

AS/400 Graphic Print Management with Validoc

Graphic print AS/400



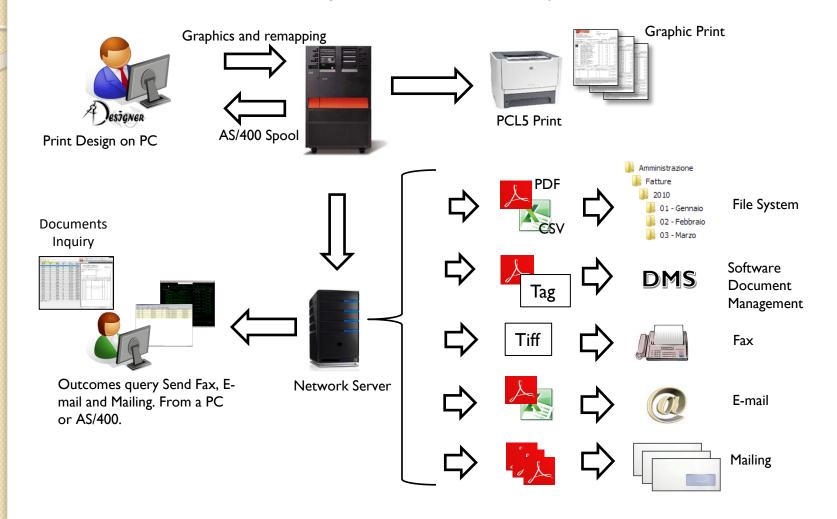
The programming tools that operate on AS / 400 (iSeries - System i) are often poor in the functions of production and shipping documents (invoices, delivery notes, orders, etc.). They are equipped with only basic functions, there are problems to edit graphics documents with autonomy and settings parameter are minimal. **Validoc** enables you to overcome these gaps, allowing the company to operate in a modern and dynamic production of its documents.



Validoc architecture



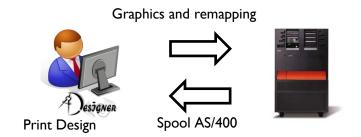
The working process with Validoc begins with the design of the graphic with the tool "Designer". The print is formatted, then sent to the AS / 400 and can, therefore, be used on laser printers. The same print is also sent to a software PC on the network server that provides to convert it to a PDF or Tiff file or to extract the CSV file. It also takes steps to save files to network folders, to forward them to the document management software and send them by fax and mail.

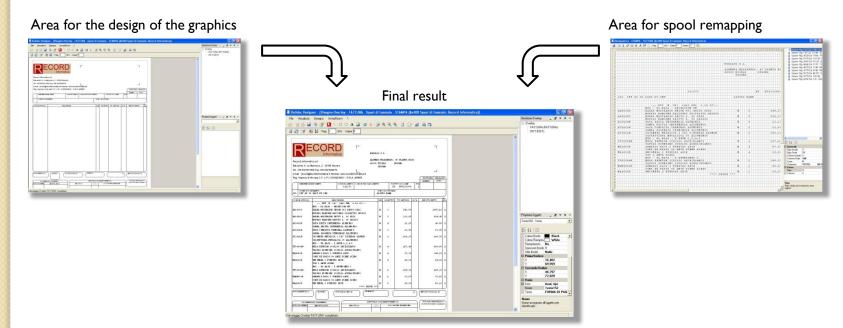


Validoc Designer



With the tool "Designer" you can make prints, attach the graphic components needed and adjust the spool until you reach the required result. It is possible to import and place logos, draw lines and boxes and insert text constants. It is possible to move parts of the spool to fit the graphics, change the font of the spool and insert one and two-dimensional barcode.

