Kofax Invoice Automation

User's Guide
Version: 6.0.2

Date: 2019-04-18

KOFAX

Legal Notice

Table of Contents

Introduction

Kofax Invoice Automation

Kofax Invoice Automation is a business solution that interprets invoices you receive from your suppliers. The interpreted information is checked and validated according to your requirements. Then the information is transferred to a file. Invoice Automation can be customized to read and interpret invoices in a variety of formats, including:

- Paper
- Fax
- PDF
- Email
- XML (ReadSoft Collector or Invoice Portal)

Sorting

Invoice Automation can automatically sort invoices by buyer, supplier, country, and invoice type. Sorting reduces the scan operator's manual work and automates invoice routing.

- Buyer (legal entity) identification – Invoice Automation can automatically search for and identify buyers on each invoice.
- Supplier identification – Invoice Automation can use bank account numbers and other information on an invoice to identify the correct supplier.
- Country sorting – Invoice Automation can automatically recognize an invoice's country of origin by identifying the supplier. Invoices can also be routed and verified according to the country of origin.
- Invoice classification – Invoice Automation can differentiate and sort invoices by type. Types of invoices include general expense invoices (GE), purchase order invoices (PO) and credit notes.

Who uses Invoice Automation?

Normally, three different groups of people at your company work directly with Invoice Automation.

- A software administrator installs Invoice Automation.
- An administrator sets up the program to work efficiently with your invoices. This person also manages the Invoice Automation database.
- Department personnel use Invoice Automation to process invoices.

Using this book

The *Invoice Automation Handbook* is intended primarily for new users who want to learn the basics of Invoice Automation.

- Chapter 1 explains what Invoice Automation is and summarizes some of the key features.
- Chapter 2 gives you an overview of Invoice Automation.
- Chapter 3 guides you through the basic steps that help you to get started in preparing for production. This chapter only requires your PC and the Invoice Automation Manager module.
- Chapter 4 continues the tutorial with a presentation of the steps required to process invoices in each of the production modules. You use the four production modules and a scanner in this chapter.
- Chapter 5 describes how to use the Optimize module to learn new invoices and increase production.

    After Invoice Automation is installed, you can use the guidelines in Chapters 3 through 5 to process your own invoices. These chapters show you how to perform basic operations in the correct order.

    You can find information on specific concepts, menu choices, or functions of interest in *Invoice Automation Help*. It is easily accessible while running the program in each module by pressing F1 or choosing Help topics from the Help menu in each module.

    Use the glossary in the back of this book to familiarize yourself with new terms.

Typographical conventions

These conventions are used throughout product documentation:

- Menu names, commands, and dialog selections appear in boldface.
- Page numbers in the index which refer to a page with a definition appear in smaller boldface.
- Names of keys on your keyboard appear in a special font with small capital letters.
- Field names and variable names appear in this font.
- Variables that have to be replaced by the actual value appear in the same font as above but are *italicized* (for example, *Fieldname*).
- Names of files are written in this font.

Handbook tutorials

We suggest that you follow the steps described in Chapters 3 through 5 using the sample material provided with Invoice Automation. Sample invoices and master data are included with the installation. You can find the sample invoices in the Images folder (default location: C:\Program Files\ReadSoft \Invoice Automation\Samples\). The sample master data is located at the same location in the Master data subfolder. You can print the sample invoices and use a scanner to scan them into the system. Or, if you do not have access to a scanner, you can import the images directly into the system.

By completing the tutorial, you will understand the basics of Invoice Automation. For example, you will see how buyer and supplier identification work as well as other key concepts such as country sorting and invoice classification.

The six modules

Invoice Automation is comprised of six separate modules, each with a user friendly interface:

- Manager
- Scan
- Interpret
- Verify
- Transfer
- Optimize

The modules can be run separately or simultaneously, on one computer or in a network. In this way, work can be planned to enhance computer capacity and personnel efficiency.

Collector can also be used as a **Data source extension** to be able to process invoices that are emails/attached to emails as images or XML files in the same way as paper invoices are processed.

Entrance mode can also be used to process documents other than invoices such as customer orders using generic non-invoice based terminology. This can be configured separately for individual users.

Manager

You use the Manager module for system and database administration and for defining Invoice Automation' settings. Among other things, you use Manager to manage:

- Users
- Invoice profiles
- Transaction descriptions
- Scanner descriptions
- Job descriptions
- Inboxes for the Verify module
- Maintenance plans
- Buyer and supplier information (master data)

Scan

The Scan module controls the scanner and sends invoice images to Invoice Automation. Details it can handle include:

- Advanced, integrated functions for image enhancement.
- Endorsing each paper invoice with a number as it is scanned.
- Appendices or attachments to invoices.
- Batches, or stacks of invoices that you process together.

Interpret

The Interpret module reads incoming invoices and captures the information you need. Using master data from your financial system, it can recognize the buyer and suppliers for each invoice and sort them accordingly. The Interpret module can also automatically classify invoices by type.

Verify

The Verify module quickly and securely validates interpreted invoice information according to internal routines and settings that you specify using the Manager module.

During production, the Verify operator checks invoices for accuracy and makes any necessary adjustments before sending the invoices to Transfer.

Verify has an inbox that lets you decide which invoices you want to verify. Administrators can customize the inbox using hierarchical folder views that organize the invoices in a way that is meaningful to their own production system. For example, you can use the inbox to sort invoices by buyer, supplier, country, and type.

Transfer

The Transfer module sends information from processed invoices to a target system via a *transfer file*. The target system can be an archive, workflow, or financial system. The target system can be another application on the same computer as Invoice Automation or on another computer on the network.

Optimize

You use the Optimize module to speed production by increasing interpretation and identification performance of problem invoices. The Optimize module is not used in everyday production.

Optimize is most often used when setting up Invoice Automation for the first time. During this time, all incoming invoices are new to the system, and the invoices that cannot be automatically learned by Interpret and Verify must be learned in Optimize. Automatically learned invoices can also be optimized to improve production performance.

Interface languages and KIA for Generic documents mode

The interface language is specified individually for each user.

The Invoice Automation 6.0.2 interface is translated into twenty three languages plus KIA for Generic documents mode.

KIA for Generic documents mode terminology is generic so that it can be used to process documents other than invoices, such as customer orders, if desired.

Collector plugin

Collector is used to process invoices that are sent by email (or it can be used to retrieve invoices directly from a file folder). XML documents can be processed in connection with Collector using Invoice Automation' SmartXML functionality.

Chapter 2

Invoice Automation overview

This chapter contains an overview of what you do to set up Invoice Automation at your company and how department personnel use the program to process invoices.

The overview introduces important concepts and some of the terms that are used in Invoice Automation. However, please note that many important and powerful Invoice Automation functions are not mentioned in this overview.

There are three basic phases of work you do with Invoice Automation:

- *Preparing for production* involves setting up Invoice Automation before invoices are processed. You do this using the Manager module. Chapter 3 contains a tutorial that takes you through the steps in preparing for production.
- *Production* involves scanning, interpreting, and verifying invoices, as well as transferring information from processed invoices to an output file or target system. You do this using the production modules: Scan, Interpret, Verify, and Transfer. Chapter 4 teaches you how to process invoices using the production modules.
- *Optimization* involves fine-tuning invoices for increased interpretation rates and improved production. Chapter 5 explains how to do this using the Optimize module.

Preparing for production

After installing the program, you must set up Invoice Automation for production. Setting up Invoice Automation includes activities such as defining user access rights and importing master data. It also means telling the program about your suppliers, their invoices, and how to process them.

"Setting up Invoice Automation"To prepare for production, you must define these core settings:

- Users – to determine who can access Invoice Automation and what tasks they can perform.
- Scanner descriptions - to specify settings that are valid for your scanner.
- Invoice profiles – to tell Invoice Automation what information to capture.
- Job descriptions – to give Invoice Automation the processing instructions for each module.
- Transaction descriptions or XML Output format – to determine the format of the output of the captured information.

Note that these are only the basic settings required to use Invoice Automation. Additional settings and options will be discussed throughout the remainder of the handbook, and even more options are described in *Invoice Automation Help*.

User authorization

User authorization requires Invoice Automation users to supply a user name and password when starting any module. There are two types of user authorization:

- *Local user* – uses Invoice Automation own, built-in system to control user access.
- *Network authentication* - uses Microsoft Windows users and groups to control access to Invoice Automation.

  Local authorization is enabled by default. You can change this setting when you create users for Invoice Automation. For more information about user authorization, see *Invoice Automation Help*.

Master data

Master data is information about your buyers and suppliers. It includes details such as company names, addresses, and phone numbers. It can also contain supplier identification numbers for your financial system and supplier account information.

Invoice Automation can import master data and use it to automatically identify the buyers and suppliers of your invoices.

Invoice profiles

An *invoice profile* is a general description of the information that you want to capture from a particular group of invoices. A single invoice profile can handle invoices from hundreds, or even thousands, of different suppliers.

Among other things, an invoice profile defines:

- How to locate and process the invoices
- How to identify the invoices
- The fields you want Invoice Automation to capture
- The format of the transaction information from processed invoices
  An invoice profile contains:
- One to three *identifiers* used to identify invoices.
- *Field profiles* describing the fields you want to capture.
- A *transaction description*, which defines what information you want to transfer.
- A *scanner description*, which defines the scanner settings and invoice paper size.

  Invoice Automation includes predefined invoice profiles for many different countries. These "country profiles" are fully loaded with the most popular field profiles as well as country-specific business logic and validation routines. In many cases, country profiles can be used with very little or no adjustment at all.

Identifier profiles

An *identifier* is a field that is used to recognize each invoice. An *identifier profile* describes an identifier and tells Invoice Automation how to find an identifier on an invoice. You can define as many as three identifier profiles for each invoice profile. If you use more than one identifier, you can use the invoice profile Identification settings to control how the identifiers are used.

There are two types of identifiers, value and image. A value identifier contains alphanumeric characters, while an image identifier contains graphical elements such as a company logo.

An identifier is unique to each type of invoice. Therefore, the usual identifier defined is an account number or a telephone number that is different for every supplier. It is this unique value that the program uses to recognize the supplier's invoice.

Field profiles

Field profiles tell invoices what information you want to capture. Typical fields are:

• Invoice date • Invoice number • Amount • Tax • Total	A field contains information you want to capture.
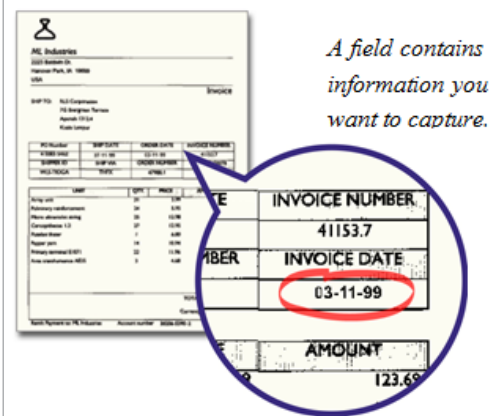
"Field profile" You need one field profile for each field you want to capture on the invoice. Each field profile includes information that tells Invoice Automation how to locate the field, what the field looks like, and how to interpret the field.

When an invoice is processed by the Interpret module, the program looks for fields on the invoice. When Invoice Automation finds a field that matches the properties specified in the field profile, it captures the information in that field.

Job descriptions

A *job description* is a set of instructions describing what you want a specific Invoice Automation module to do. It tells each production module (Scan, Interpret, Verify and Transfer) which invoices you want to process and how you want Invoice Automation to work.

You can create and edit a job description using the Manager or any of the other modules. However, in the other modules, you can only change the details that pertain to that particular module.

We often refer to job descriptions in connection with a production module name, for example *Scan job description*. This simply refers to details specified for that module in the Job description dialog. In fact, there are details for every production module saved in each job description.

- A *Scan job description* tells Scan how to process the invoices to be scanned.
- An *Interpret job description* tells Interpret which invoices to interpret and validate.

- A *Verify job description* tells Verify which invoices you want to verify and what status they should have in order to do it. You can also choose from many options for how you want the program to interact with you during the verification process.
- A *Transfer job description* tells Transfer what information you want to capture and where you want to send it.

  You can create as many job descriptions as you like for different purposes, and you can edit them right up until the time you use them. You can create different job descriptions for the same invoice profile in order to divide your work in different ways or in order to allow each user to customize the settings. A job description with default settings is perfectly usable as-is.

Jobs

During everyday use of Invoice Automation, personnel run *jobs* (job descriptions) to process invoices. A job performs a specific type of processing such as scanning invoices. Some types of jobs are interactive, while others do not require manual intervention.

It is useful to create a few *job descriptions* in advance in order to have a well-defined environment for the personnel who use Invoice Automation. When defining job descriptions, you specify a number of options in each job that control what you want Invoice Automation to do.

The four types of jobs are:

Job	Function	Interaction
Scan	Starts the scanner, scans invoices, and creates an image file for each invoice.	Operating the scanner.
Interpret	Identifies and matches the scanned invoices to known suppliers. Captures and validates the information on identified invoices. Learns new, unidentified invoices.	No personnel interaction. Can run with a graphical interface or as a Windows service.
Verify *	Displays any fields that require an operator to manually verify or type the field value. Presents interpreted invoices for adjustment and approval.	Verifying and completing field values.
Transfer	Exports the captured invoice information to a file.	No personnel interaction. Can run with a graphical interface or as a Windows service.

* If you choose to use the inbox in Verify, you can optionally hide the Verify job in the Verify module.

Understanding invoice definitions

An *invoice definition* is a collection of settings that describe one type of invoice from one supplier. Invoice definitions are normally created in Verify when new invoices enter the system. The program uses the identifiers, and optionally master data, on the invoice definition to recognize the supplier's invoice and find information on it.

When the program cannot match an invoice to an invoice definition, the invoice is *Unidentified*. You can match unidentified invoices with suppliers when:

Verifying invoices using Verify.

Learning invoice definitions using Optimize.

What is learning?

Learning is the process of creating an invoice definition that fully describes the fields on the invoices from a particular supplier. To *learn* an invoice, the program has to find and interpret all of the invoice's fields. After an invoice is learned, Invoice Automation can identify additional invoices of the same type and automatically capture the information on them.

Based on the information in the invoice profile, Invoice Automation can successfully learn many fields without user assistance.

If Interpret cannot fully learn the invoice, you can learn the invoice manually using Optimize. Manual learning means that you use Optimize to assist Invoice Automation in identifying any fields that Interpret could not learn.

There are two important concepts that you need to understand about Invoice Automation and learning:

- Field definition"When Invoice Automation learns an invoice from a specific supplier, it saves the information about this specific invoice type in an *invoice definition*. Position, format, and other information about a particular field on the invoice definition is stored in a *field definition*. The next time an invoice from the same supplier is processed, Invoice Automation finds and captures all information using the invoice definition and field definitions as a guide. The difference between an invoice profile and an invoice definition is that an invoice profile is used for learning unidentified invoices from any supplier, whereas an invoice definition is used to define an invoice from one particular supplier.

- Invoice Automation processes all invoices from the same supplier in exactly the same way. Invoice Automation assumes that the fields on an invoice can always be found using the "rules" specified in the invoice definition. The only exception is a *variant*. A variant occurs when you have two invoices, from the same supplier, that have different field positions. In this case, the variants are distinguished by a description that accompanies the supplier. See *Invoice Automation Help* for more information about suppliers and descriptions.

  After processing an invoice and learning it, Invoice Automation has the ability to identify invoices from the same supplier and capture the information on them with little or no manual intervention required.

  For additional information about learning, refer to *Invoice Automation Help*.

Information transfer

When an invoice is processed, the Transfer module creates a *transaction* containing the captured information, system information, and any information you may have entered manually. "Transaction description" When you set up Invoice Automation, you create a *transaction description,* which specifies the content and format of the transactions. Each transaction is saved in a *transfer file* that is used by your financial system.

A *default transaction description* is part of every complete invoice profile. You can also specify additional transaction descriptions in the Transfer job description.

You can also use the *Transfer job description* to choose which invoices are transferred according to their status and specify whether or not each invoice should be deleted from Invoice Automation' database after it is successfully transferred.

The standard transaction description

There are three types of transaction descriptions, only one of which is required: the *standard transaction description*. You use the Manager to create one standard transaction description for each invoice profile. The standard transaction description is a necessary part of a complete invoice profile.

Understanding transactions and transaction descriptions is essential in order to use Invoice Automation effectively. Before you begin creating transaction descriptions, read about them in *Invoice Automation Help*. In particular, read about creating a standard transaction description. When you create a standard transaction description, you decide what information your organization wants to get from the processed invoice and the preferred format of the information.

Production

While the Manager and Optimize modules are used for administrative work, the remaining four modules (Scan, Interpret, Verify, and Transfer) are used during production.

During everyday use of Invoice Automation, department personnel run jobs in the various modules as described below in the four phases of production.

You can do all four phases of production on one computer, or you can use a different computer for each phase, if the computers share the same database.

Scanning invoices (Scan)

The Scan module controls the scanning phase. Images of the invoices are produced by the Scan job for the Interpret module to process. Details it can handle include:

- Advanced, integrated functions for image enhancement.
- Endorsing each paper invoice with a number as it is scanned.
- Appendices or attachments to invoices.
- Batches, or stacks of invoices that you process together.

Interpreting scanned invoices (Interpret)

The Interpret module identifies and interprets invoice information. It identifies different suppliers by interpreting unique *identifiers* on each invoice and matching them to suppliers in the database. Invoices from new suppliers are learned as completely as possible, and the information on these invoices is captured.

Interpret can run continuously and process invoices as they become available from the Scan module. You can also automate Interpret as a Windows service.

Interpret can also use master data to identify which buyer, or legal entity, is responsible for the invoice, and Interpret can identify which country the invoice comes from as well as classify the invoices type. This is called *sorting*.

Sorting

Sorting occurs in the Interpret module. Invoice Automation can automatically sort invoices by buyer, supplier, country, and invoice type, and uses that information to determine which invoice profile to use. Sorting reduces the scan operator's manual work and automates invoice routing. When the supplier, buyer, and invoice type are identified, Invoice Automation knows which invoice profile to use to process the invoice.

Validating and verifying invoices (Verify)

The Verify module uses internal and online routines, as well as tables in your financial system, to validate information interpreted by the Interpret module. You use the Verify module to verify that information on the invoices is correct.

Verifying an invoice in Verify.

Depending on the options in the Verify job description, Invoice Automation displays images of the information to be *adjusted* and *approved*. It is the job of the Verify operator to complete and correct any fields that Invoice Automation cannot interpret with 100% certainty, as well as fields you want checked for any reason.

The user-friendly interface has advanced functions for image handling, which enhance zooming and panorama methods. Operators can accomplish the work efficiently using a wide range of functions such as the inbox which organizes incoming invoices in a way that is meaningful to the Verify operator.

The inbox is highly customizable.

After invoice processing has been completed in Verify, the information is ready for transfer.

Transferring information (Transfer)

The Transfer module transfers information from processed invoices to a target system via a *transfer file*. The target system can be another application on the same computer as Invoice Automation or on another computer.

The information is transferred in transactions. A *transaction* is information resulting from processed invoices, which Invoice Automation transfers to another system. When you run a Transfer job, the start date, start time, and elapsed run time are also displayed, and you see a bar chart which shows how many invoices of each type are transferred.

Transfer can run continuously and process information as it becomes available. You can also automate Transfer as a Windows service.

