

# Workflow and Business Data Integration

- Document Sets
- Visio Services
- Workflow
- Business Connectivity Services

# Document Sets

# Document Sets

- Group documents together within a Document Library
- Shared Components:
  - Metadata
  - Versioning
  - Workflow

**Documents**

Documents

Drop Off Library

**Lists**

Tasks

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Recycle Bin

All Site Content

## Actiview Kenya Trip

This will be one to remember.

<b>Account Name</b>	Actiview
<b>Manufacturers</b>	Camp Time
<b>Pitch Date</b>	10/22/2009 12:00 AM
<b>Products</b>	Enormous Tents
<b>Sales Consultant</b>	CONTOSO\dianep

[View All Properties](#)  
[Edit Properties](#)

<input type="checkbox"/>	Type	Name	Document ID	Modified	Manufacturers	Products
<input type="checkbox"/>		Actiview Kenya Trip - Sales Brochure	CONTOSO-2-108	10/4/2009 7:38 PM	Camp Time	Enormous Tents
<input type="checkbox"/>		Actiview Kenya Trip - Sales Presentation	CONTOSO-2-109	10/4/2009 7:38 PM	Camp Time	Enormous Tents
<input type="checkbox"/>		Actiview Kenya Trip - Sales Contract	CONTOSO-2-110	10/4/2009 7:44 PM	Camp Time	Enormous Tents

# Visio Services

# Visio Services Features

## In detail...

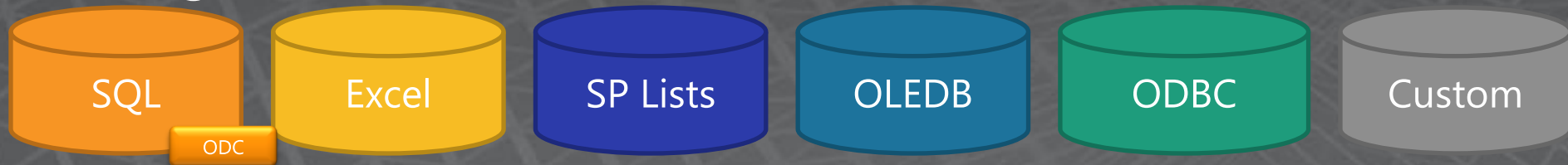
- Rendering

- Browser-agnostic
- Full Fidelity rendering using
- Down-level experience in PNG



- Visual Refresh of Data Diagrams

- Refresh diagrams connected to:



- Supports Kerberos, SSO & Unattended Auth.
- Automatic refresh

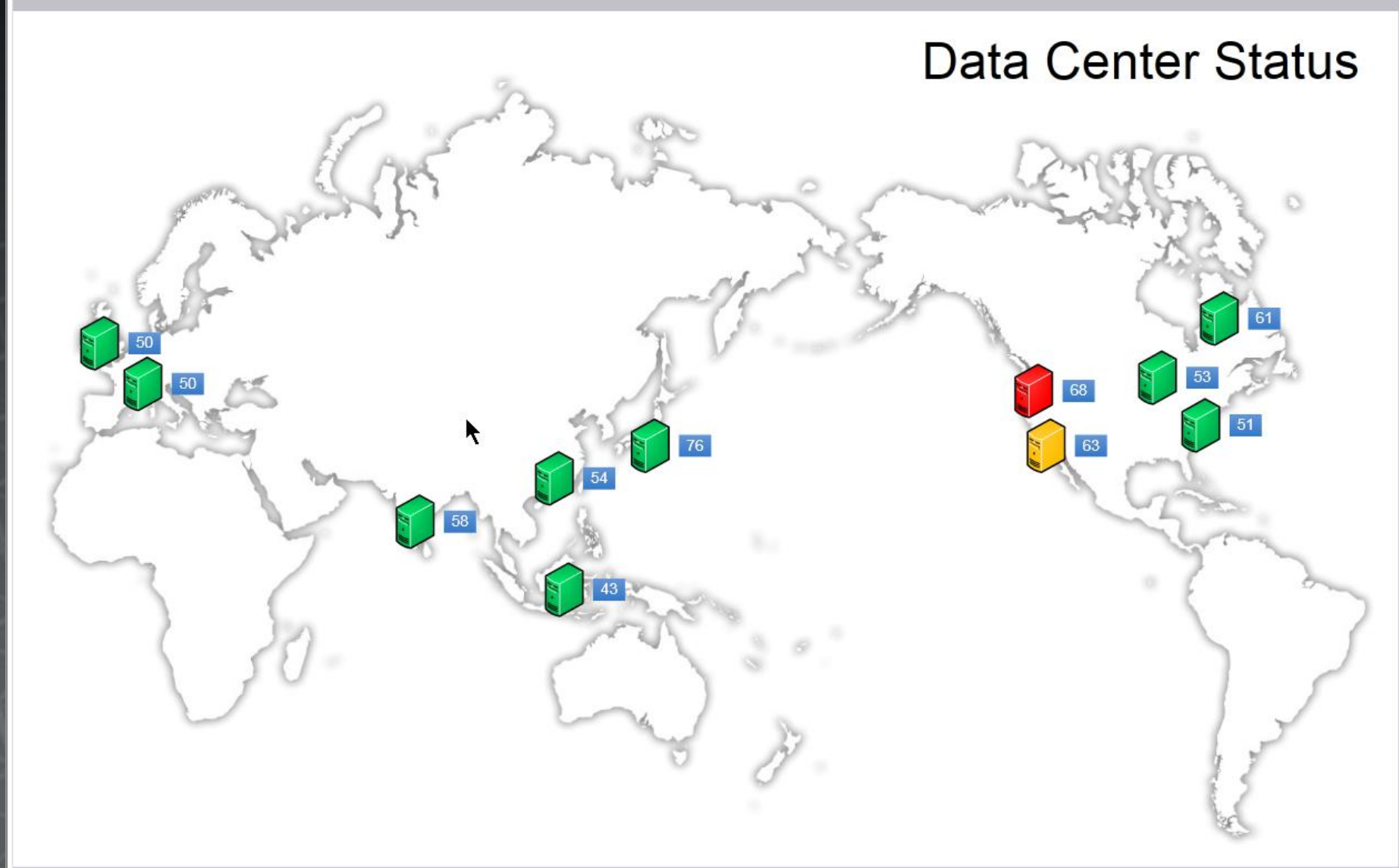
# Visio Services Features

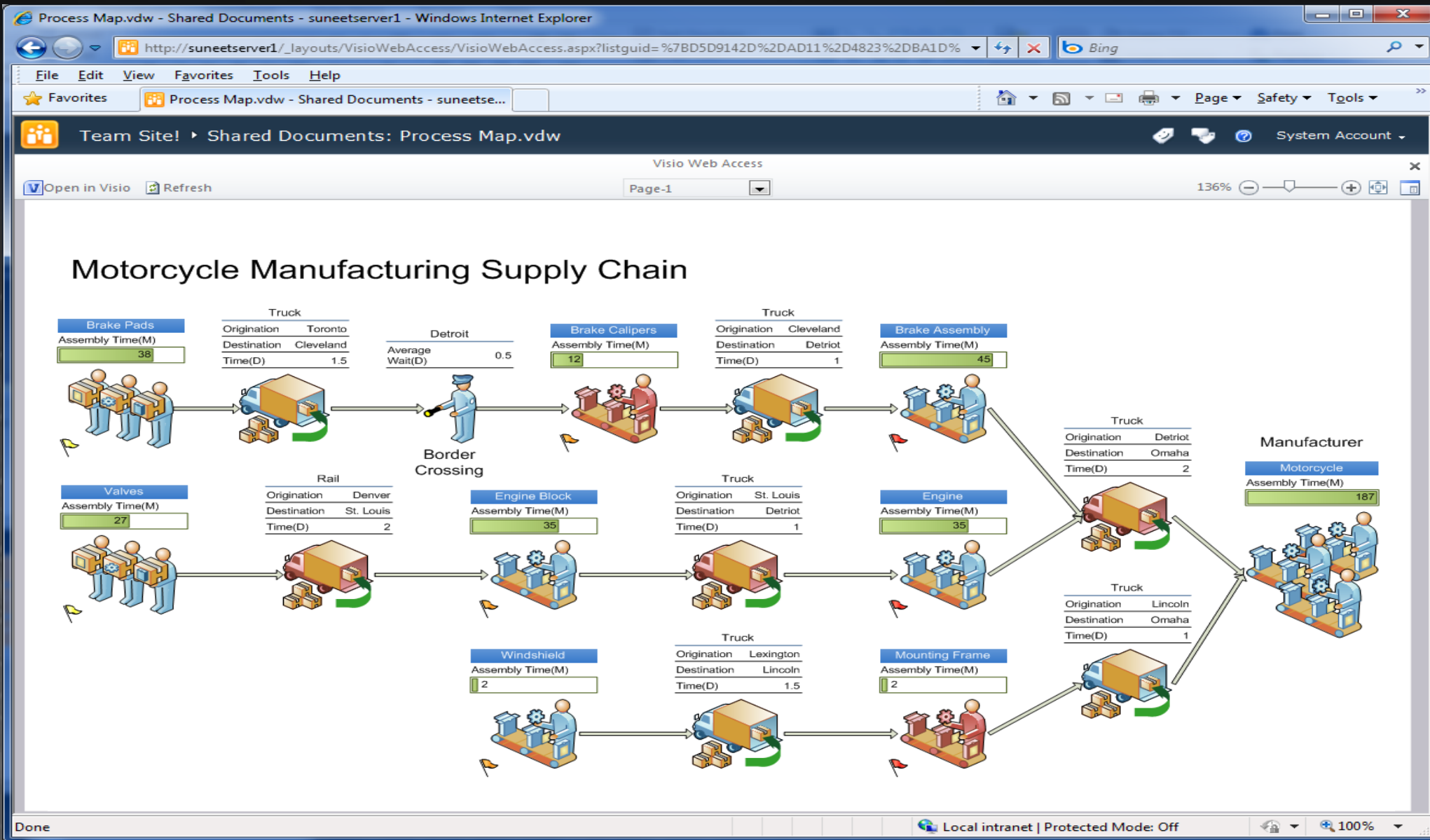
## In detail...

