

Choosing PLM 360: A Customer Perspective

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PL2024/Class Summary

In this class we discuss Greenpoint's journey in selecting Autodesk PLM 360 cloud-based software for its product lifecycle management solution. We discuss why Autodesk PLM 360 was considered as a potential solution, explain how to create a trial tenant, explore the main themes of how Autodesk PLM 360 works, and discuss possible Autodesk® Vault integrations.

Key learning objectives

At the end of this class, you will know about:

- Accessing resources that are available for learning Autodesk PLM 360
- The meaning of the layout and function of key workspace concepts from GTI's perspective
- Automation through creating scripts and access the RESTful API
- Possible integrations with Autodesk Vault

Greenpoint Technologies, Kirkland, WA

Mark Keilholz, Senior Director, Information Systems

- Greenpoint Technologies is a Boeing Business Jet (BBJ) Completion Center which provides turnkey interior completions for high-net-worth individuals and Heads-of-State.



Greenpoint Company Profile

- 400+ Employees
- Comprised of 4 different companies in Washington and Texas
- Technologies in-place
 - ✓ Inventor
 - ✓ Vault Pro
 - ✓ ACAD-M
 - ✓ Navisworks
 - ✓ 3DS Max
 - ✓ Raster Design
 - Microsoft Business Systems
 - ✓ Dynamics AX
 - ✓ Sharepoint

Why the Need for PLM?

- Our systems were difficult to configure, maintain and update
- Data Silos
- Fragile tools
- Not-User Friendly
- Required duplicate data entry
- Slow and inefficient
- Data difficult to mine and analyze

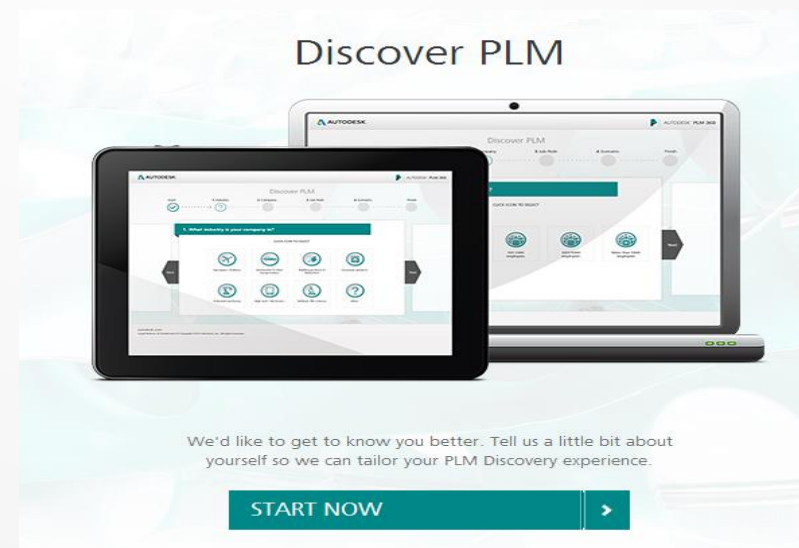
Specific Requirements for PLM

- Ability to integrate with our key business systems
- User friendly - Intuitive, dynamic interface with reporting and dashboards
- Automates key tasks and delivers the right information to the right person at the right time
- Mitigates bottlenecks by easily identifying what items / issues are affecting a deliverable
- Helpful visualization tools increase comprehension (including workflow)
- Facilitates change management and provides complete history
- Highly configurable, both for admins and end-users
- Highly searchable

Why We Looked at PLM 360

Orrin Bourne, CAD Administrator

- We are a current Autodesk/IMAGINiT customer so it made sense to look at PLM 360.
- We imagined that there was likely some sort of integration with Vault.
- Easy to get a trial version....ONLINE!



The Journey Begins!

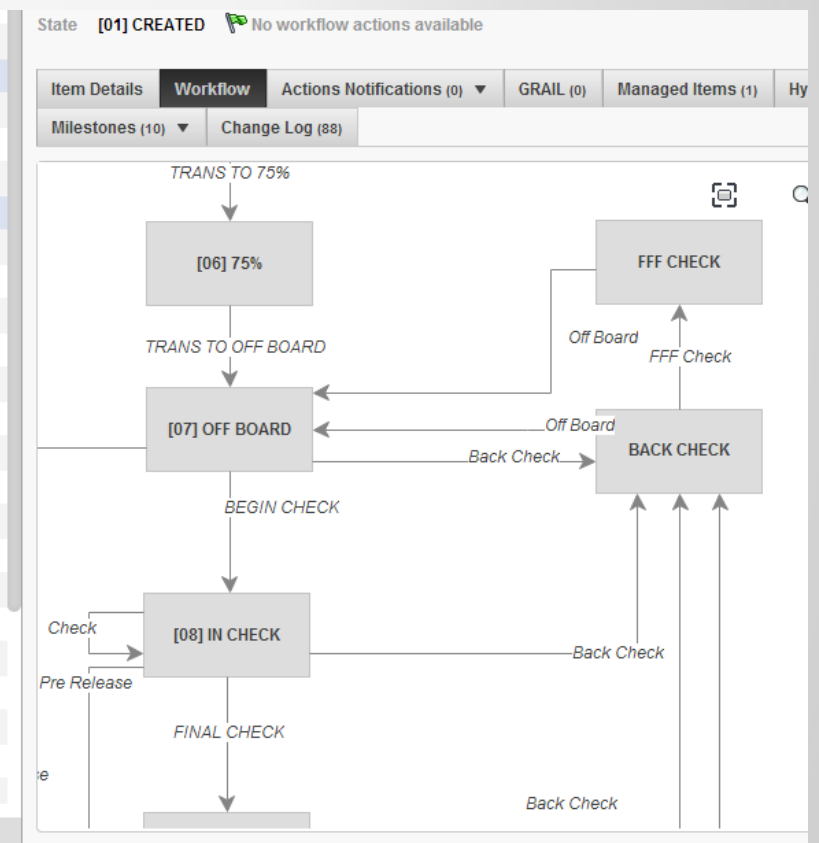
- Creating Your 30 day Trial Tenant
 - <http://www.autodeskplm360.com/discover/>
 - Need to use Autodesk ID (one trial tenant per ID)
- Learning How to Use PLM 360
 - <http://help.autodesk.com/view/PLM/ENU/>
- PLM 360 Support Forum
 - <http://forums.autodesk.com/t5/PLM-360-General/bd-p/705>

