

modernizing an application on HP NonStop servers

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CommitWork GmbH

overview

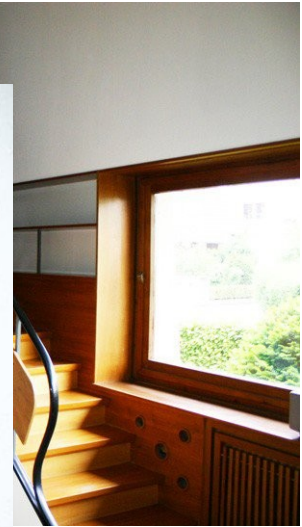
- a house
- motivations
- options

a house



in a quiet neighbourhood

a house – specific architecture



a house – 20 years of piled up renovation projects



a house – where to start with renewing?

- leave everything as it is?
- only new wallpapers?
- new windows?
- reface with thermal insulation?
- new central heating?
- new centralized water supply system?
- change floor plans?
- or just move out?
- it just depends, how long you want to stay in this house

motivations

tear it down & build it
newly using standards



motivations

or stick with it due to

- excellent service levels
- cheap operating cost
- excellent security regarding external attacks
- unmatched scalability
- individual business applications

motivations

- expected savings
- better maintenance & easier extensions
- generation problem / e.g. Cobol programmers
- user acceptance
- hard-/software discontinuation
- new functions
- simplification
- workflow optimization

Work

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Option 1

„pimp my screen“

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pimp my screen

1. the simplest method: “pimp my screen“

Goal: better user acceptance, web functionality

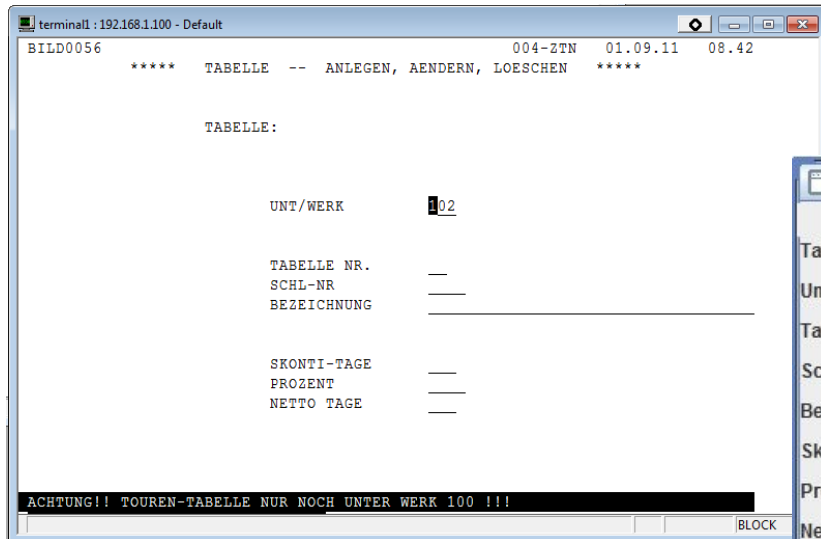
other advantages : none

Method: 1:1 client code conversion into Java or HTML



pimp my screen

before



terminal1: 192.168.1.100 - Default

BILD0056 004-ZTN 01.09.11 08.42

***** TABELLE -- ANLEGEN, AENDERN, LOESCHEN *****

TABELLE:

UNT/WERK 102

TABELLE NR. _____

SCHL-NR. _____

BEZEICHNUNG _____

SKONTI-TAGE _____

PROZENT _____

NETTO TAGE _____

ACHTUNG!! TOUREN-TABELLE NUR NOCH UNTER WERK 100 !!!

BLOCK

&

after



Tabelle - Anlegen, Ändern, Löschen

R. 0.0.1.20110831152839 Domäne 102 Benutzer 0317auf 01.09.2011 08:43:36

Tabelle: _____

Unt/Werk 102

Tabelle Nr.

Schl-Nr.

Bezeichnung

Skonti-Tage

Prozent

Netto-Tage

Lfd. Nr.

Anzeigen (F13) Zugang (F1) Ändern (F3) Löschen (SF2) Schließen (F16)

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Option 2

„combining basic dialogues and
creating new & more complex dialogues“

combining & creating new dialogues

2. combining basic dialogues and creating new & more complex dialogues

Goal : more user acceptance

other advantages : simplified user navigation

Method : implemetation of new client apps based on Java or .Net; using toolkits for faster implementation



combining & creating new dialogues

before: (example from ITUG 2003)

a logical transaction split up into 5 simple transactions

The image displays five overlapping SAP transaction windows, each titled 'Kruppl: px - Default', illustrating a sequence of steps in a logical transaction:

- Window 1 (Top Left):** Transaction 'PS UB BED: 1000 163 AGGREGATEFOL. KB'. It shows 'KB-NR.: 1910512000' and the prompt 'MATERIALFEHLER IN ZEILE 3 EINGEBEN'.
- Window 2 (Middle Left):** Transaction 'PS DB BED: 1000 163 AGGREGATEFOL. KB'. It shows 'KB-NR.: 1910512000' and 'MATERIALFEHLER IN ZEILE 3 EINGEBEN'. Below this, it lists 'AGG-FOLGE-WAP' and 'AGG-FOLGE-KB' with various codes.
- Window 3 (Middle Right):** Transaction 'PS DB BED: 1000 171 ERF. FERT. VORSCHRIFT'. It shows 'WAP-NR.: 00000000000000' and 'KB-NR.: 1910512000'.
- Window 4 (Bottom Left):** Transaction 'PS DB BED: 1000 108 KB-WAP-BEMERKUNGEN'. It shows 'KB-NR.: 1910512000' and 'WAP-NR.: 4510600600200'.
- Window 5 (Bottom Right):** Transaction 'PS DB BED: 1000 101 ENTSPERREN'. It shows a table with columns for 'KZ/ WAP - NR.', 'KB - NR.', 'WB - NR.', 'AUS- FOLG LETZ DATUM', 'SPER END', and 'AUSF. SP'. The table contains one row of data. Below the table, it shows 'GRP: WAP: KB: WB: AUSL: F-AGG:' and 'LET-AG: DAT-SP: SP-GRD: END-AG: AUSF-NR: SP-KZ:'. The transaction is identified as 'Auskunftsfunction - Ent Sperren'.

combining & creating new dialogues

after: (example from ITUG 2003)

just one transaction

Materialstück 0938310002 freigeben Coil Info: 0938310002

R. 4.4 Aggregat: FBA8 CW Benutzer: 0701 auf PROD 28.04.2003 15:03:37

Materialstück: 0938310002 Aggregat: Bewertung: Nacharbeit

Hauptfehler: 5881(1650, Gewicht zu klein) Stärke: 0

☐ Nachdressieren ☐ Streckrichten
☐ Nachölen ☐ Inspizieren
☐ Mustertafel ☐ Besäumen
☐ Nachglühen ☒ Umwickeln
☐ Abwickeln von ☐ oben ☐ unten
☐ Fehler bereinigen Fehler:
☐ Seite tauschen ☐ Verpacken
☐ Coil teilen Anzahl der Teile:
☐ Zusammenschweißen mit Folgemenge:
☐ Mit Meister ☐ mit Betriebsleitung ☐ Tagesschicht

☒ UWL

☒ Aggregat UWL verwenden ☒ UWL 1 ☐ UWL 2 ☒ Mit Probennahme

Amplitude Mitte:	1	Walzbreite:	13850	Overrun-Breite:	0
Amplitude Rand:	4	Walzdicke:	810	Mehrfachbreit:	1
Amplituden-Messl.:	0	Oberfläche:	2	Streckgrad:	0
Rauheit QP:	65	Sortier-KZ:	0007	Lage Gutseite:	5
Rauh. Einschr. MIN:	11	Adjustage Breite:	13770	Richten:	0
Rauh. Einschr. MAX:	16	Adjustage Dicke:	800	Endbesäum-KZ:	1
Max. Anz. Löcher:	0	Dressiergrad:	12		

Bemerkung:

Lesen der Daten erfolgreich.

