



# MatchPoint SCM

Best Practice for Software Change  
Management

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Christoph Heinrich  
CM First Group

# Agenda

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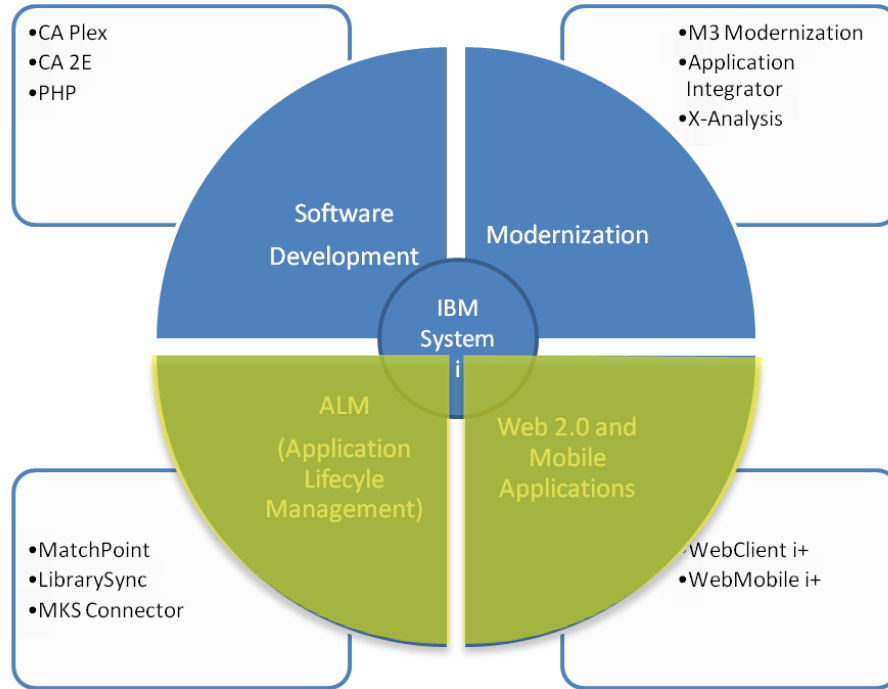
- CM First
- MatchPoint Overview and new Features
  - Extended Java / C# Support for Model Import
  - Subversion Integration
  - MatchPoint Mobile
- Demo
- Best Practice in Software Change Management
  - Department of Justice, Zurich

# Company Profile

- CM First Group with Swiss Headquarters
  - Focus on Quality and Reliability
- International Presence
  - Zug, Milan, Austin, Worldwide reseller partners
- CA Primary Partner
  - Euro Zone, North America
- Quality Proven Products
  - WebClient i+ (and PHP, Websydian)
  - Matchpoint i+, MKS Connector
  - Databorough X-Analysis
  - CA Repository Scanners
  - Worksoft Certify



# CM First Portfolio

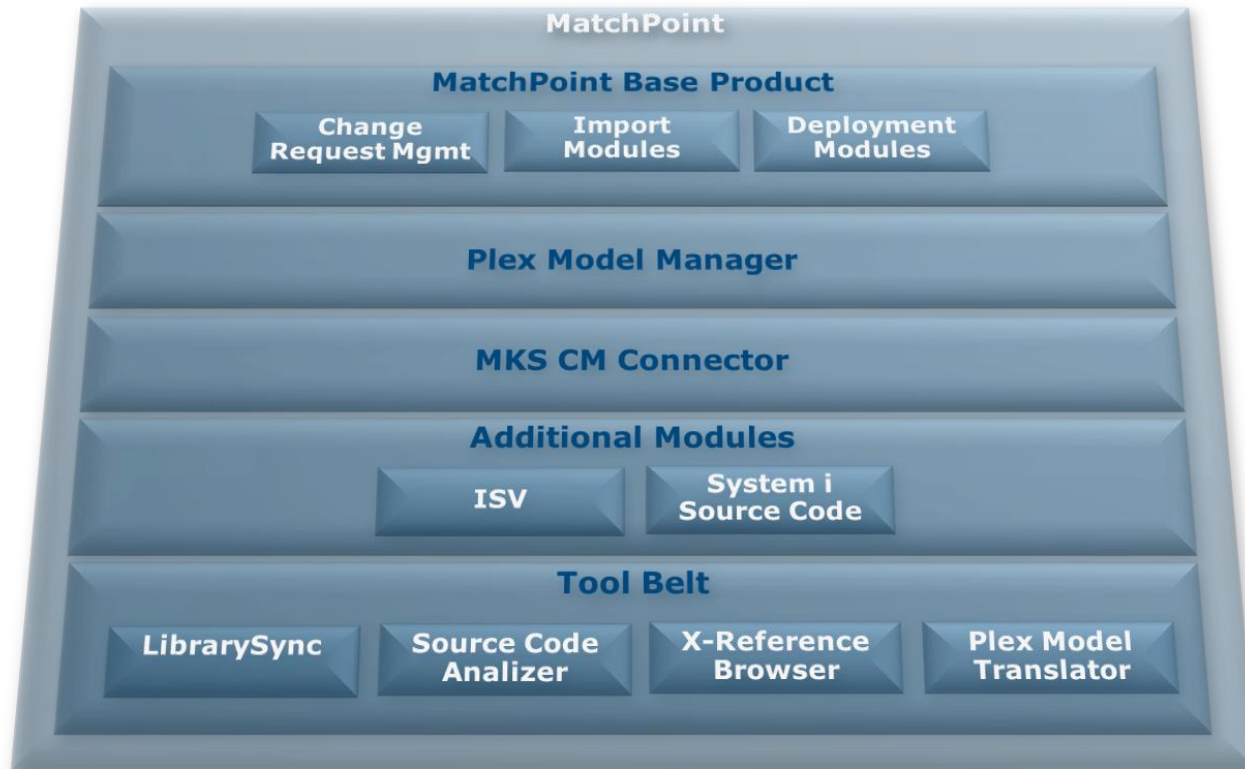




# MatchPoint Overview

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# MatchPoint Overview



# MatchPoint Overview

**MatchPoint - Software Change Management**

File Select Master Data Extras Billing View Window Help

**Edit Change Requests**

CR Number: 0 Priority: 0 open Requester: HEC Christoph Heinrich Application: Human Ressource 2  
Status: CR Description: Reference: Environment: Object: Developer: Web Designer Subsystem: CR Type: Project Customer: Filter Reset Only cumulative Show content

