

Postal Authority Solutions





Smart Match

International Applications

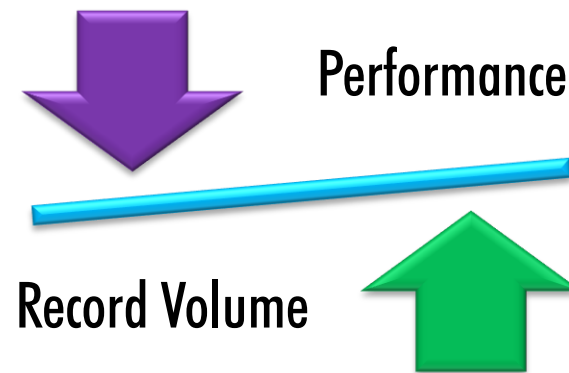
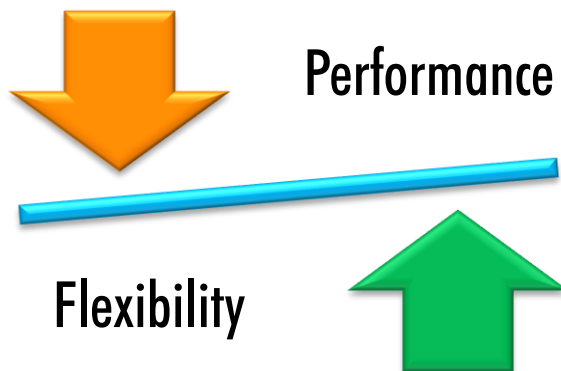
The Problem



Smart Match

On Average 20% of the overall mail stream is unrecognizable due to misspelling, abbreviated street & city names, and/or improperly addressed/structured.

Current directories require you to tradeoff adaptability & record volume vs. performance by forcing you to incorporate stringent data management policies to achieve high assignment rates

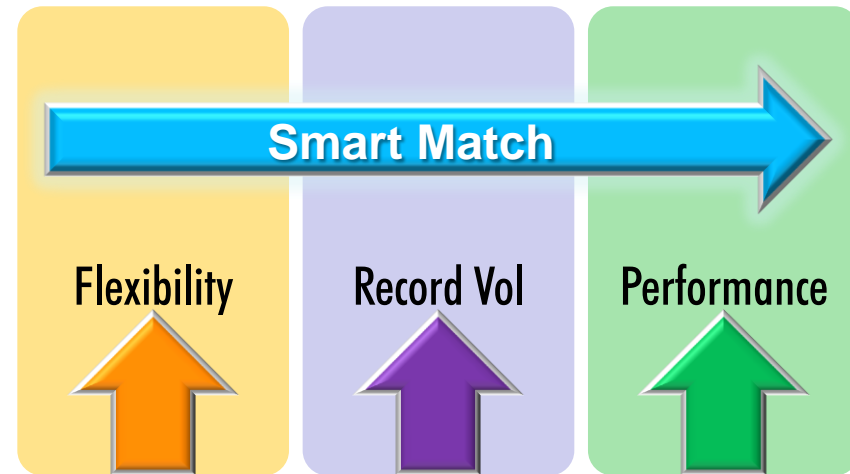


The Solution



Smart Match was developed to optimize our OCR Engine to finalize more outgoing or incoming mail by accurately adapting and correcting various degrees of address corruption

