

Campus Days  
14.-16. januar 2010



# Rapportering med SharePoint 2010 og SQL Server 2008 R2

Carsten Fetterlein Hansen

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*Formålet med denne session er at  
give et indblik i mulighederne med  
SQL Server 2008 R2 Report Builder  
og SharePoint 2010*

20%

# Today's BI Reality for Most Organizations

**Difficult  
To Use**

“Foreign” tools inhibit adoption and use

**Fragmented**

Functionality split across multiple tools

**Inflexible**

Rigid and unable to change with the business

**Departmental**

Narrowly deployed without a complete view

**Costly**

Too costly for broad deployment

# Empowering ALL Users

*JUST SOLVE  
MY PROBLEM*

*BUILDING  
THE DATA CENTER  
OF THE FUTURE*

*REWIRING  
THE ECONOMY*

*EFFORTLESSLY  
CONNECTED  
& IN CONTROL*

*SUPPORTING  
BUSINESS  
USERS*



*IT PROFESSIONALS*

*BUSINESS DECISION  
MAKERS*

*INFORMATION  
WORKERS*

*POWER USERS*

*DEVELOPERS*



Microsoft®  
**SQL Server**™  
PowerPivot for Excel.

# Microsoft BI Vision & Strategy

Improving organizations by providing business insights to *all* employees leading to better, faster, more relevant decisions

- Thinking Bigger About BI
- Complete & integrated Business Intelligence offering
- Empower decision makers across your extended organization

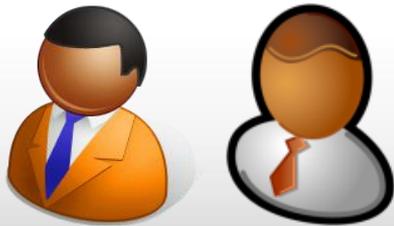






# Microsoft® SQL Server™ 2008 R2

*Empowering end users through “Managed Self-Service BI”*



End User  
Empowerment



IT Management &  
Compliance

“Managed Self Service BI” delivered through:

- Self Service Analysis → Desktop Analytics
- **Self Service Reporting → End User Reporting**
- **SharePoint Integration → Sharing, Collaboration & Management**

## Build

- Connect to data
- Integrate your data
- Develop visually



## Manage

- Predictable response
- Simplified management
- Scale across mixed workloads



## Deliver

- Deliver relevant information
- Drive actionable insights
- Share insights



DEVELOPERS



IT PROFESSIONALS



POWER USERS



INFORMATION WORKERS



BUSINESS DECISION MAKERS





rappor

demo

# Self Service Report Authoring

- Productive & Intuitive Authoring:
  - Report part publishing and reuse
  - Leverage hours of IT investment in Predefined reports.  
All reports can now be componentized and shared with IW and other IT users.
- Collaboration:
  - “Grab & Go” reporting with a shared component library

# Rapport komponenter



# demo

# Tablix Visualizations: Sparklines and Data Bars

- Sparklines
  - “Data intense, word-sized graphics” – *Tufte*
  - Automatic axis alignment. All charts can have the same data points, regardless of source data.
  - Can be converted into full charts to support additional small multiple scenarios.
- Data Bars
  - Usually depicts a single value in a cell.
  - Min and Max are automatically determined, but are configurable.

Team	W/L By Week (H= Dark)	TO Ratio	Pts/G vs Avg
Arizona Cardinals		0	26.7
Atlanta Falcons		-3	24.4
Baltimore Ravens		13	24.1
Buffalo Bills		-8	21.0
Carolina Panthers		6	25.9
Chicago Bears		5	23.4
Cincinnati Bengals		-2	12.8
Cleveland Browns		5	14.5
Dallas Cowboys		-11	22.6
Denver Broncos		-17	23.1
Detroit Lions		-9	16.8
Green Bay Packers		7	26.2
Houston Texans		-10	22.9
Indianapolis Colts		9	23.6
Jacksonville Jaguars		-7	18.9
Kansas City Chiefs		5	18.2
Miami Dolphins		17	21.6
Minnesota Vikings		-6	23.7
New Orleans Saints		-4	28.9
New England Patriots		1	25.6
New York Giants		9	26.7