What We Discovered

- It is highly configurable = adaptable to changing needs
- Workspaces/Items are easy to create through the UI = easier implementation
- It's easy to model and modify business processes = collaboration & accurately capture our processes

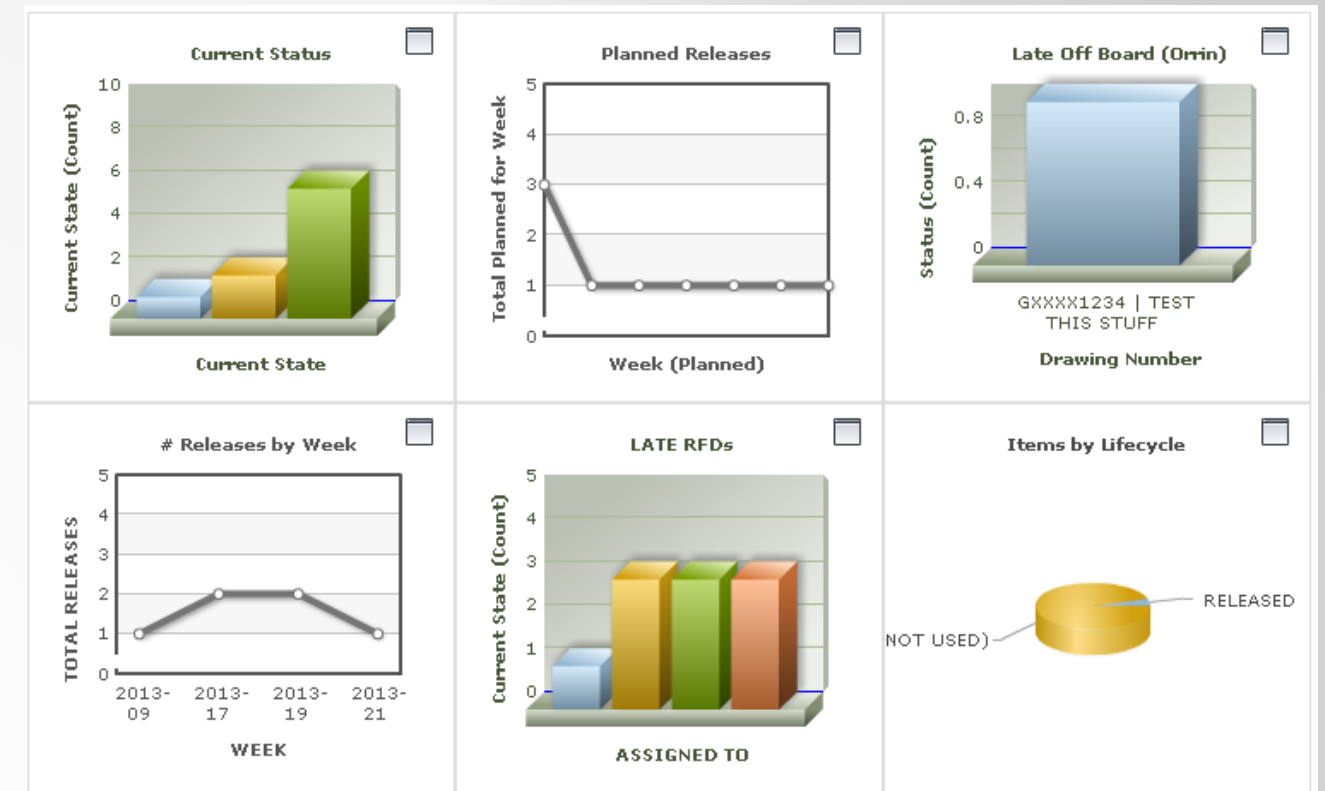
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IN STL - WATER...	Systems	> DUE IN 8+ DA ...	02/13/2014	[02] READY TO ...	02/13/2014
DETAILS/ASSY ...	Systems	> DUE IN 8+ DA ...	07/02/2014	[02] READY TO ...	07/02/2014
DETAILS/ASSY ...	Systems	> DUE IN 8+ DA ...	01/22/2014	[02] READY TO ...	01/22/2014
IN STL - WATER...	Systems	> DUE IN 8+ DA ...	06/02/2014	[02] READY TO ...	06/02/2014
IN STL - TOILET...	Systems	> DUE IN 8+ DA ...	01/16/2014	[02] READY TO ...	01/16/2014
IN STL - TOILET...	Systems	> DUE IN 8+ DA ...	04/15/2014	[02] READY TO ...	04/15/2014
DETAILS/ASSY ...	Systems	> DUE IN 8+ DA ...	04/21/2014	[02] READY TO ...	04/21/2014
IN STL - TOILET...	Systems	> DUE IN 8+ DA ...	06/26/2014	[02] READY TO ...	06/26/2014
IN STL - WATER...	Systems	> DUE IN 8+ DA ...	03/20/2014	[02] READY TO ...	03/20/2014
SCHEMATIC - ...	Systems	> DUE IN 8+ DA ...	07/15/2014	[02] READY TO ...	07/15/2014
REMOVALS - W...	Systems	> DUE IN 8+ DA ...	02/07/2014	[02] READY TO ...	02/07/2014
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IN STL - WATER...	Systems	> DUE IN 8+ DA ...	12/24/2013	[02] READY TO ...	12/24/2013
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IN STL - WATER...	Systems	> DUE IN 8+ DA ...	02/05/2014	[02] READY TO ...	02/05/2014
DETAIL/ASSY - ...	Systems	> DUE IN 8+ DA ...	12/30/2013	[02] READY TO ...	12/30/2013
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What We Discovered