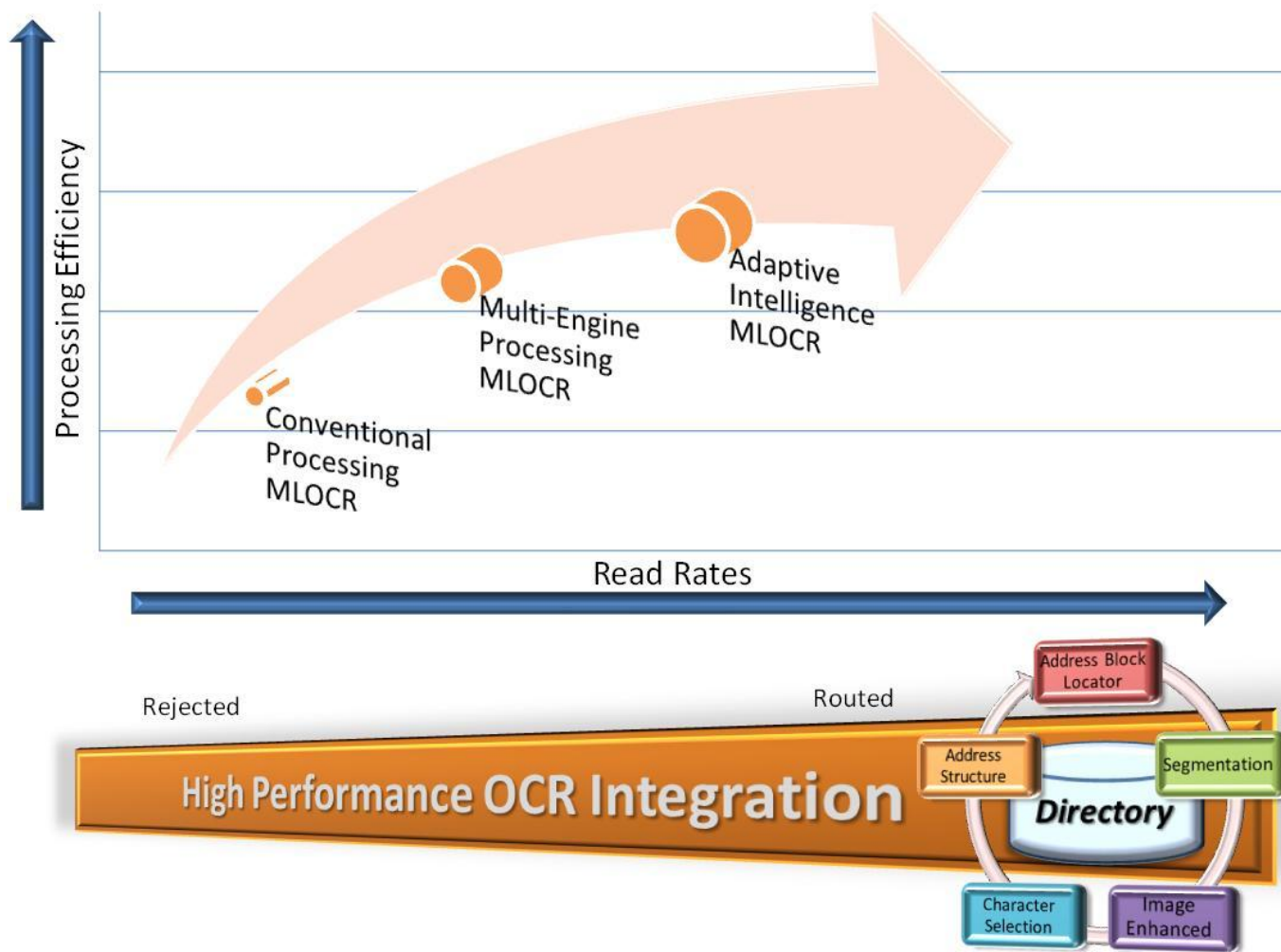
Our technology reduces the level of character noise, extracts all relevant envelope data, and then uses fuzzy logic, sophisticated pattern matching algorithms, and flexible search rules to maximize the number of assignments



Advantages of OCR Integration



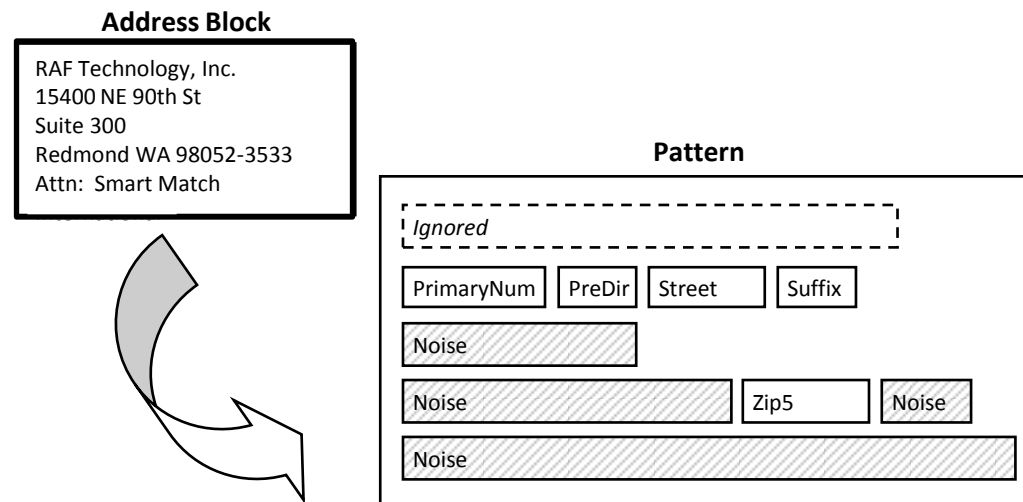
Smart Match



Key Smart Match Features



- o Eliminates Character Noise with reduces errors
- o Differentiates multiple aliases for a name (e.g. abbreviations or historic names)
- o Flexible search rules that can define multiple address block patterns
- o Provides an address & reverse look-up utility which can debug routing issues
- o Output data can be customized (e.g. Postcode, standard address carrier route, or GPS)
- o Supports outgoing & incoming applications
- o Includes a Std. VES interface
- o Fully integrates all domestic and foreign Postal Authority data




