



SAPience.be TECHday 2011

Modeling tomorrow's technology

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



Szekeres Andreas



Rooms Kris

Lamot, Mechelen
April 6, 2011

Main
Sponsors:



Deloitte.



Media
Partner:

solutions

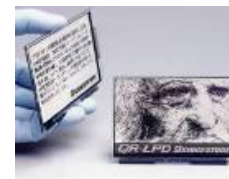


Bridgestone Group activities and products



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.



Main Sponsors:



Deloitte.



Media Partner:





Bridgestone Europe

Bridgestone Europe NV/SA

Headquarters : Brussels

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

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

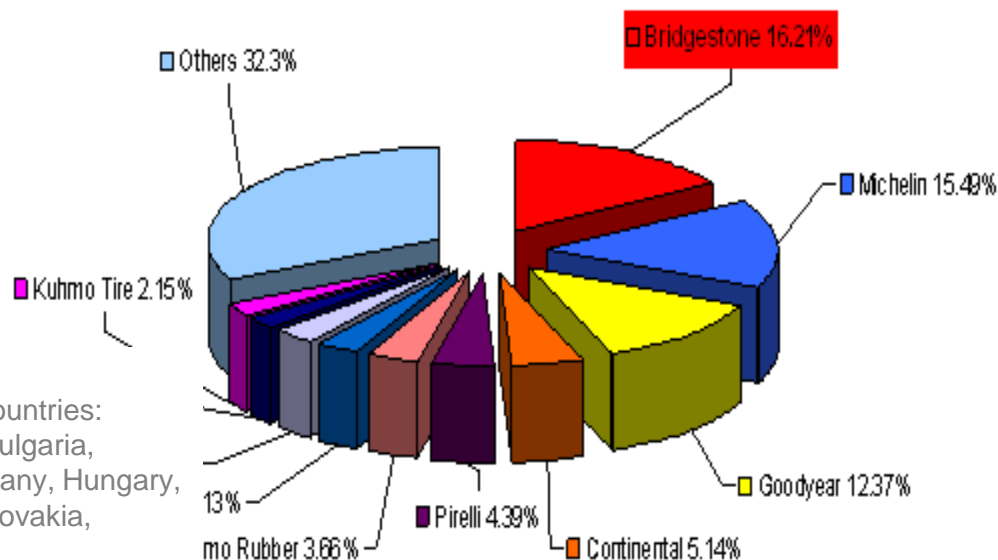
3 in Spain,

2 in Poland

1 in France, in Italy, in Hungary, in Belgium

1 Technical centre with Proving Ground (Rome)

1 European Proving Ground (Rome)



Tyre Market Share
(worldwide 2009)

Main Sponsors:



Deloitte.

