

Power Platform World Tour

PowerBIUG PowerAppsUG FlowUG



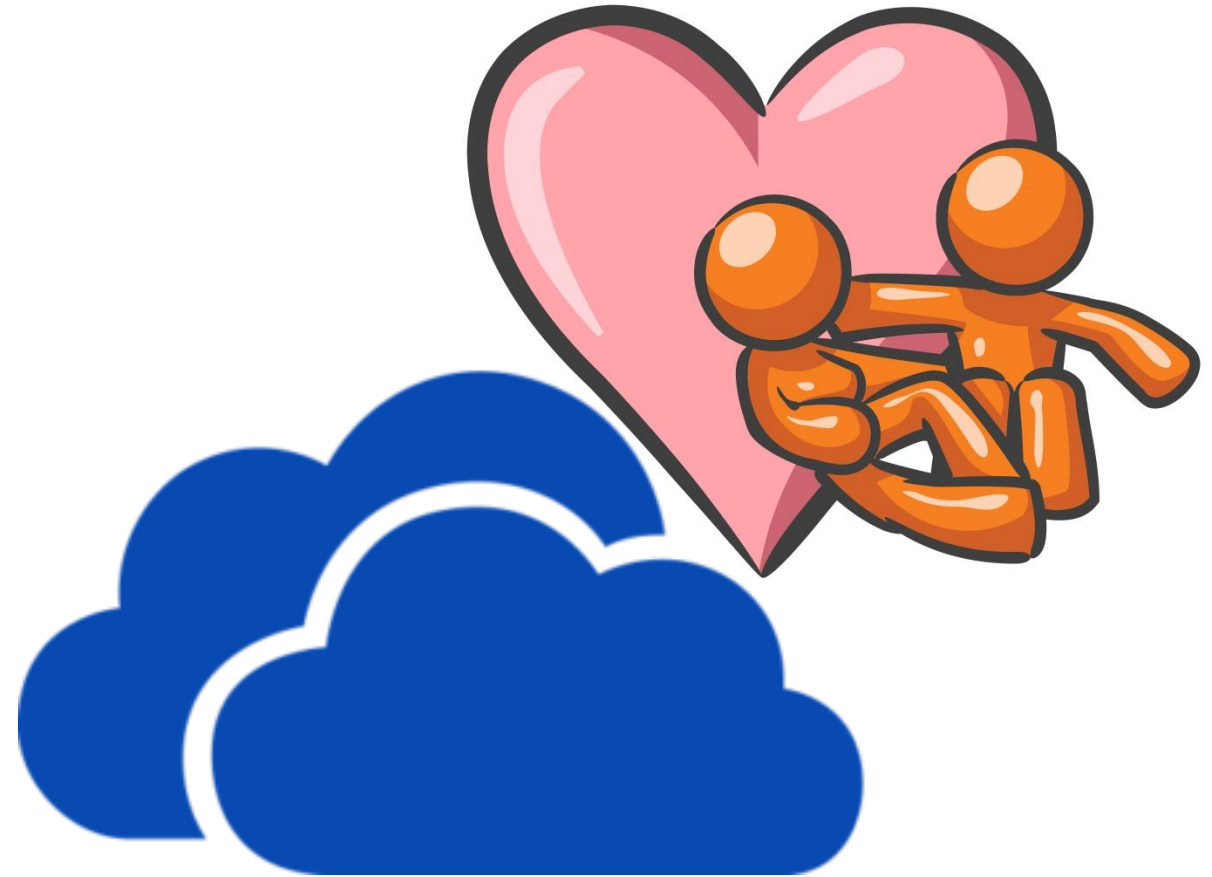
Paginated Reports in Power BI

Just Thorning Blindbæk



Agenda - Love is in the air

- The background
- Use cases
- How to create a report
- How to publish and distribute
- The future

