates the length of the body of the file in the queue.
Input XML path	This indicates the path of the input XML.
Workflow path	<p>This indicates the workflow the DFM business object takes when processing a transaction.</p> <p>There are various status codes listed against each transaction that indicate the workflow path of each document in the queue. The last code in the list matches the code in the <b>Status</b> field.</p>

# XML Document Query

## Exploring

### Where it fits in?

This program lets you view details of XML documents that are being retained on file. You can configure the history settings and the retention period of these documents using the **XML Document Control** program.

Transactions you can view in this program include documents processed by the **Document Flow Manager** as well as those created using the **Electronic Data Interchange** or **Business-to-Business Trading** systems.

Things you can do in this program include:

- View details of incoming and outgoing XML documents.
- View the transformation and processing details.
- View details of failed XML documents.

## Navigation

- This program is accessed from the **Program List** pane of the SYSPRO menu:  
*Program List > Business-to-Business Trading*

# Starting

## Security

### Activities

You can restrict operator access to **activities** within a program. These are configured using the **Operator Maintenance** program.

### Fields

You can restrict operator access to the **fields** within a program. These are configured this using the **Operator Maintenance** program.

### eSignatures

You can restrict access to the eSignature transactions within a program at Operator, Group, Role or Company level. You configure these using the **eSignature Setup** program. Electronic Signatures provide security access, transaction logging and event triggering that gives you greater control over your system changes.

### Groups

You can restrict operator access to programs by assigning them to groups and applying access control against the group. This is configured using the **Operator Groups** program.

### Passwords

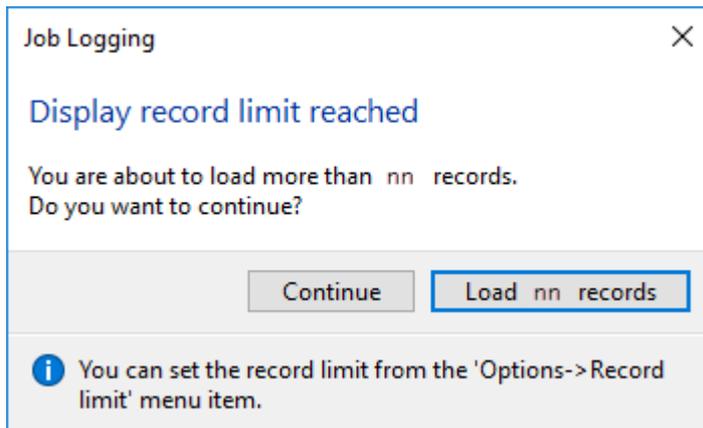
You can restrict operator access to functions within a program using **passwords**. Passwords are defined in the **Password Definition** program. When defined, the password must be entered before you can access the function.

# Using

## Hints and Tips

- You can set a limit to the number of records displayed in the **Log Details** pane by making an entry at the **Record limit** field of the **Options** menu.

If the number of records reaches this threshold value an information message is displayed and you can choose to ignore the limit, or only display the number of records up to this limit.



- Columns in a list view are sometimes hidden by default. You can reinstate them using the **Field Chooser** option from the context-sensitive menu (displayed by right-clicking a header column header in the list view). Select and drag the required column onto the list view.
- Fields on a pane are sometimes hidden by default. You can reinstate them using the **Field Selector** option from the context-sensitive menu (displayed by right-clicking any field in the pane). Select and drag the required fields onto the pane.
- Press **CTRL+F1** within a list view or form to view a complete list of functions available.

# Referencing

## Menu and Toolbar

Field	Description
<b>File</b>	
Exit	This exits the program.
<b>Options</b>	
Show all records	Select this to view all records.
Record limit	This lets you limit the number of records you see in the list. The record limit is set to 1000 by default.
<b>Functions</b>	
Purge	This lets you purge the records displayed in the <b>Log Details</b> pane.
<b>Time filter</b>	This lets you select the time frame for filtering the data records displayed in the <b>Log Details</b> pane.
<b>Refresh view</b>	This lets you refresh the list of contracts in the <b>Log Details</b> pane.
<b>Show Custom Filter</b>	This displays the <b>Filter Options</b> pane, from which you can indicate filtering options.

## Log Details

Column	Description
Reference	This indicates the document reference number.
In/Out	This indicates whether the processed document was an incoming or outgoing document.
Document date-time	This indicates the date and time the document was processed.
Operator name	This indicates the operator name who processed the document.
Document name	This indicates the document name.
Document type	This indicates the type of document that was processed (i.e. history or failed).

