

**ABBYY®**

**SYSTEM ADMINISTRATOR'S GUIDE**

**ABBYY®**

# **Recognition Server 2.0**

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## **Introduction**

Optical Character Recognition (OCR) is a technology that enables you to convert scanned or photographed images of printed documents into machine-editable and searchable text.

ABBYY Recognition Server is a robust and powerful server-based solution for automating optical character recognition and PDF conversion of medium and high volumes of documents.

Recognition Server can be used both as a turnkey out-of-the-box solution and as an integral part of document capture systems, document sorting systems and back-end applications.

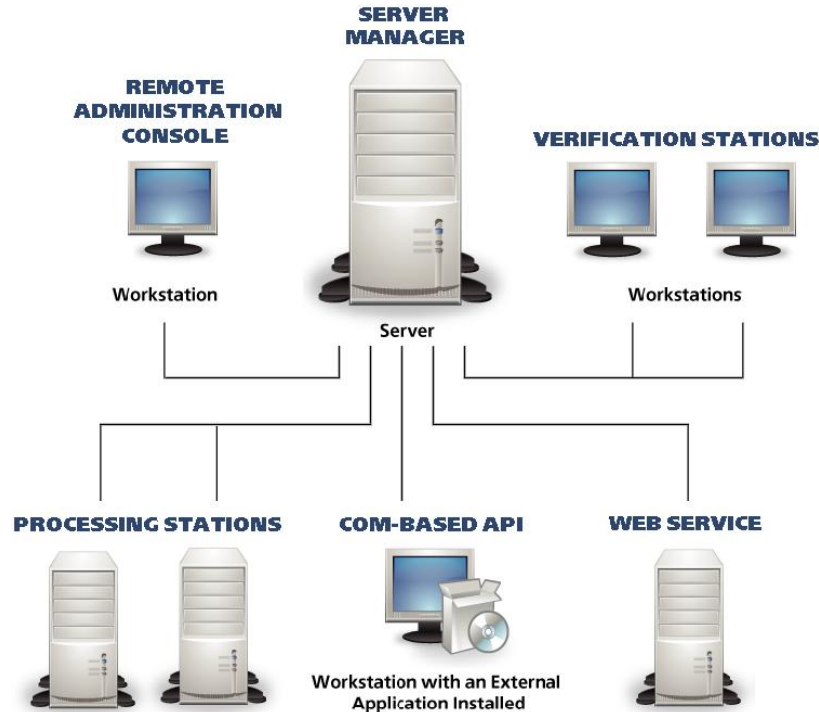
### **ABBYY Recognition Server 2.0 provides:**

- **High quality recognition and conversion of documents in more than 190 languages**  
Award-winning ABBYY OCR technology delivers unprecedented recognition accuracy for any kind of printed documents.
- **Unattended server-based operation**  
The whole document conversion process is performed in unattended mode on the server, and administered centrally.
- **Fault tolerance**  
Designed as a highly robust solution, Recognition Server ensures the ongoing system stability and data safety.
- **Unprecedented scalability**  
With its ability to use the resources of additional computers and CPUs during processing, Recognition Server has no speed limitations and can convert virtually any volume of documents within the required timeframe. There is no need for complex system configuration – it takes just a few minutes to extend the processing power by plugging additional stations to the system.
- **Flexible integration tools**  
Integration with scanners, MFPs, imaging applications and backend systems has never been easier. Recognition Server can communicate with other systems in a number of ways: via “watched” folders, e-mail, XML files or Open API.

## Architecture

### Main Components

ABBYY Recognition Server consists of 6 components: Server Manager, Processing Station, Verification Station, Remote Administration Console, COM-based API, and Web Service.



### Server Manager

This is the main component. It works as a Windows service, manages licenses and all processing options, forms and manages the job queue, distributes the jobs among Processing Stations and Verification Stations, and delivers the output documents after processing. It also coordinates the work of other components (Processing Stations and Verification Stations) and interacts with the Remote Administration Console and the API. The Server Manager does not perform recognition, this task is performed by Processing Stations.

ABBYY Recognition Server will not function without the Server Manager. To run the Server Manager, you need an activated and non-expired license. See the **Protection Technology and License Activation** section for details.

### Processing Station

This component is a Windows service that directly performs recognition. It processes files received from the Server Manager.

The Recognition Server allows you to connect several Processing Stations to one Server Manager in order to increase the processing speed and maximize the throughput. The Server Manager will evenly distribute the workload among the CPUs of the Processing Stations.

### Verification Station

This is a client station which allows you to proofread the recognition results. The Verification Station automatically receives the recognized pages that must be verified from the Server Manager. You can connect several Verification Stations to one Server Manager to speed up the verification process.

### Remote Administration Console

This is a Microsoft® Management Console (MMC) snap-in that provides a common administration interface for configuration and monitoring Recognition Server.

## **COM-based API**

This API allows you to integrate Recognition Server with other applications in the local area network. The COM-based API component should be installed on the computer on which the client application will run. It can also be distributed together with the client application. See more information about the distribution of the COM-based API in the Open API Help file.

## **Web Service**

This component provides a Web Service API for integrating the Recognition Server with remote applications over the HTTP protocol.

All the Recognition Server components can be installed on the same or on different computers in the local area network.

## **Workflows and Jobs**

A **workflow** is a set of processing parameters that are to be applied to image files. Recognition Server can handle several workflows with different parameters. Each workflow corresponds to a unique input source (a folder or a mailbox). All the images that appear in the source folder/mailbox are processed using the parameters of the corresponding workflow.

A **job** is a processing unit. A job contains an image (or a set of images) and its processing parameters. A job is created when Recognition Server imports images for processing. Usually a job contains one image file and inherits the processing parameters of the workflow in which it was created. However, with the help of the API or XML tickets it is possible to create a job that will contain several image files and will have parameters different from the workflow settings. (See the **Integration Tools** section for more information.)

## **Interaction of Components and Load Balancing**

When image files are submitted to ABBYY Recognition Server 2.0, the Server Manager creates jobs for them and queues them for processing. The first job in the queue will be sent to the first available Processing Station for processing. If there are several Processing Stations in the system, the Server Manager will evenly distribute the jobs from the queue among these Processing Stations.

A Processing Station can run several OCR processes (their number can be adjusted in the Remote Administration Console). For optimal performance, the recommended number of processes for a station is  $N+1$ , where  $N$  is the number of CPU cores on the station. Usually each OCR process gets one file at a time. For example, if a Processing Station runs two OCR processes, it will recognize two files in parallel (they can belong to the same job or to different jobs). However, if the file has many pages (e.g. several dozen) and there are no more than 5 jobs waiting in the queue, the big file will be split into several chunks, and the chunks will be sent to different OCR processes, in order to get the work done faster.

When the Processing Station has finished processing the file, it returns the recognized file to the Server Manager and is assigned the next job from the queue.

If verification is turned on in the workflow settings, pages that require verification will be queued for verification after recognition. If there are Verification Stations connected, the Server Manager will route the queued pages to those stations. Each Verification Station gets one page at a time. If no Verification Stations are currently connected, or the users logged on the stations are not permitted to verify pages from this workflow, the pages will wait in the queue with "Queued for verification" state. They will not be exported until they are verified.

After all the pages from the document are recognized and (if necessary) verified, the Server Manager will deliver the output document to the destination specified in the job settings.

If document separation is enabled in the workflow settings, the pages in the job queue will be rearranged into documents before export according to the separation rule. In this case, each job shown in the Job Log will correspond to one output document and will list all the files that form the output document.

If several workflows are set up, ABBYY Recognition Server will process jobs from all the workflows simultaneously, within the single queue. The jobs will be arranged in the queue according to their creation time and priorities.

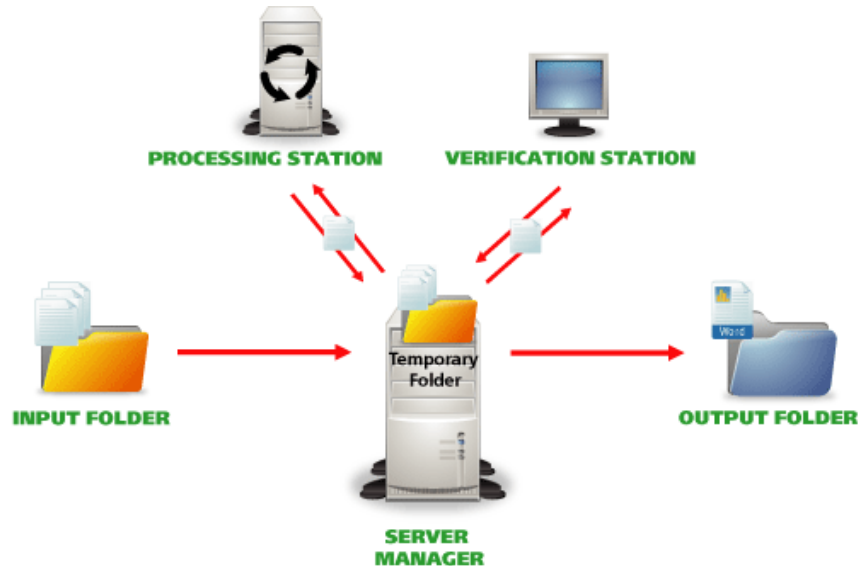
## **Handling Documents**

When image documents get in the Input Folder or mailbox, they are imported by the Server Manager and transferred to the Images subfolder of the ABBYY Recognition Server 2.0 temporary folder. The path to the Server Manager temporary

folder can be viewed and changed in the **Recognition Server Properties** dialog box of the Remote Administration Console.

The image files are kept in the Images subfolder of the Server Manager temporary folder throughout the entire conversion process. The Processing Stations and Verification Stations receive copies of those images for processing. This ensures that no files are lost in case an error occurs during the recognition or verification.

