



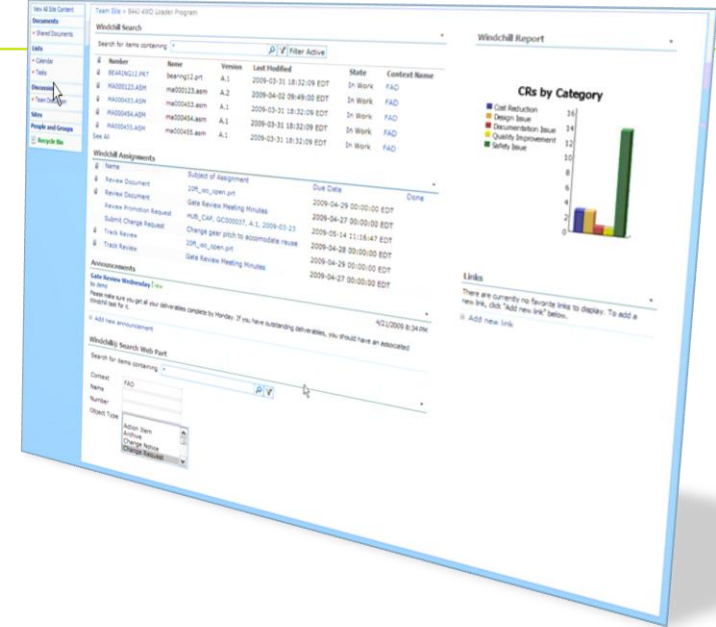
# Windchill-SharePoint Integration Overview

May 2009

# Why Windchill and SharePoint Together?

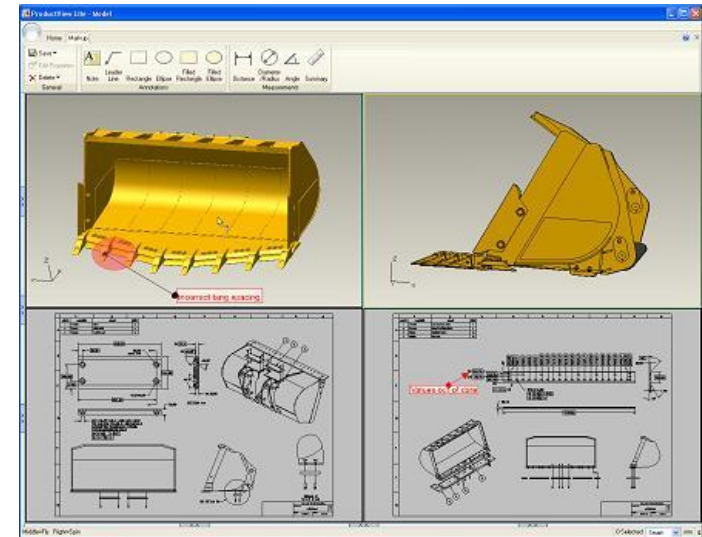
## Access advanced PLM-managed information through a familiar interface

- Increase visibility of PLM-managed content to more cross-discipline knowledge management participants
- Leverage a familiar user interface that a majority of participants utilize everyday



## SharePoint as a user interface for Windchill PDMLink

- Expand the reach of PLM-managed content throughout the organization, balancing complex change and configuration management with extended ease-of-use and visibility
- Provide lightweight graphical visibility to CAD information directly out of SharePoint
- Augment SharePoint by providing a single source of product content management, classification, change management, etc.



# Windchill Web Parts for SharePoint (R9.1 M010 and Later Releases)

## The Power of Windchill; the Simplicity of SharePoint

- Easy-to-use web parts expose key PLM capabilities within the familiar SharePoint environment