View: Internal External All

Application	Version	CR Number	CR Description	Priority	Depend	Obj	Note	Planned End Date	CR Status	CR Type Description	Developer Name	CR current Description	Subs
H2	V300	2007315	Model Import	1				01.07.2011	development	Production Error	Heinrich	Development Hapisol II V3.0	
H2	V300	2007092	New Requirement on Person	2				30.06.2011	ready for promotion	Release	Heinrich	Test Hapisol II V3.0.0	Addre
H2	V300	2005244	New field on address panel	2				17.05.2011	test	New Requirement	Heinrich	Development Hapisol II V3.0	
H2	V300	2007314	FileSystem Import	1				15.05.2011	development	New Requirement	Heinrich	Development Hapisol II V3.0	
H2	V300	2007227	correction on initial cr status	0				11.05.2011	approval pending	New Requirement	Heinrich	Development Hapisol II V3.0	Addre
H2	V300	2007085	CR Description	0				11.05.2011	approval pending	New Requirement	Heinrich	Development Hapisol II V3.0	Addre
H2	V300	2007313	New Function to create departments	1				01.05.2011	ready for promotion to production	New Requirement	Heinrich	Test Hapisol II V3.0.0	Addre
H2	V300	2007133	Cum PTF 06060	0				20.04.2011	approval pending	Cumulative PTF	Heinrich	Development Hapisol II V3.0	
H2	V300	2007249	Release R45	3				17.04.2011	ready for promotion	Release	Heinrich	Development Hapisol II V3.0	
H2	V300	2007155	Change position of field in address field 233	2				15.04.2011	test	New Requirement	Heinrich	Test Hapisol II V3.0.0	Contrac
H2	V300	2007162	Change Sort of Fields on Panel et564	1				04.04.2011	test	New Requirement	Heinrich	Test Hapisol II V3.0.0	Addre
H2	V300	2007038	New Field on Department	2				25.03.2010	ready for promotion	New Requirement	Heinrich	Development Hapisol II V3.0	

**Edit Models**

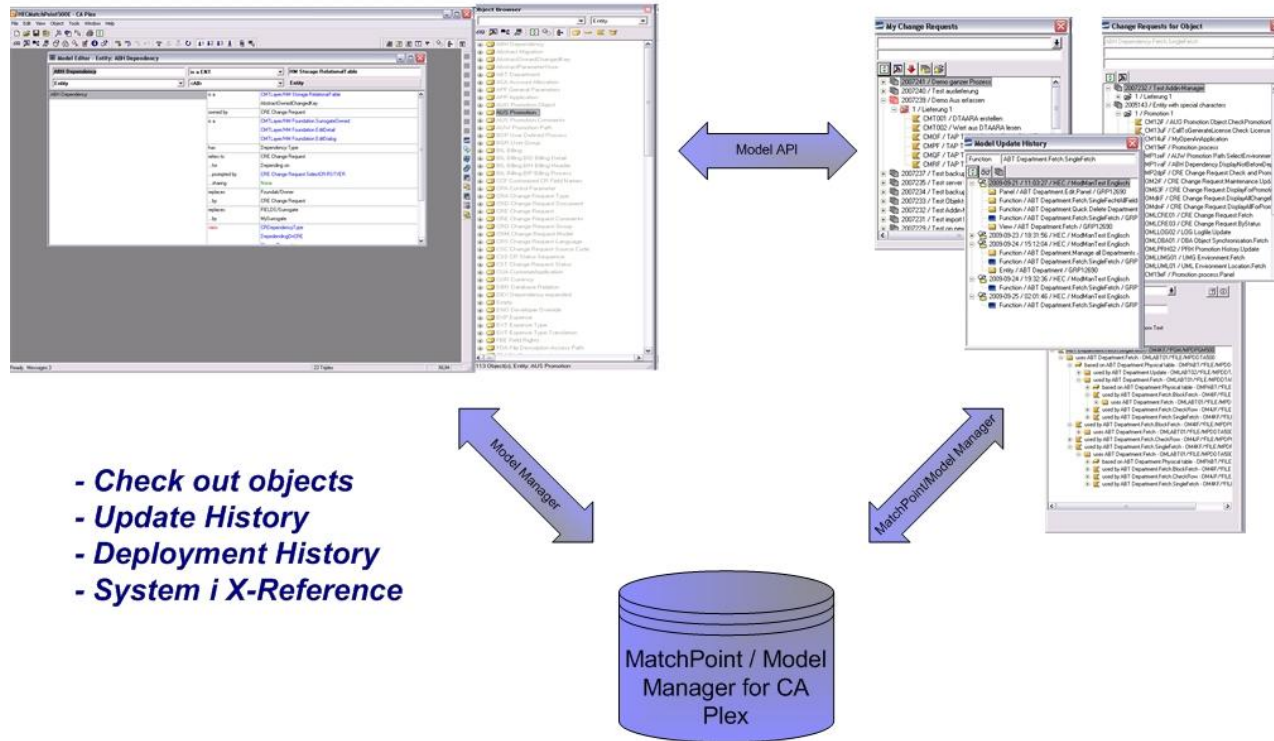
Model Name: Application: Model Type: Template Normal Filter Reset  
Model Status: Extracted Version: User ID:

Plex Version	Model Surrogate	Model Name	Model Description	User ID	Model File Name	Model Status	Model Type	Last Update Date	Last Update Ti
2	301	Tutorial Java	Tutorial Java	HEC	D:\MPTest\TutorialJava\TUTORIALJAVA.mdl	Extracted	Normal	00.00.0000	00:00:00
2	299	ModManTest Englisch	Test Model Manager English	HEC	D:\MatchPoint\TestModMan\HECLocalModel\HECModelTestE.mdl	Extracted	Normal	00.00.0000	00:00:00

