Bombardier Aerospace (Belfast)
Time Management Implementation Review

Personal Introduction

- Paul Neely - 26 years Bombardier.
- First 13 years in HR/Payroll.
- Last 13 years as an IT Analyst.

Time Management Implementation Review

- Project completed within budget and on time, 2003.
- This presentation will:
  - Share our project experiences
  - Highlight some tools and techniques
  - Lessons learnt.

BOMBARDIER

the evolution of mobility

- Multinational Canadian transportation company.
- Aerospace includes Business and Commercial Aircraft.

Business Aircraft

Challenger

Global

Learjet

John Travolta

Travolta, who owns a Challenger, promoting Bombardier Aerospace's Challenger 650.

Source: http://www.kansas.com/news/business/aviation/article3310729.html#storylink=cpy

Commercial Aircraft

Q-Series

CRJ

C-Series

Company Structure - Aerospace

36,000 Employees.
Larger sites:

Other sites include:

Amsterdam
Shenyang
Frankfurt
Casablanca
India

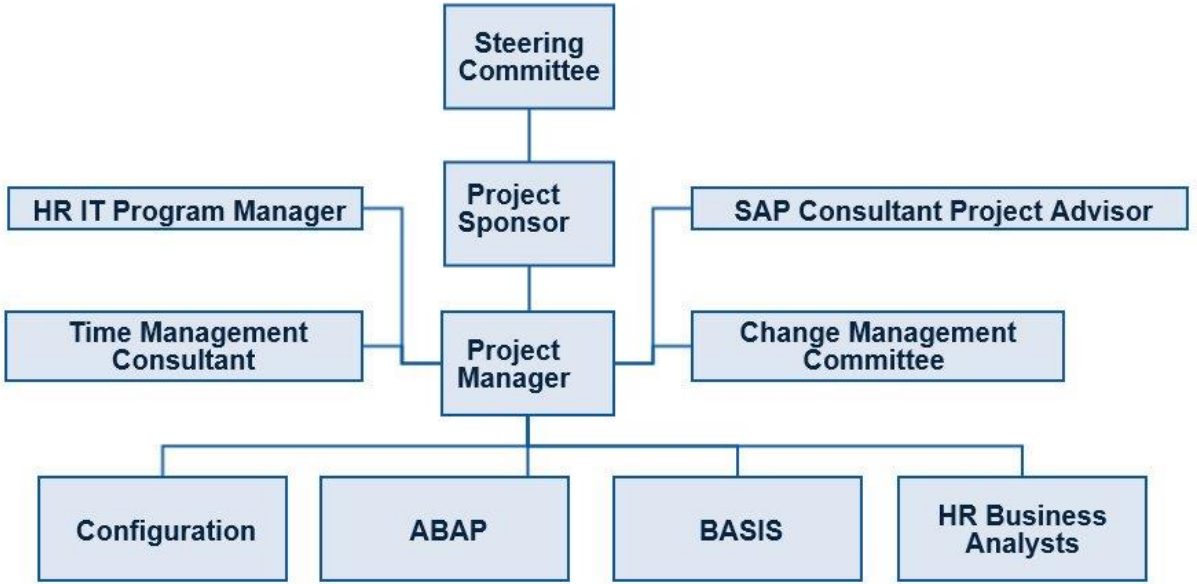
… and many Sales/Regional Offices worldwide

Need for Change – 1980's systems

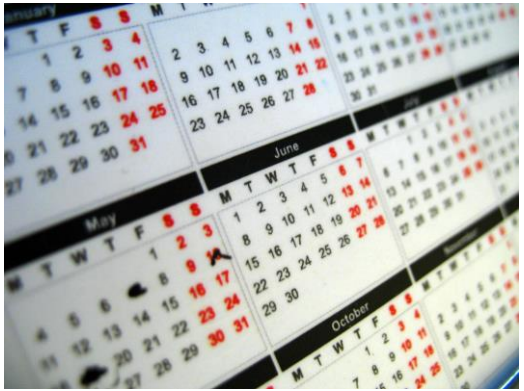
SAP Time Management Project

- Work started 2002, took 11 months
- Budget $918,000
- Completed 3% under budget: $870,000