## Improve Worker Productivity

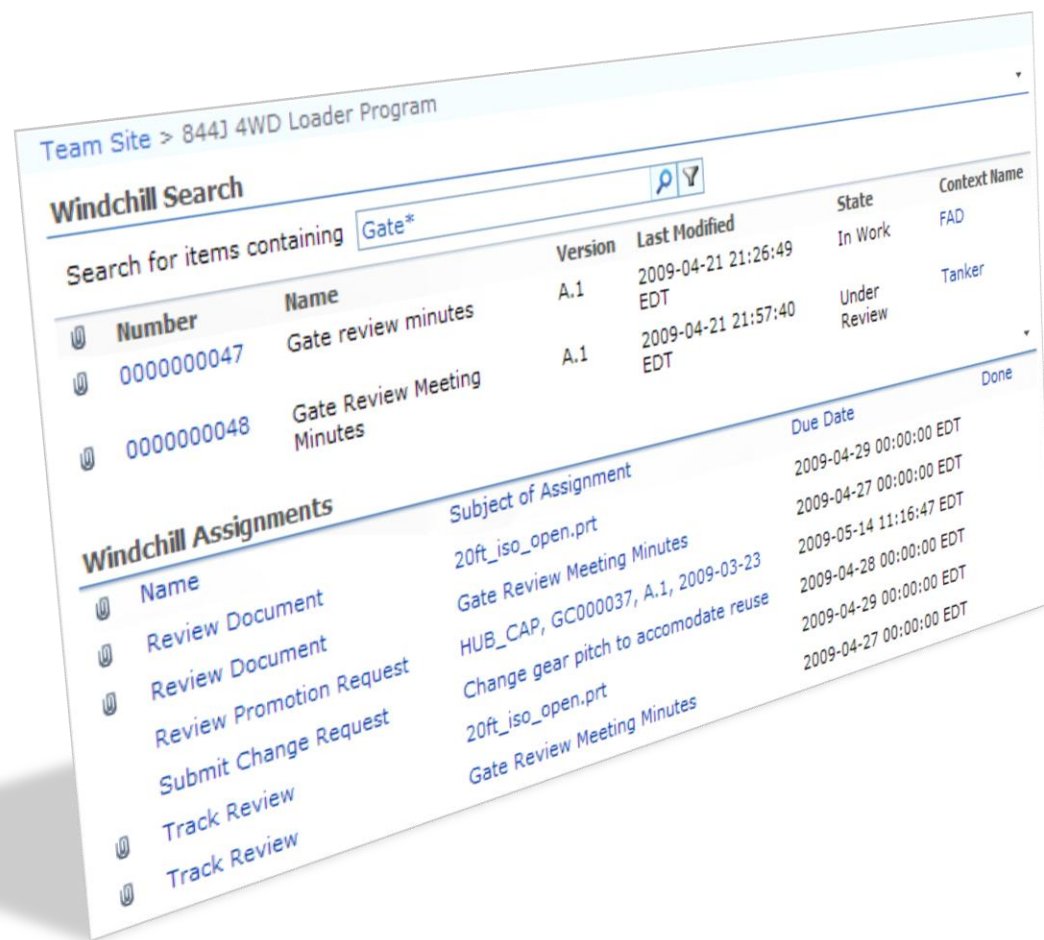
- Build cross-application dashboards
- Seamlessly access and edit documents regardless of their location
  - Windchill Web Parts and Desktop Integration
- View and markup product representations with ProductView

## Broaden Access to Product Data

- Search for key product information using flexible search parameters
- Configure “sticky searches” of important data for display in team sites

## Compatibility

- WSS 3.0, MOSS 2007, Windchill ProductPoint



## Typical Roles and Collaboration Needs

Light Collaboration +  
Edit Attributes and Relationships,  
Edit Structured Content or Sets of  
Documents, Review and Mark up  
Viewables...

View and Print +  
Complete Assignments,  
Review/Edit Individual  
Documents...

Search, Navigate  
Relationships,  
Retrieve Content

Role	View and Print	Light Collaboration	Full Collaboration
Engineers, Manufacturing, Other Traditional PLM Users	X	X	X
Procurement, Marketing, Legal	X	X	
Sales	X	X	
Executive, other G&A	X	X	



# Targeted Scenarios

## Windchill Web Parts

### Executive Dashboard

- Show Windchill Business Reports in context with reports from ERP, sales, and corporate finance
- Windchill assignments for the occasional approvals that reach the executive level
- Suitable for executives that need a broad view of program status across all disciplines, presented in a familiar interface

The screenshot displays the Windchill Executive Dashboard with the following sections:

- Product Development Process Dashboard:** A grid of progress bars for various product lines (MCI Bor-266, TPS-XL-123-1, EBDA 64-9100 RI) across stages: Concept, Design, Development, Validation, and Rollout. Each bar shows a percentage of completion and a color-coded status (green for on track, red for delayed).
- Requirements:** A table listing requirements with columns for ID, Type, Name, Version, Priority, Status, % Complete, Modified, and Modified By.
 

