

Introduction to BIRT

Krzysztof Daniel

Before we start

Before we start

- Who knows BIRT?

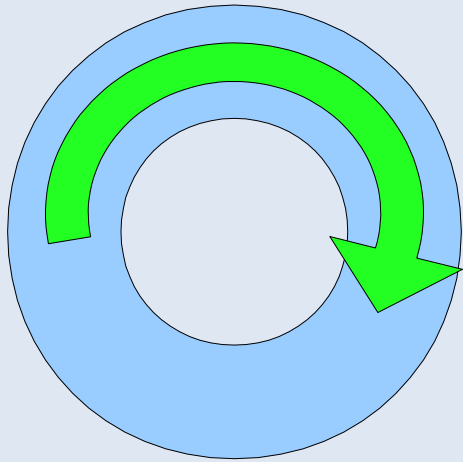
Before we start



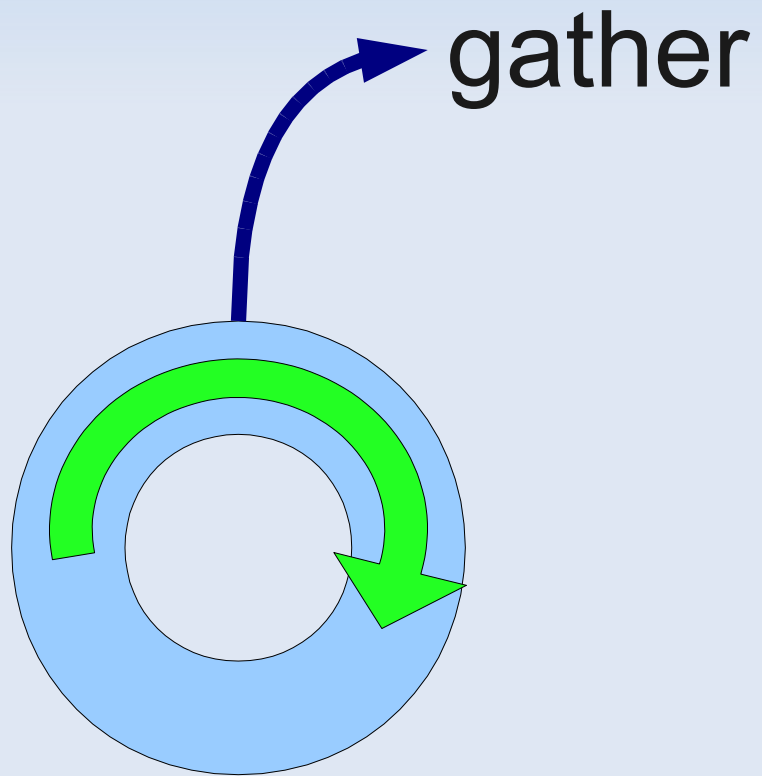
This is encouragement, not a tutorial.

What is reporting for?

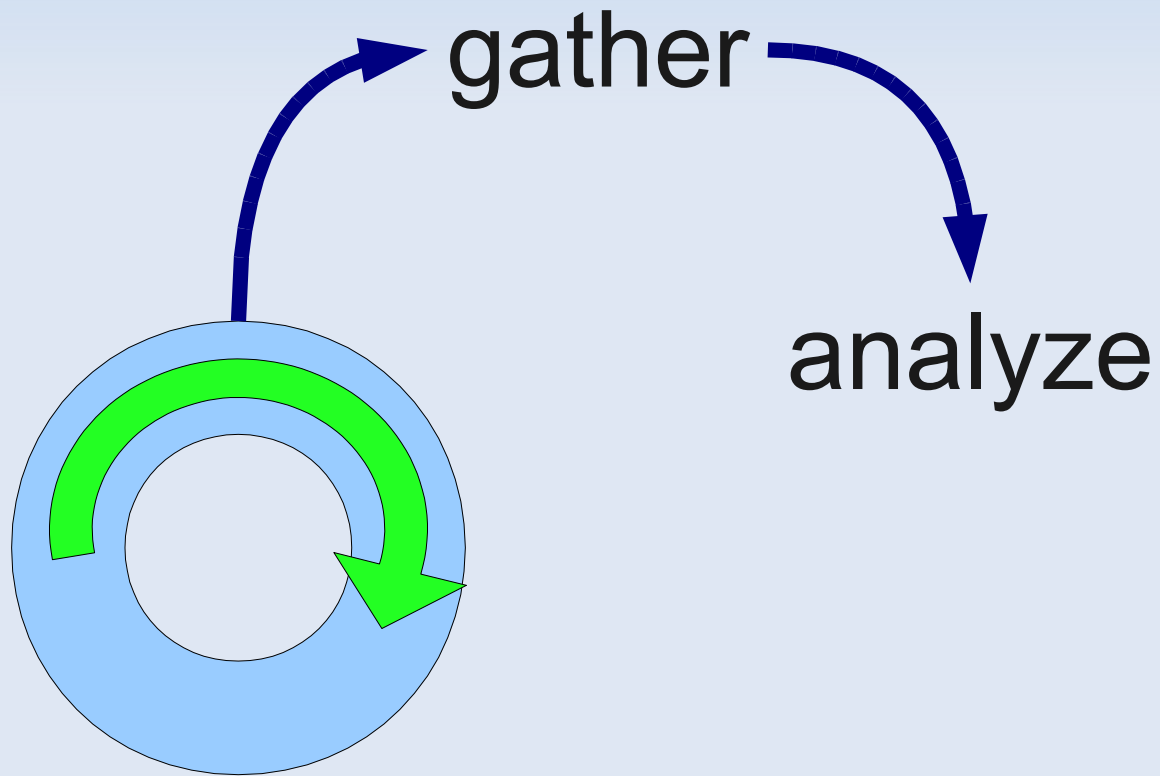
What is reporting for?



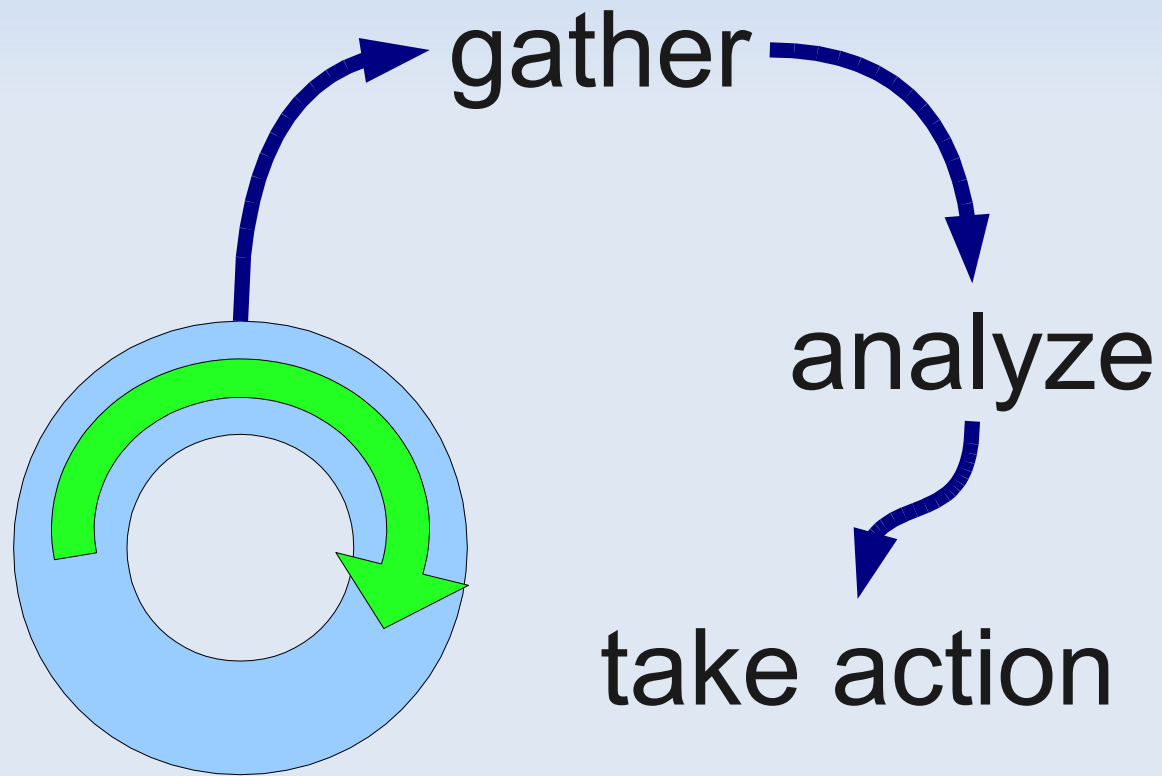
What is reporting for?