Project Team Structure

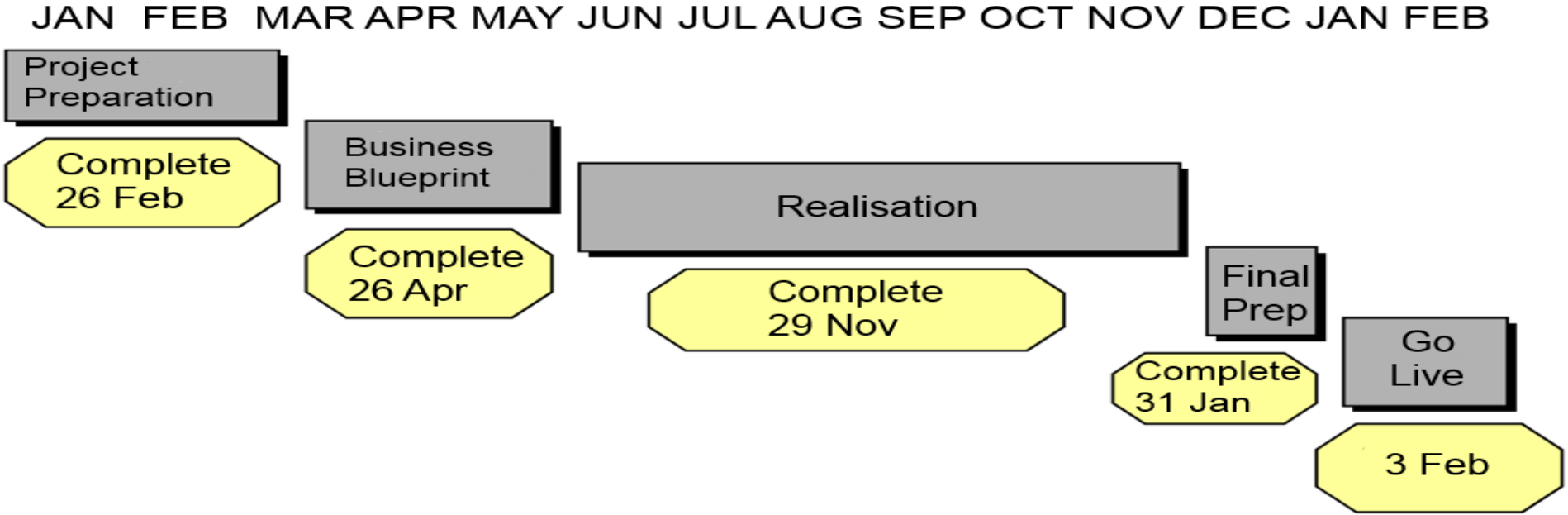


Project Estimates



- Based on:
  - 5000 employees
  - 2000 users
  - 500 work schedules
  - Replacement scope
  - Only essential history

Project Plan

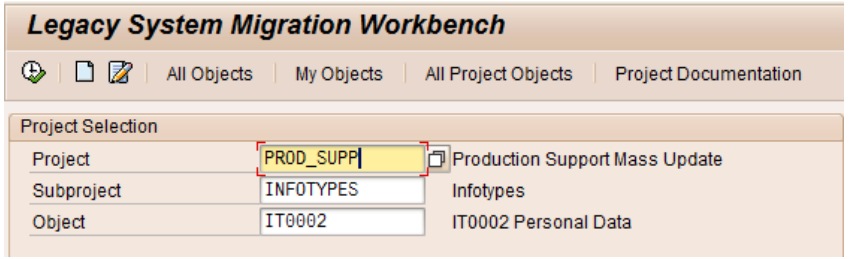


Testing Strategy

- Unit testing
- Integration Testing
- Parallel Running

Conversion & Cutover

- Tool – **LSMW**
- Work schedules
- Sickness history (SSP)
- Clocking stations switched to new network. (TCP/IP protocol).



Conversion & Cutover

Infotype 0007

Display Planned Working Time

Work schedule

Personnel No	[redacted]		Name	[redacted]	
EE group	1 Employee		Subarea	0055 HR	
EE subgroup	12 Managers		Cost Center	1013	Personnel H/Q
Start	26.07.2014	To	31.12.9999	Chg. 05.08.2014	MCKINSLX

Work schedule rule

Work schedule rule	K4001	FLX 36.00
Time Mgmt status	1 1 - Time evaluation of actual times	
Working week	09 WW Shorts (starting Saturday)	
Part-time employee		Regular/Temporary St R

Working time

Employment percent	100.00	Dyn. daily work schedule			
Daily working hours	7.20	Min.	0.00	Max.	0.00
Weekly working hours	36.00	Min.	0.00	Max.	0.00
Monthly working hrs	156.00	Min.	0.00	Max.	0.00
Annual working hours	1872.00	Min.	0.00	Max.	0.00
Weekly workdays	5.00				