Sparklines

Data Bars

# Tablix Visualization: Indicators

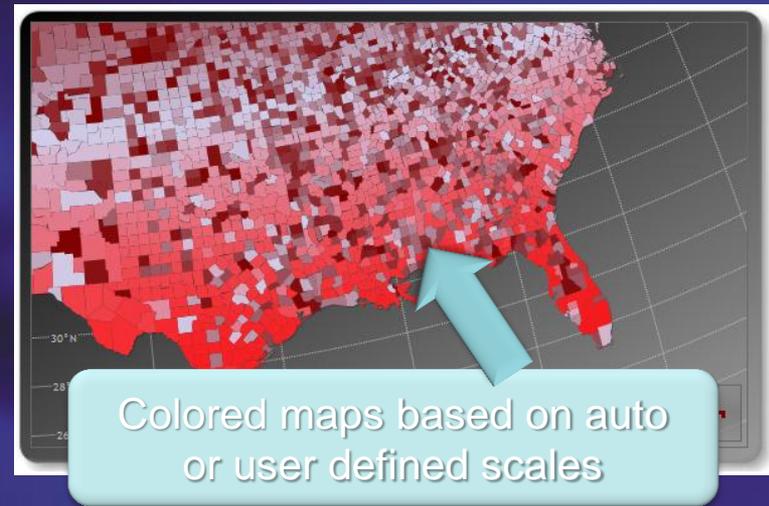
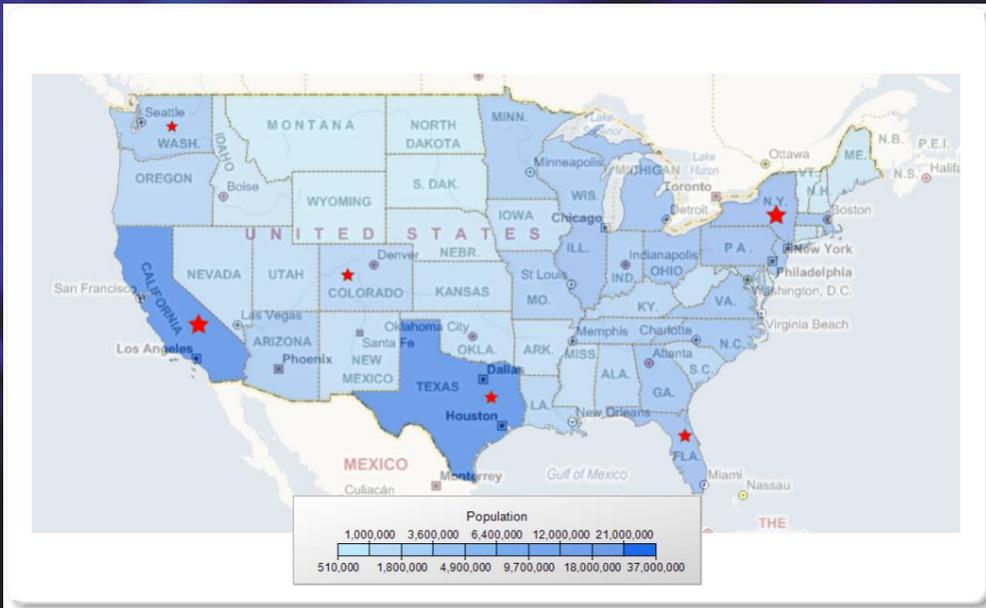
- Icons used to depict the status against a value, goals or a trend.
- Report authors can create their own sets or choose from several pre-configured sets.
- Colors, Icon and Size can be changed based on data.
- Automatic support for comparing each member of a group against siblings.
- Can also be placed inside gauges.