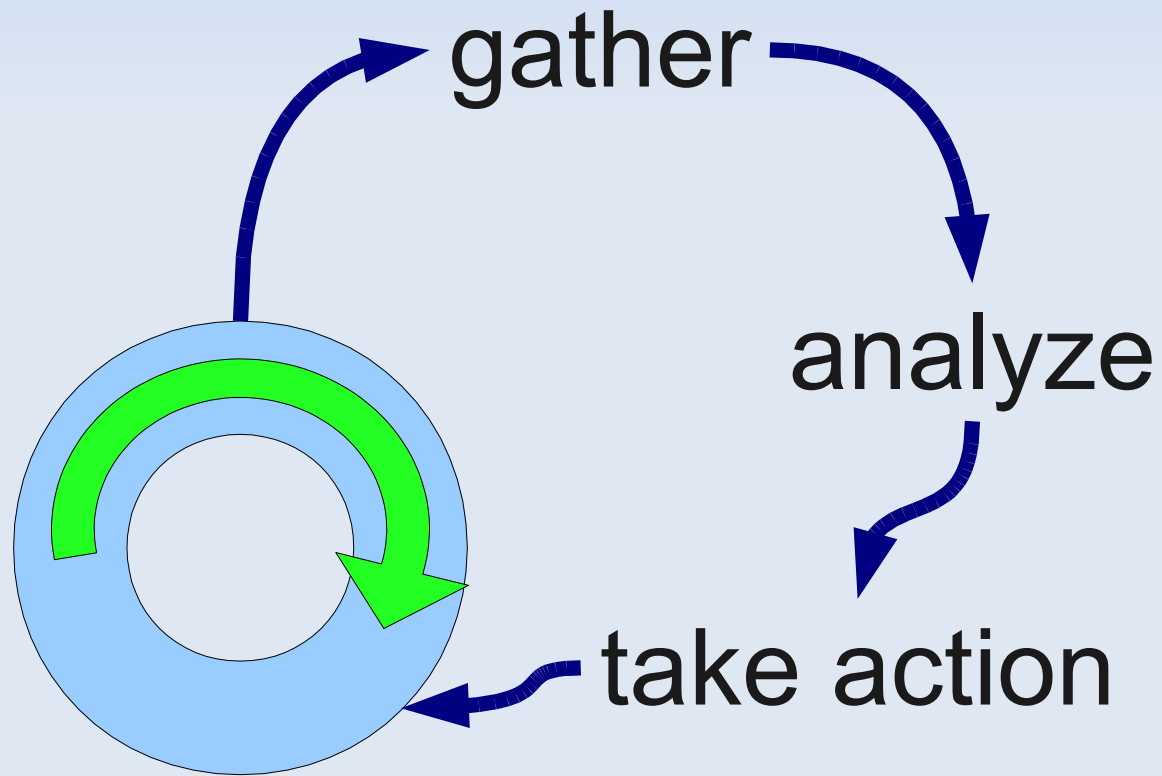
What is reporting for?



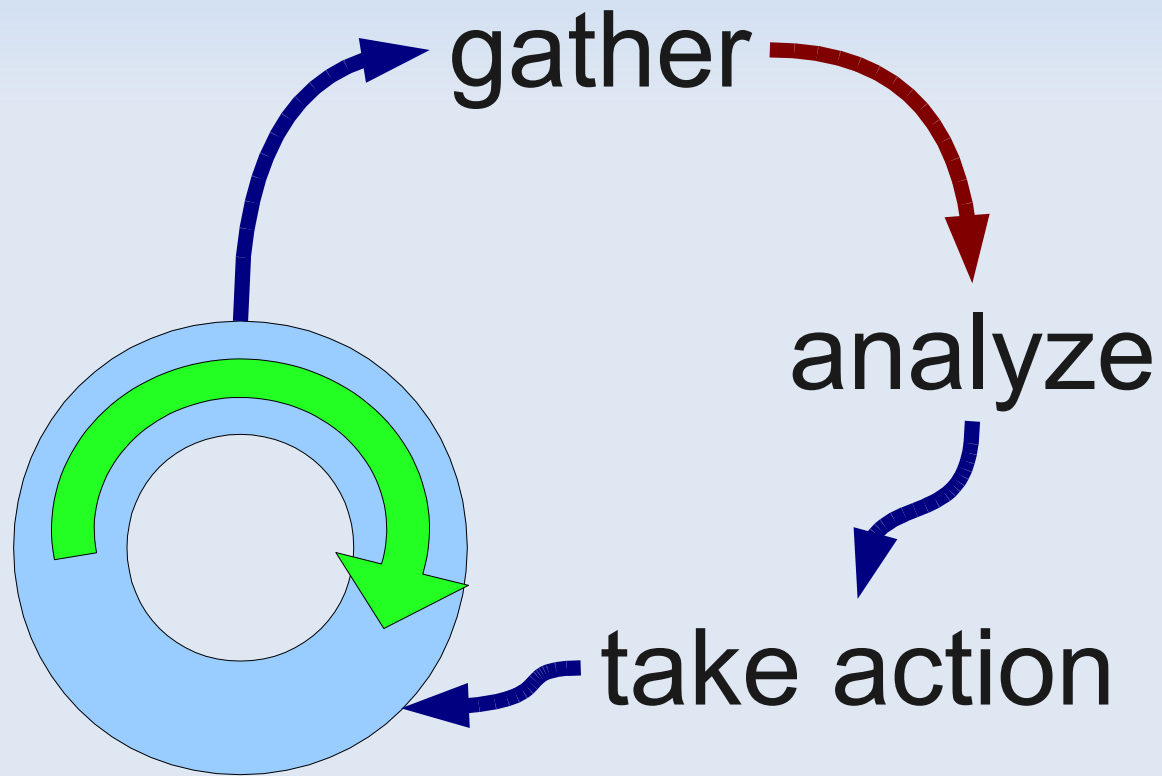
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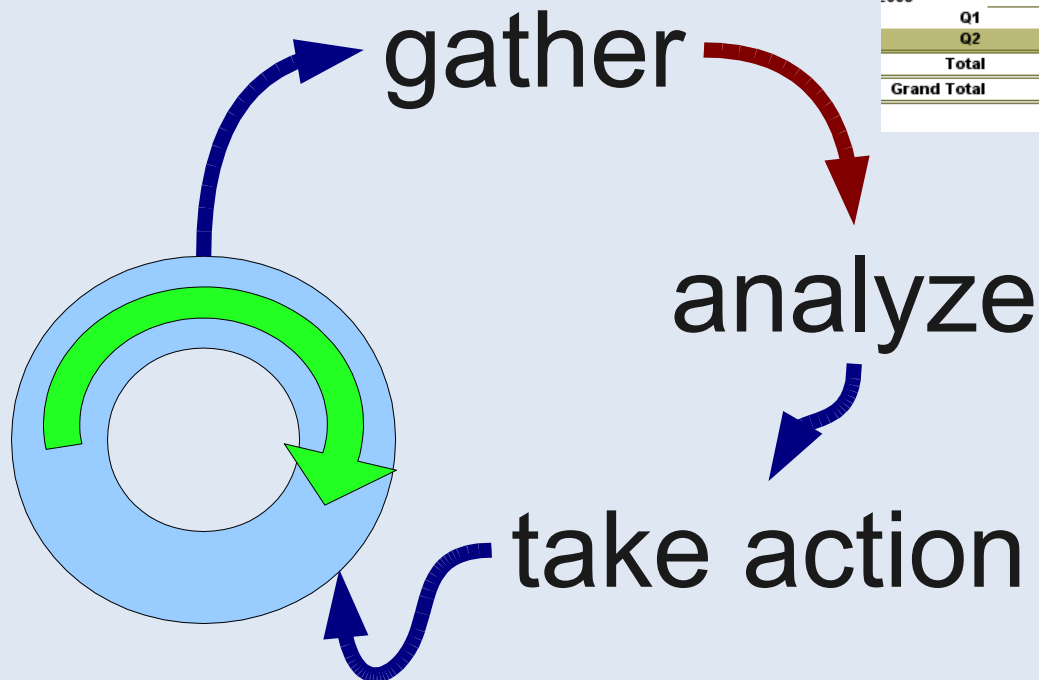
CLASSIC MODELS