Smart Match Example



Smart Match

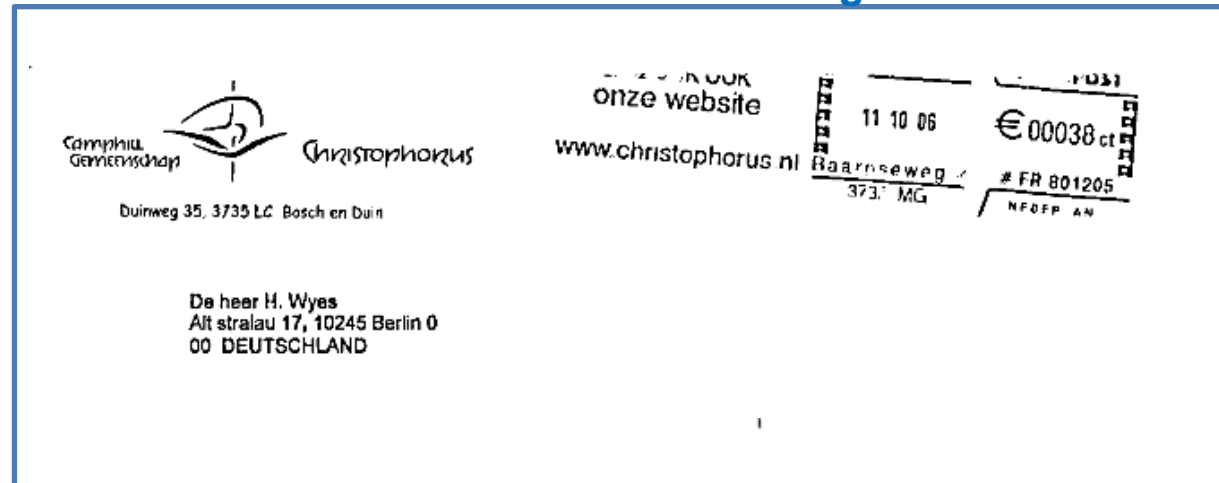
Germany

Address format



Line 1: RECIPIENT
Line 2: STREET_NAME HOUSE_NUMBER
Line 3: POSTAL_CODE LOCALITY
Line 4: GERMANY

Actual Mail Piece Image



Record Analysis



Smart Match

The image shows an envelope with a magnifying glass over the recipient address. A red arrow points from a legend box to the magnified address. The legend box contains the following information:

- Line 1: RECIPIENT
- Line 2: STREET_NAME HOUSE_NUMBER
- Line 3: POSTAL_CODE LOCALITY
- Line 4: GERMANY

The magnified address is: Da heer H. W. Altstrale 17, 10245 Berlin 00 DEUTSCHLAND

The envelope also features the following text and stamps:

- Logo: Campylia Gemeenschap
- Text: onze website
- Text: www.christophorus.nl
- Text: Baarnseweg 373 MG
- Text: 11 10 06
- Text: € 00038 ct
- Text: # FR 801205
- Text: NEDERLAND