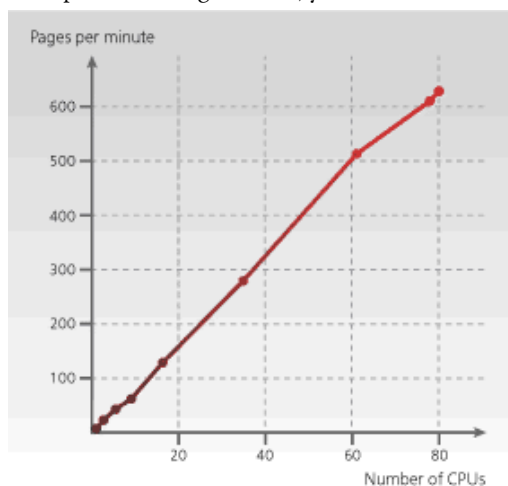
When the recognition and verification are completed, the output files are handed back to the Server Manager and queued for publishing. After the output file is published to the Output Folder, the image copy is removed from the Server Manager temporary folder.



**Note:** To reduce network traffic, create the Input and the Output Folders of the workflow on the same computer on which the Server Manager is installed.

## Scalability

One Server Manager can manage dozens of Processing Stations connected to it and effectively distribute the workload among them. This makes the whole system highly scalable to meet high-volume processing demands. By connecting multiple Processing Stations, you can increase the processing speed up to several hundred pages per minute.



**Note:** The picture shows the speed increase as measured in ABBYY's internal tests. System performance may vary depending on the complexity and quality of the images, the hardware of the server and the stations, and the network configuration.

## **Fault Tolerance**

As ABBYY Recognition Server 2.0 runs completely unattended, it has a number of fault tolerance features that ensure robustness of the system:

- The system starts automatically at Windows startup. For example, in the case of a temporary power outage, ABBYY Recognition Server will be up and running automatically after the PC is rebooted.
- Documents are processed so that no data are lost in the case of a system failure. All the images that were being processed when the failure occurred will stay in the queue and will be processed again after the system is restarted.
- The Server Manager periodically checks to make sure that the Processing Stations are running and are available. If a Processing Station is temporarily down for some reason, the Server Manager will re-establish connection with it after it becomes operational. No administrator's involvement is required to re-connect a Processing Station.
- If a Processing Station or Verification Station experiences a failure while processing a document, the document will be automatically re-routed to another available station. If no station is available at the moment, the image will remain in the queue and wait for the first available station.

## **Integration Tools**

### **XML tickets**

ABBYY Recognition Server 2.0 provides a convenient way to customize job settings via so-called XML tickets. An XML ticket is an XML file that contains a set of processing parameters for the job. The parameters set in the XML ticket override the workflow settings. If an XML ticket accompanies one or several input files, these files will be processed using the parameters set in the ticket. XML tickets can be used to define almost all job parameters, such as priority, recognition languages, output formats, output file name and path, etc.

XML tickets can be created either manually (in a text editor) or programmatically, via the Open API.

XML tickets can be used for integration of ABBYY Recognition Server with front-end systems and devices (for example, the processing options that the user sets on the scanner panel can be transferred to ABBYY Recognition Server in an XML ticket).

### **Open API**

ABBYY Recognition Server provides two types of Open API for integration with external systems: a COM-based API and a Web Services API. Both APIs provide the following functionality:

- submitting images for processing
- creating and submitting XML tickets for processing
- getting notifications about the job completion and information about the job results

The COM-based API uses RPC technology and can be used for integration with other systems in the local area network.

The Web Services API enables communication with remote systems via HTTP, and therefore allows for remote integration over the Internet.

See more information about the Open API and the XML tickets in the Open API Help file.

**Note:** You can use the Open API and XML tickets only if you have the Open API add-on module enabled in your ABBYY Recognition Server 2.0 license.



## **Installation**

ABBYY Recognition Server 2.0 includes a specialized installation program that automates the setup process. To insure proper installation, always use the ABBYY Recognition Server CD-ROM for installation. The installation program allows you to install ABBYY Recognition Server components on one computer or on several different computers.

## **System Requirements**

### **Server Manager**

- PC with Intel® Pentium®/Celeron®/Xeon™/Core™, AMD K6/Athlon™/Duron™/Sempron™/Opteron™ or compatible processor with a minimum clock speed of 500 MHz
- Operating system: Microsoft® Windows Server® 2008, Windows Vista®, Windows Server 2003, Windows® XP, Windows 2000
- Memory: 128 MB RAM
- Hard disk space: 15 MB for installation and 100 MB for program operation\*
- The account under which the server is running must have read/write permissions to the following registry branches:
  - HKEY\_CLASSES\_ROOT
  - HKEY\_LOCAL\_MACHINE\Software\ABBYY
  - HKEY\_CURRENT\_USER\Software\ABBYY
- Microsoft .NET Framework 1.1 or later is required for saving files to Microsoft SharePoint Server
- Microsoft Outlook 2000 or later is required for processing and sending e-mail messages via Microsoft Exchange Server

### **Processing Station**

- PC with Intel Pentium/Celeron/Xeon/Core, AMD K6/Athlon/Duron/Sempron/Opteron or compatible processor with a minimum clock speed of 500 MHz
- Operating system: Microsoft Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, Windows 2000
- Memory: 128 MB RAM plus an additional 100 MB for each recognition process
- Hard disk space: 230 MB for installation and 100 MB for program operation\*

### **Verification Station**

- PC with Intel Pentium/Celeron/Xeon/Core, AMD K6/Athlon/Duron/Sempron/Opteron or other compatible processor with a clock speed of 500 MHz or higher
- Operating system: Microsoft Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, Windows 2000 (for localized interfaces, corresponding language support is required)
- Memory: 128 MB RAM
- Hard disk space: 250 MB for installation and 100 MB for program operation\*

### **Remote Administration Console**

- PC with Intel Pentium/Celeron/Xeon/Core, AMD K6/Athlon/Duron/Sempron/Opteron or compatible processor with a minimum clock speed of 200 MHz
- Operating system: Microsoft Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, Windows 2000

- Memory: 128 MB RAM
- Hard disk space: 15 MB
- Microsoft .NET Framework 1.1 or later is required for saving files to Microsoft SharePoint Server

### COM-based API

- PC with Intel Pentium/Celeron/Xeon/Core, AMD K6/Athlon/Duron/Sempron/Opteron or compatible processor with a minimum clock speed of 200 MHz
- Operating system: Microsoft Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, Windows 2000
- Memory: 128 MB RAM
- Hard disk space: 15 MB

### Web Service

- PC with Intel Pentium/Celeron/Xeon/Core, AMD K6/Athlon/Duron/Sempron/Opteron or compatible processor with a minimum clock speed of 200 MHz
- Operating system: Microsoft Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, Windows 2000
- Memory: 128 MB RAM
- Hard disk space: 15 MB and 100 MB for program operation\*
- Microsoft IIS 5.1 or later
- Microsoft .NET Framework 1.1 or later

\* - **Note:** The hard disk space required for program operation may be larger depending on the complexity, quality, and number of the images.

## Installing ABBYY Recognition Server Components

The installation program will guide you through the installation of ABBYY Recognition Server. Please close all applications prior to installing ABBYY Recognition Server.

**Note:** To communicate with Microsoft SharePoint Server, the Server Manager and the Remote Administration Console require Microsoft .NET Framework 1.1 or higher to be installed. If you are going to configure Recognition Server to publish documents to a SharePoint library, you should install Microsoft .NET Framework prior to installing ABBYY Recognition Server.

If you choose to install Microsoft .NET Framework later, you will have to register the SharePoint connection library manually afterwards. See the **Manual Registration of the SharePoint Connection Library** section for details.

### To install ABBYY Recognition Server:

1. Insert the ABBYY Recognition Server 2.0 CD-ROM into the CD-ROM drive. The installation program will launch automatically.
2. Follow the installation program instructions.

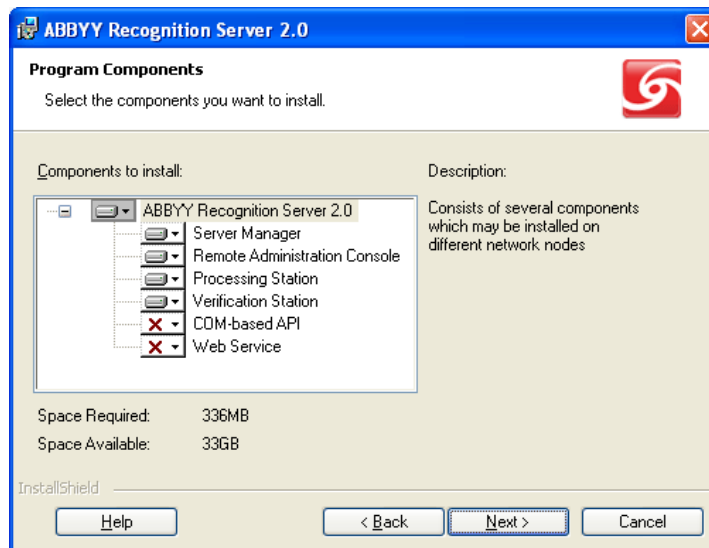
If the installation program does not launch automatically:

1. Click the **Start** button on the **Taskbar** and select **Settings>Control Panel**.
2. Select the **Add or Remove Programs** item.
3. Click the **Add New Programs** button.

Follow the installation program instructions.

### Selecting program components

You can select the program components you wish to install. By default the Server Manager, the Processing Station, the Verification Station and the Remote Administration Console components are marked for installation.



**Note:**

- If you select the Web Service component for installation, Microsoft Internet Information Services (IIS) and Microsoft .NET Framework (including Microsoft ASP.NET) must be already installed on your computer.

