

Integrity and Compliance, and the Change Management Process in z/OS - A User Experience

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DATEV eG

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Session #13950



Agenda

- Company Overview
- Why we needed a Compliance Tool
- Which data was available without a new tool
- Test possible solutions
- Requirements for change creation
- Phase 1: the Mailing interface
- Phase 2: http/Soap interface (Web-Service)
- Who uses that information?

The Company



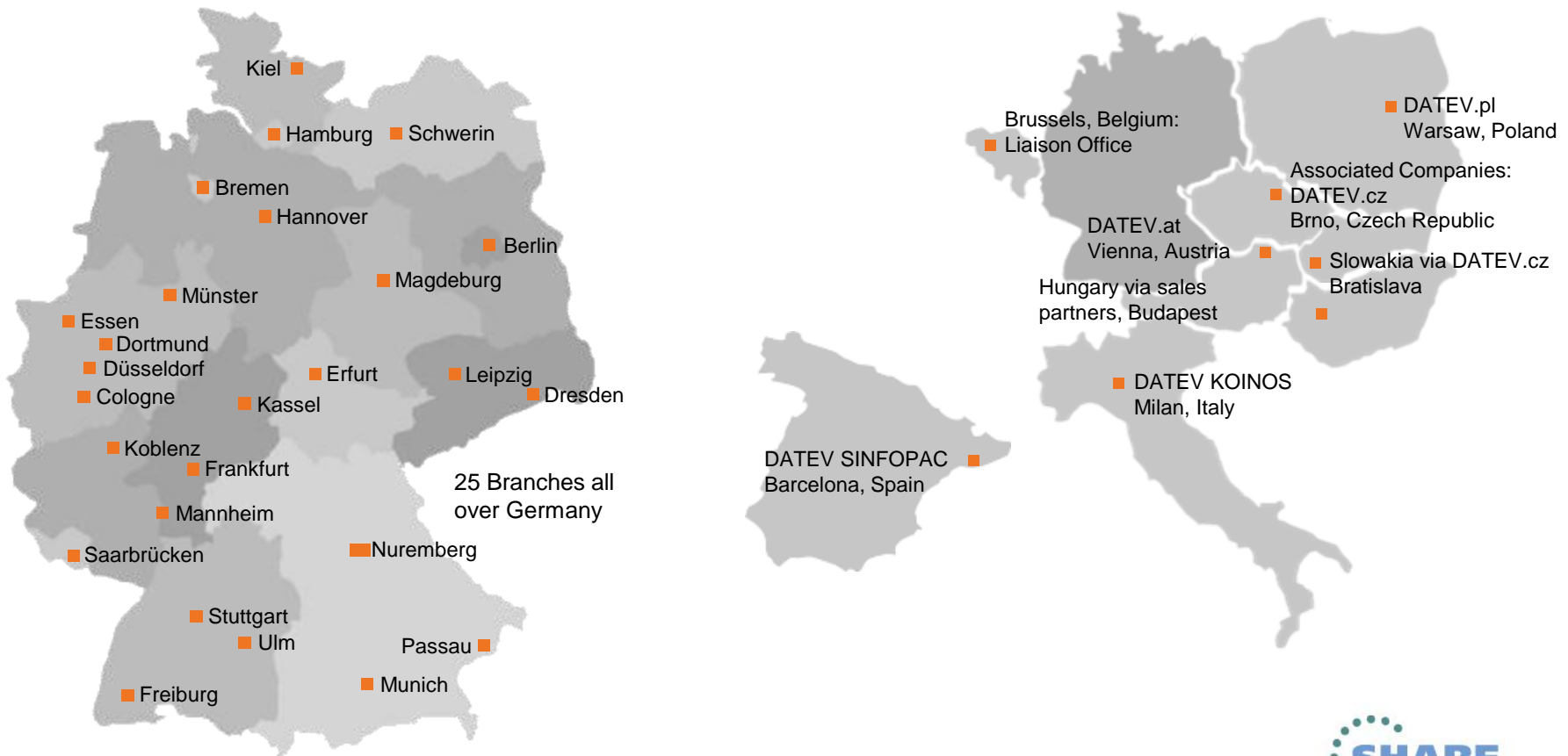
DATEV eG
Headquarters: Nuremberg
Founded: 1966

Professional EDP service
organization in Europe for:

- Tax consultants
- Lawyers
- Attested auditors
- Certified Public Accountants

The Company

Branches in Germany, Liaison Offices in Berlin and Brussels and Associated Companies



DATEV: Mission and Members

Our Purpose

- Economical promotion of our members
(40,013 in 2012)
- That means:
Supporting all services carried out by our members on behalf of their clients