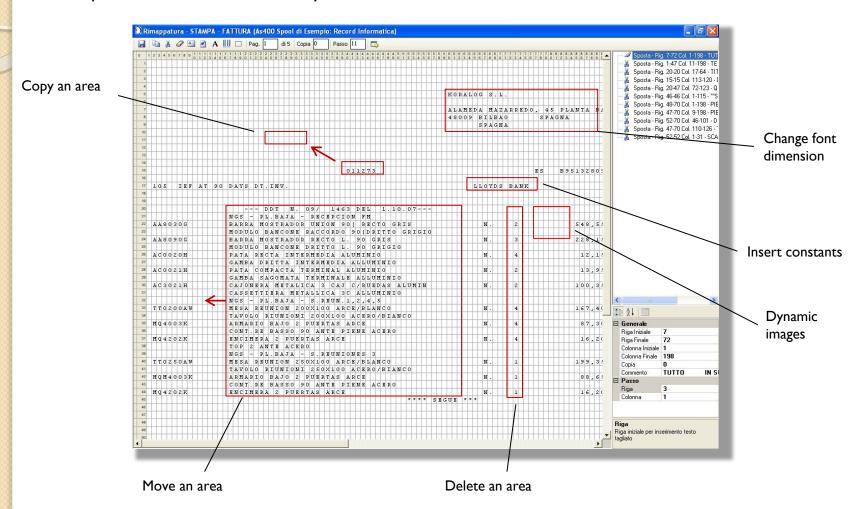








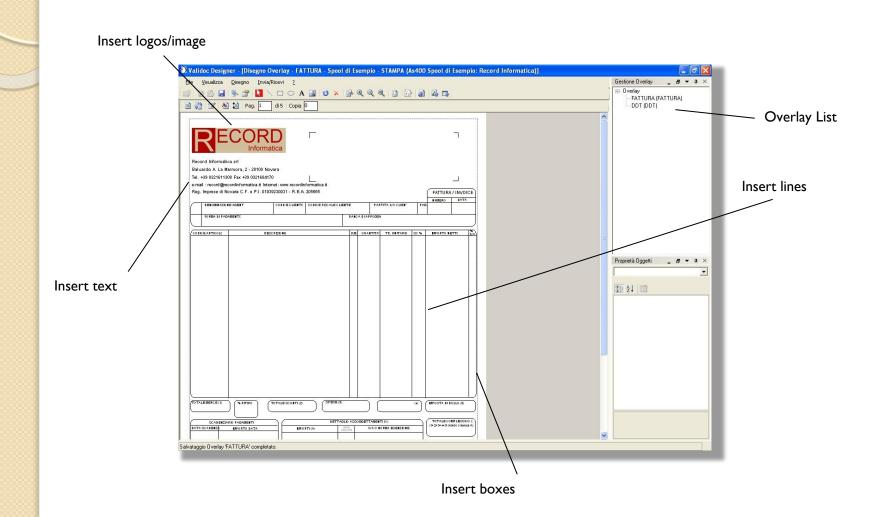
"Remapping" means the process by which you move, copy, delete, etc.. areas of the print to obtain a final result where the text of the press is arranged in a different way from the original. The operations are conditionable in order to perform them in a flexible way.



Validoc Designer - Graphic



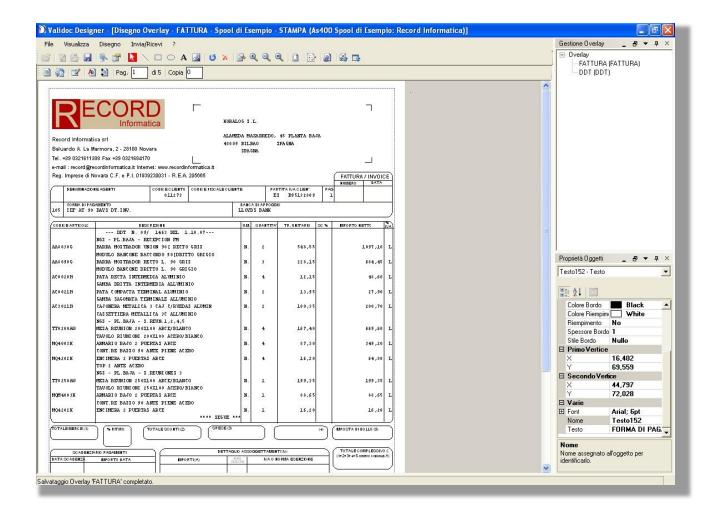
In parallel with remapping operations, it also inserts graphic objects to compose the document in its final form.