Ready NUM

# MatchPoint – CA Plex Integration

*MatchPoint Add-Ins for CA Plex provide SCM-Features for the CA Plex Model Environment*





# MatchP

# System i X-Reference Browser

# lex

Change Requests for Object

CRE Change Request.DisplayAllForPromotion

2005197 / Cum PTF 44

2005182 / Demo 2

2005181 / Kueselstein 44 Yellow Pages

System i X-Reference Browser

Object OME6F \*PGM

Lib. MPDPGM500

Model Update History

Function PRD Product.Fetch.SingleFetch

2009-09-16 / 13:08:20 / HEC / ModManTest Englisch

Function / ABT Department.AnotherTextWithLongFunctionName

Function / Product.Fetch.BlockFetch / GRP12690

Function / Product.Fetch.BlockFetchSet / GRP12690

Function / Product.Fetch.CheckRow / GRP12690

Function / PRD Product.Fetch.ProcessGroup / GRP12690

Function / PRD Product.Fetch.SingleFetch / GRP12690

Function / Product.Fetch.StatelessBlockFetch / GRP12690

Function / Product.Update.CheckedUpdate / GRP12690

Function / Product.Update.DeleteRow / GRP12690

Function / Product.Update.InsertRow / GRP12690

Function / Product.Update.UpdateRow / GRP12690

View / Product.Fetch / GRP12690

View / Product.SuperKeys / GRP12690

View / Product.Update / GRP12690

Table / Product.Physical table / GRP12690

Entity / ABT Department / GRP12690

Entity / Product / GRP12690

My Change Requests

development

2007093 / Test V4.8

2007018 / Add new field to departement

2005158 / New Address Type

2005156 / Demo Change Request

2005143 / Entity with special characters

1 / Promotion 1

CM12fF / AUO Promotion Object.CheckPromotionObjects

CM13uF / CallToGenerateLicense.Check License

CM14uF / MyOpenAnApplication

CM19eF / Promotion process

MP1seF / AUW Promotion Path.SelectEnvironmentForProm

MP1vaF / ABH Dependency.DisplayNotBeforeDependencie

MP2dpF / CRE Change Request.Check and Promote Chang

OM2rF / CRE Change Request.Maintenance.Update

OM63F / CRE Change Request.DisplayForPromotion

OMdmF / CRE Change Request.DisplayAllForPromotion

OMLCRE01 / CRE Change Request.Fetch

OMLCRE03 / CRE Change Request.ByStatus

OMLLOG02 / LOG Logfile.Update

OMLOBA01 / OBA Object Synchronisation.Fetch

OMLPRH02 / PRH Promotion History.Update

OMLUMG01 / UMG Environment.Fetch

OMLUML01 / UML Environment Location.Fetch

CM19eF / Promotion process.Panel

MP1seF / AUW Promotion Path.SelectEnvironmentForProm

MP1vaF / ABH Dependency.DisplayNotBeforeDependencie

OM2rF / CRE Change Request.Maintenance.Update.Panel

OM63F / CRE Change Request.DisplayForPromotion.Panel

OMdmF / CRE Change Request.DisplayAllForPromotion.Pan

CM12vF / OBA Object Synchronisation.Fetch.SelectDeselec



## *Extended Java and C# Support for Model Import*

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# Java Support

**Edit TripleMatch**

☒ Import all scoped  
☐ Import view functions

Import Object with Status: \*Blank

HEC  
CM1clF

OK

	Sort Field	Object type	AliasName	Compare	Target	Connector	Additional Object	Description	Impl-Name Override	Process Target	Ignore Conflict	Optional Object	Ob
	10	Function	language SYS	EQ	WinC		<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DL
	20	Function	panel PNL	EQ	*		<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PN
	40	Function	language SYS	EQ	Java		<input checked="" type="checkbox"/>		&_ObFnc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CL
	41	Function	language SYS	EQ	Java		<input checked="" type="checkbox"/>		&_ObIn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CL
	42	Function	language SYS	EQ	Java		<input checked="" type="checkbox"/>		&_ObOut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CL
	43	Function	language SYS	EQ	Java		<input checked="" type="checkbox"/>		&_ObFnc&_ObD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CL
	46	Function	panel PNL	EQ	*		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PN
	47	Function	panel PNL	EQ	*		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RE
	48	Function	panel PNL	EQ	*		<input checked="" type="checkbox"/>		&_ObFnc&_ObP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CL
	49	Function	calls FNC	EQ	*		<input checked="" type="checkbox"/>		&_ObIn	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CL
	50	Function	calls FNC	EQ	*		<input checked="" type="checkbox"/>		&_ObOut	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CL
	51	Function	generated call to FNC	EQ	*		<input checked="" type="checkbox"/>		&_ObIn	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CL
	52	Function	generated call to FNC	EQ	*		<input type="checkbox"/>		&_ObOut	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CL
	60	Table	language SYS	EQ	DDS	AND	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	61	Table	impl name NME	ST	WRK		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PF
	70	Table	language SYS	EQ	DDS		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PF
	80	Function	language SYS	EQ	RPGIV		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RF
	100	View	language SYS	EQ	DDS		<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LF

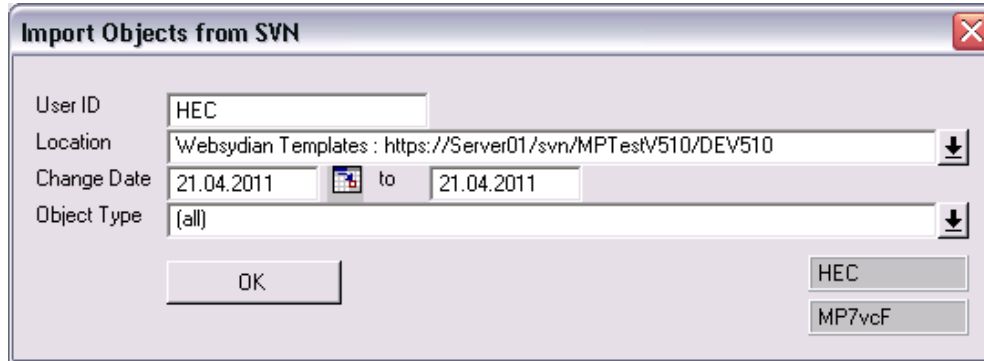


# *Subversion Integration*

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# Subversion Integration

- Import objects from Subversion server
  - Integrate development environments under subversion control -> *web development*



Objects that have been committed within a specified period by this user



# MatchPoint Mobile

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**cm** FIRST  
TECHNOLOGIES

# MatchPoint i+ Overview

MatchPoint - Software Change Management

File Select Master Data Extras Billing View Window Help

Edit Change Requests

CR Number: 0, Priority: 0, Requester: HEC Christoph Heinrich, Application: Human Resource 2, Version: , Subsystem: , CR Type: , Project: , Customer: .

