PixEdit® Server & PixEdit® Converter Server Deployment Guide

Table of content

About this document

This document briefly describes the function of the various components in the PixEdit® Server & PixEdit® Converter Server, their system requirements and how to install.

The screen dumps in this deployment guide is taken during runtime of PixEdit® Server, but are valid for PixEdit® Converter Server as well (during runtime of PixEdit® Converter Server, the colors will appear green in the installer).

PixEdit® Server & PixEdit® Converter Server

System Requirements

PC/Server with Intel processor (hardware or virtual)
Normal use: Minimum 4 processor cores and 8 GB RAM
Heavy use: Minimum 8 processor cores and 16 GB RAM
Operating Systems: Microsoft Windows Server 2019, 2016 or 2012 recommended.

Microsoft Office: Microsoft Office 2019, 2016 or 2013 recommended.

Disk space: Approx. 300MB for installation. You also need free disk space for input, output and temporary document files during processing. The amount needed will vary greatly depending on the intensity and type of your document production. But 50 GB free space is a good start.

*Note that your Microsoft Office version must include Microsoft Outlook in order for the server to be able to convert MSG files

Installation

To install PixEdit® Server, you simply start the PixEditServerSetup.exe application. A installation wizard will appear, that leads you through all the necessary configuration steps. PixEdit® Server actually consists of four separate applications or *features*: The **PixEdit® Server Core**, **PixEdit® Server Input Connector**, **PixEdit® Server Manager** and the **PixEdit® Barcode Tool**. For simplicity, all these features are bundled in one single installation package. During the installation wizard, you will be given the option to choose which of these features you want to be installed on that particular system.

Silent Installation (without a user interface)

It is also possible to install PixEdit® Server without the installation wizard. This is useful if you plan to integrate this installation into another installation. To do this, you will need to download the Silent Installation package of PixEdit® Server, PixEditServerSilentSetup.zip. This package contains two files: Package.msi and install.bat. Package.msi is the actual installation file, which is used by msiexec, the Microsoft Installer. The .bat file contains the suggested msiexec commands that you will run to install the software

IMPORTANT: This command file **cannot** be run as is. You must open and edit it first, providing key information to the installer which should have otherwise been provided during the installation wizard. Please read the comments in the .bat file carefully.

Another important thing about the silent installation concerns prerequisites. During a normal installation, the installation Wizard would check for all the necessary prerequisites for PixEdit® Server and automatically install those that were not already present on the system. When running a silent install, you are responsible for checking and installing those prerequisites. The MSI package will **not** do this for you. For a list of prerequisites for PixEdit® Server please see [Appendix B](#).

PixEdit® Server Core

The PixEdit® Server Core is a server application which installs and runs as a Windows Service. It is the document processor engine of the system, and it performs all the necessary processing and preparation of your documents for electronic archiving in the PDF/A file format. It can handle both scanned paper documents and digitally born documents such as Microsoft Office documents. (A complete list of supported document formats is provided in Appendix A.)

PixEdit® Server Core is an efficient multithreaded application which will automatically scale its processing capacity depending on your server hardware. Note that the PixEdit® Server Core cannot actually do anything on its own. It needs client software to be able to carry out document processing.

Important setup notes for Server Core

The Server Core consists of two functional parts:

- Document processing core
- Web service host (WCF)

Both these reside within the same executable, PixEditService.exe, and this exe runs as a Windows Service on your system.

In order to operate properly, the Server Core has a few fundamental requirements which must be fulfilled on your system:

- A dedicated physical working folder must be created on a local or network drive. For optimal performance we recommend a local hard drive. The default is "C:\Docserver".
- This physical folder must be given a UNC share name, and all clients using the Server Core must be given read/write access to this share. The default UNC share name "Docserver".
- In order for clients on other computers to be able to communicate with the web service of the Server Core, a firewall rule must be created, to allow inbound connections on the selected TCP port. The default port for the Server Core web service is set to 8080. If all components are to be installed on the same machine, there is no need for opening ports in the firewall.