- SharePoint Integration
  - Visio Web Access web part
  - JavaScript Mash-up API
  - Supports web part connections
- Administration
  - Visio Services is a Shared Service
  - Customizable in Central Admin & PowerShell
  - Can tune performance to your hardware



# Data Center Status





# Visio Services Workflow Integration

- Diagram workflows in Visio and import into SPDesigner
- Export SPD workflows into Visio Diagrams
- Visualize workflow status with Visio Services in SharePoint

The screenshot displays the 'Workflow Status: Approval' page in SharePoint 2010. The page title is 'Visio Services Demo > Workflow Status: Approval - SharePoint 2010'. The 'Workflow Information' section shows the following details:

- Initiator:** System Account
- Document:** Hover
- Started:** 10/14/2009 10:45 PM
- Status:** In Progress
- Last run:** 10/15/2009 10:51 PM

The 'Workflow Visualization' section shows a flowchart with the following steps:

- Start (Green play button)
- Decision: Compare data source (Green checkmark)
- If No: Set workflow variable (Green checkmark)
- If Yes: Set workflow variable (Green checkmark)
- Task: Assign item for approval (Started: 10/14/2009 10:45 PM, Currently Assigned Tasks: 1). Assignees: REDMOND\parida and Suneat Shah.
- End (Red square)

At the bottom of the page, there are two links: 'Add or update approvers of Approval' and 'Cancel all Approval tasks'. The page footer shows 'Local intranet | Protected Mode: Off' and a zoom level of 100%.

# SharePoint Designer & Workflows

# What's new in SharePoint Designer?

- Completely re-tooled to be an office app for SharePoint
- Easier to restrict who can use it
- Create regular and external content types and attach them
- Content creation
- Site Administration
- Connect to external data sources
- Significantly enhanced workflow capabilities

# SPD's Rules-Based Workflow Designer

- Core tooling improvements
  - New workflow types: site, c-type, reusable
  - Constructs: nested logic, impersonation step
  - Enhanced data binding, on-demand columns
- Use new and improved actions
  - Manager, user profile lookups
  - Doc set and record management
  - Read/write to external lists
- Visio as a graphical designer
- Solution packaging for portability



# Business Connectivity Services

# Business Connectivity Service

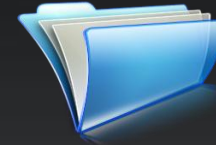
- No code connectivity to external data sources
- Direct item binding via External Content Types
- Full CRUDQ support (read-write)
- SharePoint Designer integration
- Offline access to external data
- Fully indexed and searchable



2010

# Scenario

SharePoint List



2010

External Content Type



2010

Business Connectivity Service



SQL Database



# External Content Type (ECT)

## The building block

- Superset of entity capabilities; describes:
  - Structure of the external system (Fields, Methods, Connection)
  - How this data behaves within SharePoint and Office
- Manage and reuse from a central location
- Added to the Business Data Connectivity service through:
  - SharePoint Designer
  - Visual Studio 2010
  - Import into the Business Data Connectivity service as part of a model

# Demos

TCSC