Additional fields

Flexi Time Employee ☑ Carer Employee ☐

Infotype 0085

Create SSP1(L) Form Data GB

Personnel No	[redacted]	Name	[redacted]	
EE group	1 Employee	Subarea	0055 HR	
EE subgroup	12 Managers	Cost Center	1013	Personnel H/Q
Start	26.07.2014	to	31.12.9999	

Previous employment

Date SSP1(L) Received		Weeks Sick Paid Prev. ER	
Last Sick Pay Date Prev. ER			

Leaver's information

Notification of Leaving	
Last Sick Pay Date ER	

Infotype 0050

Display Time Recording Info

Pers.No.	[redacted]		Name	[redacted]	
Pers.area	1000 Bombardier Shorts		Cost Ctr	5068	IT-HR Competency Cen
EE subgrp	12 Managers		WS rule	KX062	FLX 24.00 Rduced Hrs
Start	22.11.2007	To	31.12.9999	Chg. 28.11.2007	LETSONGY

Time ID

Time rec.ID no.	[redacted]
ID version	

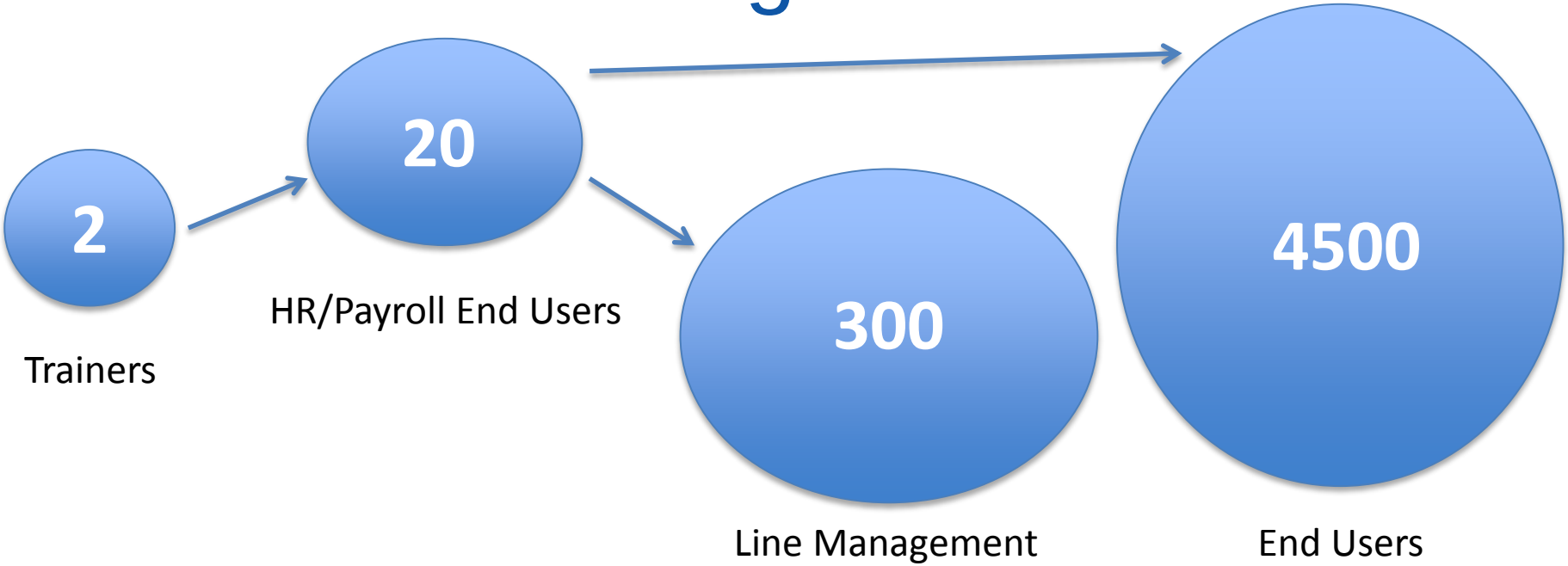
Interface data

Time event type grp	01
Subsystem grouping	001
Grpg. att./absence	001
EE expenses grpng	001
Access control group	
Mail indicator	
Personal code	

Time variables

Grpg for TE rule	
Flextime maximum	0.00
Flextime minimum	0.00
Time bonus/deduction	0.00
Standard overtime	
Additional indicator	

