



# O-17 Udviklingsmulighederne i Office 2010

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# Takeaways

- VBA still going strong :-)
- New UI development options
- Data-oriented development with SharePoint services
- Open XML SDK

# CUSTOM UI IMPROVEMENTS

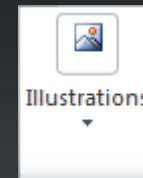
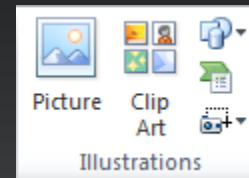
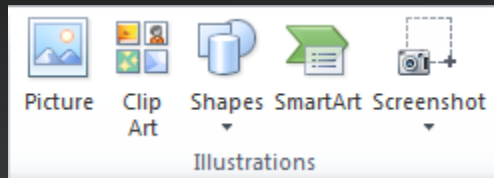
# RibbonX – Tab Activation

- Ability to programmatically select a tab and make it show up “in front” of other tabs
- Similar to Ribbon invalidation in its use of push model:

```
IRibbonUI.ActivateTab(String TabID)
```

# RibbonX – Group Scaling

- Built-in Ribbon groups change layout as window resizes:



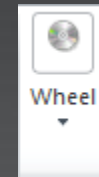
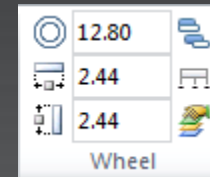
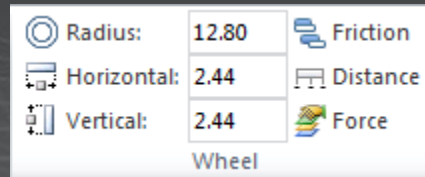
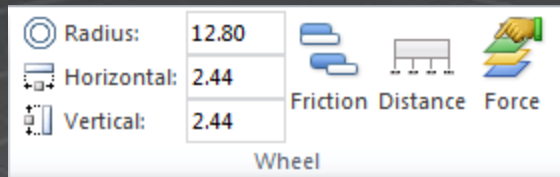
- New Office 2010 scenarios

# RibbonX – Group Scaling

- In Office 2010, autoScale property can be set on a custom group:

```
<group id="Wheel" autoScale="true">
```

- Custom group then changes its layout as the window resizes, like built-in groups do:





# Context Menu Extensibility

- In Office 2010, context menus can be extended via CustomUI as well:

```
<customUI ...>  
  <ribbon> ... </ribbon>  
  <contextMenus>  
    <contextMenu idMso="MenuCell">  
      <button id="ButtonRefresh"  
        .../>  
    </contextMenu>  
  </contextMenus>  
</customUI>
```