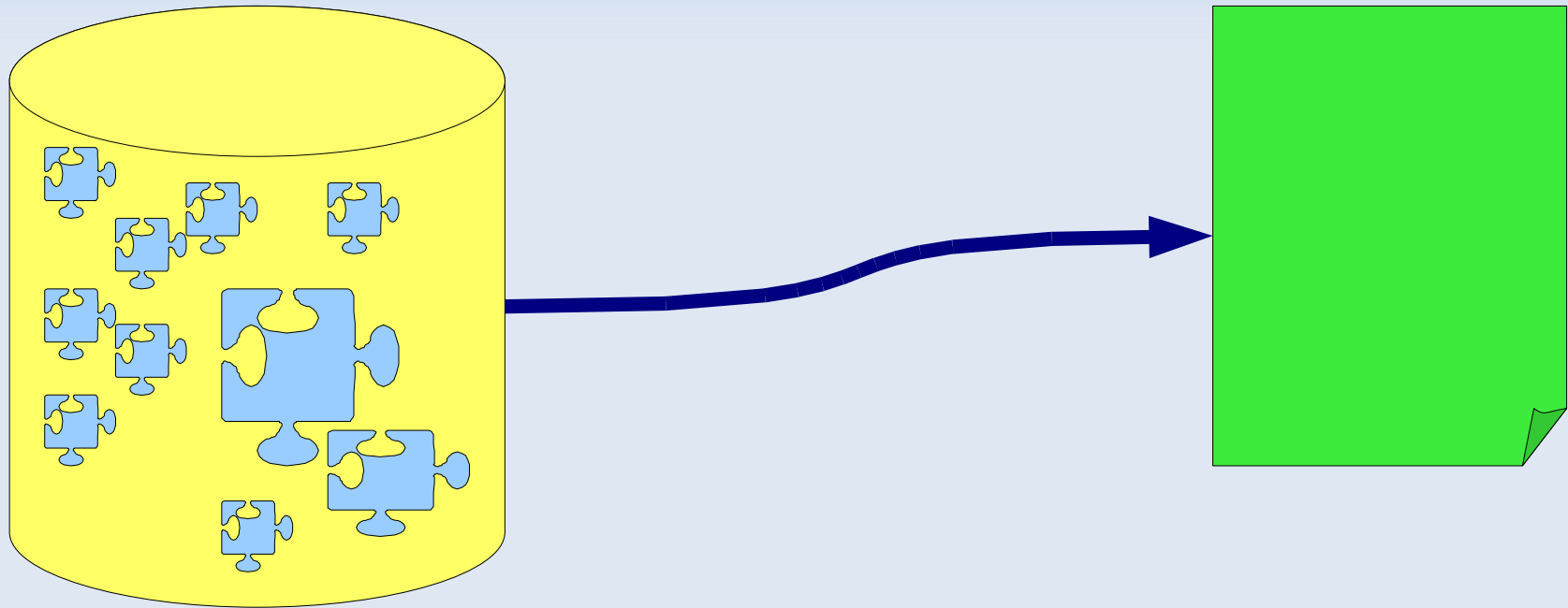
Classic Models, Inc.

701 Gateway Boulevard
South San Francisco, CA 94080

Year		Classic Cars	Trucks & Buses	Vintage Cars	Total
2003	Q1	\$152,581	\$43,593	\$106,982	\$405,613
	Q2	\$194,291	\$62,804	\$81,959	\$493,388
	Q3	\$243,978	\$73,842	\$110,486	\$584,500
	Q4	\$778,535	\$196,416	\$311,111	\$1,789,678
	Total	\$1,369,386	\$376,657	\$610,539	\$3,273,181
2004	Q1	\$317,306	\$67,942	\$136,849	\$760,730
	Q2	\$252,165	\$73,696	\$119,997	\$631,322
	Q3	\$419,674	\$106,833	\$200,420	\$1,048,801
	Q4	\$739,276	\$200,230	\$366,660	\$1,925,757
	Total	\$1,728,423	\$448,702	\$823,927	\$4,366,611
2005	Q1	\$392,920	\$101,332	\$183,041	\$972,208
	Q2	\$225,273	\$41,874	\$60,113	\$516,894
	Total	\$618,193	\$143,207	\$243,155	\$1,489,103
Grand Total		\$3,716,003	\$968,566	\$1,677,622	\$9,128,896



What is reporting for?



Sample Use Case – tracking data

Year	Category	Value
2008	income	322
2007	outcome	456
2008	income	123
2006	outcome	678
2008	income	234
2007	income	556

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For each year sum incomes
and subtract outcomes

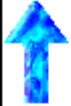

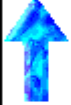


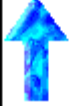
Sample Use Case – tracking data

Year	Category	Value
2008	income	
2007	outcome	
2008	income	
2006	outcome	
2008	income	
2007	income	



For each year sum incomes
and subtract outcomes

Enhanced listing

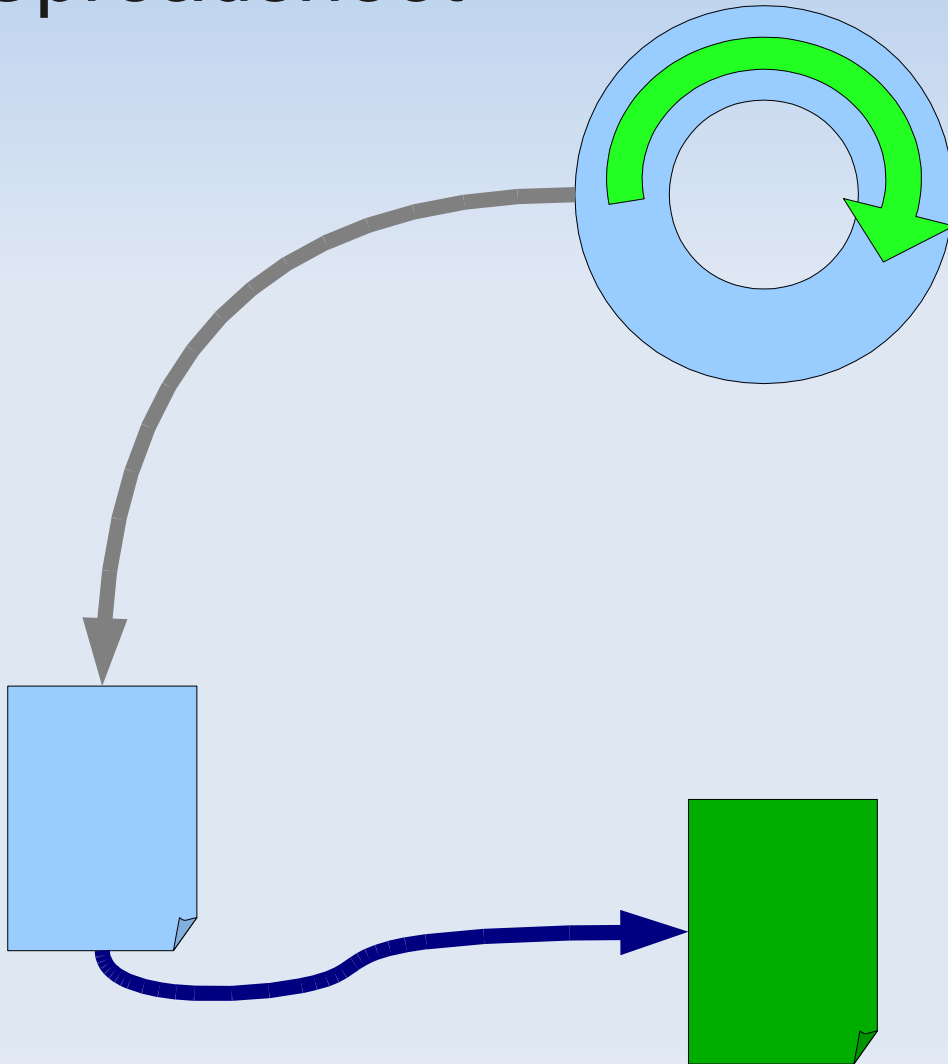
Year	Category	Value
2008		322
2007		456
2008		123
2006		678
2008		234
2007		556

Spreadsheet can do this, too!

So, why reporting?

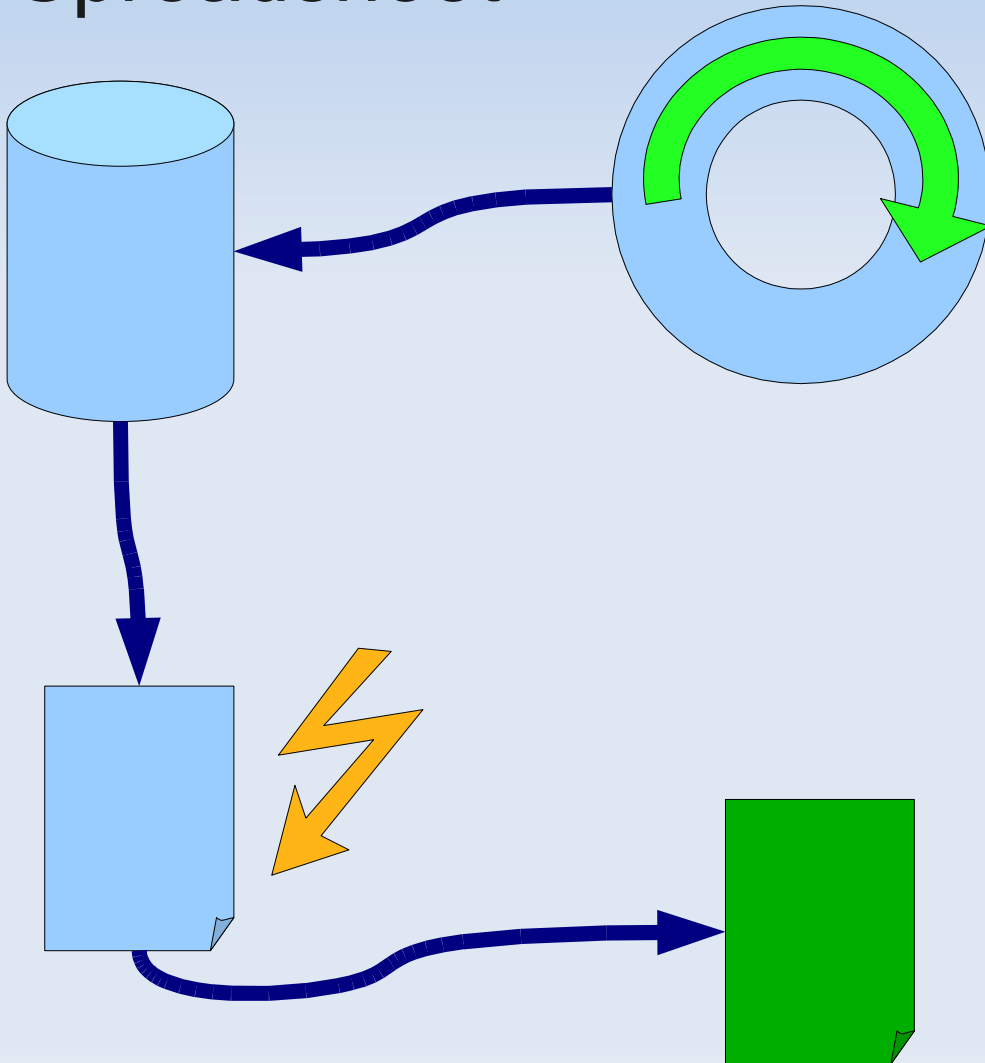
So, why reporting?