Optimization

You can use the Optimize module to help Invoice Automation find a field or specify information about a field. Optimize displays the invoice image on the screen, and you use your mouse to mark the field on the invoice image. This is part of Invoice Automation' manually assisted learning function.

Before optimizing an invoice, consider whether or not it is worthwhile to do so. For example, if you have a supplier whose invoices could benefit from optimization, but you seldom receive invoices from that supplier, it is probably not cost-effective to optimize the invoice. On the other hand, if you frequently receive invoices from that supplier, optimization can increase production speed, saving you more time and resources.

Customization

Invoice Automation is designed to be a part of a complex environment, and its open interface makes it easy to integrate with a variety of other systems.

You can customize the program to suit your requirements, modifying its functionality and adding more features. You do this with your own Visual Basic for Applications (VBA) code or DLL (Dynamic Link Library) functions (written in any language capable of producing DLLs), or by writing ActiveX event servers residing in a DLL or .EXE file. For example, you can add dialogs, ActiveX automation calls, ODBC access, file manipulation, and much more.

Invoice Automation offers you this access via the Events page, which you can access from the Manager and from job descriptions. An event is the result of an activity at a specific point in a program. As invoices move through the production modules (Scan, Interpret, Verify and Transfer), events are fired at predefined occasions.

When an event is fired, Invoice Automation checks to see whether you have defined a handler for the event. An event handler causes execution of a predefined VBA function, DLL function or both.

VBA and DLL programming is a complex task which requires knowledge of Visual Basic, C, C++, or ActiveX automation. Invoice Automation API Help contains a language reference for Invoice Automation' application programming interface (API).

VBA and DLL functions can be quite powerful. They can change values on invoices and even cause Invoice Automation to malfunction. We recommend you proceed with caution when implementing event handlers.

Getting around in the program

The graphical user interface (GUI) provides a visual means of using Invoice Automation and makes standard program operations easier to use.

Most of the functions that can be performed by the menus and the toolbar buttons can also be done by clicking objects on the GUI. For example, if you are running the Manager module, and you want to create a new invoice profile, you can do so by choosing New (File menu), or you can right-click the empty space under the Invoice profiles object bar, and select New.

The GUI also serves as means to display object properties. If you look at an invoice profile's icon in the Manager module, for example, you can see if the invoice profile is open, closed, or locked in the database. For more information on icons, see *Invoice Automation Help*.
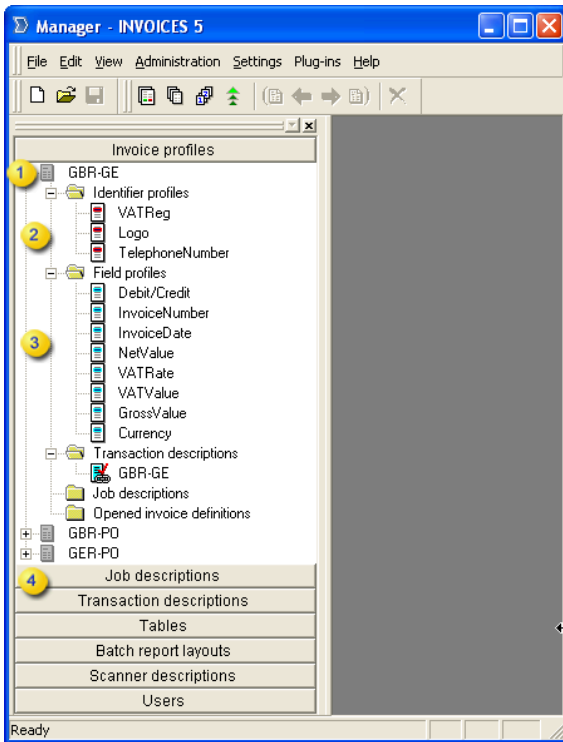
The Manager Window

1	Invoice profile
2	Identifier profiles
3	Field profiles
4	Object bars

Note that the menu options are context sensitive. In other words, the menu functions are related to the current active object. In the example above, right-clicking the white space under the Invoice profiles object bar gives you the option to create a new invoice profile. However, if you click the Job description object bar, right-clicking and selecting New will create a new job description. Likewise, if you right-click an invoice profile folder, only options related to the selected folder will be available.
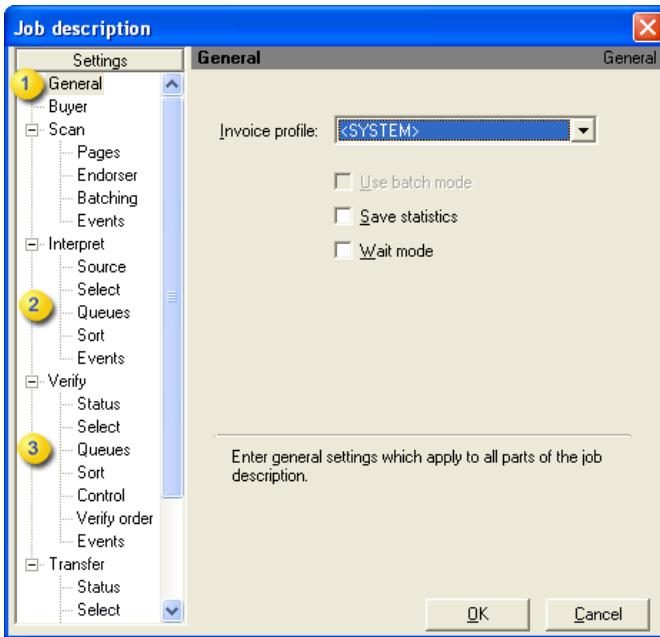
The *Job description* dialog.

1	General settings
2	Settings
3	Verify job description
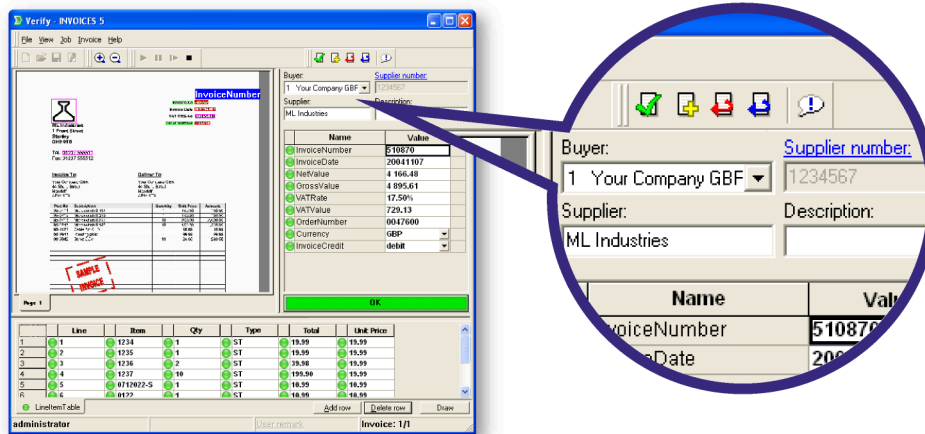
The Verify module puts buyer and supplier information at your fingertips.

The Verify module is designed to give you a quick overview of invoice information and makes the verification process quick and easy. You have access to important buyer and supplier information, and the unique traffic-light system quickly tells you which areas need attention.

Accessing Invoice Automation Help

Invoice Automation Help contains the most up-to-date information available on the product. If you have a basic understanding of Invoice Automation, having read this book and worked through the tutorial, it is easy to find the information you want in *Invoice Automation Help*.

F1

The easiest way to access Help is to press F1 on your keyboard. You can do this at any time while you are using Invoice Automation. F1 is context sensitive, which means that the topic most closely related to whatever you are doing appears.

Note: In some cases F1 displays an overview topic, and you must look for the desired information using the Contents, Index, or Search tab.

The Help menu

Each Invoice Automation module has a Help menu. Select Help topics to access *Invoice Automation Help*.
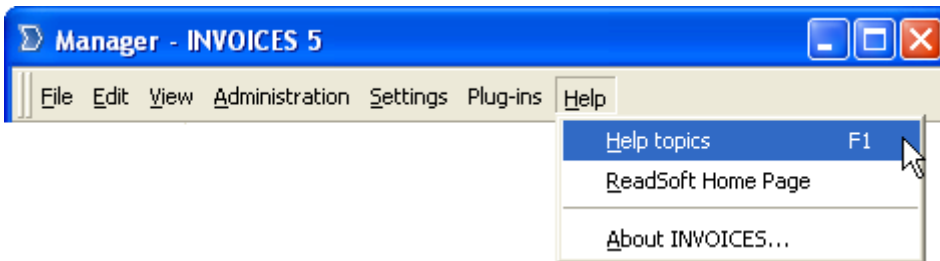
Select *Help topics* to open Invoice Automation Help.

Accessing Help from outside Invoice Automation

You can access *Invoice AutomationHelp* even if no Invoice Automation window is open. Using Windows Explorer, locate the main help file, INVOICES5_ENG.chm. It is located in the Bin folder. Double-click this file and use *Invoice Automation Help* as you normally would.

Chapter 3

Preparing for production

The instructions in this chapter take you through all of the basic steps in setting up Invoice Automation for use in production.

In this tutorial, you will set up Invoice Automation for an imaginary company consisting of two legal entities, *Your Company GBR* and *Your Company GER*. The legal entities represent your imaginary subsidiaries in England and Germany.

You will use the sample master data to provide Invoice Automation with information about your imaginary companies and suppliers. Then you will create a working production system that can process the sample invoices.

All of the steps in this chapter will be performed using the Manager module.

Steps to prepare for production

Before you can use Invoice Automation in production, complete the steps listed below. Detailed instructions on each step follow.

1. Define user authorization settings (required)
2. Import master data from your financial system and adjust the master data policy (recommended)
3. Create an invoice profile for each legal entity (required)
   - Adjust, add, or delete identifier profiles
   - Adjust, add, or delete field profiles
4. Add a standard transaction description and mark it as default (required for each invoice profile)
   - Determine the physical layout of the output
   - Set the default transaction description
5. Create a scanner description (required if using a scanner)
6. Create a job description (required)
7. Check and activate the invoice profile (required)
8. Define inbox settings (recommended)
9. Test the invoice profile (recommended)

Define user authorization settings

By default, Invoice Automation asks you to supply a user name and password when starting any module. This is called *local user access.* Local user access is Invoice Automation own, built-in system to control user access.

Optionally, Invoice Automation can use Microsoft Windows users and groups to control access to Invoice Automation. This is called *network authentication.* See *Invoice Automation Help* for more information about user authorization.
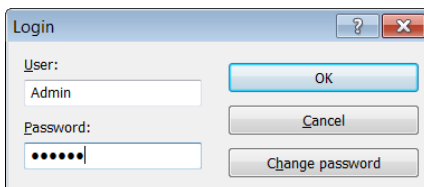
For the tutorial, we will turn off user access:

1. Start the Manager module from the program group created during installation or run the program eimngr.exe.
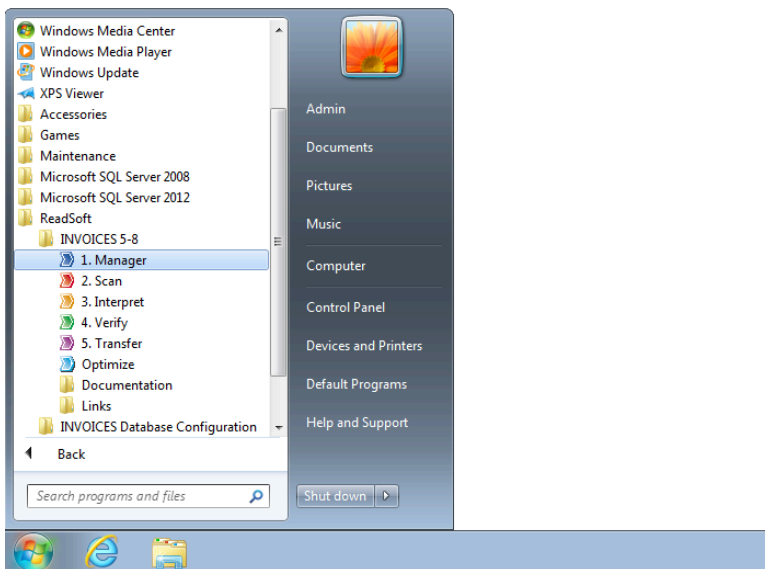

Invoice Automation default program group.

2. If this is the first time Manager has been started, the **Login** dialog appears. Type the user name and password and click **OK**.

The default **User** is "Admin" and the default **Password** is "secret".

3. If this is the first time Manager has been started, the **Getting started** dialog appears. For the purposes of this tutorial, you can simply click **Close** to close this dialog.

4. Select **User authorization** from the **Settings** menu in Manager.
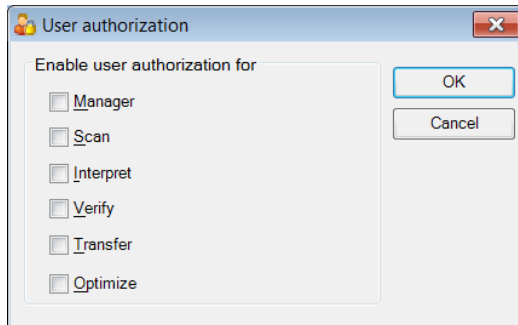
The **User authorization** dialog determines which modules are password restricted.

5. Deselect each module to disable user authorization. Now you can access any module without having to log in.
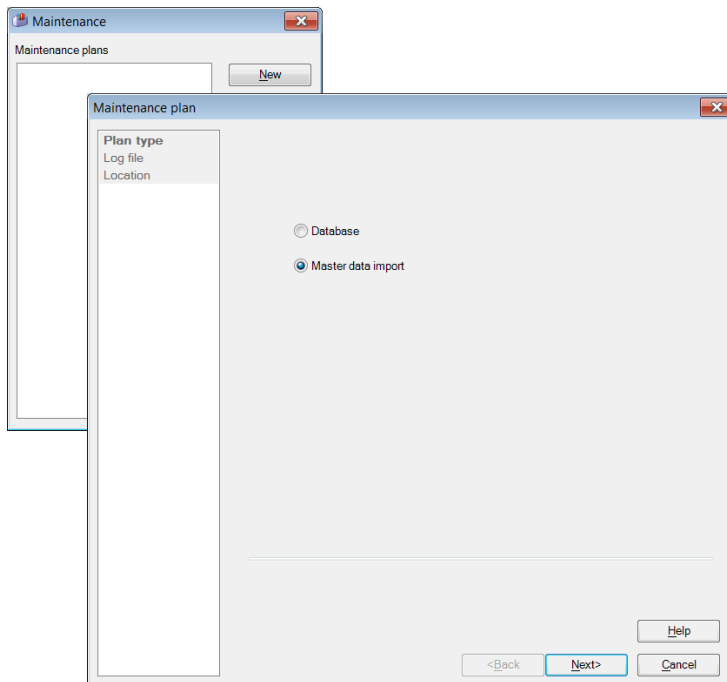
Import master data

Since master data is created/edited in the ERP system where it originates from, it is important to import the latest information on a regular basis to help ensure that Invoice Automation can continue to automatically match invoices with suppliers.

Master data is imported via a *maintenance plan*. You can use maintenance plans to perform routine operations such as database maintenance and master data import. A maintenance plan lets you save master data import settings and can be reused again and again. This comes in handy, if your master data changes often.

To create a maintenance plan to import master data:

1. Select **Maintenance** (Administration menu). The Maintenance dialog appears.

2. Click **New** to create a new plan.

Select *Master data import* in the *Maintenance plan* dialog.

3. Select **Master data import** in the dialog that appears and click **Next** to continue.

4. Use the Log file settings to specify where to save the log file and what to do if the file already exists. You must type a file name in the Log file name box or specify an existing file using the browse button.

5. Click **Next** to specify where the log file is to be kept and how it is to be handled.
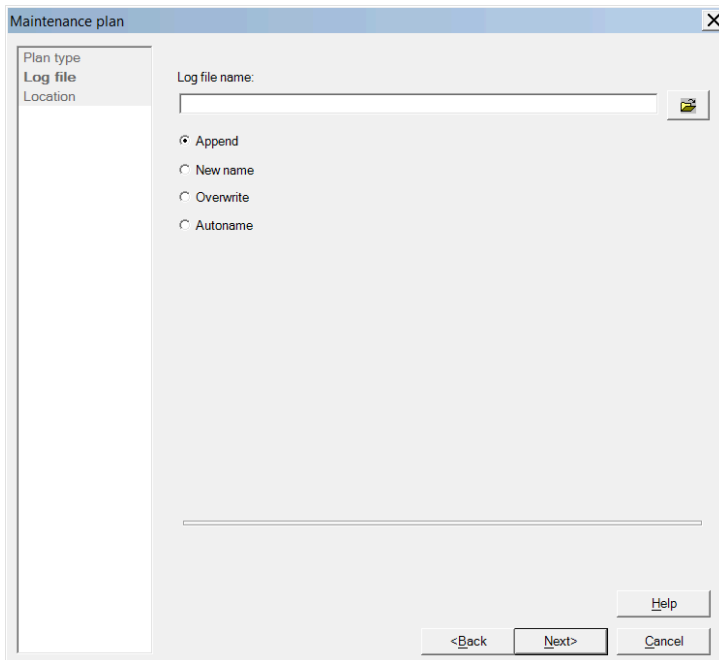
Note that you have to click the folders button ( ) to select a location before you can specify the name of the log file.

6. Click **Next** to define the Location settings.

These settings determine where to find the files that contain the master data you want to import. Invoice Automation can import master data in these formats:

- XML
- Tab-separated file
- Microsoft Excel
- See *Invoice Automation Help* for more information on how to format your master data for importing.

For this tutorial, you will import the sample XML files (default location: C:\Program Files\ReadSoft \INVOICES\Samples\Master data). The files include information about your imaginary companies (buyers) and your suppliers. Later, you can view the supplier information in the *supplier registry*,

which you access from Manager and Verify. You can also view the buyer information in the *buyer registry*, which you can only access from Manager.

Use the browse buttons to specify the location of each master data file.

7. Click the first browse button (…) and use the **Open** dialog to specify the master data file containing supplier data (suppliers.xml). Do the same for the supplier banks (supplier-banks.xml) and buyers (buyers.xml).

8. When you are satisfied with the settings, click Finish and name the maintenance plan in the dialog that appears.
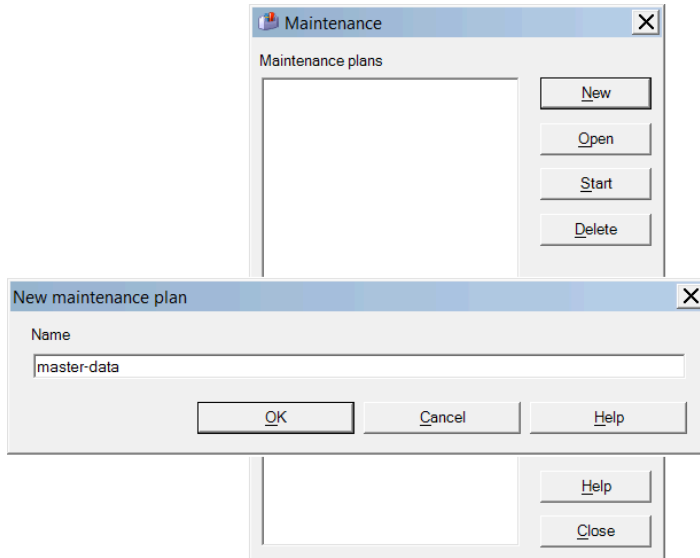
Name the maintenance plan and click *OK* to save it.