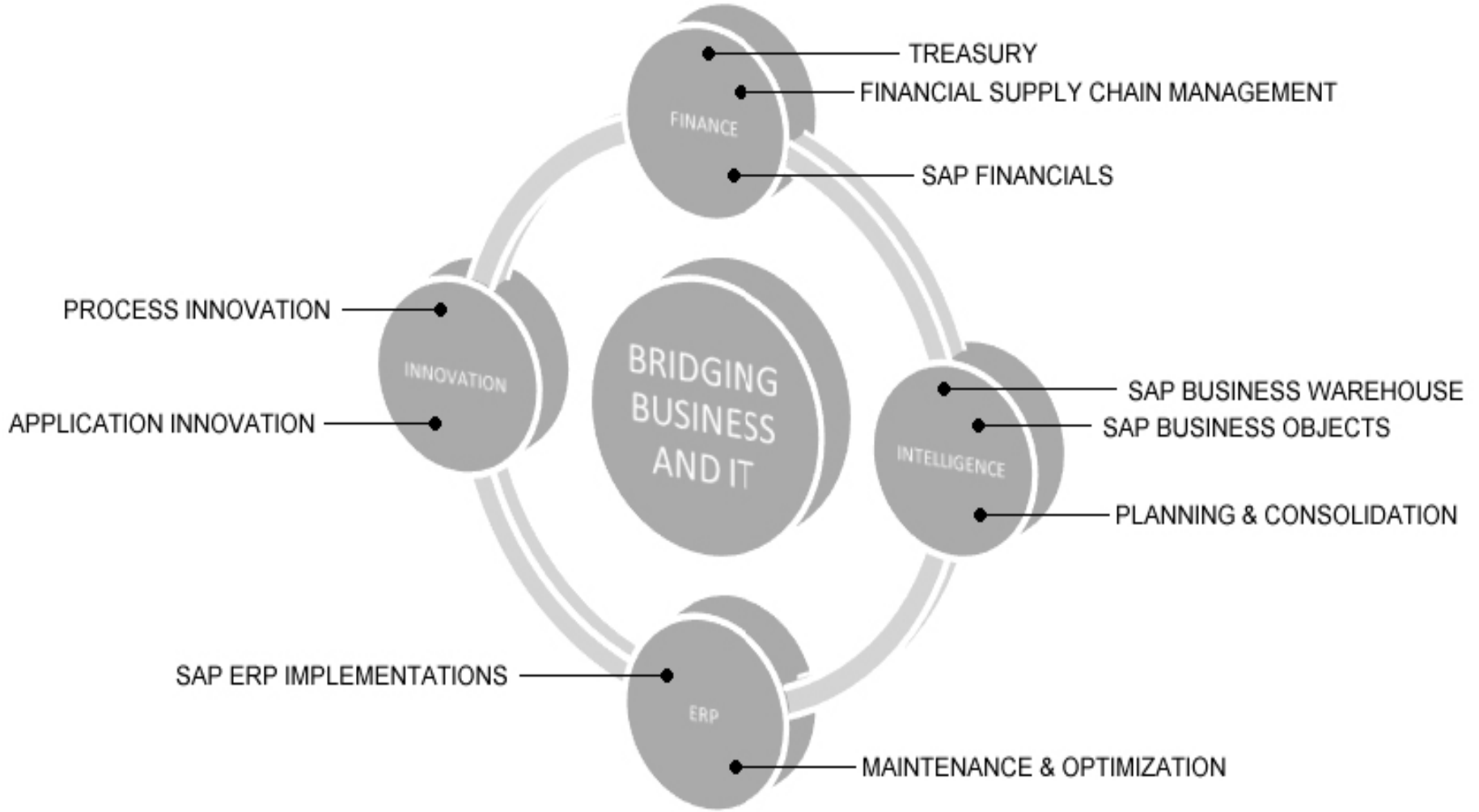


Media Partner:





Intensum





Messages

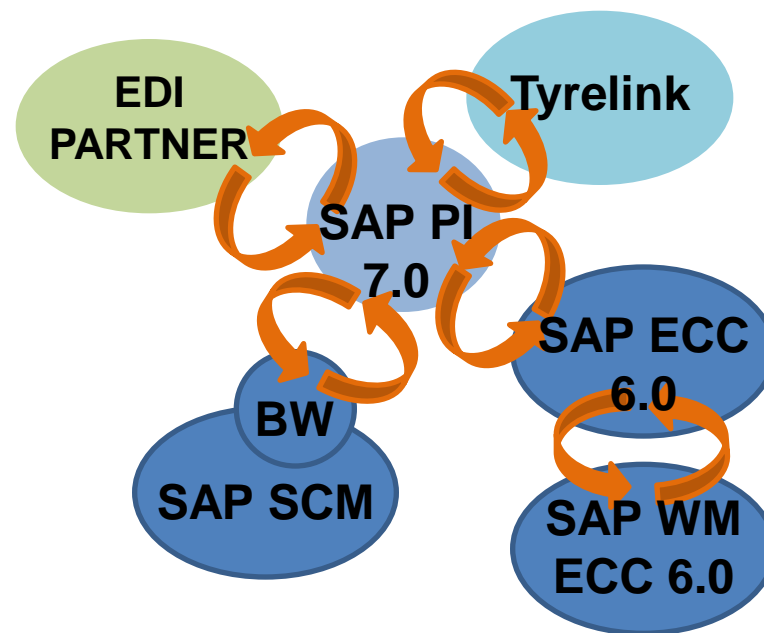
**IN : ORDERS, DELINS, DELJIT,
GSVERF, REMADV,
ACC_INVOIC_RECEIPT**

**OUT : ORDRSP, DESADV,
SHPMNT, INVOIC, DIRDEB,
PAYEXT, PRICAT, ZSTAT**

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

Statistics

**Asynchronous : 40.000 / day
Synchronous : 20.000 / day**



Main Sponsors:



Deloitte.

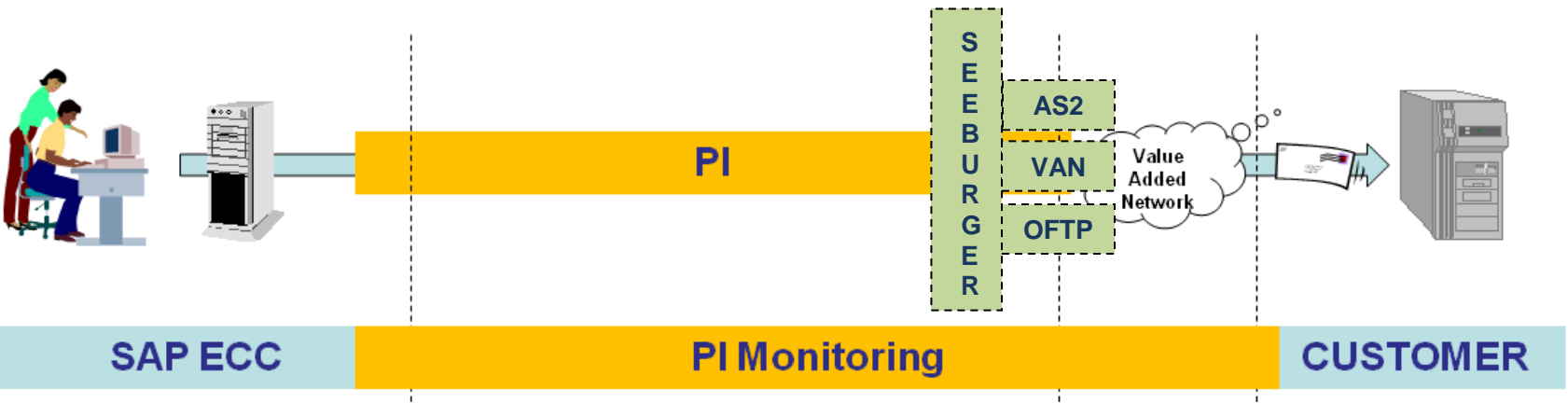
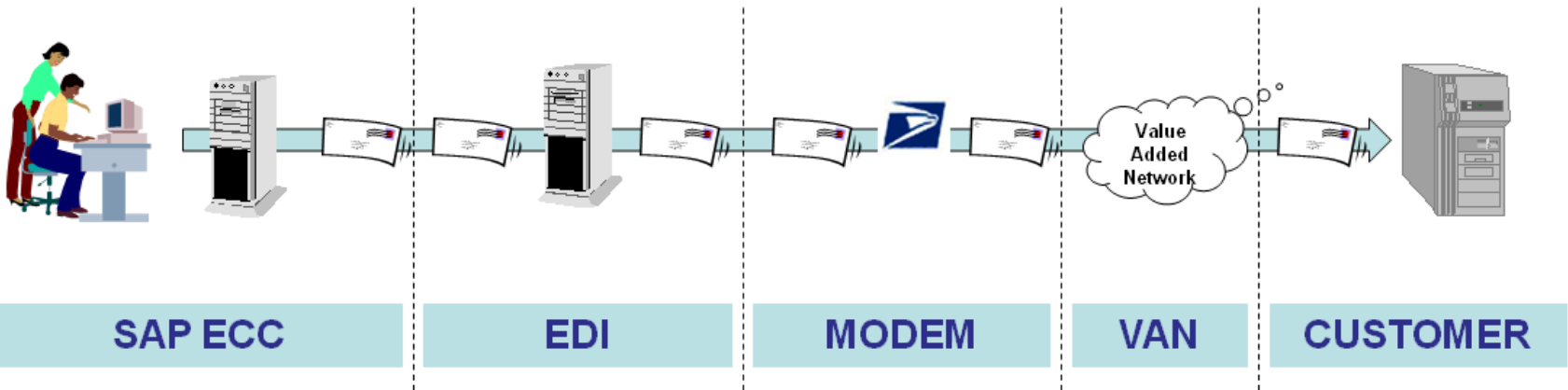