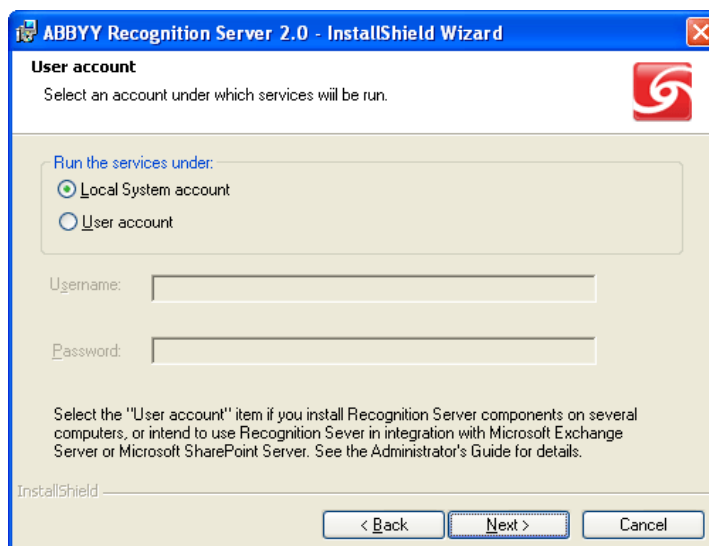
Microsoft IIS can be installed as a Windows component via the **Start>Settings>Control Panel>Add or Remove Programs** window.

To install Microsoft .NET Framework 1.1, you may run dotnetfx.exe file from the DotNet folder on the Recognition Server 2.0 CD and follow the installation program instructions. When installing Microsoft .Net Framework, ASP.NET is copied on the computer but not installed. You should install it manually by running: C:\WINDOWS\Microsoft.NET\Framework\vX.X.XXX\aspnet\_regiis.exe -i (specify the appropriate version instead of vX.X.XXX).

- The Recognition Server Web Service may require very complex configuration, if it is installed on the same computer with Microsoft Office SharePoint Server. It is not recommended to install them on the same computer.

### Selecting a user account

The Server Manager and the Processing Station components of ABBYY Recognition Server are services. If you select at least one of these components, the program will ask you to select a user account under which the services will be run after installation. By default, the Local System account is selected.



You should select **User account** in the following cases:

- If the Server Manager and the Processing Stations will be installed on different computers in a workgroup network.
- If the Server Manager and the Processing Stations will be installed on different computers in a domain-based network and the TCP/IP protocol will be used instead of Named Pipes (see details in the **Connection protocols** section).
- If the Input Folder (from which the images will be imported by Recognition Server) and the Output Folder and the Exception Folder (to which the documents will be published by Recognition Server) are located on a computer different from that on which the Server Manager is installed.  
In this case you should run the Server Manager and Processing Stations under a user account which has read/write access to these folders.
- If you are going to configure Recognition Server to save output documents to Microsoft Office SharePoint Server.  
In this case you should run the Server Manager under a user account which has read/write access to the SharePoint Server libraries.
- If you are going to configure Recognition Server to import images from an Exchange Mailbox, send output documents by e-mail, or send notifications to the administrator by e-mail.

The user account, under which you choose to run the services, must meet the following requirements:

- In the case of a domain-based network, it must be a domain user account.
- In the case of a workgroup network, this user account must be the Administrator or a member of the Power Users group with a non-empty password.
- This user must have read/write access to the Input, Output, and Exceptions Folders of all workflows set up on the Server.

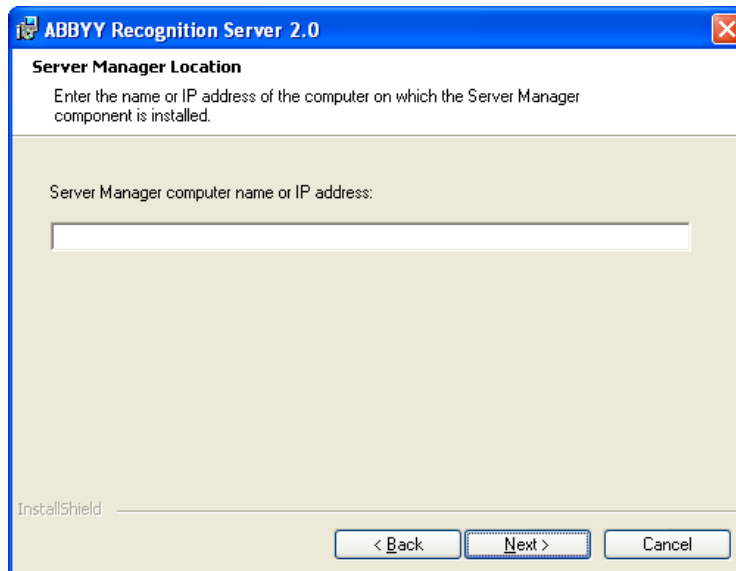
For example, you can create a special user account that will be used only by Recognition Server and grant all the necessary permissions to this account.

### Troubleshooting:

- **After entering the username and password, the message “No mapping between account names and security IDs was done” appears.**  
This means the username you have entered does not exist. You must enter an existing username in DOMAIN\username or COMPUTER\username format.
- **After entering the username and password, the message “Logon failure: unknown username or bad password.” appears.**  
This means you have entered an invalid password or username. Try entering the username and password again.
- **After entering the username and password, the message “Logon failure: the user has not been granted the requested logon type at this computer” appears.**  
This means the system has failed to run the services under this account. This may happen if the user account you have entered does not have sufficient permissions to run the services. Make sure that the user account meets the requirements described above. If the still message appears, select the Local System account and restart the components under the user account manually after the installation (see the **Restarting services under a user account** section).
- **After entering the username and password on Windows 2000, the message “The required privilege is not held by the client” appears.**  
This means that the installer failed to check if the specified user has proper credentials. Select the Local System account and restart the components under the user account manually after the installation (see **Restarting services under a user account** section).

### Specifying the path to the Server Manager

If the Verification Station component is selected for installation and the Server Manager component is not, the installation wizard will request the name of the computer on which the Server Manager is (or will be) installed. Enter the computer's DNS name or its IP address.



This computer name will be stored in the Verification Station's registry key. When launched, the Verification Station will use it to connect to the Server Manager.

## Installing ABBYY Recognition Server Components via the Command Line

You can install ABBYY Recognition Server components from the command line in silent mode. Run the setup.exe file from the installation CD-ROM with the command line options described below.

Option	Default Value	Description
INSTALLDIR=" <i>&lt;destination path&gt;</i> "	C:\Program Files\ABBYY Recognition Server 2.0\	The path to the folder where the ABBYY Recognition Server will be installed.
MODULES= <i>&lt;list of components&gt;</i>	PStation,VStation,Server,Console	The list of components that you want to install. The modules must be separated by a comma (.). For example, MODULES=PStation,VStation,Server,Console,API,WebService.
TYPE	System	The user account under which the services will be run after installation. The value of this option may be one of the following: <b>System</b> – Local System account, <b>User</b> - User account. In the latter case you need to specify SERVICELOGIN and SERVICEPASSWORD.
SERVICELOGIN		The username under which the Server Manager and the Processing Station services will be run.
SERVICEPASSWORD		The password corresponding to the username.
SERVERLOCATION		The name of the computer on which the Server Manager is installed. This option is useful only if the Verification Station component is selected for installation and the Server Manager component is not.
/v		Indicates the beginning of the list of installation parameters.
/q		Silent mode. Use the <b>/qb</b> option if you want a progress bar to be displayed during the installation. No other dialog boxes will be displayed.

/L<language code>	<locale language>	Installs ABBYY Recognition Server with the interface language specified in the command line. Possible language code values: 1033 English 1034 Spanish 1040 Italian 1031 German 1049 Russian 1036 French
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**Note:** When you use silent mode, the /q option must precede the /v option, for example: setup.exe /q /v

**Examples**

setup.exe /q /v MODULES=API

This command line will install (in silent mode) the COM-based API component into the C:\Program Files\ABBYY Recognition Server 2.0 folder.

setup.exe /qb /L1033 /v MODULES=VStation,PStation INSTALLDIR="D:\ABBYY Recognition Server 2.0"

This command line will install (in silent mode) the Verification Station and the Processing Station components into D:\ABBYY Recognition Server 2.0 folder with the English interface. A progress bar will be displayed.

**Installing ABBYY Recognition Server using Microsoft Systems Management Server (SMS)**

Microsoft Systems Management Server automates software deployment in a network and eliminates the need to go directly to the locations where the software is to be installed (computers, groups, or servers).