- Personalized Data Mining = identify actionable information early
 - Project Management Tab
 - Personalized Reports and Dashboards
 - Configurable Views

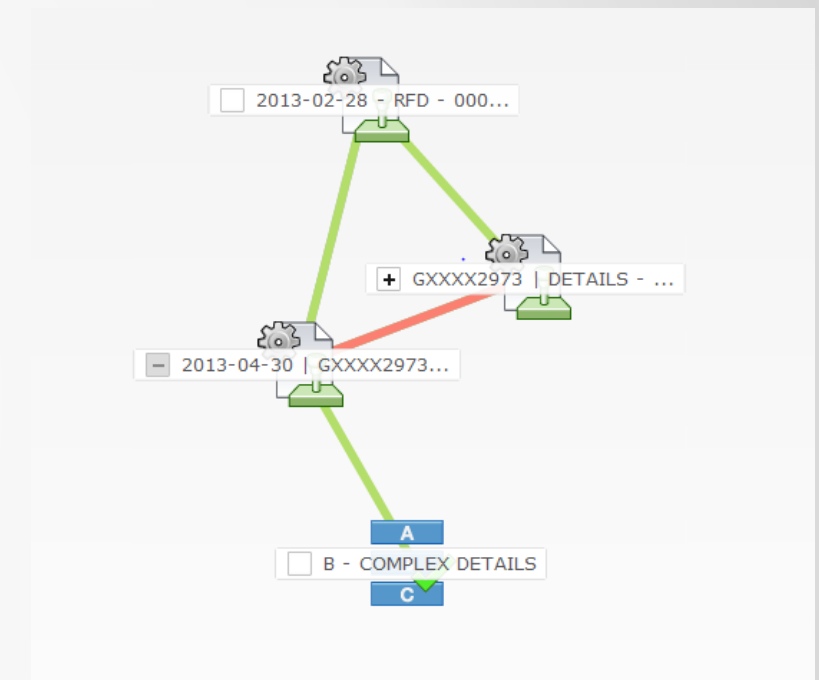
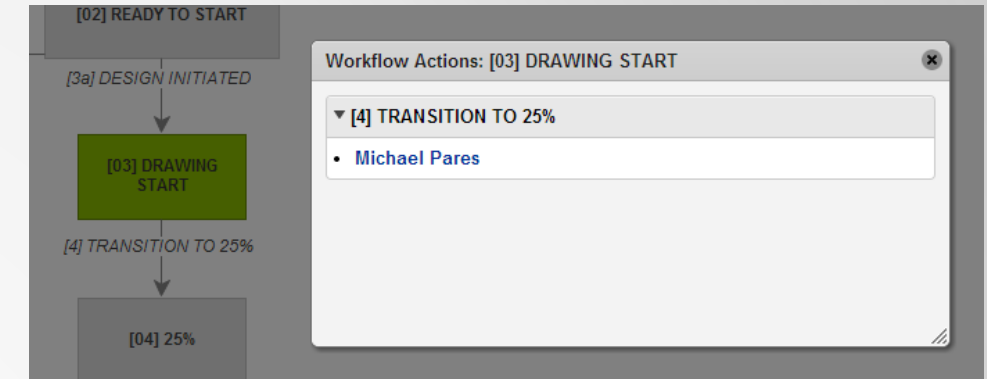