Now that you have created a maintenance plan, you can run it to import the master data.

To run a maintenance plan:

9. Select the maintenance plan you want to run in the Maintenance dialog.

10. Click **Start**. After you click Start, Invoice Automation asks if you want to run the maintenance plan. Click **Yes** if you are certain you want to run the maintenance plan.

See *Invoice Automation Help* for more information about maintenance plans.

Master data policy

After you have imported the master data, you tell Invoice Automation that you want to use the master data to assist identification. To do this:

1. Select **Master data policy** (**Settings** menu).

2. Check both settings in the dialog that appears:

   Use imported supplier data for identification, and display it in Verify when searching for a supplier

   Allow Verify operators to choose suppliers from the supplier registry only (not add now ones)

   Click **OK**.

Creating an invoice profile

Before you start processing invoices, you must tell Invoice Automation what kind of information the invoices contain. You do this by using the Manager to create an *invoice profile*. The invoice profile tells Invoice Automation what to look for on your invoices.

What to capture

The most important step in preparing for production is deciding what fields you want to capture. The fields you capture determine not only which field profiles you need, they also affect invoice identification, validation, and output.

To make this task easier, Invoice Automation provides ready-made invoice profiles, which include the most commonly used fields and business logic. All you have to do is adjust the invoice profile to suit your needs. You can adjust the existing fields, delete ones that you do not need, and create new fields if necessary.

Create a new invoice profile

For the purposes of this tutorial, we will create three invoice profiles: two for your imaginary company in England (*Your Company GBR*) and one for your imaginary company in Germany (*Your Company GER*). *Your Company GBR* will have one invoice profile for purchase order (PO) invoices and one for general expense (GE) invoices. *Your Company GER* will only have one invoice profile for purchase order invoices.
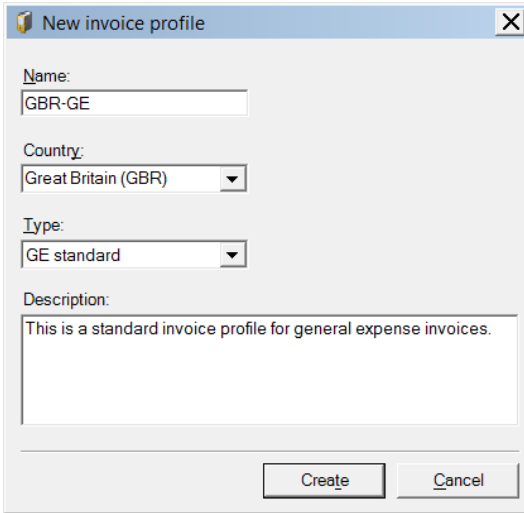
To create a new invoice profile:

1. Click the **New** button ( ) in Manager.

2. When the **Create new object** dialog appears, select **Invoice profile** and click **OK**.
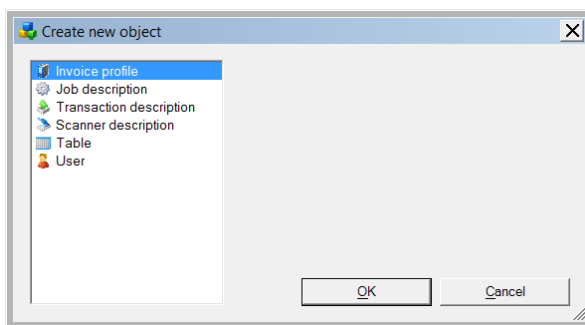
The **New** dialog

3. When the **New invoice profile** dialog appears, type a name for the invoice profile in the **Name** box.

For this tutorial, you will create a general expense invoice profile first, so you can name it "GBR-GE".

The **Country** box determines what predefined fields your invoice profile will contain.

4. Use the **Country** box to specify which country your invoices come from.

The **Country** box determines what predefined fields the invoice profile will contain. It also tells Invoice Automation how to apply business logic when capturing information. The number and names of the field profiles that appear can vary, depending on the country you select in the **New invoice profile** dialog.

For the purposes of this example, we will use Great Britain.

5. Select the type of invoices you want to process with the invoice profile in the **Type** box and click **Create**. The new invoice profile appears under the **Invoice profiles** object bar, complete with predefined identifiers and field profiles.

Before we adjust the invoice profile, create two additional invoice profiles. In all, you should have three invoice profiles with these settings:

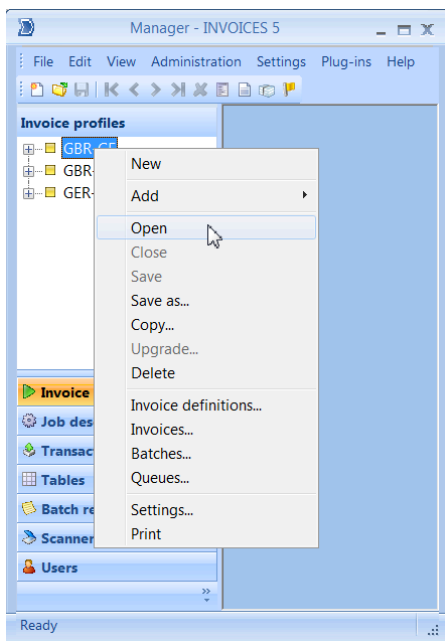| Name	Country
GBR-GE	Great Britain (GBR)
GBR-PO	Great Britain (GBR)

Name	Country
GER-PO	Germany (GER)
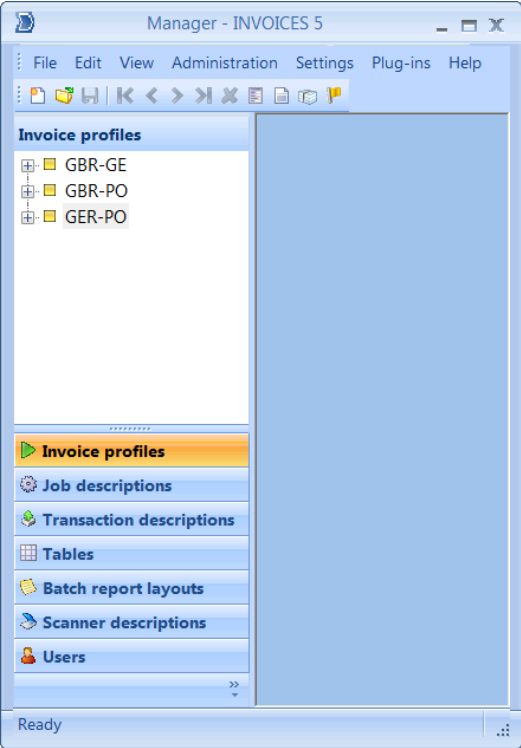
Three invoices profiles in the Manager module.

Opening and closing an invoice profile

Before you can edit an invoice profile, you must make sure it is open. Invoice profiles can be closed to prevent accidental changes while in use.

- To open invoice profile so you can edit it, right-click the one you want to open and select **Open**.
- To close an invoice profile to prevent editing, right-click the one you want to close and select **Close**.

Working with field profiles

After you have created an invoice profile, you are ready to adjust the field profiles. You need to review the settings of each field profile to ensure they meet your requirements. You may find that some field profiles need to be adjusted slightly, while others are unnecessary and need to be deleted. You may also need to create additional field profiles.

When using the sample invoices, you do not need to adjust any field profiles. However, when you process invoices of your own, some adjustments might be necessary to improve performance.

Study the identifier and field profiles. Decide what fields you need to delete, add, or adjust (if any).

Adjusting identifier profiles

There must be at least one but no more than three identifiers in your invoice profile. This field identifies the supplier by a unique value or image. By using more than one identifier, you can identify an invoice by both images and values that can be adjusted in the invoice profile identification settings.

Value identifiers differentiate suppliers by a unique value such as an account number, supplier number, etc.

*Image identifiers* recognize suppliers by a unique image, such as a logo.

You may find that some of your suppliers can be identified by a unique value, while others can only be identified by their logos. In this case, you must use both a value and an image identifier to process all

of your invoices. Invoice Automation can utilize up to three, different identifiers in one invoice profile to manage your processing needs.

Value identifiers

Assume that you decide to use the VAT registration number (available in invoice profiles for Great Britain) as one of your identifiers. If all of your suppliers print their VAT registration numbers on their invoices, this is the field to use because it is different for each supplier.

1. Double-click the invoice profile to expand the profile tree.
2. Expand the Identifier profiles folder.
3. Double-click the VATReg identifier profile to view its settings.
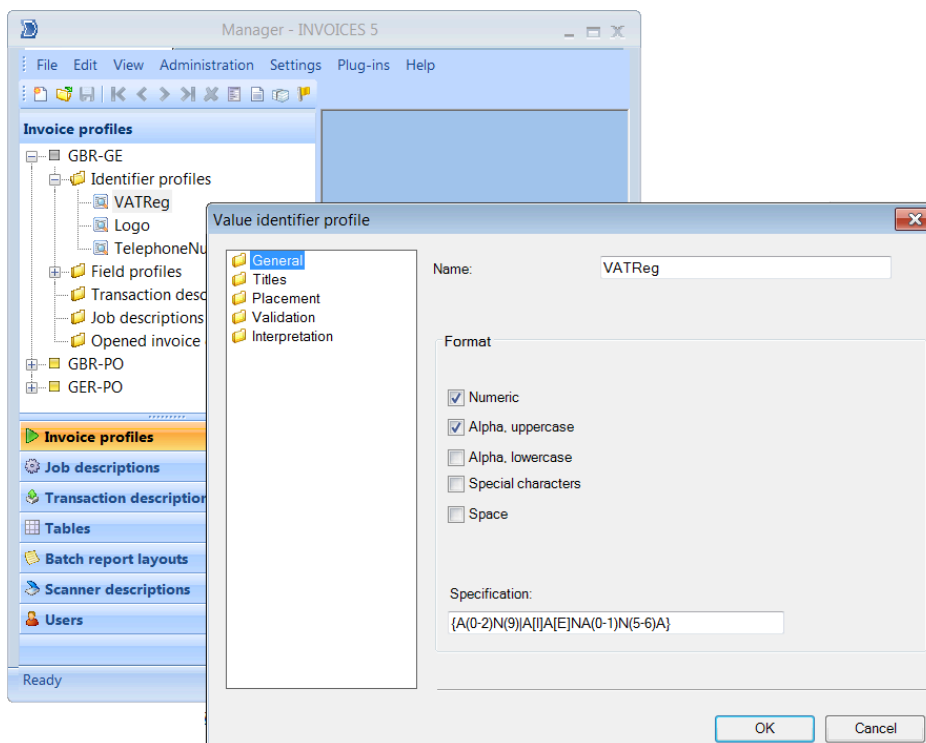
4. Double-click a field profile to view its settings.

Check the format

The format tells Invoice Automation the number and type of characters you expect to find in the specified field. For a complete list of format specifications with examples, see the format specification table in the Quick notes section of this book.

If you use the VATReg identifier profile with the sample invoices, you are only capturing numbers, so the character type is N. Since the number of characters in the VAT registration number is always the same, you specify "9" as the length of the field.

1. Verify that the **Numeric** box is selected.
2. Make sure the correct format is typed in the **Specification** box.

Specifying titles

Titles help Invoice Automation locate fields. A *title* is text that is printed on the invoice to identify the information in a field. For example, the date of an invoice is often printed next to the title "Date".
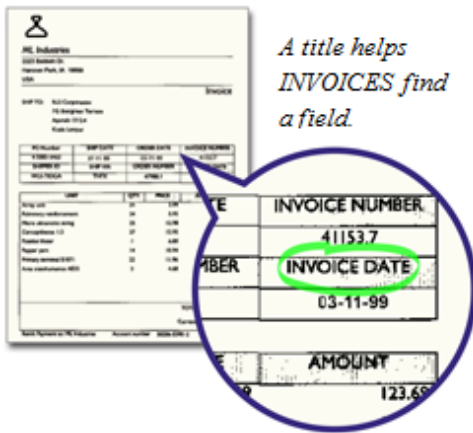

In general, if the field you are defining has a title, specify all the different title texts that can occur. It does not matter whether you use uppercase or lowercase letters, or a combination of the two. When Invoice Automation learns a new invoice, it uses these title texts to find the field. Invoice Automation also uses titles when processing already learned invoices to find fields that have a variable position on the invoice.

To specify additional titles for a field profile:

1. Click **Titles** in the dialog.

2. Type a new title in the Title box.

   You do not have to enter variations of titles that include spaces, such as vat reg number, because Invoice Automation automatically handles spaces in titles. However, if there are other abbreviations or synonyms for the title, you can insert as many variations as needed.
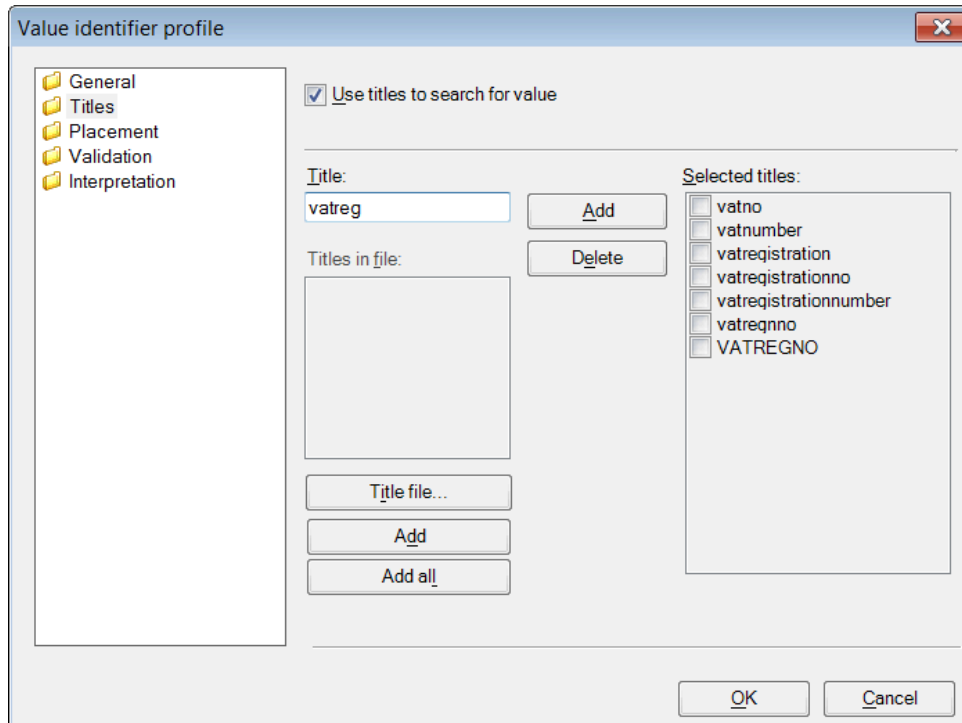
Invoice Automation uses the text in the **Selected titles** box to identify the field you want to capture.

3. Type the text in the **Title** box, and click **Add** to copy it to the **Selected titles** box.

4. Click **OK** to save your changes and exit the dialog.

Adjusting field profiles

Study the field profiles to determine which ones you can keep the way they are, which ones need to be adjusted, and which ones need to be deleted.

There are three field profile types: *single item*, *table*, and *barcode*.

- Single item field profiles are used to capture one unit of information.
- Table field profiles are used to capture a collection of single item fields that are related to each other physically or logically. There are several types of table field profiles: *line item*, *VAT*, and *bank account*.
- Barcode field profiles can be used to capture information contained in barcodes.

Some of the settings are the same as you used when working with the value identifier. Here are some things to keep in mind when working with field profiles:

- Check the Placement settings. Judge whether the field usually has a Fixed or Variable position on a typical invoice. Also, check the position of the field value in relation to the title.
- When defining a date field, set the Language. Invoice Automation uses this when interpreting dates.

- Look at the invoices when adjusting the list of field Titles. It is important to include all possible titles. Invoice Automation cannot automatically find a title that is not included in the list.

Creating a single item field profile

If you need to create additional field profiles when processing your own invoices, do this:

1. Right-click the **Field profiles** folder and select **Add single item field**.

2. Enter a suitable name for the field you want to capture in the **Name** box.

3. Select a field type from the **Field type** box.

   The field type determines what sort of validation routines and business logic will be performed on the field during interpretation. See *Invoice Automation Help* for more information on the **Field type** setting.

   If you do not want to connect the field to predefined business logic, you can leave this setting blank.

4. Specify the field **Format** for regular fields and date fields using the same method described above (see " Check the format"). The field **Type** describes the content of the field:

   Regular fields can contain any allowed characters.

   Date fields contain a day, a month, and a year. You do not have to specify the format of a date field unless you want to.

   Amount fields contain a monetary amount. They have automatic formatting and cannot be changed.

5. Add titles in the same manner described above (See "Specifying titles" above.).

   Note: If a value identifier already exists that you want to use as a field profile, it can be automatically copied to the **Field profiles** folder by right-clicking the identifier and selecting **Copy to single item field**.

Specify the field position on the invoice

Invoice Automation also needs to know if the field is always in the same place, or if it can have a variable position on different invoices from the same supplier.

Invoice Automation is better at finding fixed fields than variable fields, so whenever possible, specify a field position as fixed. You can always change the field position specification later in the Optimize module if it turns out to be variable.

Note that "fixed position" does not mean fixed to within a millimeter, but fixed to within a small area that allows for minor variations in printing.

The default selections will suffice in most circumstances.

1. Select the **Placement** setting in the **Single item field profile** dialog.

2. Select each **Value location** box where you expect to find the field value.

   The **Value location** tells Invoice Automation where to find the value in relation to the title. Each value position check box represents an area where Invoice Automation will look for the value. If you are certain, for example, that the field value will only be found to the right of the title on all the invoices, select only the check box directly to the right of the title. If the value position varies from invoice to invoice however, you can select more than one position.

3. In the **Value position on invoice** box, select the appropriate radio button to specify the field position as fixed, horizontally fixed, vertically fixed, or unspecified.

   The **Placement** settings tell Invoice Automation where to find the field you want to capture.

4. If necessary, adjust the field rotation by clicking the button in the **Rotation** box.

Specify how the value should be validated

You can optionally specify validation criteria for the field. Validation criteria are used when invoices are processed. Invoice Automation checks whether the field meets your criteria. Fields that do not meet the specified validation criteria are displayed during the verification process, so that department personnel can identify any possible problems.

You may also want to apply a checksum validation to the value. If you want to do this, read more in *Invoice Automation Help*.

Specify other settings

There are a number of optional settings that you can specify for additional processing of the field. You access these by selecting Options and Events. For more information, see *Invoice Automation Help*.

Saving a field profile

When you have completed the field profile, click **OK**. The New field profile dialog closes, and the field profile is saved to the invoice profile you are working on.

It is helpful to know the field profile belongs to the invoice profile that you opened or are in the process of creating. If you ever want to look at (or update) this field profile again, you have to open the invoice profile that you saved it to first.

You can edit a field profile or change its name by opening the invoice profile and double-clicking the field profile. Before doing so, make sure the invoice profile is not being used in production. Also note that you cannot change the name of a field profile after you have created a transaction description.

Deleting a field profile

To delete a field profile, or identifier profile, select the field profile in the profile tree and press delete.