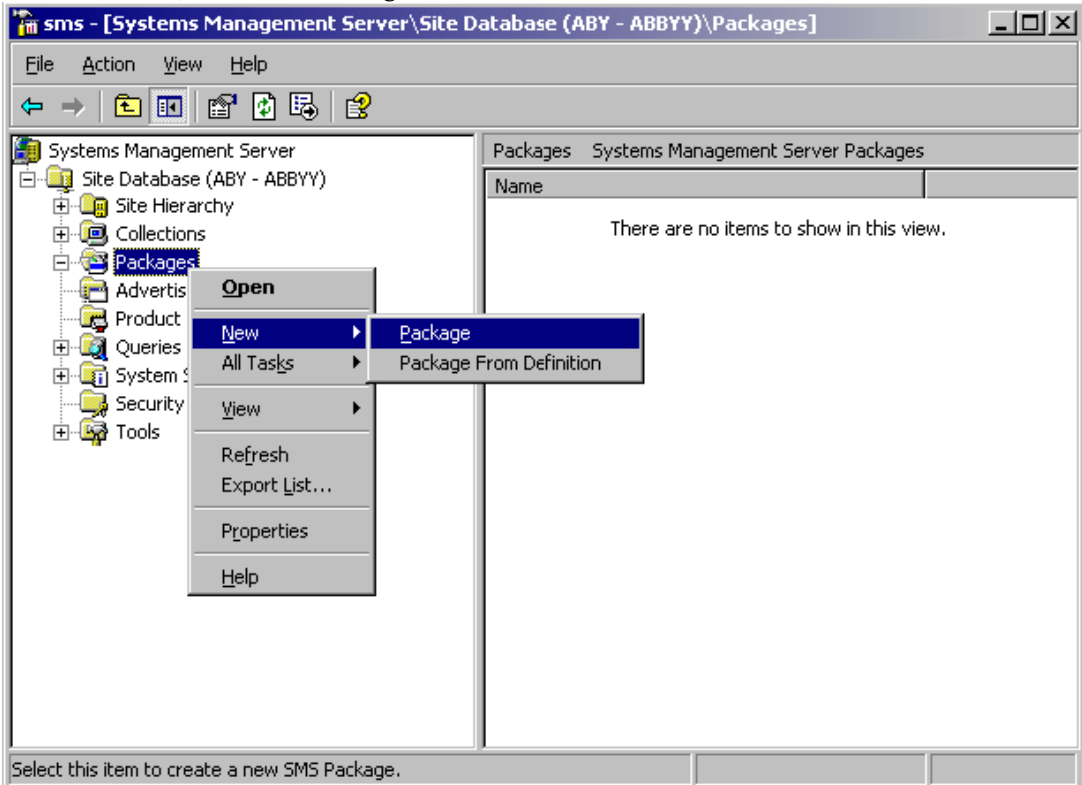
Software deployment using SMS includes three stages:

1. Preparing ABBYY Recognition Server for automated installation (creating a so-called "unattended setup").
2. Creating a deployment script (i.e. choosing installation parameters: computer names, time of installation, conditions for installation, etc.).
3. Installing the software on the specified computers using SMS in accordance with the installation parameters specified in the script.

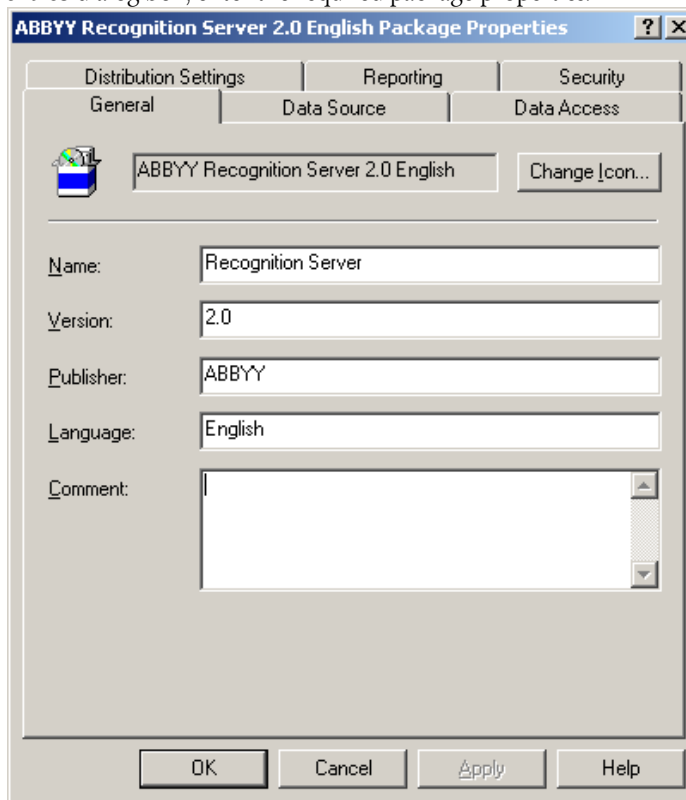
**An example of deploying ABBYY Recognition Server using SMS**

1. Create an administrative installation point:
  - Run the setup.exe file with the /a command-line option from the ABBYY Recognition Server installation CD-ROM:  
**setup.exe /a**
  - Next during administrative installation, specify a shared network folder that can be accessed from any workstation on which you are planning to install the program (e.g. \\MyServer\Programs\RecognitionServerAdminSetup).
2. Once the administrative installation point has been created, select the **Packages** item in the SMS Administrator Console.

- In the **Action** menu, select **New/Package**.

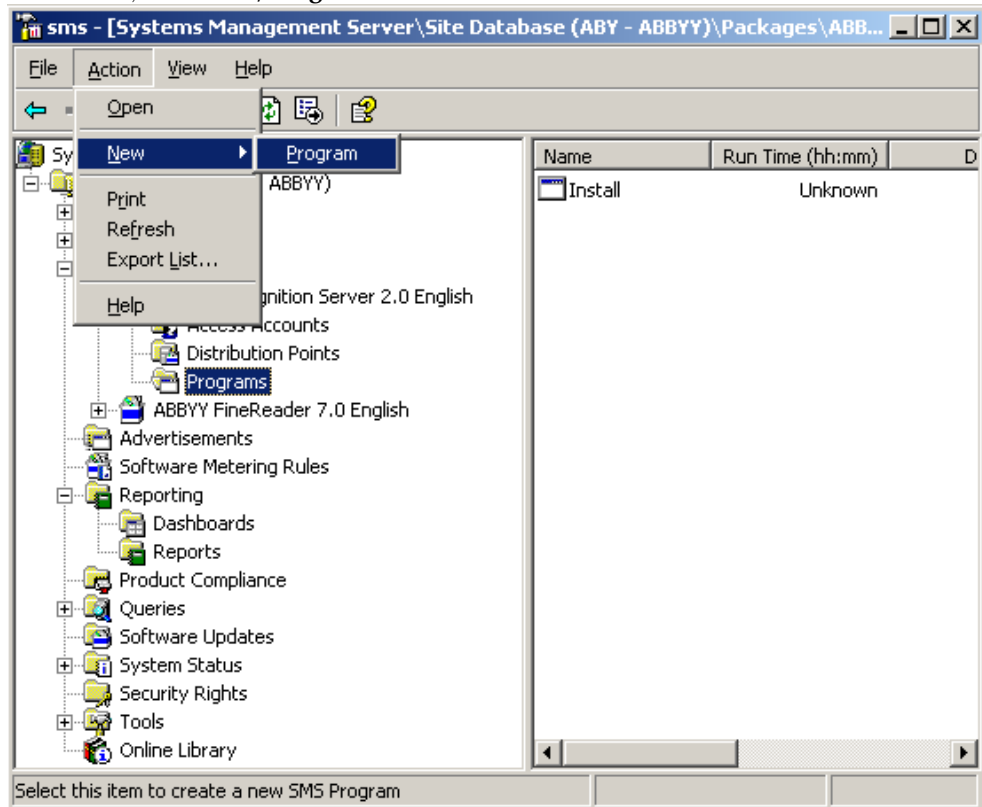


- In the **Package Properties** dialog box, enter the required package properties.

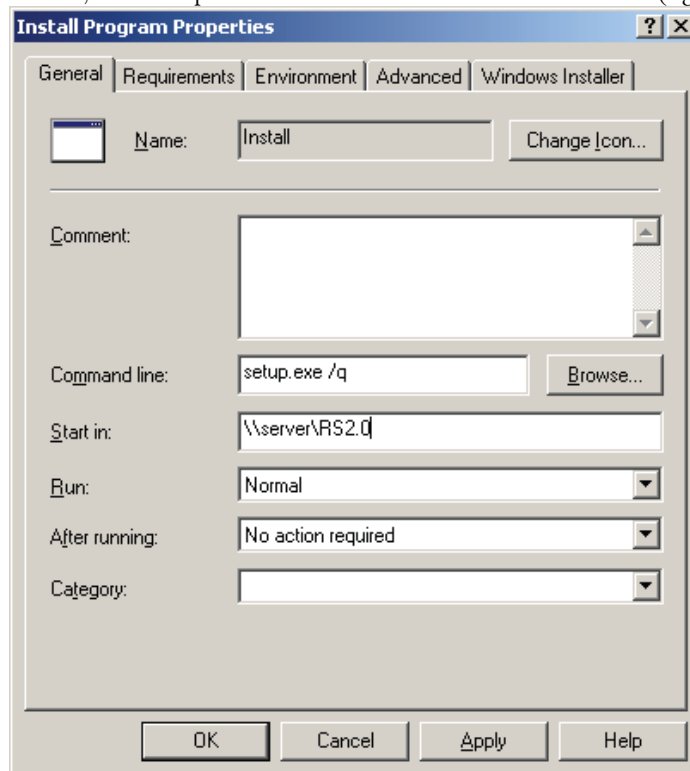


- Click the **Data Source** tab.
- Make sure that the **This package contains source files** box is not selected and click **OK**.
- In the package you have just created, select **Programs**.