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Default 0 				
TASK NUMBER ▾	DRAWING NUMB...	DISCIPLINE	LEAD	RESPONSIB
DT - 0000117	GXXXX1234 TES...		Bourne, Orrin	Bourne, Orrin
DT - 0000116	GXXXX2971TEMP...	INTERIORS	Hadden, Ian	
DT - 0000115	GXXXX2970L LA...	INTERIORS	Bourne, Orrin	
DT - 0000096	GXXXX2974 WIR...		Keilholz, Mark	
DT - 0000095	GXXXX2973 DET...	INTERIORS	Keilholz, Mark	
DT - 0000094	GXXXX2972 PAN...	INTERIORS	Keilholz, Mark	
DT - 0000093	GXXXX2971 ASS...	INTERIORS	Keilholz, Mark	Bourne, Orrin
DT - 0000092	GXXXX2970L LA...	INTERIORS	Keilholz, Mark	
DT - 0000091	GXXXX2970 INS...	INTERIORS	Keilholz, Mark	Bourne, Orrin
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INTERIORS XXXX RHINO									
Item Details ▾ Project Management (8)									
Add Add Linked Items Edit Baseline ▾									
Project Items									
#	Title/Item	Start	End	Duration	Pre	Status	% Complete	Timeline	
								Apr	May Jun Jul
1	2013-04-30 GXXXX2973 DETAILS - DOOR 4 PANTRY	04/04/2013	05/08/2013	34d		[12] RELEASED	100%	100%	
2	2013-04-30 GXXXX2970L LAYOUT - DOOR 4 PANTRY	04/05/2013	04/29/2013	24d		[12] RELEASED	100%	100%	
3	2013-04-30 GXXXX2971 ASSY - DOOR 4 PANTRY	04/19/2013	04/29/2013	10d		[12] RELEASED	100%	100%	
4	2013-04-30 GXXXX2972 PANEL/ASSY - DOOR 4 PANTRY	05/20/2013	05/29/2013	9d		[12] RELEASED	100%	100%	
5	2013-06-27 GXXXX1234 TEST THIS STUFF	05/21/2013	05/21/2013	0d		[03] DRAWING START	100%	100%	
6	2013-06-27 GXXXX1234 TEST THIS STUFF	05/21/2013	05/21/2013	0d		[03] DRAWING START	100%	100%	
7	2013-07-26 GXXXX2971TEMP ASSY - DOOR 4 PANTRY	06/15/2013	06/15/2013	0d		[03] DRAWING START	0%	0%	
8	2013-04-30 GXXXX2970 INSTL - DOOR 4 PANTRY	06/17/2013	07/30/2013	43d		[12] RELEASED	0%	0%	
Project Summary		04/04/2013	07/30/2013	117d			64%		

What We Discovered

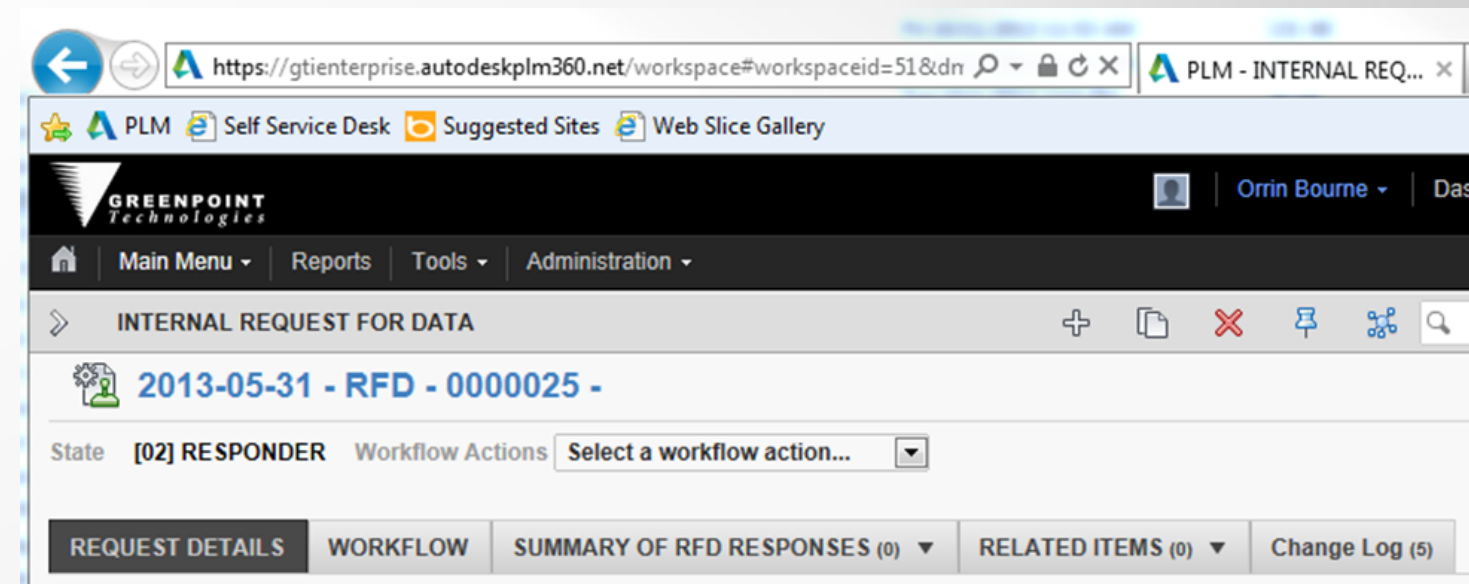
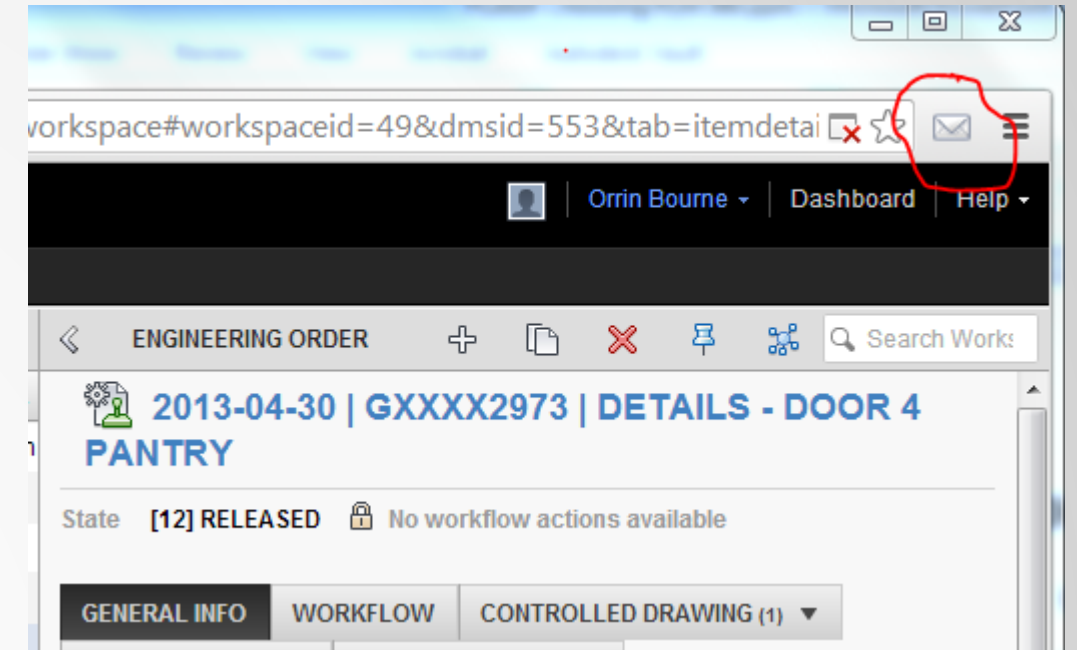
- Have the Ability to Understand Our Data (Who, What, Why)
 - Know who is responsible for a task at any given time.
 - Investigate data relationships and dependencies.
 - Understand the history of revisions and why they occurred.
 - Can use historical data for performance analysis.
 - Many more ways.....