- New control types supported

**DEMO**



# BACKSTAGE EXTENSIBILITY

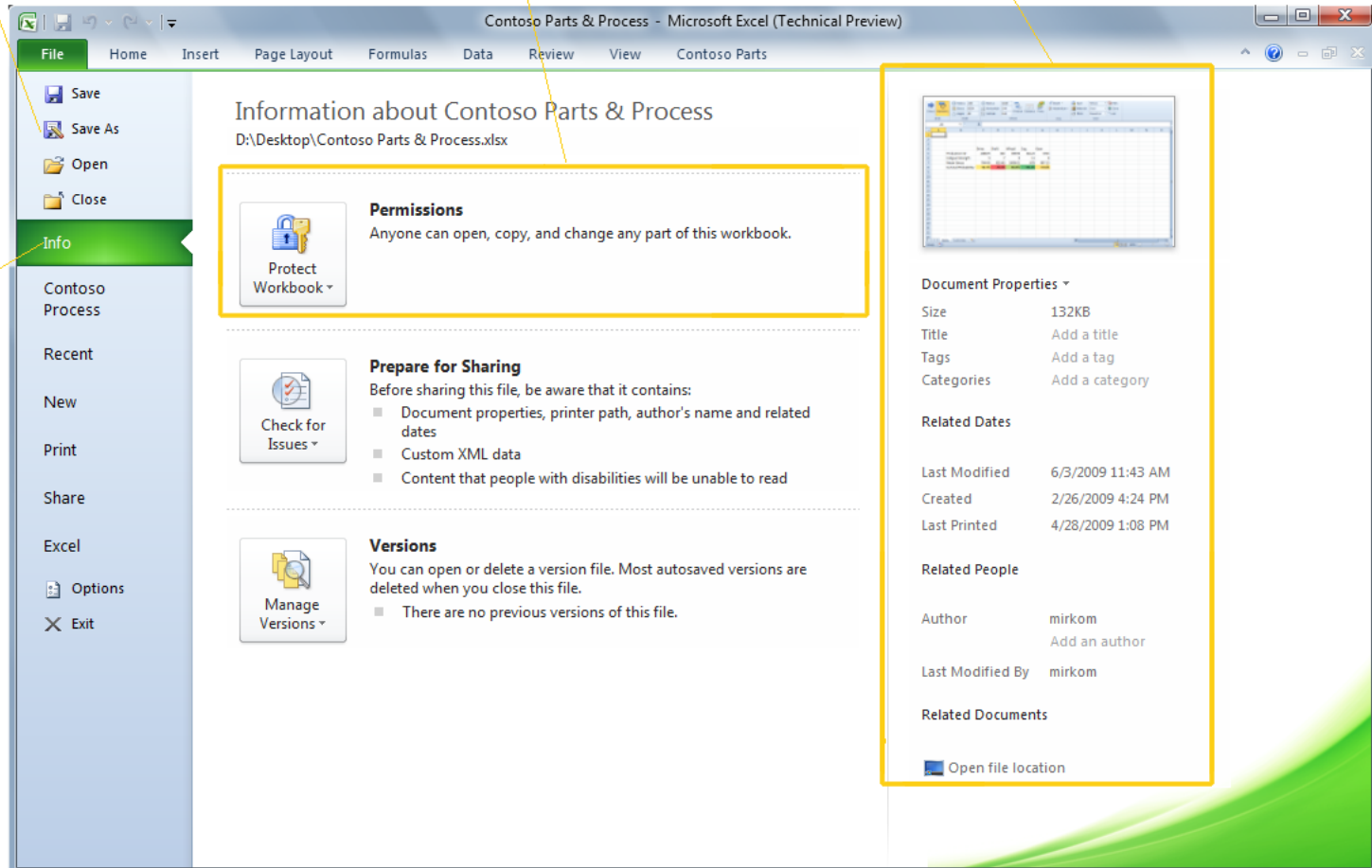
# Backstage – Glossary

**FAST  
COMMAND\***

**GROUP**

**COLUMN**

**TAB**



\* these names are not final

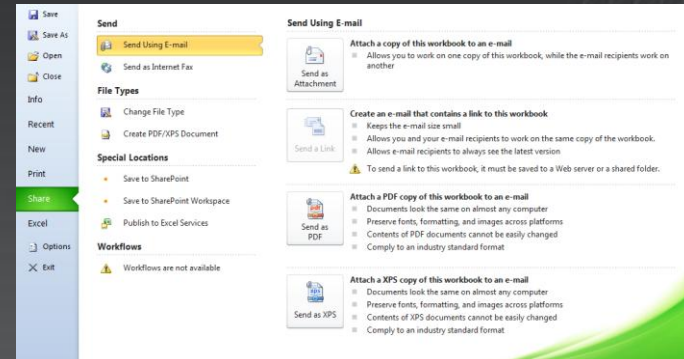
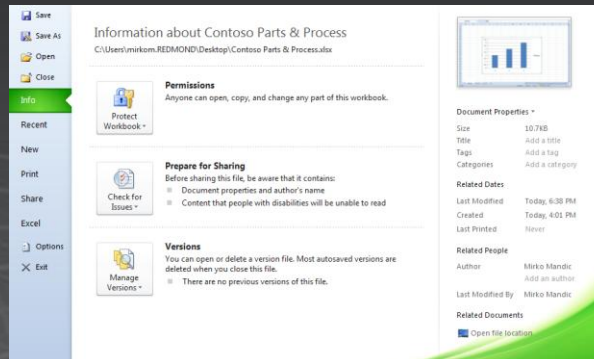
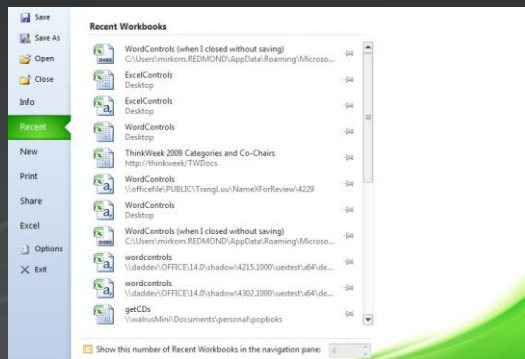
# Backstage Extensibility – Hierarchy

