

Business Intelligence applications developed with IBM's Cognos

Technical white paper
Consulting Engineering

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Business Intelligence

Our time and efforts has been devoted to developing Business Intelligence applications using IBM Cognos. We tend to leverage most of Cognos' platform to bring out customer satisfaction at highest level possible. So far, two applications have been developed and are successfully maintained, supported and upgraded.

From tabular reports with crosstabs and lists, to various charts to visualize gathered data – we have mixed them all. In addition, reports we developed augment results with external web services, refresh data on daily basis and historise dimensions of interest. Our applications bring unique experience and assist our end-users in analyzing gathered financial data to bring business decisions with great ease!

Succeed BI

A financial dashboard with customized control for users to pick different dimensions when generating a financial report. Users can use more than 30 filter dimensions which can be combined to deliver a report that only displays data which concerns the individual running the report.

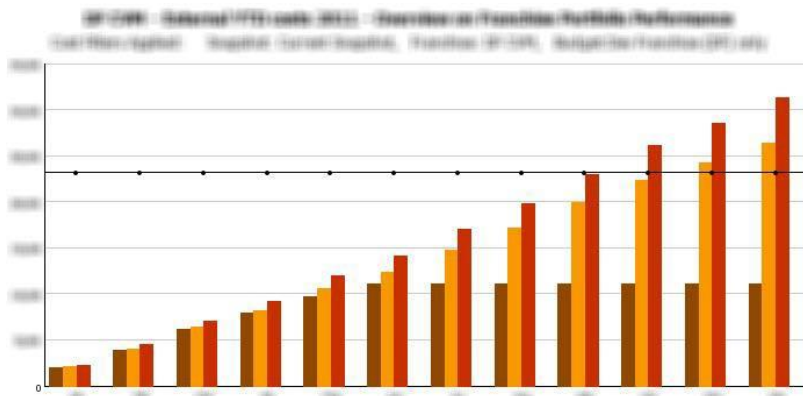
Features:

- Customized dimensions to choose for filtering
- Daily data refresh
- Dimension data historization
- Multiple report output types available
- Boosted report generation with database optimization



Lifeline

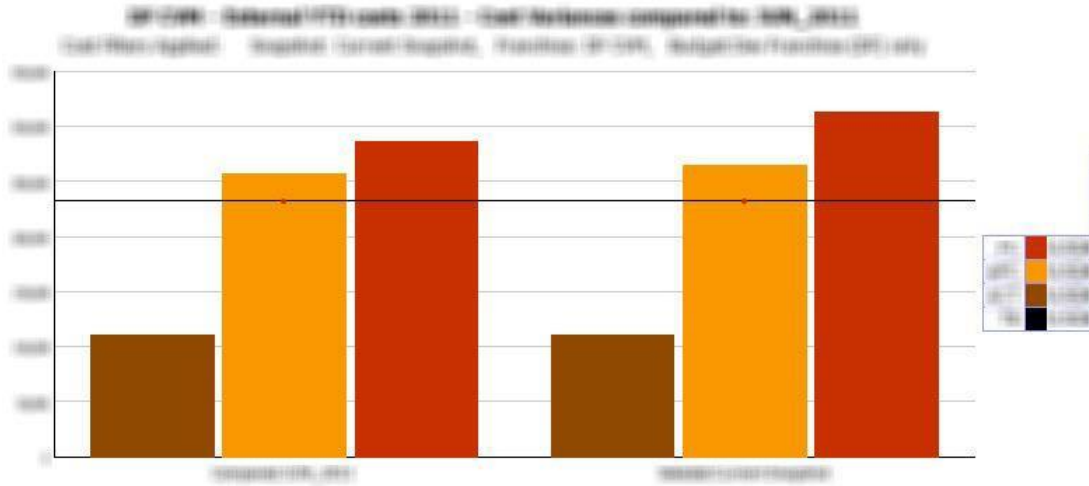
Multilevel, drillable application for project budgeting. Backed up with charts for data visualization, the financial part of this project aims to help financial teams estimate; track and compare expected budgets with actual costs for each project. The milestone part of the application is used for tracking set milestones within individual organizations



Features:

- Multilevel data granularity
- Drillable interface for level migration
- Historized dimension data
- Easy comparison of forecasts, budgets and actual costs