DRAWING TREES	
GXXXX2970L LAYOUT - DOOR 4 PANTRY [REV:A1]	
Lifecycle	RELEASED Revision RELEASED A1 Effective 05/24/2013
DETAILS	LOWER LEVEL DRAWINGS (0) NHA (0) DESIGN TASKS & PUs (1) Change Log (1)
Workflow	Current State
PU - 000012 - G12652970L - LAYOUT - DOOR 4 PANTRY REV:IR	RELEASED

What We Discovered

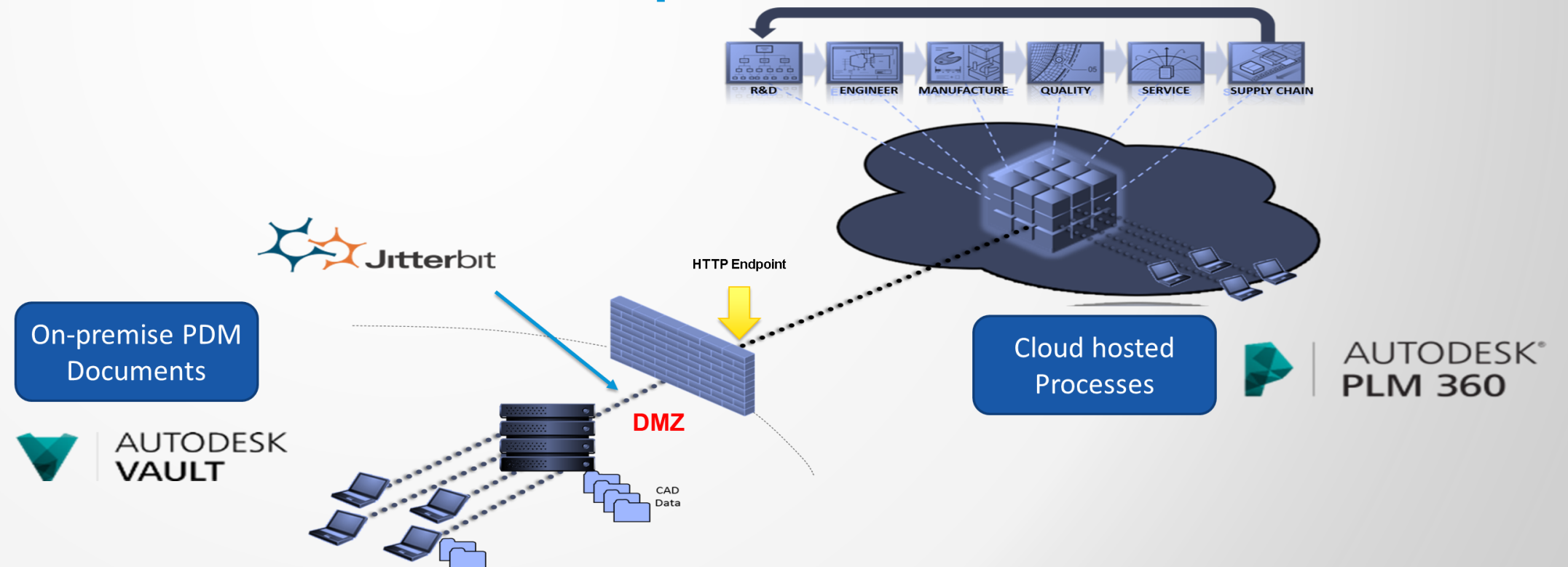
- Cloud Based System is Advantageous
 - Very nimble navigation of tenant = drive user adoption
 - Easy to share data = reduce data duplication
 - Can create a mash-up with other web based systems i.e. Vault web client, SharePoint and PLM 360 = new paradigm in PLM?
 - No need for IT infrastructure or maintenance = reduced costs
 - Instant mobile access



What We Discovered

- Server side automation using JavaScript
- Complex automation and integration using RESTful API
- PLM 360 Connect (aka Jitterbit) can be used to simplify the process of automating and integrating PLM 360 with external systems.

