Tailor-made E-Invoicing solution implementation at Bridgestone using SAP PI 7.0 and WebDynpro

BRIDGESTONE
Your Journey, Our Passion

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Bridgestone Group
activities and products

Tyres
(84% of our total activity in 2009, growing)

- NON tyre products
- Automotive parts, such as wheels, noise absorbers, cushions, ...
- Industrial rubber products, such as belts, hoses, roofing and insulation materials, ...
- Chemical products, such as building products, foams, ...
- Sporting goods, such as bicycles, golf balls and gear, tennis balls, surf boards, boats etc.

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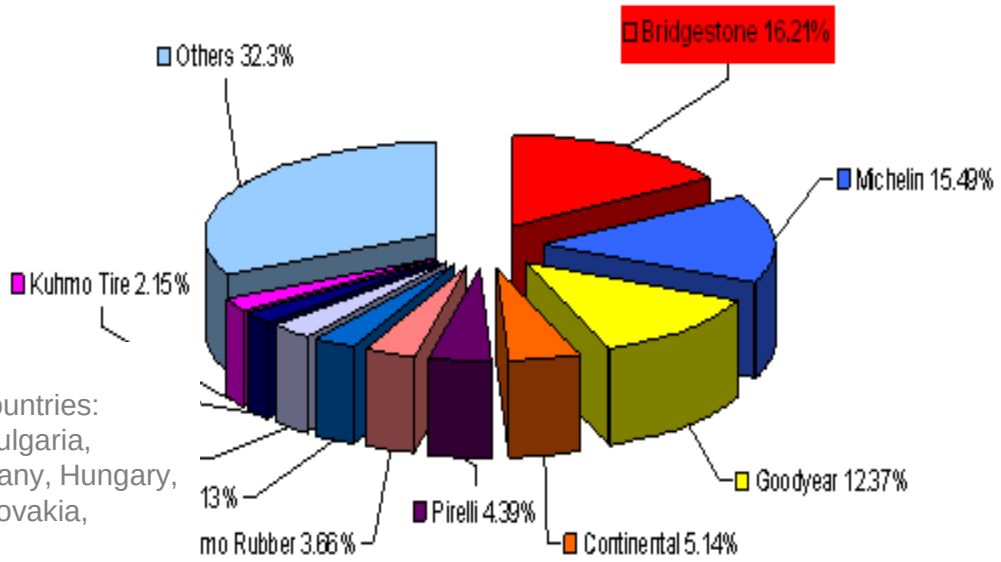
Bridgestone Europe

Bridgestone Europe NV/SA
Headquarters : Brussels

Bridgestone Europe established as coordination office in 1972; became HQ in 1990.



Tyre Market Share
(worldwide 2009)

Facilities in Europe include:

20 fully owned Sales Subsidiaries

Sales presence through 6 regions covering the following countries: Austria, Baltic Countries, Belgium, Bosnia- Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Poland, Portugal, Romania, Serbia, Spain, Slovakia, Slovenia, Sweden, Switzerland, UK, The Netherlands

2 Exclusive Distributors

Greece and Norway

9 Factories

3 in Spain,
2 in Poland
1 in France, in Italy, in Hungary, in Belgium

1 Technical centre with Proving Ground (Rome)
1 European Proving Ground (Rome)

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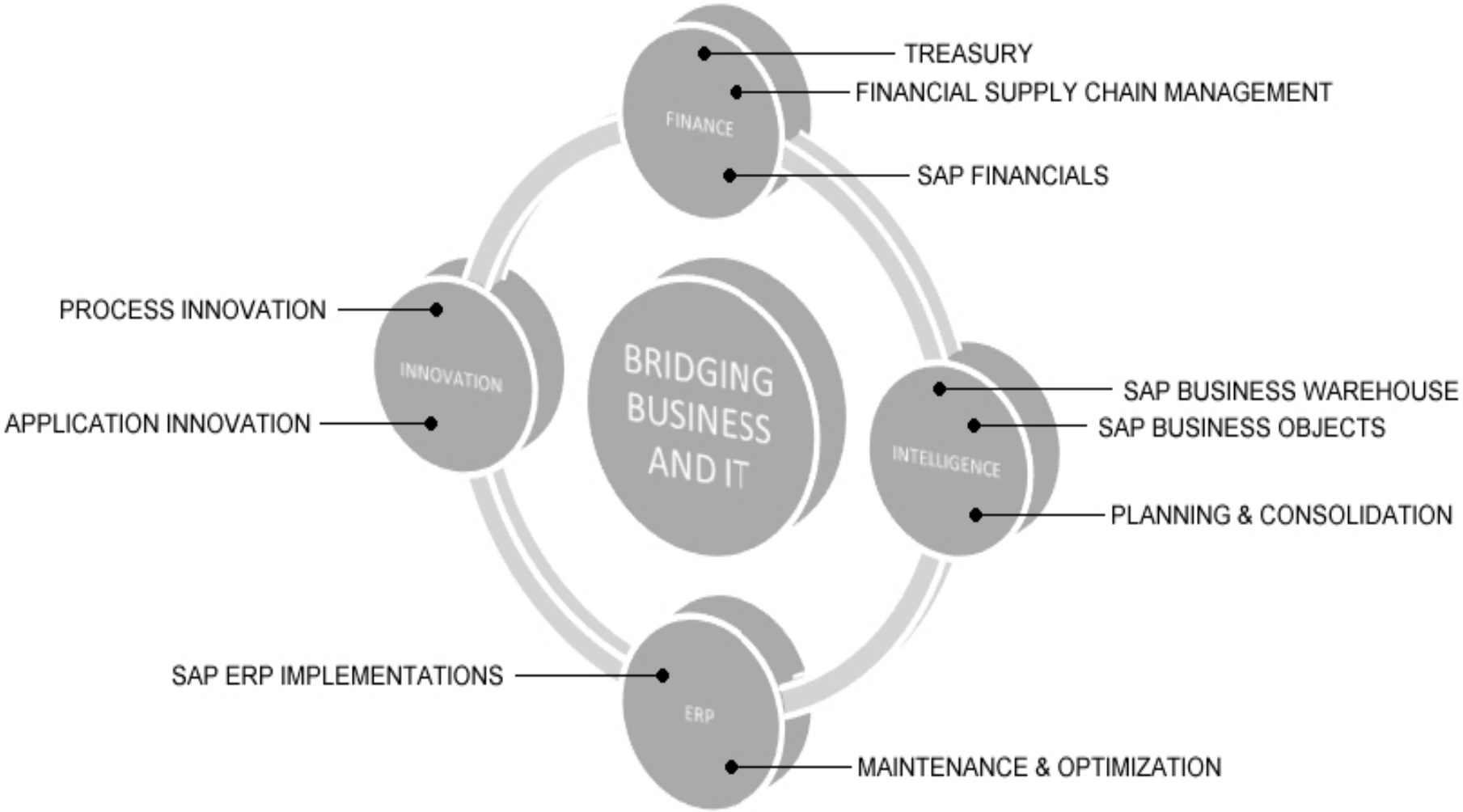
Intensum