End User Training

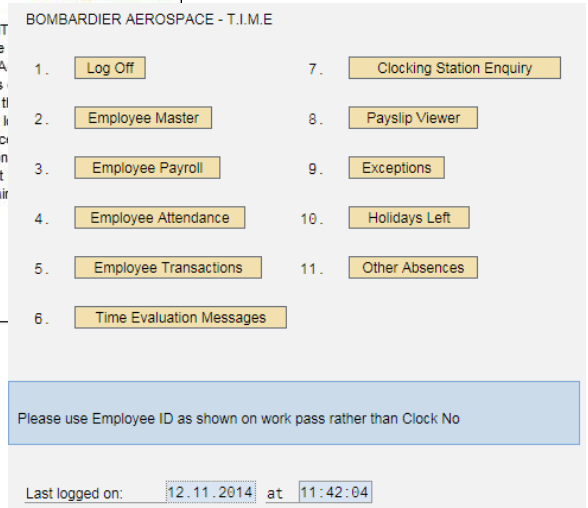


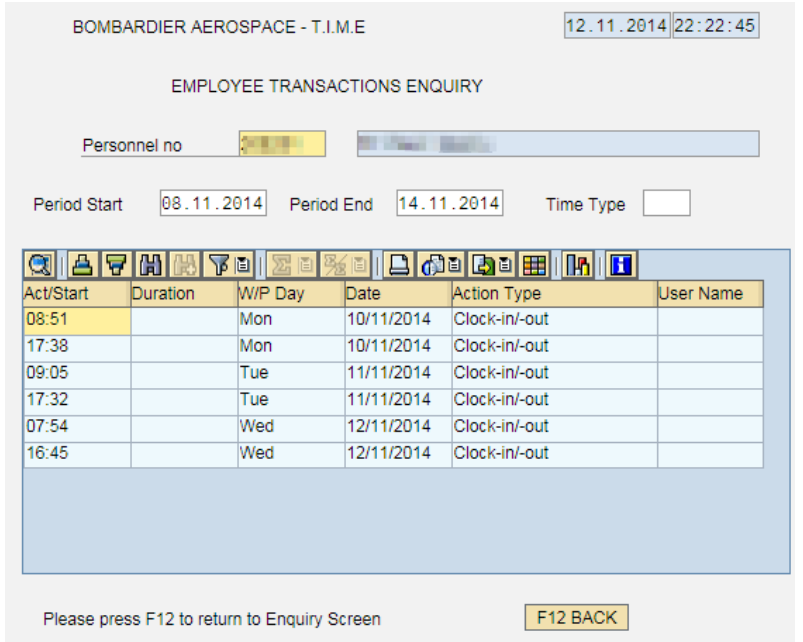
Vax Terminal

Old access method …

Source: Bletchley Park/National Museum of Computing

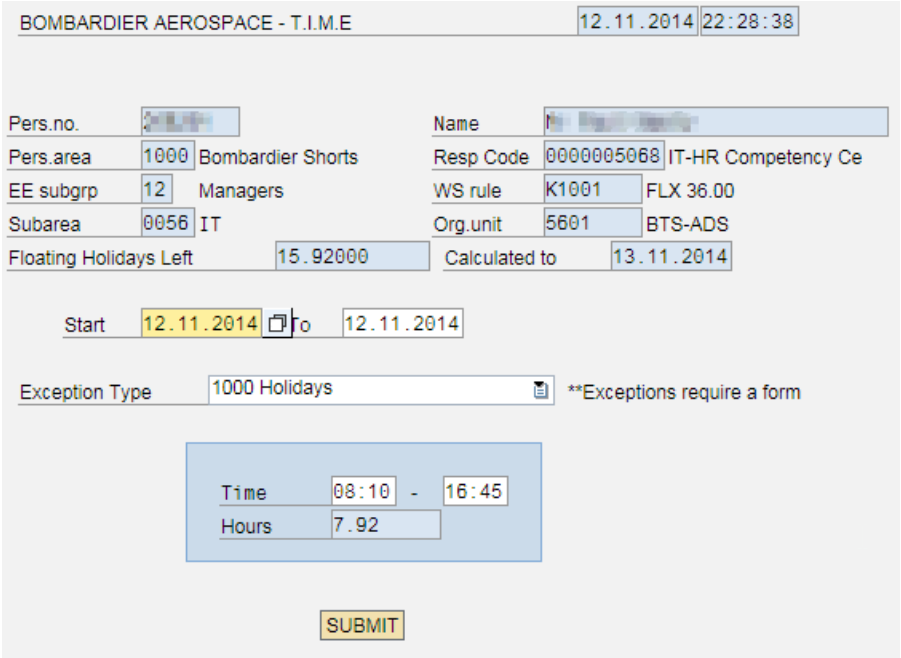
eTime (Our Custom Application)