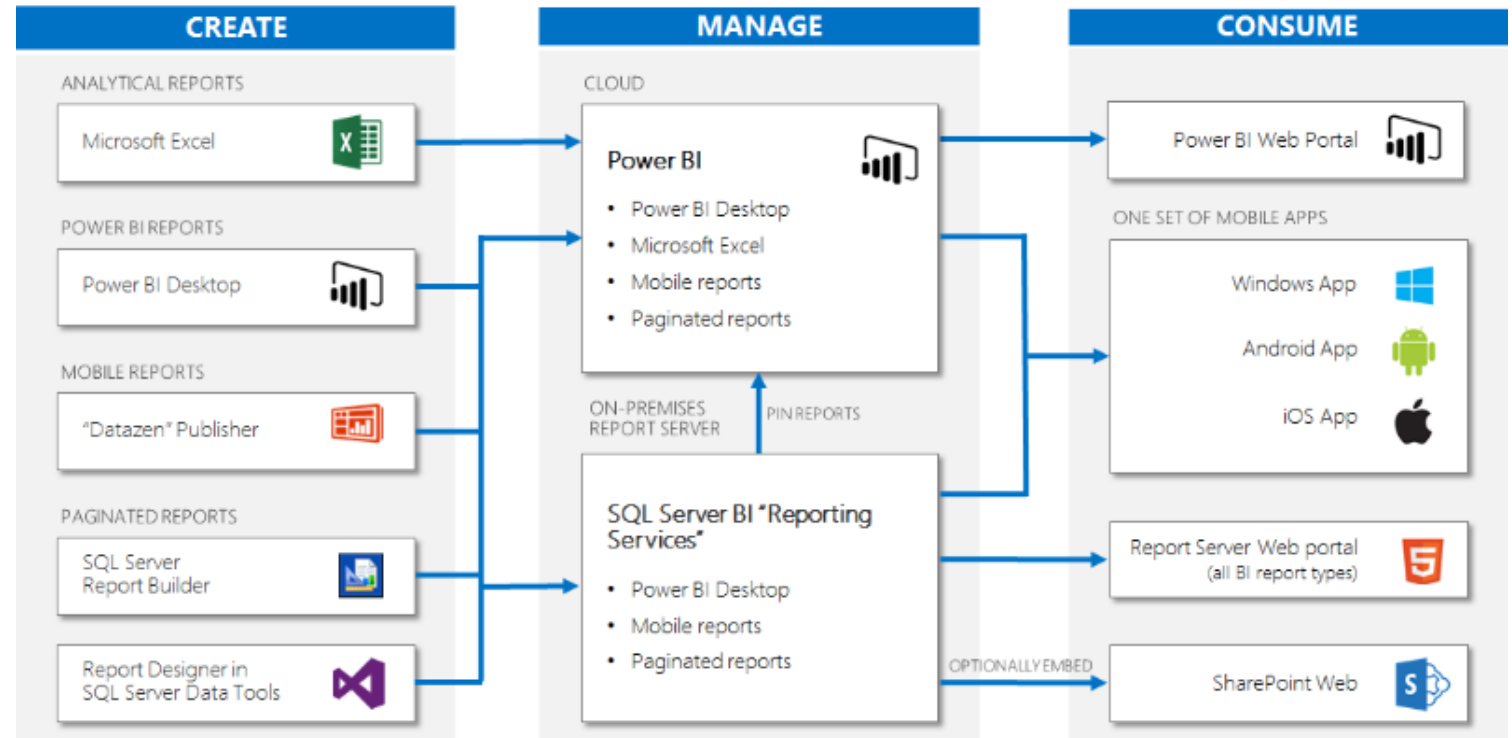


The background

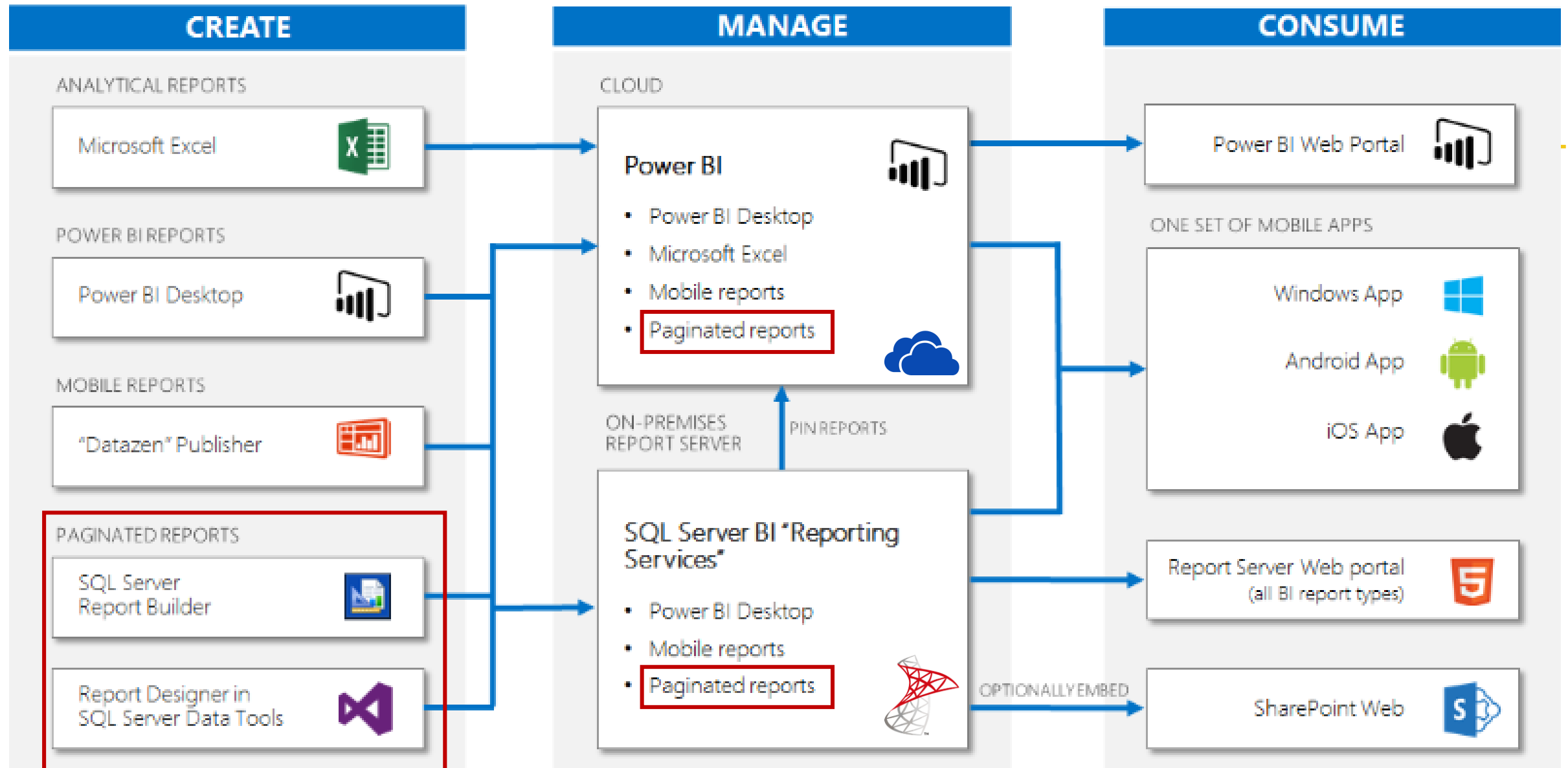
A large audience is seated in a modern conference hall, facing a stage. Two large projection screens are visible on the stage, displaying presentation content. The room has a high ceiling with recessed lighting and large windows on the right side. The audience is diverse in age and appearance, and many are looking towards the stage.

Pixel perfect print friendly paginated reports

- Been around for years...
 - Reporting Services (SSRS)
 - SQL Server 2000
 - Now GA in Power BI
- The Swiss Army Knife