Smart Match Example #2



Smart Match

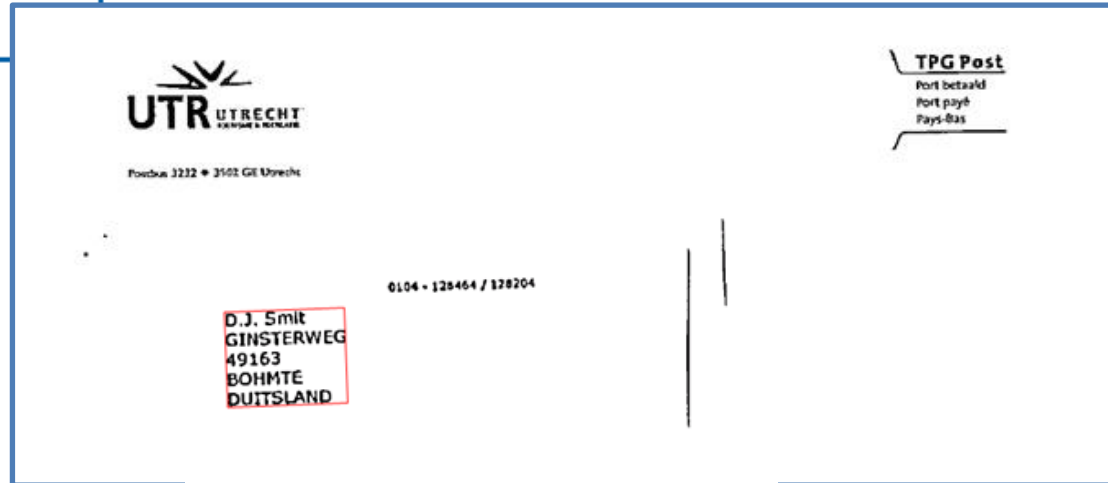
Germany

Address format



Line 1: RECIPIENT
Line 2: STREET_NAME HOUSE_NUMBER
Line 3: POSTAL_CODE LOCALITY
Line 4: GERMANY

Actual Mailpiece Image



Smart Match Example #2



Smart Match

The magnifying glass highlights the following address:

D.J. Smit
GINSTERWEG
49163
BOHMTE
DUITSLAND

TPG Post
Port betaald
Port payé
Pays-Bas

Line 1: RECIPIENT
Line 2: STREET_NAME HOUSE_NUMBER
Line 3: POSTAL_CODE LOCALITY
Line 4: GERMANY

Smart Match Mexico Example #3



Smart Match

Argosy Post View 3.40

CEDECOR
02526 MEXICO, D.F.

Seguimos regalando Casas

DESTINATARIO

REGISTRO POSTAL
CA98-0031
AUTORIZADO POR
SEPOMEX

Y a ti, ¿cómo te caería ganar una casa?

54360 CHAPA DE MOTA MEXICO

Mail Pieces		Finalized		Partial	
MP:	16649	MP (RAF):	16423 98.64%	MP (RAF):	2 0.01%
HW:	0	MP (other):		MP (other):	
Total	16764	HW:	0 0.00%	HW:	0 0.00%
		Total:	16423 97.97%	Total:	2 0.01%

Injected		Timeouts		Module	
Rate:	2880	Master:	115	Module:	6
Excess:	0	RM Late:	4	Orphaned Images:	0
License Violation:	0	Unassigned Images:	111		

Directory Results: 54360 ClearZone Barcode: PLANET Barcode:

Address Barcode: 4-State BC (Tracking): 4-State BC (Routing):

Keyline Match:

Display Raw OCR Results

Write Statistics Reset

Mail Processed: 16649 Mail Pieces / hr: 2880 % Finalized: 98.0 54360 You are in Administrative Mode localhost

Smart Match UK Example #4



Smart Match

The screenshot displays the Argosy Post View 3.40 software interface. The main window shows a scanned mail piece with the following text:

Name and address
RadcliffesLebrasseur
5 Great College Street
Westminster
London SW1P 3SJ

The interface includes a toolbar with icons for home, search, zoom, and help. The bottom section contains several data panels:

Mail Pieces	Finalized	Partial
MP: 16726	MP (RAF): 16500 98.65%	MP (RAF): 2 0.01%
HW: 0	MP (other):	MP (other):
Total: 16845	HW: 0 0.00%	HW: 0 0.00%
	Total: 16500 97.95%	Total: 2 0.01%

Additional statistics:

Injected	Timeouts
Rate: 3600	Master: 118
Excess: 0	RM Late: 4
License Violation: 0	Unassigned Images: 114
	Module: 6
	Orphaned Images: 0

OCR Results:

GREAT COLLEGE STREET
LONDON SW1P 3SJ

Directory Results: SW1P 3SJ
ClearZone Barcode:
PLANET Barcode:
Address Barcode:
4-State BC (Tracking):
4-State BC (Routing):
Keyline Match:
 Display Raw OCR Results

Buttons: Write Statistics, Reset

Status Bar: Mail Processed: 16726 | Mail Pieces / hr: 3600 | % Finalized: 98.0 | SW1P 3SJ | You are in Administrative Mode | localhost

Smart Match Spain Example #5



Smart Match

Argosy Post View 3.40

EAE
Escuela de Administración de Empresas
Avda. de la Catedral, 8 y 8
08002 BARCELONA

TELECOM ASESORES
A/a JORDI MATEO
C/ PAU CLARIS 161, 3º 2º
08037 BARCELONA
BARCELONA

millo

OCR | System Snapshot | Statistics | Alerts | All Stats

Mail Pieces		Finalized		Partial	
MP:	16881	MP (RAF):	16650 98.63%	MP (RAF):	2 0.01%
HW:	0	MP (other):		MP (other):	
Total:	17002	HW:	0 0.00%	HW:	0 0.00%
		Total:	16650 97.93%	Total:	2 0.01%