Stück-Nr.: 0938310002

Mat-Fehler SperrG Inst Datum / Zeit
5881 <1650> 0546 QP 28.04.2003 03:37:01 UWL2
Gewicht zu klein
5464 <0357> B8028 28.04.2003 09:09:30 UWL2
Falscher Außendurchmesser
Kunde TKS NEUWIED BQ ZSTE 180 BH
Verwendungszweck AUTOMOBILTEILE, AUSSEN
Auftrags-Nr. 4510764000100
Vorstufen-Ident 9297747000

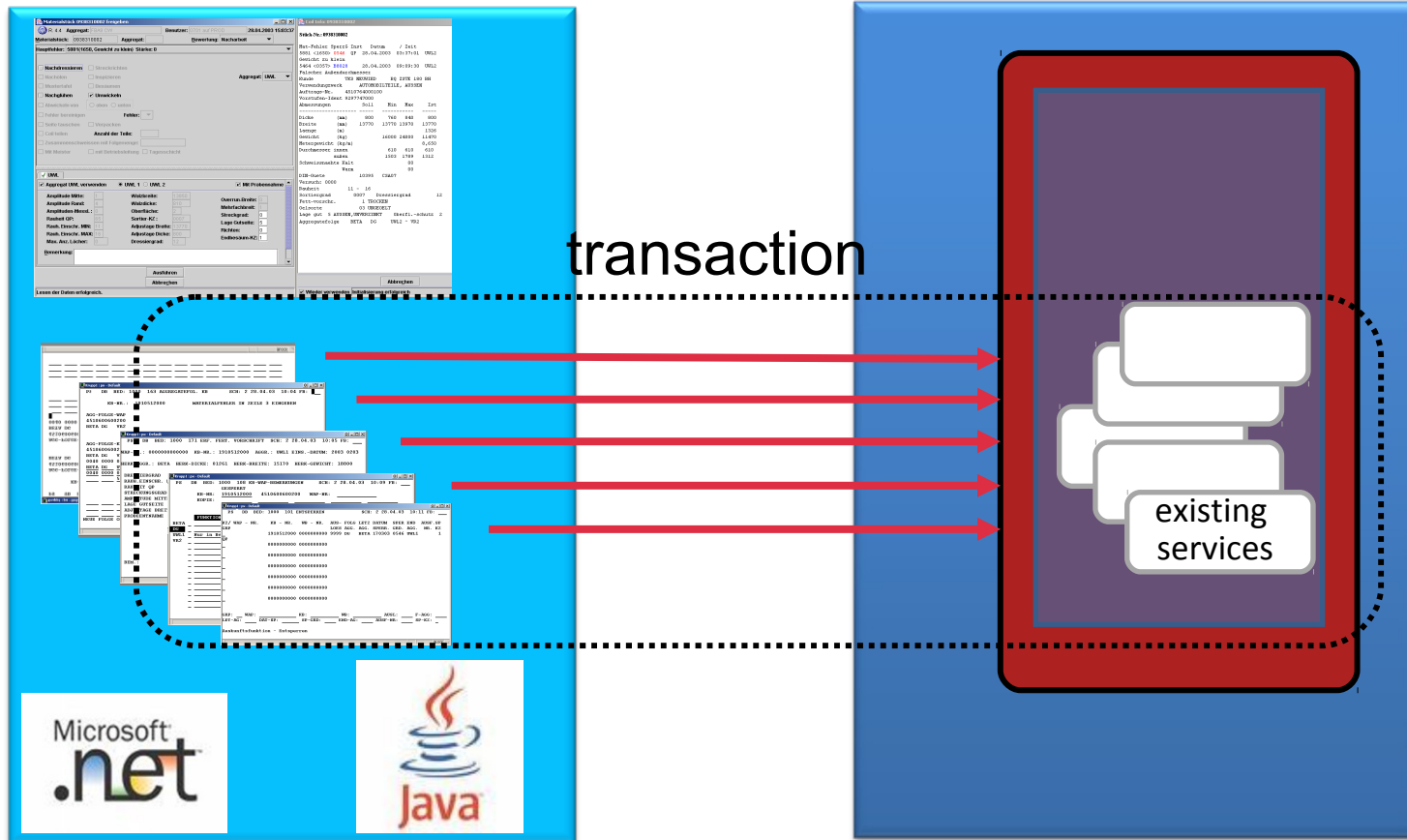
Abmessungen	Soll	Min	Max	Ist
Dicke (mm)	800	760	840	800
Breite (mm)	13770	13770	13970	13770
Laenge (m)				1326
Gewicht (kg)		16000	24000	11470
Metergewicht (kg/m)				8,650
Durchmesser innen		610	610	610
außen		1503	1789	1312
Schweissnaechte Kalt			00	
Warm			00	

DIN-Guete 10395 CSA07
Versuch: 0000
Rauheit 11 - 16
Sortiergrad 0007 Dressiergrad 12
Fett-vorschr. 1 TROCKEN
Oelsorte 03 UNGEÖLT
Lage gut 5 AUSSEN, UNVERZINKT Oberfl.-schutz 2
Aggregatefolge BETA DG UWL2 ^ VR2

☒ Wieder verwenden Initialisierung erfolgreich

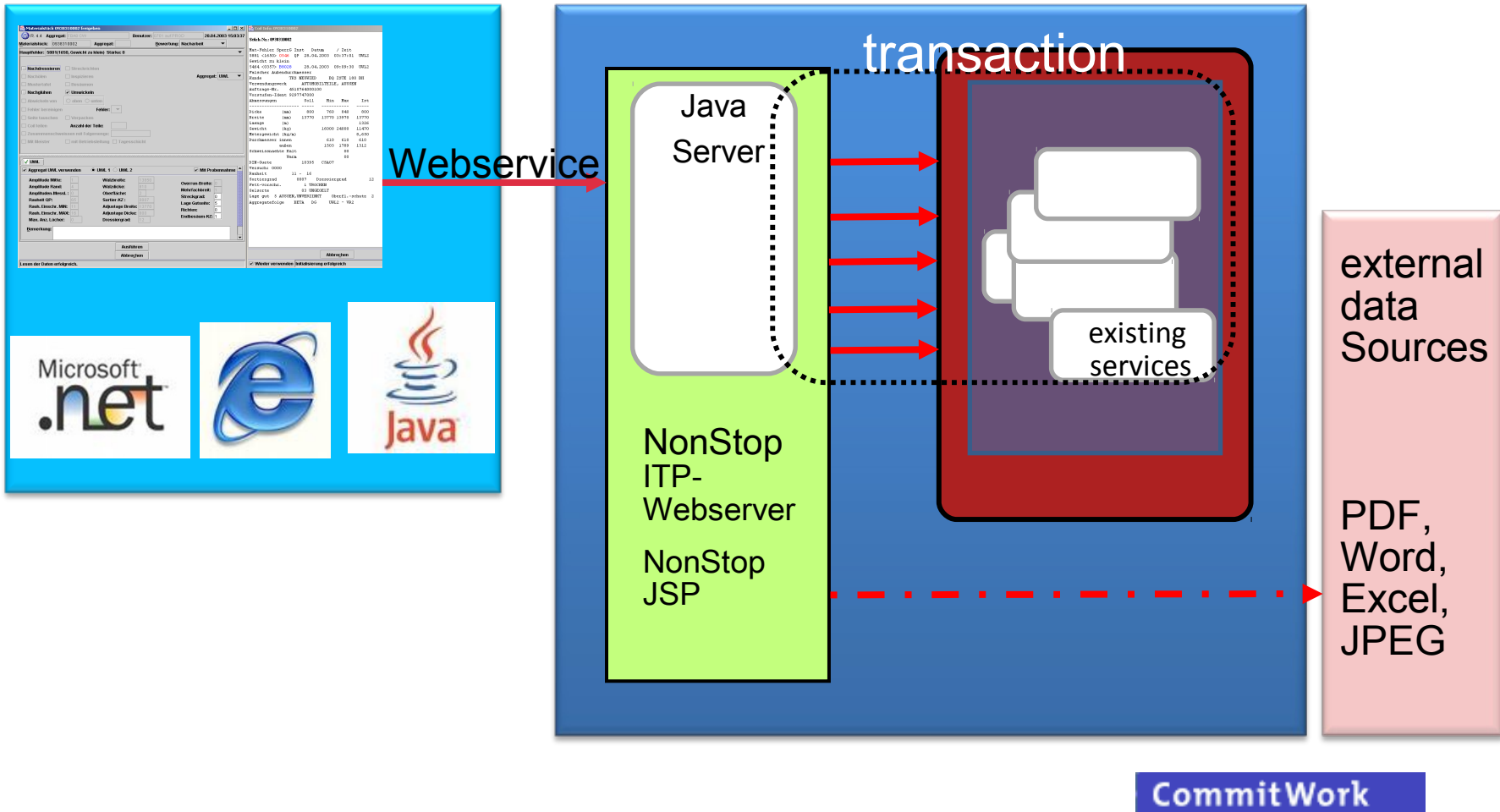
combining & creating new dialogues

combining functions within a client



combining & creating new dialogues

combining functions within a server



combining & creating new dialogues

scrolling in huge tables

Materialstücke bewerten

Datei

R. 4.4 Aggregat: FBA8 CW Benutzer: 0701 auf PROD 28.04.2003 09:34:42

Suchkriterien

Ident. von: bis: Aggregat: Instanz: GÜW Materialart: KB Sperrdatum von: bis: Fehler:

Suche starten

Ident	G	T	S	A	PBV
0937190002	S				
0937200002	S				
0937220002					verpackt (1)
0938260002	S			S	
0938270001	S			S	
0938270002	S			S	
0938310001	S				
0938310002	S				
0938670001	S			S	
0938670002	S			S	
0950900000	S				
0950910001	S				verpackt (1)
0950910002	S				verpackt (1)
0950910003	S				
0961260001	S			S	
0965760001	S				
0965760002	S				

Auswahl umkehren Aktualisieren

Coil-Info ... Beobachten ... **Abwerten ...** Freigeben ... Laborwerte ... Abbrechen

Suche erfolgreich beendet.

Coil Info: 0938310002

Stück-Nr.: 0938310002

Mat-Fehler SperrG Inst Datum / Zeit

5881 <1650> 0546 QP 28.04.2003 03:37:01 UWL2

Gewicht zu klein

5464 <0357> B8028 28.04.2003 09:09:30 UWL2

Falscher Außendurchmesser

Kunde TKS NEUWIED BQ ZSTE 180 BH

Verwendungszweck AUTOMOBILTEILE, AUSSEN

Auftrags-Nr. 4510764000100

Vorstufen-Ident 9297747000

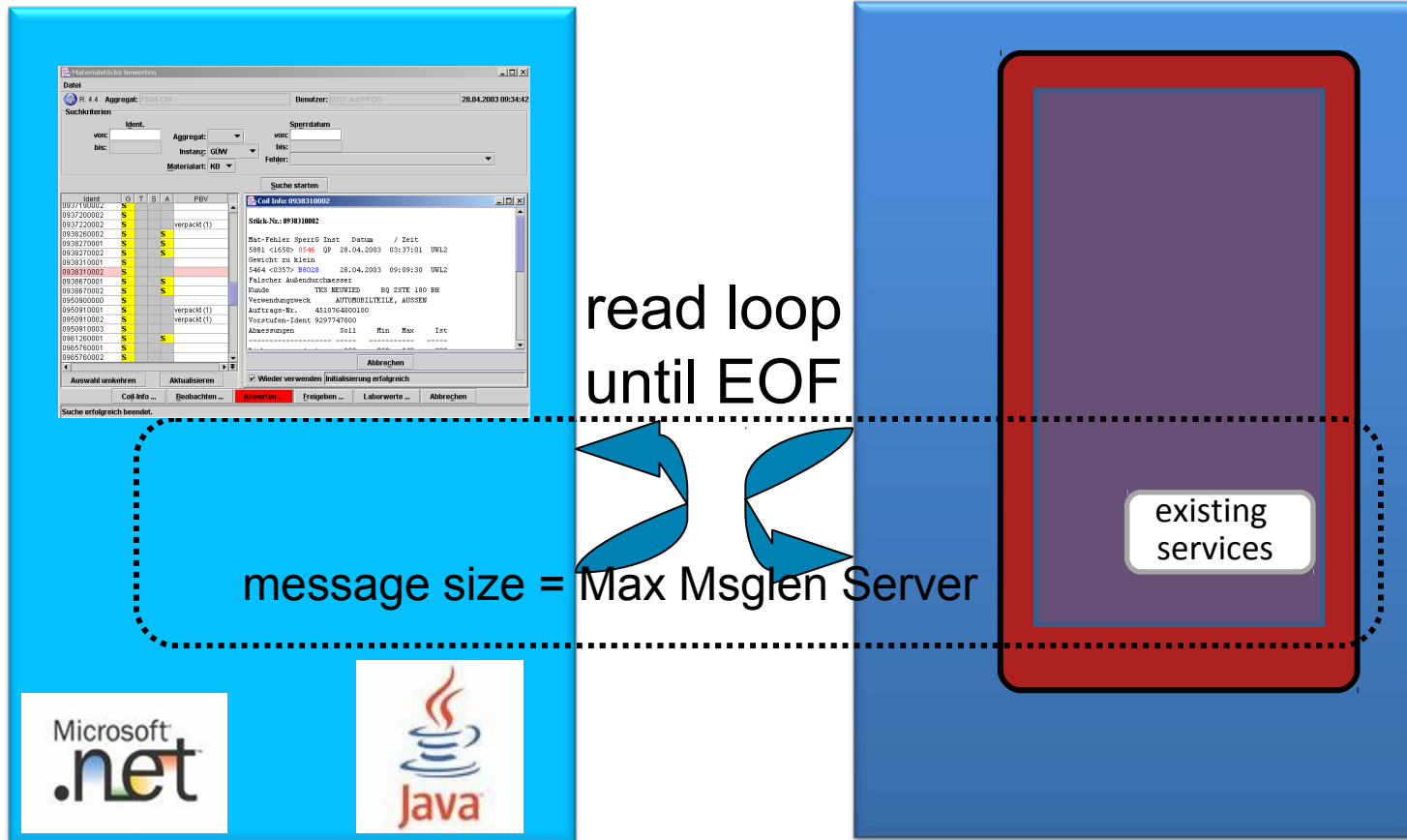
Abmessungen Soll Min Max Ist

Abbrechen

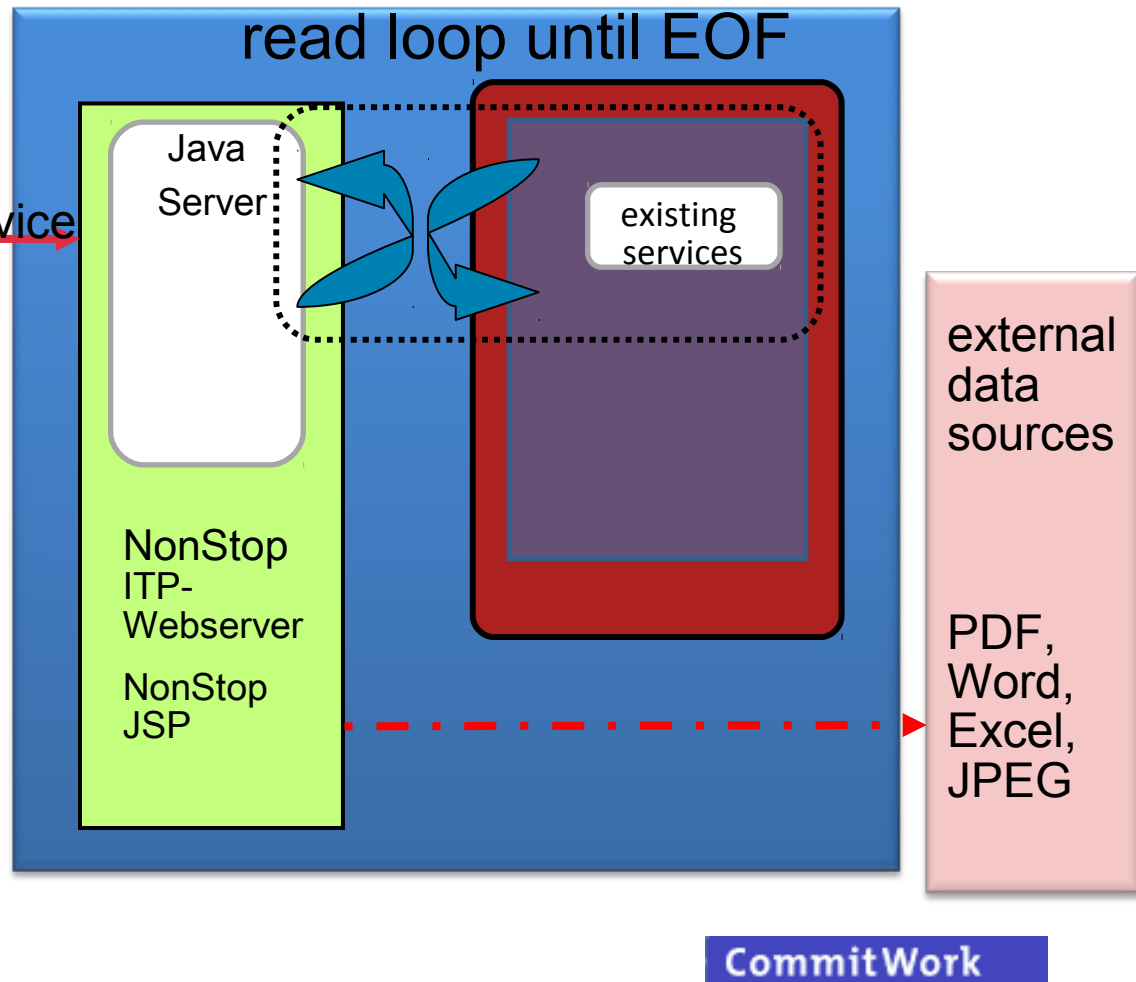
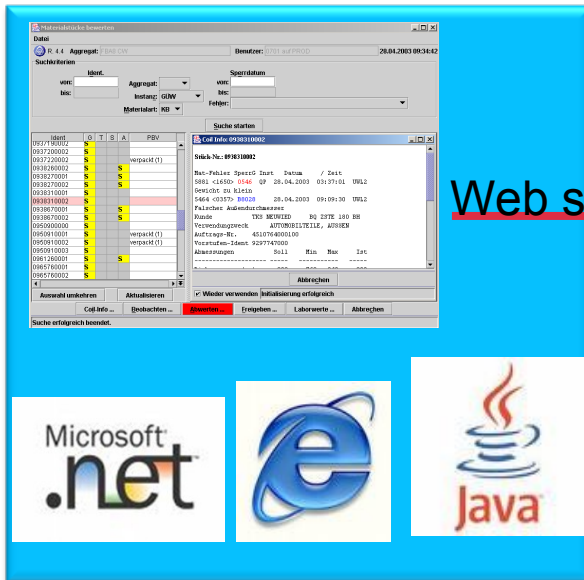
☒ Wieder verwenden Initialisierung erfolgreich