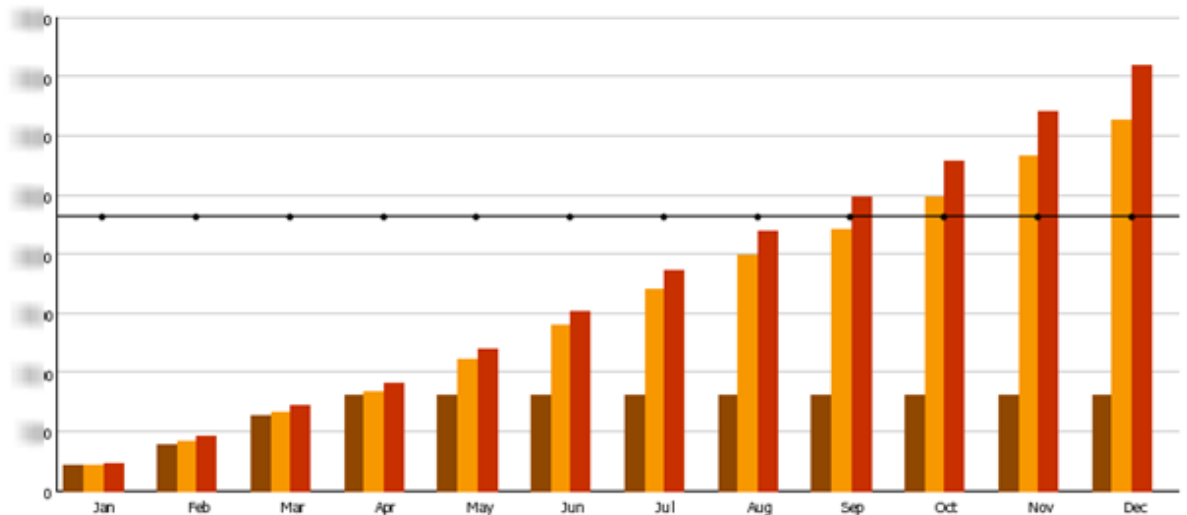
- Multiple report output types available
- Variance calculations



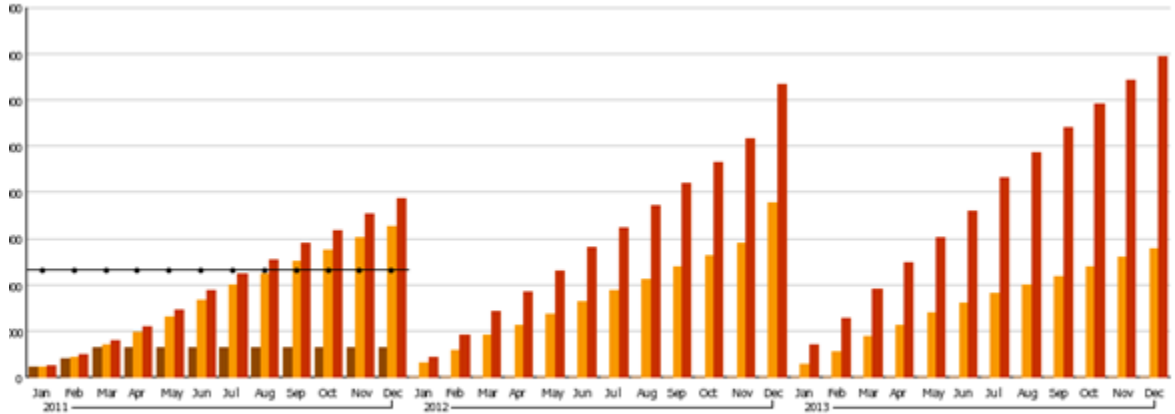
Since data is gathered from a living application, its quality must be checked and confirmed. Therefore we developed a stand-alone QA tool for data integrity. Many times it helped find and correct errors in the data which originate from the data source application.