Validoc Designer - Preview



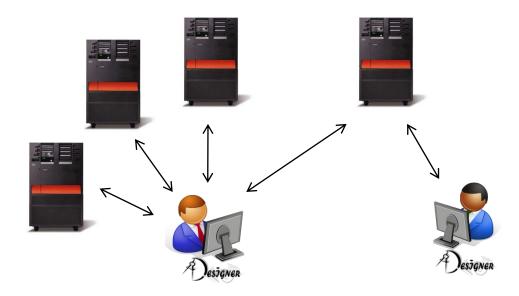
With the tool "Designer" the final result to be printed (get in print) is always under control.



Validoc Designer



With the tool "Designer" is possible to operate on multiple AS/400s taking distinct libraries of projects and it is possible to operate with more technical on a single AS/400. The achievements can be copied from one environment to another to reuse the work already done. It is therefore a suitable tool for software companies, professionals and corporate IT departments that follow more AS/400 systems and work in teams.



Laser Print - Operation



Sending graphic prints to laser printers is handled entirely on the AS/400 system. During installation of the software it generates a subsystem where, for each print queue to bed handled, it spawns a process. These processes are activated only when a spool to be treated is created. This allows to consume CPU only when needed, without processes of periodic scanning of the print queue.





Generation prints on the AS/400. Power and Security.

Maximum scalability: a print queue, a process management.

Use of PCL5 language, The most popular with laser printers.

No polling queues. Zero waste of CPU.

Laser Print - restructuring body document



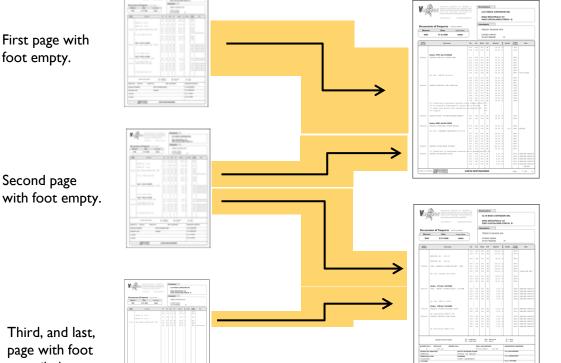
Validoc allows the restructuring of the body of prints. For better management of vertical space in the document, you can use the functions of "body restructuring" to divide in the most suitable way the body of the document, using variable graphics per page, and without programming.

Without body restructuring. Graphic fixed and foot space unused two out of three pages.

By restructuring body. Graphic variable and used space of the foot. From three pages is passed to 2 pages. As evidenced by the yellow areas, the detail is automatically "smeared" on two pages.

First page with foot empty.

Second page



First page: graphics without foot and body of the document fully utilized.

Third, and last, page with foot compiled.

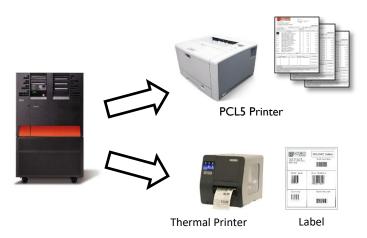
Second and final page: graphic with foot. Foot data compiled.

Laser Print - Barcode





Validoc can print data using barcode fonts. Many symbologies are managed both mono and two dimensionally. Labels can also be printed on thermal printers PCL5.



Graphic Printouts with barcode

Validoc supports several families of one- dimensional Barcodes, from the simplest (such as "Code 3 of 9" or "Interleaved 2 of 5") to the most detailed and complex ones (such as codes EAN, UPC, UCC EAN 128, etc..).