Media Partner:





EDI @ BSEU



INTENSUM DOCUMENT TRACKING

Main Sponsors: Media Partner:



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 successfully posted
 Based on **Document nb** or other search **functionalities**
Performant Filtering and grouping

Selection

From date: To date:

From time: To time:

Status: History: on off

Document number:

IDoc number:

Message type:

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

Main Sponsors:



Deloitte.



Media Partner:





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: “DEMATérialisation 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

Main Sponsors:



Deloitte.



Media Partner:

solutions



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.

Main Sponsors:



Deloitte.

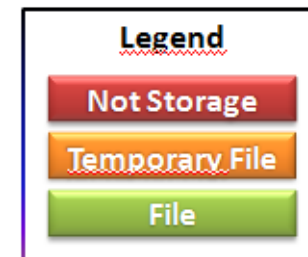
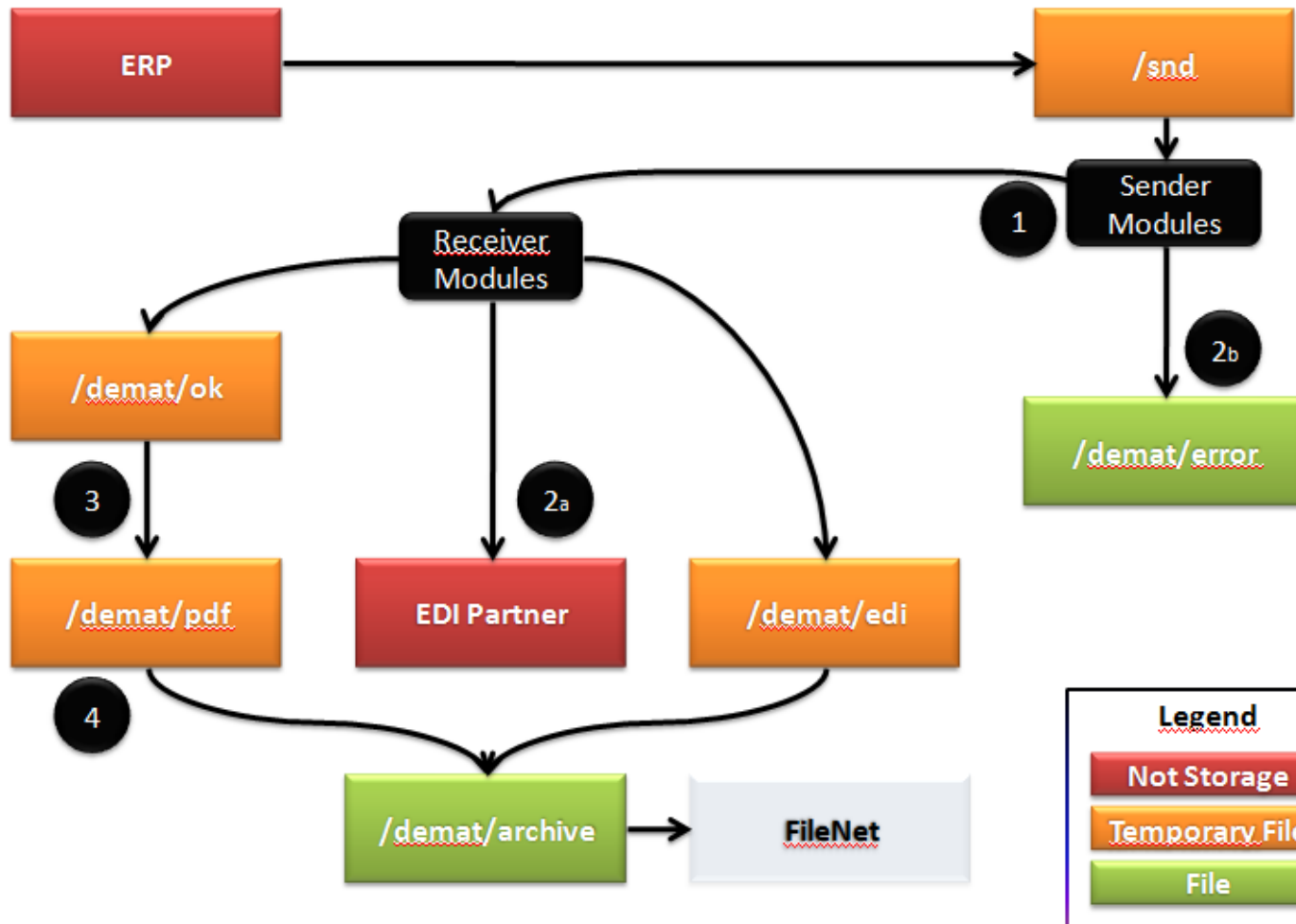