- At the same level as the Ribbon and context menus:

```
<customUI ...>  
  <ribbon> ... </ribbon>  
  <outspace> ... </outspace>  
  <contextMenus> ... </contextMenus>  
</customUI>
```

# Backstage Tab Extensibility

- Add new custom tabs
- Hide, disable built-in tabs
- Specify layout in custom tabs:



# Fast Command Extensibility

- Add custom fast commands
- Hide, disable built-in fast commands

# Backstage Group Extensibility

- Conceptually similar to Ribbon groups
- Add custom groups to built-in/custom tabs
- Hide built-in groups

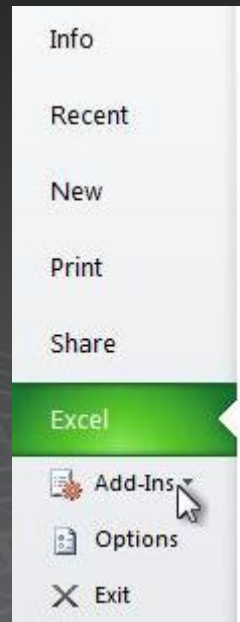


# Backstage Control Types

- Wide variety of control types available for building custom slabs  
(button, checkBox, editBox, dropDown, radioGroup, comboBox, hyperlink, labelControl, groupBox, layoutContainer, imageControl, etc.)
- Callbacks are similar, often identical, to those in the RibbonX
- Rich set of layout capabilities

# Existent File-Level Add-Ins

- An “Add-Ins” flyout shows all of the custom additions to Office 2007’s File Menu:



**DEMO**

# OPEN XML SDK 2.0

# Open XML SDK

- Allows you to create and modify Open XML documents
  - SDK currently supports Office 2007 SP2 Open XML files
- Based on .NET (C# and VB)
  - Compatible with LINQ
- Provides a unified platform for solutions
  - Consistent client and server solutions
- This SDK does NOT
  - Replace Office application Object Models
  - Perform layout + recalculation tasks
  - Perform file conversions to other formats, like PDF or XPS
- The SDK will be released in two versions
  - Version 1: Part level manipulation
  - Version 2: Content level manipulation

# Open XML SDK Tools

- SDK provides the following tools
  - Open XML Diff
  - Class Explorer
  - Document Reflector
- Open XML Diff
  - Compare differences in two Open XML files
- Class Explorer
  - Allows developers to navigate Open XML standard as it relates to the SDK
- Document Reflector
  - Automatically generates Open XML SDK code based on document