Codice 128

Among the two-dimensional barcodes, PDF417 are supported (Portable Data File 417), which can contain up to 2,700 characters and QR Code (only thermal printer PCL5) which can contain up to 7,000 characters.



OR Code







Laser Print - Language



Validoc manages foreign language characters both in print and in PDF. It is possible to maintain the correct diacritical marks (dieresis, accents, cedillas, etc.) or symbols (cyrillic, greek, etc.) of the alphabets of foreign languages set in prints AS / 400. It is, also, possible to print with symbols CJK (Chinese, Japanese, Korean) of the prints encoded with fonts double-byte AS / 400.

Diacritical marks

Cyrillic and Greek symbols

CJK symbols

CJK symbols

CJK symbols

A

A

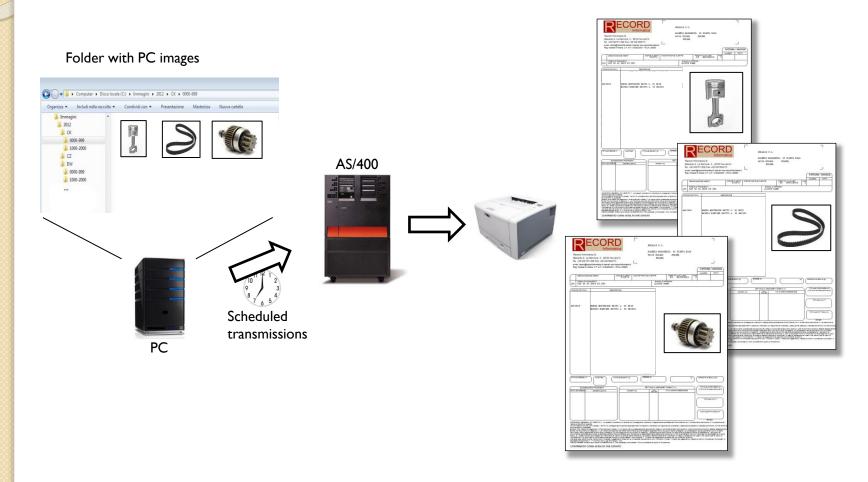
A

A

A

Laser Print - Dynamic Images

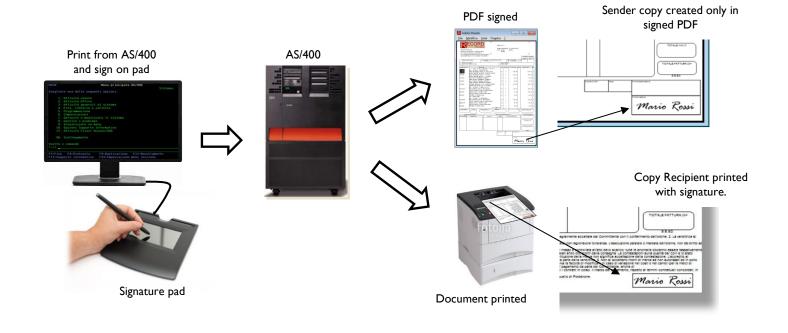
Validoc manages the placing of dynamic images in the document. Work by taking images from a network folder and bringing them on the AS/400 at scheduled intervals. It handles the upload of images new or changed. Allows you to print them dynamically based on the contents of the document (typically based on the product codes). It is possible to manage more than one image per document with different sizes, both black and white and color.



Laser Print - Electronic Signature

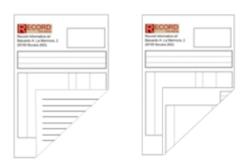


Validoc manages the electronic signature of documents. In other words, it makes it possible to detect a signature executed by a specialised pad and incorporate it into a printed or PDF document. The signature thus obtained, is a simple electronic signature (not graphometric) suitable for DDT signature situations where the value of the transported goods is not such as to induce legal proceedings in the event of disallowance.