Microsoft Reporting Roadmap, October 2015



Use cases

A large audience is seated in a conference hall, facing a stage with multiple projection screens. The audience is diverse in age and appearance, and many are looking towards the stage. The stage features several large projection screens displaying content, and a person is visible standing near the center of the stage. The room has a modern design with a high ceiling and large windows on the right side.

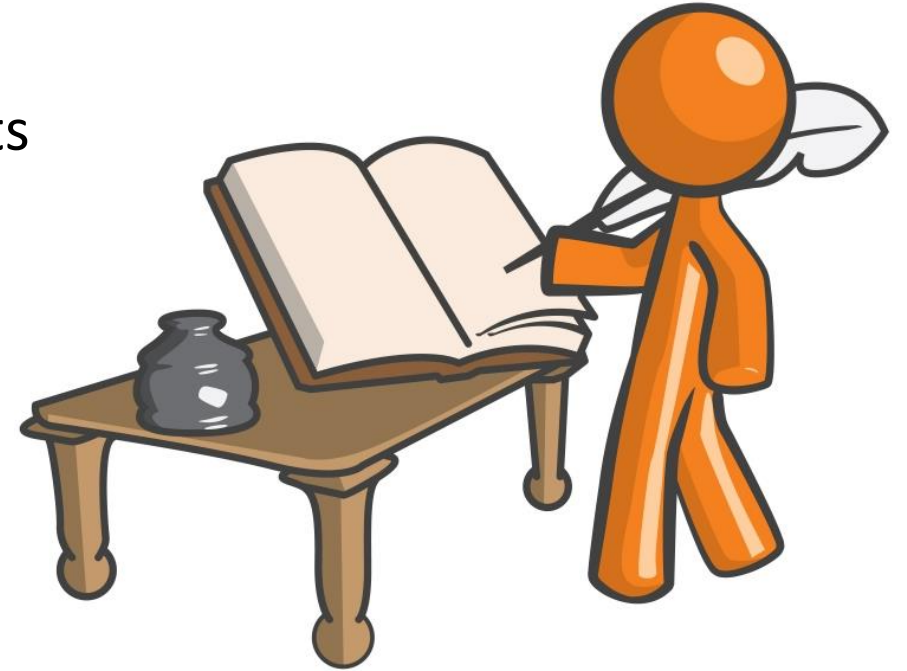
Use cases

1. Migration scenarios

- All ready a large investment in Paginated reports
- Gather them with your Power BI analytical reports