ID	Type	Name	Version	Priority	Status	% Complete	Modified	Modified By
3	Use Case Template	Use Case Template	2.6	(2) Normal	Final	100%	5/7/2008 4:47 PM	Garf, Lee
4	OOB Site Configurations	OOB Site Configurations	1.8	(2) Normal	Draft	60%	8/20/2008 11:12 PM	Cooke, Jim
5	Upload ProE Model to Catalog	Upload ProE Model to Catalog	1.5	(2) Normal	Draft	0%	5/7/2008 4:48 PM	Garf, Lee
6	Upload ProE Model that Uses Catalog Parts	Upload ProE Model that Uses Catalog Parts	2.9	(2) Normal	Draft	0%	7/15/2008 10:03 AM	Bergquist, Chris
7	Copy structure to new structure (same as)	Copy structure to new structure (same as)	0.32	(2) Normal	Draft	0%	11/11/2008 6:15 PM	Cooke, Jim
8	Bulk Load Parts	Bulk Load Parts	0.8	(2) Normal	Draft	0%	12/1/2008 12:59 PM	Cooke, Jim
9	Manage Standard	Manage Standard	0.11	(2) Normal	Draft	0%	1/7/2009 11:27 AM	Berouast,
- Ideas:** A table listing ideas with columns for Type, Name, Rating, and Date Submitted.
 

Type	Name	Rating	Date Submitted
Idea State: Capture (1)	Drive Channel Alignment		7/5/2007
Idea State: Formulate (1)	Biking helmet with talking GPS	☆☆☆☆☆	8/23/2007
Idea State: Evaluate (3)	Employment Practices and Selection	☆☆☆☆☆	9/2/2007
	Harlem Meadows	☆☆☆☆☆	5/5/2007
	Marge's Travel Biking	☆☆☆☆☆	7/4/2007
- Windchill Change Monitor:** A bar chart showing counts for Problem Reports (500), Enterprise Change Request (ECRs) (500), and Enterprise Change Notice (ECNs) (500).

# Targeted Scenarios

## Windchill Web Parts

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### Multi-Application Visibility and Responsibility

- E.g. Manufacturing Engineer
  - Process planning (MPMLink)
  - Reviewing/approving engineering changes (PDMLink)
  - Optimizing the production schedule (ERP)
  - Reviewing/approving vendor selections (ERP)
  - Monitoring order status for critical parts (ERP)
- Portal used for at-a-glance access to key events and status in each vertical application
  - Light collaboration tasks from within the portal itself
  - Navigate to the relevant vertical app for detailed work

# Targeted Scenarios

## Windchill Web Parts

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### Project/Program Collaboration

- Many elements of project/program execution are not directly related to product development
  - Program Manager is responsible for overall execution success of the program
    - cost, quality, weight, financial, market share, volume, and design/feature objectives
  - Finance team is responsible for performance to cost and profitability targets
  - Marketing is responsible for market communications, campaigns, etc
- Members of program management team may use SharePoint for general collaboration
  - Documents, schedules, and other data may be shared using SharePoint
- Windchill is used to manage product development process

### Typical Tasks for these Extended Project Team Roles

- Approve changes
- Review PLM-managed documents
- Search for/access product information

## Targeted Scenarios

### Windchill Web Parts

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#### Partner Collaboration

- OEM uses PDMLink/ProjectLink; small supplier uses ProductPoint
- Supplier is required to collaborate with OEM using ProjectLink

#### Typical Tasks for Supplier

- Respond to assignments
- Search for OEM documents or other objects
- Keep tabs on updates to dependent OEM data

**Web parts permit supplier to achieve much of their customer interaction while in their own ProductPoint environment.**



# Windchill Web Part – Search

Open in ProductView or View Item Details

Filter by common criteria like type, attributes, and context

Navigate to the container context for a closer look

Download and view or edit content without visiting Windchill

Use **Saved Searches** to set up multiple, pre-defined information views

The screenshot shows the Windchill Search interface for a '844J 4WD Loader Program'. It includes a search bar, a table of search results, and several sections below: Windchill Assignments, Announcements, and another Windchill Search Web Part. Callouts highlight specific features like 'Open in ProductView', filtering options, and 'Saved Searches'.

NUMBER	NAME	ITERATION	MODIFIED	STATE	CONTEXT
0000000047	Gate review minutes	A.5	2009-04-22 11:18:15 EDT	In Work	FAD
00021	Change material to accomodate thermal stress requirements	A.1	2009-04-21 20:58:07 EDT	Under Review	FAD
	Change gear pitch to accomodate reuse	A.1	2009-04-21 21:05:01 EDT	Open	FAD
	bearing12.prt	A.1	2009-03-31 18:32:09 EDT	In Work	FAD
MA000123.ASM	ma000123.asm	A.2	2009-04-02 09:49:00 EDT	In Work	FAD