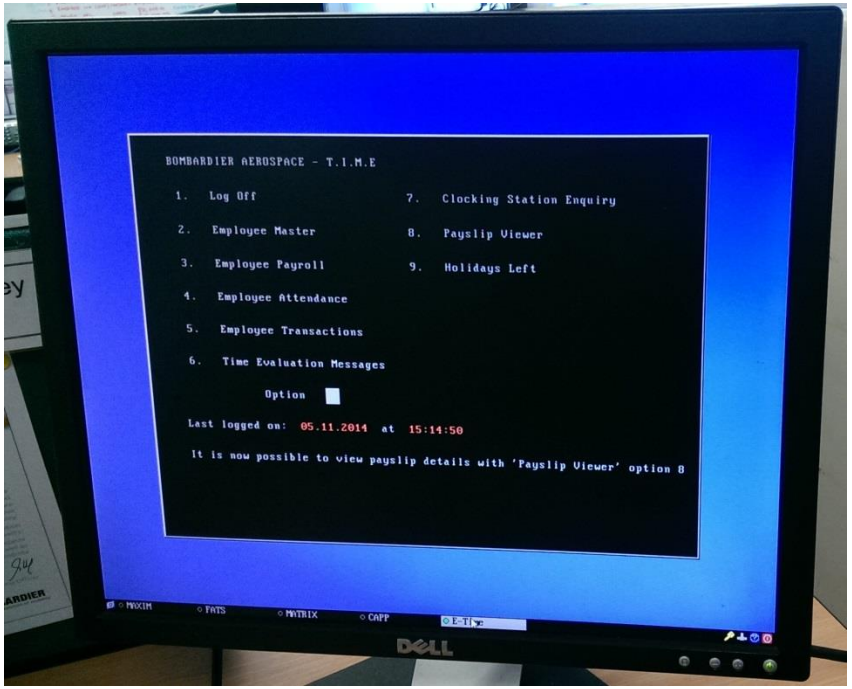
eTime (Our Custom Application)

1. Enter a new exception
2. Review unapproved exceptions
3. Review approved exceptions



New AXEL box

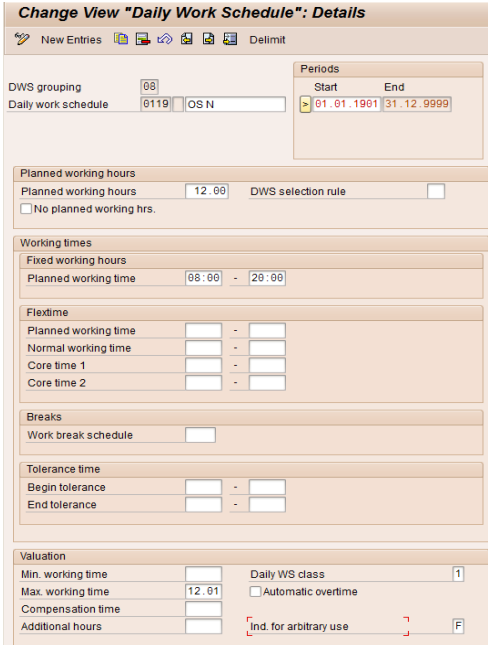
AXEL
11191547


BOMBARDIER AEROSPACE - T.I.M.E
1. Log Off
2. Employee Master
3. Employee Payroll
4. Employee Attendance
5. Employee Transactions
6. Time Evaluation Messages
7. Clocking Station Enquiry
8. Payslip Viewer
9. Holidays Left
Option
Last logged on: 05.11.2014 at 15:14:50
It is now possible to view payslip details with 'Payslip Viewer' option 8
MAXIM
FATS
MATRIX
CAPP
E-T
DELL

