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Kofax OmniPage Server

Folder Watcher

System Configuration Editor
User Guide

Contents

Introduction

This document describes the Folder Configuration Editor client of the Folder Watcher

OmniPage Server (OPS) is a solution that provides document conversion services.

OPS is an application service solution built using conventional enterprise architectural components and approaches, while still offering a high level of availability and scaling functionality.

The folder watcher system is developed for companies to provide its users with the advantage of converting their private documents through Windows-only file system usage.

Concepts, Terms and Abbreviations

The basic concept is that the folder watcher service can perceive file changes in a specified folder and send those to the conversion server after reading them. At the completion of the conversion process the new documents are downloaded to a specified subfolder of the original watched folder.

File Conversion

File conversion is the process of transforming information represented in a source file as specified by its file format into another file using a representation specified by another file format.

Note: File conversion might result in information loss if the destination file format cannot represent everything represented by the source file format.

Document Conversion

In this document, document conversion refers to the process of transforming a set of input documents into a set of output documents. The transformation is typically file conversion, OCR or both.

Folder Structure

The folder watcher system works on a predefined folder structure. The system administrator is responsible for building a watched folder structure before the watching service is started. During file system watching, the specified system directories, for example, error folder or working directories are managed by the system. These are created and deleted as necessary.

The system can read convertible files from watched folder and send those to the conversion server. After document conversion, the converted files are downloaded to a target folder directly under the watched folder.

Each watched folder should have the conversion setting file which contains conversion parameters related to the container folder. In case of a missing configuration file, the parent-related settings are used for conversion.

Security

The Folder Watcher system does not contain custom security solutions; embedded Windows privacy settings are used to guarantee document integrity for users.

File system watching is executed on behalf of the **Folder Watcher Service** user which is defined during the installation process. The mentioned service user must have full access to the root watched folder and these access rights must be applied to subfolders and files in the subfolders as well. Keep in mind to set the proper rights when planning and creating a watched folder structure.

Example:
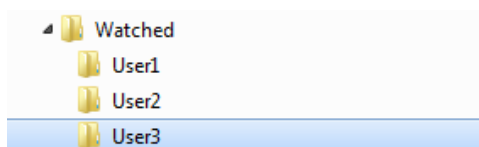
- In case of workgroup environment, all users, especially the Service User must have read and write permissions for the Watched folder and its subdirectories.
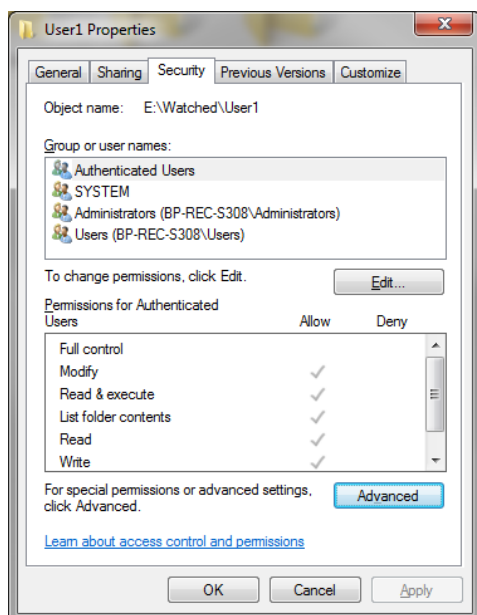
In domain environment, the Service User must have read and write permissions for the root and subfolders as well, but the various users only have read and write permissions for their associated subdirectories only. The above example shows how a sophisticated security system can be created in domain environment. Security settings can be regulated through the **Properties** dialog of the root folder.

System Configuration Editor

All conversion-related system configuration settings can be specified in the System Configuration Editor.

URL: http://{host}/systemconfigurationeditor

Authentication

The system configuration editor uses two types of authentication. In case of installation in a domain environment, the application is secured by Windows Security but outside the Windows domain, it is also accessible to manually register users.

Domain Authentication

The Windows Authentication and ASP.NET Impersonation must be enabled when the OmniPage Conversion Server is installed in Windows domain environment; in such cases the application uses standard Windows login to authenticate the administrators.

The administrator user is registered during the installation process and the information is stored in the web.config file. After installation, several administrators can be defined using comma or semicolon as the separator.

```
<configuration>
   <appsettings>
      <add key="administrators" value="domain\user">
      …
   </appsettings>
</configuration>
```

Form Authentication

In workgroup environment, Windows Authentication is not applicable. In such cases the Folder Watcher System Configuration Editor provides form-based authentication.

Log in

Enter the credentials of a registered user in the **System Configuration Editor.**

Registration of the first user

The first administrator registration can be performed on the **Registration** page. For registration, providing a unique username and password is required. Due to password policy, the specified password must be at least three characters long and must contain at least one numeric character.

User management menu

Administration of further users can be performed through user management functions available by clicking the **User** menu in the top-right corner of the main page.

Password change

Logged in users can change their password by clicking the **Change Password** menu item. Refer to the **Registration of the first user** section for password requirements.

Add or remove further users

A logged in administrator user can add or remove further administrators through the User Management page which is available by clicking the Users menu item. All registered administrators can manage the list of registered users.

Log Off

Click the **Log Off** menu item to exit the application.

Reset administrator list

Administrator login information is stored in the UserStore.dat file, which is under the 'common application data' folder:

{Common Application Data}\Kofax\FolderWatcher\UserStore.dat
it is typically the following:
c:\ProgramData\Kofax\FolderWatcher\UserStore.dat
Deleting the UserStore.dat file sets the user management to a default state. In such cases, you can start work by registering the first administrator user, as detailed in **Registration of the first user** section.