Column	Description
History document	This lets you view a copy of the original incoming or outgoing XML document, if you selected this at the <b>XML history required</b> field when creating the contract using the <b>DFM Setup</b> program.

## Filter Options

Field	Description
Apply Custom Filter	This applies the your selected filter criteria against the archived records in the <b>Log Details</b> pane.
Reset	This resets the form to its default selections.
Date selection	This lets you indicate a range of dates according to which you want to view documents. This indicates the time filter selected from the toolbar. If you select <b>Range</b> or <b>Single</b> at the <b>Date selection type</b> field then you can enter start and end date according to which you want to display information.
Date selection type	This lets you indicate the type of date selection you want to use.
Contract selection	This lets you select the type of contract you want to include (e.g. Query, Setup, Posting, Build, B2B, Other).
Operator selection	This lets you indicate the operator(s) for whom you want to select documents. <div data-bbox="555 1305 1430 1503" style="border: 1px solid #f0e68c; padding: 10px; margin-top: 10px;">  If you created an <code>__DFM</code> operator code, then you can enter it here to only display the documents related to <b>Document Flow Manager</b>. </div>
Document type	This lets you view history or failed documents in the <b>Log Details</b> pane. <div data-bbox="555 1630 1430 1989" style="border: 1px solid #f0e68c; padding: 10px; margin-top: 10px;">  <ul style="list-style-type: none"> <li>■ If you enabled the <b>Keep copy of XML documents</b> and <b>Keep history of incoming document</b> options (<b>XML Document Control</b>) then you can view a copy of the original incoming XML document.</li> <li>■ Documents with a name that ends with <code>'s.xml</code> indicate failed.</li> </ul> </div>

# DFM Service Setup

## Exploring

### Where it fits in?

This program lets you view the status of the DFM services and change configuration values without having to access the configuration files.



Any configuration changes made using the **DFM Service Setup** program only takes effect when next the service polls for a change in configuration information.

All changes are saved to and read from the database. If no information is found on the database, the **DFM Service Setup** program reads the configuration file.

Things you can do in this program include:

- Pause the services.
- Specify that logging is required.
- Change the polling interval that defaults to 30 seconds.
- Change the time interval to determine if there is a change to the configuration.

## Navigation

- This program is accessed from the **Program List** pane of the SYSPRO menu:  
*Program List > Administration > Document Flow Manager*

# Starting

## Security

### Activities

You can restrict operator access to **activities** within a program. These are configured using the **Operator Maintenance** program.

### Fields

You can restrict operator access to the **fields** within a program. These are configured this using the **Operator Maintenance** program.

### eSignatures

You can restrict access to the eSignature transactions within a program at Operator, Group, Role or Company level. You configure these using the **eSignature Setup** program. Electronic Signatures provide security access, transaction logging and event triggering that gives you greater control over your system changes.

### Groups

You can restrict operator access to programs by assigning them to groups and applying access control against the group. This is configured using the **Operator Groups** program.

### Passwords

You can restrict operator access to functions within a program using **passwords**. Passwords are defined in the **Password Definition** program. When defined, the password must be entered before you can access the function.

## Restrictions and Limits

- The following flags can't be maintained in this program, but can be edited in the `SYSPRODFMQueuePoller.exe.config` and `SYSPRODFMFolderPoller.exe.config` configuration files.
  - `zeroFileSizeDeleteTime`
  - `ConfigPollType` (defaults to ss - seconds)
  - `FolderPollType` (defaults to ss - seconds)



- PollType (defaults to ss - seconds)



This will be addressed in a future release

# Solving

## FAQs

### DFM Services

#### Where can I set the polling type for DFM services?

Although the following flags can't be maintained in the **DFM Service Setup** program, you can edit them in the `SYSPRODFMQueuePoller.exe.config` and `SYSPRODFMFolderPoller.exe.config` configuration files:

- ZeroFileSizeDeleteTime
- ConfigPollType (defaults to `ss` - seconds)
- FolderPollType (defaults to `ss` - seconds)
- PollType (defaults to `ss` - seconds)



This will be addressed in a future release.

#### Why don't the DFM Services start?

The password held against the operator used to start the services may have changed. This could occur automatically by the operating system, depending on the password policy setup.

##### Solution

- Review the password settings defined against the operator who is starting the services.
- Review the message logs within the **Event Viewer**.

#### Why don't the DFM Services start on installation?

This is most likely due to an invalid operator/password combination or the operator doesn't have sufficient permission to access the folder contents.