combining & creating new dialogues

scrolling in big tables within a client



scrolling in big tables within a server



combining & creating new dialogues

using toolkits:

Screensection:

```
05 BS-BREITE-ERZ_1          AT 06, 66 PIC Z(4),Z  
  FROM BREITZ-ERZ OF S-AD-A52-TMPMEM-I-O  
  DIM  
    OCCURS ON 9 LINES.
```

Prog: 5058	1	EinsBreite:	
		Dicke :	
Einsatz	Gew	K SollBr	
E S429700000	13060	M	726,0

Swing

DDL

transport object

Java components

new dialogue = Java components + logic

combining & creating new dialogues

mixed operation: ScreenCobol → Java Client:

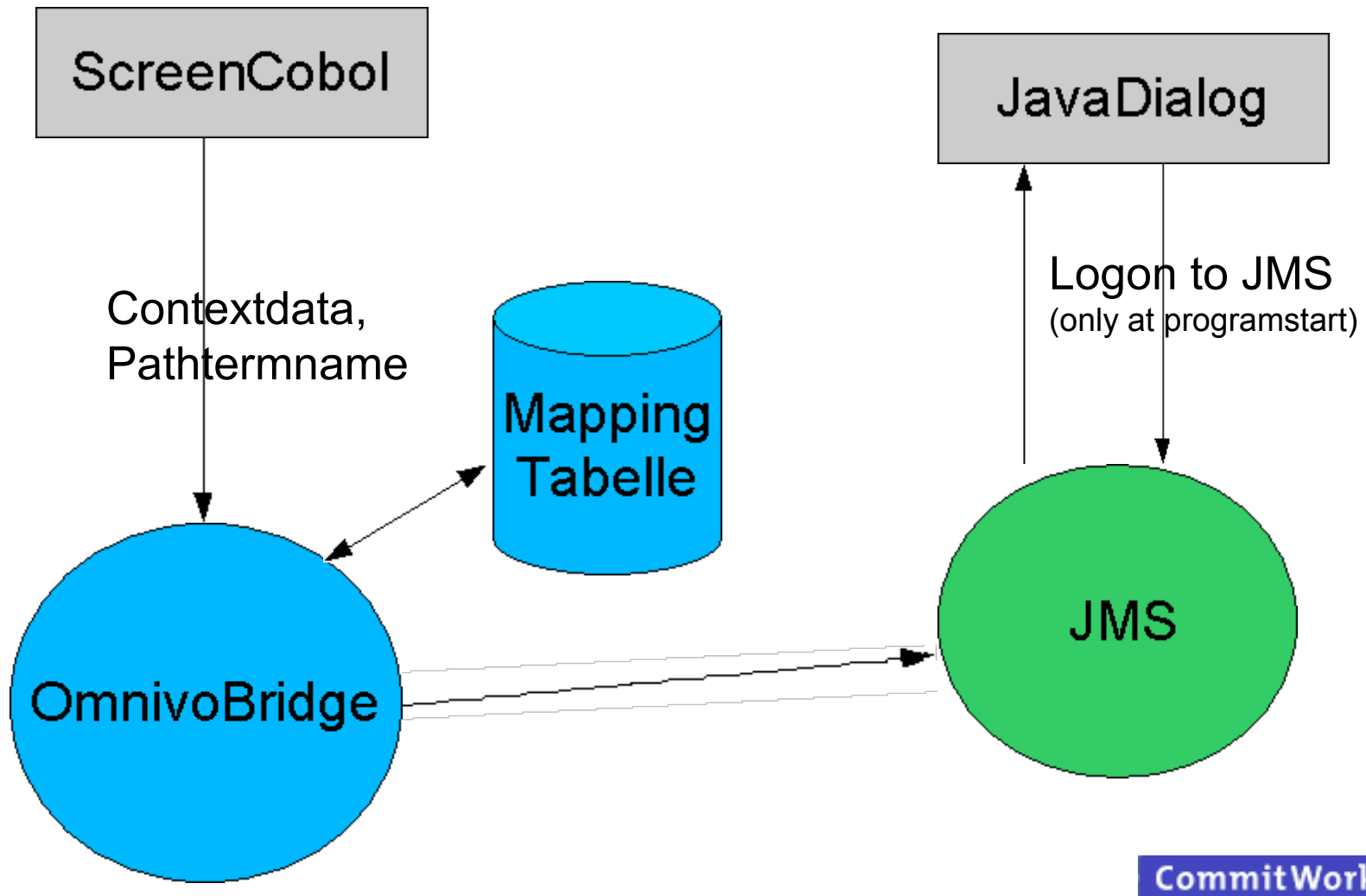
ThyssenKrupp Steel Betr: TDV II Benutzer: 0701 13.11.2007 15:59
Bochum \$TK10 Bild: B12 Information Stueckdaten Folgebild:
SF2/F15: WB-/KB-Nr.: A428900000 F2/F16: KS-Stueck-Nr.: 7066168 00 C
F3: Fremdmaterial-Nr.: Praeferenz: 01 DE 04 12
Auftrag/Pos Pt Kombi Lief.term APL-Var Stueck-Merkmale Wff-Nr. LW Charge
207606 2 30.11.07 0 8685235 1 330 55 12 118314
Letztes Aggregat Aggregatenfenster Mat-kl: 04 Wffbez HSZ220/30AB2/ISO220
(Ist-Termin) (Soll-Termin) Brammen-Nr Kaltband-Nr Bestell/Verbrau
AGG520 X AGG530 - AGG530 A428900000
11.11.07 23:11 17.11.07 21.11.07
Bearbeitungen (wenn Aggr. angekreuzt) OHNE US-PRUEF
ARB060 ARB060
Gewicht Dicke Breite Laenge Materialart KZ-Loe ID Ph
23960 0,70 1337,5 3259.997 GEB,TROCK.+ GEB,GEGL 610 3
WzB Walzbefund: kein Text vorhanden
BzB Beizbefund: kein Text vorhanden
PRL PRL-Info: kein Text vorhanden
TX3 Tx3-Text: kein Text vorhanden
Lager-platz datum uhrz. Vorgabedaten Seq+ Status Anz. Gue
ort 13.11.07 04:50 AGG Prog.lfd. lfd 0 Datum Sper te
321 Lpl: 1 1 11 1 530 54 14 14 1 12.11.07 0 1
F14: Bearb. F8: Texte ETIKETTEN: F4: Odette- F6: Kleber- F9: KS- F10: K
F13: VP zu Ring NP/PP WB-/KB-Nr. S-NP KS-Ident-Nr. SF4: Verzinkun