8. In the **Action** menu, select **New/Program**.



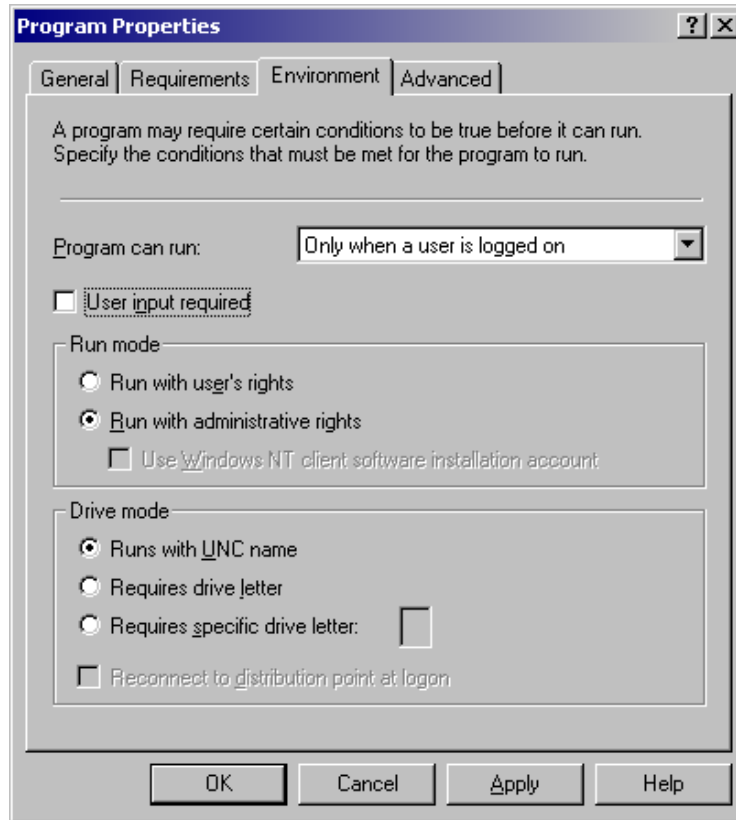
9. On the **General** tab of the **Program Properties** dialog box:
  - Enter a descriptive name of the program in the **Name** field.
  - Type `setup.exe /q` in the **Command line** field. If you wish to change the set of components to be installed, or specify additional information for the installer, use the additional command line parameters (see the **Installing ABBYY Recognition Server Components via the Command Line** section for details).
  - In the **Start in** field, enter the path to the administrative installation folder (e.g. `\\server\RS2.0`).



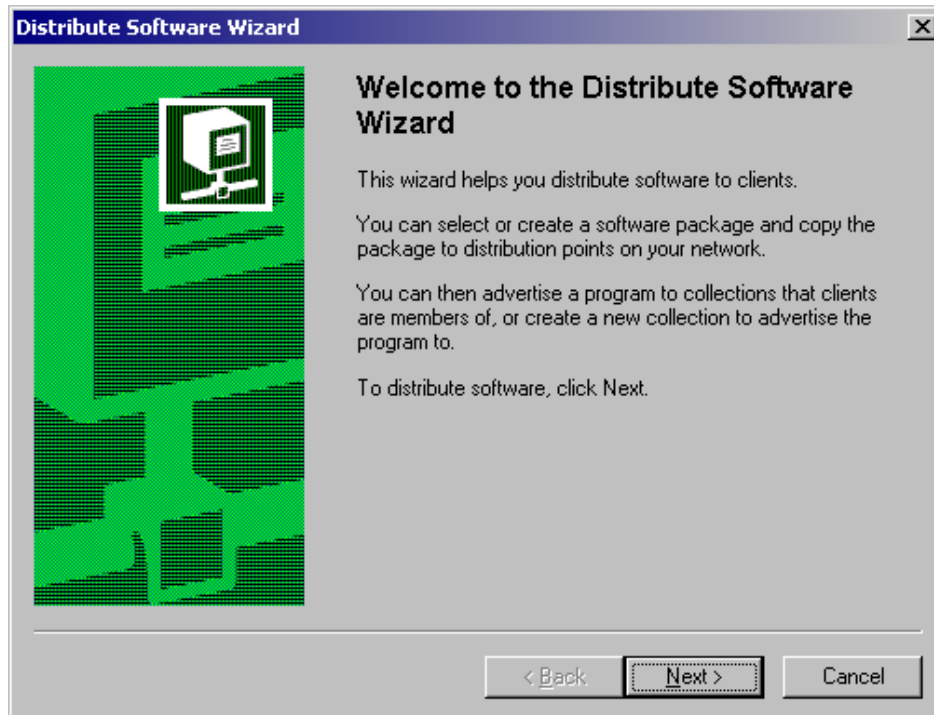
10. On the **Environment** tab of the **Program Properties** dialog box:
  - Clear the **User input required** box.



- Select **Run with administrative rights**.
- Make sure that **Runs with UNC name** is selected.



11. Change the condition in the **Program can run** field if required and click **OK**.
12. You can also use the **Distribute Software Wizard**. To run the wizard, select **All Tasks/Distribute Software** on the **Action** menu and follow the instructions of the wizard.



**Important!** You cannot create Distribution Points.

## Manual Registration of the SharePoint Connection Library

To communicate with Microsoft SharePoint Server, the Server Manager and the Remote Administration Console require Microsoft .NET Framework 1.1 or higher to be installed. If Microsoft .NET Framework has not been installed on the computer prior to installing ABBYY Recognition Server, the SharePoint connection library will not be registered during the installation. In this case, prior to configuring Recognition Server to output documents to the SharePoint Server, you should install Microsoft .NET Framework 1.1 or later and then register the SharePoint connection library manually:

1. Run dotnetfx.exe file from the DotNet folder on the Recognition Server 2.0 CD. Follow the installation program instructions.
2. After Microsoft .NET Framework 1.1 is installed, to register the SharePoint connection library launch the file SPConnectorLibReg.exe, which can be found in the \Bin subfolder of ABBYY Recognition Server installation folder.
3. Close the Remote Administration Console component and run it again. Restart the Workflows which will be used for saving output files to SharePoint libraries.

## Installing the Hardware Key Drivers

If you have a hardware protection key, the hardware key drivers must be installed on your computer before you can run ABBYY Recognition Server 2.0.

In the case of a 32-bit system, the hardware key drivers are automatically installed on your computer during ABBYY Recognition Server installation.

In the case of a 64-bit system, you should install the hardware key drivers manually. The drivers should be installed in non-PCSC mode. To install the drivers in this mode, run the iKeyDrvr.exe file from the ABBYY Recognition Server 2.0\USB Drivers\64 folder on the Recognition Server 2.0 CD using the following command line: iKeyDrvr.exe /v "VR=OFF".

**Note:** If the hardware key drivers are installed in non-PCSC mode (the drivers for 32-bit systems are installed in this mode automatically, while for 64-bit system the drivers can be installed in this mode using the command line referred above), the USB keys cannot be used as smart cards. If you need to use the USB keys as smart cards, you should install the hardware key drivers manually in PCSC mode by running corresponding iKeyDrvr.exe file without the VR=OFF parameter of the command line. In this case, ABBYY Recognition Server can work with the hardware keys, only if the Server Manager service is run under Local System account.

## Protection Technology and License Activation


A special protection technology is used to protect ABBYY Recognition Server 2.0 from illegal copying and distribution. This technology effectively excludes unauthorized use of ABBYY products by persons who have not signed a License Agreement with the software copyright owner. The protection technology is implemented in the form of protection keys. A protection key binds the product license to the particular hardware configuration of the computer or USB key and therefore prevents using one license on several computers at a time.

ABBYY Recognition Server will not run without a protection key.

Two types of protection keys are available:

- **Software key** – This is an activation file that should be obtained from the ABBYY server during an **Activation** process.
- **Hardware key** – This is a USB dongle that contains the license parameters. In the case of a hardware protection key, activation is not required.


If you have a software protection key, you must activate at least one license in the **Licensing** node before you can run ABBYY Recognition Server 2.0. After activation ABBYY Recognition Server is launched automatically.

**Note:** If ABBYY Recognition Server is not launched after activation, click the  (Start) button on the toolbar or select the corresponding item on the shortcut menu.

### License Activation

**Important!** Activation is only required for a software protection key.

When you run the Remote Administration Console for the first time, you are prompted to enter your software license number or plug in your hardware key. If you enter the software license number, the activation process will start automatically.

To activate a license, select this license in the **Licensing** node and either click  (Activate License) on the toolbar or select the corresponding item on the shortcut menu.

### How is activation carried out?

Activation takes very little time and is carried out with the help of an **Activation Wizard**. The Activation Wizard helps you send the necessary activation information to ABBYY.

Activation information is sent as a code (Installation ID) which is generated based on the information about the computer on which the program is being installed. No personal information about the user or the user's computer is used for generating this code and this code cannot be used for identifying the user.

### Activation methods

- **Via the Internet**  
Activation is carried out automatically and takes only a few seconds. An Internet connection is required for this type of activation.
- **By e-mail**  
Send an e-mail message generated by the program and containing the information required for activation. To ensure a quick reply from the mail robot, do not alter the information in the message body or the Subject field. After you have received an activation file from ABBYY, enter the path to the file in the corresponding field of the Activation Wizard.

Once the activation is complete, the program can be used without any restrictions.

**Important!** ABBYY Recognition Server 2.0 can be reinstalled on one and the same computer an unlimited number of times without re-activation. However, if some of the computer parameters are changed, the program should be re-activated.

## **Deactivation**

You can deactivate your ABBYY Recognition Server 2.0 license if you need to reinstall Recognition Server from one computer to another. The deactivated license can be then activated on another computer. The number of allowed deactivations can be restricted by your license.

Deactivation takes very little time and is carried out with the help of the Activation Wizard. The deactivation is performed only via the Internet. It is carried out automatically and takes only a few seconds. An Internet connection is required. Once the deactivation is complete, the license can be activated on another computer.

## **License update**

If you are interested in the newest capabilities of ABBYY Recognition Server 2.0 and your license does not allow you to use them, you need to update the license. The license update process is similar to the activation process. The update process is carried out with the help of the Activation Wizard which helps you to send the necessary update information to ABBYY. The license update can be performed via the Internet or by e-mail. Once the update is complete, the newest functionality of the program can be used.