Preparing to transfer captured data

The Transfer module is used to transfer data from processed invoices to a target system or file. The information can be transferred using XML output (see "Configure a job to use XML output" below) or transactions (see "Add a transaction description" on page 41).

Configure a job to use XML output

Invoice Automation can transfer captured data in XML format. You can use Invoice Automation' internal XML format or any other desired external XML format. XML output is a part of **Transfer** and can be used for XML invoices, scanned invoices, and imported images.

To export the results of processed invoices in XML format:

1. In Manager, click the **Job descriptions** object bar and double-click an existing job description to open it, or right-click in the area above the object bars and select **New** to create a job description.

2. Click **Transfer** and select **XML Output** in the transfer job description's General settings.
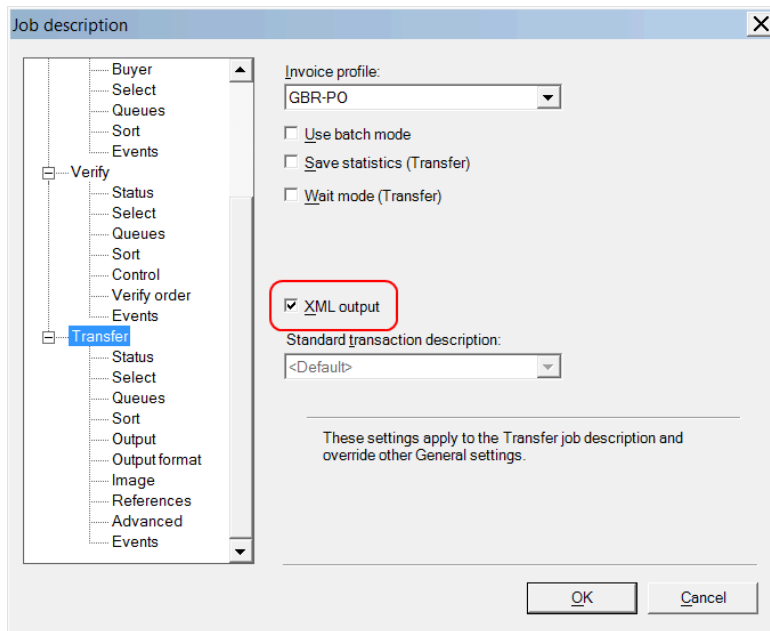

3. In the **Output** page of the dialog, using the **Output directory**box, specify the folder where the files are to be
   saved.
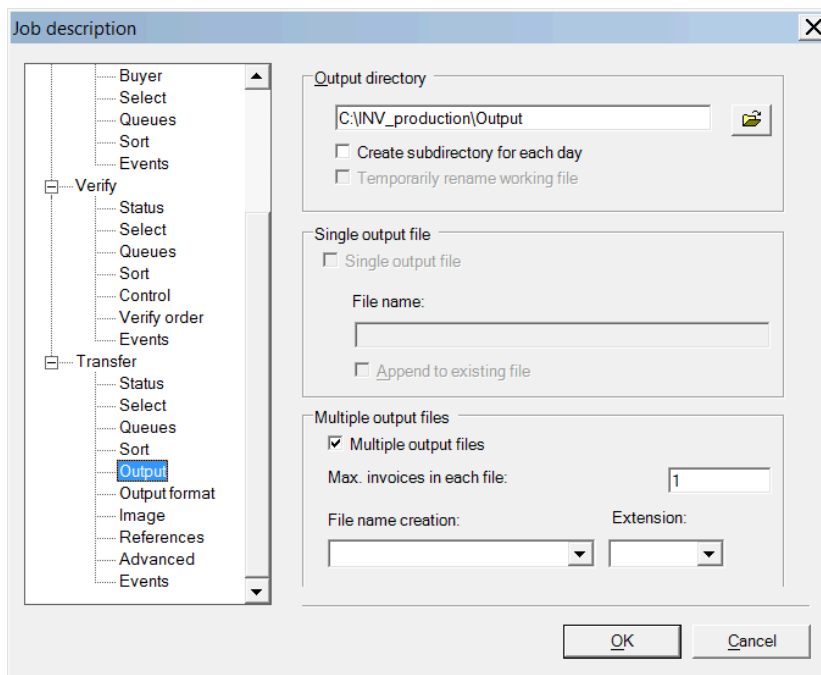
Optional: Use the **Multiple output files** settings to determine how the XML files are saved. It is selected by default when **XML Output** is selected in the Transfer General settings dialog (see step 2) and ensures that a fixed number of invoices is saved in each XML file (specified using the **Max. invoices in each file** setting).

4. Optional: Adjust the **Output format** settings:
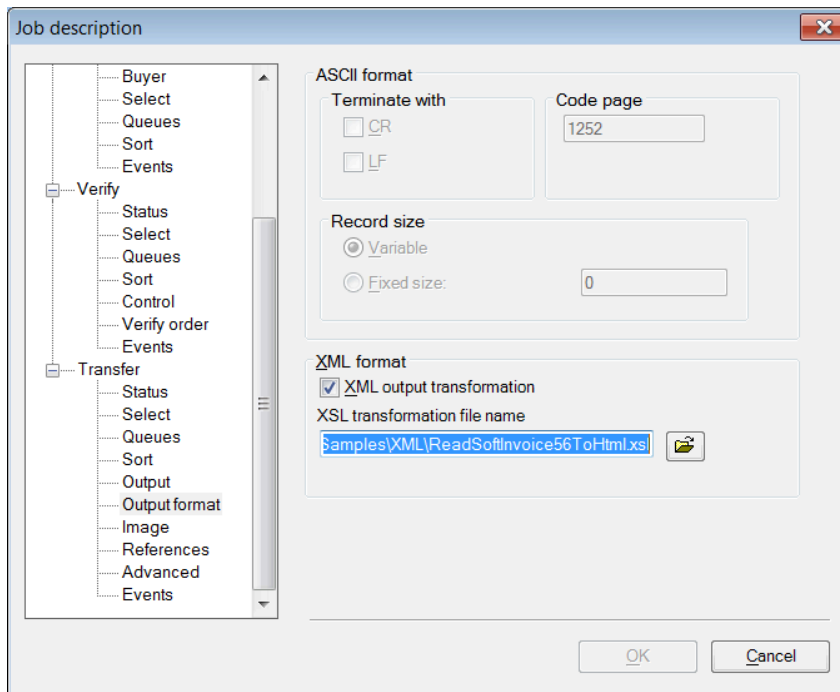
By default, output is saved using Kofax'es own XML format. Using **XML output transformation**, it is possible to transform the output to a different XML format by specifying a different XSL file to format the text.

Add a transaction description

Now that you have defined the invoice profile, it is time to create a *transaction description*.

"Transaction description" A transaction description is used to format the output from processed invoices. It specifies the content, format, and physical layout of the information the Transfer module will send to a transfer file after invoices have been processed.

You must do one of the following:

- Define at least one, default transaction description for each invoice profile.
- Define one transaction description for each type of invoice.

For this tutorial, we will define one transaction description for each invoice profile. If you have many invoice profiles, however, we recommend defining one transaction description for each type of invoice. See *Invoice Automation Help* for more information.
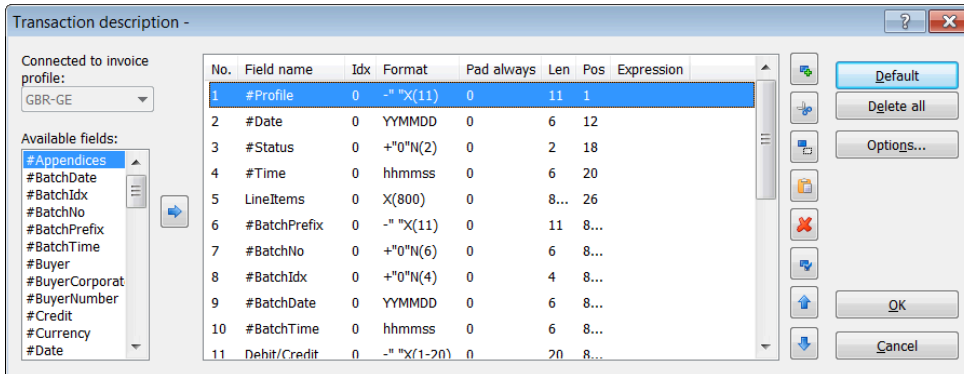
Create a transaction description

1. Make sure the invoice profile for which you want to create a transaction description is open.

2. Right-click the **Transaction descriptions** folder under the invoice profile and select Add.
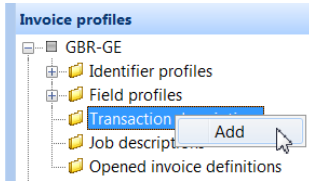
3. Click **Default** "Default button in transaction descriptions" to obtain a transaction description for the invoice profile. You see that Invoice Automation creates a number of *transaction fields* that include both *system variables,* which begin with the "# " character, and all the fields defined in the invoice profile.

The *Transaction description* dialog with default transaction fields.

4. You can use the **Available fields** box and the right-arrow button to add fields to the transaction description.

5. To remove an unwanted field from a transaction description, select the field and click the **Delete** button.

See *Invoice Automation Help* for more information about using the Transaction description dialog.

Determine the physical layout of the output

The transaction description options determine the layout of the output. Assume you want the transaction to consist of the transaction fields separated by commas, with trailing zeros or spaces removed from each field.

1. Click **Options (Transaction description dialog)**.

2. Select **Comma between fields**.

3. Select **Compact**.

You can also choose to have no separation between transaction fields (keep in mind that this can make the information hard to read) or to separate fields with a tab. Special characters can be used

as separators by selecting Other separator and adding the character to the text box. If you select **Compact**, trailing zeros and spaces are removed from each field.
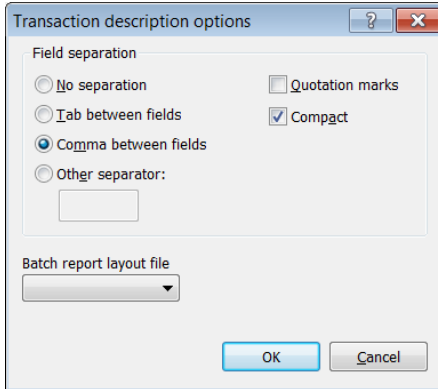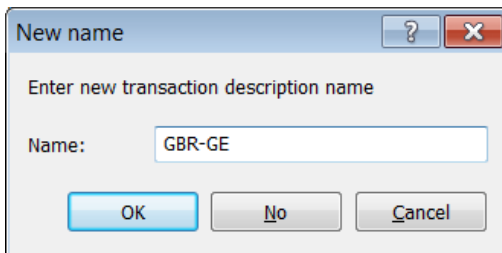

The *line separation selections* you made in the *Transaction description* dialog.

4. Click **OK** to save your changes and exit the dialog.

Save the transaction description

1. Close the **Transaction description** dialog by clicking **OK**.

2. Name the transaction description and click **OK**. Now the transaction description is associated with the currently open invoice profile.

Name the transaction description in the *Save transaction description as* dialog.

3. In the Invoice profile, click **Save**.

The transaction description is saved with the invoice profile.

You can edit a transaction description at any time by opening the invoice profile (if it is not already open) and double-clicking the transaction description.

Resave the invoice profile each time you edit a transaction description.

Create a scanner description

Scanner descriptions allow you to make settings that are valid for your scanner. They can be linked to an invoice profile, so you can use one scanner description for all your invoice profiles, or create multiple descriptions for different scanners.

To create a scanner description:

1. Click the **New** button in the Manager module.

2. When the **New** dialog appears, select **Scanner description** and click **OK**.
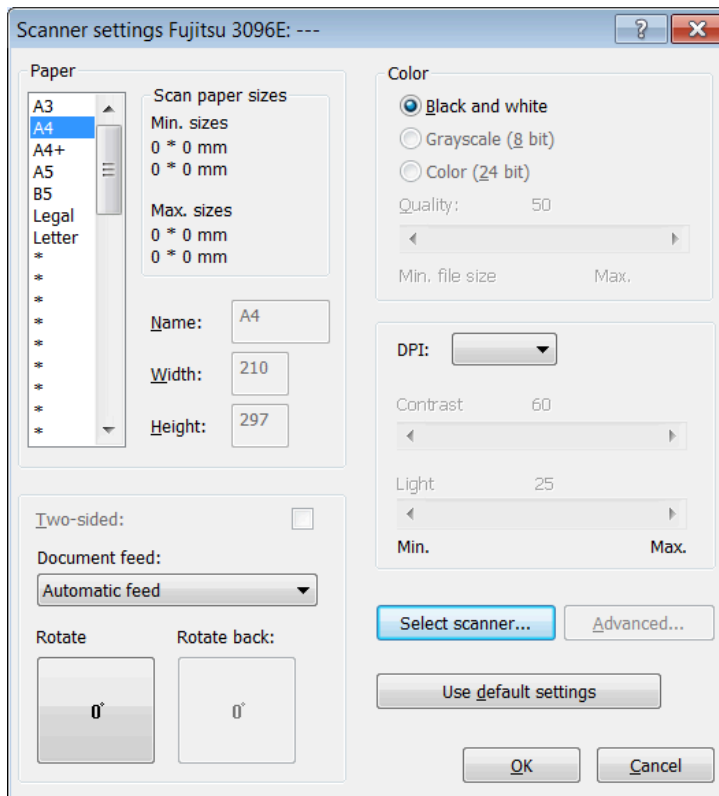
The **Scanner settings** dialog

3. Click **Select scanner** and select your scanner model from the dialog, then click **OK**.

4. Select a paper size. Invoice Automation has a number of predefined paper sizes. The sample invoices have A4 format, which is selected by default.

   If none of the predefined sizes fits the invoice you want to define, you can either select a larger paper size than the actual invoice or define a new paper size.

5. Select the DPI. In most cases, we recommend that you consistently use the default setting, 300 DPI, to scan small text more effectively.

6. Change the scanner settings **Light**, **Contrast** and **Rotate** only if necessary, after consulting *Invoice Automation Help*.

7. Click **OK** to close the dialog.

8. When the next dialog appears, enter an appropriate name for the scanner description and click **OK**. The scanner description is saved and can be seen under the **Scanner descriptions** object bar.

Create a job description

A *job description* is a set of instructions that describes what you want Invoice Automation to do. It tells which invoice profile to use and how you want Invoice Automation to work.

You can create job descriptions for all four of the production modules using the Manager, and you use them to run jobs in the other modules.

When you create job descriptions, you have many alternatives and choices to make. The following steps show the basic options needed to run the program.

Job descriptions and sorting

You can connect a job description to a specific invoice profile, however, in order to take advantage of Invoice Automation' automatic sorting, we highly recommend connecting the job description to the *system profile*. In essence, using the system profile is like using all of the invoice profiles at once, so Invoice Automation can sort the invoices properly.

To demonstrate the power of sorting, we will use the system profile in the tutorial.

Note that the system profile does not appear under the Invoice profiles bar in Manager. It is built into the system and cannot be changed. For more information on job description settings, see *Invoice Automation Help*.

Step 1 - Create a new job description

1. Click **New** on the Manager Toolbar.
2. When the New dialog appears, select **Job description** and click **OK**.
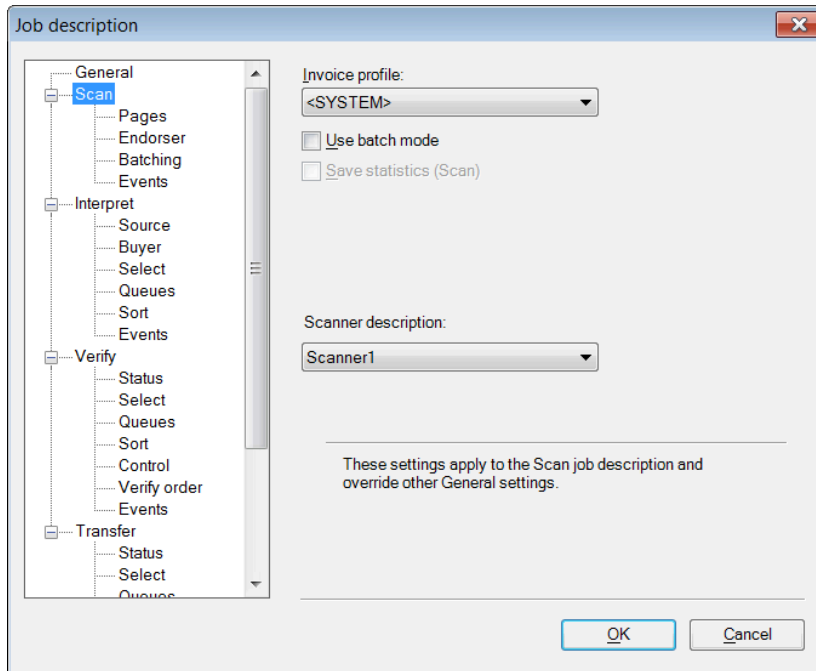3. Select <SYSTEM> from the Invoice profile box.
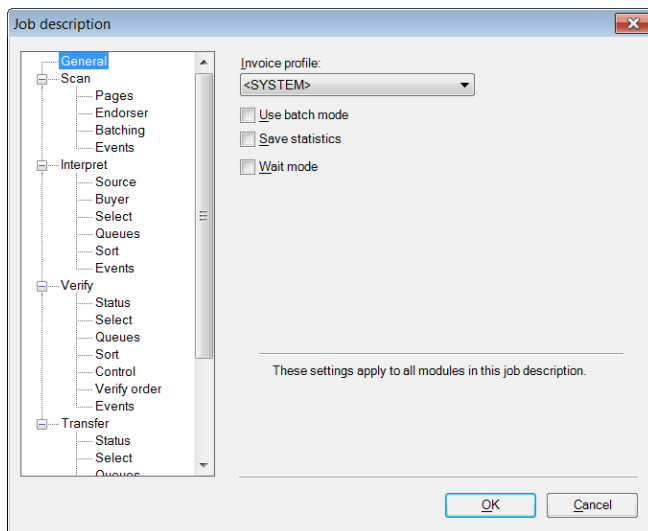
The **Job description** dialog

Step 2 - Edit the Scan job description settings

1. Click Scan (**Job description** dialog).

2. Select the scanner description you want to use from the **Scanner description** box.

Select the scanner setting you want to use with the job description.

For information on additional Scan job description settings, see *Invoice Automation Help*.