Media Partner:

solutions



BRIDEMAT





BRIDEMAT



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

- Intesum Document Tracking extended for DEMAT

Main Sponsors:



Deloitte.



Media Partner:

solutions



Intensum Document Tracking for DEMAT



Typical question :

My customer claims that he did not received my invoice.

What should I do?

Main Sponsors:



Deloitte.



Media Partner:

solutions



Intensum Document Tracking for DEMAT



Input screen

Selection

From date: To date:

Document number: Ref. document number:

From time: To time: IDoc number: Ref. IDoc number:

Status: History: on off Message type: Partner:

green = OK

red = Error



Deloitte.



Media Partner:





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 num
▶ 572F537F016E4DF416A886C616A24934				FR	RENAULT	3/9/2011	11:29:44 AM	7141662230
▶ 4D77D4D0523E1F09E100000C205EAD0		Customer material is missing			RENAULT	3/9/2011	11:29:04 AM	7141662230

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

Main Sponsors:



Deloitte.



Media Partner:





Intensum Document Tracking for DEMAT



Download of created EDIFACT file

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
▶ 572F537F016E4DF416A886C616A24934				FR	RENAULT	3/9/2011	11:29:44 AM	7141662230	INVOIC	00002361200389BSFR
▶ 4D77D4D0523E1F09E100000C205EAD0				FR	RENAULT	3/9/2011	11:29:44 AM	7141662230	INVOIC	00002361200389BSFR

