

PL11390 - Integration Options for Vault



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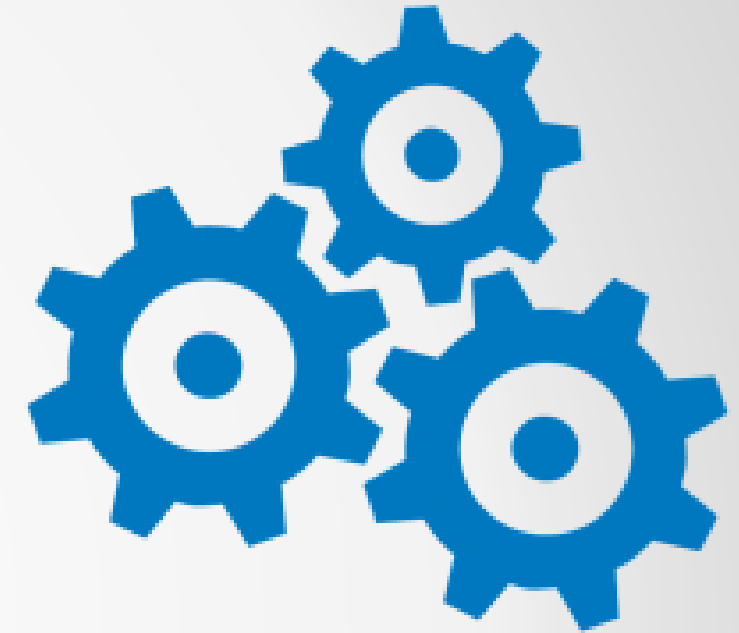
Sr. PLM Consultant - Razorleaf

Agenda

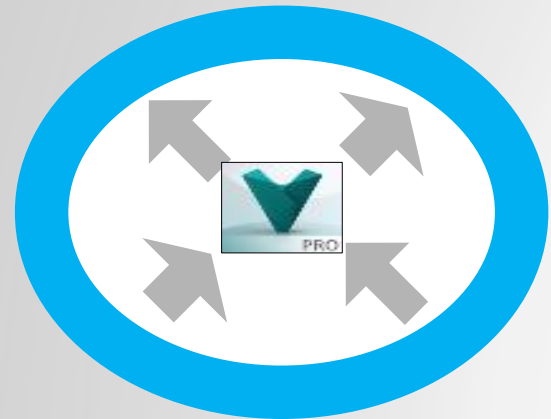
- Why Integrate?
- Integration landscape
- Powerful third party options
 - powerGate - Marco
 - Jitterbit – Rodney
- Open Q & A

Why Integrate?

- Reduce manual entry
- Reduce duplicate data
- Reduce errors
- Leverage best tool for the job



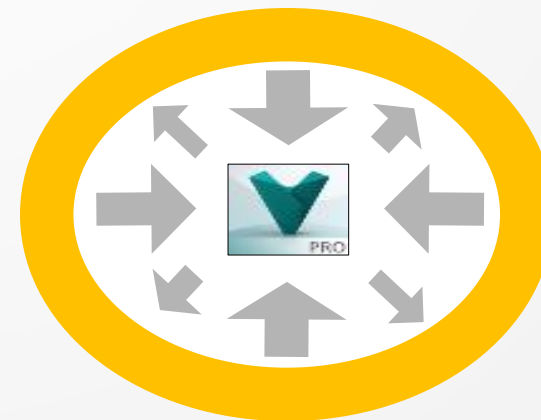
Vault Enterprise Integration Landscape



Import and Export



Application Programming Interface (API)