2. Complement to Power BI reports

- Print, print, print
- Push reports and/or data
- Export without row limits
- Multiple live connections in the same report



Strengths

- Paginated
- Print friendly
- Pixel perfect
- Multiple export formats
- Parametrized subscriptions

Weaknesses

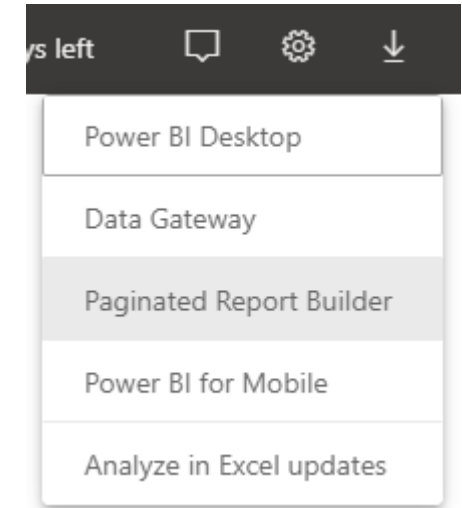
- Require premium
- Additional development tool

A large audience is seated in a conference hall, facing a stage with presentation screens. The room is modern with a high ceiling and large windows. The audience is diverse in age and appearance, and many are looking towards the stage. The stage has two large projection screens displaying content. The overall atmosphere is professional and focused.

How to create a report

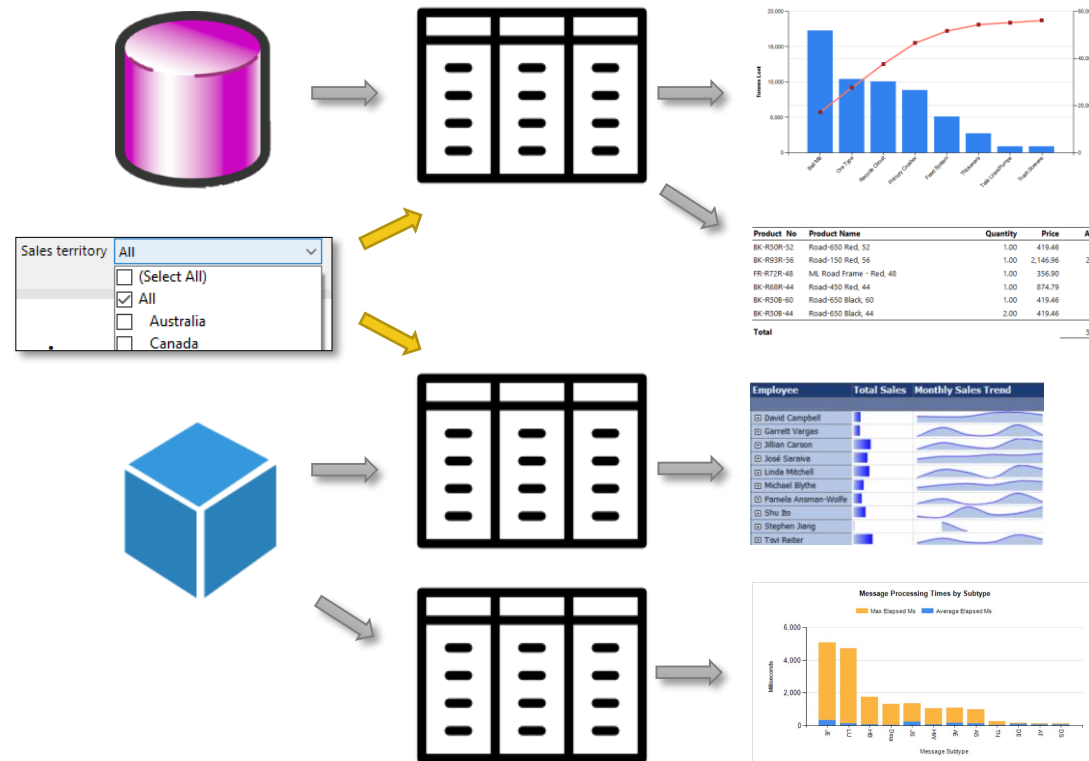
Power BI (Paginated) Report Builder

- Another development tool
 - SQL Server Report Builder + additional features
 - Not as user friendly as Power BI Desktop
- Download and install
 - Updated frequently
- Free – don't require Premium
 - Try it out!