## Administering

ABBYY Recognition Server 2.0 is administrated via a separate component, the Remote Administration Console, which is based on the Microsoft Management Console (MMC). The Remote Administration Console allows administrators to change Recognition Server's properties, connect Processing Stations and manage their properties and activity, create and manage workflows, add users to the system and assign Administrator and Verifier permissions to the users, monitor connected Verification Stations and the job queue, view and export the job log and the server log, and manage licenses.

If several ABBYY Recognition Servers are installed in the local area network, they can all be registered in the same Remote Administration Console and thus all managed from a single point.

## Getting Started

If you install the Server Manager and the Remote Administration Console on different computers, you need to register the installed ABBYY Recognition Server in the Remote Administration Console (see **How to Register a New Server** for details).

If you install the Processing Station and the Server Manager on different computers, you will need to register the Processing Station in the **Processing Stations** node (see **How to Register a New Processing Station** for details).

After you install ABBYY Recognition Server 2.0, a Default Workflow is configured, which has the following settings:

- The Input Folder, Output Folder and Exceptions Folder are set to Default Workflow\Input Folder, Default Workflow\Output Folder, and Default Workflow\Exceptions Folder respectively. The root folder is:
  - %ALLUSERSPROFILE%\Application Data\ABBYY Recognition Server 2.0 – for Windows 2000, Windows XP, Windows Server 2003;
  - %PUBLIC%\ABBYY\ABBYY Recognition Server 2.0 – for Windows Vista, Windows Server 2008.
- The format of the output file is set to PDF.
- The recognition language is set to English.
- The input image is moved to the Output Folder without conversion.

You can view the properties of the Default Workflow in the **Workflow Properties** dialog box, which can be opened in the **Workflows** node. You can also create new workflows in this node (see **How to Create a New Workflow** for details).


### To recognize a document:

- Copy the document (image or PDF file) into the folder which is specified as the Input Folder in the properties of the workflow.
- Shortly (the actual time required depends on the complexity of the document and your hardware resources) the recognition results will be placed into the Output Folder.
- If the document cannot be processed (e.g. the image file is corrupted or its format is invalid), the image will be placed into the Exceptions Folder. An XML result file with a description of the error will also be placed in this folder.

## How to Register a New Server

The installed copy of ABBYY Recognition Server must be registered in the Remote Administration Console if the Server Manager and the Remote Administration Console have been installed on different computers.


To register a new Recognition Server:

1. Select the **ABBYY Recognition Servers** node and either click  (Register New Server) on the toolbar or select the corresponding menu item on the shortcut menu.
2. In the **Register New Recognition Server** dialog box, provide the name, description, and location (i.e. DNS name or IP address) of the Server Manager component.
3. Click the **Test Connection** button to check the connection. If connection has been successfully established, the word "Connected" will appear next to the button.
4. In the Authentication group, provide the correct authentication parameters.


5. Click **OK**. A node corresponding to the registered copy will appear in the **ABBYY Recognition Servers** node.

## How to Register a New Processing Station

If the Server Manager and a Processing Station have been installed on different computers, you need to register the Processing Station in the Recognition Server. To register a new Processing Station:


1. Select the **ABBYY Recognition Servers\Recognition Server\Processing Stations** node.
2. Click  (Register New Processing Station) on the toolbar or select the corresponding item on the shortcut menu.
3. In the dialog box that opens, specify the name of the station and the name or IP of the computer on which the Processing Station is installed.
4. Click the **Test Connection** button to check the connection to this computer.
5. Click **OK**. The created Processing Station will be added to the **Processing Stations** node.

## How to Create a New Workflow

To create a new workflow, select the **Workflows** node and either click  (New Workflow) on the toolbar or select the corresponding item on the shortcut menu. You can also create new workflows by creating a copy of an existing workflow and changing its options. To create a copy of an existing workflow, select the **Duplicate** item on the shortcut menu of the workflow.

In the **Workflow Properties** dialog box, specify the following:

- **Input** tab:
  - Workflow name which will be displayed in the **Workflows** node
  - In the **Get images from** drop-down list, select the type of the Input Folder
  - The path to the Shared Folder, Exchange Mailbox Folder, POP3 E-mail Server or FTP server, the username and password to the POP3 server, the login and password to the FTP server (see **How to Configure E-mail Processing** for more information about e-mail configuration)
  - Workflow activity, which can be scheduled (see **How to Create a Schedule** in ABBYY Recognition Server 2.0 Help)
- **Process** tab:
  - Recognition language(s)
  - Document separation method
  - Recognition mode
- **Quality Control** tab:
  - Verification settings (see **How to Configure Verification**)
  - Exceptions Folder into which the images that cannot be processed will be published
- **Output** tab:
  - Output formats and their settings
  - Output destination and the file naming rule

To view or adjust the properties of a workflow, select the corresponding node and either click  (Properties) on the toolbar or select the corresponding item on the shortcut menu.

If the Input Folder has subfolders and image files are copied into the subfolders, the output files will be saved in the corresponding subfolders of the Output Folder or Exceptions Folder.

## How to Configure E-mail Processing

ABBYY Recognition Server 2.0 provides the following e-mail-based functionality:

- Import of attachments from e-mail messages (**Get images from: Exchange mailbox** or **Get images from: POP3 E-mail Server** option on the **Input** tab of the **Workflow Properties** dialog box)

- Sending output documents by e-mail (**Send output file via Exchange Server** or **Send output file via SMTP Server** option in the **Output Format Setting** dialog box of the workflow properties)
- Sending notifications to the administrator (**Notify the administrator if a failure occurs** and **Notify the administrator when all jobs have been processed** options in the **Recognition Server Properties** dialog box). Recognition Server supports sending notifications to the administrator only via Microsoft Exchange e-mail server.

**Note:** If using e-mail-based functionality provided via Microsoft Exchange Server, Microsoft Outlook 2000 or later must be installed on the computer where the Server Manager is installed.

### To configure your Exchange e-mail client:

The e-mail account must be configured correctly on the computer where the Server Manager is installed for Recognition Server to be able to process and send e-mail messages via Microsoft Exchange Server. To configure the e-mail account:

1. In the Control Panel, click Services, and then make sure that the ABBYY Recognition Server 2.0 Server Manager service is configured to run under a domain user account. If, during the installation, you chose to run the service under a Local System account, you should restart it under a domain user account (see **Restarting Services under a user account**).
2. On the Microsoft Exchange Server computer, set up a mailbox or several mailboxes for the domain user account under which the ABBYY Recognition Server 2.0 Server Manager service is running.
3. On the computer where the Server Manager is installed, log on to Windows by using the same user account under which the ABBYY Recognition Server 2.0 Server Manager service is running, and start Microsoft Outlook. **Important!** Microsoft Outlook has to be run under this user account on this computer at least once before the workflow is set up.
4. Configure Microsoft Outlook to connect to Microsoft Exchange Server. You will need to provide the name of the Exchange Server computer and the mailbox on the Exchange Server. If you wish to use mailboxes other than the default mailbox, you should first connect these mailboxes to the current account. For example, to connect a mailbox in Microsoft Outlook 2003:
  - Select **Tools > E-mail Accounts...> View or change Existing e-mail accounts** and click **Next**.
  - Click the **Change...** button and then click the **More settings...** button.
  - On the **Advanced** tab of the **Microsoft Exchange Server** dialog box, click the **Add...** button and enter the name of the mailbox you want to connect.
5. After the setup is complete, verify that you can send and receive mail interactively. You can then close Microsoft Outlook.

**Note:** When configuring the workflow to monitor an Exchange Mailbox, you will be prompted to enter the path to the mailbox folder. To be able to navigate to the folder using the **Browse for folder** dialog box of the Remote Administration Console, you must first connect the desired mailbox in Microsoft Outlook on this computer. Alternatively, you can enter the name of the mailbox folder manually in the following format: **Mailbox - Username\Folder**. For example: Mailbox - Recognition Server\Inbox.

### To set up import of messages from the POP3 e-mail server:

1. Create a new workflow or modify an existing one (see **How to Create a New Workflow**). In the drop-down list of the **Input** tab of **Workflow Properties** dialog box, select **Get images from: POP3 E-mail Server**.
2. Enter the address of the POP3 e-mail server and if necessary change the port number.
3. Enter the user name and password to logon.
4. Click **OK** on the **Input** tab of **Workflow Properties** dialog box.

**Note:** If all the settings are correct but Recognition Server is unable to retrieve messages from POP3 e-mail server, make sure that a firewall does not block connection with the e-mail server. See **Recognition Server is unable to retrieve messages from POP3 e-mail server or send messages via SMTP server** in the **Troubleshooting** section for details.

### To set up publishing documents to the SMTP server:

1. Create a new workflow or modify an existing one (see **How to Create a New Workflow**). In the **Output Format Settings** dialog box, select **Send output file via SMTP server** and click the **E-mail Account** button.

2. In the **E-mail account** dialog box that opens enter the address of the SMTP server and if necessary change the port number.
3. Enter the sender address and the password. The password may not be required depending on SMTP server settings.
4. Click **OK** on the **Input** tab of **Workflow Properties** dialog box.

**Note:** If all the settings are correct but Recognition Server is unable to send messages via SMTP server, make sure that a firewall does not block connection with the e-mail server. See **Recognition Server is unable to retrieve messages from POP3 e-mail server or send messages via SMTP server** in the **Troubleshooting** section for details.

## How to Configure Verification

ABBYY Recognition Server 2.0 includes Verification Stations that allow you to check and correct the recognized text. The pages that require verification arrive to the Verification Station automatically after they are recognized. Detailed information about Verification Station operation can be found in the Verification Station Help.


The verification settings in Recognition Server are specified for each workflow. For each Recognition Server workflow, you can select one of the following options:

- **No verification** – all pages will be exported into the output document after recognition and will not be routed to a Verification Station.
- **Verify all pages** – all pages will be queued for verification after they are recognized and before they are exported to an output file.
- **Verify only pages on which uncertain characters exceed N%** - only pages recognized with low confidence will be queued for verification.