Work Schedules

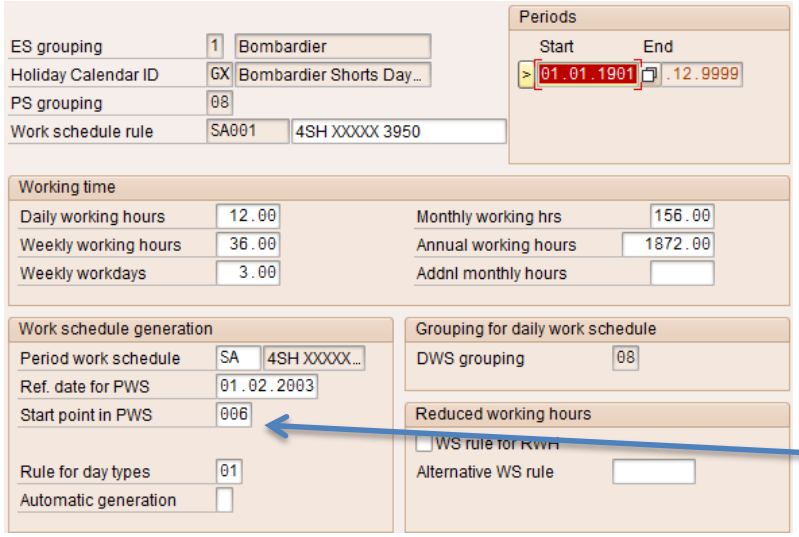
Period Work Schedule

08	RW01	NSH 36.00 3333	001	0110	0110	0110	0113	0130	0571	0477
08	RX	NSH 36.00 3333	001	0412	0412	0412	0310	0210	0413	0413
08	SA	4SH XXXXX 3950	001	0119	0119	OFF	OFF	OFF	OFF	0120
08	SA	4SH XXXXX 3950	002	OFF	OFF	OFF	0120	0120	OFF	OFF
08	SA	4SH XXXXX 3950	003	OFF	OFF	0119	0119	0119	OFF	OFF
08	SA	4SH XXXXX 3950	004	0120	0120	0120	OFF	OFF	OFF	0119

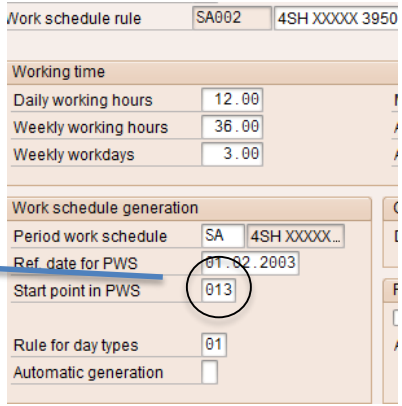


Daily Work Schedule – Shift with premium

Work Schedules



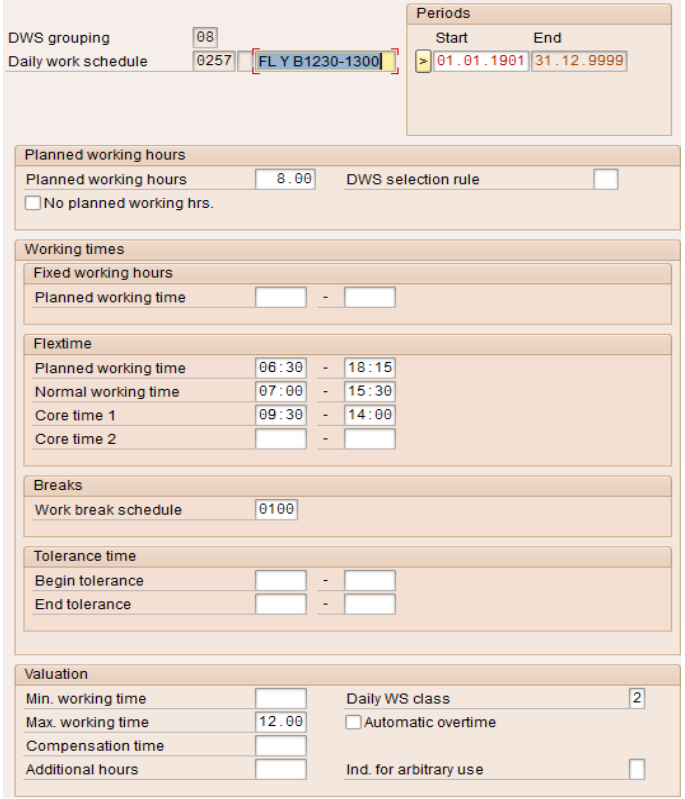
ESG	ES grpg for WS	Holiday Ca...	Text	PSG	WS rule	Start Date	End Date
1	Bombardier	GX	Bombardier ..	08	SA001	01.01.1901	31.12.9999
1	mbardier	GX	Bombardier ..	08	SA002	01.01.1901	31.12.9999
1	Bombardier	GX	Bombardier ..	08	SA003	01.01.1901	31.12.9999
1	Bombardier	GX	Bombardier ..	08	SA004	01.01.1901	31.12.9999



Work Schedules

Period Work Schedule

08	HC	NSH 36.00 0000	001	0262	0262	0262	0263	0230	OFF	0227
08	HD	OTH 36.00 2000	001	2021	2021	2021	2021	2022	0378	0378
08	INAC	36 Hr Week	001	1008	1008	1008	1008	1004	1000	1000
08	K001	FLX 36.00	001	0257	0257	0257	0257	0258	OFF	OFF
08	K002	FLX 30.25	001	0267	0268	0267	0268	0267	OFF	OFF
08	K003	FLX 33.42	001	0267	0268	0268	0268	0483	OFF	OFF