Third Party Solutions

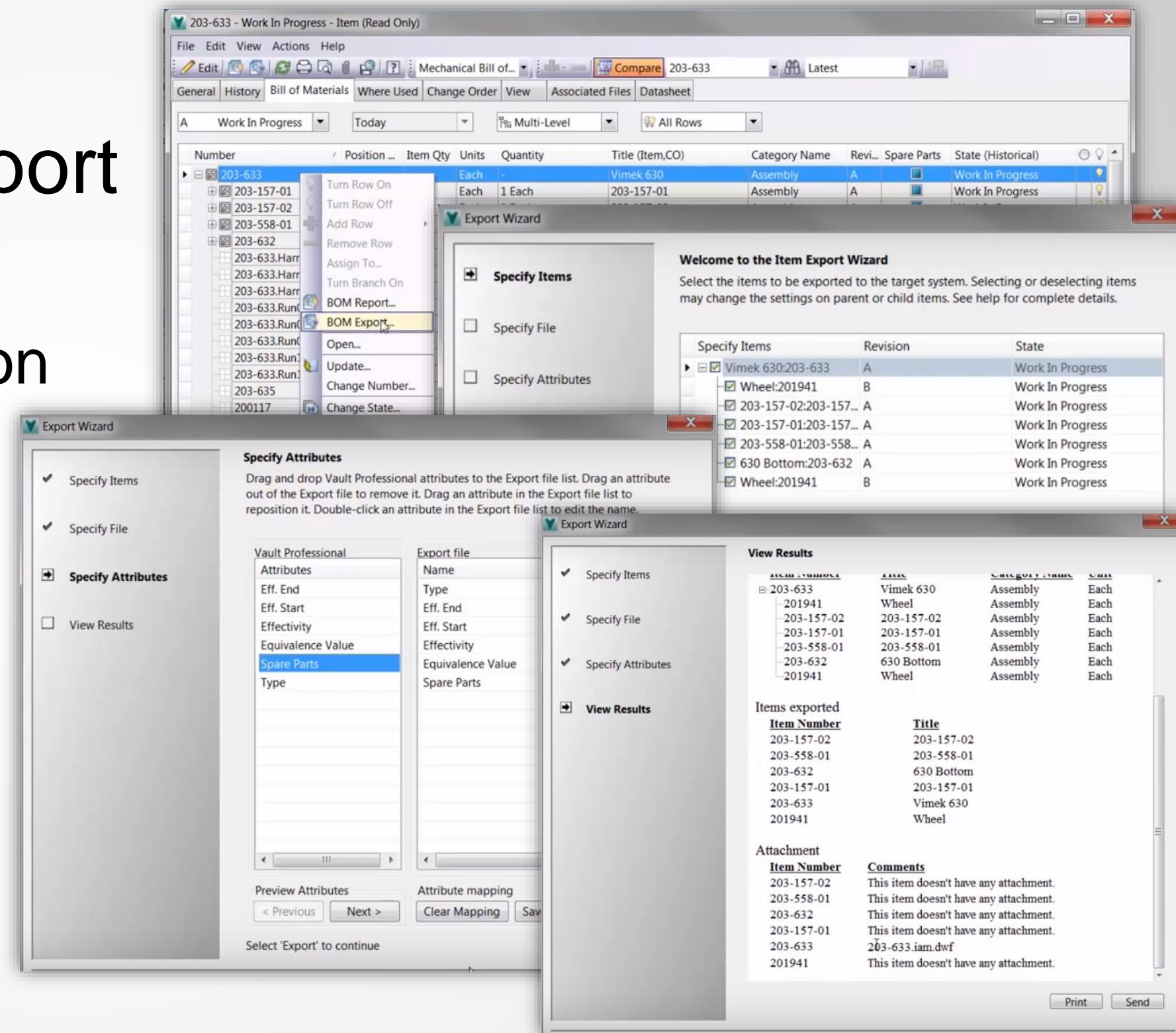
Autodesk Vault Integration Basics

Vault Item Master reminder

- Powerful eBOM built into Vault Professional
- Easy to use tools without leaving Vault
- Significant Enhancements in last three releases
- Vault Office / Webclient can be leveraged by others with BOM needs

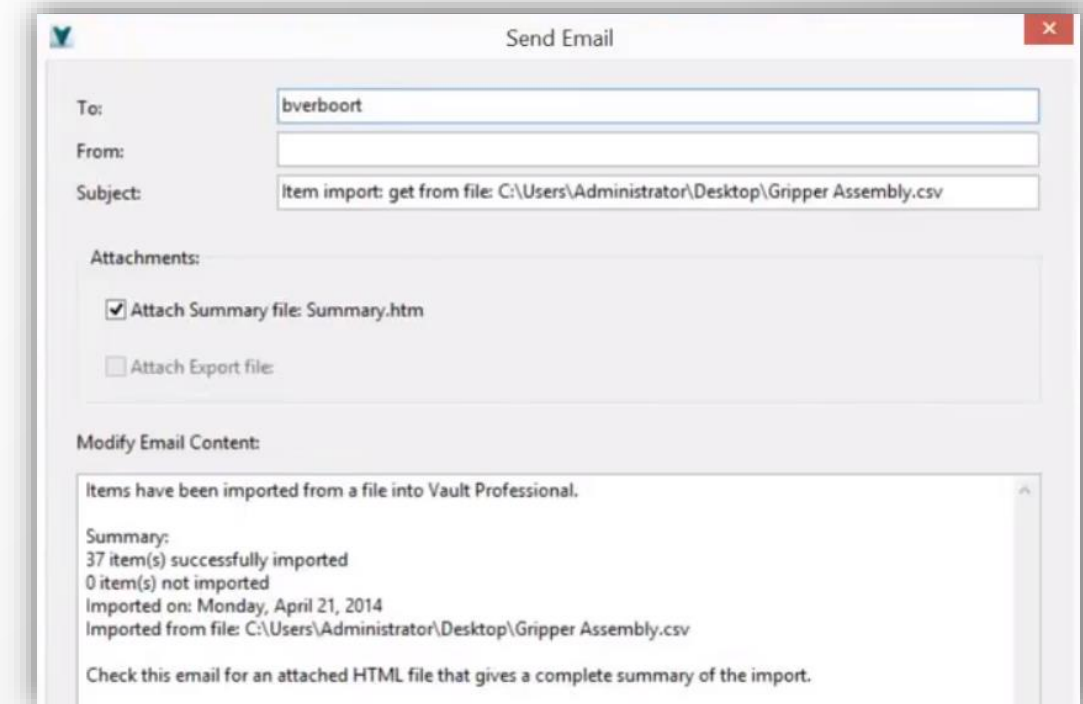
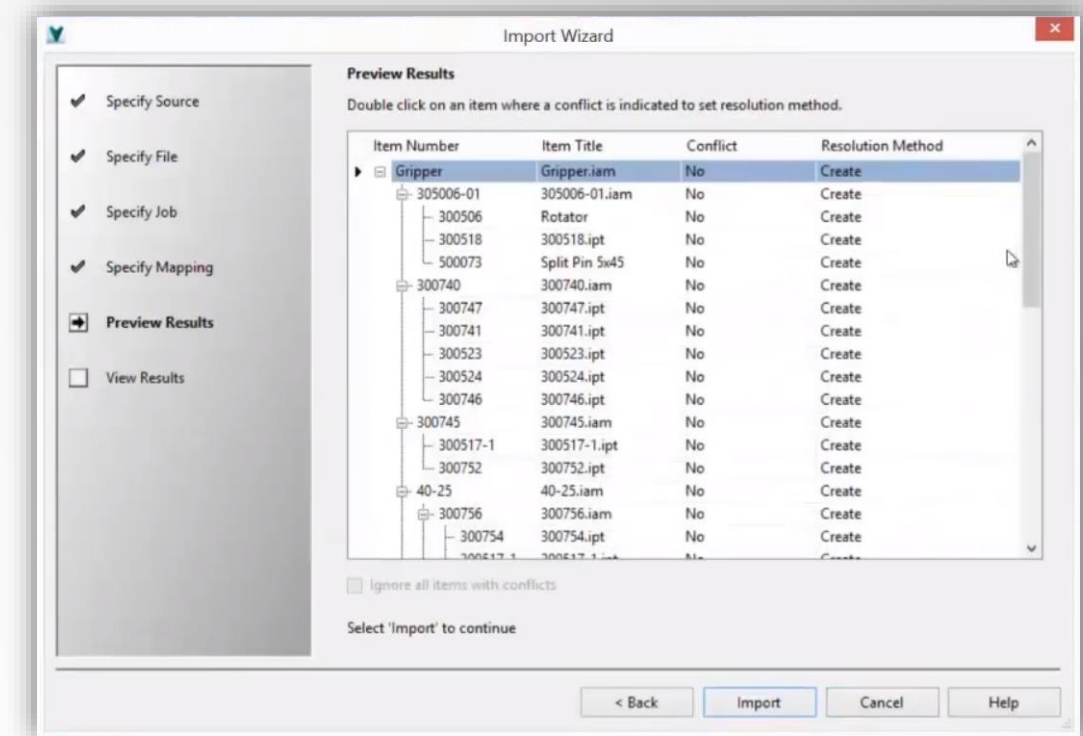
Autodesk Vault Integration Basics