- It's recommended to run the Server Core on a dedicated Windows user account. This account should be a domain user and be part of the admin group on the local server. During the installation of PixEdit Server you should be "logged in" as the desired Windows user.
- In order for clients to be able to discover this Server Core's web service via the WS-Discovery protocol, a firewall rule must be created to allow inbound connections on UDP port 3702.
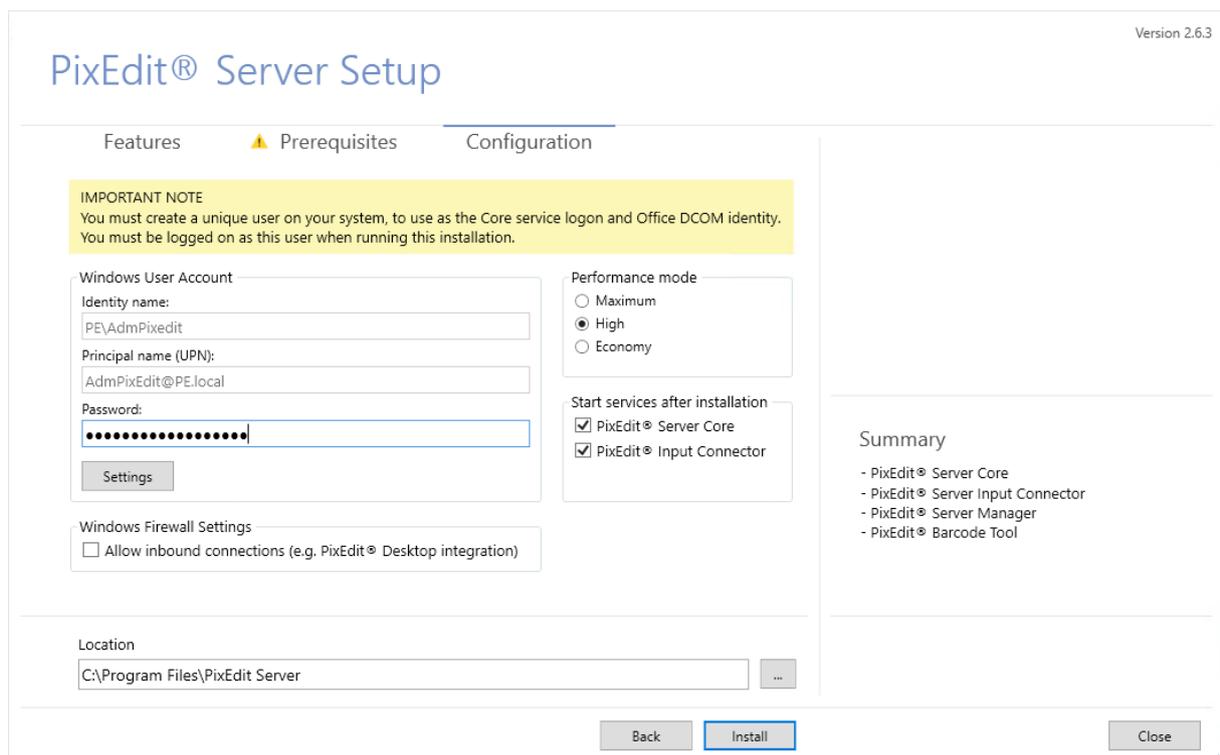
*Figure 1. Main setup dialog for the PixEdit® Server core. The screenshot is showing many of the details described in '*Important setup notes for Server Core'
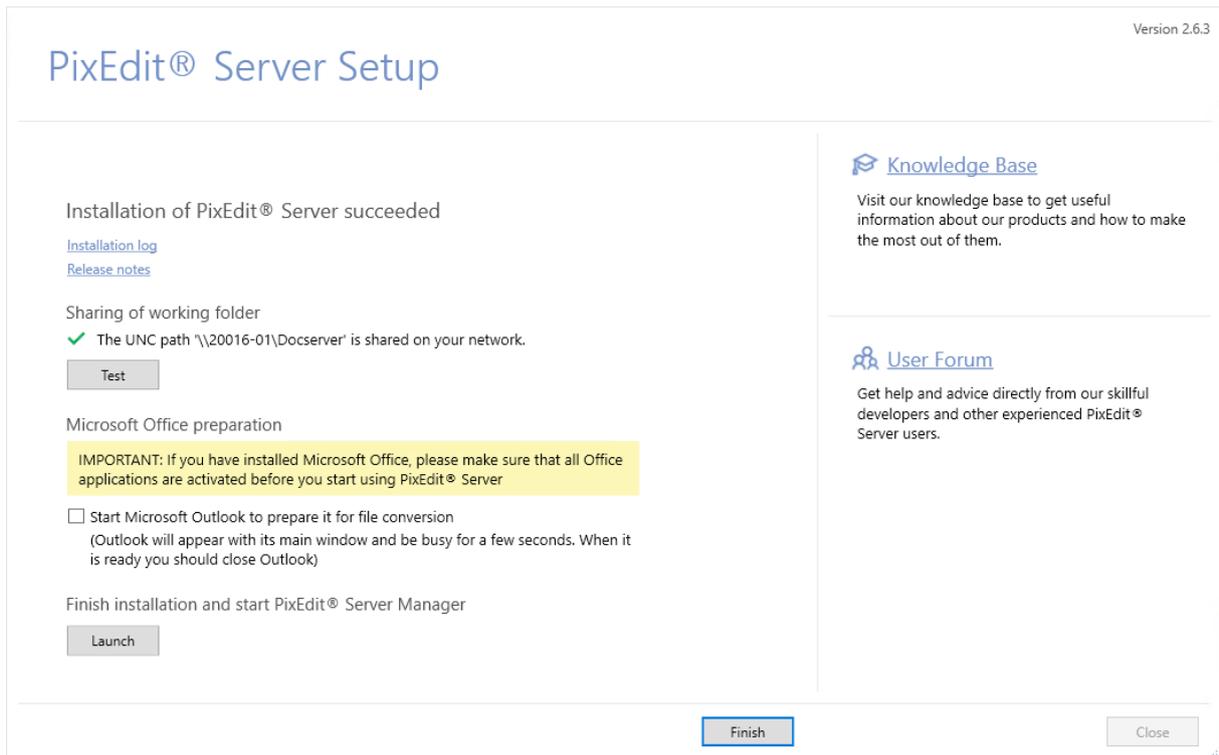
Figure2. Showing the Microsoft Office Preparation dialog and share test of the working folder "Docserver".