If you create a workflow with verification enabled, by default all users are allowed to verify pages from this workflow, which means that if there are some pages queued for verification, any user who runs a Verification Station will receive a page from the workflow.

However, it is possible to restrict the verification permissions for a workflow, so that only a limited number of users (so-called “Verifiers”) may verify pages from this workflow.

To restrict the verification permissions for a workflow:

1. Select the workflow in the **Workflows** node and click  (Properties) on the toolbar, or select the corresponding item on the shortcut menu.
2. In the **Workflow Properties** dialog box, navigate to the **Quality Control** tab and click the **Assign Verifiers...** button.
3. In the **Assigned Verifiers** dialog box, select the option **Restrict access to this workflow for all users except the Verifiers listed below**, and then select the desired verifiers from the list. If a username you need is not on the list, you should first add it to the list of Recognition Server Verifiers.
4. Click **OK** and save the workflow properties.

To add a verifier to the Recognition Server:

1. In the **Users** node click  (Add User) or select the corresponding item on the shortcut menu.
2. Enter the user name in **DOMAIN\username** or **COMPUTER\username** format.
3. Select the **Verifier** option and then select the workflows this user should be allowed to verify.
4. Select the option **Allow the user to choose workflows on the Verification Station** if you want the user to be able to select which workflows to verify.
5. Click **OK** and then click the **Refresh** button. The new verifier will be added to the **Users** node.

## Using the Verification Station in a workgroup network

If the Verification Station and the Server Manager are installed on different computers in a workgroup network, the following requirements should be met:

- The user account under which the Verification Station is run must be the Administrator or a member of the Power Users group with a non-empty password.



- On the computer on which the Server Manager is installed, there must exist user accounts with the same usernames and passwords as those of the users who will run the Verification Station.

## How to Configure Publishing Documents to a SharePoint Server

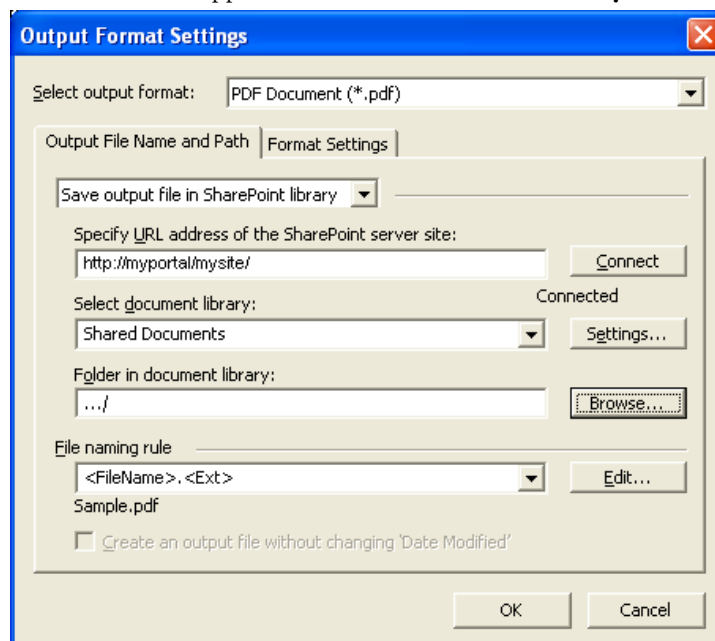
ABBYY Recognition Server 2.0 supports publishing output files to Microsoft Office SharePoint Portal Server 2003 and Microsoft Office SharePoint Server 2007.

**Note:** In order to be able to communicate with the SharePoint Server, the Server Manager and the Remote Administration Console require Microsoft .NET Framework 1.1 or higher to be installed. If Microsoft .NET Framework has not been installed on the computer prior to installing ABBYY Recognition Server, the SharePoint connection library will not be registered during the installation. In this case you should install Microsoft .NET Framework 1.1 or later and then register the SharePoint connection library manually. See **Manual Registration of the SharePoint Connection Library** for details.

To be able to save output documents to a SharePoint Server library, the ABBYY Recognition Server 2.0 Server Manager service must be run under a user account which has read/write access to the SharePoint Server library. If, during the installation, you chose to run the service under a Local System account, you should restart it under a user account (see **Restarting Services under a user account** section).

To set up the publishing of documents to a SharePoint Server library:

1. Run the Remote Administration Console under a user account which has read/write access to the SharePoint Server library.
2. Create a new workflow or modify an existing one (see **How to Create a New Workflow**). In the Output Format Settings dialog select **Save output file in SharePoint library**.
3. Enter the URL of the SharePoint Server site (e.g. <http://myportal/mysite/>) and click **Connect**. The Remote Administration Console will try to connect to the specified site and download the list of document libraries and folders from there. If connection is successful, you will see the "Connected" message below the button, and the names of the document libraries will appear in the **Select document library** list.



4. Select the document library from the list. If you wish to change the content type, or specify the metadata values that should be exported as document properties, click the **Settings...** button.  
**Note:** Content type selection and setting of the document properties are available only for Microsoft Office SharePoint Server 2007.
5. Select the folder in the document library using the **Browse...** button, or leave the field empty to save documents in the root folder.
6. Click **OK** in the **Output Format Settings** dialog box.

**Note:** If the Input Folder has several subfolders containing image files, the output files will be saved in the corresponding subfolders of the Output Folder in the SharePoint Server document library.

## How to Transfer Recognition Server Settings to another Server

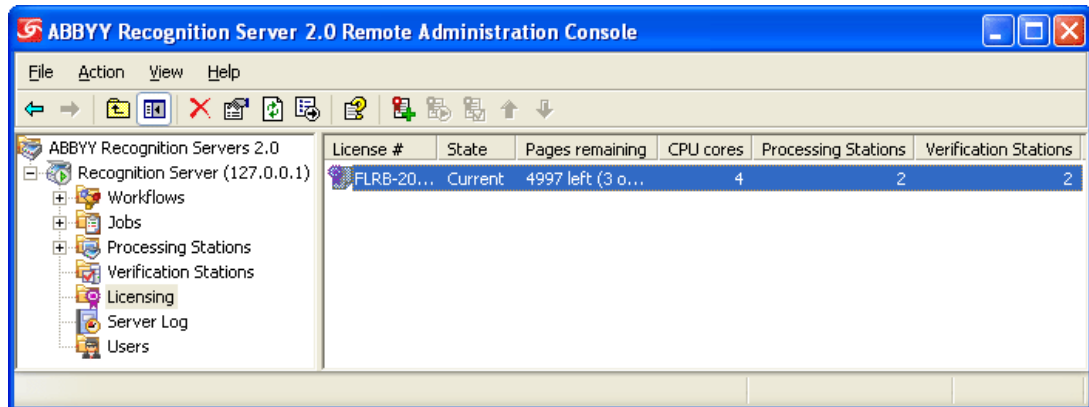
You can easily move Recognition Server settings or individual workflows from one Recognition Server to another by exporting them to an XML file.

To export and import Recognition Server settings, use the **Export Settings...** and **Import Settings...** buttons in the **Recognition Server Properties** dialog box of the Remote Administration Console.


To export and import one or several workflows, use the **Save Settings** and **Load Settings** items on the shortcut menu of the **Workflows** node in the Remote Administration Console.

## Managing Licenses

License management is carried out in the **Licensing** node of the Remote Administration Console.





In this node, you can add, remove, activate, swap, and select licenses.

An unlimited number of licenses can be added in this node. Licenses from a hardware key are added to the node automatically when you plug the dongle in a USB port. Licenses with software key protection should be added by clicking  (Add New License) on the toolbar or by selecting the corresponding item on the shortcut menu.

A license can have one of the following states:

- Current (only an activated and unexpired license can have “Current” state)
- Activated
- Not activated
- Expired

To activate a non-activated license select it and either click  (Activate License) on the toolbar or select the corresponding item on the shortcut menu. See the **License Activation** section for more information.

At any given moment, only one of the licenses (the “Current” license) is used. If the Current license expires, ABBYY Recognition Server will automatically switch to the next available license. If none is available, ABBYY Recognition Server will stop. Use the “up” and “down” arrows to arrange the licenses in order of availability, and use  (Set As Current License) to switch to the selected license.


## Managing User Accounts


In the **Users** node of the Remote Administration Console, you can view the list of Recognition Server users, add or remove user accounts, and change user roles and permissions.

There are two types of user roles in ABBYY Recognition Server 2.0: Administrator and Verifier. A user can have administrator, verifier, or both permissions. An administrator has all the setup rights and can add and remove administrators and verifiers. A verifier has the permissions to proofread the recognized pages from certain workflows on a Verification Station.

Immediately after the installation of ABBYY Recognition Server 2.0, there is only a Chief Administrator in the system. The password of the Chief Administrator is empty. We strongly recommend changing this password. To change the password: in the **Details** pane of the **Administrators** node, select the **Chief Administrator** item and then select **Change Password...** on the shortcut menu.

To add a new user:

1. Click  (Add User) on the toolbar or select the corresponding item on the shortcut menu.
2. In the **User Properties** dialog box, enter a domain user account in DOMAIN\username format, or a local user account in COMPUTER\username format.
3. Assign one or both roles to the user. If you assign a Verifier role to the user, you can select which workflows this user should have the right to verify, and whether the user should be able to select workflows on a Verification Station. See **How to Configure Verification** for details.
4. Click **OK** and refresh the Remote Administration Console. The new account will be added to the list of users.

To remove a user, either click  (Delete) on the toolbar or select the corresponding item on the shortcut menu.

**Note:** You cannot remove an administrator if the Remote Administration Console runs under his account and in the **Register New Recognition Server** dialog box the **Use Windows Authentication** option is selected.