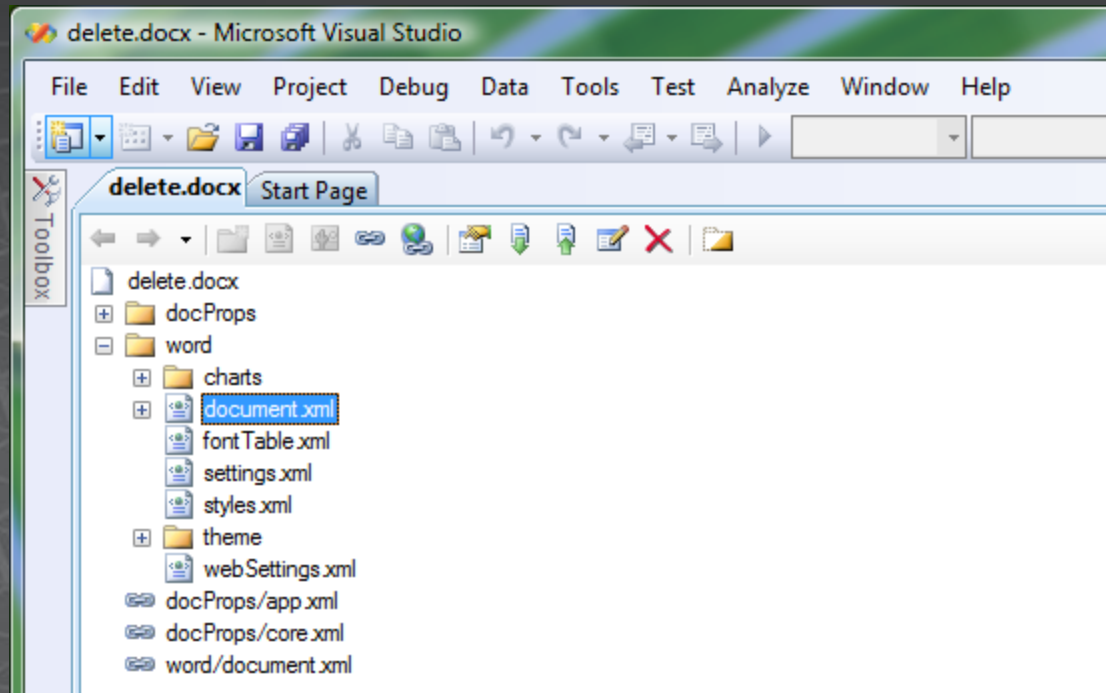


# Open XML Power Tools

- A set of 30+ cmdlets that create and modify Open XML documents
  - Removing comments, accepting tracked revisions, etc.
- Supports the PowerShell piping architecture
  - Documents are piped from cmdlet to cmdlet as objects
- Built on Open XML SDK
- Available on CodePlex
  - <http://www.codeplex.com>

# VSTO Power Tools

- Open and edit Open XML documents directly in Visual Studio
- <http://www.microsoft.com/downloads/details.aspx?FamilyID=46B6BF86-E35D-4870-B214-4D7B72B02BF9>

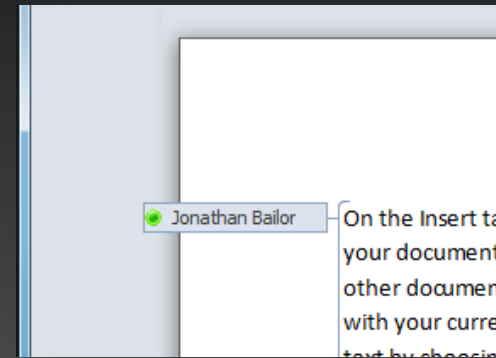


**DEMO**

# DATA-ORIENTED DEVELOPMENT

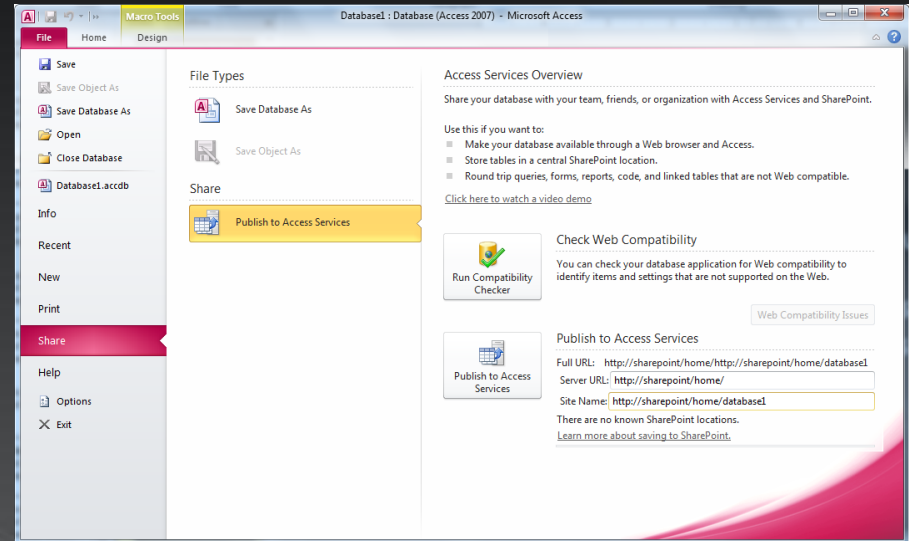
# Expanding on the Server

- Multi-user co-authoring
- Access Services
- Word Services
- Excel Services
- InfoPath Services
- Project Services
- Visio Services