The setup dialog in *Figure 2* allows the user to prepare Outlook to avoid the 'first-run' wizard. This dialog is also a remainder to make sure that the Microsoft® Office software is activated and ready to be used.

PixEdit® Server Input Connector

The PixEdit® Server Input Connector is a client that connects to the PixEdit® Server Core. It provides the connection between your document management system and the server. The client is configured to observe client folder(s) for any incoming documents and then upload the documents along with a job specification to the server core. When the server is done with the job, the documents will be copied to the client output folder.

If the PixEdit server and client software is running on different machines you might need to access the Windows Server Manager to specify a "Log-on" user on the PixEdit Input Connector Service. This depends on the network configuration but might be necessary to apply, so the connector is able to copy files to the server.

Info: The installation folder for the PixEdit® Server Input Connector contains a set of test documents which can be useful when deploying and testing the system.

PixEdit® Server Manager

When the setup program is finished installing PixEdit Server the manager starts for the first time. With the server manager, you configure job profiles and different setups and this will be the application where you monitor on going server activity. Please read the User guide for a more detailed description on how to configure PixEdit Server. The user guide is displayed by selecting Help from the Server menu, or by pressing F1.
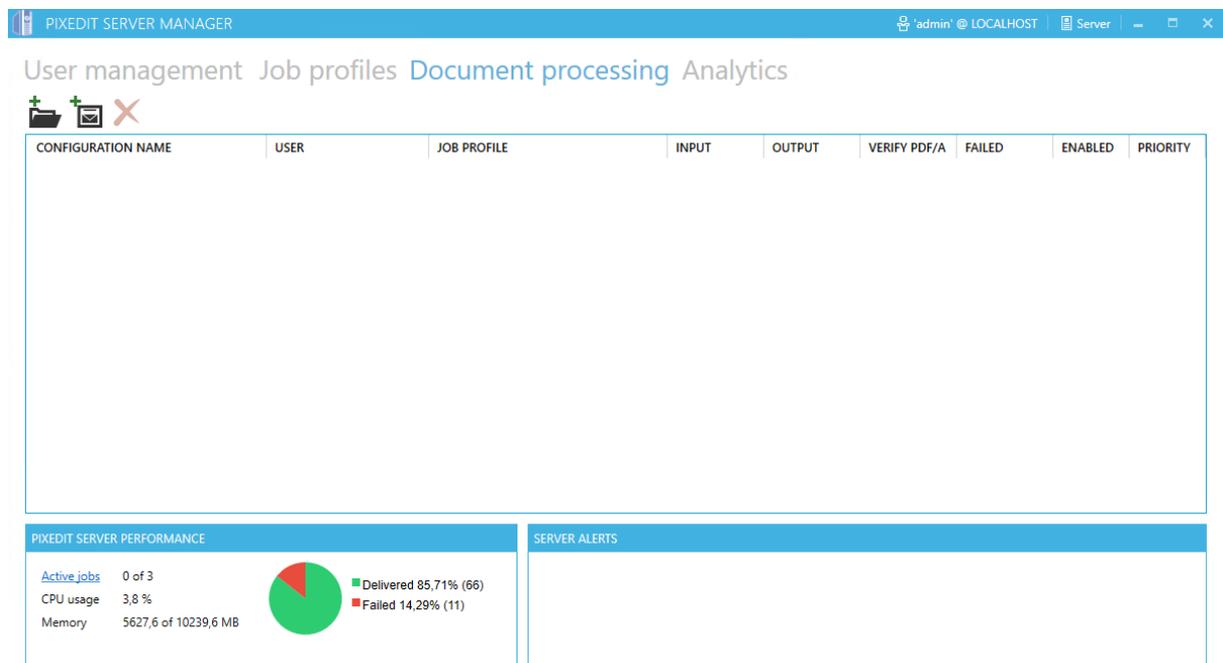
Figure 5. Showing PixEdit® Server Manager

Troubleshooting

The installation-program for PixEdit® Server is a complete setup which deploys both server and client programs to the current system. But with every server/client software and integration with third-party products there can be some issues if the software is not properly configured. Most of these issues are often caused by strict user rights and /or group policies. So, it's recommended to use a unique Windows user with local administrative rights for installation and execution of the PixEdit® Server. Please refer to the [#Important setup notes for Server Core](#)

Problems with the working folder

If the specified working folder for PixEdit® Server is not shared, the Input Connector client will not be able to copy files to this location

Office products and incorrect DCOM-Config user identity

PixEdit® Server is running as a Windows Server and to be able to communicate with third-party products such as Office® a valid Windows user needs to be specified in DCOM-configuration in Windows Component Services. If for some reason the correct user has not been specified the user might experience the following error message in the Server Monitor.

"Retrieving the COM class factory for component with CLSID {000209FF-0000-0000-C000-000000000046} failed due to the following error: 8000401a The server process could not be started because the configured identity is incorrect. Check the username and password. (Exception from HRESULT: 0x8000401A)".

This particular error message applies to Microsoft® Word.