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EDI @ BSEU

Messages

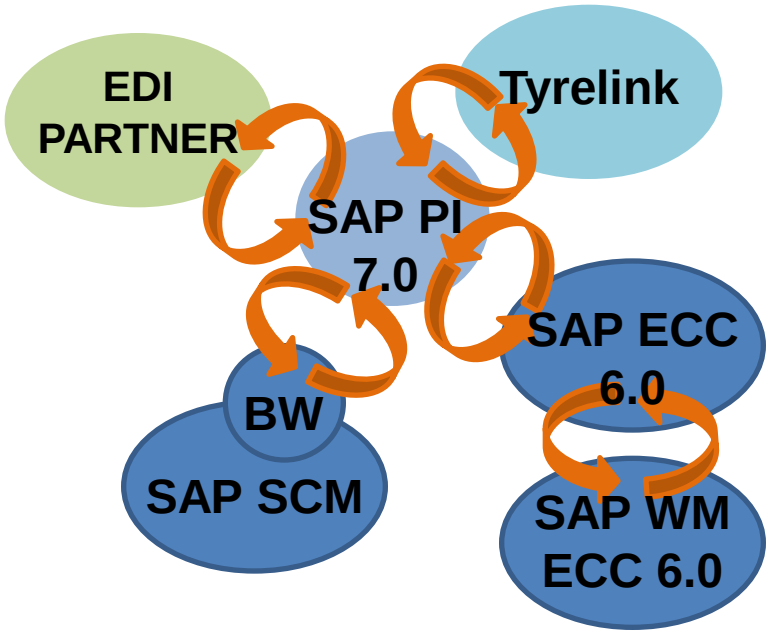
IN : ORDERS, DELINS, DELJIT, GSVERF, REMADV, ACC_INVOIC_RECEIPT

OUT : ORDRSP, DESADV, SHPMNT, INVOIC, DIRDEB, PAYEXT, PRICAT, ZSTATA

> 150 mappings in PI with customers, carriers, suppliers, payment organisations, banks