Team	W/L By Week (H= Dark)	TO Ratio	Pts/G vs Avg	3rd %	Pen Yds
Arizona Cardinals		0	26.7	42%	
Atlanta Falcons		-3	24.4	43%	
Baltimore Ravens		13	24.1	41%	
Buffalo Bills		-8	21.0	40%	
Carolina Panthers		6	25.9	40%	
Chicago Bears		5	23.4	36%	
Cincinnati Bengals		-2	12.8	35%	
Cleveland Browns		5	14.5	34%	
Dallas Cowboys		-11	22.6	43%	
Denver Broncos		-17	23.1	48%	
Detroit Lions		-9	16.8	29%	
Green Bay Packers		7	26.2	44%	
Houston Texans		-10	22.9	42%	
Indianapolis Colts		9	23.6	50%	
Jacksonville Jaguars		-7	18.9	41%	
Kansas City Chiefs		5	18.2	38%	
Miami Dolphins		17	21.6	37%	
Minnesota Vikings		-6	23.7	39%	
New Orleans Saints		-4	28.9	48%	
New England Patriots		1	25.6	43%	
New York Giants		9	26.7	43%	

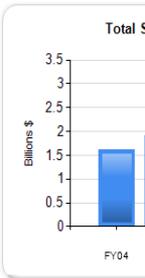
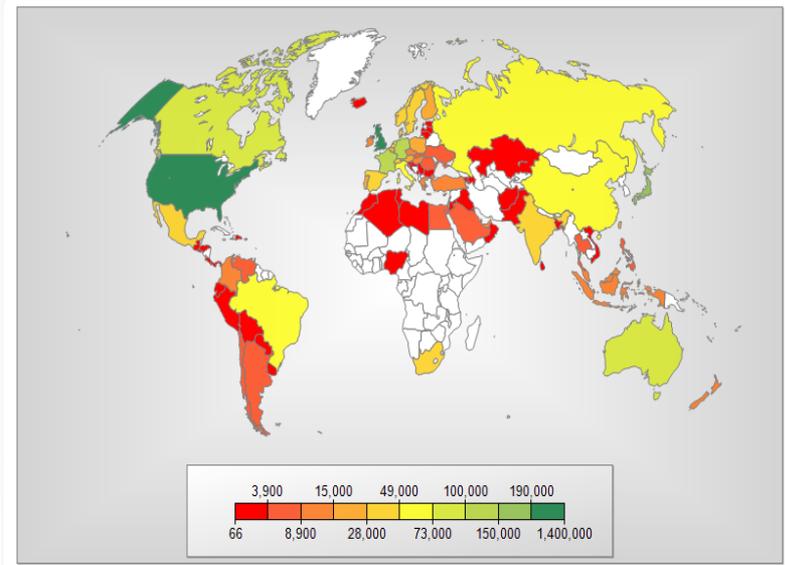
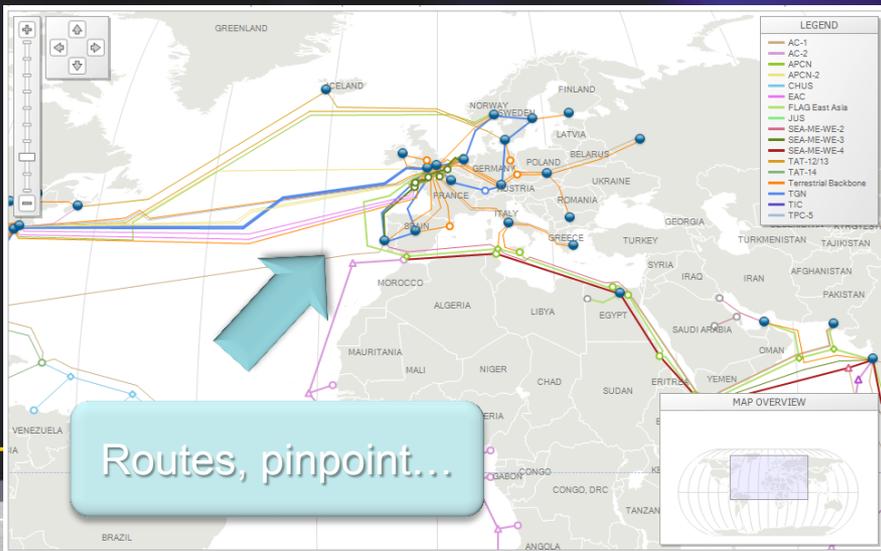
# Map Features