To verify and manually set the correct user identity, go to the Windows start menu and in the "Run" command field type "dcomcnfg.exe"
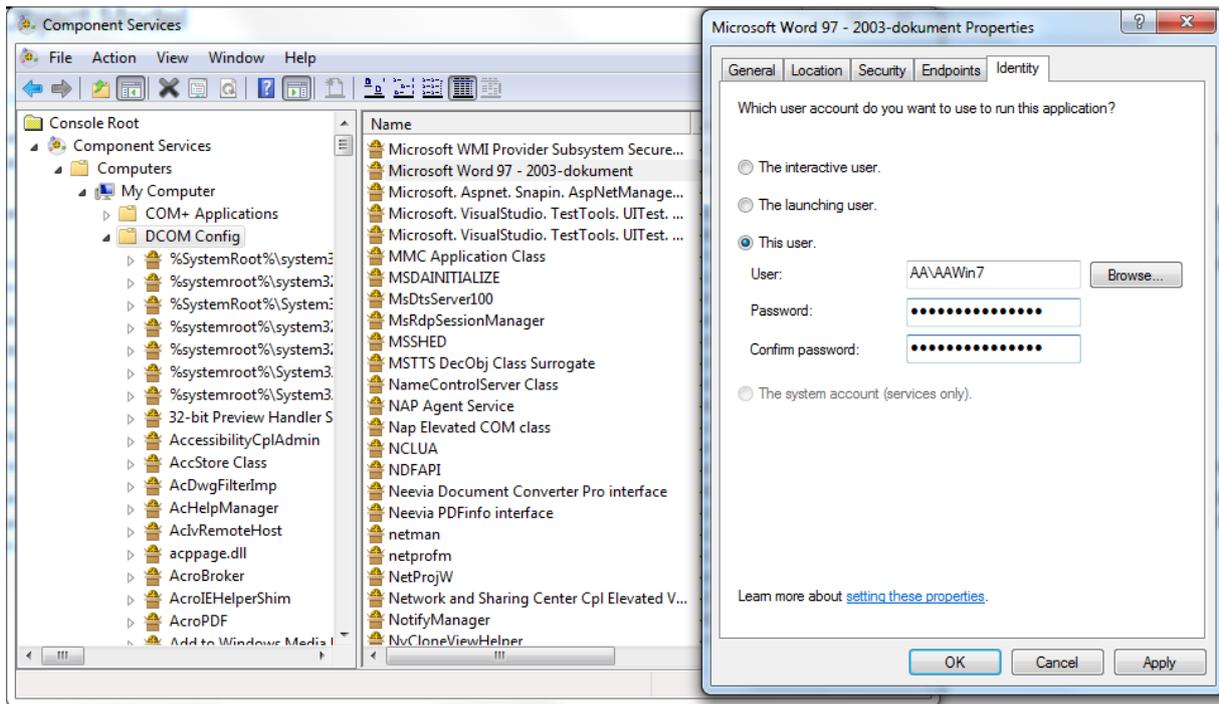
Figure 5. Showing the component Services with the properties dialog for Microsoft Word97 – 2003 –document opened.

Open up the 'Component Services | Computers | My Computer' and click the 'DCOM Config' item. On the right side view find for instance Microsoft Word DCOM-object and right-click this item and choose 'Properties' from the context-menu. In this dialog go to the 'Identity' tab and select "This User" and set the correct username and password. And make sure to verify that the correct user identity is set for:

"Microsoft Excel Application", "Microsoft Power Point Slideshow",

"Microsoft Publisher Application" and "Outlook Message Attachment"

PixEdit Server is not working when running "logged-off"

If the user experiences this kind of behavior, it's likely to think that there is no valid user specified to run the PixEdit Core Service. To verify and manually set the correct logon user, go to the Windows start menu and in the "Run" command field type "services"
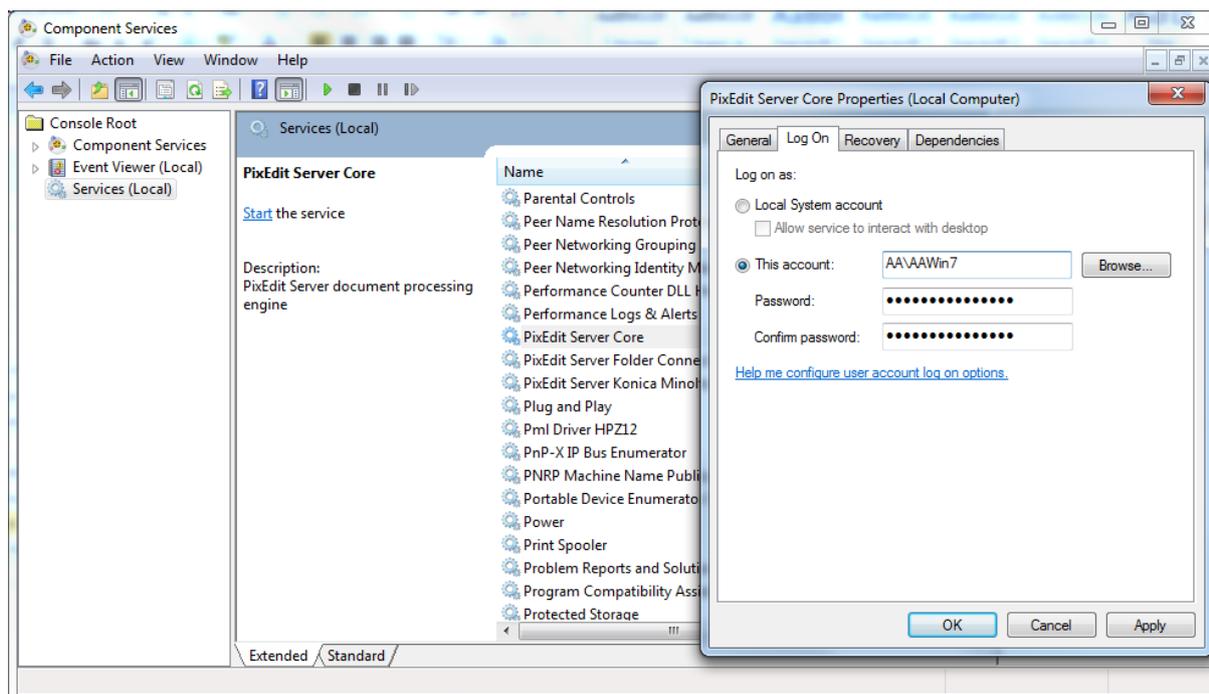
Figure 6. Showing the Windows Services with the PixEdit Server Core service highlighted and with its properties dialog opened.