Statistics

Asynchronous : 40.000 / day
Synchronous : 20.000 / day



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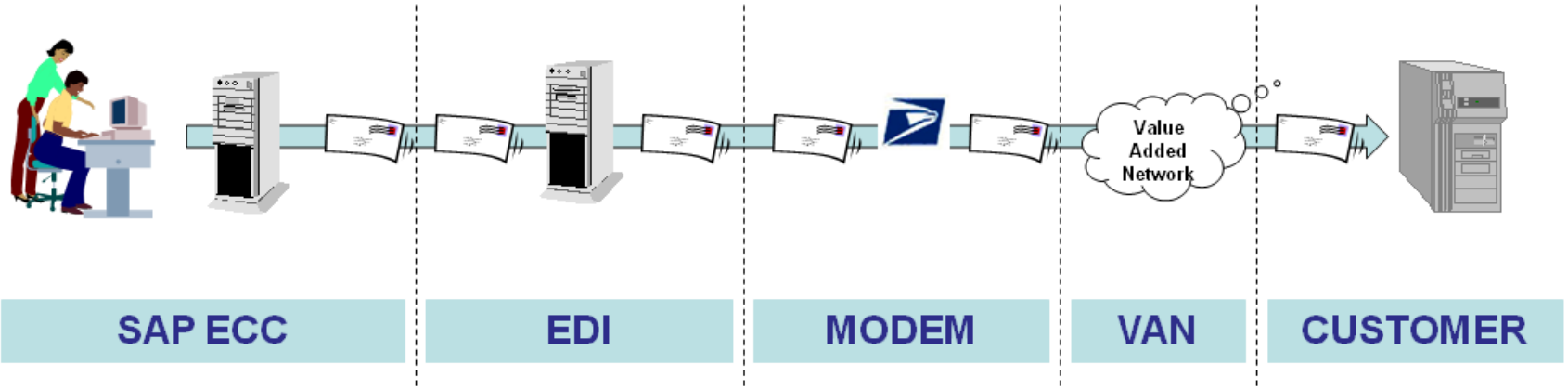
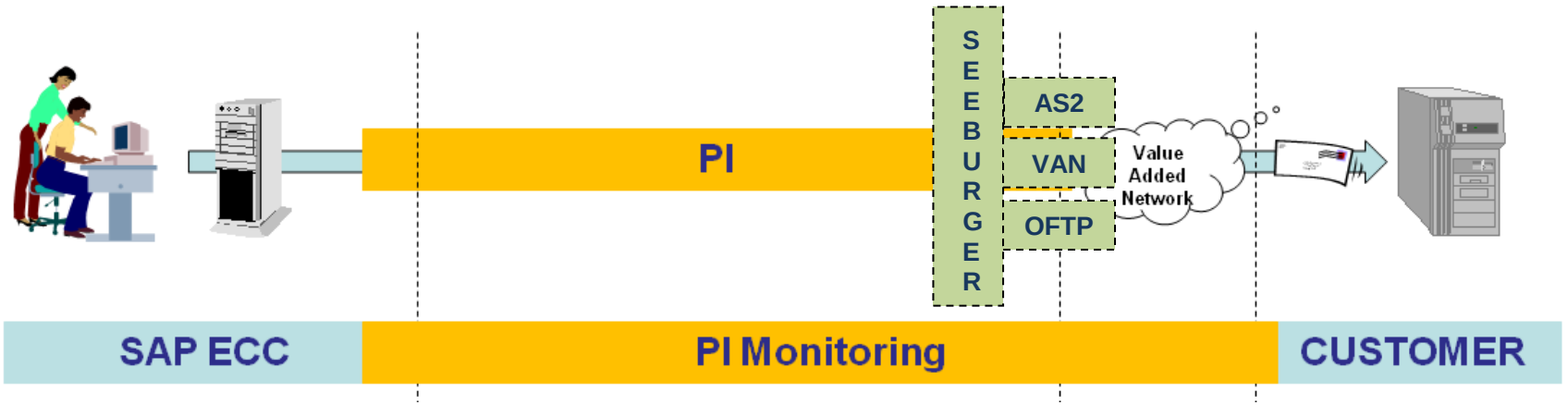
EDI @ BSEU





INTENSUM DOCUMENT TRACKING

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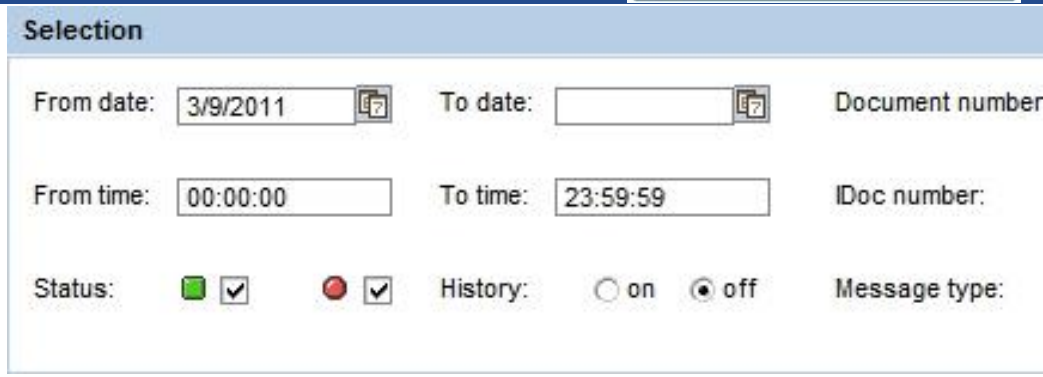
Intensum Document Tracking



User Friendly

End-to-End Monitoring Tool for IT User, Key User , End User

Fast Tracking of Asynchronous and Synchronous Messages that are in error or succesfully posted

Based on Document nb or other search functionalities

Performant Filtering and grouping

Flexibel

Data is persistent

Authorization Concept

No sensible information is displayed

Possible to track documents over different interfaces / Cross System

Monitoring Data can be archived independent of PI messages

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Paperless e-Invoicing

- **Digital paperless e-Invoicing**: means that the electronic invoice is legally accepted and there is no more paper documents exchanged.
- **DEMAT** is the French denomination for “Digital Paperless Electronic Invoicing” eg. in FR: “DEMATéralisation de factures”
- The French DEMAT process is specific to France and it is used by many customers since a long time. It does **NOT** require a digital signature. The major legal requirements are:
  - to have the legally requested information in the electronic messages
  - to be able to visualize the electronic message in a human readable way for the legal authorities
  - the archiving system must ensure that the messages can not be changed once archived.
- For consistency reason, it is advisable to have the same check rules on both sides

DEMAT

Some rules must be followed to respect the FR law for the storage:

- The FR public administration can control whenever they want the documents and they must be made accessible.
- The layout of presenting the content of the document is not regulated BUT the legal information MUST be shown.
- The physical storage can be in France or could be in a partnership country (meaning this country has signed a special agreement with the FR public administration; example European community countries)
- Archiving for minimum 6 years for EDI, 10 years for business document (paper based)
- Not all invoice types must be in demat, you can start partial demat (example normal invoices yes, credit notes no), but both parties MUST be aligned.