Our Members

- Tax consultants
- Lawyers
- Certified Public Accountants
- Attested auditors
- Tax consulting companies
- Auditing companies
- Law firms

Range of Products

Software

- Accounting
- Audit
- Human Resource Management
- Business Advice
- Internal Organization

2.5 m. Financial Accounting and 10 m. Payroll Slips each month

Services

- Personal Services
- Electronic Services
- Service Applications

1000 employees dealt with @ 1.9 m. service contacts in the year 2012

Advice/Knowledge

- Strategic Advice
- Advice for Start-Ups
- Continuing Education
- Literature
- Data Bases

About 235,000 users attended DATEV seminars in the year 2012

Data Processing Center, Printing and Shipping



Facts and Figures

CPU:

38,304 MIPS

- 2 IBM 2827-H66
- 2 IBM 2818-M10 ICF

Server:

- 1,038 Unix
- 5,517 Windows

Storage:

- 15.3 PB on disc drives and tape cartridges

Printing:

- 40 laser printers
- 5 color printers

Shipping:

- 14 m. commissions annually reduced to 10 m. packages

As at December 2012

Why a compliance tool?

- The task was to find a product that detects and saves changes on system parameter files and system load libraries.
- We also needed a function to undo the changes.
- We needed verification about “who changed what and when” on the z/OS systems.
- At best, the product should have an interface to our change management tool.

What data is available but insufficient

- Statistical info in ISPF
 - Only for PO/PDSE files
 - No LOAD libraries
 - Easy to manipulate (stat off)
 - No information if someone uses a job or program for the change
- Dataset backup (HSM - daily)
 - No automatic versioning on member level
- SMF records about changes possible (job, user, PGM)
- Ability to view last used IPL parms in System Automation (INGPLEX)



Test installations

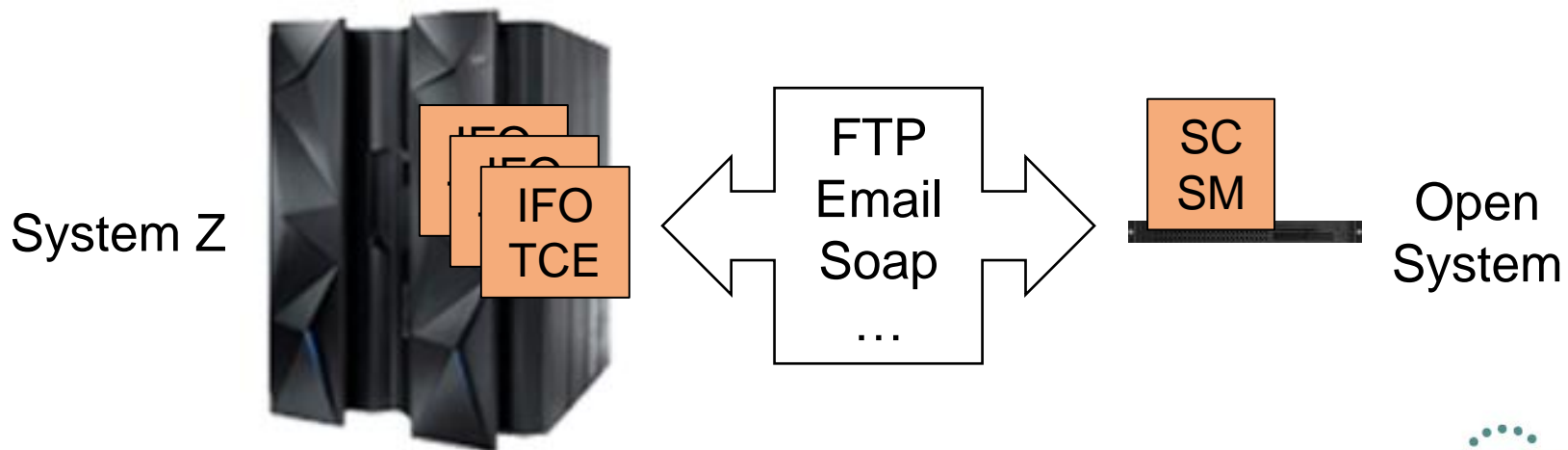
- Our Mission was to install and test two products.
- Both products met our requirements.
- With Image FOCUS and The Control Editor, we had the benefit of the Base Image FOCUS functions:
 - Parmlib checking before IPL
 - Parmlib checking for new z/OS releases
- We chose Image FOCUS and The Control Editor from NewEra Software.