Filter, Reset, Only cumulative, Show content

View: Internal, External, All

Application	Version	CR Number	CR Description	Priority	Depend	Obj	Note	Planned End Date	CR Status	CR Type Description	Developer Name	CR current Description	Subs
H2	V300	2007315	Model Import	1				01.07.2011	development	Production Error	Heinrich	Development Hapisol II V3.0	
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H2	V300	2007227	correction on initial cr status	0				11.05.2011	approval pending	New Requirement	Heinrich	Development Hapisol II V3.0	Addres
H2	V300	2007085	CR Description	0				11.05.2011	approval pending	New Requirement	Heinrich	Development Hapisol II V3.0	Addres
H2	V300	2007313	New Function to create departments	1				01.05.2011	ready for promotion to production	New Requirement	Heinrich	Test Hapisol II V3.0.0	Addres
H2	V300	2007133	Cum PTF 06060	0				20.04.2011	approval pending	Cumulative PTF	Heinrich	Development Hapisol II V3.0	
H2	V300	2007249	Release R45	3				17.04.2011	ready for promotion	Release	Heinrich	Development Hapisol II V3.0	
H2	V300	2007155	Change position of field in address field 233	2				15.04.2011	test	New Requirement	Heinrich	Test Hapisol II V3.0.0	Contrac
H2	V300	2007162	Change Sort of Fields on Panel et564	1				04.04.2011	test	New Requirement	Heinrich	Test Hapisol II V3.0.0	Addres
H2	V300	2007038	New Field on Department	2				25.03.2010	ready for promotion	New Requirement	Heinrich	Development Hapisol II V3.0	

Edit Models

Model Name: , Application: , Model Type: Template, Normal, Filter, Reset

Model Status: Extracted, Version: , User ID: ,

Plex Version	Model Surrogate	Model Name	Model Description	User ID	Model File Name	Model Status	Model Type	Last Update Date	Last Update Ti
2	301	Tutorial Java	Tutorial Java	HEC	D:\MPTest\TutorialJava\TUTORIALJAVA.mdl	Extracted	Normal	00.00.0000	00:00:00
2	299	ModManTest Englisch	Test Model Manager English	HEC	D:\MatchPointTestModMan\HECLocalModel\HECModelTestE.mdl	Extracted	Normal	00.00.0000	00:00:00

Ready

NUM

# MatchPoint WebClient

## Change Request Information

http://localhost:8080/Matchpoint55web/webclient?WSYD\_SIGN=&WSYD\_EVENT=&WSYD\_SID=&WSLNKREF=&WSCU - Windows Internet Explorer

http://localhost:8080/Matchpoint55web/webclient?WSYD\_SIGN=&WSYD\_EVENT=&WSYD\_SID=&WSLNKREF=&WSCU

File Select Extras

cm FIRST

CM First | Logout | Preferences | Help

CR Number: 0 Priority: ☐ open

CR Description:

Reference:

Environment:

Object:

Requester:

Tester:

Developer:

Web Designer:

Product:

CR Group:

Application:

Version:

Subsystem:

CR Type:

Project:

Customer:

Filter

Reset

☐ Only cumulative

☐ Show content

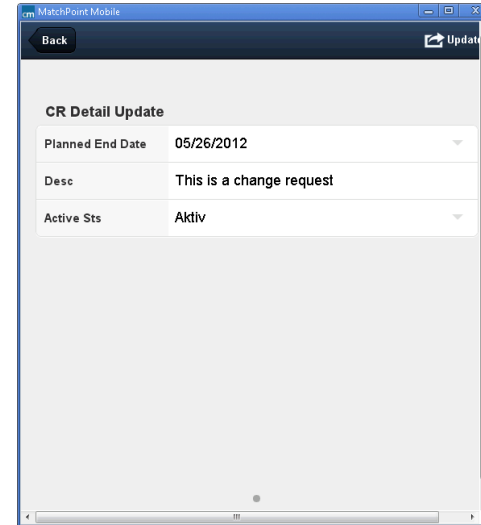
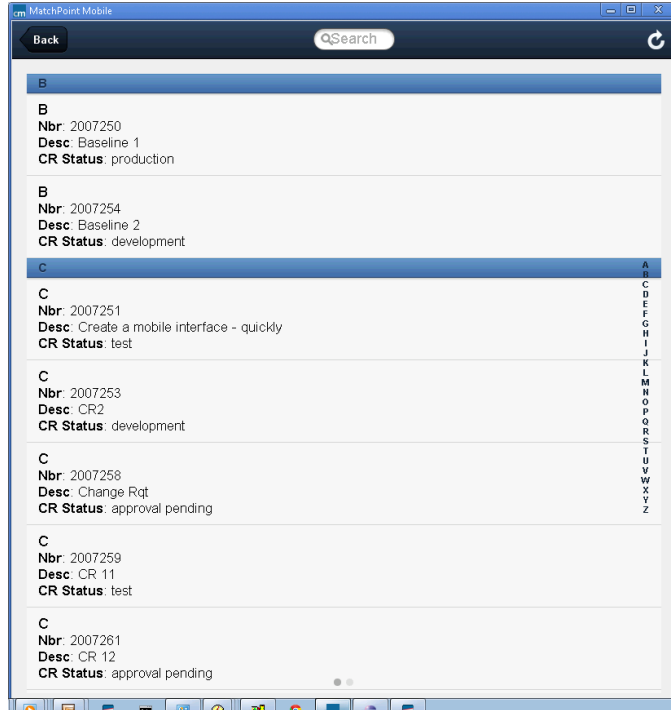
Internal ☐ All