Laser Print - Document Composition and Finishing

Functions are supported to allow document composition and finishing. Standard and typographical duplex, selection of paper trays, paper size selection and rotation of the sheet. Management output trays and staple.





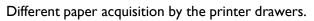


Management of standard and typographical duplex

A3, A4, A5 etc. Paper formats Management

Managing multiple output trays







Portrait/Landscape Paper Rotation Management



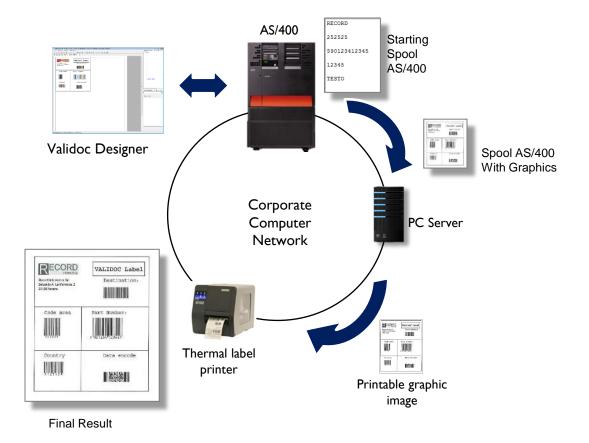
Management Staple sheets

Label Print



With Validoc, labels can be produced on a thermal printer. Validoc's AS/400 print modelling tools (Designer) are used to insert lines, boxes, logos and barcodes into the label. The label image is generated and printed on any thermal transfer or direct thermal printer.

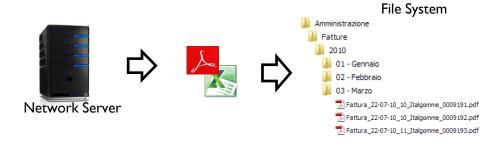
No programming or knowledge of the printing language is required.







Printing graphics can be sent to a Validoc PC component installed on a network server. This component provides the converting of the printout into a PDF file, or the extraction, according to given rules, of a readable CSV file for Excel. After the conversion, the PC manages to save it on the network, according to a flexible mechanical nomenclature of files and folders set on the AS/400 system.





The folder is created automatically if it does not exist

The folder name is Parametrically generated with elements of the environment (user, document type, date, etc.) and with elements taken from the spool.

The name of the document is generated parametrically also with the same mechanical of the folder name.

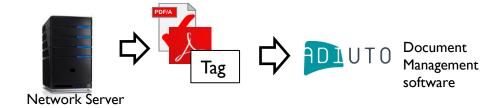
Files can be saved in ZIP format with a password protection.

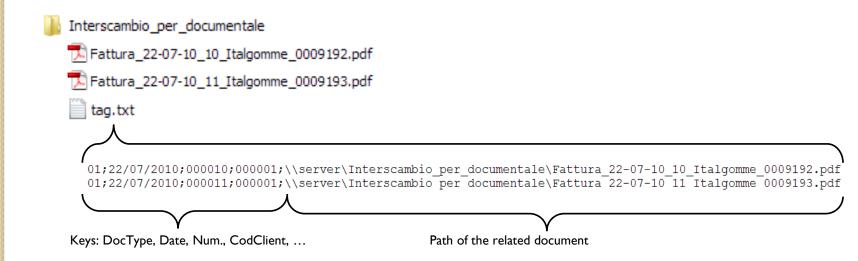
"Versioning" (the capability to save in overlay or to save all the copies with a version progressive number) is supported.

Export to a PC



Printing graphics, converted to PDF document, can be stored in a network folder together with its identification keys (TAG's). The keys that identify the document are, usually items like: protocol number, document number, document date, customer/supplier, etc. These keys are stored in a text file along with an indication of the network path of the related document. Document management systems can, thus, acquire these documents and search keys allow users queries. Can be produced also PDF/A for substitutive conservation purposes.