Name	SubjectName	Deadline	PercentComplete
Review Document	Gate Review Meeting Minutes	2009-04-27 00:00:00 EDT	
Review Document	20ft_iso_open.prt	2009-04-29 00:00:00 EDT	
Submit Change Request	Change gear pitch to accomodate reuse	2009-04-28 00:00:00 EDT	
Track Review	20ft_iso_open.prt	2009-04-29 00:00:00 EDT	

NUMBER	NAME	ITERATION	MODIFIED	STATE	CONTEXT
00021	Change material to accomodate thermal stress requirements	A.1	2009-04-21 20:58:07 EDT	Under Review	FAD
00022	Change gear pitch to accomodate reuse	A.1	2009-04-21 21:05:01 EDT	Open	FAD

# Windchill Web Part – Assignments

Sort and filter using standard SharePoint capabilities

Navigate directly to the subject item in Windchill

Download and view or edit content without visiting Windchill

Complete typical assignment actions quickly and easily with context-sensitive menus

The screenshot shows the 'Assignments Web Part' in a SharePoint environment. It features a table with columns for Name, Subject of Assignment, Due Date, and Done. A context menu is open over the 'Track Release' assignment, showing options like 'View Information', 'Reassign Task', 'Complete Task', and 'Edit Deadline'. A callout points to the 'Track Release' link, indicating direct navigation to the subject item in Windchill. An inset window shows the 'Windchill' interface with a navigation menu and a detailed view of the 'Assignments' list, including columns for Assignment Name, Actions, Subject of Assignment, and State.

Name	Subject of Assignment	Due Date	Done
Approval Request	Agenda Template	2008-12-26 00:00:00 GMT	
Post Mortem			0
Project Finish			
Project Start			
Scope			0
Track Release	Agenda Template		

Number	Iteration	Modified	State
GC000001	A.A.1	2008-11-06 17:18:01 GMT	INWC
GC000001	A.2	2009-01-05 19:18:40 GMT	INWC
GC000002	A.1	2008-11-06 17:17:48 GMT	INWC
GC000003		2008-11-06 17:17:41 GMT	INWC
GC000004		2008-11-06 17:17:42 GMT	INWC

Assignment Name	Actions	Subject of Assignment	State
Track Release	Actions	Agenda Template	Under Review
Approval Request	Actions	Agenda Template	Under Review
Project Finish	Actions		
Scope	Actions		
Post Mortem	Actions		
Project Start	Actions		

# Windchill Business Reports in Portals

## Embed Windchill Reports in your Corporate Portals

- Construct cross-application dashboards
- Increase process and product visibility across the extended team
- Supports popular corporate portals, e.g.
  - Websphere
  - SharePoint
  - Netweaver

The screenshot shows a corporate portal interface with a sidebar on the left containing navigation options like 'Documents', 'Lists', 'Discussions', and 'Sites'. The main content area features a 'Windchill Report' section. This section includes a bar chart titled 'CRs by Category' with a legend for Cost Reduction (blue), Design Issue (orange), Documentation Issue (red), Quality Improvement (yellow), and Safety Issue (green). To the right of the chart is a table:

Category	Count
Cost Reduction	4
Design Issue	9
Documentation Issue	2
Product Improvement	1
Quality Improvement	2
Safety Issue	14
<b>Summary</b>	<b>32</b>

Below the chart, the report shows a date range of 'May 24, 2008 - 11:02:32 AM' and sections for 'Team Discussion' and 'Links'.

# Web Part Concept – Folder Browser (Target 9.1 Maintenance Release)

The image shows a screenshot of the PTC Home page with a folder browser concept overlaid. The main page has a left sidebar with navigation links: Home, View All Site Content, Documents (Shared Documents), Lists (Calendar, Tasks), Discussions (Team Discussion), Sites, and People and Groups (Recycle Bin). The main content area has sections for Announcements, Calendar, and Windchill Documents.

The Windchill Documents section contains the following table:

Type	Name	Version	Modified	Modified By	Context
Folder	CAD-Documents	1.0	12/21/2007 1:25 PM	Garf, Lee	Passat B6
Folder	Configurations	1.0	12/21/2007 1:26 PM	Garf, Lee	Passat B6
Folder	DF_Export	1.0	12/21/2007 1:26 PM	Garf, Lee	Passat B6
Folder	Documents	1.0	12/21/2007 1:26 PM	Garf, Lee	Passat B6
Folder	Product	1.0	12/21/2007 1:26 PM	Garf, Lee	Passat B6
Folder	Promotion Request	1.0	12/21/2007 1:26 PM	Garf, Lee	Passat B6
Folder	Prototyping	1.0	12/21/2007 1:27 PM	Garf, Lee	Passat B6
Folder	Structure	1.0	12/21/2007 1:27 PM	Garf, Lee	Passat B6
Folder	Variant Specifications	1.0	12/21/2007 1:27 PM	Garf, Lee	Passat B6