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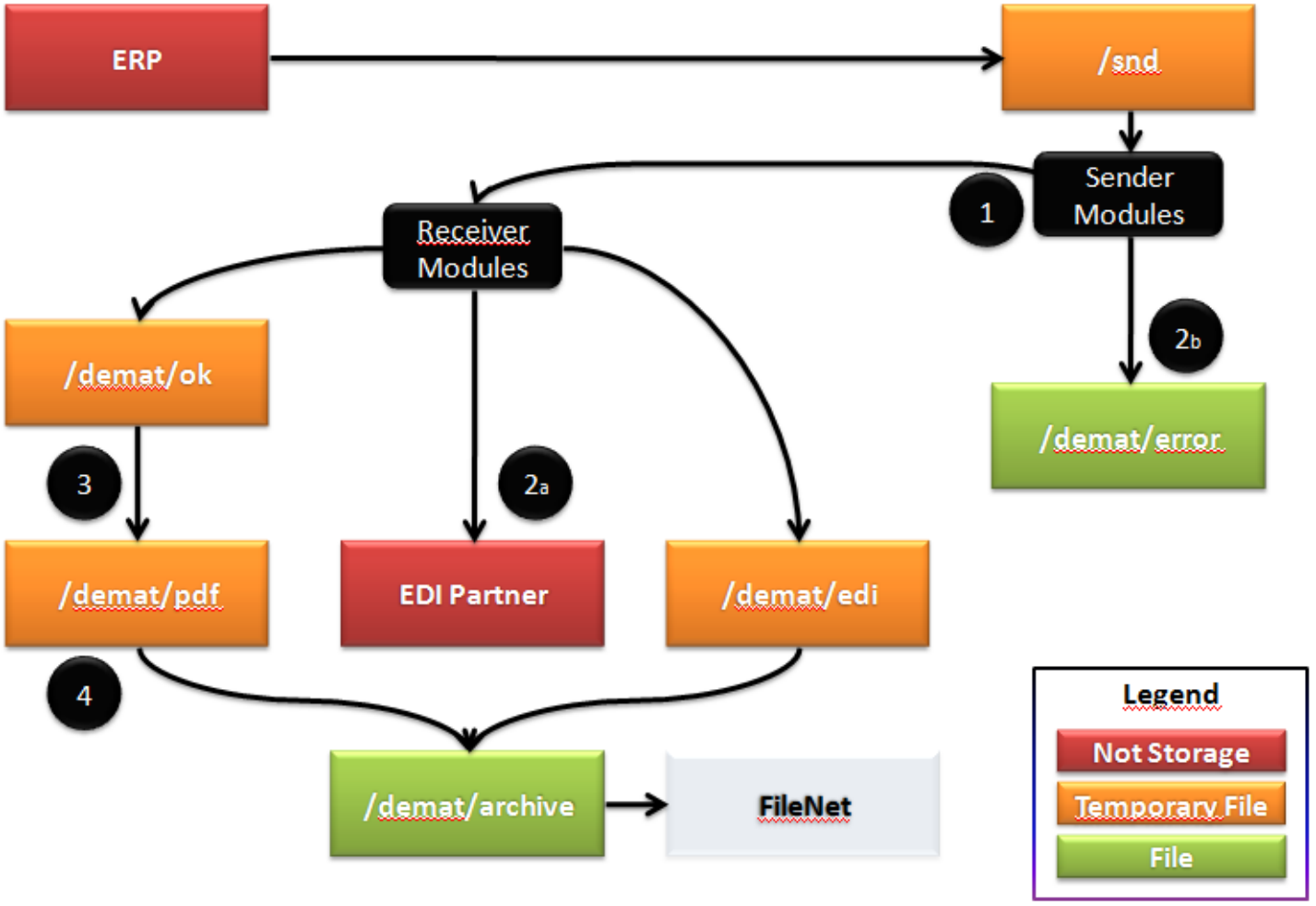
BRIDEMAT



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PI

- PI Graphical Mapping: IDOC to EDIFACT/XML
- Seeburger BIC Mappings : EDIFACT/XML to EDI Conversion
- XPATH : check DEMAT mapping
- ABAP RFC FM :
  - Z_DEMAT_CHECK_PARTNER, Z_DEMAT_UPDATE_SUMMARY
- Enterprise Java Beans
- Java Mapping Programs : PDF Creation
- Java Adapter Modules :
  - Monitoring updates, Validation, Indexing, Archiving

WEBDYNPRO JAVA

- Intensum Document Tracking extended for DEMAT

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Intensum Document Tracking for DEMAT

Typical question :

My customer claims that he did not received my invoice.