CALLE DE PAU CLARIS 161
08037 BARCELONA

Directory Results:	ClearZone Barcode:	PLANET Barcode:
08037		
Address Barcode:	4-State BC (Tracking):	4-State BC (Routing):

Keyline Match:

Display Raw OCR Results

Mail Processed: 16881 Mail Pieces / hr: 3600 % Finalized: 97.9 08037 You are in Administrative Mode localhost

Record Finalization



Smart Match

The screenshot displays the Argosy Post View 3.40 interface. At the top, a toolbar contains icons for navigation and help. The main window shows the OCR results for a mail piece: "De heer H. Wyes", "Alt stralau 17, 10245 Berlin O", and "00 DEUTSCHLAND". A yellow callout box on the right explains that the Smart Match (SM) system parsed this unstructured data using three techniques: Pattern Matching, Noise Filtering, and Alias Assignments. Below the main window, a statistics panel shows that 2641 mail pieces were processed, with 2677 finalized (97.58%). A red arrow points from the "Finalized" statistics to the OCR results. A blue oval highlights the OCR text, and a yellow arrow points from it to the "Directory Results" field, which contains the value "10245". The interface also includes sections for injected mail, timeouts, and various filters, along with a status bar at the bottom showing "Mail Processed: 2641" and "You are in Administrative Mode".

De heer H. Wyes
Alt stralau 17, 10245 Berlin O
00 DEUTSCHLAND

SM Parsed the unstructured data using:

- Pattern Matching
- Noise Filtering
- Alias Assignments

Category	Item	Value	Percentage
Mail Pieces	MP	2641	
	HW	0	
	Total	2641	
Finalized	MP (RAF)	2677	97.58%
	MP (other)		
	Total	2677	97.58%
Partial	MP (RAF)	0	0.00%
	MP (other)		
	Total	0	0.00%

Directory Results: 10245

Keyline Match: [Empty]

Display Raw OCR Results:

Write Statistics | Reset

Mail Processed: 2641 | Mail Pieces / hr: 0 | % Finalized: 97.6 | 10245 | You are in Administrative Mode | localhost

Alias Table



Smart Match

The screenshot shows the Argosy Post View 3.40 application window. The main area displays a scanned address: Vala Björk Svansdóttir, Njarðvíkurbraut 31, 260 Njarðvík. A red box highlights the address, and a red oval highlights the municipality 'Njarðvík'. A yellow callout box with a blue border contains the text: 'The Alias Table was used to identify the correct municipality'. A green arrow points from this callout to the 'Njarðvík' in the address. Below the address, a search results pane shows the identified municipality: 'Reykjanesbær'. A red oval highlights 'Njarðvík' in the Wikipedia text below, which states: 'Reykjanesbær is a municipality on the Reykjanes peninsula in Iceland, it is made up of the towns Keflavík, Njarðvík and Hafnir. The municipality was created in 1995 when the inhabitants of the three towns voted to merge them into one.' The bottom status bar shows 'Mail Processed: 45', 'Mail Pieces / hr: 0', '% Finalized: 100.0', '260', and 'You are in Administrative Mode'.

Address Look-up



Smart Match

RAF Smart Match-i Address Lookup Utility

RAF Smart Match-i

Configuration and Directory Data

Configuration Selection:

Active Directory

Name: Version:


Data File: Data:

Create Date: Data Compiler:

Smart Match-i Software

SMI Version:

ALU Version:



Address Lookup

C/Provenza 122
08029-BARCELONA

>>>> Finalized :: Finalized <6ms> <<<<<
Pattern Matched 'Street3b' - Level of Sort(1)

Parsed Address:
C/PROVENZA 122
08029

Result(s):
[0] Standardized Address
PROVENÇA 122
08029
[0] Postcode='08029'...

Finalized

Customizable Outputs



Smart Match

Argosy Post View 3.40

POWERED BY **RAF** TECHNOLOGY

15400 NE 90TH STREET
REDMOND, WA 98052

OCR | System Snapshot | Statistics | Alerts | All Stats

15400 NE 90TH ST
REDMOND WA 98052

280

GPS Coordinates

Director Results: LA:47.68/LO:-122.13

Address Barcode:

ClearZone Barcode:

PLANET Barcode:

4-State Barcode (Tracking code):

4-State Barcode (Routing code):

Currently Loaded Configuration: US

Mail Processed: 8 | Mail Pieces / hr: 0 | % Finalized: 8.3 | LA:47.68/LO:-122.13 | You are in Administrative Mode | localhost

Video Encoding Server



Smart Match