##### Solution

Review the message logs within the **Event Viewer**.

#### Where do I define the 'file size delete time' for the DFM folder poller service?

Although you can't currently maintain the `FileSizeDeleteTime` in the **DFM Service Setup** program, you can edit this in the following configuration files:

- SYSPRODFMQueuePoller.exe.config
- SYSPRODFMFolderPoller.exe.config

## Configuration

### Why are the changes I made not implemented immediately?

Any configuration changes made using the **DFM Service Setup** program only takes effect when next the service polls for a change in configuration information.

This interval can be specified at the **Config Interval** column of the **DFM Service Setup** program.

## Problem Solving

### Where can I find the DFM event log?

The event log is created when DFM is installed. The log is output to the following folder, which you can review for diagnosing any problems you may encounter:

*Control Panel > System and Security Administrative Tools > Event Viewer > Applications and Service Logs*

You can open each entry in the log to view the error or warning details.

The event log is only available if you have selected **Yes** at the **Log required** option in the list view of the **DFM Service Setup** program.

### Why do documents remain in the polling folder?

Likely causes are that the document is not being picked up at all, or is being picked up but the **Document Flow Manager** user doesn't have permission to delete the original document from the folder.

If the document is not being processed, then there are a number of possible causes:

- The contract is configured to poll a different folder.  
Check the relative pathing from which the service is run.  
If the folder is on a remote workstation, ensure that the machine is running and that the SYSPRO application server can see both the machine and the share/mapped drive.
- The file does not match the file type defined against the contract.
- The contract is disabled.
- The **SYSPRO 8 Document Flow Manager Folder Poller** service doesn't have permission to access the folder.
- The file is defined as read-only.

Review the attributes against the file.

- The **SYSPRO 8 Document Flow Manager Folder Poller** service is not running.

## Why are there no results for documents in the polling folder?

The **SYSPRO 8 Document Flow Manager Queue Poller** service is not running, or the contract is not configured to output the results from the business object.

### Solution

- Review the contract to ensure that it is configured to output the results from the business object and that the correct folder is specified.
- Check that the operating system user who is starting the **SYSPRO 8 e.net Communications Load Balancer** service has been granted write-access to the folder.
- Check that the user for the **SYSPRO 8 e.net Communications Load Balancer** service has been granted write-access to the `Failed` folder.

# Using

## Hints and Tips

- Any configuration changes made using the **DFM Service Setup** program only takes effect when next the service polls for a change in configuration information.  
This interval can be specified at the **Config Interval** column of the **DFM Service Setup** program.
- Columns in a list view are sometimes hidden by default. You can reinstate them using the **Field Chooser** option from the context-sensitive menu (displayed by right-clicking a header column header in the list view). Select and drag the required column onto the list view.
- Press `CTRL+F1` within a list view or form to view a complete list of functions available.

# Referencing

## Toolbar and Menu

Field	Description
<b>File</b>	
Save	This saves the details you entered or changed.
Save and Close	This saves the details you entered or changed and returns to the previous screen.
Exit	This exits the program.
<b>Refresh</b>	This refreshes the information for the pane.

## DFM Services

Field	Description
Server name	This indicates the DFM service you are maintaining.
Server type	<b>F</b> indicates the folder poller and <b>Q</b> indicates the queue poller.
Service instance	This is an internal flag.
Service description	This indicates a description of the service for identification purposes.
Status	This indicates the current status of the service (e.g. paused, running, etc).
Paused flag	This indicates whether the service is currently paused. You can select to pause or start the service. <ul style="list-style-type: none"> <li>▪ <b>Yes</b> = paused</li> <li>▪ <b>No</b> = not paused</li> </ul>
Log required	This indicates whether an event log is required for the service. You can select whether an event log is required for the service. <ul style="list-style-type: none"> <li>▪ <b>Yes</b> = log is required</li> <li>▪ <b>No</b> = log is not required</li> </ul>

Field	Description
Poller interval	<p>This indicates how often the service will poll for new files in configured contract folders and is measured in the unit of time specified at the <b>PollType</b> flag.</p> <p>This defaults to 30 seconds, but can be changed here.</p>
Config interval	<p>This indicates how often (in seconds) the service must will poll for changes made to the configuration information.</p> <p>If the service can't reach the <b>SYSPRO 8 e.net Communications Load Balancer</b> or business object, it will retry once this interval has lapsed.</p>
Started date	<p>This indicates the date the service was last started.</p>
Updated date	<p>This indicates the last time the configuration of the service was changed.</p>

# DFM Folder Poller service

## Exploring

### Where it fits in?

This service monitors specified folders and uses the contract details to determine if the files in the folders should be sent to the DFM queue.