Step 3 - Edit the Interpret job description settings

1. Click **Source** under the Interpret job description settings.

2. Adjust the source settings.

- If you plan on using a scanner to scan invoices into the system, select **Internal** in the **Invoice source** box.
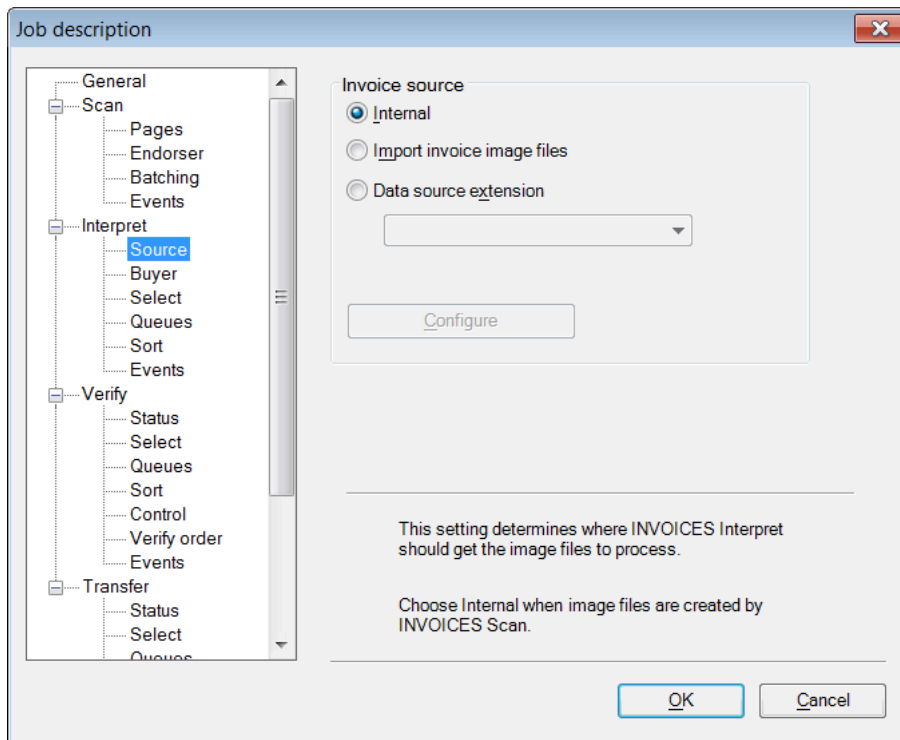
*Internal is the default selection in the **Invoice source** group box.*

- If you plan on importing image files, instead of scanning, select **Import image files** in the **Invoice source** box and click the **Configure** button. Select "*.*" in the **Files of type** box and specify the

folder where your image files are located in the **Source directory** box. This is explained in more detail later in the section, "Skip the Scan module during testing."
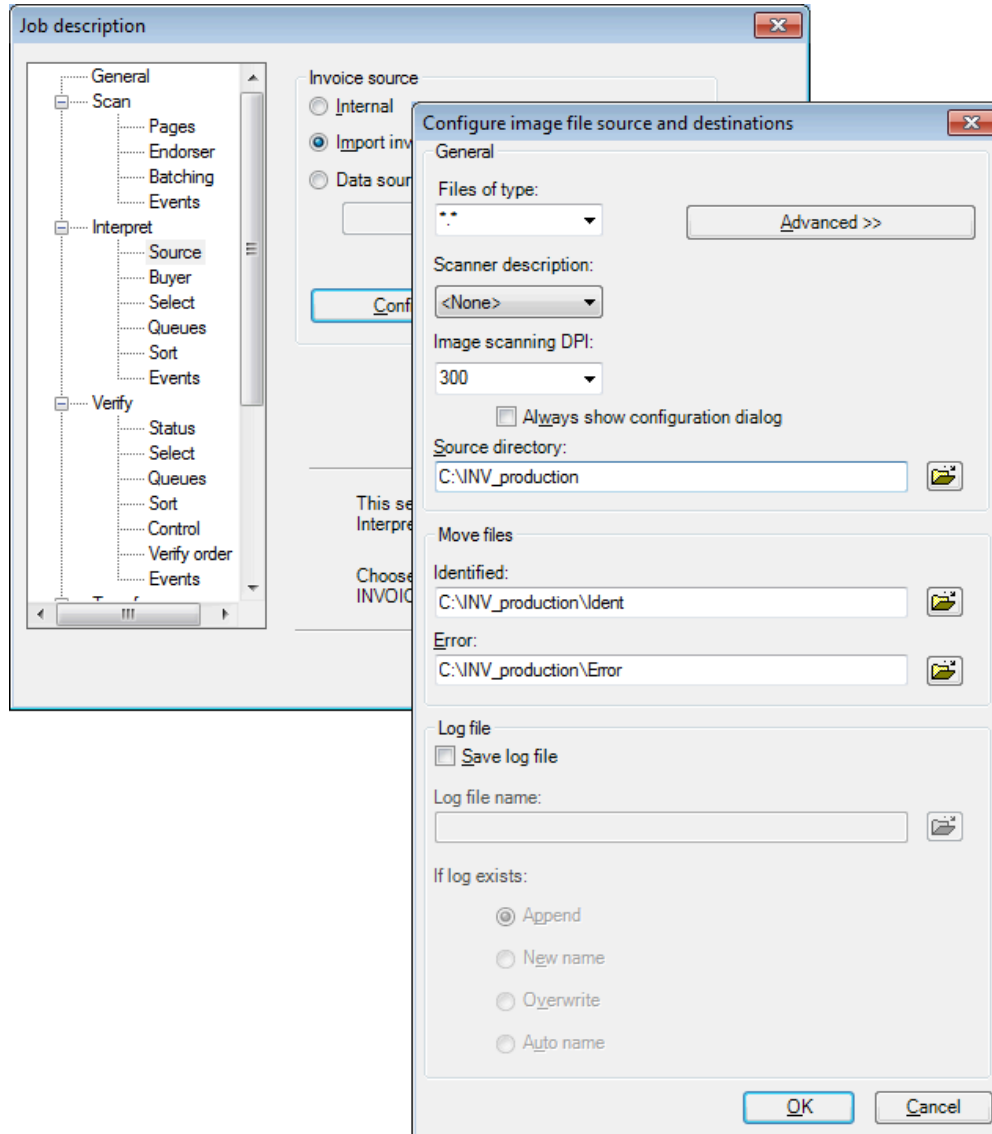
Although the default Interpret job description settings are all that is needed to run an Interpret job, there are many ways to customize your Interpret job. See *Invoice Automation Help* for more information.

Step 4 - Edit the Verify job description settings

Although the necessary Verify job description settings are predefined, there are many ways to customize your Verify job. See *Invoice Automation Help* for more information.

Step 5 - Edit the Transfer job description settings

Next, edit the *Transfer job description*. It tells Invoice Automation what information to transfer, which invoices to get it from, and where to send it.
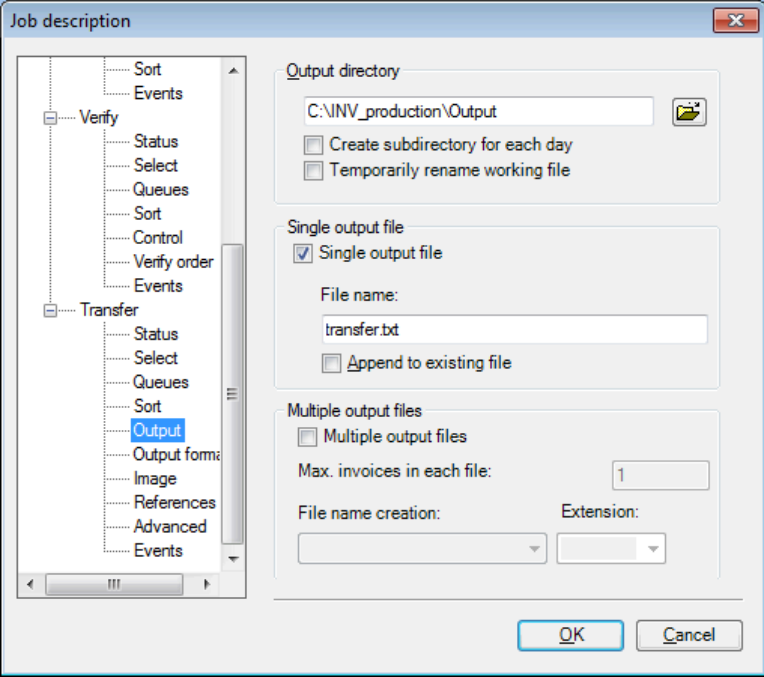
1. Click Transfer (**Job description** dialog).

2. When using the system job, select "<Default>" from the **Standard transaction description** box.
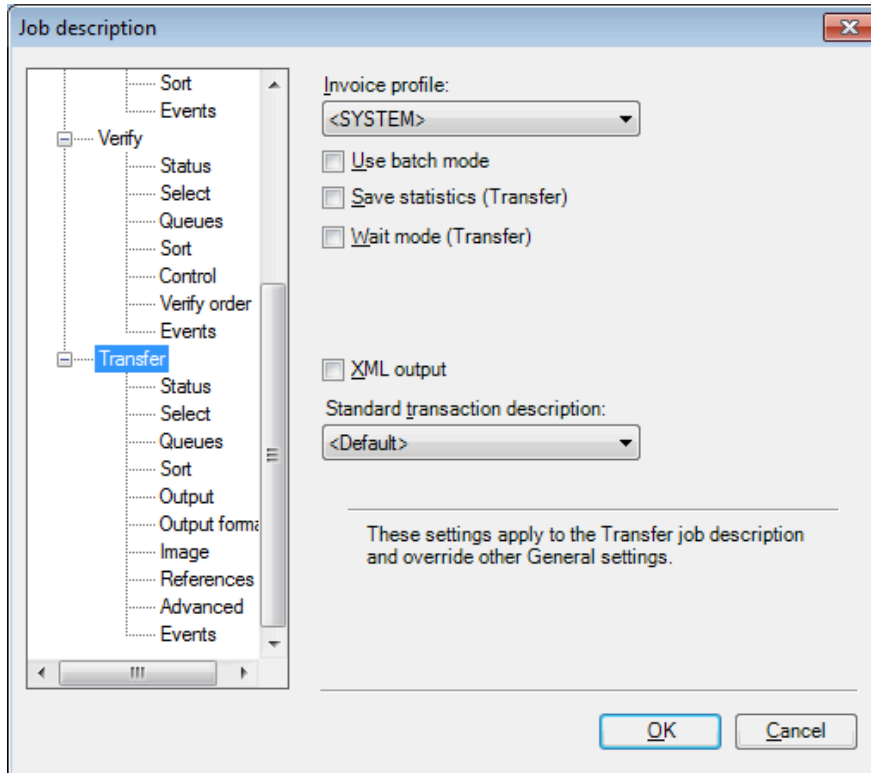
General settings for the Transfer job description

3. Select **Output** under the **Transfer** settings.

4. Specify the **Output directory**, and in the **File name** box under **Single output file**, type the name of the file that you want the data to be transferred to, such as transfer.txt.

Note When choosing to transfer the information to an existing file, activate the **Append to existing file** box if you do not want to overwrite previously saved data. If you fail to do so, a warning dialog will appear when you run the job in the Transfer module.


In the **Transfer job description** dialog, you specify how you want the invoice information to be transferred.

5. "Status" Use the **Status** settings to choose the status of the invoices you want to transfer. The **Status** settings also determine:

Whether or not the invoices are to be deleted after transfer

Where to save the image files, if you wish to save them after transfer

For information about other job description options, see *Invoice Automation Help*.
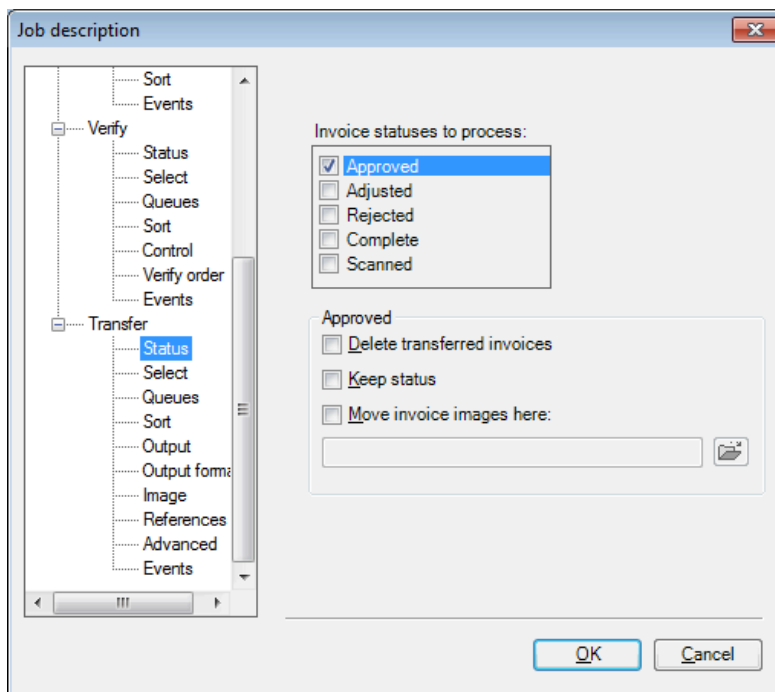
With these settings selected, only Approved invoices will be transferred.

6. Click **OK** to exit.

7. When the **Enter new job description name** dialog appears, enter an appropriate name and click **OK.** Your Job description is complete and automatically saved.

Check and activate the invoice profile

You have now completed the invoice profile, and it is time to activate it. It must be active for you to be able to use it for processing invoices.

1. Make sure the invoice profile is open. An open invoice profile has a white icon. A closed invoice profile's icon is gray. If the invoice profile is closed, right-click the invoice profile and select **Open** to make it editable.

2. Right-click the profile again and select **Settings**. Invoice Automation checks the validity of your invoice profile and displays the results in a dialog. If you followed the instructions above, the dialog now indicates that the invoice profile has no errors.

   Note that Invoice Automation cannot check for logical errors. You must ensure, for example, that any tables used in the invoice profile are correctly defined and that the transaction layout suits your purposes.

The **Invoice profile** dialog with a status warning

If any errors are listed in the dialog, correct them, then check the invoice profile again.

3. Click **Active** to lock the invoice profile in the database. If there are errors listed in the dialog, Invoice Automation does not allow you to activate the invoice profile.

4. Click **OK** to close the **Invoice profile settings** dialog.

5. Right-click the invoice profile and select **Save**.

6. Right-click the invoice profile again, and select **Close** to close the invoice profile.

   The invoice profile is now complete and ready for use in other modules.

Define inbox settings

The inbox is a way of choosing which invoices to verify. It is an alternative to running Verify jobs. The inbox gives both Invoice Automation administrators and Verify operators more control over the verification process. Administrators can create customizable, hierarchical folder views that organize the invoices to be verified in a way that is meaningful to their own production system. The folder view can be directed to Invoice Automation users based on their authorization rights and the invoices can be grouped and filtered according to a variety of criteria such as:

• Invoice profile

- Invoice status
- Buyer
- User-defined variables
- Queue

Before Verify operators can take advantage of the inbox feature, an administrator must create an inbox folder view. To do this:

1. Select **Inbox configuration** from the **Settings** menu in Manager to display the **Inbox configuration** dialog.
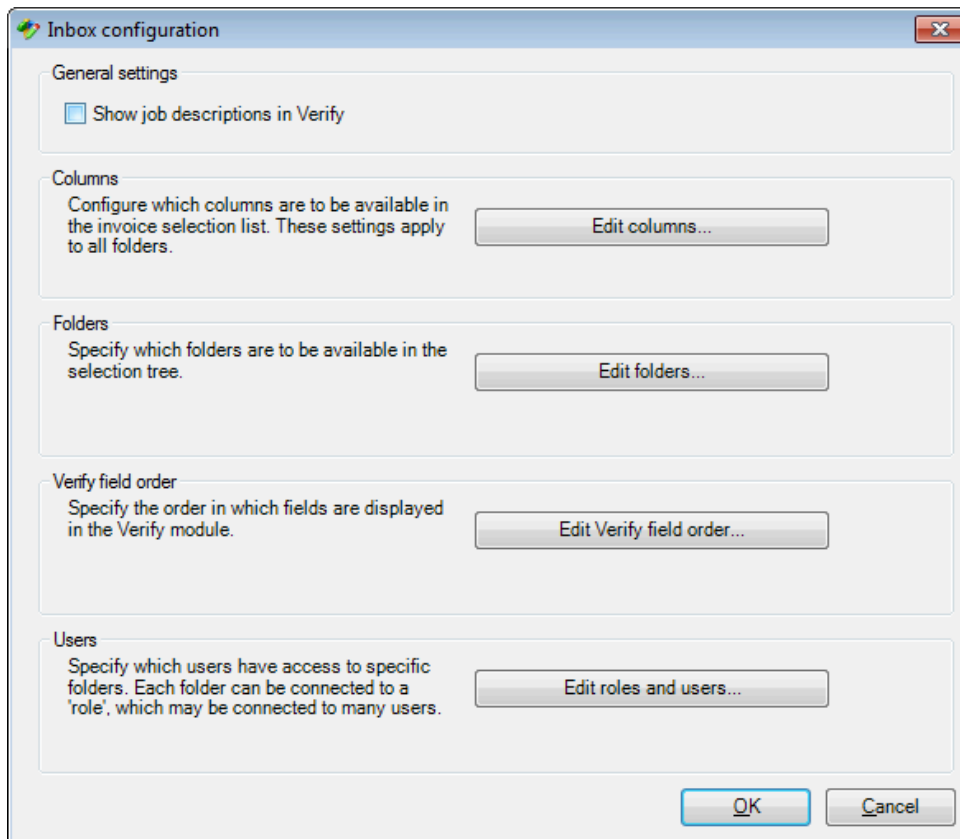
Use the general settings to toggle job descriptions in Verify.

2. Click **Edit folders** to display the **Edit folders** dialog. This is where you can create a folder view for the Verify operators.

3. Click **Auto-create folder structure** to make a folder view that uses all of the invoice profiles. You can create a folder view from scratch, however, we recommend using the **Auto-create** button as a foundation.
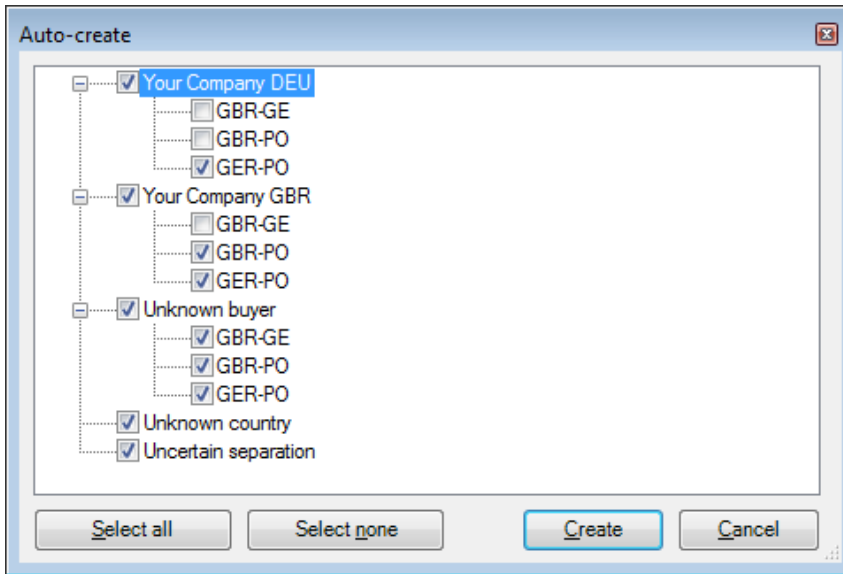
The Unknown buyer folder contains all of the invoice profiles.

4. For this tutorial, we want invoices from England to be displayed in the folder for *Your Company GBR* and we want invoices from Germany to be displayed in the folder for *Your Company GER*. Therefore, you need to deselect the GBR-GE and GBR-PO invoice profiles under Your Company GER. Likewise, you need to deselect the GER-PO invoice profile under Your Company GBR.