PLM and PDM Landscape



What We Discovered

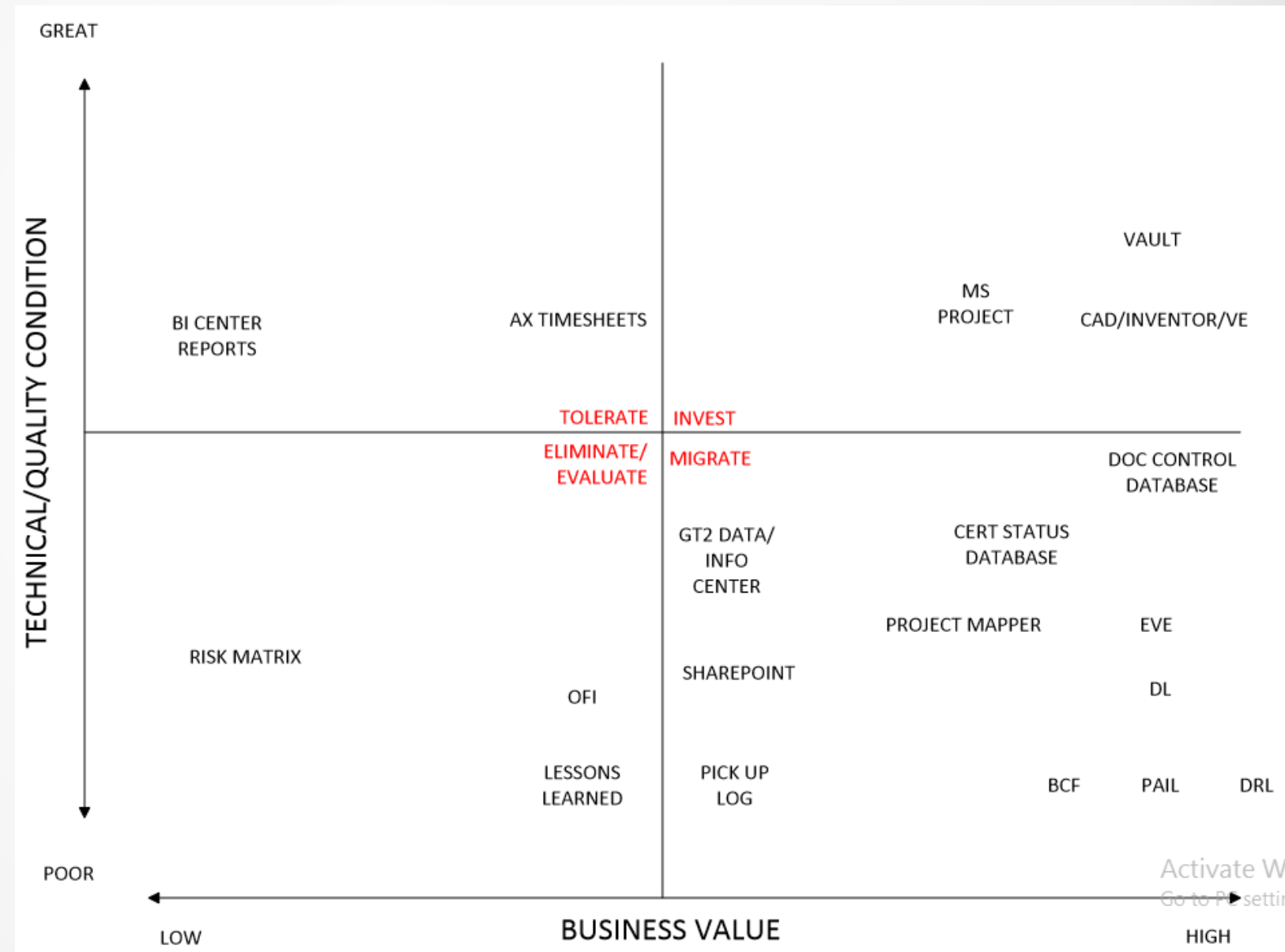
- We didn't want to build another silo
- We looked for opportunities for integration
 - SharePoint
 - ERP
 - ADFS – Single Sign On
- Ways to optimize our investments
 - Align to strategy
 - Recognize and leverage benefits of specific tools
- Primary objectives
 - Inventor/Vault and DL
 - Multiple task lists

- Stakeholders took inventory of our existing tools
- A few quick discussions identified critical relationships and overlap



What We Discovered

- Stakeholders classified the state of our existing tools
- Identified which solutions need investment most