- Manual Item Import / Export
- Export
 - Attribute Mapping / Selection
 - Various File Options
 - CSV, TDL, XML, DWF
 - Supports Attachments
 - Capture Export Record



Autodesk Vault Integration Basics

- Import Items
 - Create BOM Structure
 - Leverage existing data from ERP
 - Capture record

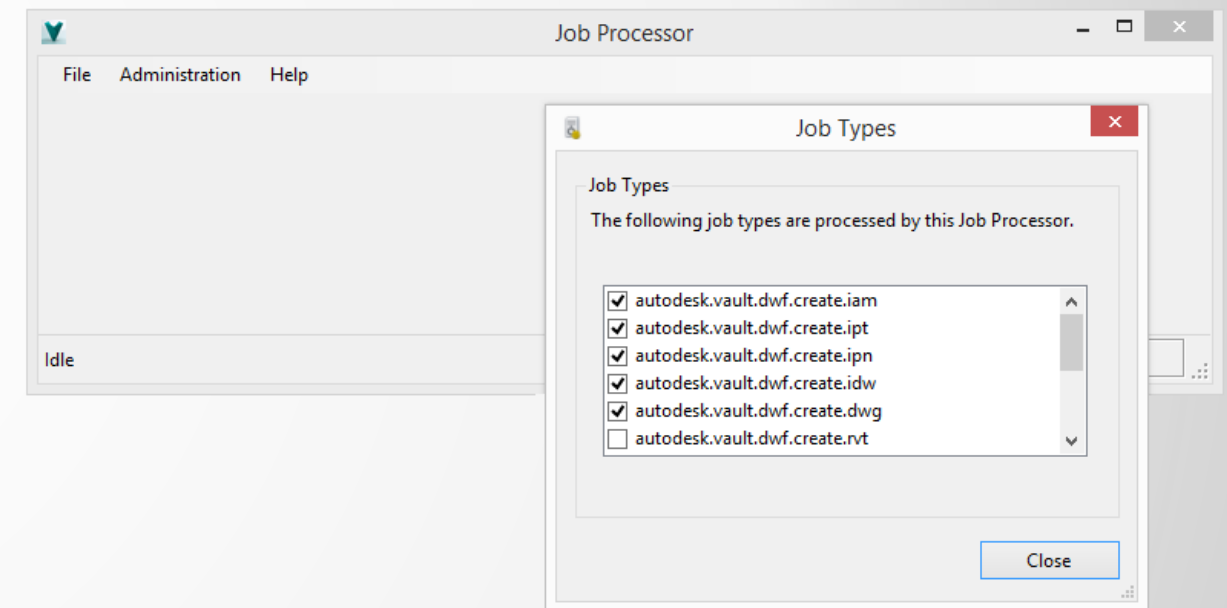


Roles and Permissions note

- Administrator
- ERP Manager
 - Import ERP: Import an item from an ERP system into Professional
 - Export ERP: Export items for use with an ERP system.

Autodesk Vault Integration Basics

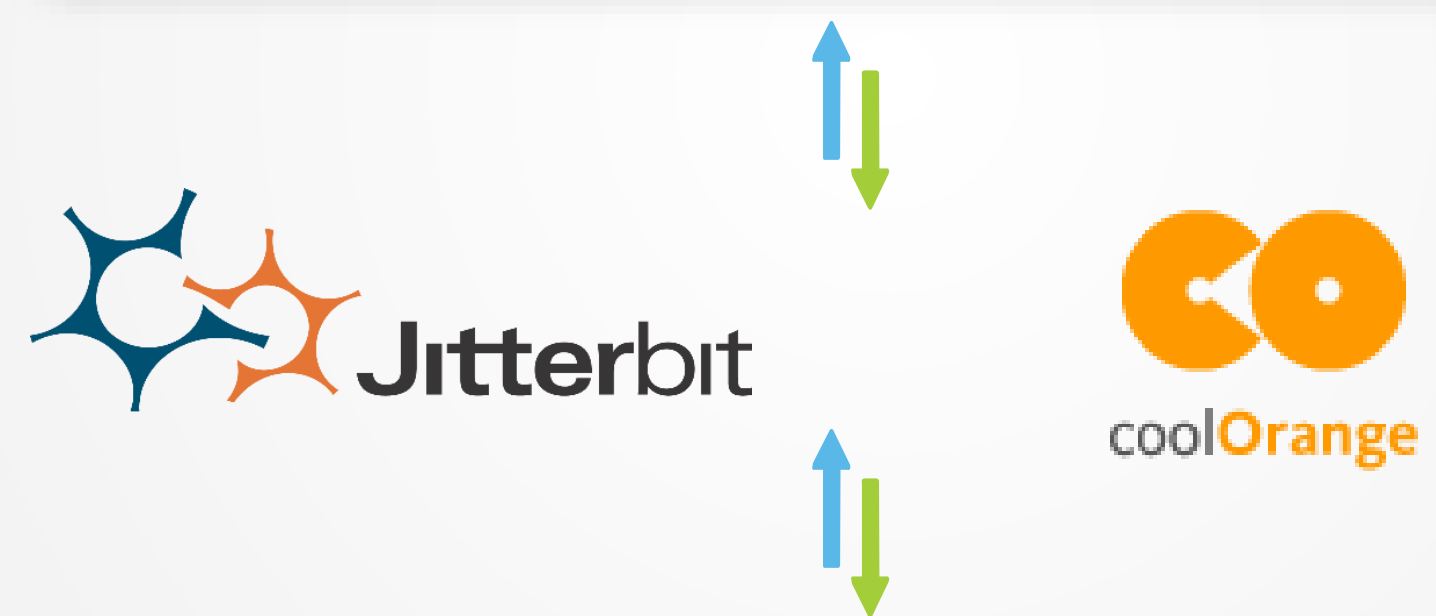
- Autodesk Vault Professional
 - API Access
- Job Processor + API
 - Custom Job Types
 - Allows the Job Queue to act on Event Triggers in vault
 - Revisioning (Doc-Centric, Items)
 - Creation, Edit, On-Demand