- Support for SQL Spatial
- Integration with Virtual Earth tiles
- Data Grouping
  - Equal intervals, equal distribution, optimal, user-defined
- Multiple Map layers

# Cool looking Data Visualization: and soon...



Worldwide Sales of FY08 (thousands \$)



# Maps



# demo



Home Insert View

Run Paste

Views Clipboard Font Paragraph Border Number Layout

1pt

Merge Split Align

Report Data

New Edit...

- Built-in Fields
- Parameters
- Images
- AdventureWorks2008
  - EmpSalesMonth
    - Employee
    - Year
    - MonthNumber
    - Month
    - Category
    - Sales
  - SalesEmployees
    - BusinessEntityID
    - Employee
    - JobTitle
  - EmployeeSalesYearOverY
    - Employee
    - Year
    - MonthNumber
    - Month
    - Sales
  - EmployeeSalesDetail
    - Employee
    - Subcategory
    - Sales
    - SalesOrderNumber
    - SalesOrderID
    - Product
    - OrderQty
    - UnitPrice
    - Category

[&ReportName]

[ReportMonth]  
[@ReportYear]

**ADVENTURE WORKS cycles**

**Yearly Sales Comparison**

Month	Year A	Year B
Month A	~\$0.1	~\$0.2
Month B	~\$0.3	~\$0.0
Month C	~\$0.1	~\$0.0
Month D	~\$0.2	~\$0.3
Month E	~\$0.3	~\$0.1
Month F	~\$0.2	~\$0.1

«Expr»

Category	Year A	Year B
Category A	~\$0.2	~\$0.8
Category B	~\$0.8	~\$0.2
Category C	~\$1.0	~\$0.9
Category D	~\$0.8	~\$0.9
Category E	~\$0.8	~\$0.4
Category F	~\$0.7	~\$0.6

«Expr»	
[SalesOrderNum] [Category]	[Sum(Sales)]
	[Sum(Sales)]
<b>Total:</b>	[Sum(Sales)]

Properties Library

Search Name and Description

Add Criteria

Name	Created By	M...
Name	Modified By	
	Created By	
	Description	

### Publish Report Components

 Publish report items as components

Publish items from this report and the items they depend on, such as datasets and parameters, to the current report server

- ➔ Publish all components with default settings  
Click this option to publish your components with current settings. New components will use default name and folder location.
- ➔ Review and modify components before publishing  
Click this option to select which components to publish and to edit properties before publishing.

Help Cancel

Report Data

New Edit... X

- Built-in Fields
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- AdventureWorks2008
  - EmpSalesMonth
    - Employee
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    - MonthNumber
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Properties Library

Search Name and Description

Add Criteria

Name	Created By	M...
------	------------	------

Name  
Modified By  
Modified  
Created By  
Created  
Description

Report Data

New Edit... X

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- AdventureWorks2008
  - EmpSalesMonth
    - Employee
    - Year
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    - MonthNumber
    - Month
    - Sales
  - EmployeeSalesDetail
    - Employee
    - Subcategory
    - Sales
    - SalesOrderNumber
    - SalesOrderID
    - Product
    - OrderQty
    - UnitPrice
    - Category

### Publish report components to library

Select report components to publish

Using the controls below to select and edit the report components to be published

Components

- Logo
- ReportYear
- ReportMonth
- EmployeeID
- Rectangle1
- Tablix3
- ShowDescription

Datasets

Help Publish Close

Properties Library

Search Name and Description

Add Criteria

Name	Created By	M...
Name	Modified By	Modified
	Created By	Created
	Description	Description

Report Data

New Edit...