What should I do?

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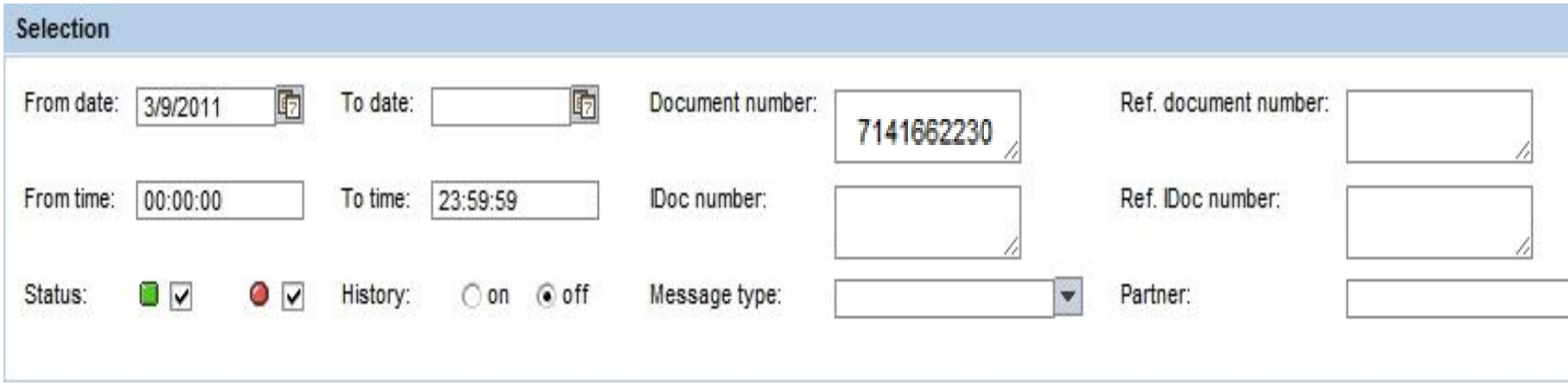
Intensum Document Tracking for DEMAT