Autodesk Vault Integration Additional Options



Job Server Queue				
Close Queued After: [dropdown] [refresh] [Re-Submit] [Remove] [Reset to Queue] [Print] [Take Site Ownership] [?]				
ID	Priority	Status	Description	Submitted Date
▶ 468	100	Pending	Razorleaf.Vault.ItemsBOMs: P3000.ipt	11/17/2015 6:54:14 PM
469	100	Pending	Razorleaf.Vault.ItemsBOMs: P3000.ipt	11/17/2015 7:06:23 PM

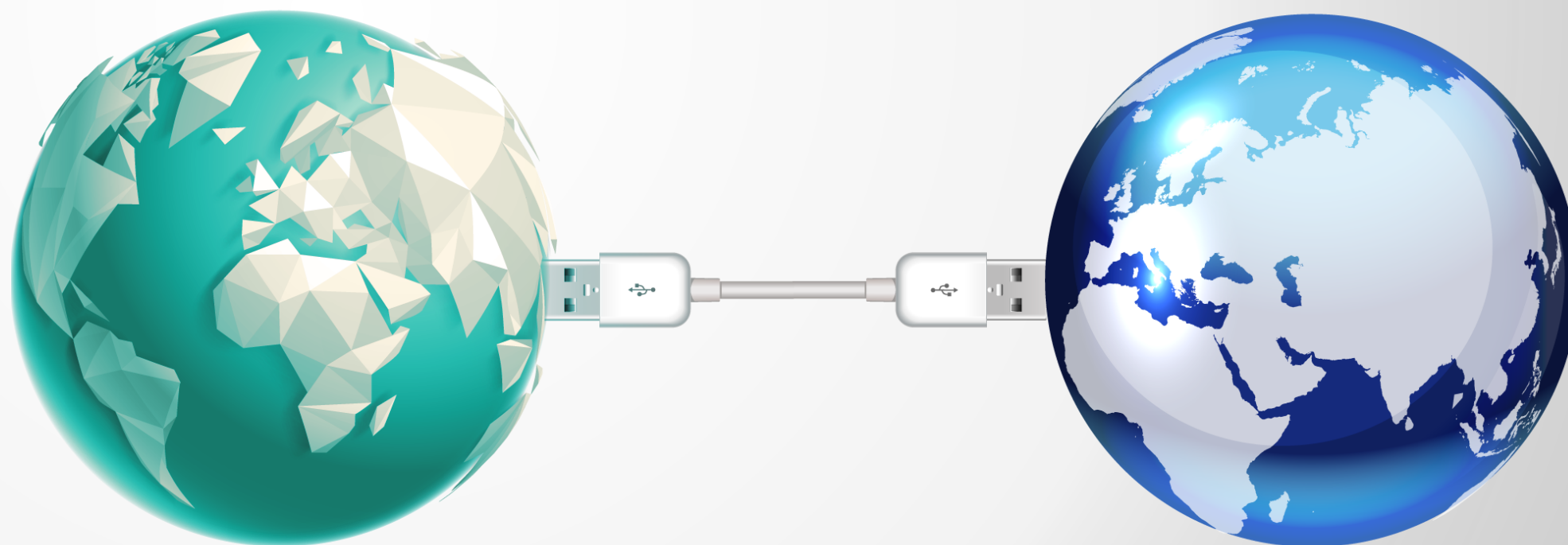


ERP CRM PLM **SAP** + **Other ERP**



coolOrange

powerGate



What is powerGate

powerGate is a standard yet flexible solution for connecting Vault with ERP systems

Deep integration in Vault and CAD client

Online direct access to ERP data (no redundancies/delays)



2 things I've learned

Customers have all
the same needs

Items/Material

BOM

Files (PDF, etc.)

Projects

Customer's needs
are all different

Different properties

Different work-flows

Sample 1 – Item + BOM Integration with Navision

Autodesk Vault Professional 2016

Fichier Edition Affichage Aller à Outils Actions Aide

Rapport... Tracer... Rechercher...

Partager dans Buzzsaw Mettre à jour à partir de Buzzsaw Ajouter à partir de Buzzsaw Synchroniser maintenant Vue par défaut Présentation

Recherche dans l'aide ?

Changer de révision...