Report objects

- Data source
 - Connection string
- Dataset
 - Just a flat table
- Parameter
 - Input filter
- Data region
 - Tablix, chart



- Parameters
 - FromDateFullDateAlternateKey
 - ToDateFullDateAlternateKey
 - SalesTerritorySalesTerritoryCountry
 - SalesSalesOrderNumber
- Images
 - AWIlogo
- Data Sources
 - My Workspace\DS Sales
- Datasets
 - SalesTerritorySalesTerritoryCountry
 - SalesTerritoryCountry
 - ParameterCaption
 - ParameterValue
 - ParameterLevel
 - ParameterCaptionIndented
 - dsOrders

Data sources for the Power BI Developer

Reuse what you have already build!

- Power BI Datasets
 - Premium
 - Non-premium
- Analysis Services
 - On-prem (Tabular and MOLAP)
 - Azure
- Other sources
 - SQL Server On-prem
 - Azure SQL DB
 - Azure SQL DW
 - Oracle
 - Teradata

Datasets

- Not a Model
- No import mode
- Just a query
 - Live/direct connection
 - Returns a flat table
- Query designer
 - Generates DAX or SQL

The screenshot shows the 'Query Designer' window in Power BI. The 'Model' pane on the left shows a hierarchy of tables: Metadata, Model, Measures, KPIs, Currency, Date, Employee, Product, Promotion, Reseller, Sales, and SalesTerritory. The 'Sales' table is selected. The 'Filter Expression' pane on the right shows the following filters:

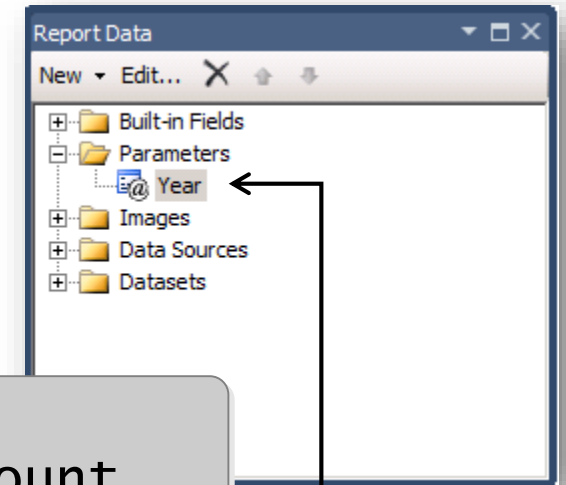
Dimension	Hierarchy	Operator	Filter Expression	Parameter
Date	FullDateAlternateKey	Range (Inclusive)	1/1/2005 : 12/31/2014	<input checked="" type="checkbox"/>
SalesTerritory	SalesTerritoryCountry	Equal	{ All }	<input checked="" type="checkbox"/>
Sales	SalesOrderNumber	Equal	{ All }	<input checked="" type="checkbox"/>

The main query results table is displayed below the filters, showing a flat table of data. The table has the following columns: Status, CustomerPONumber, SalesOrderNumber, OrderQuantity, CarrierTrackingNumber, ProductAlternateKey, and Product. The data is filtered to show only 'Current' status records.

Status	CustomerPONumber	SalesOrderNumber	OrderQuantity	CarrierTrackingNumber	ProductAlternateKey	Product
Current	PO18009186470	SO43663	1	1E90-4FBF-B6	BK-R50R-60	Road-6
Current	PO16008173883	SO43666	1	D46A-40CA-8D	BK-R50R-52	Road-6
Current	PO16762199940	SO43859	1	2C16-4AA6-B4	LJ-0192-L	Long-S
Current	PO12557127067	SO43872	1	52FF-45CD-9B	BK-R50R-48	Road-6
Current	PO7656175368	SO43912	1	69B6-46F8-A4	BK-R68R-44	Road-4
Current	PO18009181739	SO44281	1	13EE-4DFE-93	BK-R50B-52	Road-6
Current	PO16008112311	SO44286	1	27D8-4398-9C	BK-R68R-44	Road-4
Current	PO16762152605	SO44500	1	E9A4-477A-83	BK-R50R-48	Road-6
Current	PO16037162003	SO44505	1	5D07-4BE7-A6	FR-M945-52	HL Mo
Current	PO12557171689	SO44521	1	E46D-4692-AC	BK-R50R-58	Road-6
Current	PO4698173942	SO44548	1	3A3B-4572-8F	BK-R50B-58	Road-6
Current	PO16095186445	SO44753	1	3015-48E8-85	FR-R72R-48	ML Roa
Current	PO4002147144	SO44781	1	32AD-4737-BB	CA-1098	AWC Lc
Current	PO18009115235	SO45040	1	8354-423A-A8	BK-R50B-52	Road-6
Current	PO16008114038	SO45044	1	DC47-40A2-8F	BK-R50R-52	Road-6
Current	PO6728123661	SO45073	1	7EBC-48E3-90	BK-R50R-48	Road-6
Current	PO16762133534	SO45286	1	AE6F-4379-99	BK-R68R-58	Road-4
Current	PO12499190711	SO45301	1	0BA8-4928-A7	FR-R38R-62	LL Roac
Current	PO4553175399	SO45325	1	5C87-4ACC-B0	BK-R50R-60	Road-6
Current	PO7656113434	SO45339	1	1F94-40D0-86	BK-R50R-62	Road-6