5. Click **Create** after you are finished making your selections to return to the **Edit folders** dialog. The folder view appears in the **Edit folders** dialog.
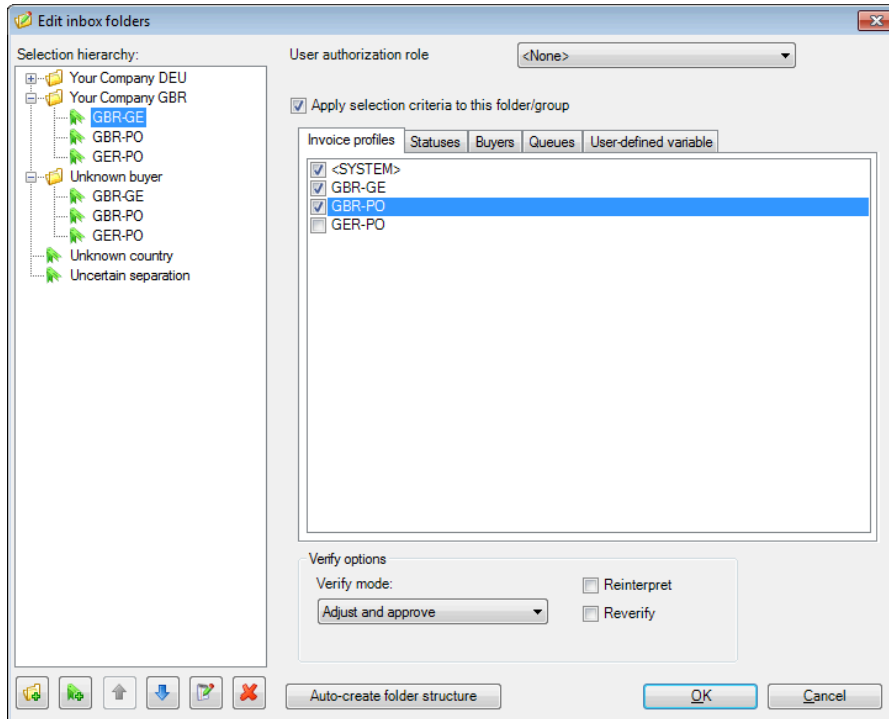
You can define criteria for each folder using the **Edit inbox folders** dialog.

Each item under a folder is a conceptual representation of the invoices that will be displayed when you double-click that item in Verify. For example, if you select **GBR-GE** under the **Your Company GBR** folder, you can see that the GBR-GE invoice profile is selected in the **Apply selection criteria to this folder/group**. This means that when you double-click the same item in Verify, only invoices that have been interpreted using the GBR-GE invoice profile will be displayed.

Each item you define in the **Apply selection criteria to this folder/group** creates a condition that must be true in order to display an invoice in the currently selected item. As you become more familiar with Invoice Automation, you can use the buttons (**Add root**, **Add child,** etc.) at the bottom of the **Edit folders** dialog to create folders of your own. You can also use the **Edit roles and users** button (**Inbox configuration** dialog) to add another level of criteria to your inbox, by only allowing specific users access to inbox folders.

6. Click **Save** to save your settings. You now have a fully functional inbox that will be displayed in Verify.

Test the invoice profile

Normally, before you begin using Invoice Automation to process invoices with a particular invoice profile, it is essential that you take the time to test the invoice profile. Your tests reveal adjustments you can make which will increase Invoice Automation' interpretation rate.

To test an invoice profile, use the invoice profile in production (see Chapter 4) with some representative test invoices, checking the statistics as you work and comparing the actual invoices with the transfer file.

Define several additional invoice profiles with different settings and validation routines to determine which works best for the invoices.

Follow these instructions to create a new invoice profile based on an already existing one:

1. Click the invoice profile that already exists.
2. Select **Save as** on the **File** menu.
3. Type a new name and click **OK** to save.
4. Right-click the new invoice profile and select **Settings**.
5. Change the invoice profile status to **Inactive**. Note that if the original invoice profile was closed when you created the new one from it, the new invoice profile will also be closed when you save it. Consequently, you need to right-click it and select **Open** before you can inactivate it.

   Now you can make any changes you wish in the new invoice profile. You must reactivate, close, and resave it before you can use it.

Other important activities

Although the activities described below are part of invoice administration, they are not usually performed until after a first run through production. If you are using Invoice Automation for the first time, we recommend that you simply read them before you move on to the next chapter and then return to them later.

Skip the Scan module during testing

When you are testing Invoice Automation, you can choose to have Invoice Automation interpret invoices from image files instead of scanning the invoices manually. Then, you can interpret them repeatedly, skipping the step of rescanning the invoices for each test.

1. Double-click the job description to open it.
2. Select **Source** from the **Interpret** settings.

**3.** Select **Import image files** and click **Configure**.
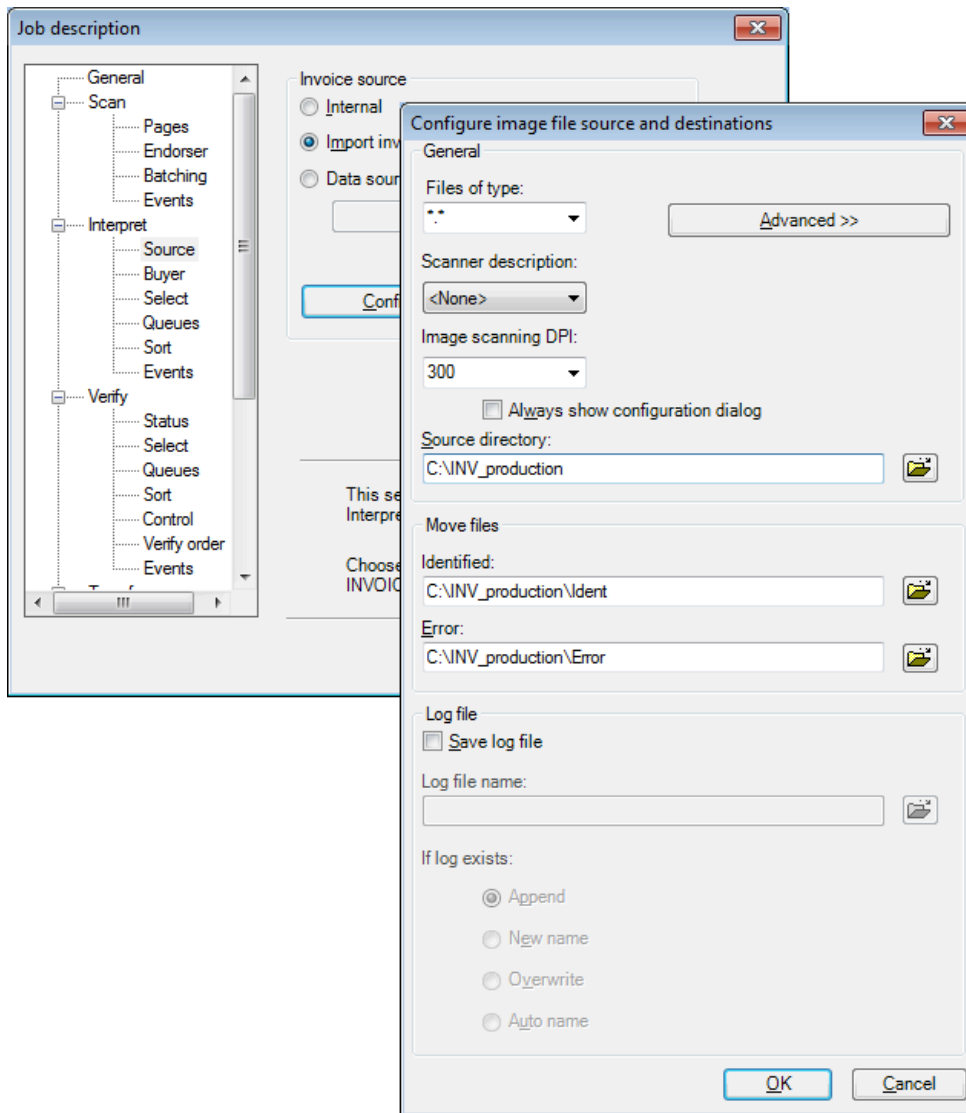
You can skip the Scan module by importing image files.

4. Select "*.*" in the **Files of type** box to import all supported image file types, or select a specific file type, if you know what type of image files you use.

5. When the **Configure image file source and destinations** dialog appears, click the folder button next to **Source directory** in the **General** group box, and specify the folder where your images are located.

Default paths for **Identified** and **Error** files automatically appear in the **Move files** dialog.

6. Click **OK** to exit the **Configure image file and destinations** dialog, then click **OK** again to save your changes and exit the dialog.

7. Run the Interpret module and start the interpret job. Invoice Automation moves the image files from the main folder you selected to the various subfolders, depending on whether or not Interpret processed them successfully. Normally, they are moved to the *Ident* folder.
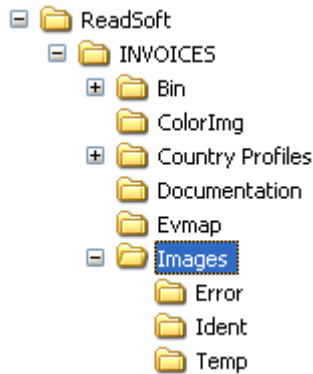
The folder structure for your image files can look something like this.

8. To reuse the files to test the system again, use Windows Explorer to move them from the destination folder (usually *Ident*) back to the source folder.

Test the transaction description

The result of processing invoices with Invoice Automation is the information output from those invoices. "Test the invoice profile" on page 55 describes one way you can optimize the accuracy of that information.

The content and format of the output is also important. Testing the transaction description can reveal adjustments that you can make which result in an output format best suited for the target system using the transfer file.

To test a transaction description, you must repeatedly run invoices in Transfer, checking the transfer file after each Transfer job to evaluate the results. This process is rather time-consuming since you must interpret, verify, and transfer test TIFF files each time, but it is worthwhile to fine-tune the content and format of your output.

Customize job descriptions

Before you begin using the application to process invoices, it is worthwhile to think about your alternatives for the job descriptions for the four production modules. By trying different settings, you can customize Invoice Automation to your needs and make the verification process very efficient.

Do not hesitate to define a number of job descriptions with different settings to see which ones work best with different invoice profiles or for different users. Follow these instructions to base a new job description on an already existing one, using the Manager or any of the production modules:

1. Select a job description you already created.
2. Select **Save as** from the **File** menu.
3. In the **Save job description** dialog, type a new name.
4. Open the new job description you just created and make any changes you choose.
5. Click **OK** to close the dialog.

6. Click **Save**.

   If you want to try various settings for an existing job description while working in one of the production modules, there is no need to save changes at all. Although an edited job description is not saved to a file, the changes are still active and you can select **Start** (**Job** menu) to use the job description with its changes.

   You can always change your mind about not saving a new job description and select **Save** or **Save as** on the **File** menu. If you close the module without doing so, the changes are permanently lost.

Before you begin: What to think about

Before you begin creating your own invoice profile, look at some of the invoice types you plan to capture in Invoice Automation.

Some characteristics of the invoices that are important to take note of are listed below:

- **Paper size**. What size is the paper that the invoices are printed on? This information must be specified in the scanner description.
- **Fields**. What information do you want to capture from the invoices? Think of which fields you need and what formats they use. Avoid using titles that are not unique. Specifying unique titles saves production time and increases interpretation rates.
- **Identifiers**. Decide what will be used as the identifier. The identifier needs to contain either a piece of information or an image that is included on every invoice and is unique for each supplier. If not all of the invoices contain the same piece of information, you can use multiple identifiers, for example, one identifier for account numbers and one for logos. Each invoice profile can contain up to three identifiers in any combination.

Chapter 4

Production

Chapter 3 described the basic steps involved in preparing Invoice Automation to process your invoices. This chapter describes the actual invoice processing or *production*.

Scan, Interpret, Verify, and Transfer work only in accordance with job descriptions. Your first step in these four modules is always either to open an existing job description or create a new one. Note, however, that both Interpret and Transfer can be run automatically as Windows Services. See *Invoice Automation Help* for more information about automating Interpret and Transfer.

"Production" While all administration tasks are performed in the Manager, your incoming invoices are processed using the four production modules:

1. Scan: scanning invoices
2. Interpret: interpreting and validating invoices
3. Verify: verifying and approving invoices
4. Transfer: transferring information from processed invoices

    All phases can be performed on a single computer or different computers (if they share databases).

Scan operator tasks

In this section, we use the invoice profiles set up in Chapter 3.

Step 1 - Start the Scan module

1. Switch on the scanner before you turn your computer on. Otherwise, your computer's device driver may not find the scanner.
2. Start the Scan module from the program group created during installation or run the program eiscan.exe.

Step 2 - Scan the invoices

The sample invoices images included with the program can be printed and then scanned and used in production (or they can be imported directly).

1. Place the invoices in the document feeder as straight as possible.

2. Select File > **Open** menu) or click **Open** on the toolbar.

3. When the **Select job description** dialog appears, select the job description you want to run, and click **OK**.

4. Click **Run** to begin the job.

    Invoice Automation starts the scanner and begins receiving images of invoices. The job status, date, and time are displayed on the screen while the scanner is running, as well as a bar chart indicating how many invoices of each type have been scanned.

    If you are running your invoices in batches with a fixed number of invoices, Invoice Automation runs until the specified number of invoices has been scanned. If not, Invoice Automation runs until the scanner's document feeder is empty.

    You can stop at any time by stopping the scanner manually.

5. When the document feeder is empty or when the batch is finished, you can add more invoices and continue the job by clicking **Continue** in the **Operator control** dialog, or you can click **Stop** to stop scanning.
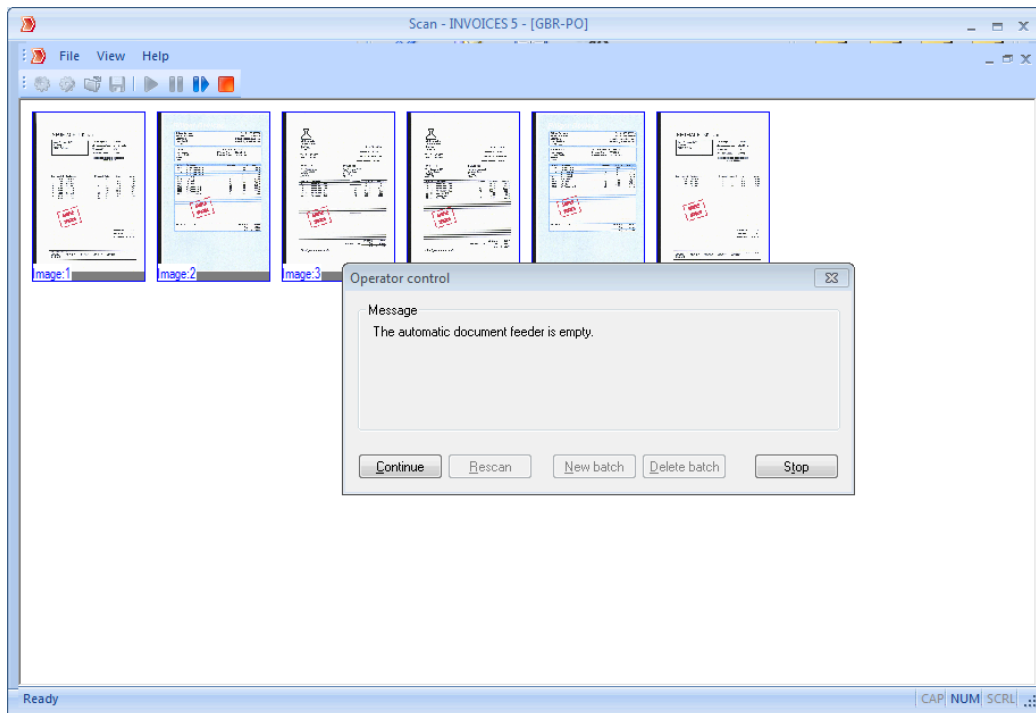
The **Operator control** dialog notifies you when the document feeder is empty.

As invoices are scanned, they are saved to Invoice Automation's database automatically unless you specifically discard them. This is why there is no **Save** or **Save as** command for scanned invoices in Scan.

Thumbnail images of the most recently scanned invoices appear as the invoices are scanned. To view an enlarged invoice image in another window, right-click the thumbnail image and select **View**.

Certain events (some of which are described below) may require your attention during scanning. A message displayed in the **Operator control** dialog describes the situation.

Scanning invoices in batches

If you are scanning invoices in batches, you are given the opportunity to enter batch information before each new batch begins.

If you indicated in the job that you wanted to confirm each batch, then after each batch is finished, you must select New batch, Continue, or Stop before the Interpret module can begin to process the scanned images.

For additional information about batches, refer to *Invoice Automation Help*.

Problem: The scanner needs attention

- If the scanner is not connected or is switched off, connect or switch on the scanner, wait until it is ready, make sure there are invoices in the document feeder, and start the job again.

- If the document feeder is empty, add more invoices and restart the job.
- If a paper jam occurs, clear the paper path, clear the error status on the scanner (refer to the scanner's manual), and restart the process.

Step 3 - Close the Scan job

Once the Scan job has finished running, close the Scan module by choosing the **File** > **Exit** menu.

You are now ready to move on to Interpret.

Interpret operator tasks

The Interpret module:

- Learns the new invoices as completely as possible without manual assistance.
- Creates an invoice definition for each new invoice type.
- Captures the information on the invoices (for new invoices, it captures information for the fields it can learn).

You can run Interpret with a graphical interface, as described in the next section, or you can run Interpret automatically using Windows Services. Services start and stop automatically according to the times you specify, and they can run indefinitely without interaction. See *Invoice Automation Help* for more information on using Windows Services.

Step 1 - Run the Interpret job

1. Start the Interpret module from the program group created during installation or run the program eiitrp.exe.
2. Select the **File** > **Open** menu option or click **Open** on the toolbar.
3. Select the job description you want to run and click **OK**.

4. Click **Start** to begin the job.

   The **Statistics** box is displayed and updated after each invoice is processed. The job status, date, and time are displayed, as well as a bar chart indicating how many invoices have been interpreted. There are no operator dialogs that require your attention.

   Depending on the speed of your workstation, this can take some time.

   Information about the Interpret job is displayed and automatically updated while the module is running.

5. When all the invoices are processed, a message at the bottom of the window tells you there are no more invoices.

6. You can view statistics, which tell you how many invoices were interpreted, when they were interpreted, and how long it took by choosing the **File** > **Statistics** menu option.

   You can save statistics from the latest run by clicking **Save** in the dialog. When you have saved statistics, you can also print them.

7. When the job is finished, select **File** > **Exit** to close Interpret.

   You are ready to move on to Verify.

Verify operator tasks

After the invoices have been processed by Interpret, they are ready for verification. Any fields on an invoice that were not fully captured by interpret are presented for adjustment. You are asked to *verify* the invoices to check that the interpreted values for each field are correct and change them if they are incorrect.