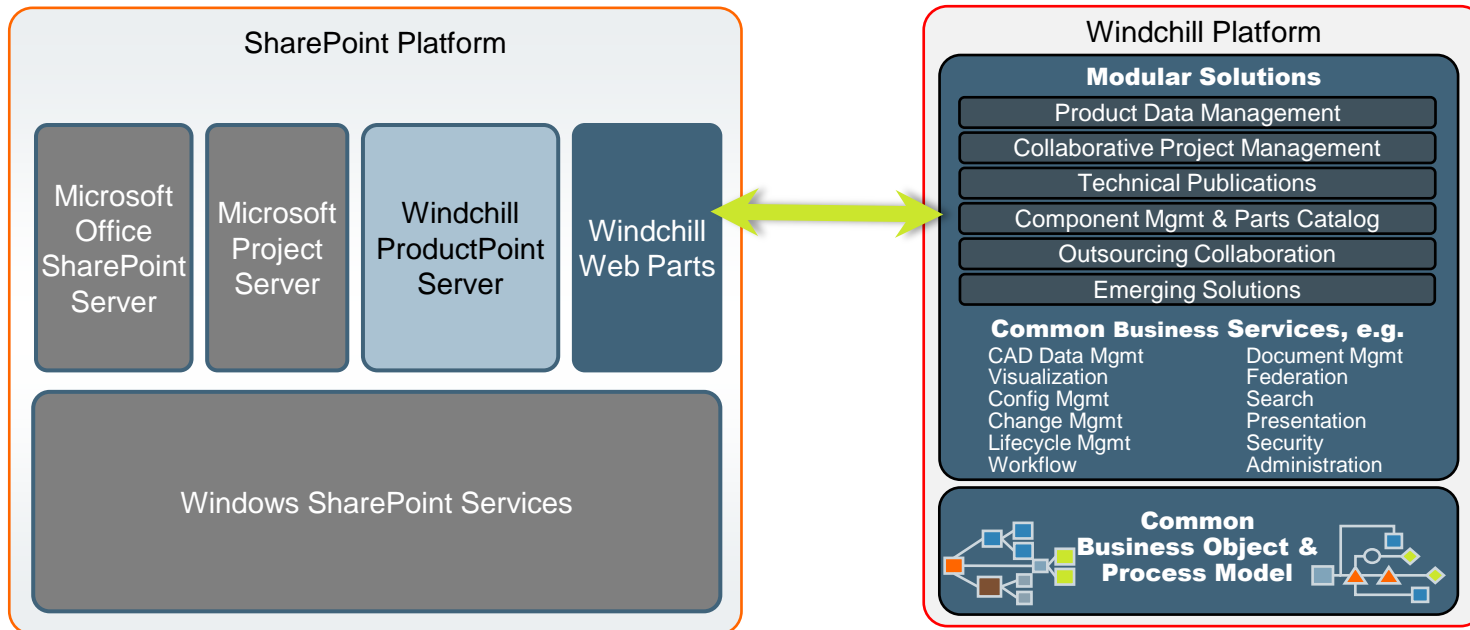
The detailed view of the folder browser interface shows the following structure:

- PTC Automotive PDS
- Home | Product | Project | Change | Library | Suppliers
- Products List | Details | Folders | Product Structure | Team Assignments | Change Monitor | Forum
- PASSAT B6 Recent Products: [Dropdown]
- Search within this product: [Search Box]
- Current View: Folders Only
- Folder Browser Table:

Name	Actions	Modify
CAD-Documents	See Actions	
Configurations	See Actions	
DF_Export	See Actions	
Documents	See Actions	
Calculations	See Actions	
Product	See Actions	
Promotion Requests	See Actions	
Prototyping	See Actions	
Structure	See Actions	
Variant Specifications	See Actions	

Forward Looking Statements Subject to Change without Notice

# Differentiating Windchill Web Parts from Windchill ProductPoint



## Windchill ProductPoint

- Runs completely inside the SharePoint architecture
- Provides CAD data management on top of SharePoint's other horizontal collaboration capabilities
- Content lives inside SharePoint

## Windchill Web Parts

- Allow remote interaction with Windchill PDMLink, ProjectLink, Pro/INTRALINK, or Arbortext Content Manager
- Leverage SharePoint's ease of use, but leaves the content within the Enterprise PLM system
- Blends SharePoint's Ease of Use with Enterprise-Class PLM Capabilities