Calling a Java Client out of a
ScreenCobol requestor

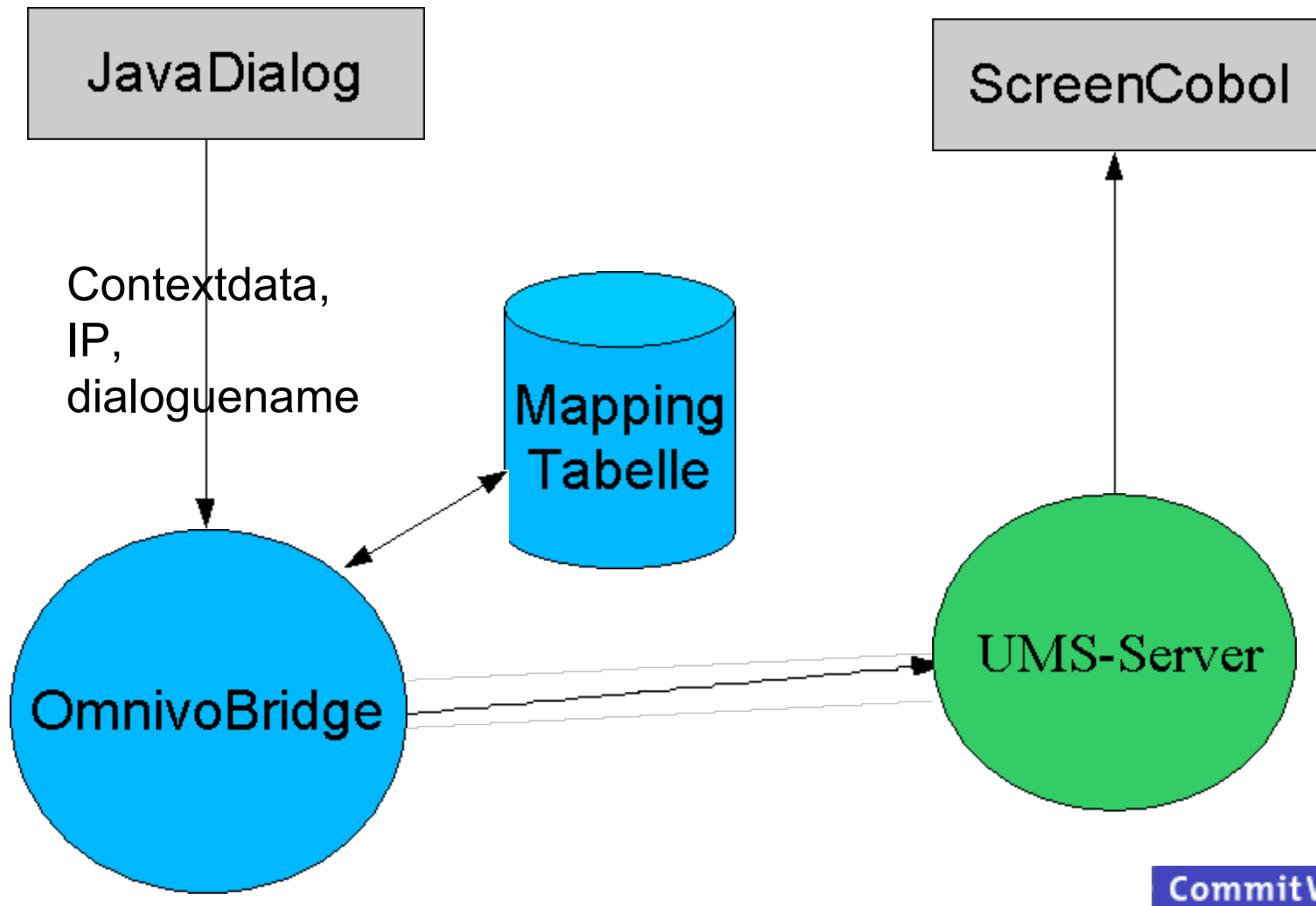
combining & creating new dialogues

mixed operation: ScreenCobol → Java Client:



combining & creating new dialogues

mixed operation: JavaClient → ScreenCobol



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Option 3

„using a SOA-stack layer“

using a SOA-stack layer

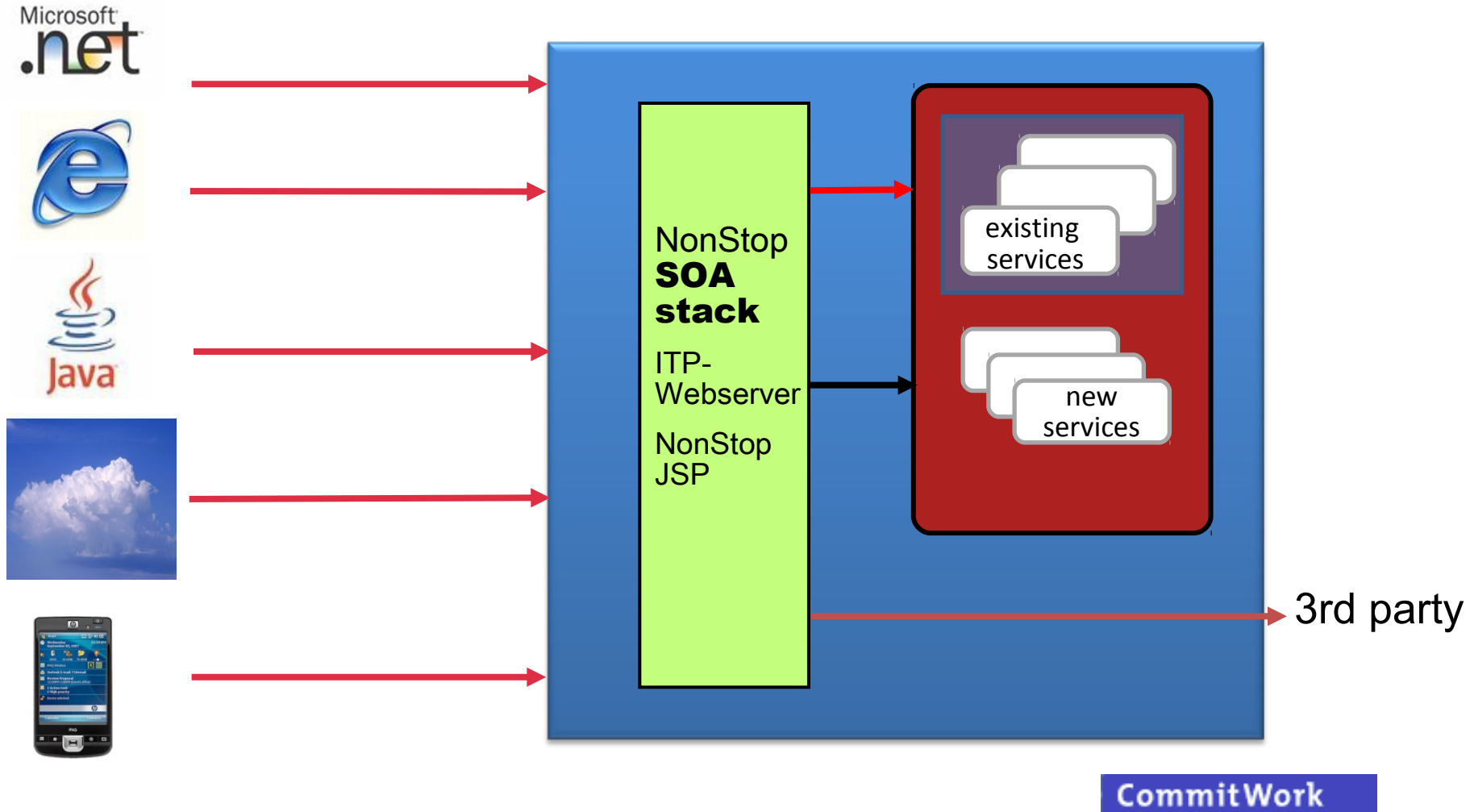
3. pulling in a SOA-stack layer on a NonStop Server