Input screen

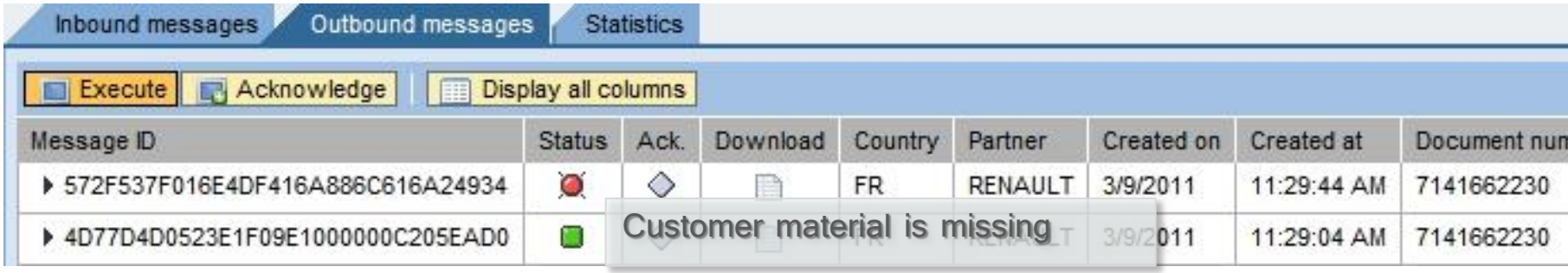


green = OK

red = Error

Intensum Document Tracking for DEMAT

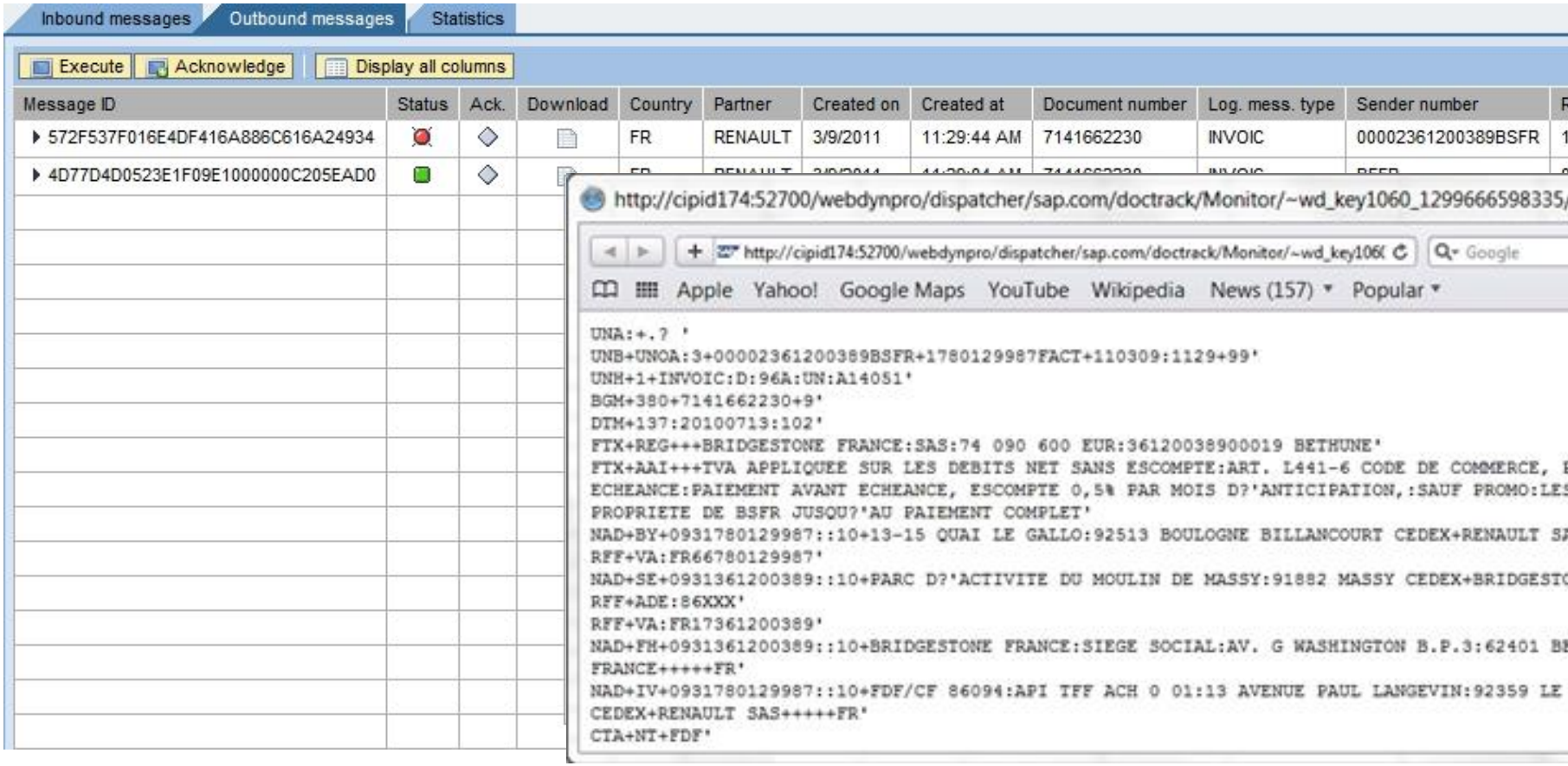
Result



- Bottom line : IDoc to file (EDIFACT)
- Top line : Check Mapping DEMAT

Intensum Document Tracking for DEMAT

Download of created EDIFACT file



Intensum Document Tracking for DEMAT

Result

Inbound messages | Outbound messages | Statistics

Execute | Acknowledge | Display all columns

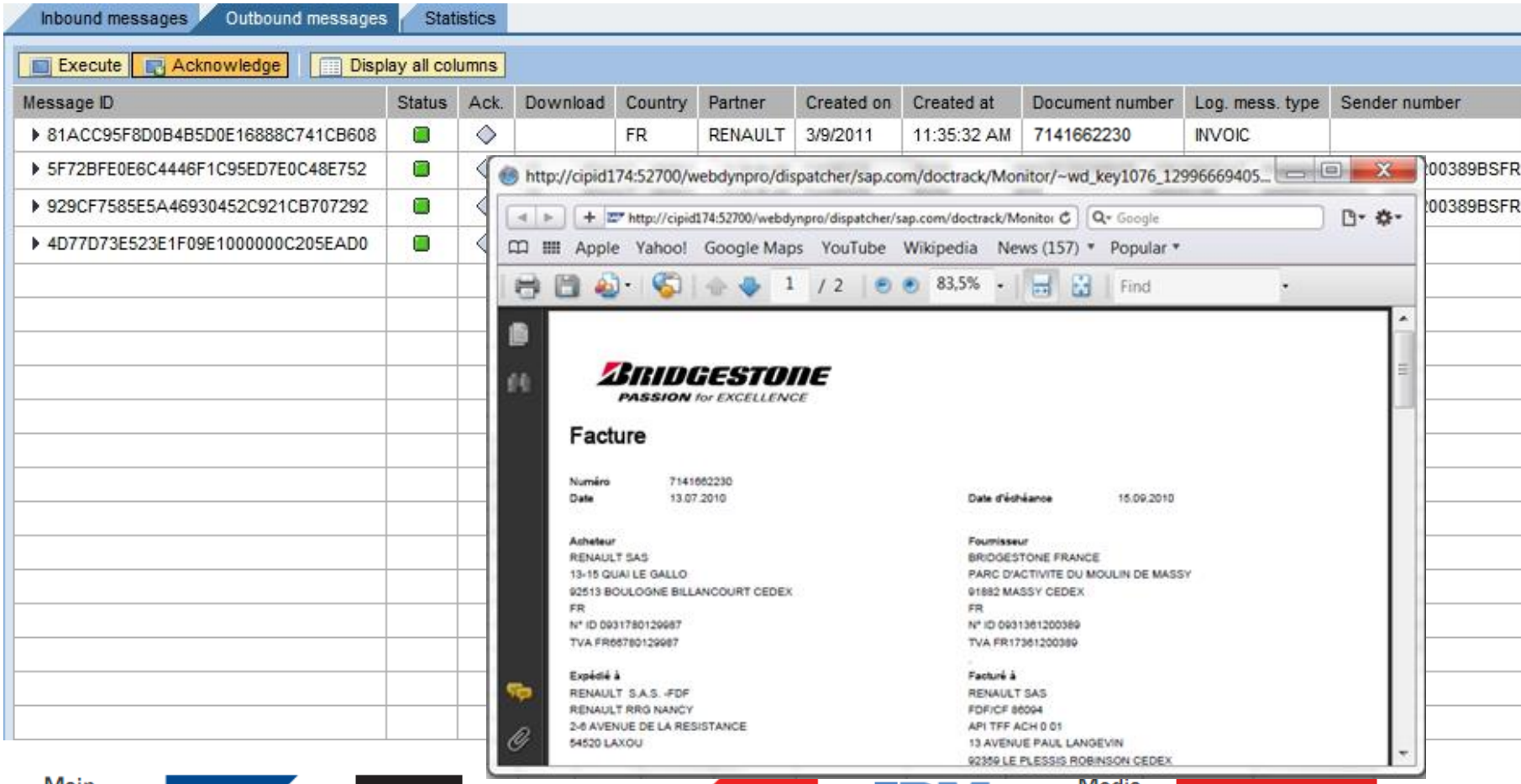
Message ID	Status	Ack.	Download	Country	Partner	Created on	Created at	Document number	Log. mess. type	Sender number
81ACC95F8D0B4B5D0E16888C741CB608				FR	RENAULT	3/9/2011	11:35:32 AM	7141662230	INVOIC	
5F72BFE0E6C4446F1C95ED7E0C48E752				FR	RENAULT	3/9/2011	11:34:59 AM	7141662230	INVOIC	00002361200389BSFR
929CF7585E5A46930452C921CB707292				FR	RENAULT	3/9/2011	11:34:44 AM	7141662230	INVOIC	00002361200389BSFR
4D77D73E523E1F09E1000000C205EAD0				FR	RENAULT	3/9/2011	11:34:36 AM	7141662230	INVOIC	BFFR