Application	Version	CR Number	CR Description	CR Status	CR Description
H2	V300	2007167	New Fieldposition at Address äöü	test	Test Hapisol II V3.0.0
H2	V300	2007164	New Function for Contact	test	Test Hapisol II V3.0.0
H2	V300	2007162	Change Sort of Fields on Panel etr564	test	Test Hapisol II V3.0.0
H2	V300	2007156	Neue Update-Funktion	ready for promotion to production	Test Hapisol II V3.0.0
H2	V300	2007155	Change position of field in address	test	Test Hapisol II V3.0.0
H2	V300	2007133	Cum PTF 06060	approval pending	Development Hapisol II V3.0.0
H2	V300	2007092	New Requirement on Person	ready for promotion	Development Hapisol II V3.0.0
H2	V300	2007085	CR Description	approval pending	Development Hapisol II V3.0.0
H2	V300	2007038	New Field on Department	ready for promotion	Development Hapisol II V3.0.0
H2	V300	2007035	FTP-Transfer with consolidation	ready for promotion to production	Test Hapisol II V3.0.0
H2	V300	2007033	Language Dependent Objects	ready for promotion to production	Test Hapisol II V3.0.0
H2	V300	2007027	Addressfield	production	Test Hapisol II V3.0.0



# MatchPoint Mobile

## Change Request Information



# CA Plex

## Presentation

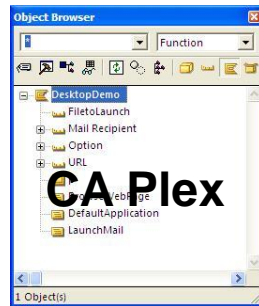
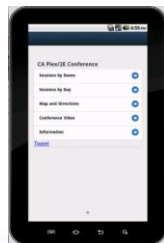
Web Services  
ASP .NET  
WPF clients



Java



MFC



## Servers



IBM System i™  
RPGIV



## Databases



IBM DB2



Microsoft  
SQL Server



MySQL

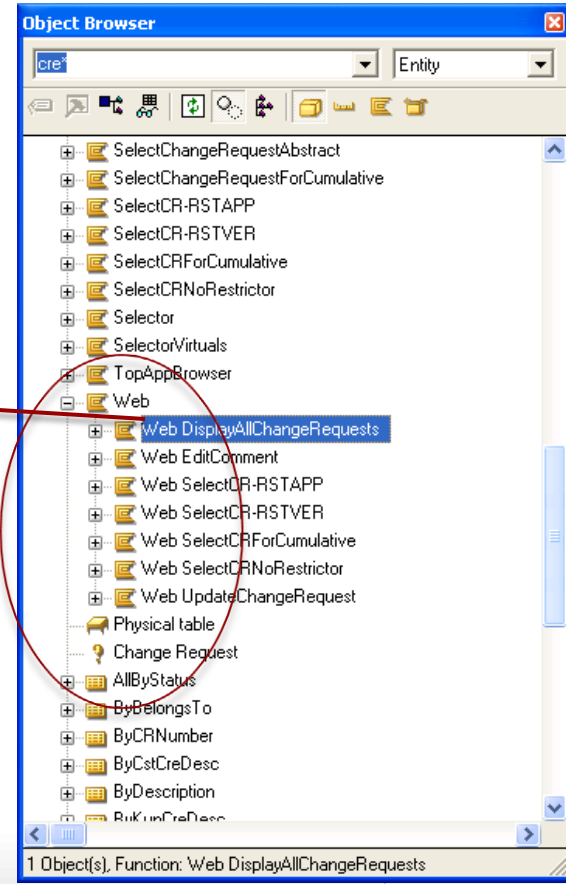
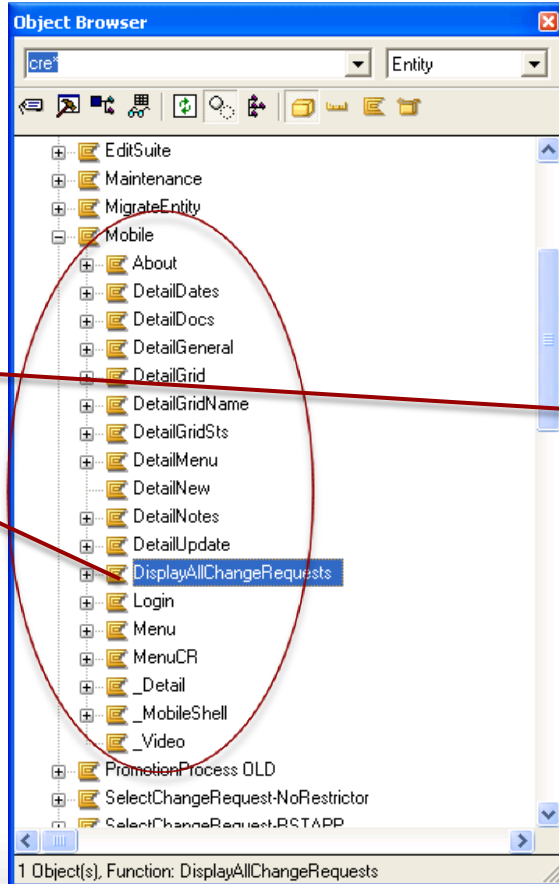
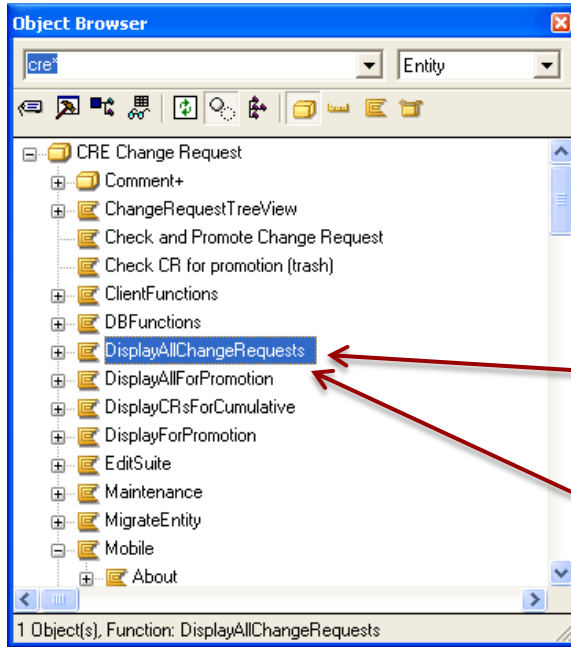
ORACLE