Parameters

- Report Parameters
 - Values specified when rendering a report
 - By a user viewing a report interactively
 - In a report subscription
- Dataset/query Parameters
 - Used to restrict query results
 - Mapped to a report parameter



```
-- Dataset query
SELECT SalesOrderNumber, SalesAmount
FROM FactInternetSales
WHERE YEAR(OrderDate) = @Year
```

Data regions

Like Visuals in Power BI

- Tablix
 - Tables
 - Matrixes
 - Lists
- Charts
- Gauge
- Maps

Sales Territory	Full Name	ID2003	ID2004
Northwest	Pamela O. Anderson-Wolfe	\$900365.58	\$1656492.86
	David R. Campbell	\$1377431.33	\$1930885.56
	Tate A. Morris-Annas		
Total			

Table Report

Sales by Area and Year		North America		2003	2004	Total
		US	CA			
Clothing	Caps	\$9798.76	\$2801.06	\$9909.44	\$13006.39	\$22915.83
	Tights	\$51391.51	\$8233.90	\$59625.41	\$10000.00	\$69625.41
Components	Chains	\$4972.00	\$793.83	\$354		\$4365.83
	Cranksets	\$105118.64	\$18515.99	\$728		\$123634.63
	Touring Frames	\$767130.33	\$196141.85	\$60344		\$963272.18

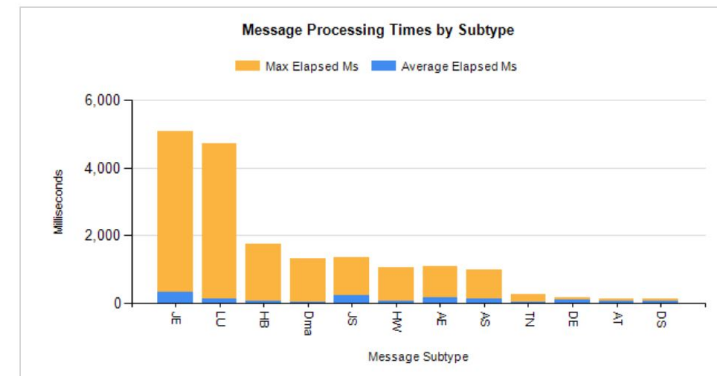
Matrix Report

Congratulations!