The four steps to check the whole process :

- 1st line mapping of IDoc to file (EDIFACT)
- 2nd line mandatory fields check result
- 3th line Creation of the PDF file (via mapping)
- 4th line Creation of the INDEX file (needed for archiving)

Intensum Document Tracking for DEMAT

Download of created PDF



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Intensum Document Tracking for DEMAT

Acknowledgment of flow

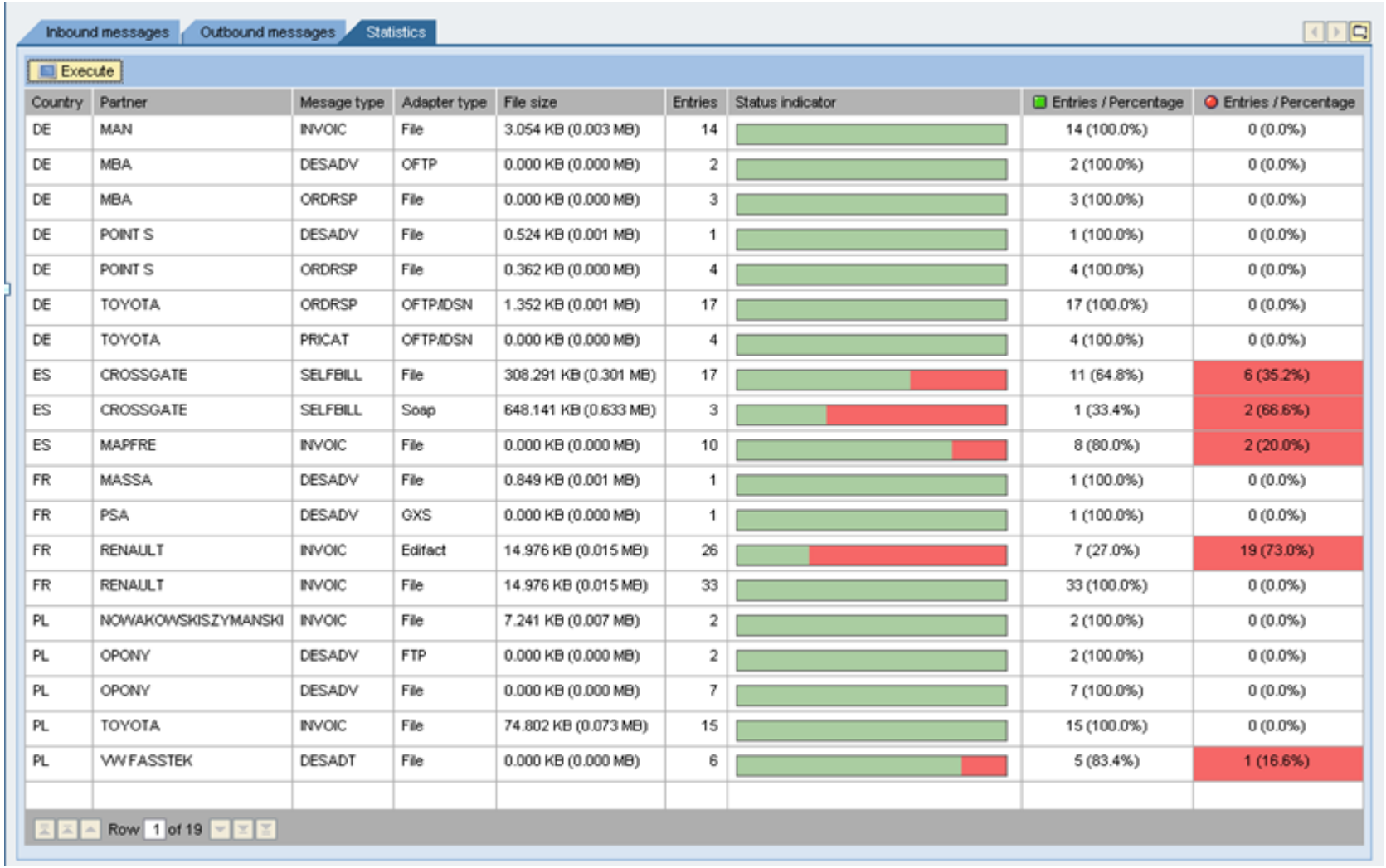
Inbound messages | Outbound messages | Statistics