Daily Work Schedule – for flexitime

Work Schedules

Our custom table to store rounding values:

Display View "Work Schedule Rules for Adjustment": Overview

Expand <-> Collapse

Work Schedule Rules for Adjustment

ESG	Hol...	PSG	Work sc...	End Date	Start Date	workday	number to ad...	target
1	GX	8	DA001	31.12.9999	01.01.1901	7	0.0133000-	36.00
1	GX	8	DB001	31.12.9999	01.01.1901	7	0.0133000-	36.00
1	GX	8	DC001	31.12.9999	01.01.1901	7	0.0133000-	36.00
1	GX	8	DJ001	31.12.9999	01.01.1901	7	0.0133000-	36.00
1	GX	8	DK001	31.12.9999	01.01.1901	7	0.0133000-	36.00
1	GX	8	DM001	31.12.9999	01.01.1901	7	0.0133000-	36.00
1	GX	8	DT001	31.12.9999	01.01.1901	7	0.0133000	36.00

Clocking Stations

Durable, reliable, tamper proof

Sample Badge

If found please return
BOMBARDIER
Airport Road
Belfast
BT3 9DZ

Employee ID0
Clock No: 00
Access No
Issue No 06

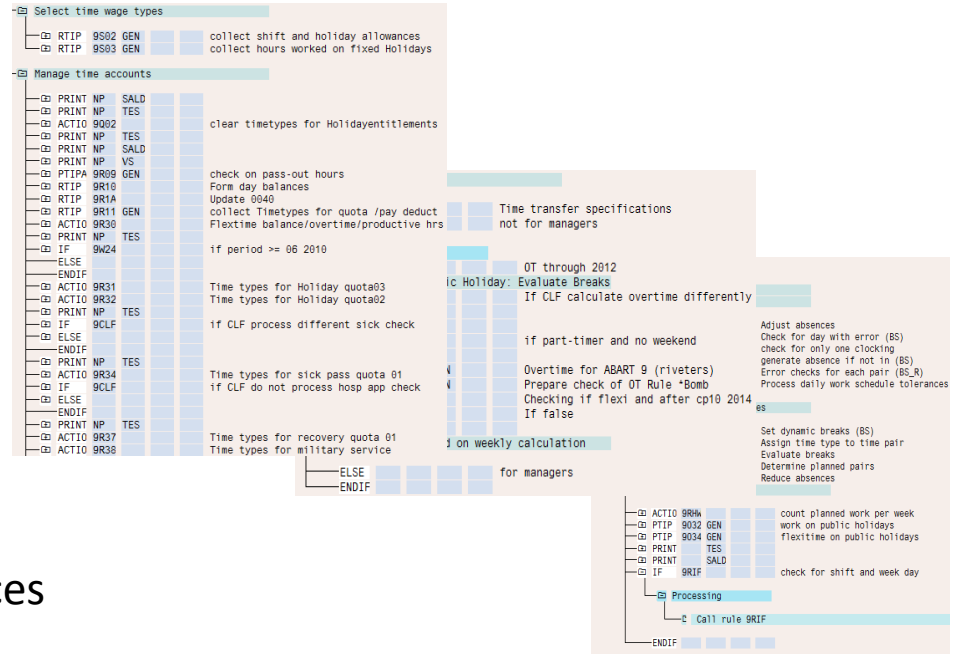
BOMBARDIER

JOHN
TRAVOLTA

(September 20, 2011-09-20 Source: PacificCoastNews.com)

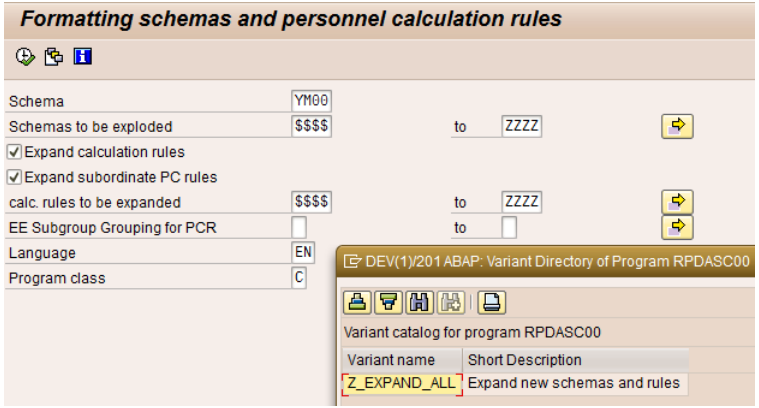
Absence & Attendance Policies

- Error checks
- Lateness
- Overtime
- Managers
- Flexitime
- Contractors
- Working holidays
- Break times
- Shifts
- 50 types of absences/attendances



