



Power View & PowerPivot High Octane Self-Service Reporting

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New Self-service BI Paradigm

- PowerPivot in Excel
- Excel Services in SharePoint
- Tabular models in Analysis Services
- Enterprise reporting tools:
 - Excel Services
 - Report Builder / Reporting Services
 - PerformancePoint
- Power View visual experience

What is PowerPivot?

- Next-generation of Analysis Services
- In-memory cube (but simpler)
- Technologies:
 - VERTIPAQ - compression
 - VERTISCAN - real-time aggregation & calculation
 - DAX - expression & query language (Excel-like, MDX-like, not SQL-like)
- 3 Flavors:
 - Desktop Excel 2010 add-in
 - Shared deployed to SharePoint library
 - Enterprise BISM tabular model in SSAS

PowerPivot in Excel

- Data storage compressed & embedded in the XLSX file
- In-memory aggregation
- No row limit (realistically, tens of millions)
- File size limit: 2 GB
- Memory limit: as much as you have (64 bit OS)
- Query speed: fast
- Compression ratio: 5x to 20x, depending on sparcity, redundancy, etc.

Demonstration

- PowerPivot in Excel

Excel Services in SharePoint

- Excel 2010 workbook (containing a PowerPivot model), deployed to a SharePoint 2010 library
- Opens in the browser
- Runs on the SharePoint server
- Storage limit: 2GB (SharePoint / SQL Server limit)
- Speed: fast

Demonstration

- Excel Services in SharePoint

Tabular Models

- Uses exactly the same VERTIPAQ & VERTISCAN technology
- Model is designed in SQL Server Data Tools (Visual Studio 2010)
- PowerPivot workbook can be converted to tabular model
- Model data is stored in a special Analysis Services instance on an enterprise server
- No stated resource limits
- Same reporting & client tools can use either PowerPivot or tabular model

Demonstration

- BISM tabular model
- Design & deployment
- Tabular mode SSAS database

SharePoint Shared Connections

- Deployed PowerPivot model/workbook
- Shared connections are stored in a connection library
- BISM Connection file (.BISM)
- Reporting Services Shared Connection (.RSDS)
 - Windows Authentication
 - Stored credentials
 - Impersonation
 - Delegation

Demonstration

- SharePoint connection library
- Create BISM connection file
 - Simple
- Create RSDS shared connection
 - Flexible
 - Use tabular model data provider
 - Connection string
 - Authentication options

Power View

- “Visualization experience”
not “Reporting tool”
- Simplicity
- Business user experience
- Behavior is intuitive & automatic
 - “Do the right thing be default”
 - Little or no training
- Driven by PowerPivot or tabular model

Demonstration (part 1)

- Open Power View from PowerPivot model
- Open Power View from connection
- Choose fields to create table
- Change table to a visual
- Filters
- Slicers
- Tiles
- Interactivity

Demonstration (part 2)

- Multiples
- Animated bubble chart
(animated presenter)
- Pages
- PowerPoint integration
- Saved reports

The Future

- Power View & Reporting Services
- Analysis Services multidimensional models & tabular models
- PowerPivot in Excel & SharePoint

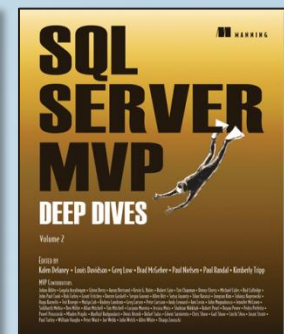
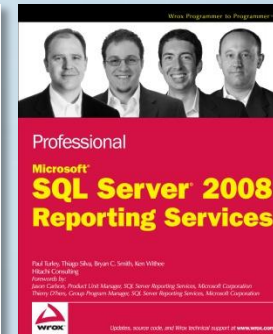
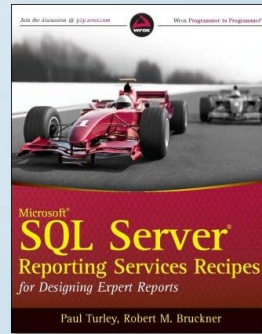
Thank You

Resources

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