DDS

ODBC  
DDL

JDBC  
DDL

# Simply by inheritance



# Only change the presentation

The screenshot displays three overlapping windows from a software development tool:

- Model Editor - Function: CRE Change Request.Mobile.DisplayAllChangeRequests**  
This window shows a function definition. The function name is "CRE Change Request.Mobile.DisplayAllChangeRequests". It is defined as "is a FNC" (Function). The function calls "CRE Change Request.DisplayAllChangeRequests". It also lists "calls" for "CRE Change Request.Mobile.\_MobileShell" and "CRE Change Request.Mobile.DetailMenu", and "generated call to" for "PRD Project.Fetch.ManageCombo".
- Panel: CRE Change Request.Mobile.DisplayAllCh...**  
This window shows a "List" view with a table. The table has columns: "Nbr", "Desc", and "CR Status".
- Panel: CRE Change Request.Web.Web DisplayAllChangeRequests.Panel**  
This window shows a "Panel" view with a form and a table. The form includes fields for "CR Number", "Status", "CR Description", "Reference", "Environment", "Object", "Requester", "Tester", "Developer", "Web Designer", "Product", "CR Group", "Application", "Version", "Subsystem", "CR Type", "Project", and "Customer". There are also checkboxes for "Priority", "open", "Only cumulative", and "Show content". A "Filter" button is present. Below the form is a table with columns: "Application", "Version", "CR Number", "CR Description", "CR Status", "Priority", and "CR current | Description".



## *Demo*

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## *Best Practice in Software Change Management*

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# Project Types

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- **New Development Projects**
  - New application
  - New Module for existing application
- **Maintenance**
  - Permanent maintenance on productive application
    - Fixes and new requirements
  - Temporary developments
    - Fixes and new requirements
    - No permanent team
- **Modernization**

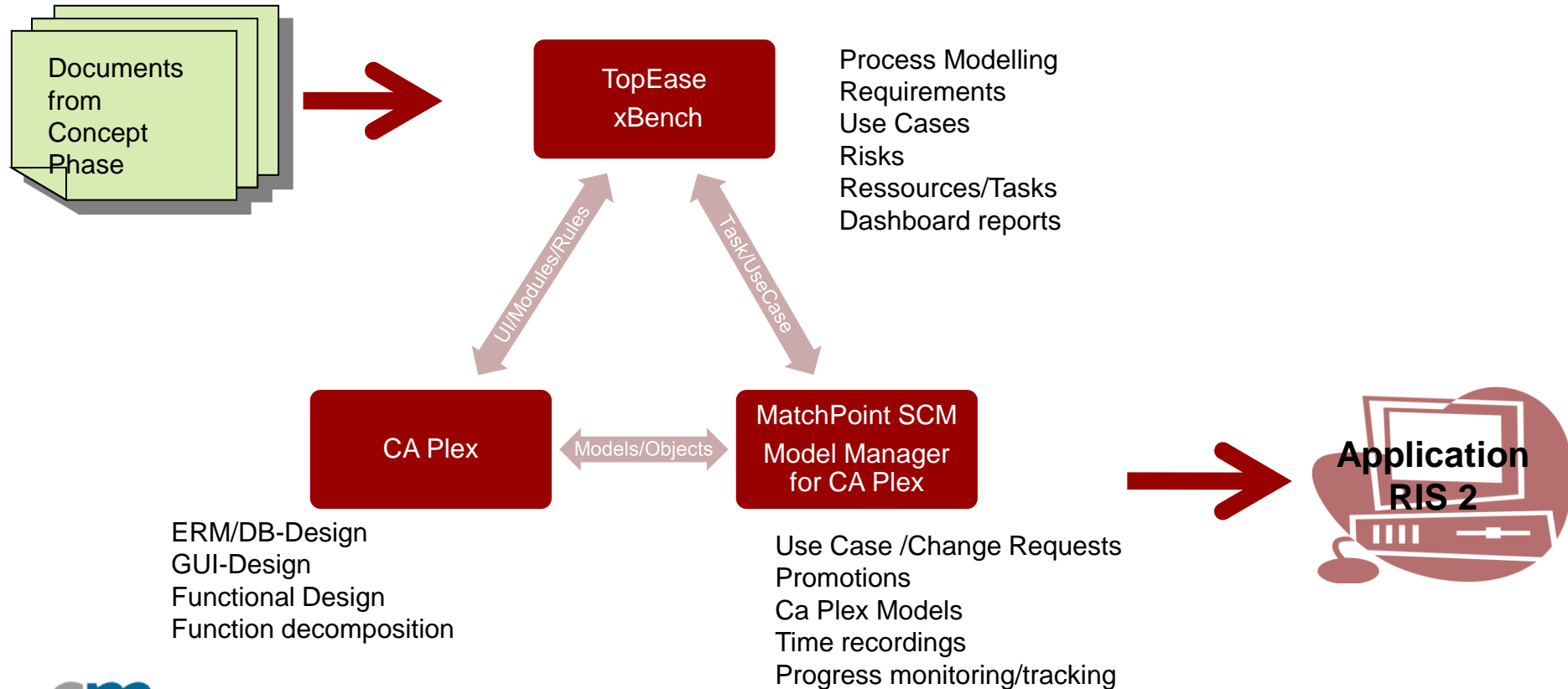
- ## Project RIS2

- Customer: Department of Justice and Inner Affairs, Zurich
- Application: RIS2 (Case Management System)
  - Criminal Investigation
  - Prison Management
  - Municipal Office Management
- Users: 1300 users in multiple locations
- Team: Projectteam with 10 Plex developers
- Duration: Total of 4 years
  - Multiple installation dates for different offices