Browser window showing EDIFACT data:

```

http://cipid174:52700/webdynpro/dispatcher/sap.com/doctrack/Monitor/~wd_key1060_1299666598335/
+ http://cipid174:52700/webdynpro/dispatcher/sap.com/doctrack/Monitor/~wd_key1060
Apple Yahoo! Google Maps YouTube Wikipedia News (157) Popular
UNA:+. ? '
UNB+UNOA:3+00002361200389BSFR+1780129987FACT+110309:1129+99'
UNH+1+INVOIC:D:96A:UN:A14051'
BGM+380+7141662230+9'
DTM+137:20100713:102'
FTX+REG+++BRIDGESTONE FRANCE:SAS:74 090 600 EUR:36120038900019 BETHUNE'
FTX+AAI+++TVA APPLIQUEE SUR LES DEBITS NET SANS ESCOMPTE:ART. L441-6 CODE DE COMMERCE, R
ECHEANCE:PAIEMENT AVANT ECHEANCE, ESCOMPTE 0,5% PAR MOIS D'ANTICIPATION,:SAUF PROMO:LES
PROPRIETE DE BSFR JUSQU?'AU PAIEMENT COMPLET'
NAD+BY+0931780129987::10+13-15 QUAI LE GALLO:92513 BOULOGNE BILLANCOURT CEDEX+RENAULT SA
RFF+VA:FR66780129987'
NAD+SE+0931361200389::10+PARC D?'ACTIVITE DU MOULIN DE MASSY:91882 MASSY CEDEX+BRIDGESTO
RFF+ADE:86XXX'
RFF+VA:FR17361200389'
NAD+FH+0931361200389::10+BRIDGESTONE FRANCE:SIEGE SOCIAL:AV. G WASHINGTON B.P.3:62401 BR
FRANCE++++FR'
NAD+IV+0931780129987::10+FDF/CF 86094:API TFF ACH 0 01:13 AVENUE PAUL LANGEVIN:92359 LE
CEDEX+RENAULT SAS++++FR'
CTA+NT+FDF'
  
```

Main Sponsors:



Deloitte.



Media Partner:

solutions



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)

Main Sponsors:



Deloitte.



Media Partner:





Intensum Document Tracking for DEMAT



Download of created PDF

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	■									
▶ 929CF7585E5A46930452C921CB707292	■									
▶ 4D77D73E523E1F09E100000C205EAD0	■									

Browser window: http://cipid174:52700/webdynpro/dispatcher/sap.com/doctrack/Monitor/~wd_key1076_12996669405...

Facture

BRIDGESTONE
PASSION for EXCELLENCE

Numéro: 7141662230
Date: 13.07.2010
Date d'échéance: 15.09.2010

Acheteur
RENAULT SAS
13-15 QUAI LE GALLO
92513 BOULOGNE BILLANCOURT CEDEX
FR
N° ID 0931780120687
TVA FR65780120687

Fournisseur
BRIDGESTONE FRANCE
PARC D'ACTIVITE DU MOULIN DE MASSY
91882 MASSY CEDEX
FR
N° ID 0931361200389
TVA FR17361200389

Expédié à
RENAULT S.A.S -FDF
RENAULT RRG NANCY
2-6 AVENUE DE LA RESISTANCE
54520 LAXOU

Facturé à
RENAULT SAS
FDF/CF 86094
API TFF ACH 0 01
13 AVENUE PAUL LANGEVIN
92359 LE PLESSIS ROBINSON CEDEX





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 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	17801299
▶ 929CF7585E5A46930452C921CB707292	■	■		FR	RENAULT	3/9/2011	11:34:44 AM	7141662230	INVOIC	00002361200389BSFR	17801299
▶ 4D77D73E523E1F09E1000000C205EAD0	■	■		FR	RENAULT	3/9/2011	11:34:36 AM	7141662230	INVOIC	BFFR	00002013

→ Delivered at receiver side





Intensum Document Tracking for DEMAT



Country	Partner	Message 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/MSN	1.352 KB (0.001 MB)	17		17 (100.0%)	0 (0.0%)
DE	TOYOTA	PRICAT	OFTP/MSN	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	VWFASSTEK	DESADT	File	0.000 KB (0.000 MB)	6		5 (83.4%)	1 (16.6%)





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.

Main Sponsors:



Deloitte.



Media Partner:

solutions

Thank you!