- Built-in Fields
- Parameters
- Images
- AdventureWorks2008
  - EmpSalesMonth
    - Employee
    - Year
    - MonthNumber
    - Month
    - Category
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**Components**

- Logo
- ReportYear
- ReportMonth
- EmployeeID
- Rectangle1
- Tablix3
- ShowDescription

**Datasets**

- EmployeeSalesDetail
- EmpSalesMonth
- EmployeeSalesYearOverYear

Help Publish Close

Properties Library

Search Name and Description

Add Criteria

Name	Created By	M...

Name  
Modified By  
Modified  
Created By  
Created  
Description

Home Insert View

Run Paste

Views Clipboard Font

Report Data

New Edit...

- Built-in Fields
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  - EmpSalesMonth
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### Publish report components to library

Select report components to publish

Using the controls below to select and edit the report components to be published

Components

- Logo
- ReportYear
- ReportMonth
- EmployeeID
- Rectangle1
- Tablix3
- ShowDescription

A description of the component which can be edited here or in the properties dialog for the report item

Report server folder: /

Last modified: 7/1/2009 12:22:58 PM REDMOND\rogersa

First published: 7/1/2009 12:22:58 PM REDMOND\rogersa

Publish as a new component

Datasets

Properties Library

Search Name and Description

Add Criteria

Name	Created By	M...

Name  
Modified By  
Modified  
Created By  
Created  
Description

Current report server http://complib/reportserver

Home Insert View

Run Paste

Views Clipboard Font Paragraph Border Number Layout

1 pt

Merge Split Align

Report Data

New Edit...

- Built-in Fields
- Parameters
- Images

Click to add title

[&ExecutionTime]

Properties Library

Search Name and Description

Add Criteria

Name	Created By
EmployeeID	EndDate
Logo	ProductCat...
ProductSu...	Rectangle1
ReportMon...	ReportYear
ShowDescr...	StartDate

Name Rectangle1  
 Modified By REDMOND\rogersa  
 Modified 7/1/2009 9:38:40 AM  
 Created By REDMOND\rogersa  
 Created 6/30/2009 11:35:30 PM  
 Description

Current report server http://complib/reportsrver

100%

12:25 PM  
7/1/2009

Home Insert View

Run Paste

Font Paragraph Border Number Layout

1 pt

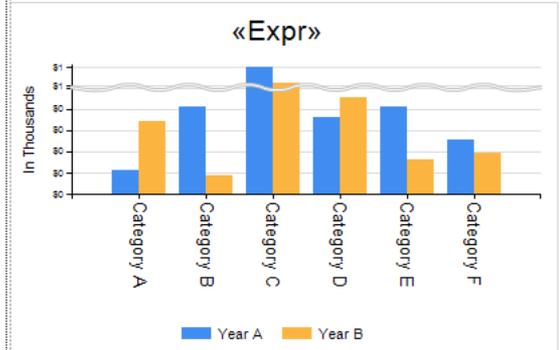
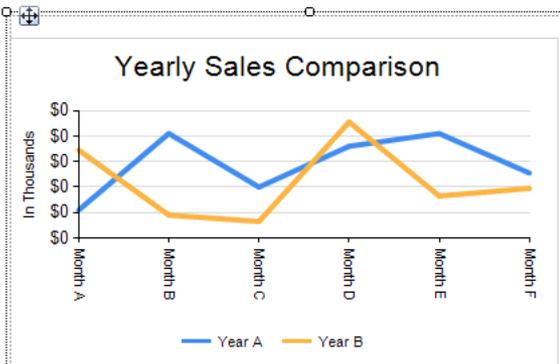
Merge Split Align

Report Data

New Edit...