- Spreadsheet



So, why reporting?

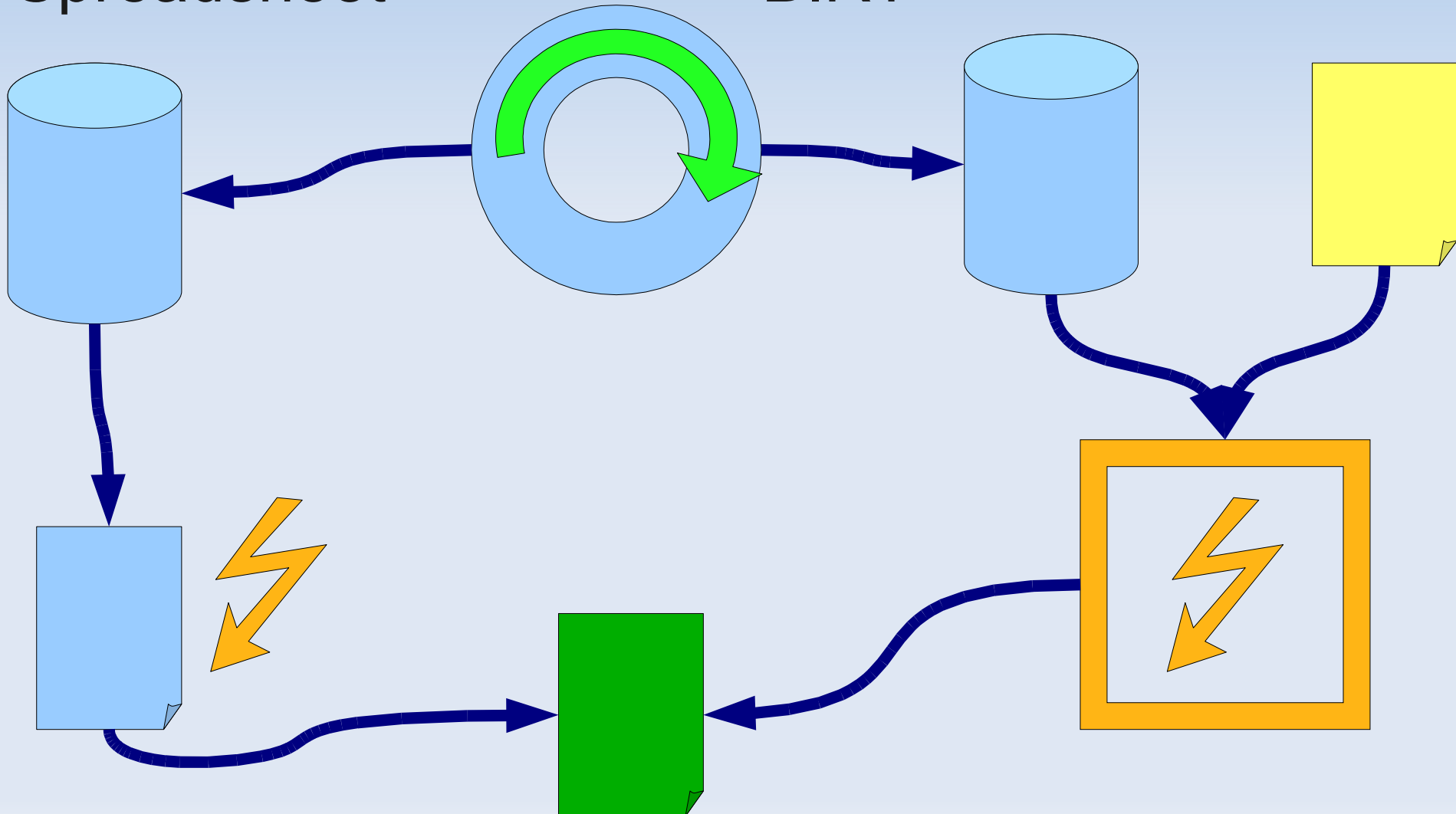
- Spreadsheet



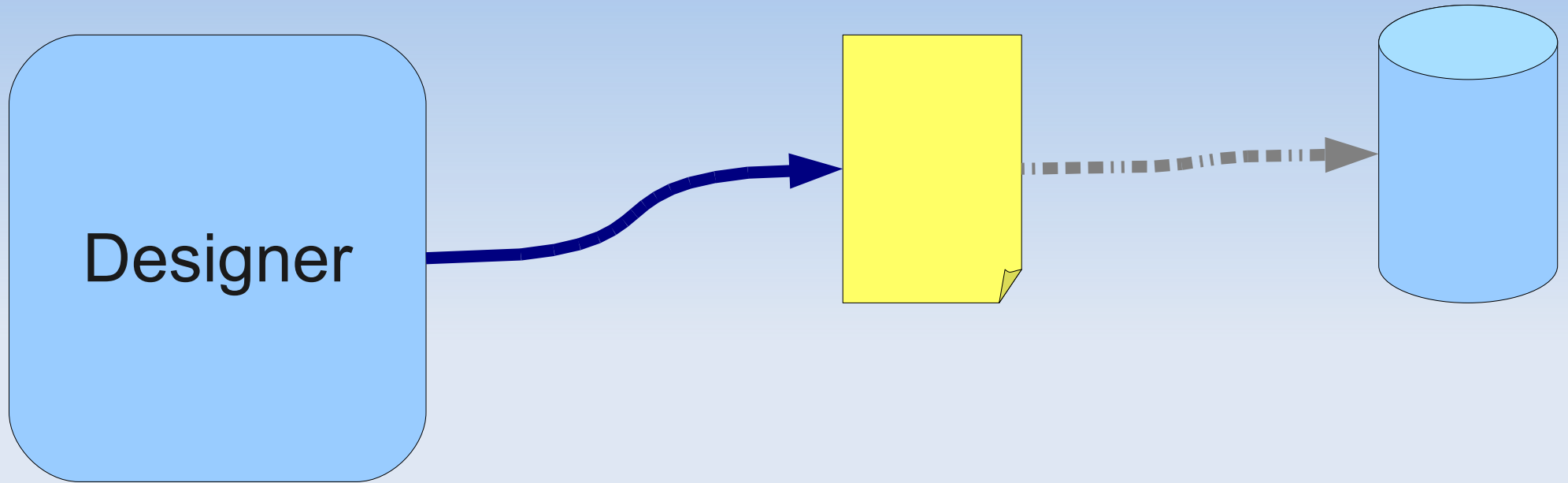
So, why reporting?