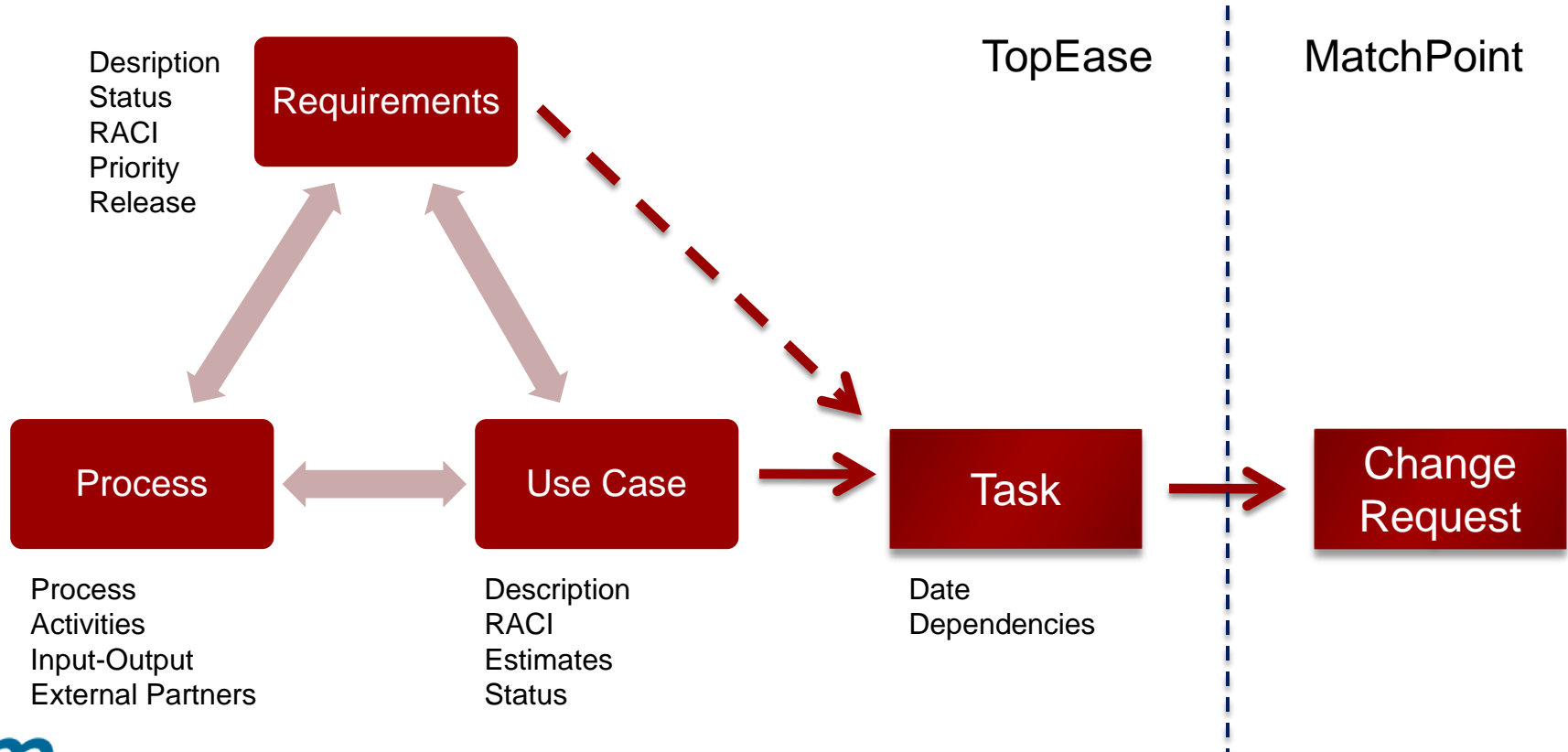


- Challenges Project RIS2
  - Replacing existing application
    - Improved GUI
    - Better business process support
    - Maintainability
    - New Modules, New requirements
  - Requirements not specified in details
  - Short time frame
  - Parallel applications with real-time synchronized data