- Built-in Fields
- Parameters
- Images
- AdventureWorks2008
  - EmployeeSalesYearOverY
    - Employee
    - Year
    - MonthNumber
    - Month
    - Sales
  - EmpSalesMonth
    - Employee
    - Year
    - MonthNumber
    - Month
    - Category
    - Sales

Click to add title



Properties Library

Search Name and Description

Add Criteria

Name	Created By
EmployeeID	EndDate
Logo	ProductCat...
ProductSu...	Rectangle1
ReportMon...	ReportYear
ShowDescr...	StartDate

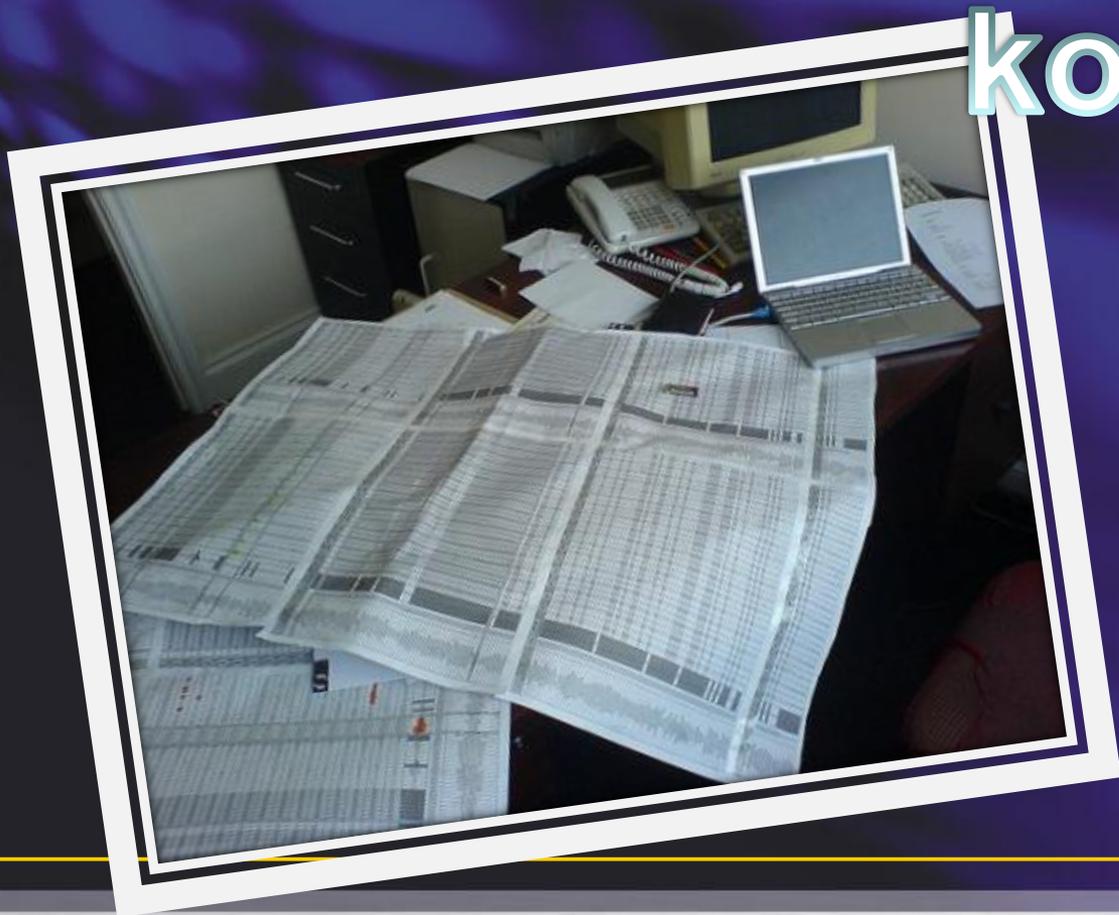
Name Rectangle1  
Modified By REDMOND\rogersa  
Modified 7/1/2009 9:38:40 AM  
Created By REDMOND\rogersa  
Created 6/30/2009 11:35:30 PM  
Description

Current report server http://complib/reportsrver

100%

Windows taskbar with icons for Internet Explorer, File Explorer, and other applications. System tray shows the time 12:26 PM and date 7/1/2009.