# Access Services

- Publish the application to SharePoint on premise or hosted
- Throttled to allow logic to run in a hosted environment
  - Scalable
  - Secure (No signatures required)





# Word Services

- File | Save As on the server
  - Can read and write any format that desktop Word can read and write
- Enables 100% fidelity server-side rendering
- It is Word, so the output is the same – Right down to the last pixel
- API for server-side automation
- High-volume doc generation, conversion

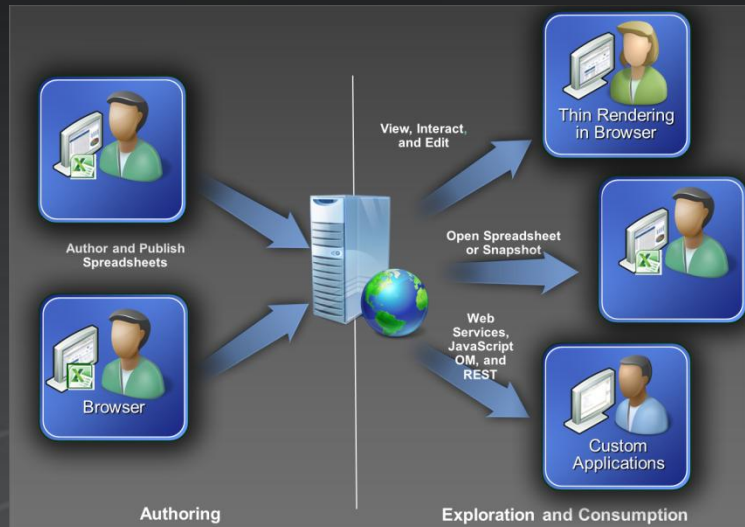


# Word Automation Services Performance

Application	Pages/second	Docs/hr*	Docs/day*
Word Automation Services	20-30	7,200	172,800
Word 2007	~5-7	900	21,600
Competitor	0.333	120	2,880