Image FOCUS and TCE in production

- Installed on all LPARs (11 LPARs, 2 Sysplexes)
- TCE environment will be activated during TSO Logon
- Requirement from Change-Team manager to see all changes and descriptions in one screen
- A requirement to have all changes available in our company's Change Management Tools (Service Center, Service Manager) was met.

Requirements for change creation

- Software on z/OS
 - Image FOCUS
 - The Control Editor
 - Software on distributed
 - Service Center (Peregrine)
 - Service Manager (HP)
- Request of an interface to the open systems world



Phase 1: Email Interface

- NewEra's solution provided an email interface.
- It is available for all kind of reports (not only detected changes).
- System REXX is required.
- SMTP mail server is required.



Phase 1: Email Interface

Descriptor Panel (edit macro):

```
File Edit Edit_Settings Menu Utilities Compilers Debug Help
EDIT      DESCRIPTOR_EDIT--...'SYS1.PARMLIB(BPXPRM00)'      Columns 00001 00072
Command ==> _____ Scroll ==> CSR
***** ***** Top of Data *****
=NOTE=    Image Focus Control Editor 7.5 ; See messages that follow
==MSG>   Enter a description for this change in the lines below:
==MSG>   Warning-Nonblank lines on entry are TEMPLATE lines. Do not alter them.
000001   -----THE CONTROL EDITOR-----
000002   SYSPLX:SYSPLEX1  SYSNM:           USRID:T03281A  TIME:13:27:51  DATE:11/09/12
000003   -----ENTER DESCRIPTIVE TEXT BELOW----- Edit -
000004   GRUND DER AENDERUNG FUER DOKU-CHANGE ANGEBEN:
000005
000006
000007   BEI "CANCEL" WIRD DAS MEMBER NICHT GEAENDERT!
***** ***** Bottom of Data *****
```

Phase 1: Email Interface

- After changing a Controlled Member, an email was sent to Change Management with the desired information as an attachment:

```
-----EVENT IDENTITY-----  
01C|-SRC: T03281A-----THE CONTROL EDITOR----- Edit -  
02C|SYSPLX:SYSPLEX1  SYSNM:XXXX      USRID:T03281A TIME:07:41:52 DATE:10/29/12  
03C|-DSN: SYS1.PARMLIB(BPXPRM00)-----VOL: TCAT01-  
-----EVENT DESCRIPTOR-----  
04T|GRUND DER AENDERUNG FUER DOKU-CHANGE ANGEBEN:  
05D|db2 v10 jdbc  
06D|  
07T|BEI "CANCEL" WIRD DAS MEMBER NICHT GEAENDERT|
```

Phase 1: Email Interface

Change:	52990	Kategorie:	SP-Doku
Status:	abgeschlossen		
Kurztext:	<input type="text" value="db2 v10 jdbc"/>		
Aktivierungszeitpunkt:	<input type="text" value="29/10/12 07:41:52"/>		

[Überblick](#) [Dokumentation](#) [Reviewer-Auswahl](#) [Close-Info](#)

Eröffnet von	Angefordert von
Name: ServiceCenter AutoClient	Name: <input type="text" value="Stumpf Joachim"/>
KOE: <input type="text" value=""/>	KOE: <input type="text" value=""/>
Telefon: <input type="text" value=""/>	Telefon: <input type="text" value=""/>
eröffnet am: 29/10/12 07:46:03	

System	<input type="text" value=""/>
Programmprodukt	<input type="text" value="z/OS Base"/>

Phase 1: Email Interface

Change: 52990 **Kategorie:** SP-Doku

Status: abgeschlossen

Kurztext: db2 v10 jdbc

Aktivierungszeitpunkt: 29/10/12 07:41:52

[Überblick](#) [Dokumentation](#) [Reviewer-Auswahl](#) [Close-Info](#)

```
-----EVENT IDENTITY-----
01C|SRC: T03281A-----THE CONTROL EDITOR----- Edit -
02C|SYSPLX:SYSPLX1 SYSNM ██████  USRID:T03281A TIME:07:41:52 DATE:10/29/12
03C|DSN: SYS1.PARMLIB(BPXPRM00)-----VOL: TCAT01-
-----EVENT DESCRIPTOR-----
04T|GRUND DER AENDERUNG FUER DOKU-CHANGE ANGEBEN:
05D|db2 v10 jdbc
06D|
07T|BEI CANCEL WIRD DAS MEMBER NICHT GEAENDERT|
```

Phase 2: Webservice (http/Soap)

- NewEra provided new support for descriptor ISPF panels:
 - The edit macro solution will be withdrawn in the future;
 - Emails are still supported with the requirements as mentioned before.
- REXX coding possible inside ISPF panels
 - *REXX(*) and *ENDREXX statements in)PROC section
- All necessary information will be stored in a change input dataset.