Settings

System Configuration Editor receives the configuration file from the Configuration Service hosted by the Watcher Server. The communication port by default is 8080; it can be changed by modifying the relevant web.config file. For proper communication, the specified port must be the same as the ServicePort in the folder watcher service configuration file, for more information, see Domain environment.

```
<appSettings>
        <add key="ConfigurationServicePort" value ="8080"/>
</appSettings>
```

Functions of System Configuration Editor

All attributes of the folder watching process can be configured in the System Configuration Editor.

Conversion Settings

- **OmniPage Server:** the HTTP address of the OmniPage Server in the following format: http://{conversionserver}
- **Use notification server:** Use the Notification Server to notify the Folder Watcher about the process completion of the job or use polling to check the job status. If you use Notification Server, the OmniPage Server must be able to access the Folder Watcher's notification service endpoint.
- **Notification server:** call-back address for the conversion server to notify the caller client about job process completion. Notification Service is included in the Watcher Service and it listens on port 8080 by default. The format setting is: http://{notificationserver}:8080 Changing the port number can be performed by modifying the OmniPage.Server.FolderWatcher.exe.config file. Set the value of the ServicePort key to the port number of your choice:

```
<appSettings>
        <add key="ServicePort" value ="8080"/>
</appSettings>
```

Watcher Settings
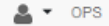
Watched folder configuration can be added, deleted and edited in the **Watchers** section.

- **Name**: watcher instance name. Default value is: New Watcher

- **Watched folder**: the watched folder path. Local path or UNC path is accepted, for example: \\server\watchfolder or c:\watchedfolder. The field is empty by default; for successful folder watching, you must enter a proper folder path.

- **Recursive**: enable or disable subfolder watching. Default value is true.

- **One-by-one processing**: sets whether file conversion happens one by one or in groups. Default value is true.

- **Result folder name**: subfolder inside the watched folder which is the storage for result files after processing. Default value is result.

- **Working folder name**: typically, a hidden system folder to store watched files temporarily while being sent for conversion. Default value is opserverworking.

- **Watcher state**: watcher can be activated or deactivated. Default value is Active.

- **Schedule settings**: the file system is polled periodically; the interval is given in seconds. Default value is 5.

- **Schedule start and end**: beginning and end of file system polling period. By default, the starting time is 00:00 and the end of the period 23:59.

- **Completion delay**: compulsory gap between current time and last modification time of watched files, given in seconds. Default value is 2.

- **Maximum file count:** Maximum count of processable files in case of group processing (not one-by-one). A value of 0 means there is no limit.

- **Long file name support**: in case of deep folder structure, the path of watched files can be longer than manageable by default. This setting enables managing files with long path. Default value is true.

Rules of File Filtering

Define rules to make file selection more sophisticated. You must set at least one rule.

- **Name**: name of specified rule. Default name is New Watcher.

- **Rule state**: activate or deactivate the rule. Default value is Active.

- **Priority**: rules can be prioritized by their importance and this field determines the order. The highest priority value is 1. The default value is 1.

- **Allowed extensions**: the files found can be filtered by extension with the specified extension collection. Defaults are JPG, JPEG, TIFF, TIF, PNG, BMP, PDF and GIF.

- **Apply filtering**: all the filtering options can be enabled or disabled. By default, it is disabled.

- **Include filter enabled**: enable or disable file filtering to include files into the result file collection

- **Include filter**: filter to include files into result file collection can be determined using Windows-style wildcards (for example, sample*.*).

- **Exclude filter enabled**: enable or disable filter to exclude files from result file collection.

- **Exclude filter**: filter options can be determined using Windows-style wildcards to exclude files from the result file collection.

- **Post processing mode**: original file handling mode after conversion processing. In case of Move, the original files are moved to a specified dictionary, but in case of Delete, the original files are deleted. Default value is Delete.

- **Post processing move to directory**: target folder of original files after conversion process completion. This is a relative path, only the name of the subfolder must be specified.

- **Failed job move to directory**: in case of some failure during the conversion process, an error file is created in the specified error folder that contains the exception description received from the server. In such case, the original files are copied into the error folder as well to avoid file loss. Default value is error.

Troubleshooting

Folder access issue

The FolderWatcher does not process the files dropped into the configured 'Watched Folder'.

In such cases, check the log files. If you find *"UnauthorizedAccessException: Access is denied."* log entries, then the folder or the share permissions are not set properly. The service user of Folder Watcher must have Read and Change rights to the 'Watched Folder'.

Solution: Give the correct permissions for the service user to the shared folder.

Service connection issue

The Folder Watched hosts a WCF service on port 8080 by default. If this port is in use by another application, then the Folder Configuration Editor cannot connect to the service to access the configuration. In this case, you get the following error message in the FolderConfigurationEditor or in the SystemConfigurationEditor web application:

"No settings available: Unable to connect to the remote server"

Solution:

- Free up the 8080 port on your machine and restart the FolderWatcher Windows service.

Or

- Configure the FolderWatcher's services manually to use another port in the in a following way:
  In this example the port will be set to 8081. Use the following command to check if the port is in use:
  netstat -anob | find "8081"
  Change the ServicePort config value in the following file:

  c:\Program Files\Kofax\Folder Watcher\FolderWatcher\2.1\Omnipage.Server.FolderWatcher.exe.config
  For example <add key="ServicePort" value="8081"></add>

  and the ConfigurationServicePort config value in the following files:

  c:\Program Files\Kofax\Folder Watcher\2.1\SystemConfigurationEditor\Web.config
  c:\Program Files\Kofax\Folder Watcher\2.1\FolderConfigurationEditor\Web.config
  For example <add key="ConfigurationServicePort" value="8081"></add>

  If you use a notification service, then change the port of the notification service URL to 8081 in the FolderConfigurationEditor.

Restart the **FolderWatcher** service.