- Spreadsheet

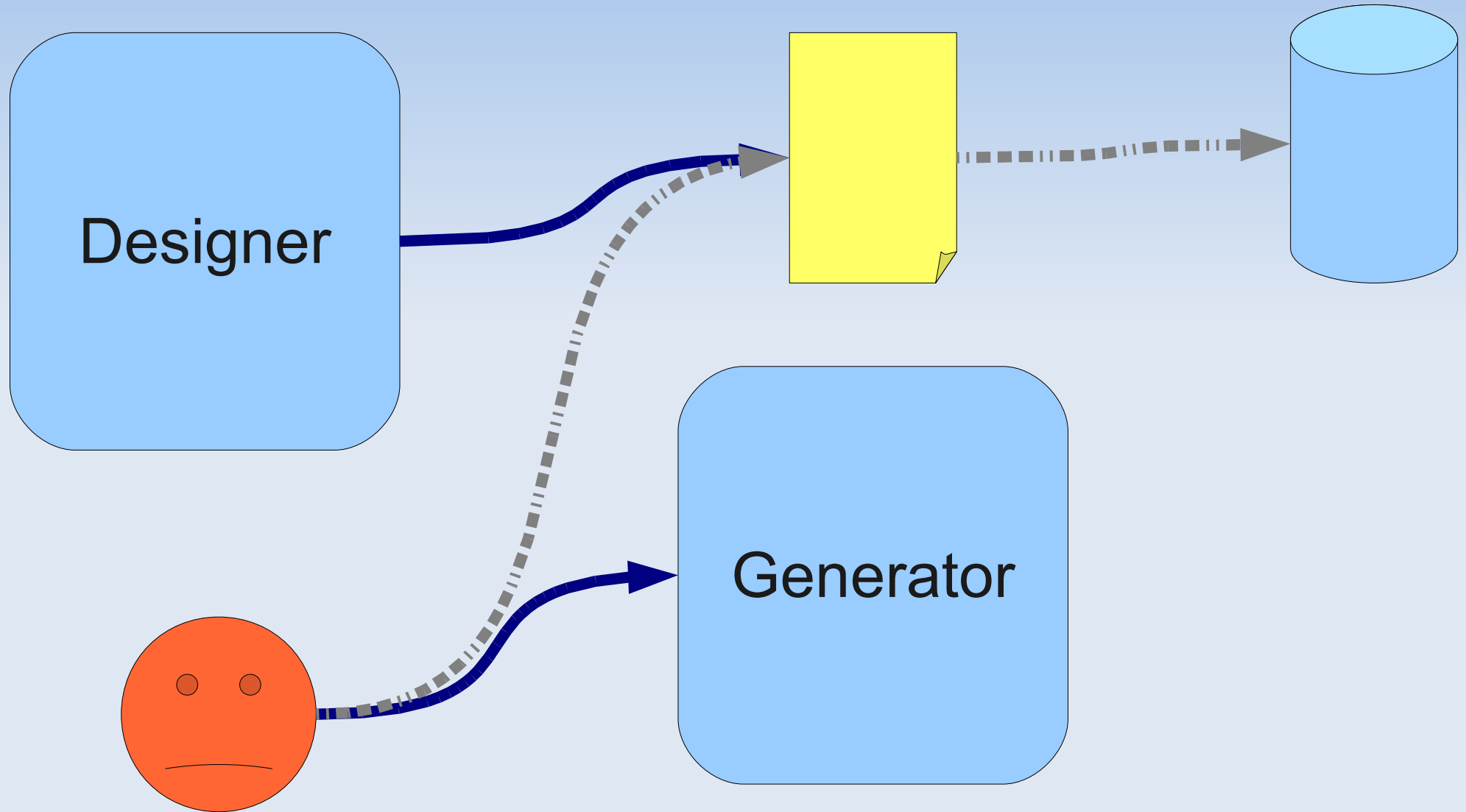
- BIRT



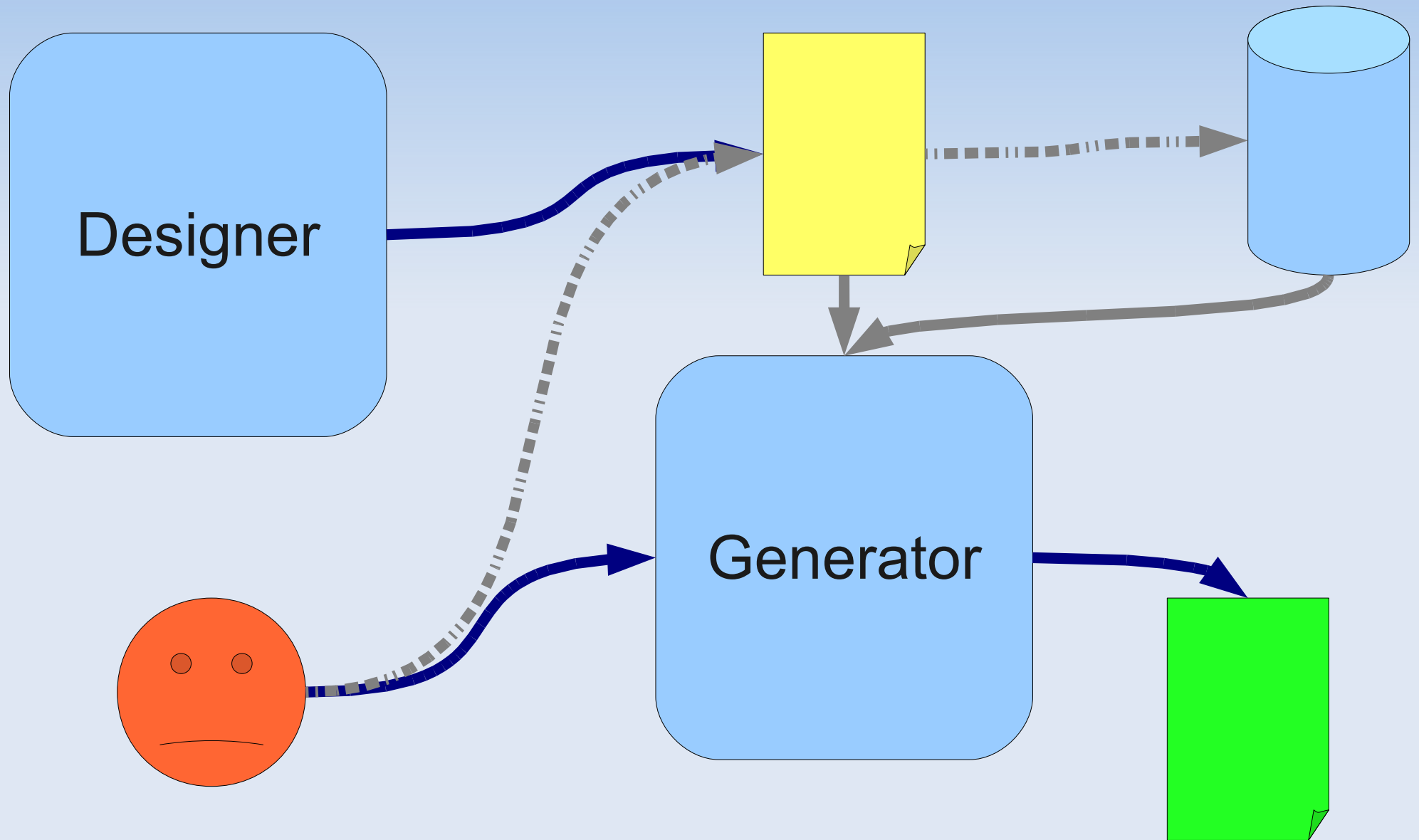
Architecture (1)



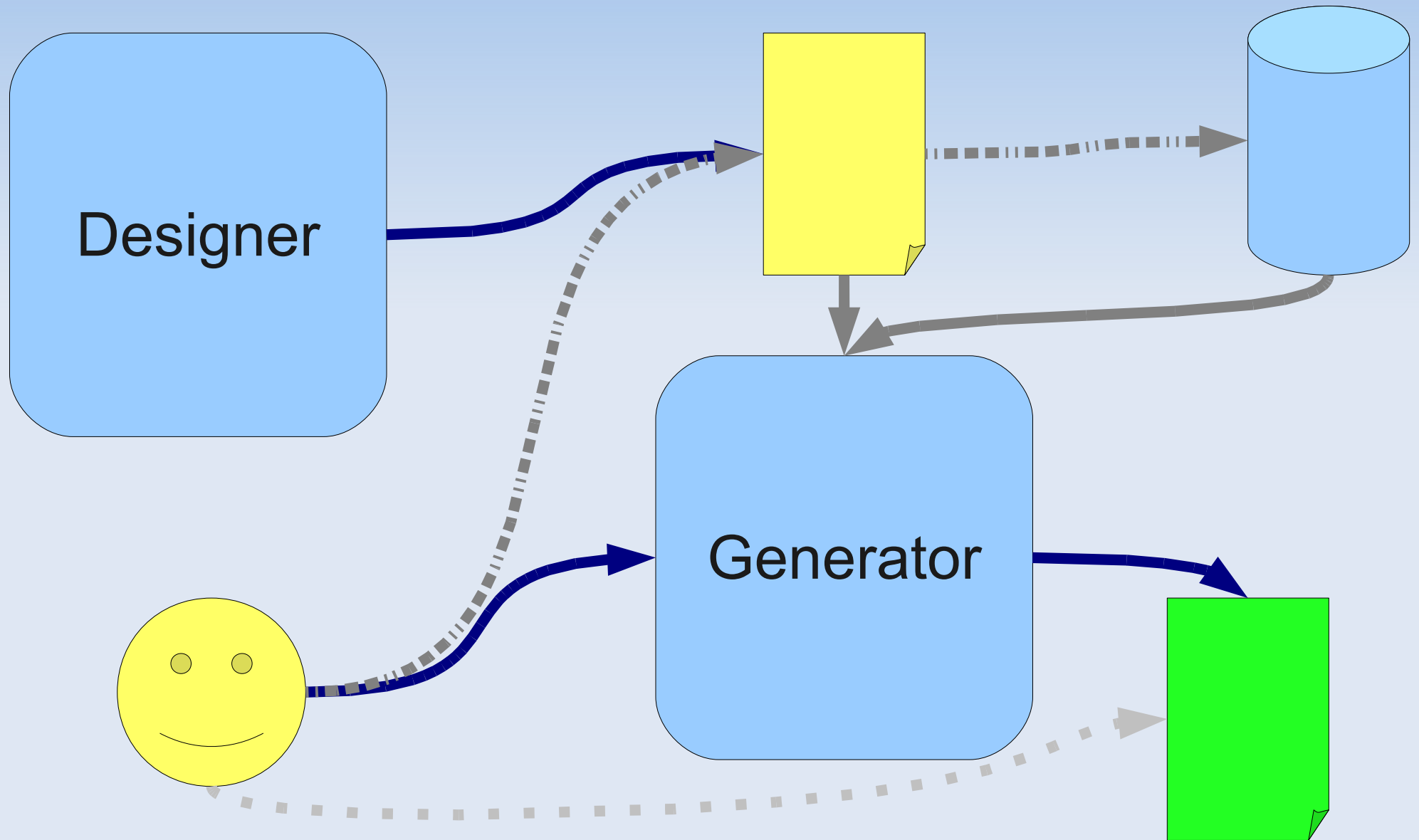
Architecture (2)