In the properties dialog for the PixEdit Server Core service make sure to set 'This account' and specify a Windows user and password.

Microsoft Excel & Publisher document conversion fails

Sometimes Excel document conversion might fail even if other office documents convert's okay and DCOM configuration and service logon identity are properly configured.

Solution: Excel & Publisher needs a default printer

Excel & Publisher needs a valid selected default printer or else the user will be presented with a dialog to pick one. In terms of automation this will not work and the conversion will fail. Typical error messages will be

"Exception from HRESULT: 0x800A03EC"

"The remote procedure call failed. (Exception from HRESULT: 0x800706BE)"

When you're logged on to Windows with a specific user, the available default printer can be different from when you are logged off. The best way to solve this is to set a standard Microsoft printer as default, like for instance "Microsoft XPS Document Writer".

Solution: Log off the server console

Sometimes Excel documents can also fail if a user is logged on to the system during document conversion. Try to convert an Excel document with no user logged in. This is also the preferred way to run PixEdit® Server in a production environment.

Appendix A – Supported file formats

Below is a list of the input file formats currently supported by PixEdit® Server.

- More than 100 image and scanned-document formats: PDF (Raster), TIFF, JPEG, PNG, BMP, etc. For a complete list, please refer to our website: http://www.pixedit.com/fileformats.aspx
- Microsoft Office* documents: Word, Excel, Outlook, PowerPoint & Publisher
- OpenOffice* documents
- AutoCAD* drawings
- CorelDRAW* drawings

*Note that to convert these types of documents, **the source application must be installed on the server**. For example, to be able to convert Microsoft Word documents in DOC and DOCX format, you must actually install MS Word on the same server as the PixEdit® Server Core. To ensure maximum compatibility and optimum results, it is also important that you keep the source applications updated with the latest versions on the server.*

IMPORTANT: It is your responsibility to acquire the necessary license and rights to run the source application(s) on your server. All though PixEdit® Server automatically integrates with several 3rd party applications, this does not automatically give you the right to use them. Techsoft cannot be held responsible for any infringement of licensing terms that the integration between PixEdit® Server and a 3rd party application might inflict.

Appendix B – Installation Prerequisites

If you decide to install PixEdit® Server without the installation wizard, i.e. only using the MSI package, the following components must be installed and the following actions must be taken prior to the installation:

- Install [Microsoft .NET 4.6.1 Framework](#)
- Install [Microsoft Visual C++ 2015 Redistributable Package (x64)](#)
- Install Microsoft Office (with Outlook) 2016, 2013 or 2010
- **Activate** Microsoft Office
- Start Microsoft Office Outlook and complete the first-run wizard. An e-mail account is **not** required, so check this option.
- Create and share the base working directory for the Server Core. If you are supplying files to the server via the Input Connector, it is sufficient to share the base directory of the Server Core with the service logon user. But, in addition, the Input Connector folders must also be shared, so that client applications can write and read files in these folders. The Server Core base working directory is set to "C:\Docserver" by default, but this can be modified in the installation wizard or on the msiexec command line.