What we discovered

PLM 360 Wins in 6 of 8 Categories

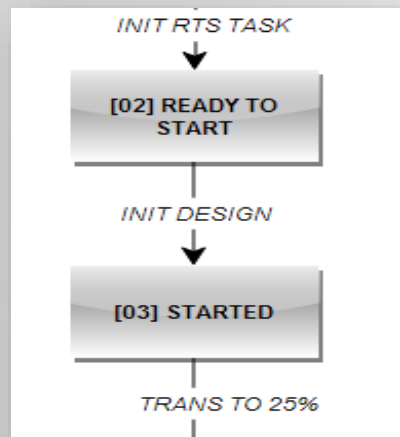
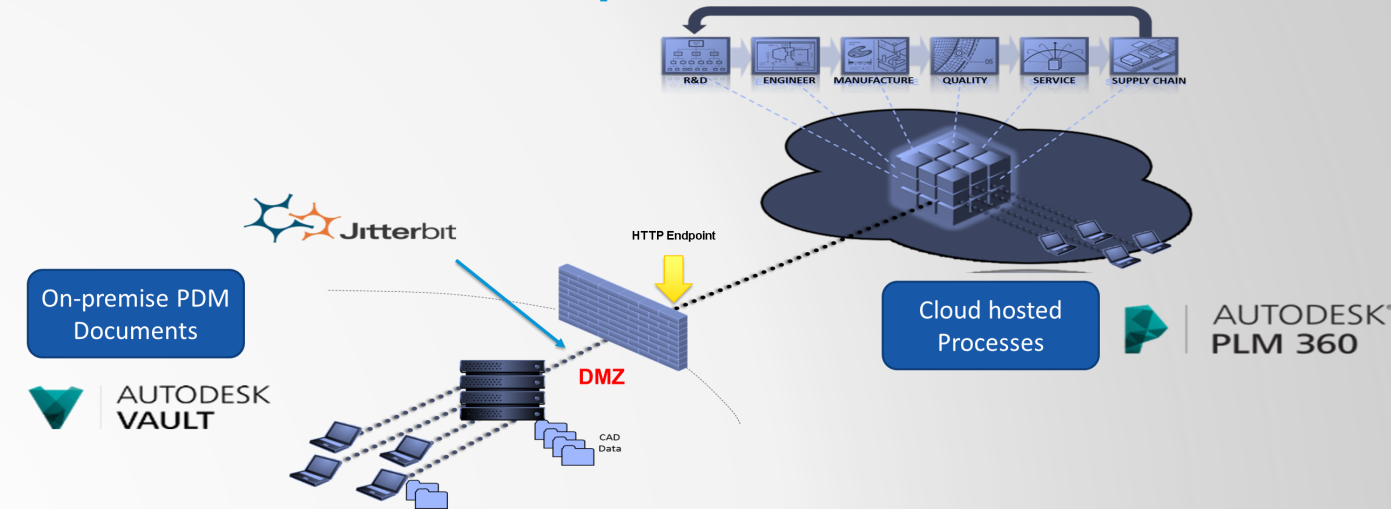
- Measured PLM Options and our existing tools
- Scored based on how well it satisfied each requirement
- 180 Requirements grouped into 8 themes
- Detailed comparison

Row Labels	Sum of PLM 360	Sum of CERT STATUS DB	Sum of PICKUP LOG	Sum of RFD	Sum of VAULT	Sum of DL	Sum of DRL	Sum of DOC CONT	Sum of PAIL	Sum of EVE	Sum of GT2	Sum of
⊕ Budget Management	35	3	6	3	3	55	3		6	37		
⊕ Communication Management	73	31	34	45	24	16	54	43	31	6	10	
⊕ Data Management	106	75	49	70	99	39	30	73	35	19	63	
⊕ Drawing Management	141	102	74	47	149	67	22	88	6	17	10	
⊕ Schedule Management	38	12	21	14	3	29	17		14	15		
⊕ Self Service	128	101	109	100	62	90	82	72	86	73	28	
⊕ Task Management	167	110	125	134	39	82	98	6	85	65		
⊕ Workflow Automation	44	37	30	29	28	12	17	26	20	9		
Grand Total	✓ 732	⚠ 471	⚠ 448	⚠ 442	⚠ 407	⚠ 390	⚠ 323	⚠ 308	✗ 283	✗ 241	✗ 111	✗