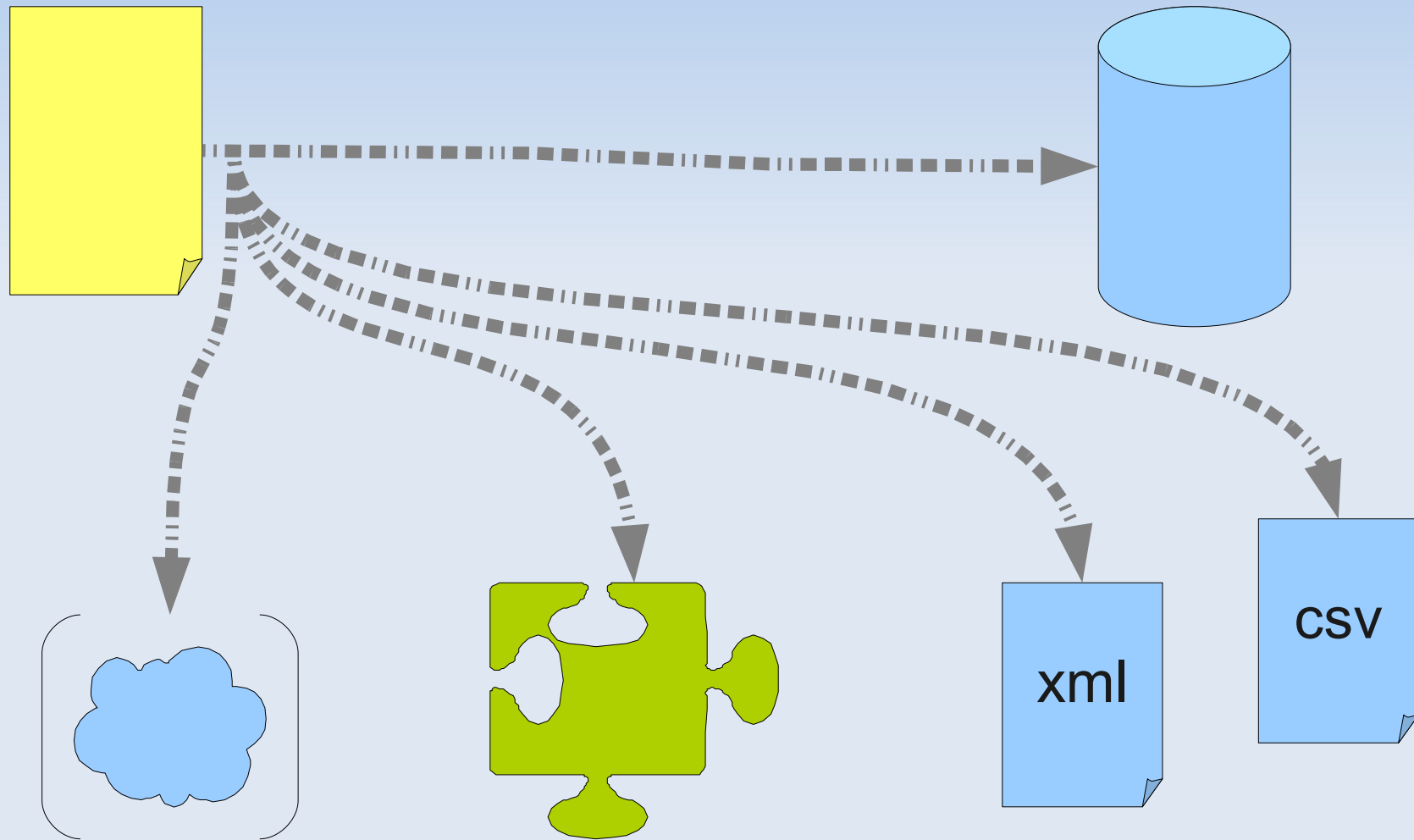
Architecture (2)



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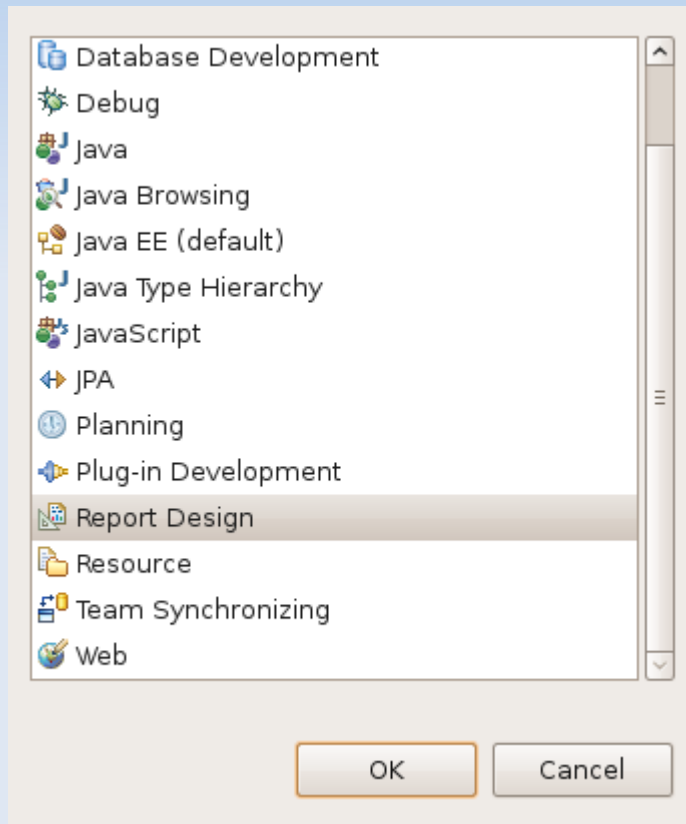
Architecture (3)



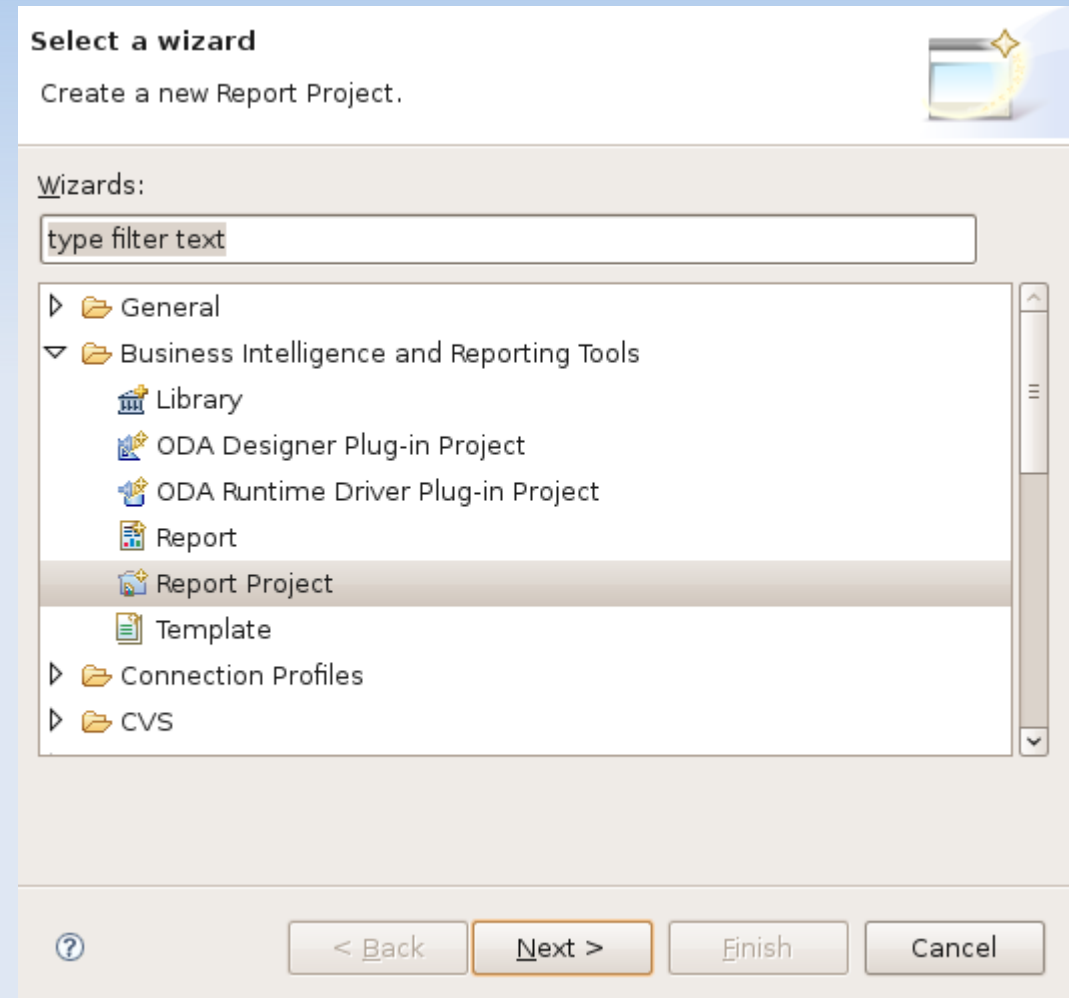
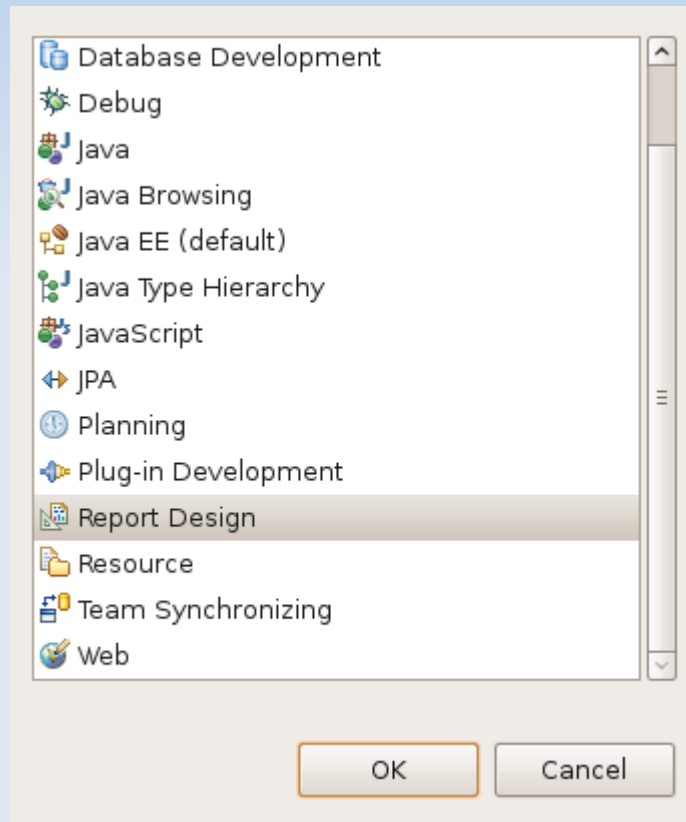
Architecture (4)