goal: highest flexibility for all requirements on client- and server side



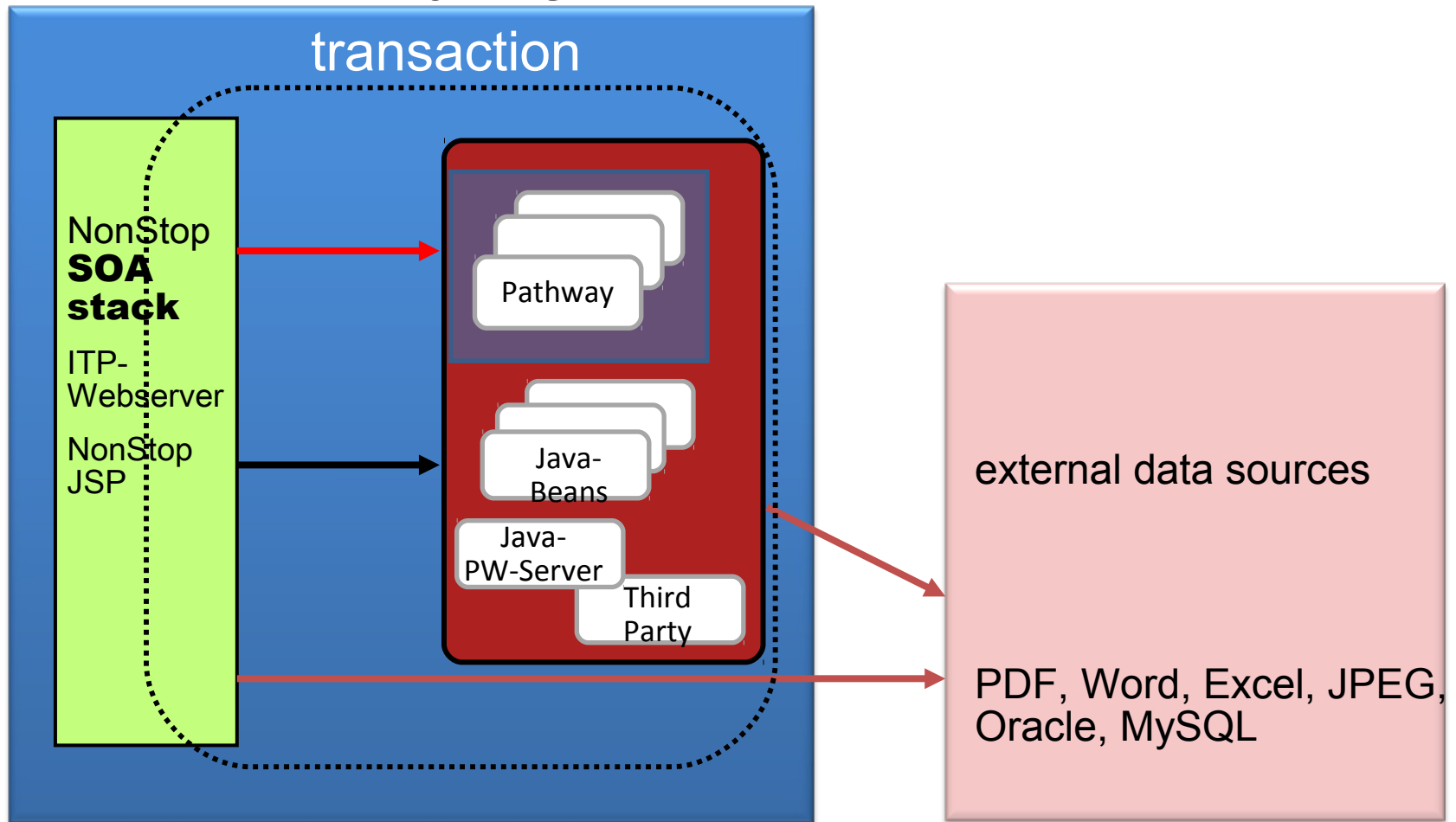
using a SOA-stack layer

open for most everything



using a SOA-stack layer

open for most everything



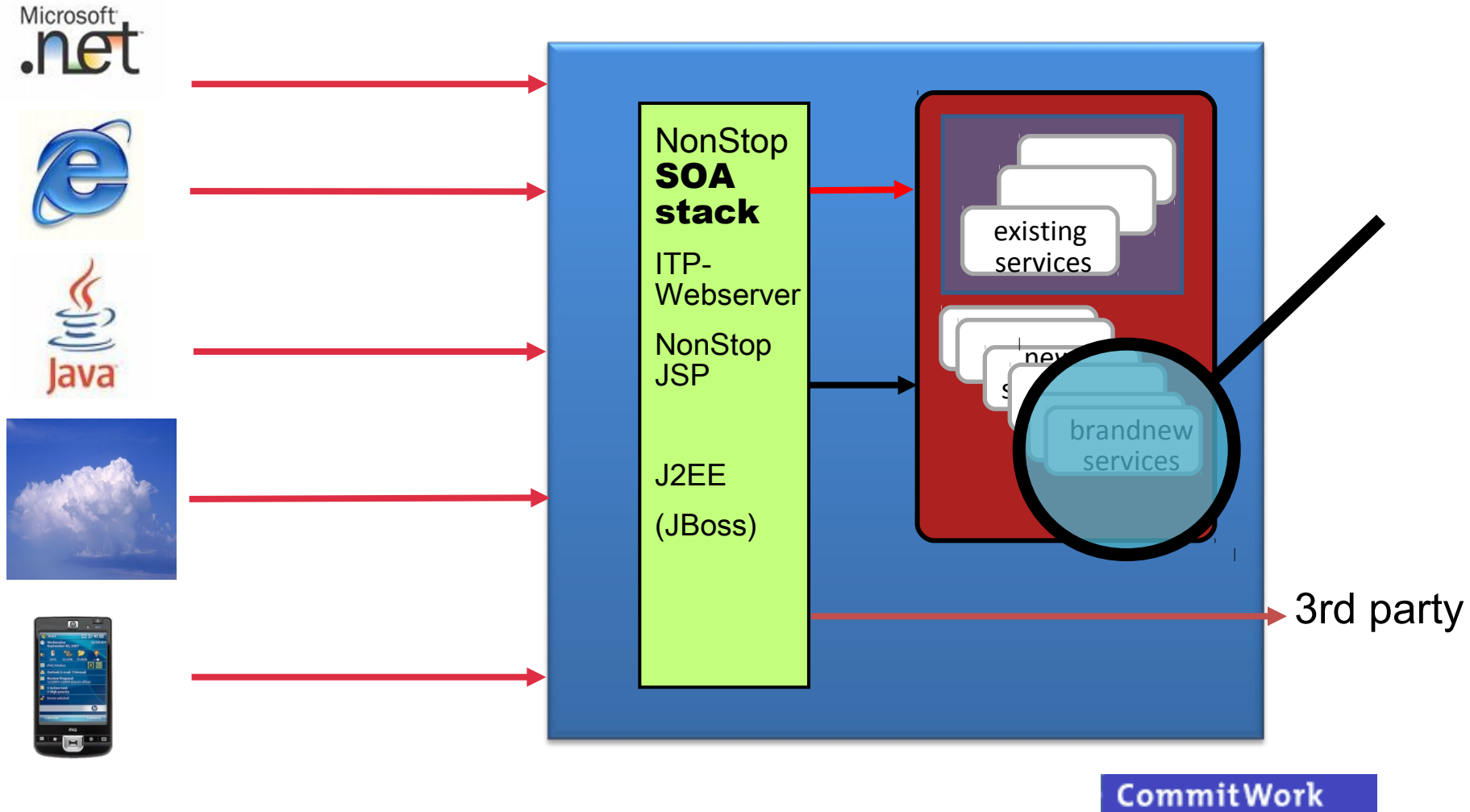
using a SOA-stack layer

one function – services coming from several servers



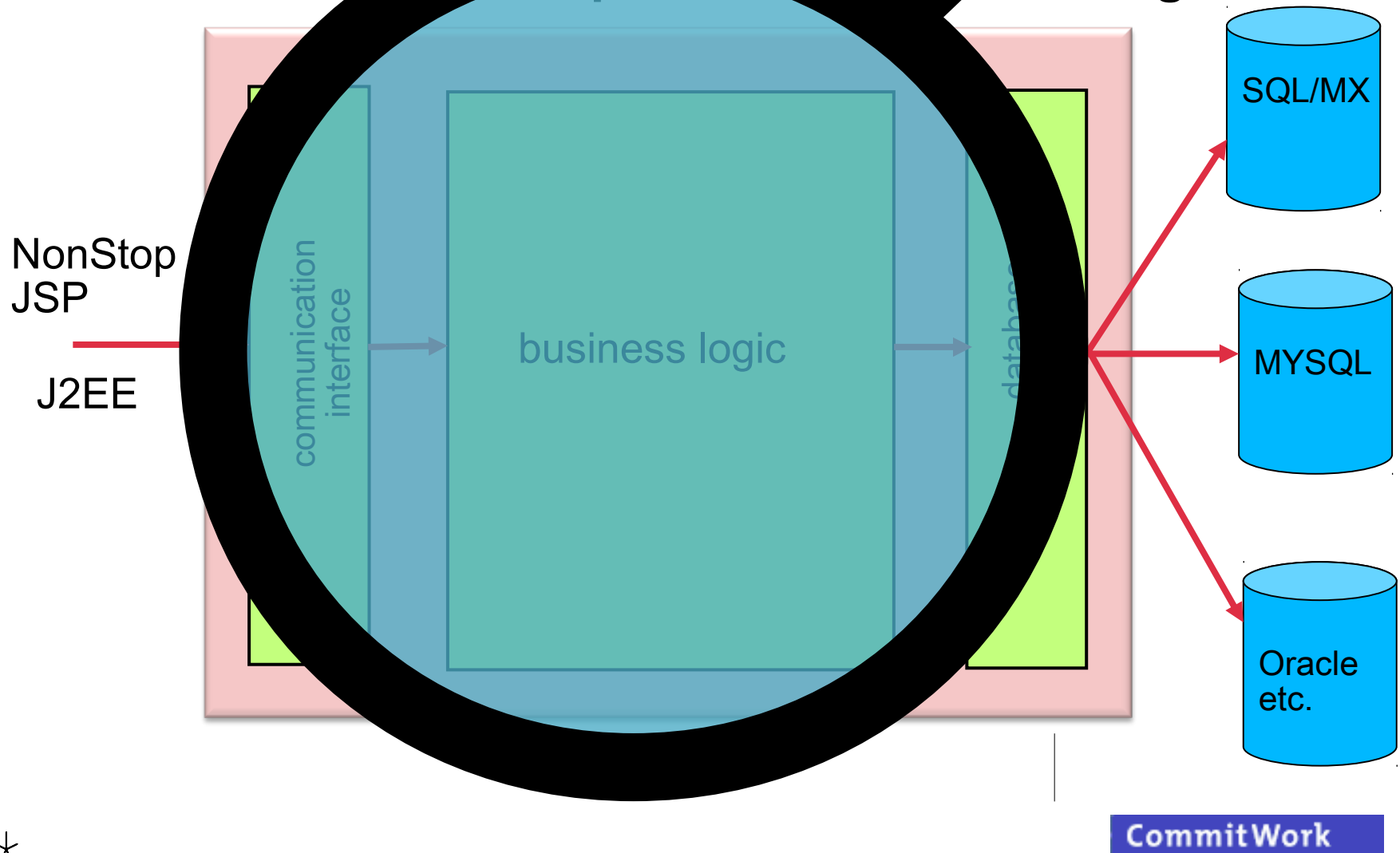
using a SOA-stack layer

smooth migration



Using a SOA-stack layer

new service encapsulate business logic

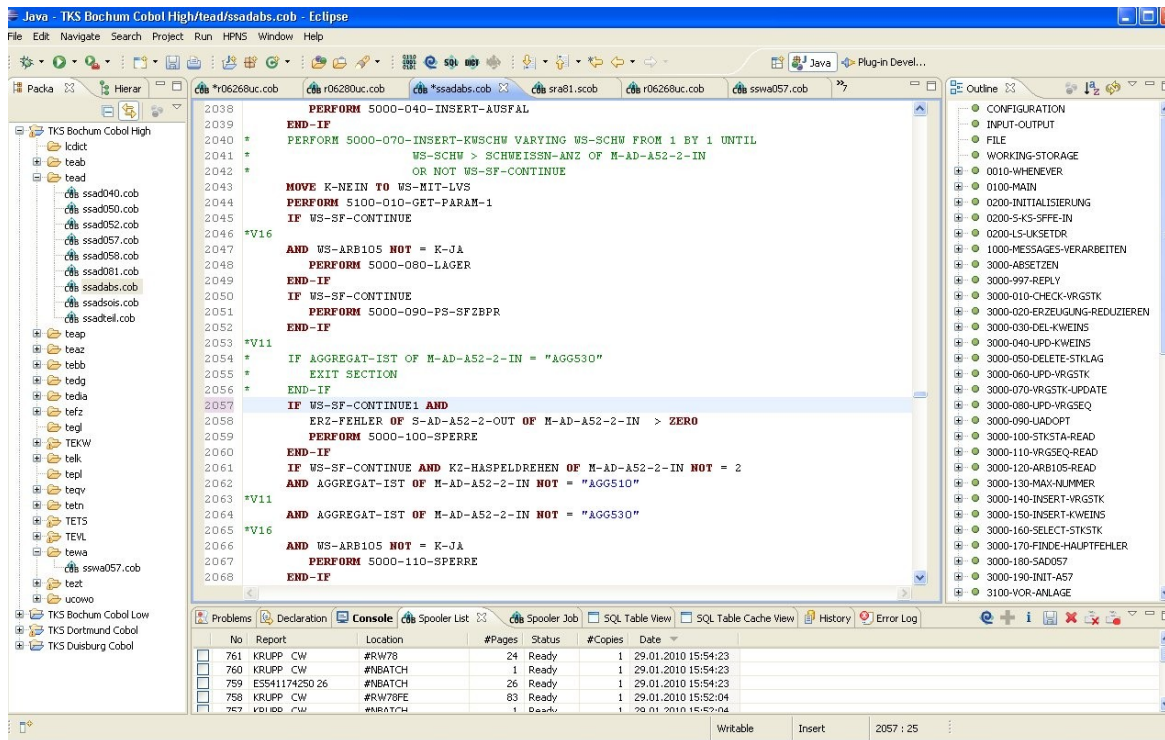




CommitWork Developer Suite (CDS)

Modernizing your existing development environment