Document Fax Transmission



Graphic prints, converted into TIFF documents, can be sent through fax. Using either a fax/modem or an internal-to-server fax card, you can send your AS/400 printouts via fax.



Faxes can be sent immediately or at different times

You can control the number of automatic retries to re-enter

Validoc supports the delivery with the Super G3

Log-print and the thumbnail of the first page are provided.

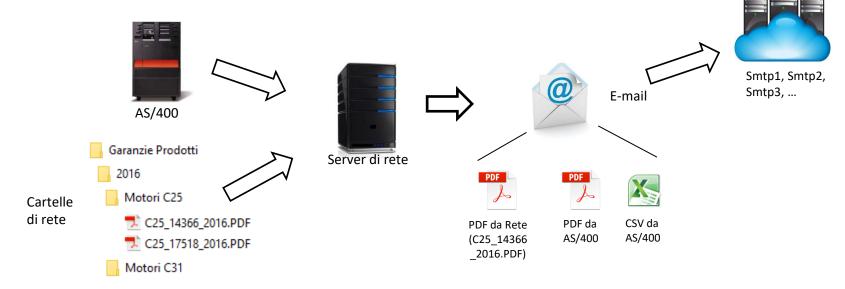
Faxes can be sent through the Zetafax software.

Cover-pages with customized fields for "to", "subject", etc. can be created

E-mail transmission of documents



Graphic prints, converted to PDF or CSV file, can be sent as email attachments.



The email fields "from", "to", "cc" can be automatically populated. More email addresses are possible for each field. The fields "object", "text" and "email text signature" are defined parametrically.

E-mails can be sent immediately, or produced in the "suspended" state and sent after manual release.

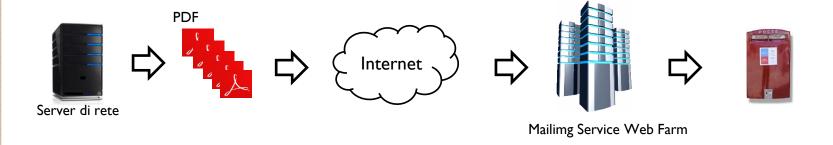
The SSL protocol is supported.

It is possible to attach other **network** documents in automatic mode.

Trasmission by Mailing Services



Graphics prints, converted to PDF document, can be sent via a mailing service using the module "Postal" of Validoc.

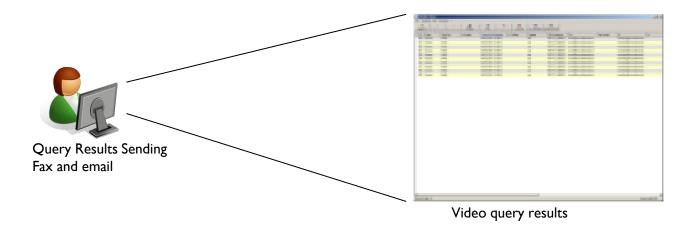


The group of PDF documents to be sent is created starting from an AS/400 spool. Validoc provides, then, to send it by internet (FTP) to the company that deals with print, envelop, stamp and deliver to Poste Italiane for distribution.

Check of the shipping results



The results of submissions made through e-mail, fax, and mailing are checked using a PC software that queries the database of Validoc PC software in order to provide feedbacks on sending.



The results of the sending can be selected and ordered for each user.

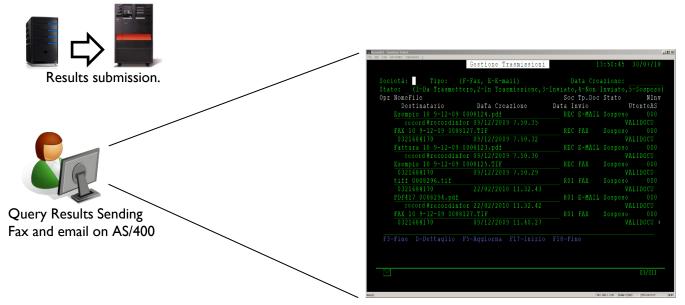
In case of suspended or emails to be re-sent, you can attach additional files from network pc before making the new shipment.