- Data Set
 - Data set is a set of rows. Each rows contains fields. Each field has name, type and value.
- Data Source

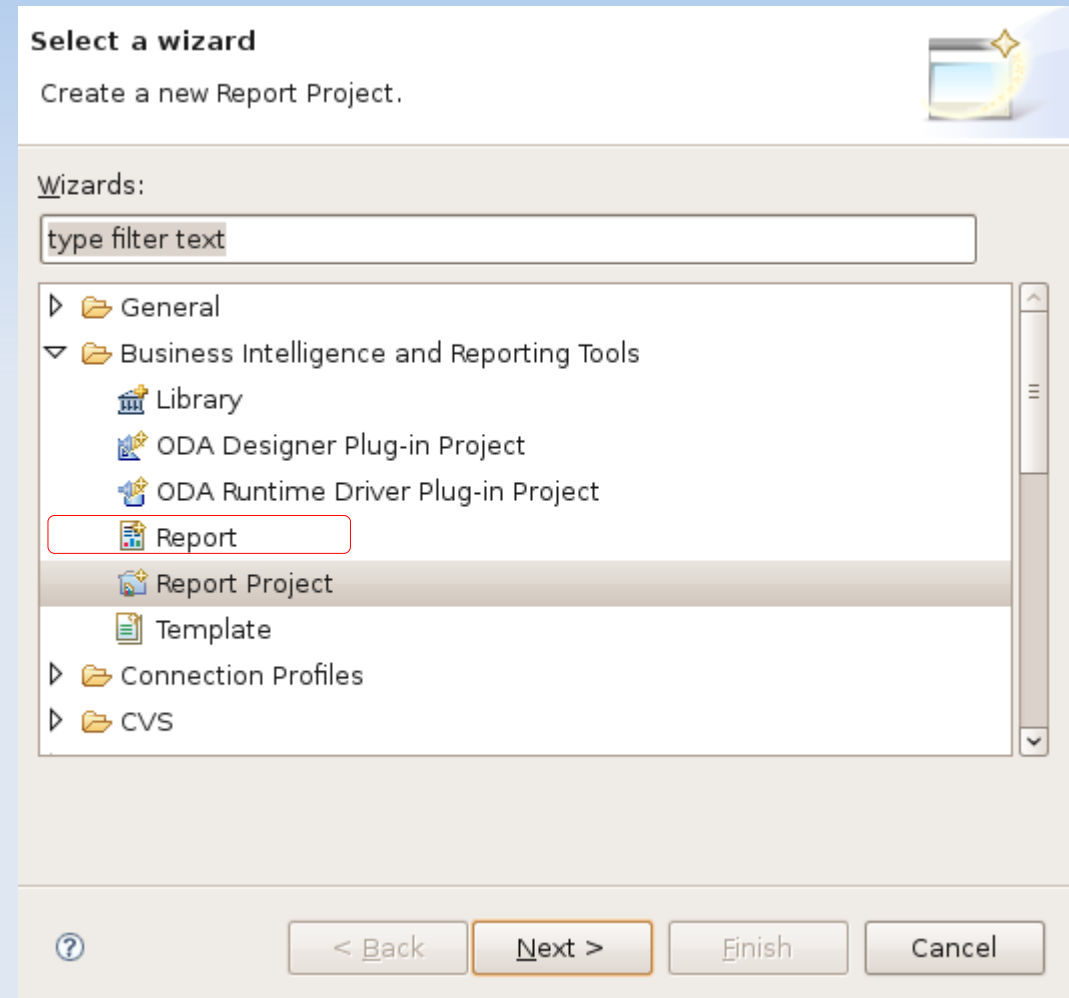
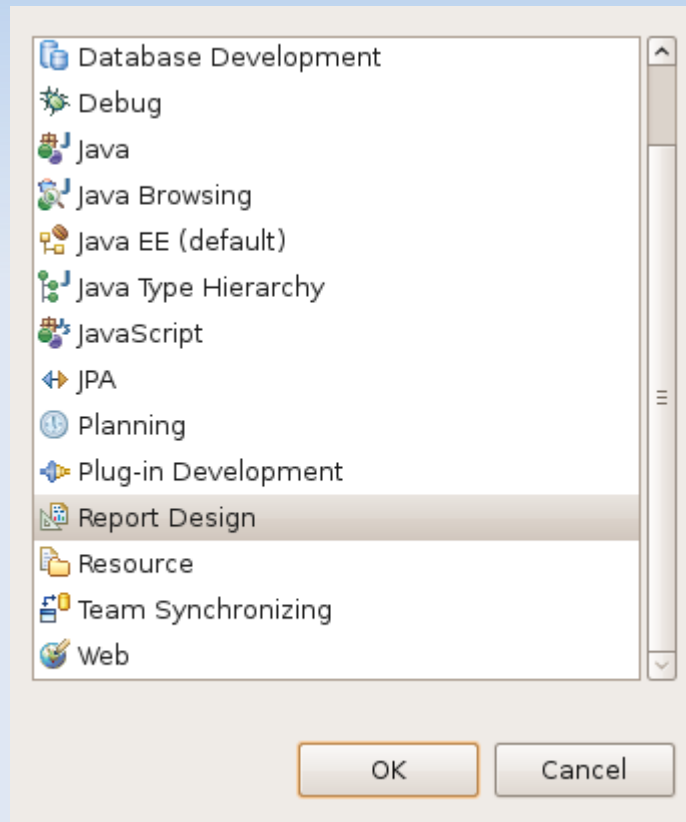
Screenshots (1)