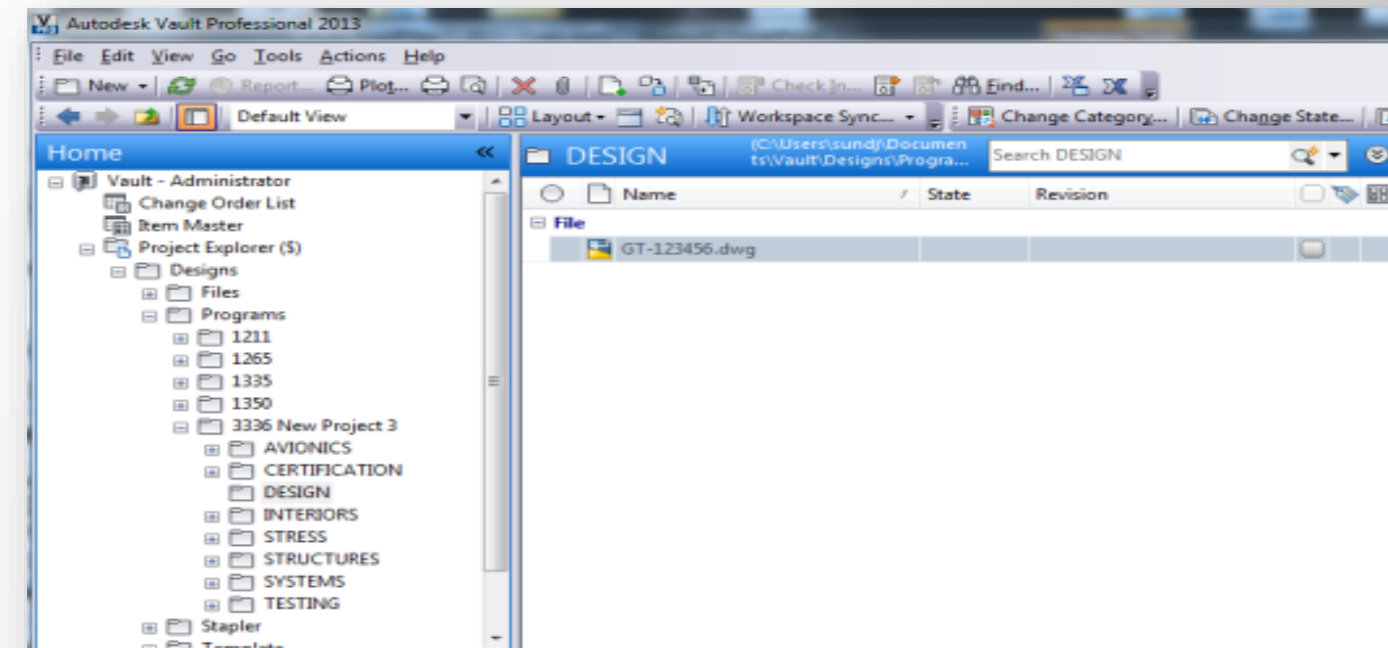
A Complete Solution Emerges

- Use PLM 360 for daily activities
 - PLM 360 NPI capabilities will match our processes
 - Capable of being the single source of project related information
- PLM 360 will integrate with Vault
 - Eliminates dual systems
 - Leverages existing investment in PDM

PLM and PDM Landscape

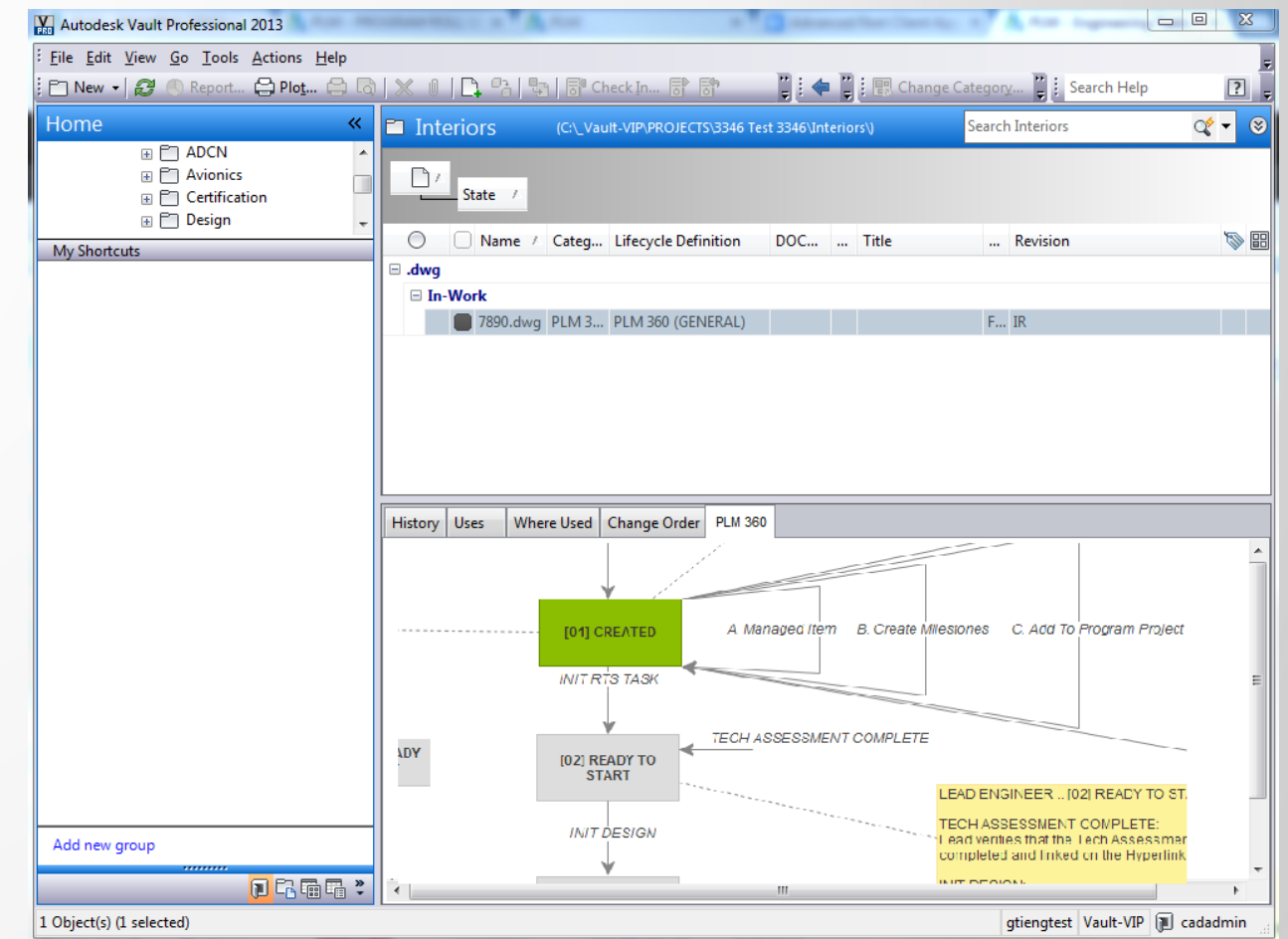


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Project Summary		04/04/2013	07/30/2013	117d			64%	



Post Implementation (The Future Looks Bright!)

- It WORKS!
- Developing a change order process
- Integration with ERP
- EBOM, Cert Status Db, Doc Control
- Want more direct integration with Vault Web-client and Vault Explorer



Key Success Factors

- Executive Sponsorship & Organization Commitment
- Well mapped business processes
- Clear definition of issues
- Clear definition of what “Success” looked like
- In-house expertise – Software Development and CAD Administration
- Easy to get started with PLM 360