Report and chart features

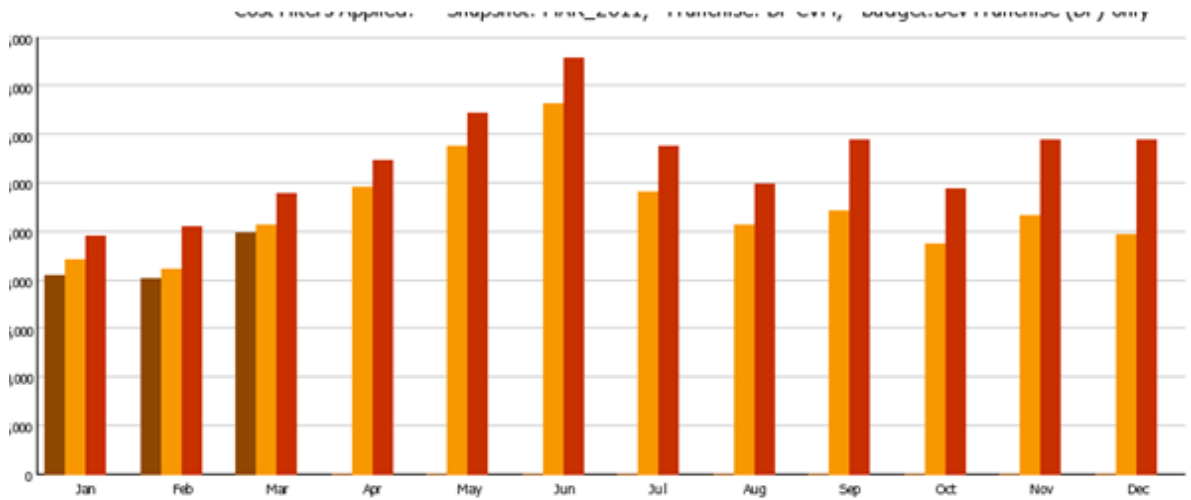
- YTD calculations based on one year



- YTD calculations in more than one year view



- Monthly view of the costs

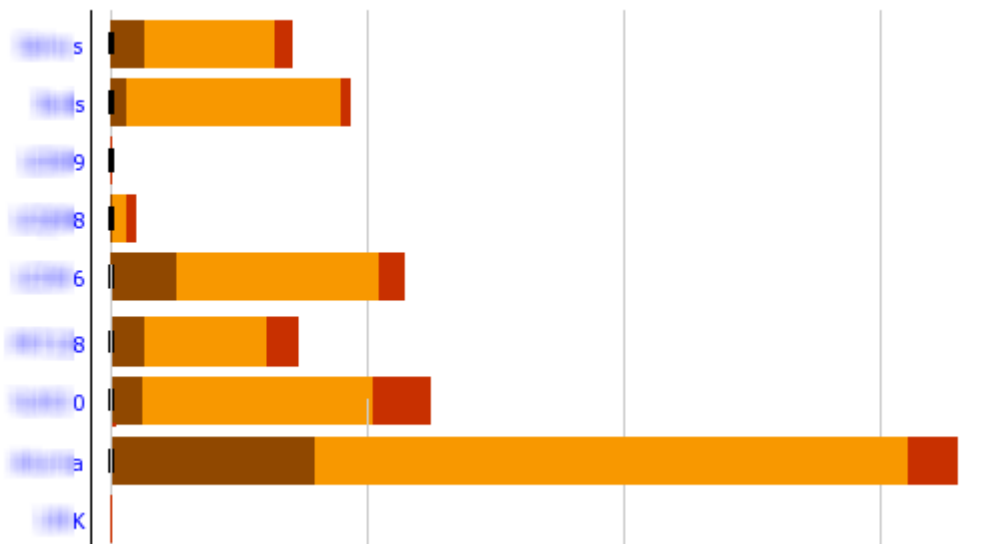


- Dynamic created legends for the charts

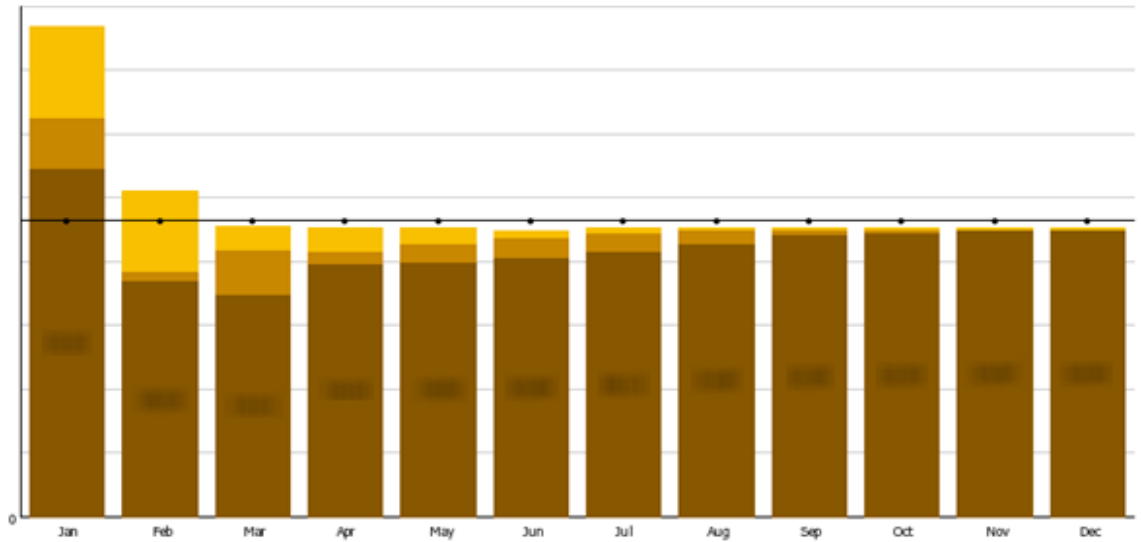
	Compared to:	Selected:	Variance:	
	JUN_2011 (=JUL11 DL) as of EOB 05-JUL-11	Current SN as of EOB 11-JUL-11	calculation method Selected - Compared to full year	
	Full Year	Full Year	Δ	Δ %
FC	1000	1000	0	0%
wFC	1000	1000	0	0%
ACT	1000	1000	0	0%
TB	1000	1000	0	0%

		Based on:		
		MAR_2011 (=APR11 DL)		
		as of EOB 07-APR-11		
		Mar	YTD	Full Year
FC	kUSD	25,000	25,000	25,000
wFC	kUSD	25,000	25,000	25,000
ACT	kUSD	25,000	25,000	25,000
TB	kUSD	25,000	25,000	25,000
YTG-r	kUSD			25,000
YTG-r	%			100%
YTG-a	kUSD			25,000
YTG-a	%			100%
Risk	kUSD			25,000
xACT/m	kUSD			25,000

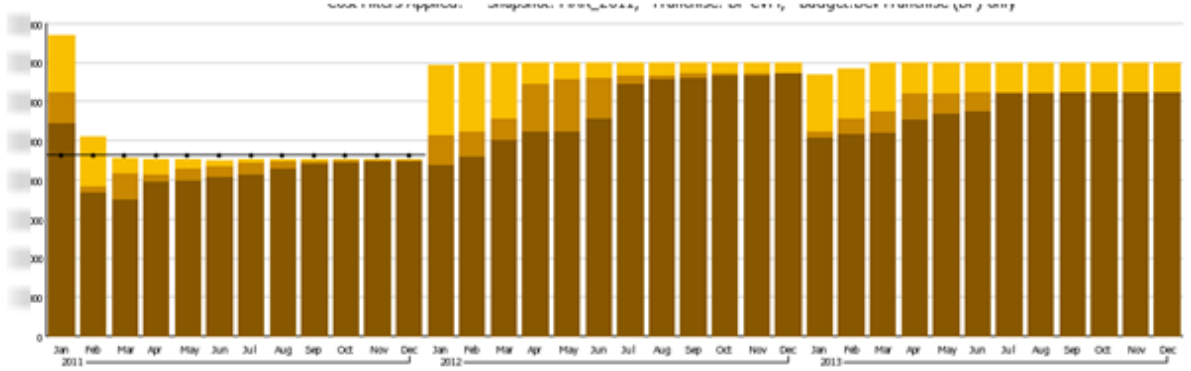
- Cumulative calculations based on the different cost types



- Future virtualization of the costs using past snapshots and costs simulation for the future using the last one



- Three years simulations



- Variances between snapshots costs

FRANCHISE	BRAND	Selected SN: MAR_2011			Compared to: APR_2011			Calculated Variances						
		FC	wFC	ACT	FC	wFC	ACT	Δ KUSD			Δ %			
Total		10000	10000	10000	10000	10000	10000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0
		1000	1000	1000	1000	1000	1000	0	0	0	0	0	0	0

- Chart view in the intersection cell for better visual presentation of the data



- Quick navigation panel

Applied Filters

Snapshot: [1-1-2008 - Snapshot](#)
 Franchise: [201-1-001](#)

Financial

Level 1

- L 1.0: [Financials - Total Sales](#)
- L 1.1: [2007 - 2008](#)
- L 1.2: [Franchise - Approval of FC - 2008](#)
- L 1.3: [Franchise - Approval of FC - 2007](#)
- L 1.4: [2007 - 2008](#)