Phase 2: Webservice (http/Soap)

TCE 7.5 DESCRIPTOR PANEL

Datev eG Descriptor PANEL ID DPSYSP

Option ==>

Bei Angabe von "CANCEL" wird das Member nicht gesichert

Anforderer : Joachim Stumpf

Beschreibung:

More: +

Test Change Record creation from z/OS system T002
neue Image Focus Version (mit Variablen)

Phase 2: Webservice (http/Soap)

```
BROWSE      IFO.WEBSERV.D121123.T1359201.T03281A      Line 00000000 Col 001 080
Command ==> _____ Scroll ==> CSR
***** Top of Data *****
T03281A.DUMMY.CNTL
##INFO##
TUSE50
N/A
.....
EDIT
00
T03281A
JOACHIM STUMPF
T002
TEST CHANGE RECORD CREATION FROM Z/OS SYSTEM T002
NEUE IMAGE FOCUS VERSION (MIT VARIABLEN)
***** Bottom of Data *****
```

Phase 2: Webservice (http/Soap)

- A REXX exec starts every hour via our job scheduling system and checks if there is a new input file.
- If there is one, the file will be read and an http/soap CreateChange request will be sent to the Service Manager server.
- After successful creation of the change record, the input file will be deleted.



Phase 2: Webservice (http/Soap)

```

1DPWEBS: *****
DPWEBS: *   I M A G E   F O C U S   W E B S E R V I C E   *
DPWEBS: *       create change record im Service Manager   *
DPWEBS: *                               (c) 2012 by t03281a   *
DPWEBS: *****
  
```

DPWEBS: gestartet am 23 Nov 2012, 14:01:31 auf System T002

DPWEBS: Es werden 1 Changes eroeffnet...

```

DPWEBS: *****
  
```

DPWEBS: File: IFO.WEBSERV.D121123.T1359201.T03281A Lines: 12

DPWEBS: Response Data Length(2491)

DPWEBS: CreateChangeWKResponse: message="Erfolgreich" returnCode="0"
 status="SUCCESS,,

DPWEBS: Change-Nummer 51257 wurde erstellt.

DPWEBS: weitere messages:

DPWEBS: <cmn:message type="String">*** Achtung! Wartungsfenster-Kollision!
 ***</cmn:message><cmn:message type="String">Change 51257

Phase Dokumentation geoeffnet von WS_DokuChange.</cmn:message>

IDC0550I ENTRY (A) IFO.WEBSERV.D121123.T1359201.T03281A DELETED

Phase 2: Webservice (http/Soap)

Change-Details | Change-Info | Doku-Change | Close-Info | Anhänge | Reviewer | Genehmigungen | Verbundene Datensätze | Aufgaben | Workflow | Aktivitäten | Journal

Change ID: S1257
 Phase: Dokumentation
 Status: closed

Service:

Betroffenes CI:

Betroffenes CI (manuelle Eingabe):

DATEV Standort: DATEV 1 DATEV 4 RZ 1 RZ 3
 DATEV 2 DATEV 3 RZ 2 RZ 4

Funktionsebene: Server
 Geschäftsfeld: Zentrale IT

Geplanter Beginn: 23.11.2012 14:59:20
 Geplantes Ende: 23.11.2012 14:59:21
 Geplanter Ausfallbeginn:
 Geplantes Ausfallende:
 Angefordertes Enddatum:

Change Koordinator: JOACHIM STUMPF
 koordinierende Zuweisungsgruppe: Basissysprog
 Change Anforderer: JOACHIM STUMPF
 Change Eröffner: WS_DokuChange
 Change Umsetzer: WS_DokuChange
 umsetzende Zuweisungsgruppe:

Kategorie: Dokumentation
 Umgebung: Produktion

Emergency-Change (A-Fehler/Notfallchange)

Regelverstoß: Wartungsfenster

Auswirkung: 3 - Mehrere Benutzer
 Dringlichkeit: 3 - Mittel
 Priorität:
 Risikobewertung: Ohne Ausfallrisiko (c)

Genehmigung im CAB

Titel: SP-Doku
 Beschreibung: System: T002
 Dataset: T03281A.DUMMY.CNTL(##INFO##) - VolSer TUSE50
 Function: EDIT
 Beschreibung: TEST CHANGE RECORD CREATION FROM Z/OS SYSTEM T002

Plan:

Backout-Verfahren:

Who uses this information?

- In case of problems, Operations can search Change Management database to find out what was changed.
- With Image FOCUS and TCE they also can undo the change (restore old member).
- Managers are able to see what is going on in their area (daily business).



Questions? Thank you!



Shaping the future – together.

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