# Deling af komponenter



# demo

# Reporting Services as a Data Source



# Self Service Analytics to Self Service Reporting and back...

- Reports as the primary data source for information worker analysis
  - SSRS reports become Data Feeds
- Native support for KPIs
- Build SSRS report on top of Information Worker analysis models

Reporting Services - Territory Sales Drilldown - Windows Internet Explorer

http://bi-vpc/Reports/\_layouts/ReportServer/RSViewerPage.aspx?RelativeReportUrl=/reports/report

Reporting Services - Territory Sales Drilldown

AdventureWorks > Reports > ReportsLibrary

My Site | My Links

Actions | 1 of 1 | 100%

Open with Report Builder  
Print  
Export

- XML file with report data
- CSV (comma delimited)
- TIFF file
- Acrobat (PDF) file
- Web archive
- Excel
- data feed**

## Territory Sales



Territory	Sales Person	Member	Total Sales
<input type="checkbox"/> Australia			\$1,943,016.45
<input type="checkbox"/> Canada			\$12,808,458.05
<input type="checkbox"/> Central			\$13,434,509.55
<input type="checkbox"/> France			\$6,083,690.96
<input type="checkbox"/> Germany			\$2,476,530.47
	<input type="checkbox"/> Rachel Valdez		\$2,476,530.47
		<a href="#">SO51109</a>	\$101,012.38
		<a href="#">SO51125</a>	\$1,375.16
		<a href="#">SO51169</a>	\$98,414.98
		<a href="#">SO51171</a>	\$4,547.17
		<a href="#">SO51172</a>	\$3,261.42
		<a href="#">SO51166</a>	\$98.34
		<a href="#">SO51155</a>	\$44,877.77
		<a href="#">SO51161</a>	\$8,506.34
		<a href="#">SO51098</a>	\$1,782.92
		<a href="#">SO51697</a>	\$486.39
		<a href="#">SO51690</a>	\$4,161.13
		<a href="#">SO51695</a>	\$275.74
		<a href="#">SO51753</a>	\$6,041.42

Done Local intranet 100%



Untitled - Gemini Client Window

Home Gemini

Connection String | From Database | From Data Feed | Other | Refresh | Insert Row/Column | Add Relationship | Properties | Add Total | Insert Row Column | Rules | Tables | Relationships | Pivot Table

Connection | New Table | Table Tools | Columns Tools | View

**Table Import Tool**

**Data Preview Page**  
Preview the data you have selected.

Territory	Sales Person	Order Number	Total Sales
Germany	Rachel Valdez	SO43720	3578.2700
Germany	Rachel Valdez	SO43985	3578.2700
Germany	Rachel Valdez	SO44053	699.0982
Germany	Rachel Valdez	SO44056	3578.2700
Germany	Rachel Valdez	SO44158	3578.2700
Germany	Rachel Valdez	SO44192	3578.2700
Germany	Rachel Valdez	SO44216	3578.2700
Germany	Rachel Valdez	SO44361	3578.2700
Germany	Rachel Valdez	SO44393	3399.9900
Germany	Rachel Valdez	SO44402	3578.2700
Germany	Rachel Valdez	SO44421	3578.2700
Germany	Rachel Valdez	SO44472	3578.2700
Germany	Rachel Valdez	SO44590	3578.2700
Germany	Rachel Valdez	SO44619	3578.2700
Germany	Rachel Valdez	SO44622	3578.2700
Germany	Rachel Valdez	SO44646	3399.9900
Germany	Rachel Valdez	SO44808	3578.2700
Germany	Rachel Valdez	SO44837	3578.2700
Germany	Rachel Valdez	SO44917	3578.2700
Germany	Rachel Valdez	SO44918	3378.9900