CDS for code 100, cobol, tal, screencobol,...



You want to see more -

please visit me in showroom,
have a live demo
and ask for a free trial version

CDS Features

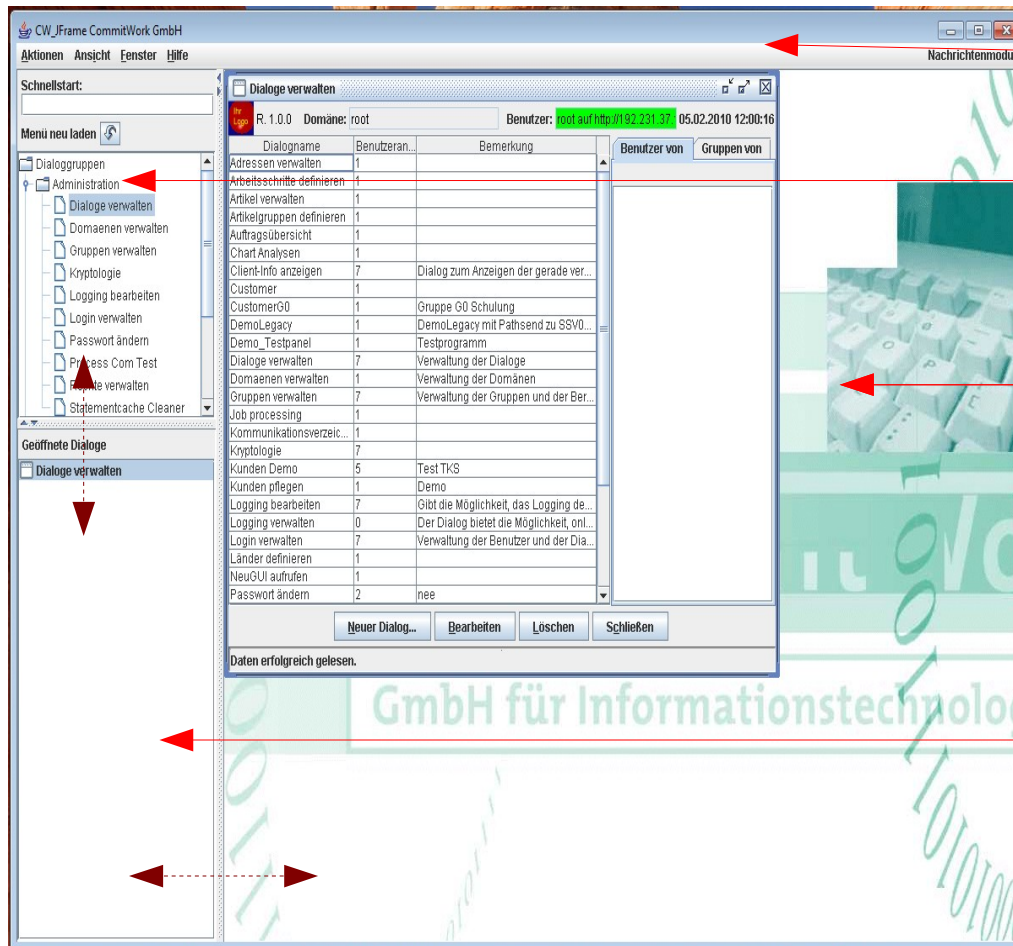
- Integration into your existing development environment
 - Utilization of your existing compile macros
 - Spooler view
 - DDL
- Powerfull editors for Cobol (Cobol85 and Screen Cobol), Tal, C.
Showing the compile errors within the editors
- Generation of SQL statements
- Register yourself at www.commitwork.de to get a demo.
Please, contact us for the demo license key.