Michael G Blythe 275

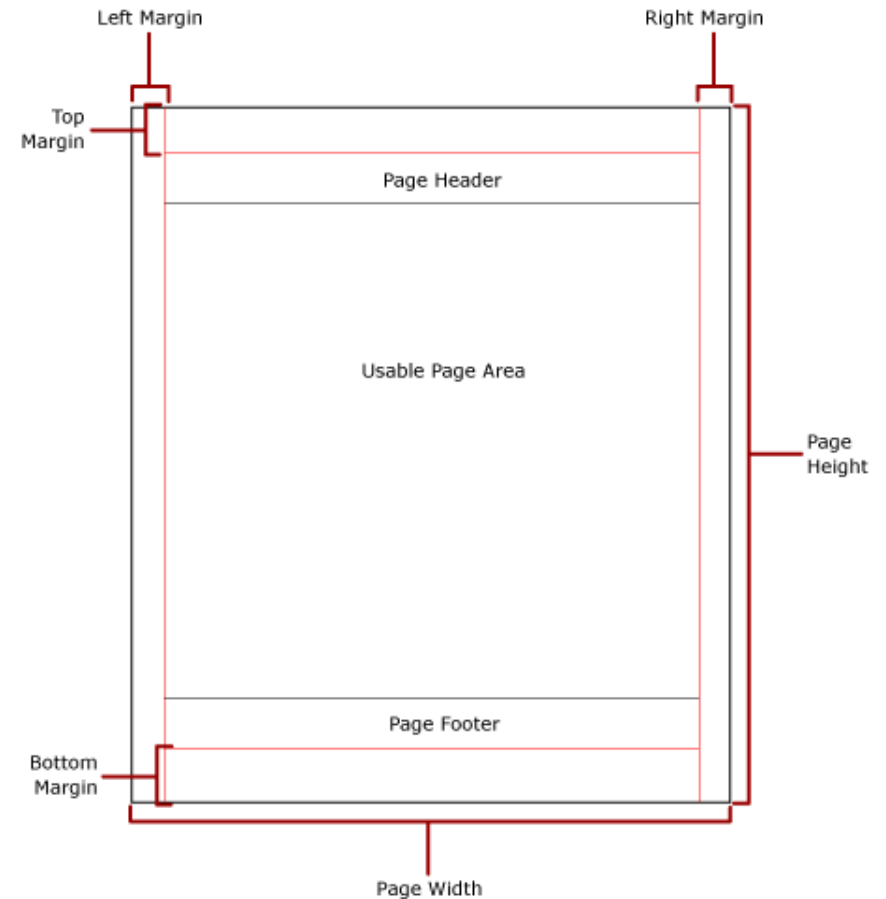
Hello Michael,
Congratulations on an outstanding year!
Your sales of \$1951085.83 makes you the TOP Adventure Works sales person in 2008.
Bob & Craig

List Report



Report-Level Properties

- Report Layout
 - Interactive size
 - Page size
 - Margins
 - Language
- Body size
- Header and footer



Item Properties

Complete control over every element in the report

- Fonts and colors
- Date and number formatting
- Naming of report objects
- Expressions!

You can make it pixel perfect 😊

Textbox28

- Action**
 - Action: None
- Alignment**
 - Indent: 0pt
 - Padding: 2pt; 2pt; 2pt; 2pt
 - SpaceAfter: 0pt
 - SpaceBefore: 0pt
 - TextAlign: Default
 - VerticalAlign: Default
- Border**
 - BorderColor: Black
 - BorderStyle: None
 - BorderWidth: 1pt
- Data Only**
 - DataElementName:
 - DataElementOutput: Auto
 - DataElementStyle: Auto
- Fill**
 - BackgroundColor: No Color
 - BackgroundImage:
- Font**
 - Color: Black
 - Font: Segoe UI; 10pt; Default
 - LineHeight: 1
- Localization**
 - Calendar: Default
 - Direction: Default
 - LabelLocID:
 - Language:
 - NumeralLanguage:
 - NumeralVariant: 1
 - ValueLocID:
 - WritingMode: Default

General

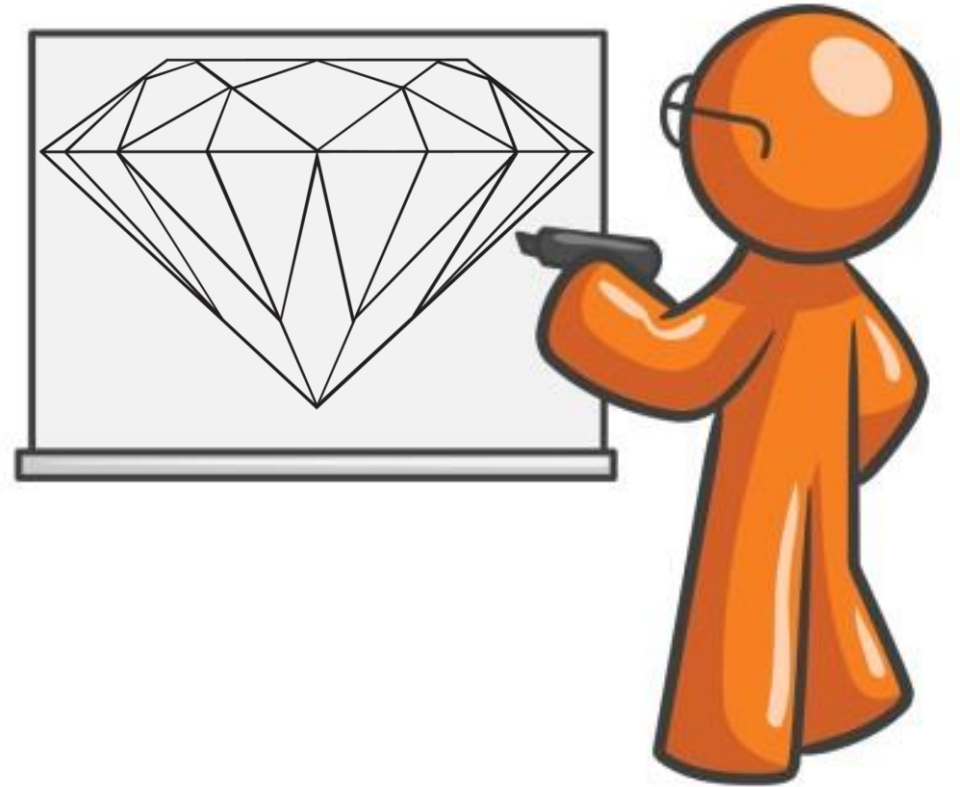
- CanGrow: True
- CanShrink: False
- Name: Textbox28
- ToolTip:

How to publish and distribute

A large audience is seated in a conference hall, facing a stage with presentation screens. The room has a high ceiling with recessed lighting and large windows on the right side. The audience is diverse in age and appearance, and many are looking towards the stage. The overall atmosphere is professional and focused.

Premium ☹️

- Require P1, P2, P3 or A4, A5, A6
 - Support for A3 is coming
- How to test with out Premium?
 - Azure Portal
 - Create Power BI Embedded
 - Scale to A4 - \$8 per hour
 - Assign capacity to workspace



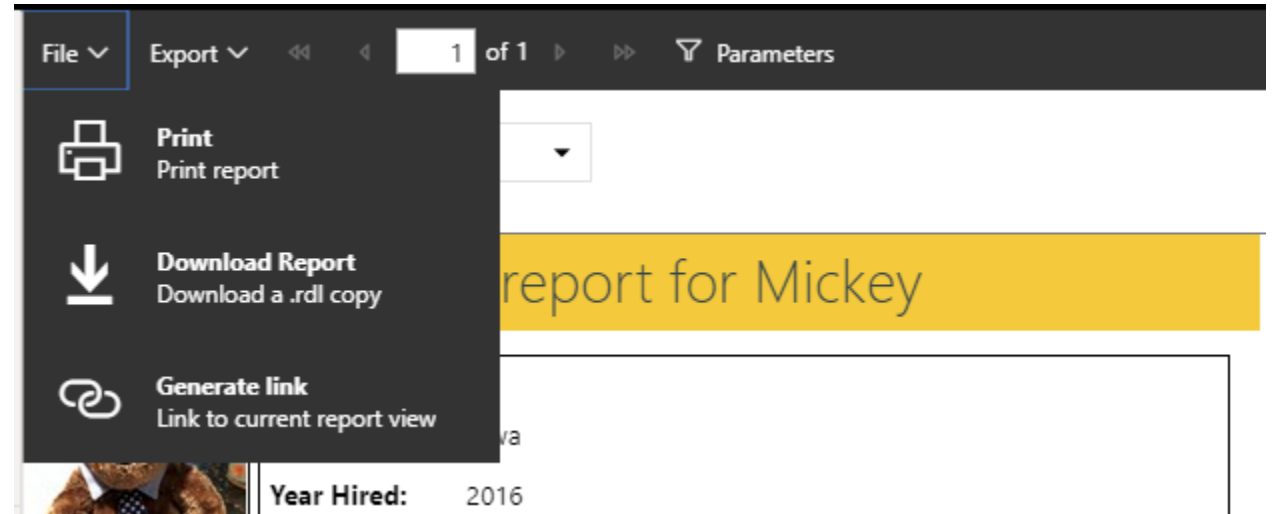
Print, Export and Subscriptions

- Print, print, print
- Export
 - PDF, Word, Excel, PowerPoint, Web
- Subscriptions
 - Hourly, Daily, Weekly
 - Parametrized



Bonus: Integration between reports

- Drill trough scenarios
 - Paginated -> Paginated
 - Power BI -> Paginated
- URL parameters
 - Link to report
 - `rp:parameter=value`
 - `rdl:format=PDF`



The future

A large audience is seated in a modern conference hall, facing a stage with multiple projection screens. The room has a high ceiling with recessed lighting and large windows on the right side. The audience is diverse in age and appearance, and many are looking towards the stage. The overall atmosphere is professional and focused.

Additional features we can expect to come

- Data driven subscriptions
- Shared data sources and datasets
- Power Query as data source
- More admin options in portal
- **Migration tool**
- Support for Pro users?
 - Ideas: <https://ideas.powerbi.com/forums/265200-power-bi-ideas/suggestions/35959420>



Questions



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- Trainer at Orange Man

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