< Back    Next >    Finish    Cancel

Home Gemini

Connection String
From Database
From Data Feed
Other
Refresh
Insert Row/Column
Add Relationship
Properties
Add Total
Insert Row Column
Rules
Tables
Relationships
PivotTable

Connection      New Table      Table Tools      Columns Tools      View

territory	salesperson	ordernumber	totalsales	Add Column
Germany	Rachel Valdez	S047339	2181.5625	
Germany	Rachel Valdez	S073898	56.97	
Germany	Rachel Valdez	S071592	38.98	
Germany	Rachel Valdez	S071467	776.33	
Germany	Rachel Valdez	S045002	3578.27	
Germany	Rachel Valdez	S047232	2181.5625	
Germany	Rachel Valdez	S070742	1120.49	
Germany	Rachel Valdez	S070744	1198.97	
Germany	Rachel Valdez	S044917	3578.27	
Germany	Rachel Valdez	S073022	1155.48	
Germany	Rachel Valdez	S074461	6.28	
Germany	Rachel Valdez	S071455	30.48	
Germany	Rachel Valdez	S072594	2390.95	
Germany	Rachel Valdez	S044905	3578.27	
Germany	Rachel Valdez	S073807	2344.96	
Germany	Rachel Valdez	S070761	2322.28	
Germany	Rachel Valdez	S074997	29.48	
Germany	Rachel Valdez	S044838	3578.27	
Germany	Rachel Valdez	S071629	814.47	
Germany	Rachel Valdez	S073760	811.32	
Germany	Rachel Valdez	S046921	2181.5625	
Germany	Rachel Valdez	S073455	32.27	
Germany	Rachel Valdez	S072394	49.99	
Germany	Rachel Valdez	S046876	2181.5625	
Germany	Rachel Valdez	S071452	38.98	
Germany	Rachel Valdez	S046865	2181.5625	
Germany	Rachel Valdez	S073978	63.97	
Germany	Rachel Valdez	S044622	3578.27	
Germany	Rachel Valdez	S074243	6.28	
Germany	Rachel Valdez	S074144	2419.06	
Germany	Rachel Valdez	S044611	3578.27	
Germany	Rachel Valdez	S050997	2443.35	
Germany	Rachel Valdez	S044580	3578.27	
Germany	Rachel Valdez	S046731	2181.5625	
Germany	Rachel Valdez	S070793	7.28	
Germany	Rachel Valdez	S071310	38.98	
Germany	Rachel Valdez	S046701	2181.5625	
Germany	Rachel Valdez	S044426	3578.27	
Germany	Rachel Valdez	S044421	3578.27	
Germany	Rachel Valdez	S067157	2443.35	
Germany	Rachel Valdez	S071589	75.97	
Germany	Rachel Valdez	S046677	2181.5625	
Germany	Rachel Valdez	S044402	3578.27	
Germany	Rachel Valdez	S044361	3578.27	
Germany	Rachel Valdez	S073549	25.48	
Germany	Rachel Valdez	S044258	3578.27	
Germany	Rachel Valdez	S050806	2443.35	
Germany	Rachel Valdez	S044216	3578.27	
Germany	Rachel Valdez	S070161	539.99	



# Rapport kilder

# demo

# Summary - Managed Self-Service BI

*Empowering end users through “Managed Self-Service BI”*



“Managed Self Service BI” delivered through:

- Self Service Analysis → Desktop Analytics
- **Self Service Reporting → End User Reporting**
- **SharePoint Integration → Sharing, Collaboration & Management**



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*Your potential. Our passion.<sup>™</sup>*

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