

ELO OCR Service

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This document describes installation and configuration of the ELO OCR Service.

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1 Installation

1.1 Prerequisites

- Windows XP, Windows 2003 or newer.
- This version cannot be used with ELO Windows Client.
- Uninstall previous ELO OCR component.

1.2 Installation Procedure

- Start setup.exe which guides you through the setup process.
- No special input parameters are required.
- Optional parameters can be supplied in the command line or in an MST file. See section 1.3.4 for more information.

1.3 Configuration

1.3.1 Technical Background

ELO OCR Service consists of the two programs EloOcrService.exe and EloOcrWorker.exe.

The former is installed as a Windows service which runs either under the Local System account or a domain account with full rights under the registry path used for configuration.

This service starts a number of the worker processes EloOcrWorker.exe which compute the OCR.

Each worker listens on a TCP port for OCR requests. The client application finds the port number in the registry and sends the image file via HTTP to the worker. The worker answers with the text information in the HTTP response.

The client application can also submit the image file over the file system. The ELO Java Clients sends the file name, if the image file does not entirely fit into memory.

In order to obtain OCR processing for ELO Indexserver client applications, the ELO OCR Service supports a further operation mode. The worker processes connect to the ELO Indexserver and ask for OCR requests ("Reverse HTTP"). When an image should be analyzed, the ELO Indexserver answers with the image data. The text result is sent back to the client application via the event mechanism of the ELO Indexserver API.

Since the connection is made from the worker to the ELO Indexserver, no special firewall configuration is required on the computers where ELO OCR service is installed. Both the image file and the text information is temporarily stored in the temporary directory of the user account assigned to the service. At most administrators should be able to access this directory.

ELO Indexserver presumably will support OCR functionality starting with version 8.00.020.

1.3.2 Security Considerations

A worker process temporarily stores image data and text output in a working directory. This directory should not be accessible by any user except the account under which ELO OCR Service is running. The configuration value "WorkDir" described in section 1.3.3.2 defines the directory location.

1.3.3 Registry Parameters

The ELO OCR Service expects its configuration under the Windows Registry key

HKEY_LOCAL_MACHINE\SOFTWARE\ELO Digital\OCR

on 32bit Windows resp.

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ELO Digital\OCR

on 64bit Windows

1.3.3.1 Service Parameters

The service configuration is stored under the key

...ELO Digital\OCR\Service.

Value Name	Value Type	Default	Description
WorkerCount	DWORD	0	Mandatory. Number of worker processes. Value 0 means no workers, thus OCR is not available on the computer. Set this value not much larger than the number of CPU kernels. The service checks each 10 Seconds for a change of this value and starts or terminates worker processes as required. The service need not to be restarted.
WorkerPriority	String	IDLE	Optional. IDLE, LOW, NORMAL, HIGH. The worker processes are started with this priority.
ReportFile	String		Optional. Log file name. Set this value, if problems with the OCR appear. If this value is absent or empty, no log file is written. The directory must exist and the service account

			must have full access to it.
ReportLevel	String	INFO	Optional. ERROR, WARN, INFO or DEBUG.

1.3.3.2 Worker Parameters

The worker configuration is stored under the key

...ELO Digital\OCR\Worker.

Value Name	Value Type	Default	Description
InstDir	String		Mandatory. Installation directory of the ABBYY FineReader Engine that is installed with the ELO OCR Service setup.
WorkDir	String	%TEMP%	Optional. Working directory. Image files and text output is temporarily stored in the sub-directory "EloOcr" of this directory. No users except the ELO OCR Service account should have access to this directory. The directory must exist. The default value is the temporary directory of the ELO OCR Service account. This is C:\Windows\Temp for the Local System account.
ServerTcpStartPort	DWORD	9010	Optional. This is the port of the first worker process. Subsequent workers will listen on port+1, +2 etc.
ServerTcpPort_<n>	DWORD		Reserved. This value stores the port number of the <n>th. worker process. Client applications will find the port to connect to the workers here. The value is available as long as the related worker is running. Do not edit or delete this value. See also Endpoint_<n>

Endpoint_<n>	String		Optional. If this value is specified, ServerTcpPort_<n> is ignored and client applications use this URL to connect to the <n>th worker process.
ReportFile	String		Optional. Log file name. Set this value, if problems with the OCR appear. If this value is absent or empty, no log file is written. The directory must exist and the service account must have full access to it.
ReportLevel	String	INFO	Optional. ERROR, WARN, INFO or DEBUG.

1.3.3.3 Worker Configuration for OCR via Indexserver

If the ELO Indexserver should be able to use the installed workers, an additional key has to be inserted:

...ELO Digital\OCR\Worker\OcrForIx.

Under this key, a subkey for each archive must be added, e.g.:

...ELO Digital\OCR\Worker\OcrForIx\Archive1

The subkey name (archive name) is not of interest. Under this subkey the following values define access to the ELO Indexserver:

Value Name	Value Type	Default	Description
url	String		Mandatory. URL to the ELO Indexserver. E.g. http://srvt02:8080/ix-elo80/ix
credentials	String		Optional. Encrypted account name and password to logon to ELO Indexserver. Use this value only in the case you cannot assign a domain account for the service. With a domain account, SSO login is possible which is more secure. The value has to be created by invoking <code>EloOcrWorker.exe -creds <username> <password></code>

The configuration of **OcrForIx** is queried by the workers each 10 Seconds. The workers need not to be restarted, in order to apply the changes.

1.3.4 Setup Parameters

The setup.msi interprets the following parameters.

Value Name	Value Type	Default	Description
SERVER_TCP_STARTPORT	Number	9010	Optional. Port for first worker process. See 1.3.3.2.
WORKER_COUNT	Number	1	Optional. Number of workers. See 1.3.3.1.
WORKERPRIORITY	String	IDLE	Optional. Worker priority. See 1.3.3.1.
SERVICE_USER	String		Optional. The ELO OCR Service runs under this account. Default is Local System.
SERVICE_PASSWORD	String		Optional. The password for SERVICE_USER.

Revisionsgeschichte dieses Dokuments			
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