This service is used by:

- Document Flow Manager

## Navigation

- The default location for this service is:

*Program Files > SYSPRO > Document Flow Manager Folder Poller*

# Starting

## Prerequisites

- Microsoft .NET Framework 4.6
- SQL Server
- SYSPRO 8 e.net Communications Load Balancer
- The **Document Flow Manager** folders that are configured against DFM contracts must be accessible to this service.
- This service is installed using the **SYSPRO Installer**.

The service can be installed multiple times, as determined by the workload.

## Restrictions and Limits

- If you require files to be processed in a certain sequence then you need to add them to the queue in the correct order.

The **Document Flow Manager** processes files as they appear and as the data is available.

- Processing speed may be affected by the number of contracts and folders in use.

# Solving

## Debugging and Diagnostics

### Service Config.exe file

You can debug this service by editing the associated `config` file in elevated mode (i.e. with administrator privileges).

The `SYSPRODFMFolderPoller.exe.config` file is located in the folder to which you installed the service.

### Windows Event Viewer function

You can view monitoring and troubleshooting messages about this service using the **Event Viewer** function in Windows:

*(Control Panel > System and Security Administrative Tools > Event Viewer > Applications and Service Logs)*

This service outputs an event log to the `SYSPRODocumentFlowManager` file.

### Windows Services function

You can start, stop, restart and configure this service using the **Services** function in Windows:

*(Control Panel > System and Security Administrative Tools > Services)*

# Referencing

## Configuration file



You should only edit this file for debugging purposes.

Don't use this as a method to update values for the service. This is because a wizard installation updates the system registry, which is what is read when using the service. A fresh installation overwrites these values, which may cause problems when you next run the service.



Any configuration changes made using the **DFM Service Setup** program only takes effect when next the service polls for a change in configuration information.

The following settings can be maintained using the **DFM Service Setup** program within SYSPRO:

- Configuration polling interval
- Polling interval
- Pause polling

Key	Description
WCFAAddress	This indicates the URL for the <b>SYSPRO 8 e.net Communications Load Balancer</b> service.
InstanceKey	This indicates the <code>base_dir</code> instance on the SYSPRO application server.
languageCode	This indicates the SYSPRO language code.
ConfigPollInterval	<p>This indicates how often the service will poll for changes made to the configuration information.</p> <p>If the service can't reach the <b>SYSPRO 8 e.net Communications Load Balancer</b> or business object, it will retry once this interval has lapsed.</p> <p>This is measured in the unit of time specified at the <code>ConfigPollType</code> flag.</p>

Key	Description
ConfigPollType	<p>This lets you indicate the unit of time (i.e. <code>ss</code> - seconds, <code>mm</code> - minutes and <code>hh</code> - hours) the service will use to poll for changes in the configuration information.</p> <div style="border: 1px solid #0070c0; border-radius: 5px; padding: 10px; margin-top: 10px;">  You can't use the <b>DFM Service Setup</b> program to maintain this flag.         </div>
FolderPollInterval	<p>This indicates how often the service will poll for new files in configured contract folders.</p> <p>This is measured in the unit of time specified at the <code>FolderPollType</code> flag.</p> <div style="border: 1px solid #0070c0; border-radius: 5px; padding: 10px; margin-top: 10px;">  This defaults to 30 seconds.         </div>
FolderPollType	<p>This lets you specify the unit of time (i.e. <code>ss</code> - seconds, <code>mm</code> - minutes and <code>hh</code> - hours) the service will use to poll for new files in configured contract folders.</p> <div style="border: 1px solid #0070c0; border-radius: 5px; padding: 10px; margin-top: 10px;">  This can only be changed in the configuration file and defaults to seconds in the <b>DFM Service Setup</b> program.         </div>
zeroFileSizeDeleteTime	<p>Specifies the length of time (in seconds) that a <i>zero</i> sized file will remain in a polling folder, before it is deleted.</p> <div style="border: 1px solid #0070c0; border-radius: 5px; padding: 10px; margin-top: 10px;">  This can only be set in the configuration file and not in the <b>DFM Service Setup</b> program.         </div>
DebugService	<p>This enables service debug logging.</p> <p>This outputs the debug messages to the active trace log, which can be viewed using an application like <b>DbgView</b>.</p> <p>Although debug messages are not written to file anywhere, exception messages are shown in the debug stream, as well as in the event log.</p> <div style="border: 1px solid #ffc000; border-radius: 5px; padding: 10px; margin-top: 10px;">  We recommend you set this to <code>true</code> before starting the service.         </div>

Key	Description
PausePolling	<p>This enables or pauses folder polling.</p> <div data-bbox="560 344 1430 497"> Before starting the service you can set this to <code>false</code> to start the service but pause folder polling.</div>

# DFM Queue Poller service

## Exploring

### Where it fits in?

This service monitors and processes files in the DFM queue.