Accueil

Projet - 39.000

Explorateur de projets (S)

Content Center Files

Designs

Bibliothèque

Cages Insegl

10000

11000

12000

13000

14000

15000

16000

17000

18000

19000

20000

21000

22000

23000

24000

25000

26000

27000

28000

29000

30000

Mes raccourcis

84-05-0-142.apt

Test 146

447.apt

10.000.207.apt

10.000.202.146.iam

10.000.202.146.iam

Ajouter un groupe

Accueil

Explorateur de projets

BOM Window

BOM Items

The BOM for the selected entity:

Number	Position	Quantity	Name	Status
✓	..		Suspension.iam	✗
✓	Shock Absorber Fr	20	Shock Absorber Front.iam	✓
✓	Shock Strut	11	Shock Strut.iam	✓
	Spring Cup	8	Spring Cup.ipt	
✓	Ball End	7	Ball End.iam	⚠
	0.25 Ball	2	0.25 Ball.ipt	
	Ball End	1	Ball End.ipt	
	Piston	6	Piston.ipt	
	E-Clip	5	E-Clip.ipt	
	Shock Shaft	4	Shock Shaft.ipt	
✓	Shock Body	10	Shock Body.iam	✓
✓	Shock Cartric	2	Shock Cartridge.iam	⚠

4 / 14

Check Process

BOM Items: 71 Items: 55 Status: Checking BOMs

Transfer BOM

0A

rin + levier

Description

à tête cylindrique

port du vérin

longe

ot

que

Goupille cylindrique

Vis

Racleur

Douille

Sample 2 – Item + BOM Integration with SAP

Autodesk Vault Professional 2016

File Edit View Go Tools Actions Help

powerJobs Report... Plot... Find... Search Help

Default View Layout Workspace Sync... Change Category... Change State... Change Revision...

Home

for coolorange

Search for coolorange

Name	Part Nu...	State	Revision
TempGuard.ipt	2112945	Work in Progress	-
2113539.idw	2113539	Released	-
2113539.iam	2113539	Released	-
2113301.ipt	2113301	Work in Progress	A
2113301.idw	2113301	Work in Progress	A
2113300.ipt	2113300	Released	-
2113300.idw	2113300	Released	-
2112946.iam	2112946	Released	-
2112945.ipt	2112945	Released	-
2112945.idw	2112945	Released	-

History Uses Where Used Change Order Preview CAD BOM Datasheet DIR Material

Transfer BOM

Properties

Material: 2112946

Plant:

ValuationArea:

ValuationType:

Industry Sector: M

Material Type: PART

Material Group: 153700000

Unit Of Measure: ST

Descriptions

Language	Description
ZH	阀盖组件 148CHTO
CS	SESTAVA NÁRAZNÍKU 148CHTO
DE	FAENGEREINHEIT 148CHTO
EN	GUARD ASSY 148CHTO
FR	ENSEMBLE DE BUTOIR 148CHTO
NL	AANSLAGEENHEID 148CHTO
ES	CONJUNTO DE TAPA 148CHTO

Bill Of Material

Status: 01

BOMText:

Plant:

ItemNo	ItemCat	Component	ComponentQty	ComponentUnit	ItemID	Plant
0010	E	2112945	1	PC	00000001	1
0010	L	2112945	0,020	PC	00000003	1
0020	E	23019	2	PC	00000002	1
0021	E	2112945	1	PC	00000005	1
0022	E	23019	2	PC	00000004	1

Sample 3 – Document Info Record with SAP

Autodesk Vault Professional 2016

File Edit View Go Tools Actions Help

powerJobs Report... Plot... Find... Search Help

Default View Layout Workspace Sync... Change Category... Change State... Change Revision...

Home

Designs (Search Results) 1106605

Name	Part Nu...	State	Revision
1106605.ipt	1106605	Released	B
1106605.idw	1106605	Released	B

History Uses Where Used Change Order Preview CAD BOM Datasheet DIR Material

Create/Update DIR DIR is not work in progress

Properties

DIR Number: 1106605

Version: B

Status: FR

Description: Guide Ring

User:

Document type: IDW

Change number: 000000020000

Charateristics

DIR Version	Type	Name	Charateristic	Value
-	017	AUTH_DMS	DEPARTMENT	002
-	017	AUTH_DMS	RESTRICTION_TYPE	2
A	017	AUTH_DMS	DEPARTMENT	002
A	017	AUTH_DMS	RESTRICTION_TYPE	2
B	017	AUTH_DMS	DEPARTMENT	002