# Excel Services



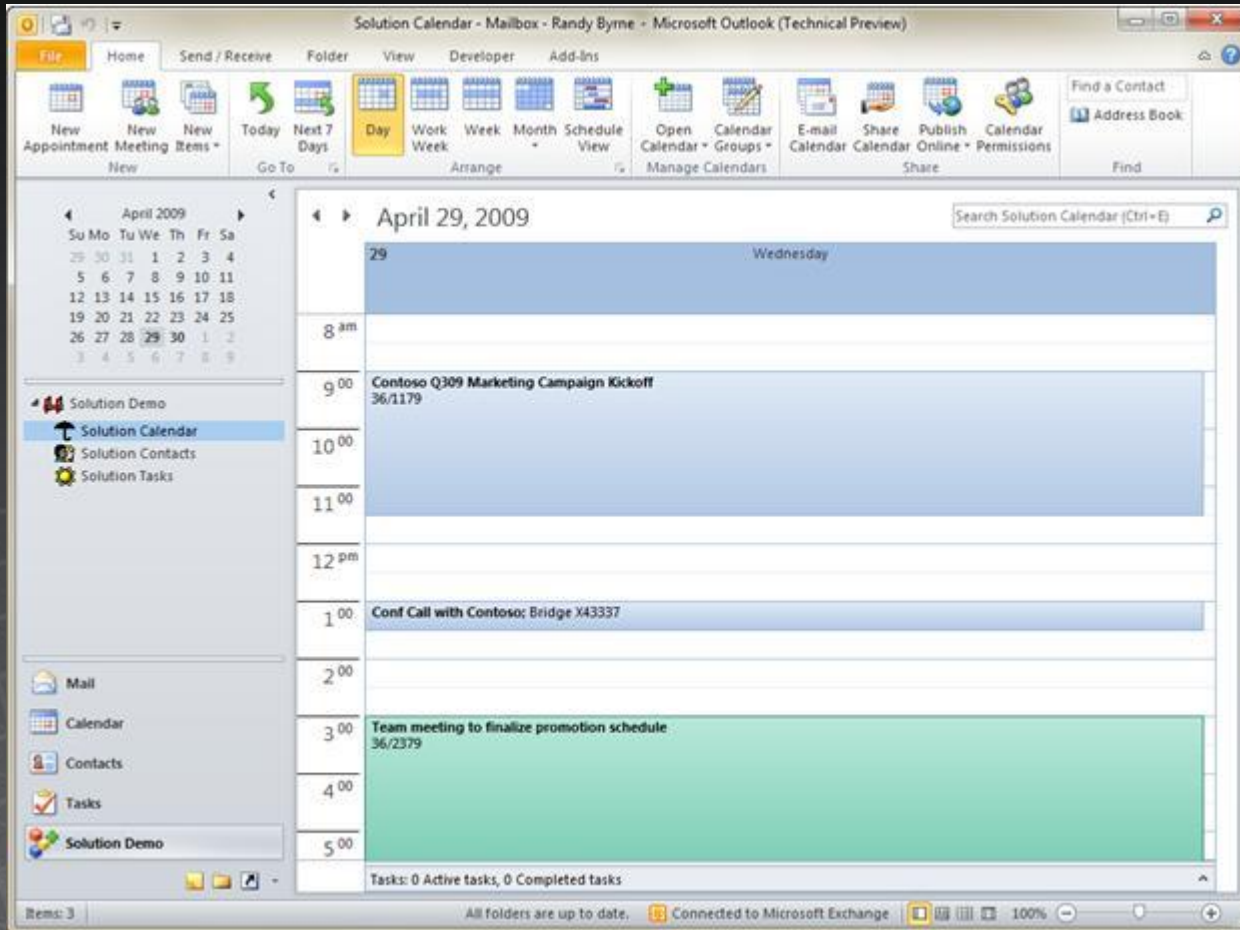
- New JavaScript Object Model
  - Capture user events
  - Ability to drive the UI
- New REST API
  - Enables embedding of ranges and charts contained in a workbook on a web page
  - Changes in underlying workbook are automatically reflected when web page is (re-) loaded
- Updated Web Services API
  - Adds support for edit mode, setting formulas
  - Ability to get charts

# InfoPath and Forms Services

- Create Forms for SharePoint Lists
- Build modular, extensible, and portable SharePoint applications
- More powerful Web browser forms
- Connect forms with line-of-business information
- Create forms with or without code