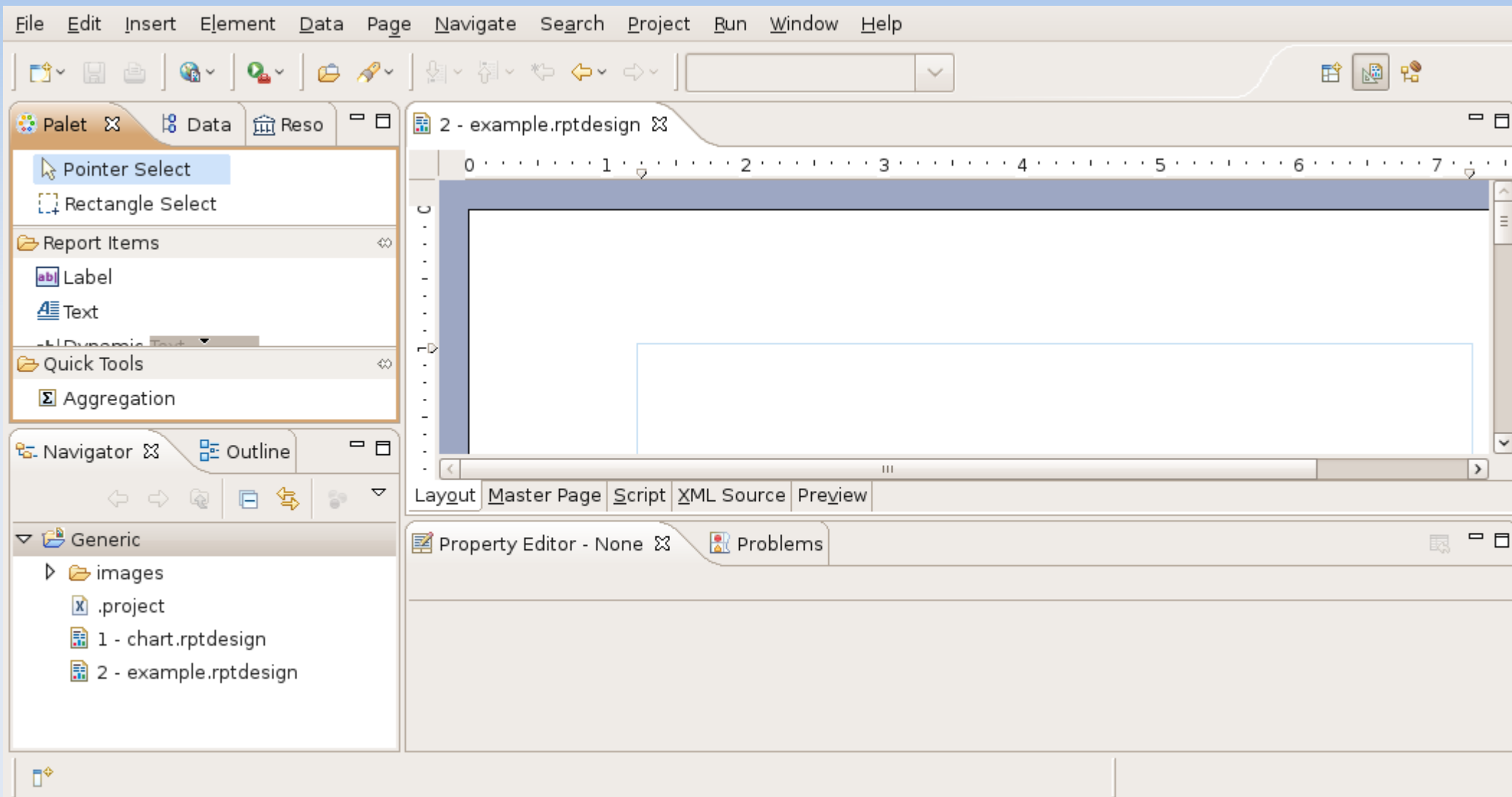
Screenshots (1)




Screenshots (1)



Screenshots (2)



Screenshots (3)


Select a Data Source Type or Choose a Connection Profile. 

Provide all the settings for a new data source, or choose a pre-defined connection profile.

Create from a data source type in the following list.
 Create from a connection profile in the profile store.

Classic Models Inc. Sample Database
Flat File Data Source
JDBC Data Source
Scripted Data Source
Web Services Data Source
XML Data Source

Data Source Name:



Screenshots (3)

Select a Data Source Type or Choose a Connection Profile

Provide all the settings for a new data source, or choose an existing connection profile.

Create from a data source type in the following list

Create from a connection profile in the profile list

- Classic Models Inc. Sample Database
- Flat File Data Source
- JDBC Data Source
- Scripted Data Source
- Web Services Data Source
- XML Data Source

Data Source Name:

[?](#)

Query

Define a sql query text using available items.

Available Items:

Schema:

Filter:

Type:

Use identifier quoting

Show system tables

```
1 select *
2 from CLASSICMODELS.CUSTOMERS
```

[?](#)

Screenshots (3)

Query

Define a sql query text using available items.

Select a Data Source Type or Choose a Connection Profile

Provide all the settings for a new data source, or choose an existing connection profile.

Create from a data source

Create from a connection profile

Classic Models Inc. Sales

Flat File Data Source

JDBC Data Source

Scripted Data Source

Web Services Data Source

XML Data Source

Data Source Name:

Data Source

Query

Output Columns

Computed Columns

Parameters

Filters

Property Binding

Settings

Preview Results

Available Items:

```
1 select *
2 from CLASSMODEL.S.CUSTOMERS
```

Output Columns

Define output columns:

Name	Type	Alias	Display Name	Display Name
CUSTOMERNU	Integer		CUSTOMERNU	
CUSTOMERNAI	String		CUSTOMERNAI	
CONTACTLAST	String		CONTACTLAST	
CONTACTFIRST	String		CONTACTFIRST	
PHONE	String		PHONE	
ADDRESSLINE	String		ADDRESSLINE	
ADDRESSLINE:	String		ADDRESSLINE:	
CITY	String		CITY	
STATE	String		STATE	
POSTALCODE	String		POSTALCODE	
COUNTRY	String		COUNTRY	
SALESREPEMP	Integer		SALESREPEMP	

Edit...



OK

Cancel

Screenshots (3)

Select a Data Source Type or Choose a Connection Profile
Provide all the settings for a new data source, or choose an existing connection profile.

Create from a data source
 Create from a connection profile

Classic Models Inc. Sales Data
Flat File Data Source
JDBC Data Source
Scripted Data Source
Web Services Data Source
XML Data Source

Data Source Name: _____

Query
Define a sql query text using available items.

Available Items: `1 select *
2 from CLASSMODEL.S.CUSTOMERS`

Output Columns
Define output columns:

Name	Type	Alias	Display Name	Display Name
CUSTOMERNU	Integer		CUSTOMERNU	
CUSTOMERNAI	String		CUSTOMERNAI	
CONTACTLAST	String		CONTACTLAST	
			CONTACTFIRST	
			PHONE	
			ADDRESSLINE	
			ADDRESSLINE:	
			CITY	
			STATE	
			POSTALCODE	
			COUNTRY	
			SALESREPEMP	

Data Explorer

- Data Sources
 - Data Source
- Data Sets
 - Data Set
 - CUSTOMERNUMBER
 - CUSTOMERNAME
 - CONTACTLASTNAME
 - CONTACTFIRSTNAME
 - PHONE
 - ADDRESSLINE1
 - ADDRESSLINE2
 - CITY
 - STATE

OK Cancel

What next?

- D&D Data Set

What next?

- D&D Data Set

The screenshot shows a report design tool interface. The menu bar includes File, Edit, Insert, Element, Data, Page, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for report design, including a zoom dropdown set to 100%. The main workspace displays a report design for '2 - example.rptdesign'. The report is structured as a table with 13 columns and 3 rows. The first row contains field names: CUSTOMERNUMBER, CUSTOMERNAME, CONTACTLASTNAME, CONTACTFIRSTNAME, PHONE, ADDRESSLINE1, ADDRESSLINE2, CITY, STATE, POSTALCODE, COUNTRY, and SALESREPEMPLC R. The second row contains the corresponding field identifiers: [CUSTOMERNUMBER], [CUSTOMERNAME], [CONTACTLASTNAME], [CONTACTFIRSTNAME], [PHONE], [ADDRESSLINE1], [ADDRESSLINE2], [CITY], [STATE], [POSTALCODE], [COUNTRY], and [SALESREPEMPLC]. The third row is labeled 'Footer Row'.

	CUSTOMERNUMBER	CUSTOMERNAME	CONTACTLASTNAME	CONTACTFIRSTNAME	PHONE	ADDRESSLINE1	ADDRESSLINE2	CITY	STATE	POSTALCODE	COUNTRY	SALESREPEMPLC R
	[CUSTOMERNUMBER]	[CUSTOMERNAME]	[CONTACTLASTNAME]	[CONTACTFIRSTNAME]	[PHONE]	[ADDRESSLINE1]	[ADDRESSLINE2]	[CITY]	[STATE]	[POSTALCODE]	[COUNTRY]	[SALESREPEMPLC]
	Footer Row											

What next?

- D&D Data Set
- Remove unnecessary columns

What next?

- D&D Data Set
- Remove unnecessary columns

The screenshot shows a report design tool interface. The title bar indicates the file is '2 - example.rptdesign'. The main workspace displays a table with the following structure:

	CUSTOMERNUMBER	CONTACTLASTNAME	CONTACTFIRSTNAME	PHONE	CREDITLIMIT
	[CUSTOMERNUMBER]	[CONTACTLASTNAME]	[CONTACTFIRSTNAME]	[PHONE]	[CREDITLIMIT]
	Footer Row				

The interface includes a toolbar at the top with various icons and a zoom level of 100%. A vertical ruler on the left side shows the design area's dimensions.

What next?

- D&D Data Set
- Remove unnecessary columns
- Use grouping (right click on the row, insert group)

What next?

- D&D Data Set
- Remove unnecessary columns
- Use grouping (right click on the row, insert group)

CUSTOMERNUMBER	CONTACTLASTNAME	CONTACTFIRSTNAME	PHONE	CREDITLIMIT
[CITY]				
[CUSTOMERNUMBER]	[CONTACTLASTNAME]	[CONTACTFIRSTNAME]	[PHONE]	[CREDITLIMIT]
Group Footer Row (CIT				
Footer Row				

What next?

- D&D Data Set
- Remove unnecessary columns
- Use grouping (right click on the row, insert group)
- Use formatting (property editor)

What next?

- D&D Data Set
- Remove unnecessary columns
- Use grouping (right click on the row, insert group)
- Use formatting (property editor)
- Use mapping and highlighting

What next?

- D&D Data Set
- Remove unnecessary columns
- Use grouping (right click on the row, insert group)
- Use formatting (property editor)
- Use mapping and highlighting
- Use charts and images