Work

CommitWork Software



What is OmivoBase? An Application Environment – Desktop view



Dynamic menues

Dialogchooser

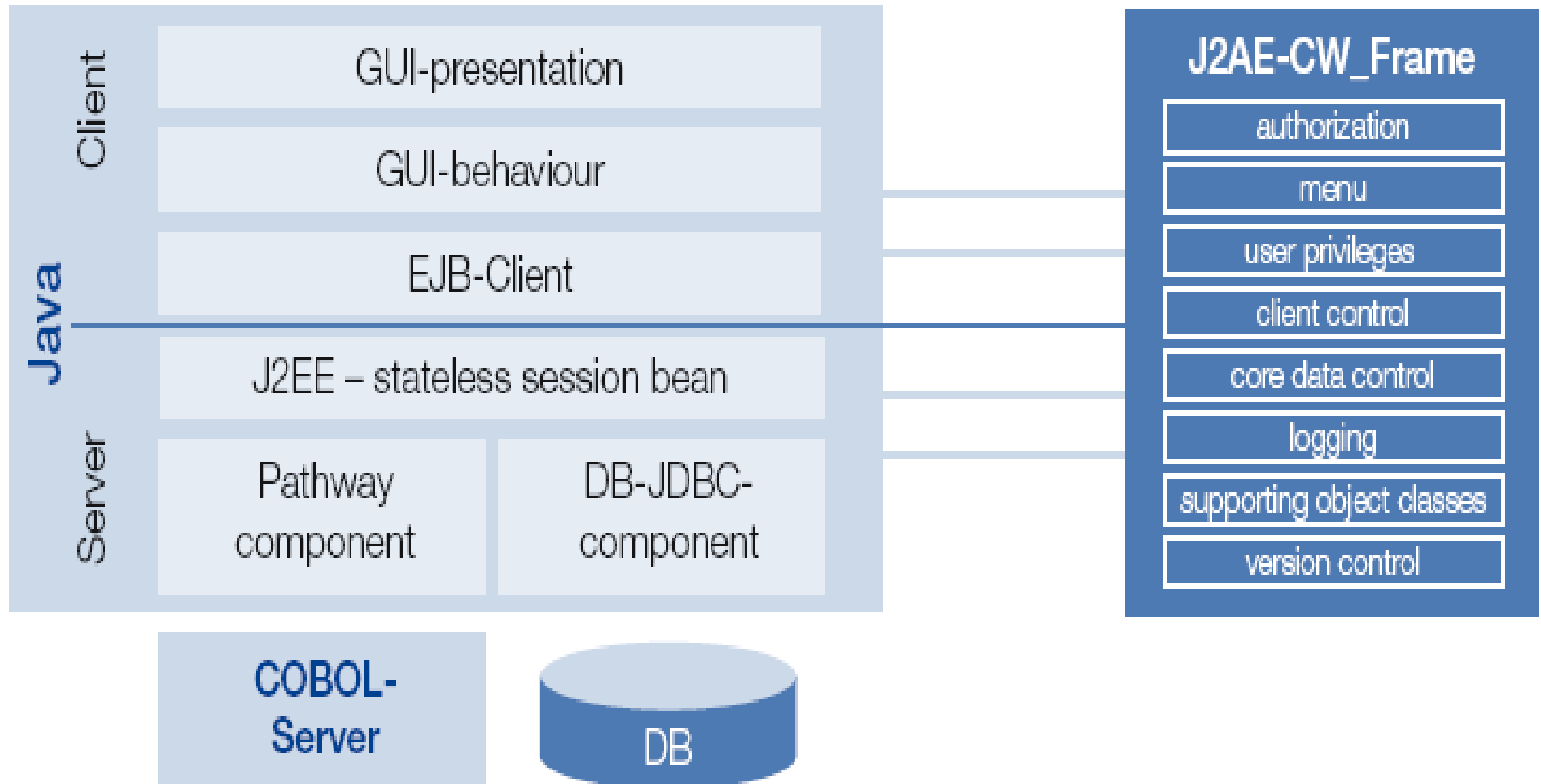
Panel for dialogs

List of open dialogs

◀---▶ = *resizable Panels*

You can select the desktop or single window view

OmnivoBase - Architecture



OmnivoBase

- more than 500 Java Classes for your use
- only some modules:
 - Menusystem
 - authorization
 - user privileges
 - ...
- CommitWork Eclipse plugin developer tools like
 - OmnivoDDL2Java
 - OmnivoProject
 - OmnivoDialog
 - OmnivoScobol (Demo)

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conclusion

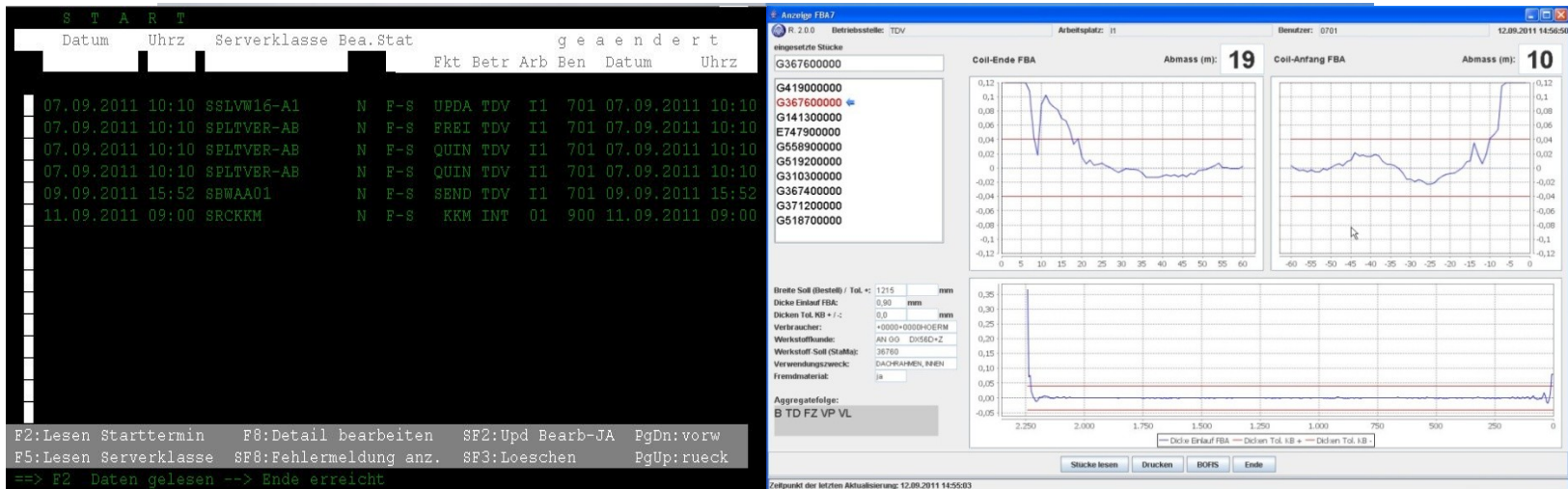
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conclusion

- modernizing is more than just colored screens
- NonStop Servers should also carry new & modern software
- protection of investment by encapsulating the business logic
- smooth migration
final goal: eliminating any hardware lock-in
- use the new NonStop Server resources for new functions
- proven in practice, please ask for references

conclusion

modernizing, but done properly!



more information? please ask HP or CommitWork.

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