Execute | Acknowledge | Display all columns

Message ID	Status	Ack.	Download	Country	Partner	Created on	Created at	Document number	Log. mess. type	Sender number	Receiver n
81ACC95F8D0B4B5D0E16888C741CB608				FR	RENAULT	3/9/2011	11:35:32 AM	7141662230	INVOIC		
5F72BFE0E6C4446F1C95ED7E0C48E752				FR	RENAULT	3/9/2011	11:34:59 AM	7141662230	INVOIC	00002361200389BSFR	178012998
929CF7585E5A46930452C921CB707292				FR	RENAULT	3/9/2011	11:34:44 AM	7141662230	INVOIC	00002361200389BSFR	178012998
4D77D73E523E1F09E1000000C205EAD0				FR	RENAULT	3/9/2011	11:34:36 AM	7141662230	INVOIC	BFFR	000020139

→ Delivered at receiver side

Intensum Document Tracking for DEMAT



Inbound messages | Outbound messages | Statistics

Execute

Country	Partner	Mesage type	Adapter type	File size	Entries	Status indicator	Entries / Percentage	Entries / Percentage
DE	MAN	INVOIC	File	3.054 KB (0.003 MB)	14		14 (100.0%)	0 (0.0%)
DE	MBA	DESADV	OFTP	0.000 KB (0.000 MB)	2		2 (100.0%)	0 (0.0%)
DE	MBA	ORDRSP	File	0.000 KB (0.000 MB)	3		3 (100.0%)	0 (0.0%)
DE	POINT S	DESADV	File	0.524 KB (0.001 MB)	1		1 (100.0%)	0 (0.0%)
DE	POINT S	ORDRSP	File	0.362 KB (0.000 MB)	4		4 (100.0%)	0 (0.0%)
DE	TOYOTA	ORDRSP	OFTP/DSN	1.352 KB (0.001 MB)	17		17 (100.0%)	0 (0.0%)
DE	TOYOTA	PRICAT	OFTP/DSN	0.000 KB (0.000 MB)	4		4 (100.0%)	0 (0.0%)
ES	CROSSGATE	SELFBILL	File	308.291 KB (0.301 MB)	17		11 (64.8%)	6 (35.2%)
ES	CROSSGATE	SELFBILL	Soap	648.141 KB (0.633 MB)	3		1 (33.4%)	2 (66.6%)
ES	MAPFRE	INVOIC	File	0.000 KB (0.000 MB)	10		8 (80.0%)	2 (20.0%)
FR	MASSA	DESADV	File	0.849 KB (0.001 MB)	1		1 (100.0%)	0 (0.0%)
FR	PSA	DESADV	GXS	0.000 KB (0.000 MB)	1		1 (100.0%)	0 (0.0%)
FR	RENAULT	INVOIC	Edifact	14.976 KB (0.015 MB)	26		7 (27.0%)	19 (73.0%)
FR	RENAULT	INVOIC	File	14.976 KB (0.015 MB)	33		33 (100.0%)	0 (0.0%)
PL	NOWAKOWSKISZYMANSKI	INVOIC	File	7.241 KB (0.007 MB)	2		2 (100.0%)	0 (0.0%)
PL	OPONY	DESADV	FTP	0.000 KB (0.000 MB)	2		2 (100.0%)	0 (0.0%)
PL	OPONY	DESADV	File	0.000 KB (0.000 MB)	7		7 (100.0%)	0 (0.0%)
PL	TOYOTA	INVOIC	File	74.802 KB (0.073 MB)	15		15 (100.0%)	0 (0.0%)
PL	VW FASSTEK	DESADT	File	0.000 KB (0.000 MB)	6		5 (83.4%)	1 (16.6%)

Row 1 of 19

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Conclusion

The **BRIDEMAT** solution helped Bridgestone to

- Achieve customer satisfaction and respect the legal requirements
- Lower the TCO
- Have a easy tool to monitor the e-invoices, usable for end users (reduce time spend of the highly specialized IT skills on monitoring).
- Be more flexible on future changes/demands.

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Thank you!