Rules & Schemas

RPDASC00

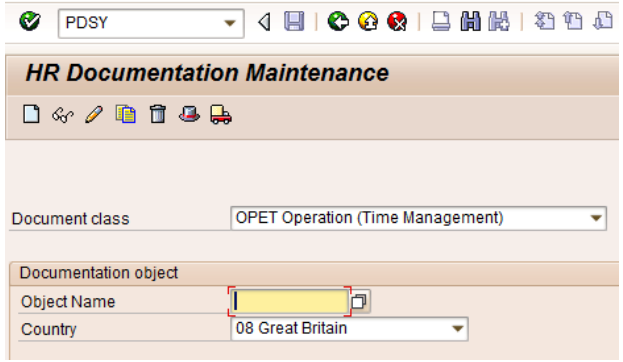



```
Formatting schemas and personnel calculation rules                    1

9RHW*****Y        ZHRS=M9003 ADDDB9003-GCY 9RHW1

9RHW1****         DSUBST 01
9RHW1****N         HRS=S     ADDDB9003
9RHW1****Y         HRS=U     ADDDB9003

YM00 070 PTIP  9032 GEN               work on public holidays
YM00 071 PTIP  9034 GEN               flexitime on public holidays
YM00 072 PRINT      TES
YM00 073 PRINT      SALD
YM00 074 IF    9RIF                   check for shift and week day

9RIF*****         D9%RSTZ508A
9RIF*****N         SCOND=F IF
9RIF*****Y         SCOND=T IF

9RIF1****         D9%RSTZ508A
9RIF1****N         SCOND=F IF
9RIF1****Y         SCOND=T IF

9RIF2****         DVALEN 1   OUTWPSHIFT
9RIF2*****        ZGCY 9RIF1
9RIF2****K        DVARSTPRSNT
9RIF2****K N      ZGCY 9RIF1
9RIF2****K Y       SCOND=F IF
```

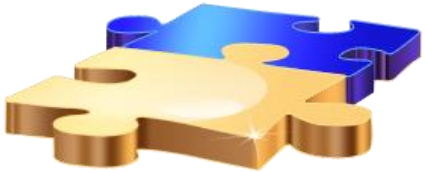
Rules & Schemas

000010	COM						copy from TM00 for Shorts (BS)
000020	COM						Time Evaluation with Clock Times
000030	COM						==
000040	**						Evaluation of time data specifying
000050	**						clock times (including personnel
000060	**						time events or PDC times)
000070	**						****** Before day processing ********
000080	BINI						Initialization
000090	MOD	MODT	GEN				Define groupings
000100	EINI						End of processing block
000110	**						****** Day processing ******
000120	BDAY						Day processing
000130	**						Options:
000140	CHECK		PON				check time recording = 1 or 9
000150	CHECK		RPR				Set retro.acc.for payroll, if required
000160	CHECK		FUT			*	Allow evaluations for future periods
000170	DKG					*	Process reduced hours (BS)

PDSY



Payroll Integration



- Hours stored in Time, money in Payroll
- Time Type converted to Wage type in ZL
- Absences/Attendances in arrears (rule)
- Time balances (SALDO) match Payroll period

Benefits

- System reliable and stable
- Full implementation of company policies
- Improved automation
- Increased visibility of time information
- Accuracy

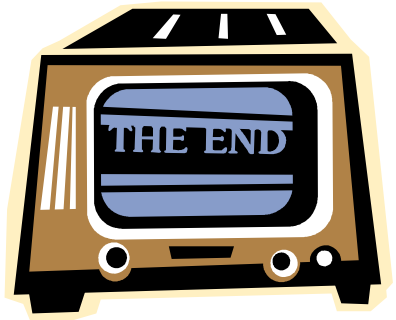
Benefits continued

- Payslip can produce more detail
- Managers can connect, view and authorise
- Employee can view and interact online
- Improved job satisfaction

Conclusion & Lessons Learnt

- Make sure Terms and conditions affecting large numbers are mapped to Employee groupings
- Stay SAP standard as possible
- Put logic into system, not reports/interfaces
- Quick decision making important

Conclusion & Lessons Learnt

- Ensure consultants share knowledge
- Involve end users throughout a project
- Test thoroughly
- Requirements of all users justify attention
- Document

Questions?