You can change the email address or phone number to send to another recipient.





The results of the submitted deliveries can be sent to the AS/400 in order to allow querying either from "green" screens with Validoc programs or integrating them into management programs.

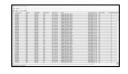


AS/400 querying using "green" screen

It is possible, for the company's IT staff, to link the results of the deliveries to the original document of the ERP company software.

This allows the user to have, on the ERP software screens, information about the sending results and also their date and time.

Document Creation Control



I dati del salvataggio di documenti in rete, creati a partire dalle stampe, possono essere inviati all'AS/400. Da AS/400 possono essere letti tramite API di interrogazione. Oppure interrogati con l'apposito programma di ricerca. E' disponibile anche un programma ricerca

PC («Client Documenti»).

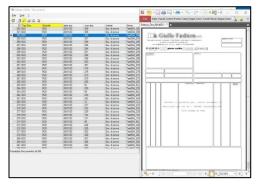


Querying Documents on AS/400 or PC.



It is possible for the company's technical IT staff to display the document data in the management software and allow it to be viewed.

In this way, the user has, on the screens of the ERP, the information of the writing data of the document and launch its display.



Screen «Client Documenti».



AS/400 video for querying document storage data.

Sending Addresses





Sending email addresses or faxes phone numbers, can be found according to four flexible modes: constant, fields from the spool, from AS/400 files or from external programs. Send addresses for "mailing" are taken only through fixed areas of print.

amministrazione@societàcliente.it amministrazione@societàcliente.it Costant fields: From print portions: amministrazione@societàcliente.it From AS/400 database: amministrazione@societàcliente.it **Customers Master** From AS/400 exit program: amministrazione@societàcliente.it Exit Program

Conditioning



Operations to be performed on the printout, such as the choice of graphics to apply, select the e-mail address to send, etc., are tasks that need to be conditioning. Validoc allows you to conditioning all major operations to be performed on the printout. It requires a given input, an operator and a term of comparison. If the condition is met, the operation is performed.

Given Input	Operator		Term of comparison
TEXT FROM SPOOL	EQUAL TO	=	*BLANKS
INPUT QUEUE (OUTQ)	DIFFERENT FROM	<>	INPUT QUEUE (OUTQ)
USER DATA (USRDTA)	GREAT THEN	>	USER DATA (USRDTA)
MODULE TYPE (FORMTYPE)	GREAT OR EQUAL TO	>=	MODULE TYPE (FORMTYPE)
USER (USER)	LESS THEN	<	USER (USER)
PAGE NUMBER WHOLE SPOOL	LESS OR EQUAL TO	<=	FIRST PAGE
PAGE NUMBER SINGLE DOCUMENT	CONTAINS	*like	LAST PAGE
17(01 1101 1511 011 1011 5 0 0 0 1 121 11	NOT CONTAINS	*not like	

Conditioning can also be done through access to external files or by calling of an exit program.

Access to external files:

It accesses the external d/b table using as keys a portions of the spool and returns true/false content in a specific field of the record. According to the value of true/false the operation is done or not done by Validoc.