## Connection Settings

### Connection protocols

ABBYY Recognition Server can use the Named Pipes or TCP/IP protocol to connect to the computers where its components are installed. By default, immediately after installation the Named Pipes protocol is used. If a connection with the computer where one of the components has been installed is not established, you may not be able to register a Processing Station. In order to make this computer available, please make sure that it has file sharing enabled and port 445 opened.

You can also change the protocol to TCP/IP:

1. Stop the Server Manager and all the Processing Station services using the Services (**Start>Settings>Control Panel>Administrative Tools>Services**).
2. In the **HKEY\_LOCAL\_MACHINE\Software\ABBYY\RecognitionServer\2.0\** branch of the registry (**HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\ABBYY\RecognitionServer\2.0\** for 64 bit systems), create the Protocol key and set its value to "TcpIp".  
**Note:** The value of this key is case-sensitive.
3. Specify the values of the ServerPort1, ServerPort2, and StationPort keys which determine the numbers of connection ports. The ServerPort1 and ServerPort2 ports are used by the Server Manager component, the StationPort port is used by the Processing Station components. If a port is not specified, its default value will be used. The default values are "3980", "3981", and "3982" respectively. If the Server Manager and Processing Station components are installed on the same computer, these ports must be different.
4. Restart the Server Manager and all the Processing Station services. They must be restarted by means of Services and under the same user account which meets the following requirements:
  - In the case of a domain-based network, this must be a domain user account.
  - In the case of a workgroup network, this user account must be the Administrator or a member of the Power Users group with a non-empty password.
5. Close the Remote Administration Console component and run it again.
6. Open the **Processing Station Properties** dialog box for each Processing Station in the **Details** pane of the **Processing Stations** node. Make sure that the current connection status is **Connected**. Click **OK**.
7. Click the **Refresh** button on the toolbar of the Remote Administration Console.

**Important!** On all computers where ABBYY Recognition Server components are installed, the values of the Protocol, ServerPort1, ServerPort2, and StationPort keys must be identical.

To change the protocol back to Named Pipes, you should:

1. Stop the Server Manager and all the Processing Station services using the Services (**Start>Settings>Control Panel>Administrative Tools>Services**).
2. Specify "NamedPipes" as the value of the Protocol key. The values of the ports are ignored.
3. Restart the Server Manager and all the Processing Station services using the Services, then close the Remote Administration Console component and run it again.
4. Open the **Processing Station Properties** dialog box for each Processing Station in the **Details** pane of the **Processing Stations** node. Make sure that the current connection status is **Connected**. Click **OK**.
5. Click the **Refresh** button on the toolbar of the Remote Administration Console.

### Restarting services under a user account

If during the installation you chose to run the Server Manager and the Processing Station services under the Local System account, you may need to restart them under a user account later. See the **Selecting a user account** section for details.

To restart the Server Manager under another user account:

- Open Services (**Start>Settings>Control Panel>Administrative Tools>Services**).
- Right-click the **ABBYY Recognition Server 2.0 Server Manager** service and then click **Properties**.
- On the **Log On** tab, select **This account** and specify a user account.
- Type the password for the user account in the **Password** box and in the **Confirm password** box and click **OK**.
- Restart the Server Manager.

The same actions must be performed to restart the Processing Station under another user account.

After restarting the services do the following:

- Close the Remote Administration Console component and run it again.
- Open the **Processing Station Properties** dialog box for each Processing Station in the **Details** pane of the **Processing Stations** node. Make sure that the current connection status is **Connected**. Click **OK**.
- Click the **Refresh** button on the toolbar of the Remote Administration Console.

### Running ABBYY Recognition Server on a computer without a network connection

If ABBYY Recognition Server does not work on a computer without a network connection, make sure that the computer's name was specified as "127.0.0.1" or "localhost" when registering the components. If your computer does not have a network connection, you cannot use its IP address or DNS name.

### Inbound connections limit in Windows

For Windows 2000 Professional and Windows XP Professional the maximum number of concurrent network connections that are allowed is 10. Therefore you cannot connect to the computer that run one of these OS more than 10 Processing Stations at the same time. If you need to use more than 10 Processing Stations, install the Server Manager on the computer that run Windows Server, which has no such restrictions.

## Troubleshooting

### The Server Manager fails to establish a connection with the Processing Station installed on a different computer

- Make sure that the Server Manager and the Processing Stations services are started and run under the same user account which has all the required permissions (see **Selecting a user account**). In the case of a workgroup network, make sure that this user is the Administrator or a member of the Power Users group and has a non-empty password.
- If the Named Pipes protocol is used (default), make sure that port 445 is open on both computers.
- Make sure that the computer where the Processing Station is installed can be accessed from the computer where the Server Manager is installed, and vice versa. If not, make sure that the option **File and Printer Sharing for Microsoft Networks** is selected in the **Local Area Connection Properties** dialog box (**Start>Control Panel>Network Connections>Local Area Connection>Properties**) on both computers.
- The Windows firewall may be blocking the work of the services. In this case, add the services to the list of exceptions and allow them to be run:
  - On the computer where the Server Manager is installed, open **Start>Control Panel>Network Connections>Local Area Connection>Properties>Advanced>Windows Firewall Settings>Exceptions>Add Program>Browse** and select the file OCRServer2.exe.
  - On the computer where the Processing Station is installed, open **Start>Control Panel>Network Connections>Local Area Connection>Properties>Advanced>Windows Firewall Settings>Exceptions>Add Program>Browse** and select the file OCRStation2.exe.
- In the case of a workgroup network, make sure that the computers where the Server Manager and the Processing Station are installed belong to the same workgroup.

### The Server Manager fails to establish a connection with the Verification Station or the Remote Administration Console installed on a different computer

- In the case of a workgroup network, make sure that the user who runs the Verification Station (or the Remote Administration Console) is the Administrator or a member of the Power Users group and has a non-empty password. Make sure that an account with the same username and password as those of the user who runs the Verification Station (or the Remote Administration Console) exists on the computer on which the Server Manager is installed. If the account does not exist, create it.
- If Named Pipes protocol is used (default), make sure that the 445 port is opened on both computers.
- Make sure that the computer where the Verification Station (or the Remote Administration Console) is installed can be accessed from the computer where the Server Manager is installed, and vice versa. If not, make sure that the "File and Printer Sharing for Microsoft Networks" option is selected in the Local Area Connection Properties dialog box (**Start>Control Panel>Network Connections>Local Area Connection>Properties**) on both computers.
- In the case of a workgroup network, make sure that the computers where the Server Manager and the Verification Station (or the Remote Administration Console) are installed belong to the same workgroup.

### No connection with the external FTP server

If the workflow fails to get images from a folder located on the FTP server, make sure that the user account under which the Server Manager service is started has the rights to access the external network. See also **Restarting services under a user account**.

### The workflow does not start with the following error message: "Some of the working folders are inaccessible"

- Make sure that the folder exists.
- Make sure that the user account under which the Server Manager service is running has read/write permissions to this folder.
- If the path contains a network drive (for example, X:\ Folder), change the path to the complete path to the folder, e.g. \\Computer\...\Folder.

### **When processing images, a "The Server Manager is out of disk space" warning appears on the computer where the Server Manager is running**

The Server Manager stores all the files queued for processing in its temporary files folder, the default path to which is **<Installation folder>\Bin\RecognitionServer2Temp**. If there is not enough disk space on the drive where the program's installation folder is located, you can change the path to the temporary folder and select another hard disk. The path can be changed in the **Recognition Server Properties** dialog box.

### **How to retrieve an image document that is being processed by ABBYY Recognition Server**

You may want to retrieve an image file before ABBYY Recognition Server has finished processing it (for example, if a document is taking too long to process, or if a network connection error has occurred). The image can be retrieved from the Images subfolder of the Server Manager temporary files folder. The path to the Server Manager temporary files folder can be viewed and changed in the Recognition Server Properties dialog. The default path is **<Installation folder>\Bin\RecognitionServer2Temp**. The image is stored in this temporary files folder from the moment when it is taken from the Input Folder and until it is published to the Output Folder. The Job ID is attached to the beginning of the image file name.

### **Digits in brackets are appended to the names of output files**

Job IDs may be appended to filenames in order to avoid a conflict of filenames in the Output Folder. To prevent this conflict, you must ensure that the names of output files are unique. For example, you can enable adding date and time to output file names in the **Output Format Settings** dialog box.

### **The Verification Station hangs at startup**

If the address of a nonexistent computer is specified in the registry as the server location, the Verification Station may hang at startup. To prevent this, in the registry remove the following values:

**HKEY\_LOCAL\_MACHINE\Software\ABBYY\RecognitionServer\2.0\DefaultServerLocation**  
(**HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\ABBYY\RecognitionServer\2.0\DefaultServerLocation** for 64-bit systems) and

**HKEY\_CURRENT\_USER\Software\ABBYY\RecognitionServer\2.0\VerificationStation\serverLocation**, then restart the Verification Station.

### **Recognition Server is unable to retrieve messages from POP3 e-mail server or send messages via SMTP server**

This may happen if a firewall blocks network connection with the e-mail server. In order to make Recognition Server receive and send messages, customize the firewall so that it allows the connection with the e-mail server via the specified port. Additionally it may be necessary to restart the Server Manager under a user account, which has permissions to access the remote e-mail server (see **Restarting services under a user account** for details).

## Technical Support

If you have any questions about how to install and use ABBYY Recognition Server 2.0 to which you cannot find answers in this System Administrator's Guide, please contact the ABBYY technical support service or authorized ABBYY partners. For contact information, please refer to the Support section at [www.abbyy.com](http://www.abbyy.com) or to the ABBYY Recognition Server 2.0 Help file.