This service is used by:

- Document Flow Manager

## Navigation

- The default location for this service is:

*Program Files > SYSPRO > Document Flow Manager Queue Poller*

# Starting

## Prerequisites

- Microsoft .NET Framework 4.6
- SQL Server
- SYSPRO 8 e.net Communications Load Balancer
- The **Document Flow Manager** folders that are configured against DFM contracts must be accessible to this service.
- This service is installed using the **SYSPRO Installer**.

This service can be installed multiple times, as determined by the work load.

## Restrictions and Limits

- If you require files to be processed in a certain sequence then you need to add them to the queue in the correct order.

The **Document Flow Manager** processes files as they appear and as the data is available.

- Processing speed may be affected by the number of contracts and folders in use.

# Solving

## Debugging and Diagnostics

### Service Config.exe file

You can debug this service by editing the associated `config` file in elevated mode (i.e. with administrator privileges).

The `SYSPRODFMQueuePoller.exe.config` file is located in the folder to which you installed the service.

### Windows Event Viewer function

You can view monitoring and troubleshooting messages about this service using the **Event Viewer** function in Windows:

*(Control Panel > System and Security Administrative Tools > Event Viewer > Applications and Service Logs)*

This service outputs an event log to the `SYSPRODocumentFlowManager` file.

### Windows Services function

You can start, stop, restart and configure this service using the **Services** function in Windows:

*(Control Panel > System and Security Administrative Tools > Services)*

# Referencing

## Configuration file



You should only edit this file for debugging purposes.

Don't use this as a method to update values for the service. This is because a wizard installation updates the system registry, which is what is read when using the service. A fresh installation overwrites these values, which may cause problems when you next run the service.



Any configuration changes made using the **DFM Service Setup** program only takes effect when next the service polls for a change in configuration information.

The following settings can be maintained using the **DFM Service Setup** program within SYSPRO:

- Configuration polling interval
- Polling interval
- Pause polling

Key	Description
WCFAAddress	Specifies the URL for the <b>SYSPRO 8 e.net Communications Load Balancer</b> service.
InstanceKey	Specifies the base dir instance on the SYSPRO application server.
languageCode	Specifies the SYSPRO language code.
ConfigPollInterval	<p>This specifies how often the service will poll for changes made to the configuration information.</p> <p>If the service can't reach the <b>SYSPRO 8 e.net Communications Load Balancer</b> or business object, it will try again once this interval has lapsed.</p> <p>This is measured in the unit of time specified at the <b>ConfigPollType</b> flag.</p>

Key	Description
ConfigPollType	<p>This lets you indicate the unit of time (i.e. <code>ss</code> - seconds, <code>mm</code> - minutes and <code>hh</code> - hours) the service will use to poll for changes in the configuration information.</p> <div style="border: 1px solid #0070c0; border-radius: 5px; padding: 5px; margin-top: 10px;">  You can't use the <b>DFM Service Setup</b> program to maintain this flag.         </div>
PollInterval	<p>This indicates how often the service will poll for new files in configured contract folders.</p> <p>This is measured in the unit of time specified at the <code>PollType</code> flag.</p> <div style="border: 1px solid #0070c0; border-radius: 5px; padding: 5px; margin-top: 10px;">  This defaults to 30 seconds.         </div>
PollType	<p>This lets you specify the unit of time (i.e. <code>ss</code> - seconds, <code>mm</code> - minutes and <code>hh</code> - hours) the service will use to poll for new files in configured contract folders.</p>
DebugService	<p>This enables service debug logging.</p> <div style="border: 1px solid #ffc000; border-radius: 5px; padding: 5px; margin-top: 10px;">  We recommend you set this to <code>true</code> before starting the service.         </div>
PausePolling	<p>This enables or pauses folder polling.</p> <div style="border: 1px solid #ffc000; border-radius: 5px; padding: 5px; margin-top: 10px;">  Before starting the service you can set this to <code>false</code> to start the service but pause folder polling.         </div>



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