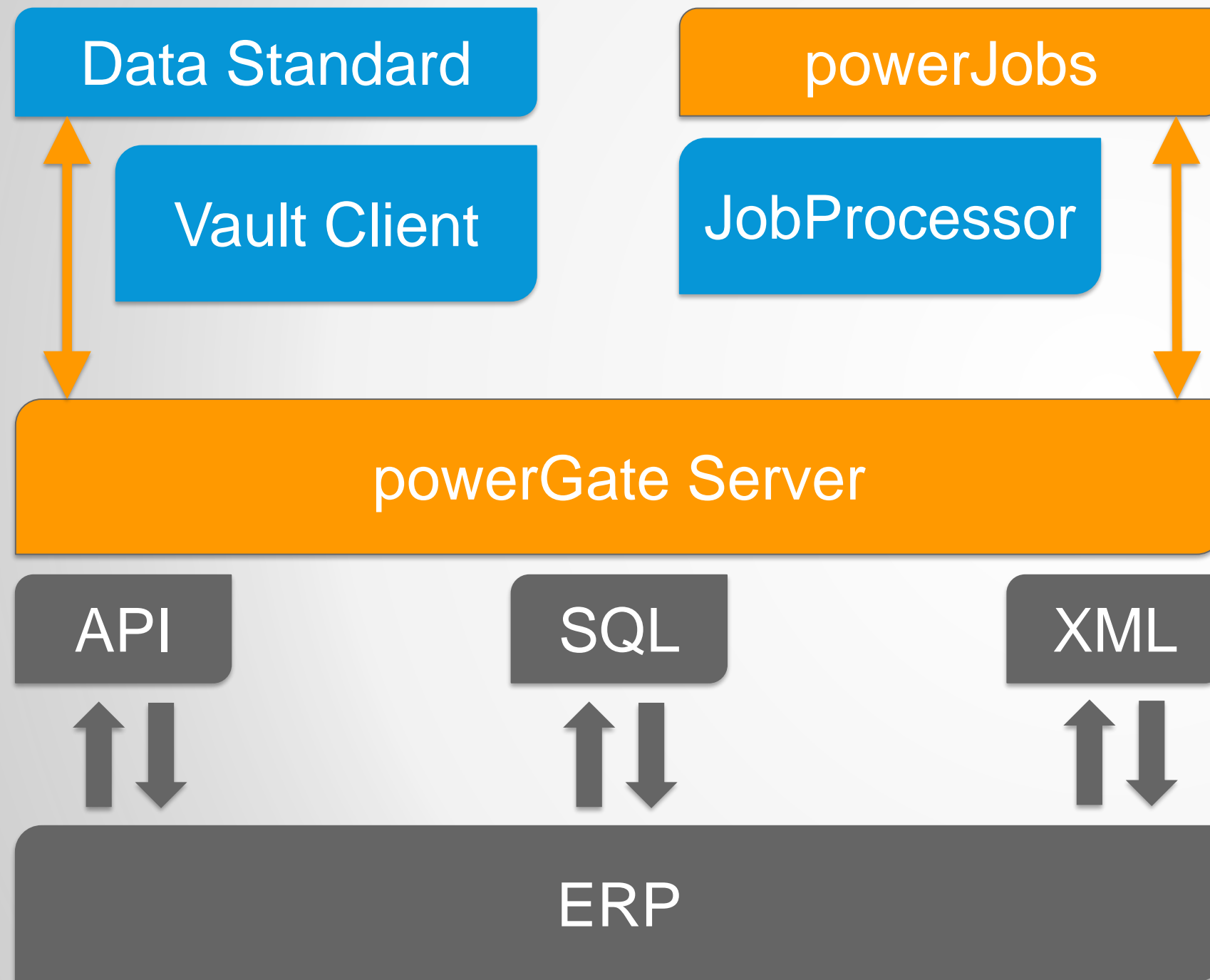
Files

Format	DIR Version	File name	Storage category
Open PDF	-	1106605.pdf	Z_HEQ_1010
Open PDF	A	1106605.pdf	Z_HEQ_1010
Open PDF	B	1106605.pdf	Z_HEQ_1010
Open	C	CAD_Upload.	Z_HEP_1010

Materials

Type	DIR Version	Number
MARA	-	0000000000001106605
MARA	A	0000000000001106605
MARA	B	0000000000001106605