Step 1 - Start Verify

1. Start the Verify module from the program group created during installation or run the program `eiveri.exe.`
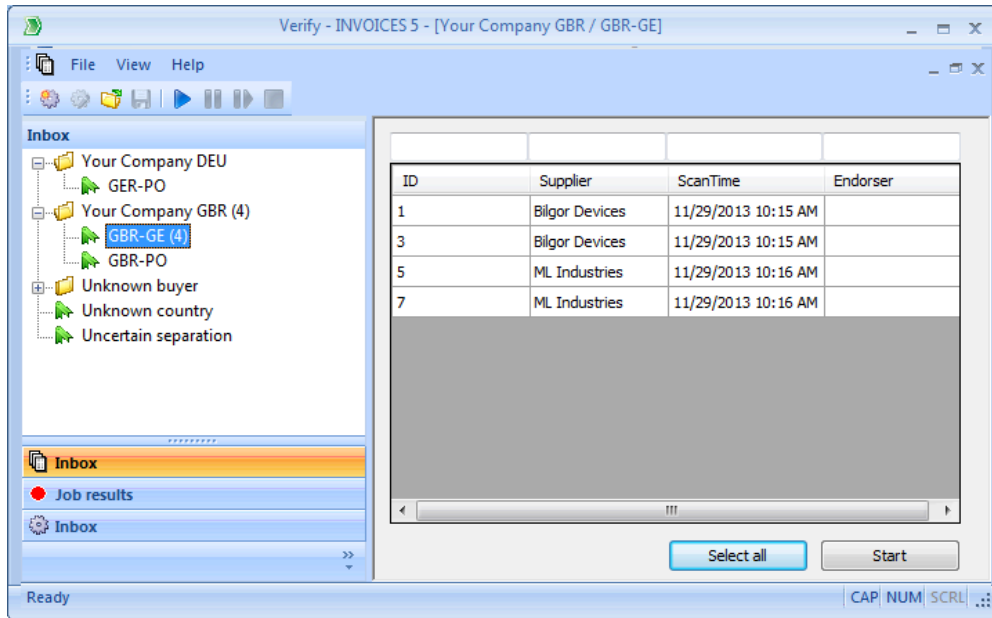
Use the inbox to decide which invoices you want to Verify.

2. Expand the folders in the inbox so you can see which invoices you want to verify.

    You can double-click an item under a folder to see what invoices are listed there. For example, if you double-click **GB-PO**, you only see invoices that have been automatically classified as purchase orders for Great Britain.

3. Select the invoices you want to verify.

    To select individual invoices you can hold down the **SHIFT** key or **CTRL** and click each desired invoice definition. Alternatively, you can click **Select all** to choose all of the invoices.

4. Click **Start** when you are ready to begin verifying.

Step 2 - Verifying the invoices

Verify displays all the invoices that have been interpreted for verification according to the criteria set by the inbox. You use Verify to check buyer and supplier information and to make sure that all fields are interpreted correctly.

1. Check that the buyer and supplier information are correct. You can use the **Buyer** and **Supplier** boxes to change this information if necessary. You can also click **Supplier number** to view more detailed information about the supplier for comparison.
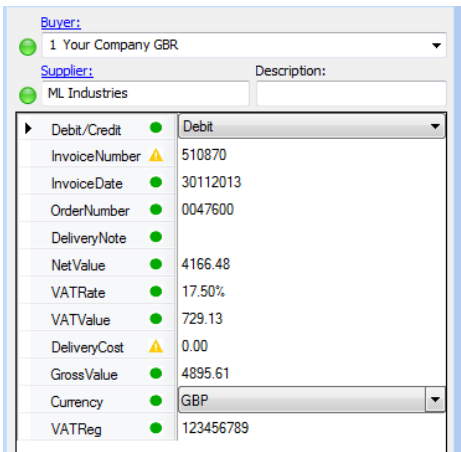
The **Verifying** dialog displays the interpreted fields.

2. Check that the field values are correct.

Option	
	...means Invoice Automation thinks the field has been interpreted correctly.
	...means the field needs your attention.
	...means there is something wrong with the field.

Each field has an image that indicates its status.

Click in any value box to see the corresponding field's location on the invoice image.

Click the button in the **#** column to scroll through the proposed field values. Only one proposal for each field should be correct. Once you have found the correct field on the invoice, check that the interpreted title and value are correct. If necessary, you can retype the values directly into the edit boxes. When you find the correct proposal, press **Enter**.

If Invoice Automation cannot find a field, locate the field on the invoice yourself and double-click it. Invoice Automation will automatically interpret the value for you. If necessary, you can type the correct value in the edit box instead.

3. After you check that all the interpreted values are correct, click **OK**. This means that you have verified the invoice and accept the values.

   Now the first invoice is completely processed by Verify, and the information is ready to be transferred to your financial system. You transfer the information later by following the steps in the next section.

   After you click **OK** in the **Verify** dialog, Verify starts processing the next invoice.

4. Continue this process until all the invoices are verified.

Verify toolbar

There are other actions you can perform on invoices in Verify. The Verify toolbar contains the most common commands you use.

	Approve. Click this button after you have ensured that all the invoice information is correct. This is the same as clicking the green OK button.
	Credit/Debit. Click this button to change an invoice to a credit note, or vice versa. This is the same as selecting **Credit** or **Debit** from the *Debit/Credit* field.
	Reject. Click this button if you do not accept the invoice for any reason. You can click this button, for example, if the document you are verifying appears to have been scanned by accident and does not belong in the system at all.
	Reroute. Click this button to change the buyer of the invoice or to change the invoice profile that was used to interpret the current invoice.
	Reinterprets the current invoice. Click this button to reinterpret the current invoice.
	User remark. Click this button to add a remark, or message, to an invoice. User remarks are saved in the process log. See *Invoice Automation Help* for more information about process logs.

Step 3 - Exit Verify

1. After you have verified the last invoice, click **OK** in the **No more invoices** dialog.

   You can view statistics that tell you how many invoices were verified, when they were verified, and how long it took by choosing the **File** > **Statistics** menu.

2. When you are finished, close Verify by choosing the **File** > **Exit** menu.

   You are now ready to transfer information.

Transfer operator tasks

After all the invoices are verified, they are ready for transfer to your financial system or to other systems. Once the Transfer module is finished with the invoices, a complete transaction, in the format defined in the invoice profile, is available in a file.

You can run Transfer with a graphical interface, as described in the next section, or you can run Transfer automatically using Windows Services. Services start and stop automatically according to the times you specify, and they can run indefinitely without interaction. See *Invoice Automation Help* for more information on using Windows Services.

Step 1 - Run the Transfer job

During transfer, job status, date and time are displayed, as well as a bar chart indicating how many invoices of each type have been transferred. There are no operator dialogs that require your attention.

Status	**RUNNING**
Start date	11/29/2013
Start time	10:15:50 AM
Elapsed	00:00:13
Invoices processed	3

Invoices

Information about the Transfer job is displayed and automatically updated while the module is running.

1. Start the Transfer module from the program group created during installation or run the program `eitran.exe.`
2. Select the **File** > **Open** menu, or click **Open** on the toolbar.
3. Select the job description you want to use and click **OK**.
4. Click **Start** > to begin the job. Invoice Automation runs until all invoices with the specified statuses have been transferred to the file specified in your Transfer job description. The format of the output information is determined by the transaction description linked to the invoice profile.

Step 2 - Exit Transfer

1. When the job is finished, you can view statistics which tell you how many invoices were transferred, when they were transferred and how long it took by choosing the File > **Statistics** menu.

   You can save statistics from the latest run by clicking **Save** in the dialog. After you have saved statistics, you can also print them.

   If you do not save statistics, Invoice Automation prompts you to do so when you exit Transfer. However, you can click **No** if statistics are of no interest.

2. When you are finished, close Transfer by choosing **File** > **Exit**.

3. Once the information has been transferred to a file, you can open and examine the text file with a text-editing program such as Notepad. If you used the predefined settings in Eilocal.ini, the transfer file can be found in the INVOICES\Transfer folder.

   The sample invoices have now gone through the entire production process. To begin using your own invoices, create a new invoice profile, transaction description, and job descriptions. Then, run your invoices through the production process. Refer to this guide for help. For assistance with more advanced functions, refer to *Invoice Automation Help*.

Chapter 5

Optimize production

When new invoice definitions are created during production, they are based on an invoice profile, which is designed to capture a wide variety of invoices from many suppliers. An invoice that does not fit the general model of the invoice profile, can have repeated field errors or identification problems. To resolve this, you can use the Optimize module to provide more detailed information about the invoice definition. This improves interpretation success and increases production.

Not all invoices with poor interpretation need to be optimized. Before optimizing an invoice, consider how often the supplier sends you invoices. If you rarely receive invoices from this particular supplier, optimization is probably not worthwhile. On the other hand, if you receive numerous invoices from this supplier on a regular basis, you can benefit from the increased performance of an optimized invoice definition.

Manually learning invoice definitions

During *manual learning*, Optimize displays the invoice definition image, so you can help Invoice Automation learn it, and updates the invoice definitions according to your manual input about field positions and properties.

In addition, during manual learning, Optimize captures any information on the invoice definition that was not captured by Interpret.

Step 1 - Start the Optimize module

1. Start the Optimize module from the program group created during installation or run the program eiopti.exe.

2. Double-click the invoice profile that contains the invoice definitions you want to optimize. Optimize produces a list of all the profile's invoice definitions with information about their statuses and other statistics in the **Invoice definitions** dialog.
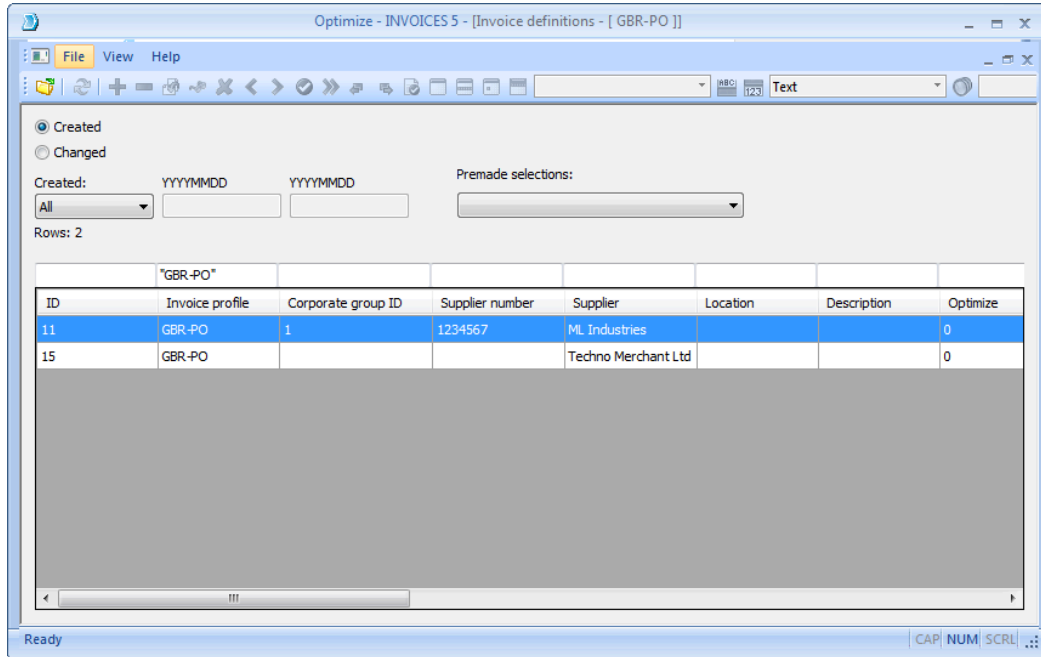
The **Invoice definitions** dialog contains statistical information about the invoice definitions.

Step 2 - Select which invoice definitions to optimize

You can choose to optimize single invoice definitions separately or an entire group of invoices in an optimize session. :

To optimize a single invoice definition, double-click the invoice definition name in the Invoice definitions dialog.

To optimize a group of invoices based on their status:
1. Select **File** > **Optimize**.

2. When the **Optimize session** dialog appears, select which invoice profile you want to optimize.
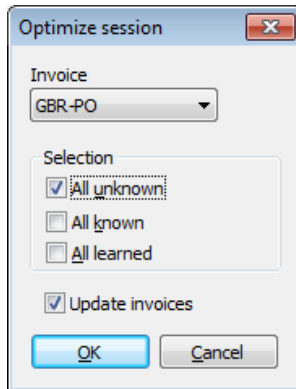
The **Optimize session** dialog allows you to select which invoice profile definitions you want to optimize.

3. In the **Selection** group box, select which invoice definitions you want to optimize according to their status (that is, *All unknown*, *All known*, or *All learned*). In most cases, you want to optimize *All unknown* invoice definitions.

4. Click **OK** to begin the manual learning of the invoice definitions.

Step 3 - Manually learning fields

After you select which invoice definitions to optimize, the Learning and Field learning dialogs appear together with the invoice image. Depending on what information is needed, either the supplier, the description, or the first field that is *Not learned* is activated.

The Learning dialog lists all the fields that are defined in your invoice profile, the type and status of each field in the invoice definition and the invoice definition status. Note that the *Not learned* fields require manual learning. This dialog changes as you learn each field. When all the fields on an invoice definition are *Learned*, the invoice definition is also *Learned*.

The Learning dialog shows the status of the fields in the invoice definition.

Not learned fields often contain *field proposals*, which are fields Invoice Automation has found that may or may not be correct.

Occasionally, a *Not learned* field may not contain any field proposals. This means that Invoice Automation could not find any fields with the characteristics specified in the invoice profile. This is often caused by the field having a dark background, in which case you need to apply a background filter, or by the field's text being hard to interpret (bold text, matrix-printed text, etc.), in which case you can change the text type in the Field learning dialog.

The active field (the title and value fields currently being learned) is highlighted in the Learning dialog, and Invoice Automation' interpretation of the field is presented in the Title and Value group boxes in the Field learning dialog.
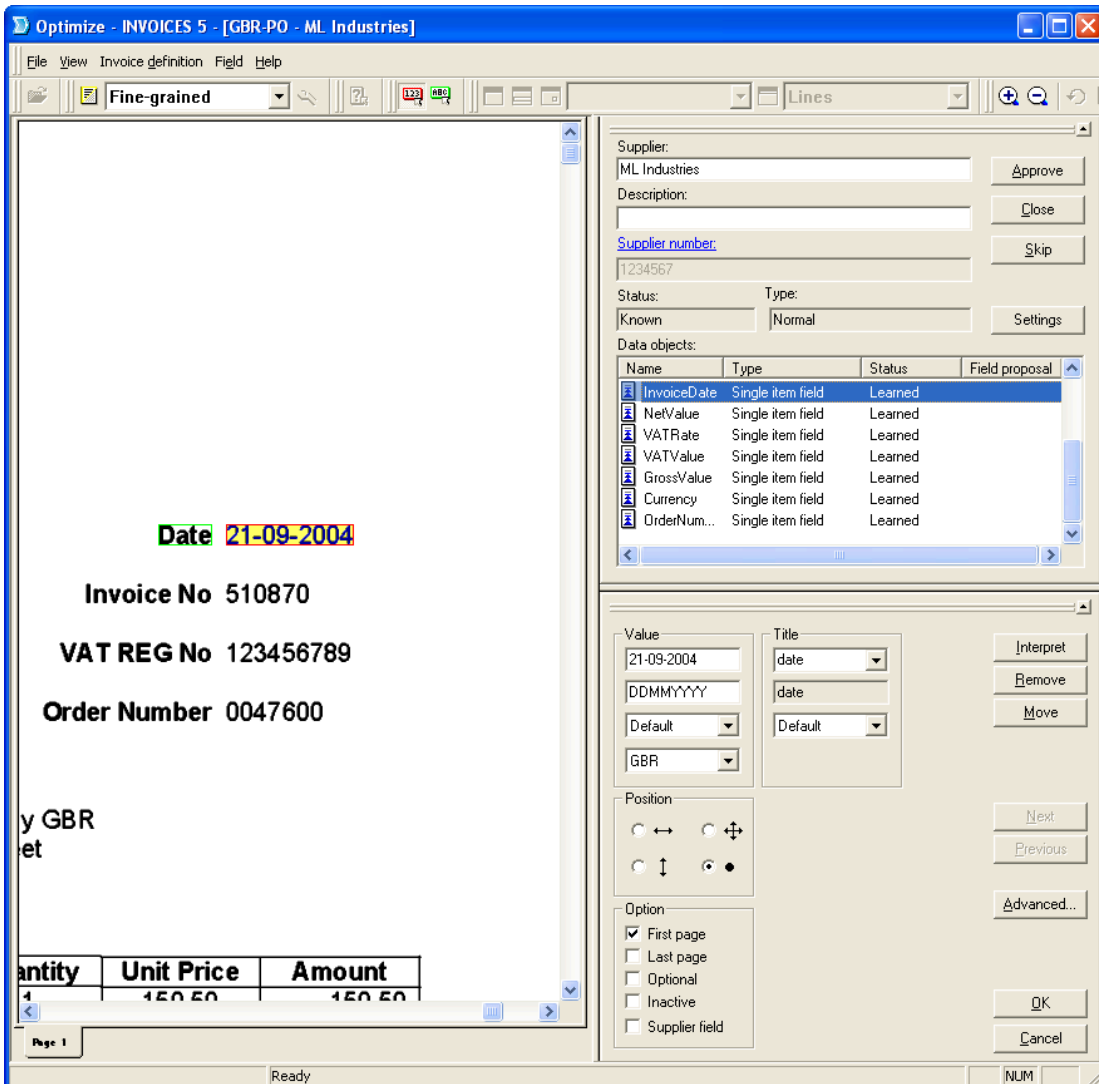
The Learning *and* Field learning dialogs with the active field marked on the invoice image

1. Click the name of a *Learned* field in the **Learning** dialog.

   If you cannot see the field marked on the invoice image, change the invoice size or position until you see the field title and value outlined on the invoice.

2. Check that the correct title and value are outlined, then look at the **Field learning** dialog and check that the interpreted title and value match those printed on the invoice. If you choose, you can double-check all *Learned* fields in this manner.

3. When learning a new invoice type, try to determine whether the **Position** of each field type varies from invoice to invoice or is always in the same place. In the **Position** group box in the **Field learning** dialog, you can change the row and column position of the field from variable to fixed and vice versa. Whenever possible, we recommend that you set a field's position as fixed, because fixed fields are easier for Invoice Automation to find than variable fields.

   Note that the position selections you made in the field profile act as default selections when you learn a field for the first time.

4. After you have double-checked a *Learned* field and set its **Position**, click **OK**. This saves your work and updates the field definition for the field.

   t_Making adjustments

5. After you have checked all the *Learned* fields on the first invoice, select the first *Not learned* field in the **Learning** dialog.

   If there are no *proposal*s for a *Not learned* field, you may need to change the text type or apply a background filter. See the heading "Applying a background filter" at the end of this section for instructions.

   In the **Value** group box, you can change the value format specification in the second box. For example, if you know that the account number from a certain supplier always has eight digits, you can specify the format as **N(8)** rather than **N(6-13)**, making the field easier for Invoice Automation to find on future invoices. We recommend that you make the format as specific as possible for each field definition.

   The first box in the **Title** group contains the title that will be associated with the field when you click **OK** to exit the dialog. The gray box beneath it shows the exact interpretation results. When Invoice Automation interprets a title, these results are usually copied into the box above. However, if the interpretation results are similar to an existing title, the existing title is used instead. Click the gray box with the interpretation results to copy them into the box. The title shown in the first box can also be chosen in the selection box from the list of existing titles, or it can be typed manually.

   In the **Title** group box (the first selection box containing the list of possible titles) there is an alternative called **No title**. However, we recommend that you do not use this alternative. Instead, learn the title field if it exists, even if the field has a fixed position, because if Invoice Automation does not find the value for a fixed-position field based on its position, it searches again with the help of the existing title. If you provide a title, you can therefore save some time and reduce the amount of necessary learning.