Metrics

Metrics data >=

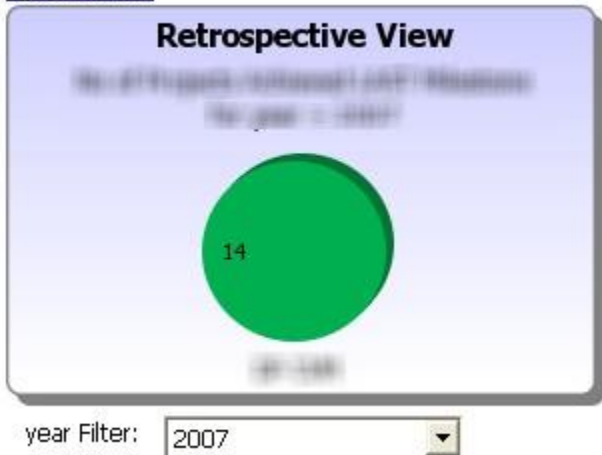
Franchise - Metrics
 Franchise - Metrics

Level 1

- L 1.0: [Franchise - Total Sales](#)
- L 1.1: [2007](#)

- Easy navigation between report levels
- Different milestones tracking for the process

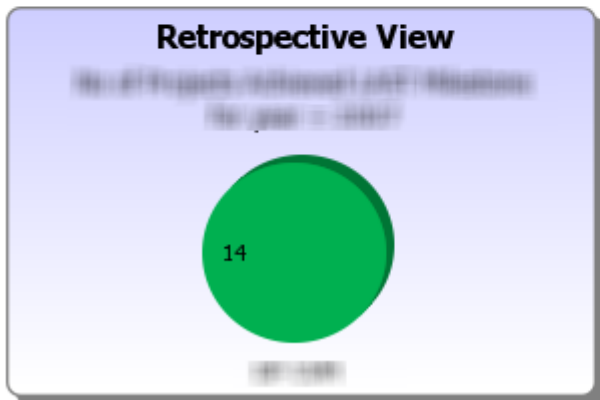
[Show Details](#)



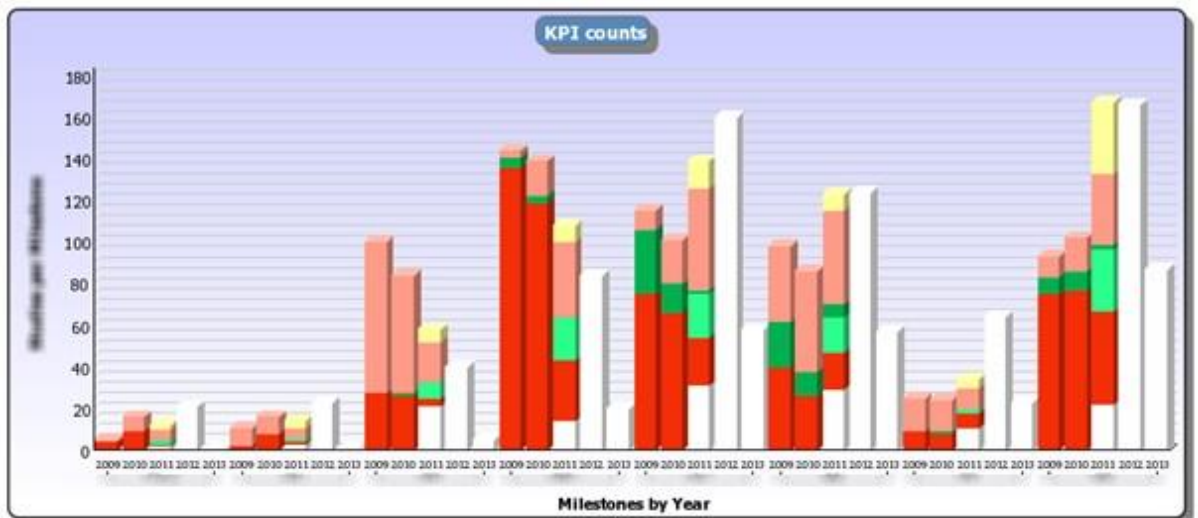
- Details what is in the pie:

[Hide Details](#)

Category	Date
Project A	27-Apr-07
Project B	28-Sep-07
Project C	14-Nov-07
Project D	13-Dec-07
Project E	05-Dec-07
Project F	22-Aug-07
Project G	10-Oct-07