Architecture



Direct user feedback

Accurate data

Fast implementation

Configurable

Customizable

Update secure

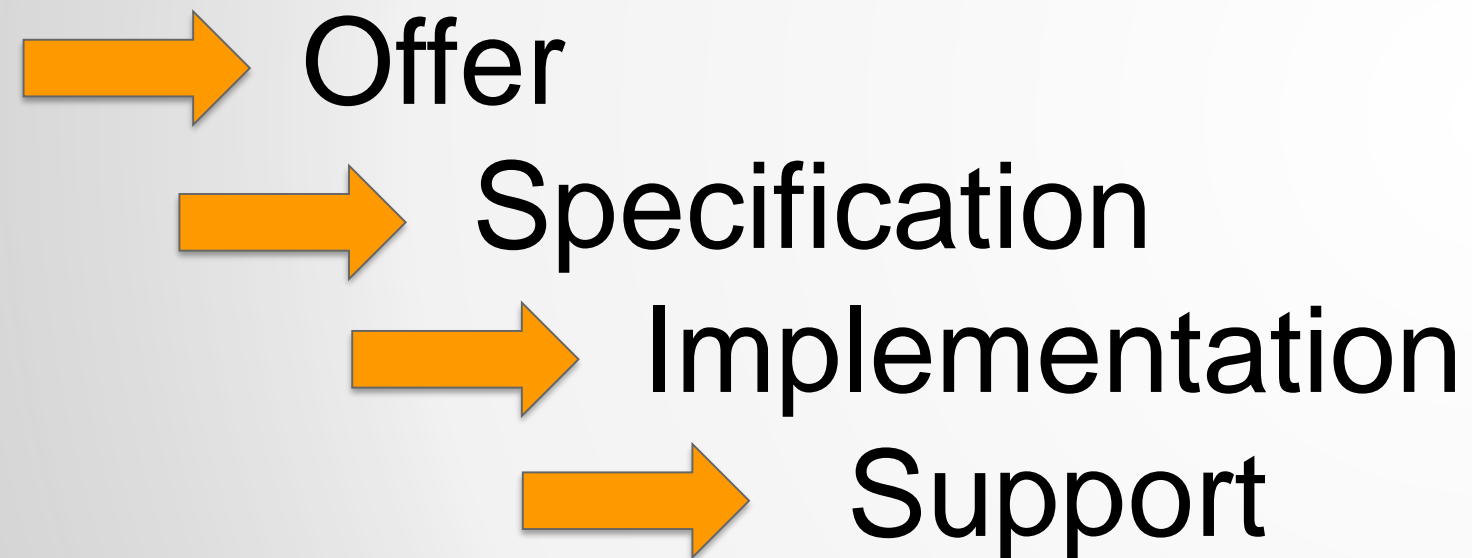
Where we do business



How to engage

info@coolorange.com, Autodesk or your trusted reseller

Webcast



Autodesk Vault Integration with Jitterbit

Jitterbit Introduction

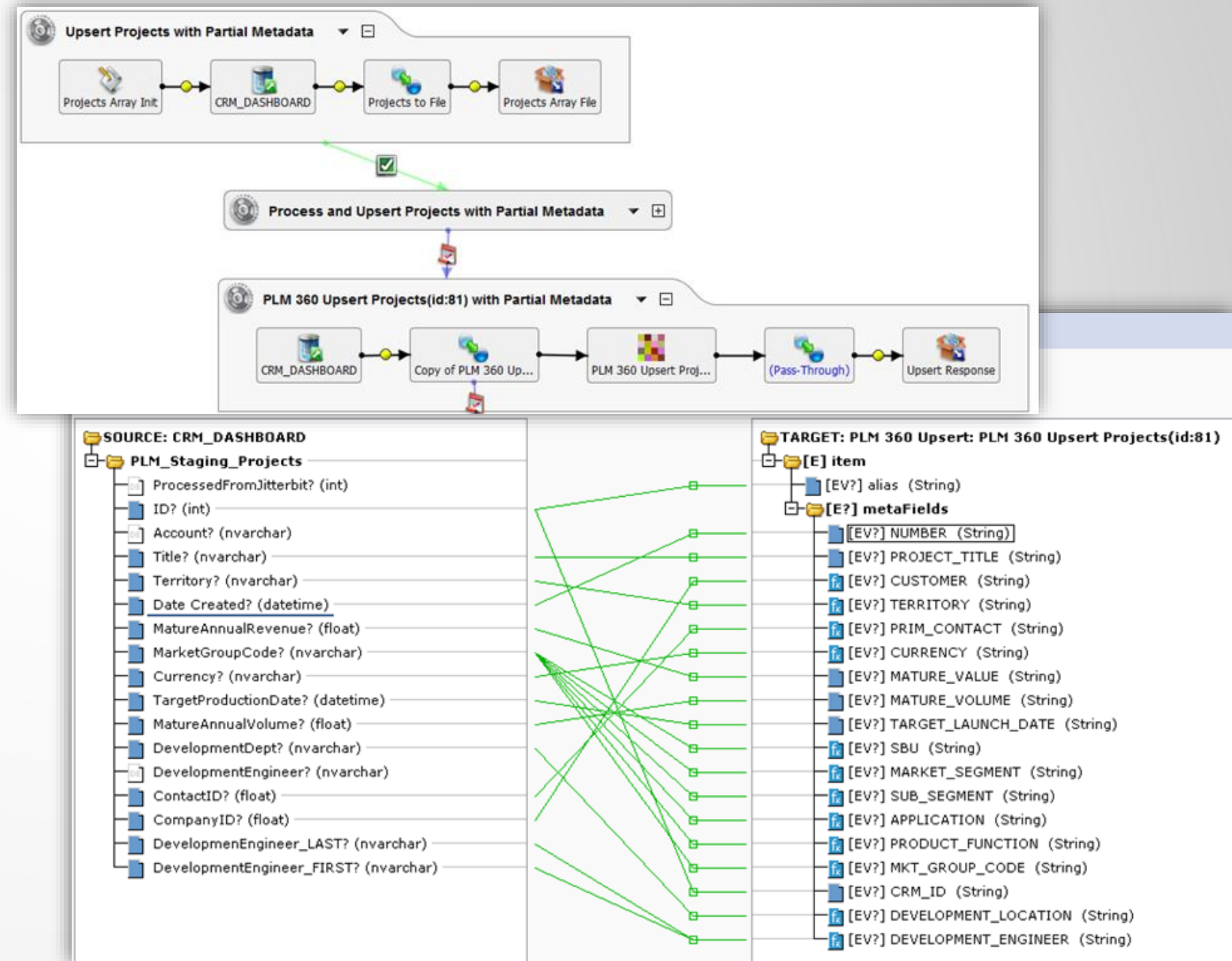


- Middleware that integrates data endpoints
- Wizard-Based; “No-Coding” approach
- Cloud or On-Premise solutions
- Client Designer

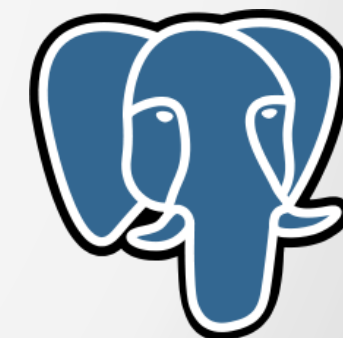
Jitterbit Introduction



- Moving Data with Ease
 - Operations
 - Transformations
 - Scripts
 - Connectors
 - JDBC / ODBC



Jitterbit Endpoints



Vault Integration Use Cases

- PLM

- Project Management
- Change Management

- CRM

- Customers
- Contacts
- Vendors

- ERP

- Items & BOMs
- Suppliers

- Other

- Visualization File Transfer
- Migration
- Data Warehousing
- Reporting

PLM Integration Use Cases for Vault: Project Management



Projects

AU-2015-1 - Autodesk, Inc.

Item Details

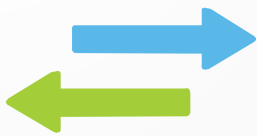
Grid (0)

Change Log (1)

Edit

▼ Details (1 of 1)

Number	AU-2015-1
Lead	Coffey, Rodney
Customer	Autodesk, Inc.