6. Once the **Field learning** dialog displays the correctly interpreted value and title (unless you select **No title**) and you are satisfied with the settings, click **OK** to save the information to the field definition.

   As you can see in the **Learning** dialog, the field is now *Learned*.

7. Continue with the next *Not learned* field until all field definitions are learned.

8. After you finish learning the *Not learned* fields, enter the name of the supplier in the **Supplier** box. This will also be the name of the invoice definition.

   You use the **Description** box if a supplier has more than one invoice definition sharing the same identifier. See *Invoice Automation Help* for more information.

9. Once the invoice definition is named, click **OK** to complete the manual learning process.

Select the text type

Text type in fields" You can specify whether or not the field title and value were printed in bold type, as well as whether or not they were printed on a dot-matrix printer or written by hand. The default values for all invoices are not in bold type and not printed on a matrix printer or written by hand.

If you are using the sample invoices, make sure the Text type selection boxes are set to Default. The Text type selection boxes are located in the Value and Title group boxes in the Field learning dialog.

Drawing frames

Occasionally, you may want to mark a field directly on the invoice image for Invoice Automation to interpret. For example, if you want to capture a specific date on an invoice that contains many different date fields, you may need to show Invoice Automation which one is the correct one.

1. Select the field you want to modify in the **Learning** dialog.
2. On the invoice image, click the frame you want to redraw and click **Remove** to delete it.
3. Click the toolbar button (**Identifier**, **Value field**, **Title field**) that corresponds to the type of frame you want to draw.
4. Draw a box around the area you want to learn.
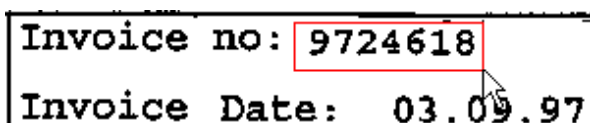
There are three ways to draw a box:

- Double-clicking the field causes the box to snap to the field.
- Clicking and dragging a box around the field also causes the box to snap to the field.
- Clicking and dragging a box around the field while holding down the **Ctrl** key prevents the box from snapping to the field. This is helpful if you want to specify a search area larger than the current field.

Optimize automatically interprets the results and displays them in the **Field learning** dialog.

5. Make the necessary adjustments, such as applying a background filter or changing the text type, to achieve the correct interpretation.
6. When you have achieved the desired result, click **OK** in the **Field learning** dialog to save the field definition.

Applying a background filter

This section is only intended for use with *Not learned* fields that have dark or patterned backgrounds.

If the invoice you are verifying has one or more *Not learned* fields with no field *proposal*s, you may need to apply a background filter. Look at the field in question on the invoice image. If the field title or value has a dark or patterned background, try filtering the background. Invoice Automation uses a variety of filters to screen out the background of a field in order to read the text more clearly.

Note: For identifiers, only use a filter if it is required for correct interpretation. Filtering identifiers increases the time required to interpret invoices.

In this section, we use the amount field from one of the sample invoices to demonstrate the filtering process. You can apply the same process to any field that requires filtering.

1. Find the field to be filtered on the invoice image. Enlarge the image a few times by clicking **Zoom in** until you can see the area well.

2. Click **Filter** and use the mouse pointer to click and drag a box around the field, leaving a little extra space around the edges.

Use the mouse to draw a frame around the area to be filtered.

3. Select a filter type from the **Filter** selection box. The field is reinterpreted automatically.

4. If Invoice Automation still could not interpret the value, try a different filter type. Click the arrow in the **Filter** selection box and select a new filter type. Invoice Automation applies the new background filter automatically.
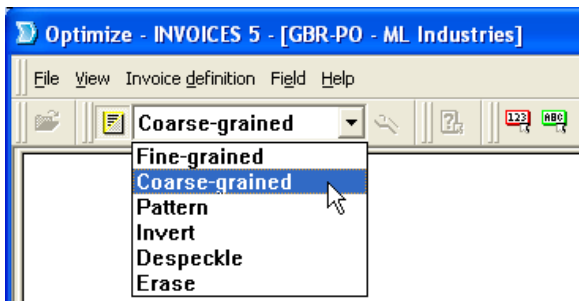
Filter options in the **Filter** selection box

5. Repeat this procedure, trying new filter types, until you find the background filter that works best. You can also use various combinations of two or more filters to obtain the desired results.

Occasionally, image quality is too poor to be corrected by filters. If this happens, select the background filter that creates the cleanest image and type the value manually into the **Value** group box.
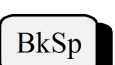
Chapter 6

Quick notes

Commonly used keyboard shortcuts

F1	=	*IInvoice AutomationHelp*
F2	=	Scale image (normal) (Manager, Verify and Optimize)
F3	=	Zoom in (enlarge) (Manager, Verify and Optimize)
F4	=	Zoom out (reduce) (Manager, Verify and Optimize)
F5	=	New single item field profile (Manager)
F6	=	Edit field profile (Manager)
F7	=	Delete field profile (Manager)
F8	=	New value identifier profile (Manager)
Home	=	First invoice definition (Manager)
End	=	Last invoice definition (Manager)

PgUp	=	Next invoice definition (Manager)		
PgDn	=	Previous invoice definition (Manager)		

Alt	+	F4	=	Exit
Alt	+	F6	=	Add user remark (Verify)
Alt	+	F9	=	Delete invoice (Verify)
Alt	+	F10	=	Skip invoice (Verify)
Alt	+	BkSp	=	Previous invoice (Verify)
Alt	+	←	=	Previous field proposal (Verify) Also returns focus to the current field when you toggle back to Verify from another program.
Alt	+	#	=	Next field proposal (Verify) Also returns focus to the current field when you toggle back to Verify from another program.
Shift	+	Tab	=	Previous field (Verify)
Tab			=	Next field (Verify)
Enter			=	Next field error/Complete field (Verify)

Alt	+	S	=	Start job (Scan, Interpret, Verify and Transfer)
Alt	+	T	=	Stop job (Interpret, Verify and Transfer)
Alt	+	P	=	Pause job (Interpret, Verify and Transfer)
Alt	+	C	=	Continue job (Interpret, Verify and Transfer)
Ctrl	+	é	=	Scroll image up (Manager, Scan Verify, and Optimize)
Ctrl	+	ê	=	Scroll image down (Manager, Scan Verify, and Optimize)
Ctrl	+	←	=	Scroll image left (Manager, Scan Verify, and Optimize)
Ctrl	+	#	=	Scroll image right (Manager, Scan Verify, and Optimize)
Ctrl	+	N	=	New job description
Ctrl	+	O	=	Open job description
Ctrl	+	S	=	Save job description
Ctrl	+	E	=	Edit job description

	+		=	Print the selected object
Ctrl		P		
Ctrl	+	G	=	Enable/disable grayscale (Manager and Verify)
Ctrl	+	D	=	Delete highlighted frame during learning (Verify)

Numeric keypad shortcuts

	+		=	Zooms in the Verifying dialog (Verify)
Ctrl		+		
Ctrl	+	-	=	Zooms out the Verifying dialog (Verify)
Ctrl	+	0	=	Resizes the invoice image to fit the window (Verify and Optimize)
Ctrl	+	1	=	Zooms in the lower left corner of the invoice image (Verify and Optimize)
Ctrl	+	3	=	Zooms in the lower right corner of the invoice image (Verify and Optimize)
Ctrl	+	7	=	Zooms in the upper left corner of the invoice image (Verify and Optimize)
Ctrl	+	9	=	Zooms in the upper right corner of the invoice image (Verify and Optimize)
Ctrl	+	5	=	Zooms in the center of the invoice image(Verify and Optimize)

Ctrl	+	⬜	=	Toggles the invoice image between black and white and color.

Steps to prepare for production

1. Define user authorization settings (required)
2. Import master data from your financial system and adjust the master data policy (recommended)
3. Create an invoice profile for each legal entity (required)
   - Adjust, add, or delete identifier profiles
   - Adjust, add, or delete field profiles
4. Add a standard transaction description and mark it as default (required for each invoice profile)
   - Determine the physical layout of the output
   - Set the default transaction description
5. Create a scanner description (required if using a scanner)
6. Create a job description (required)
7. Check and activate the invoice profile (required)
8. Define inbox settings (recommended)
9. Test the invoice profile (recommended)

Format specification

Symbol	Meaning	Examples	
N	Numeric characters	Syntax:	N(7)
		Meaning:	A 7-digit numeric field
		Field:	1234567
A	Alphabetic characters	Syntax:	A(2-5)
		Meaning:	An alphabetic field containing 2 to 5 characters
		Field:	Abc
X	Alphanumeric characters and special characters such as "#", ">", etc.	Syntax:	X(5)
		Meaning:	A field containing five characters, each of which can be a letter, number, or a special character
		Field:	Abc3D
W	White space	Syntax:	N(3)WN(2)
		Meaning:	A field containing 3 digits, a space, and 2 more digits
		Field:	123 45
S	Numbers with plus or minus signs	Syntax:	SN(3)

Symbol	Meaning	Examples	
		Meaning:	A three-digit, numeric field with a plus or minus sign in front of it
		Field:	-425
-	Remove characters before transfer	Syntax:	N(4)-X[#]
		Meaning:	The character, #, is removed when this four-digit field is transferred
		Field:	1234#
		Output:	1234
.	Decimal	Syntax:	N(1-5).NN
		Meaning:	A numeric field containing one to five digits followed by a decimal and two more digits
		Field:	24.99
*	Insignificant characters	Syntax:	N(3)*N(5)
		Meaning:	Three digits followed by an insignificant character and five more digits
		Field:	123-45678
^	Exclude	Syntax:	N[^0]
		Meaning:	Any digit except zero
		Field:	2
( )	Required	Syntax:	A(5)
		Meaning:	The field must contain five alphabetic characters
		Field:	Abcde
[ ]	Specified sign	Syntax:	N[139]
		Meaning:	A single digit that can be one, three or nine
		Field:	3
{ }	Multiple formats	Syntax:	{N(5)|N(10)}
		Meaning:	Either a five-digit field or a ten-digit field
		Field:	12345
		The "or" operator used to separate multiple formats.	Syntax:	{N(5)|N(10)}
		Meaning:	Either a five-digit field or a ten-digit field
		Field:	1234567890

Chapter 7

Glossary

Action. What is done for a specific invoice rules when all conditions are true.

Add-on. An external application (usually a DLL) that adds functionality to Invoice Automation via the API.

Appendix. A form or document which is attached to an invoice. Scan can process invoices with multiple appendices. The information from an appendix is not processed, but is only saved as an image.

Batch. A stack of invoices that you process together in order to (1) set up a scheme for locating invoices after archiving; (2) divide invoices into manageable quantities; and/or (3) summarize information from each batch in order to check the integrity of the captured information. You can put as many invoices as you like into the scanner's document feeder"Document feeder" and let Invoice Automation count the invoices.

Batch report. A printout of information about a batch that has been processed. You can use Invoice Automation' standard batch report layout, or you can define your own batch report layout.

Buyer registry. A table containing information, imported from your financial system, that Invoice Automation uses to route invoices to the proper buyer or legal entity.

Check digit. Some numbers on invoices include a control digit that is based on the other digits in the number. A checking routine performed on the number practically eliminates the risk that digits in the number have been interpreted incorrectly.

Condition. A criteria that determines if actions are executed for a specific invoice rule when using the Invoice Rules plugin. If a condition meets the specified criteria, it returns true; if not, it returns false.

Database. A collection of saved information that is administered in the Manager.

DCL. A data capture language that uses special expressions and business logic to capture fields. DCL expressions are saved in DCL files and are connected to country profiles via Eiglobalextra.ini.

Deskew. Skew is the slanting of a scanned image caused when an invoice is not aligned properly as it passes through the scanner. Kofax Invoice Automation can normally deskew (that is, straighten) and identify images of invoices that are skewed up to 10 degrees which handles most situations.

DLL. Dynamic Link Library is a collection of executable code. DLLs can be used to customize Invoice Automation.

Dynamic value. A value that is evaluated at runtime depending on the current context in connection with an action that is configured for an invoice rule in the Invoice Rules plugin. For example, a dynamic value could be read from a specific invoice field where the result depends on the value of that field for the current invoice being processed.

Entrance mode. See KIA for Generic documents.

Endorser. A built-in printer in a scanner that prints a sequence number on each invoice and can be useful for archiving purposes. Your scanner must support endorsing to utilize this feature.

Field. An area on an invoice which contains information to be interpreted and processed by Invoice Automation. Example: an invoice date.

Field definition. Information about where a field is located on invoices from a certain supplier and how to use and interpret it.

Field name. A label given to each field profile. There is no limit to the number of characters a field name can contain.

Field profile. The field profile tells Invoice Automation how to look for a particular field when new invoices are interpreted. It also tells Invoice Automation how to use and interpret the field.

Format specification. (field format specification). A property that is specified for most field definitions and profiles that describes how many and what type of characters are expected to appear in a field.

General expense (GE) invoice. Typically, an invoice used to bill individual business expenses. By default, a general expense invoice does not include line items.

Identifier. A unique value or image used to recognize invoices. This field must appear on all invoices and must have a unique value or image for each type of invoice to be processed.

Interpret. The Interpret module is used to automatically interpret and validate invoices that are either scanned in the Scan module or put into the system in other supported file formats.

Invoice definition. Contains the exact positions and the field descriptions of the fields on a unique invoice type that has a unique identifier value. An image of the invoice that was used when the invoice definition was created is also part of the invoice definition. Each invoice definition is associated with the invoice profile from which it originated. The invoice definition information is stored in the invoice definition database, and the invoice definition images are stored in the image database.

Invoice profile. A general description of the information that you want to capture from a particular group of invoices. The same invoice profile can be used for invoices from many different suppliers.

Invoice rule. A list of defined conditions, actions, and events used to perform different actions depending on current conditions when using the Invoices Rules plugin.

Invoice type. An invoice with a unique identifier. Generally, all invoices from one supplier belong to the same invoice type because they share the same identifier value, such as the supplier's account number. Each invoice type has a separate invoice definition.

Job. A task performed by a specific module on a specific group of invoices. The job is defined using a job description. The Scan, Interpret, Verify and Transfer modules perform jobs.

Job description. A set of instructions describing what you want a specific Invoice Automation module to do. It tells the program which invoices you want to process, which module to use, and how you want Invoice Automation to work. The Scan, Interpret, Verify and Transfer modules are run using job descriptions, which can be created individually, in the modules themselves, or they can be created together in one job description using the Manager module.

- **Scan job description**. Tells Scan how to process the invoices to be scanned.
- **Interpret job description**. Tells Interpret which invoices to interpret and validate.

- **Verify job description**. Tells Verify which invoices you want to verify according to status. You can also choose from many options for how you want Invoice Automation to interact with you during the verification process.
- **Transfer job description**. Tells Transfer what information to transfer and where to transfer it.

KIA for Generic documents mode. A feature in Kofax Invoice Automation that allows you to change the terminology in the program interface to more generic terms when working with non-invoice documents (such as customer orders, for example). This can be done separately for each user in the system (meaning that some users in your system can run Kofax Invoice Automation for invoices, while others can use KIA for Generic documents mode to handle generic documents).

Learning. An interactive process in the Verify and Optimize modules that occurs when the Interpret module is not able to completely learn a new invoice definition or when existing invoice definitions need more advanced learning in Optimize.

Verify displays an image of the new invoice definition and presents proposals for various fields. The user then tells Verify which proposals are correct. Optimize allows you to draw fields manually, learn logo identifiers and line items, and adjust detailed aspects of the invoice definition.

After the learning process is finished, the invoice itself is ready for verifying.

Maintenance plan. A plan you create using the Manager that specifies how maintenance is to be performed on Invoice Automation' database.

Manager. This module is used to administrate Invoice Automation, that is, to create and manage invoice profiles, invoice definitions, job descriptions, validation tables, and batch report layouts, among other things.

Master data. Supplier and buyer information imported from a financial system. Master data can be saved in Invoice Automation' database.

OCR engine. The OCR (Optical Character Recognition) engine is the part of the Invoice Automation program code that interprets invoices.

Purchase order (PO) invoice. A purchase order usually contains tables of line items of goods that were purchased, and it must have the purchase order number printed on the invoice.

Record. Information resulting from one invoice.

Scan. The production module used to scan invoices using an invoice profile that was created in the Manager module. Images of the invoices are captured and saved in TIFF file format which are then used by the other Invoice Automation modules to extract the information of interest from the corresponding invoices.

SCSI. Small Computer Systems Interface, a standard interface used to connect peripheral equipment (hard disks, CD-ROM, scanners) to computers.

Status: Active/Inactive invoice profile" \b. An invoice profile can be *Active* or *Inactive*. Inactive invoice profiles are in the process of being defined. Active invoice profiles are in production (that is, being processed). An invoice being processed also has a status, as does each field on the invoice. There is a detailed explanation in *Invoice Automation Help*.

Supplier registry. A table containing information, imported from your financial system, that Invoice Automation uses to identify the suppliers of your invoices.

Table. Tables are used to store and look up values that are used for validation. You use the Manager to create each table, give it a unique name, and save it to Invoice Automation' database.

Target system. Invoice Automation transfers information from processed invoices via a file to your target system, which utilizes that information.

Title. A title is part of a field. The title is text that always appears on an invoice and that Invoice Automation can use to find the field. For example, the title for a date field might be *Invoice date*. A title is required for every field that you want Invoice Automation to learn automatically. When defining a field, you have to specify whether there is a title for the field, and if so, what text it may contain and where it may be positioned in relation to the value part of the field.

Transaction. Output information, extracted from processed invoices, that Invoice Automation transfers to another computer in the form of a transfer file. A transaction usually contains many records whose format is specified by one or more transaction descriptions.

Transaction description. A collection of transaction fields that specify the content, format, and layout of transactions. It specifies the format and layout of the output information from processed invoices that Invoice Automation transfers to a target system.

Transaction field. One line in a transaction description that specifies one piece of information that is to be included in the corresponding transaction. The information usually consists of a value interpreted from a processed invoice, a system variable, or other text.

Transfer. This module is used after invoices have been processed to transfer information from the invoices to a target system, which can be another application in the same computer as Invoice Automation or in another computer. Information is transferred in transactions. You can specify which status of invoices you would like to transfer.

Transfer file. After invoices have been processed, you use Transfer to transfer information from the invoices to the target system. You can select to put the information in a file called the transfer file.

Value. A property of a field such as the date in a date field or the amount in an amount field.

Variant. An invoice or invoices that share an identifier field value and supplier with an already learned invoice definition, but on which the fields have different positions. You use the Description box in Verify and Optimize to differentiate variants.

Verify. The production module that is used to verify learned invoices or invoices identified by the Interpret module. When an invoice has been processed by Verify, the invoice image and the information are ready to be transferred to a file.

Verifying. The process of checking and correcting interpreted invoices. Invoice Automation displays interpreted fields, and you can approve and adjust fields as required.

You specify the parameters of the verifying process in the Verify job description

XML invoice. An invoice received from a supplier in any XML format. XML invoices are received by ReadSoft Collector, processed in Kofax Invoice Automation and transferred to the target system. Depending on the context, this term can mean eaither the received XML document itself, or the object inside the Kofax Invoice Automation system (for example, when listing all XML Invoices in the XML Maintenance dialog).