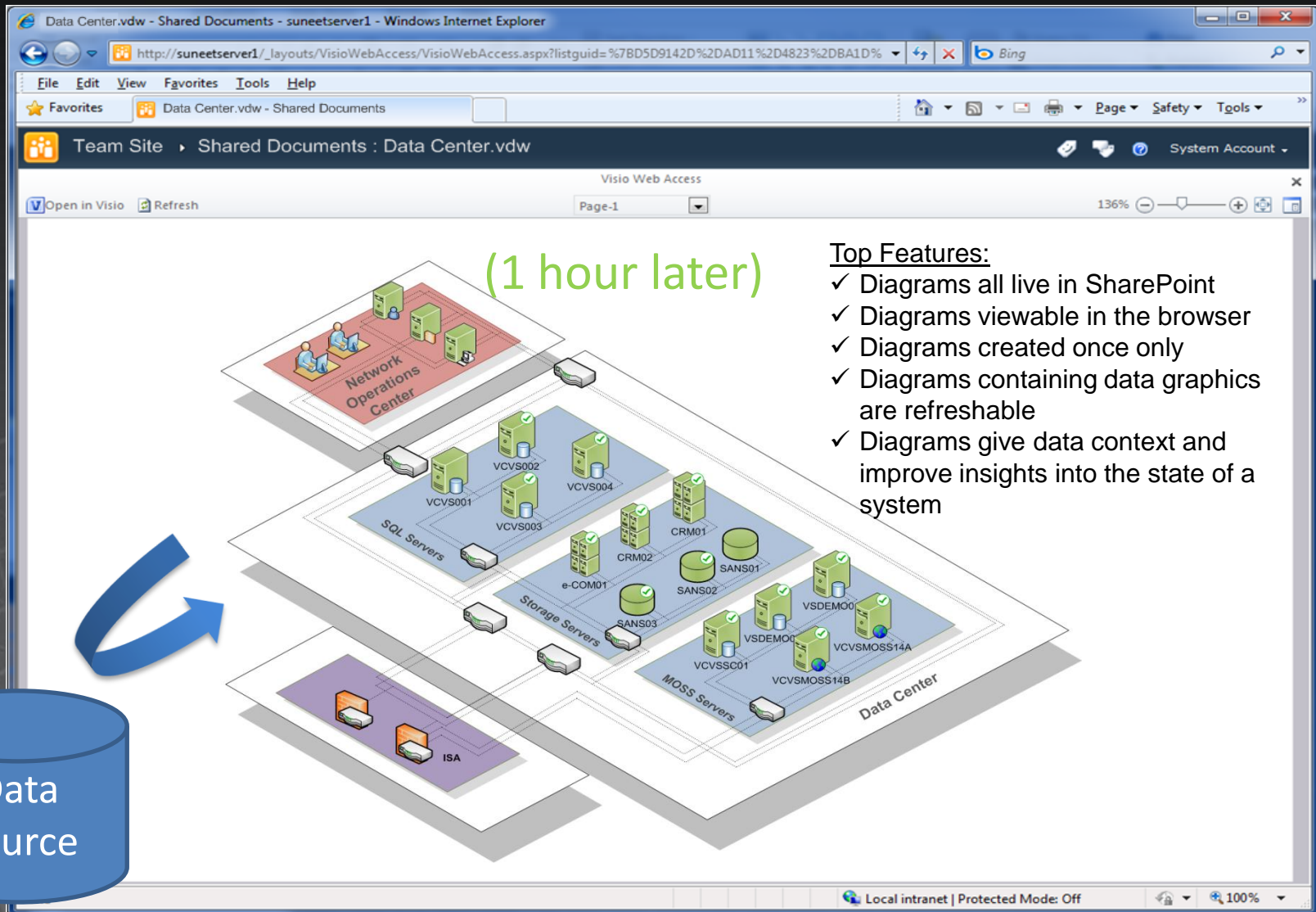


# Outlook Solutions Module



# VISIO SERVICES, AT A GLANCE

## “Data-Driven Diagrams in SharePoint”



The screenshot shows a web browser window displaying a Visio diagram titled "Data Center.vdw" in a "Visio Web Access" frame. The diagram illustrates a multi-tier architecture. At the top is the "Network Operations Center" with three server icons. Below it are "SQL Servers" (VCVS001, VCVS002, VCVS003, VCVS004), "Storage Servers" (e-COM01, CRM01, CRM02, SANS01, SANS02, SANS03), and "MOSS Servers" (VSDEMO0, VCVSSC01, VCVSMOSS14A, VCVSMOSS14B). At the bottom is an "ISA" (Internet Security and Acceleration) server. A large blue curved arrow points from a "Data Source" cylinder on the left towards the diagram. The text "(1 hour later)" is written in green above the diagram. The browser window includes a menu bar (File, Edit, View, Favorites, Tools, Help), a toolbar, and a status bar at the bottom showing "Local intranet | Protected Mode: Off" and "100%".

(1 hour later)

**Top Features:**

- ✓ Diagrams all live in SharePoint
- ✓ Diagrams viewable in the browser
- ✓ Diagrams created once only
- ✓ Diagrams containing data graphics are refreshable
- ✓ Diagrams give data context and improve insights into the state of a system

Data Source



# Relevant Sessions and ...

## Office 2010

O-05: Udrulning og administration af Office 2010(300)

O-04: Power of Choice med Office 2010 (Pc, mobil og browser)(200)

O-16: Office Business Applications(300)

... best blog on the Internet:

[http://blogs.technet.com/tyve\\_ti/](http://blogs.technet.com/tyve_ti/)

# Resources

- Office Developer Center:  
<http://msdn.microsoft.com/en-us/office/default.aspx>
- Office Development with Visual Studio (blog):  
<http://blogs.msdn.com/vsto/>

Campus Days  
14.-16. januar 2010



THANK YOU!