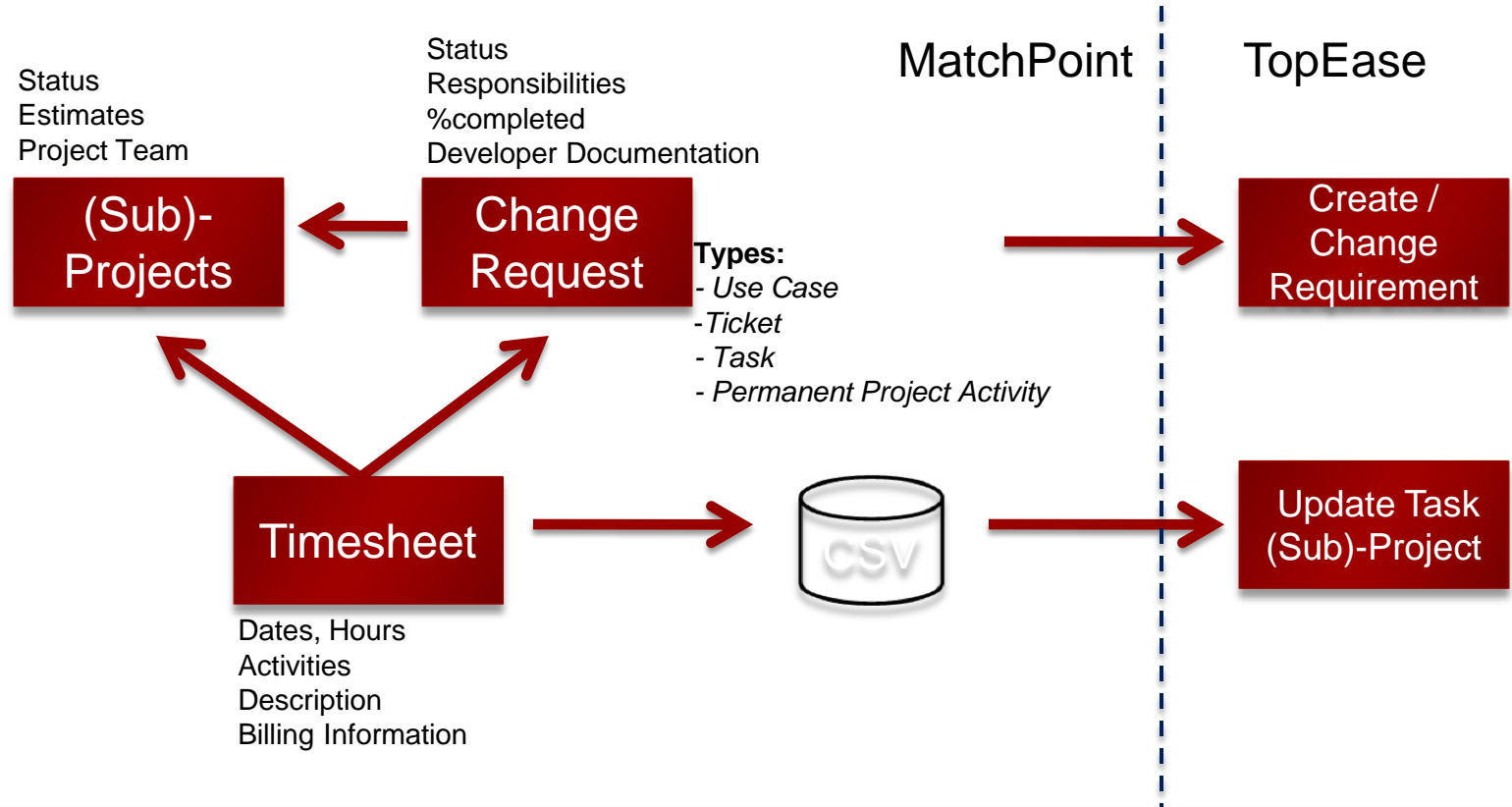
# Methodology and Tooling



# TopEase xBench



# MatchPoint



# Dashboard in TopEase xBench

Dashboards Homepage Language

Dashboard: Compliance

IKS

Filter

Ziel	Kennzahl	Bereich	Trend
Alle	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Alle	Fallend
Effizienz	Dauernde Wirksamkeit der Kontrolltätigkeiten	Rot	Stabil
Erfüllungsgrad	Dokumentation der Kontrollen in der Prozessdokumentation	Gelb	Steigend
Nachvollziehbarkeit	Gesetzliche und interne Vorschriften sind eingehalten	Grün	Kein Trend
Wirksamkeit der Kontrollen		Ohne Wert	

Row per page: 20

Filter Zurücksetzen

Statistik	Grün	Gelb	Rot	Ohne Wert	Summe
Ungefiltert	158	55	4	0	217

1 / 11 1 2 3 4 5 6 7 8 9 10

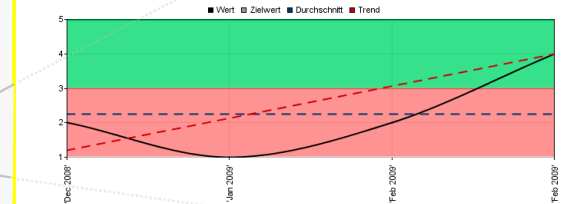
Ziel	Kennzahl	Inhalt	Bereich	Wert	Einheit	Periode	Trend	Rep.
Effizienz	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Überprüfung, ob alle Konten, welche für den Abschluss benötigt werden, bei der Erstellung des finanziellen Berichts berücksichtigt wurden	Grün	4		Feb 2009	↑	
Effizienz	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Das Anlagevermögen inkl. der Abschreibungen muss periodisch mit den Budgetzahlen verglichen werden	Grün	4		Feb 2009	↑	
Effizienz	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Das Anlegen und das Ändern von Konten im Hauptbuch darf nur restriktiv (Zugriff) einzelnen Mitarbeitern ermöglicht werden	Grün	5		Feb 2009	↑	
Effizienz	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Das Anlegen und das Ändern von Konten im Hauptbuch ist nur nach Genehmigung erlaubt	Gelb	3		Feb 2009	↓	
Effizienz	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Definition von Pflichtfeldern bei der Erfassung des Anlagevermögens	Gelb	3		Feb 2009	↑	
Effizienz	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Die Änderung eines Bankkontos muss im System durch eine zweite Person genehmigt werden	Grün	4		Dec 2008	↑	
Effizienz	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten	Die Debitorenzahlungen müssen nach Einlesen des Bank DTA's im System abgeblichen werden	Grün	4		Feb 2009	↑	
Effizienz	Überwachung der	Die Haupt- und Nebenbücher müssen regelmäßig abgestimmt werden	Gelb	3		Feb 2009	↓	

Report

Das Anlagevermögen inkl. der Abschreibungen muss periodisch mit den Budgetzahlen verglichen werden. Überwachung der Kontrolltätigkeiten durch den Vorgesetzten

Name	Überwachung der Kontrolltätigkeiten durch den Vorgesetzten		
Aktueller Wert (%)	4	Zielwert	
Einheit		Effektivdatum	Feb 2009
Datumsformat	Monatlich	Zweck	
Letzte Änderungsdatum	Mar 2009		

Historie Diagramm



Schliessen

# Summarization

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## TopEase

- Process Modelling*
- Requirement Management*
- Planing*
- Risk-Management*
- Project Status Reports*

## MatchPoint

- Tracking/Monitoring*
- Time Reporting*
- Deployment*

## CA Plex

- Database Modelling*
- Functionality Development*



[christoph.heinrich@cmfirstgroup.com](mailto:christoph.heinrich@cmfirstgroup.com)

Tel. +41 41 501 05 08

# Thank You for your Attention

Best Practice for Software Change  
Management

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Christoph Heinrich  
CM First Group