- Milestones by years



- Quick navigation from one to more than one years for the charts
- Crosstab Freeze Row ideal for vertical scrolling



- Embedded results from the server services as a report
- Dynamic tooltip description for each column header

PROJECT	TIMELINE	PH2	FDP	PH3	SDP	1st S	1st
	PLANNED/BASELINE	20-Mar-03	24-Mar-03			13-Feb-06	05-Mar-06
	ACTUAL/TARGET	20-Mar-03	24-Mar-03			13-Feb-06	05-Mar-06
	DELTA		0			0	

Metrics Definition
 type:
 desc:
 method: Actual - Planned
 KPI (retrospective) Definition:
 green: <=30d
 red: >30d
 Due (prospective)
 Definition:
 white: <-90d
 green: <=-30d
 Yellow: <=0d
 red: >0d

- Dynamic legend for each chart, table and crosstab

Study Milestones coloring		Retrospective		Prospective			
Milestone	Case						
		<=-3	>-3	<-90	<=-30	<=0	>0
		<=-3	>-3	<-90	<=-30	<=0	>0
		<=-3	>-3	<-90	<=-30	<=0	>0
		<=3	>3	<-90	<=-30	<=0	>0
		<=-7	>-7	<-17	<=-12	<=-7	>-7
		<=-42	>-42	<-62	<=-58	<=-42	>-42
		<=-70	>-70	<-90	<=-85	<=-70	>-70
		<=-3	>-3	<-90	<=-30	<=0	>0
		<-12	>-12	<-23	<=-18	<=-3	>-3
		<=-3	>-3	<-90	<=-30	<=0	>0
		<=-70	>-70	<-90	<=-85	<=-70	>-70
		<=-175	>-175	<-195	<=-190	<=-175	>-175
		<=-3	>-3	<-90	<=-30	<=0	>0
		<=-133	>-133	<-154	<=-147	<=-133	>-133
		<=-3	>-3	<-90	<=-30	<=0	>0
		<=-133	>-133	<-154	<=-147	<=-133	>-133

Dynamic coloring of the cells dependent of the Milestone status

CLINICAL	PARAMETER	Milestone						Milestone Analysis					
		2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01	2002-03-01
			11-Feb-10	17-Jun-10	17-Jun-10	26-Aug-10		17-Feb-11	17-Jun-10	17-Jun-10	26-Aug-10		17-Feb-11
				17-Jun-10							17-Jun-10		26-Aug-10
			07-Oct-03	02-Feb-04	13-Mar-04	24-Mar-04		28-Jul-06	02-Feb-04	02-Feb-04	24-Mar-04		28-Jul-06
			07-Oct-03	02-Feb-04	11-Mar-04	24-Mar-04		28-Jul-06			11-Mar-04		24-Mar-04
			06-Jul-05	26-Sep-05	12-Nov-05	28-Nov-05	25-Nov-05	17-Feb-06	26-Sep-05	26-Sep-05	29-Nov-05	25-Nov-05	24-May-06
			06-Jul-05	26-Sep-05	11-Nov-05	29-Nov-05		24-May-06			11-Nov-05	29-Nov-05	29-Nov-05
			31-Aug-06	18-Dec-06	14-May-07	01-Aug-07	05-Jul-07	03-Dec-07	04-Jan-07	04-Jan-07	01-Aug-07	05-Jul-07	05-Dec-07
			31-Aug-06	04-Jan-07	21-Jun-07	01-Aug-07		05-Dec-07			21-Jun-07	01-Aug-07	01-Aug-07
				31-Aug-04	28-Feb-05	05-Mar-05		10-Jun-05	31-Aug-04	31-Aug-04	05-Apr-05		09-Jun-06
				31-Aug-04	18-Mar-05	05-Apr-05		09-Jan-06			18-Mar-05		05-Apr-05
			07-May-04	26-Nov-04	18-Mar-06	23-Mar-06		01-Jun-06	26-Nov-04	26-Nov-04	13-Mar-06		30-Jan-07
				26-Nov-04	27-Feb-06	13-Mar-06		30-Jan-07			27-Feb-06		13-Mar-06
			03-Feb-06	15-Mar-06	13-Apr-07	14-May-07		27-Jul-07	09-Jun-06	09-Jun-06	17-Jul-07		11-Nov-08
				09-Jun-06	17-Apr-07	17-Jul-07		11-Nov-08			17-Apr-07		17-Jul-07