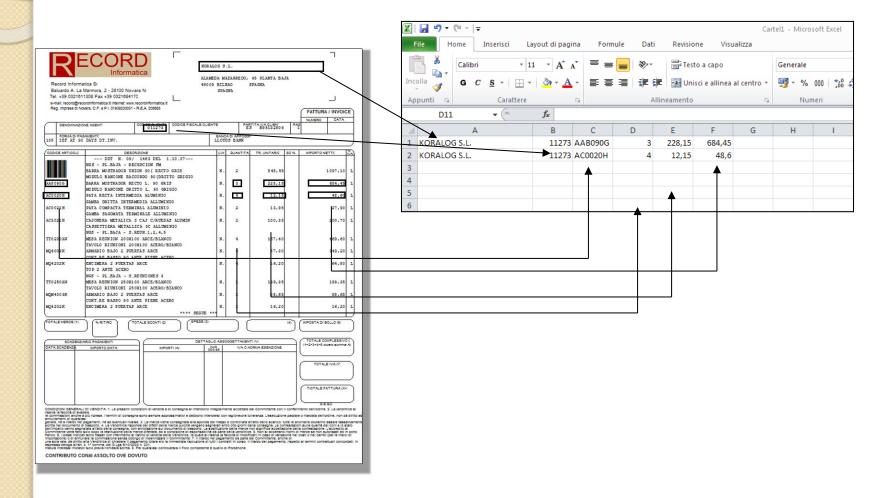
Exit program AS/400:

The exit program receives in input portions of the text of the print and uses them to perform appropriate evaluations; it returns a true/false value. According to the value of true/false operation is performed or not performed by Validoc.





Creation of CSV file, from an AS/400 printout, happens by taking text portions from header, body and footer of the printout. Capture operations can be conditioned to adapt to different print situations.



Commercial offer



Validoc consists of twelve modules, which can be purchased separately, shown below. The cost of the product varies according to the number of modules purchased and the number of users of the AS/400 system where the software is installed. There are no additional costs for number of printers, number of printed pages, number of prints processed, etc.

Printing

Allows you to manage all the operations necessary to obtain graphic printing including onedimensional barcodes



Pdf-Tiff

Allows you to manage all the operations required to produce the operations necessary PDF file, or Tiff, document management search keys.



E-mail

It allows you to manage all the to send the PDF file as an attachment to an e-mail.



Barcode2D

It handles all the operations required to produce twodimensional barcodes in the most commonly used formats.



Image

It allows images to be dynamically inserted into AS/400 printouts.







Label

It allows labels to be produced on a thermal printer.



Sign

Allows graphic signatures to be inserted into AS/400 printouts.



Digital Sign

It enables the digital signature of documents, according to the Pades, Cades and Xades standards.



Postal

It allows you to manage all the operations required to send PDF files to a mailing service.



Fax

It manages all the operations necessary to send graphic prints by fax.



Extract-CSV

It extracts data from AS/400 printouts to produce an Excelreadable CSV file.



Extract-XML

It extracts data from the AS/400 invoice printout to produce an XML file suitable for PA and B2B invoicing.



Testimonials



Do like them. Used you too Validoc for your AS/400 prints.

































































L.D.L. PLYWOOD

















Testimonial



Some of our customers testimonies:

Andrea P. - IT Manager Difarco



"We chose Validoc to achieve a graphic print from AS/400, initially targeted enough. Using it we realized the large number of functions and the soundness of the product and we have extended much use. Today we produce prints with dozens of different graphics for many customers of our logistics centre. We print over one million pages per year with Validoc in our network of AS/400 systems, create PDF prints and shipping to customers the document via e-mail. The use of Validoc is started slow but today this software is fundamental to our operation."

Paolo G. - IT Manager OMS Group



"We use Validoc with satisfaction to achieve our prints, black and white or in colour, from AS/400 system to laser printers. I think it is a software easy, robust and reliable that it never creates problems. I can only recommend it."



Danilo C. - IT Manager Supermercati Isa

"We found in the software Validoc a simple and powerful tool to accomplish the migration from print on continuous form to print to laser printer. The print component native AS/400, easily handles large volumes of our press. EAN128 barcode printing, fundamental, for us was created with simplicity and immediacy."



"Validoc is an excellent product, successfully used at Unical for the automatic generation and sending of quality graphic printouts through AS/400 spools".



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