Designs

ACS

Arbor Press

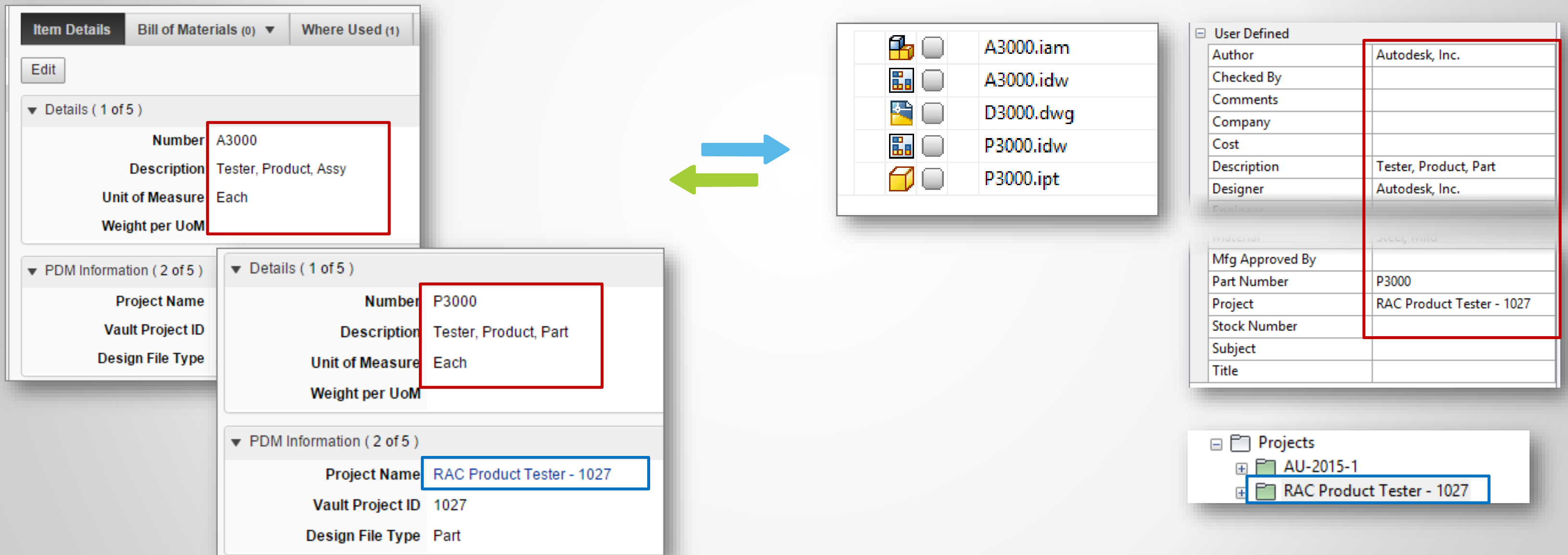
Cable and Harness

Projects

AU-2015-1

User Defined	
Project Customer	Autodesk, Inc
Project Lead	Coffey, Rodney
Project Number	AU-2015-1
Project Status	Active

PLM (ERP) Integration Use Cases For Vault: I&B File Creation



PLM Integration Use Cases for Vault: Change Management



Workflow diagram showing the change management process: CREATE → Submit → OPEN → Submit → WORK → Submit → REVIEW → Approve → APPROVED. Additional paths include Withdraw from OPEN to CREATE, and Fast Track Approval from WORK to APPROVED. Submit and Force Approval also leads from WORK to APPROVED.

General Records Comments Files Routing Status

Change Order Number: ECO-000015 State: Approved

Change Order Title: Changed part height per customer request

Detailed Description: Part height was reduced 0.25 in to meet new customer requirements

Due Date: 11/17/2015 Submitted by: Administrator Date Submitted: 11/17/2015 5:38:05 PM

Properties:

Name	Value
CO Change Reason Code	Customer Complaint
CO Type	Engineering
PLM CO Number	CO000008
PLM CO Status	CCB Review (Type II)
Priority	2-Medium

CO000008 - Changed part height per customer request - 2 - Medium

State CCB Review (Type I) No workflow actions available

Workflow Actions Change Log (5)

Item Details Affected Items (0) Change Tasks (0) Impacted Products (0) Attachments (0)

Edit

▼ Change Header (1 of 5)

Number	CO000008
Title	Changed part height per customer request
Type	1 - Engineering
Priority	2 - Medium

▼ Vault Information (2 of 5)

Vault CO Number	ECO-000015
Vault CO Status	Approved
Vault Date Submitted	11/17/2015
Vault Submitted By	Administrator

▼ Change Details (3 of 5)

Description of Change	Part height was reduced 0.25 in to meet new customer requirements
Change Reason Code	Customer Complaint
Reason Description	Customer found the part too big

► Approvals (4 of 5)

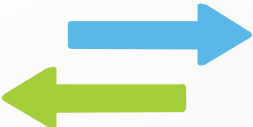
CRM Integration Use Cases for Vault: Customers / Custom Objects



Account Detail Edit Delete

Account Owner	Rodney Coffey [Change]	Rating	
Account Name	Razorleaf Corporation [View Hierarchy]	Phone	
Parent Account		Fax	
Account Number		Website	https://razorleaf.com/
Account Site		Ticker Symbol	
Type		Ownership	
Industry		Employees	35
Annual Revenue		SIC Code	
Aras ID			
Main Contact			
Billing Address	3766 Fishcreek Rd Stow, OH 44224 United States	Shipping Address	3766 Fishcreek Rd Stow, OH 44224 United States

Customers		Search Customers		
<input type="radio"/>	Name	State		
<input checked="" type="radio"/>	Razorleaf Corporation			
<input type="radio"/>	Autodesk, Inc			



User Defined	
Customer City	Stow
Customer Country / State	United States
Customer County	OH
Customer Employees	35
Customer Name	Razorleaf Corporation
Customer Street	3766 Fishcreek Rd
Customer Website	http://www.razorleaf.com/
Customer Zip	44224

ERP Integration Use Cases For Vault: Vault Doc-Centric I & B



RAC Product Tester - 1027										Search RAC Product
	Name	State	Revision	Changed By	NS Class	NS UPC Code	NS Vendor			
File	P3000.ipt	Released	B		Consumer Goods	10023	Razorleaf Corporation			

Inventory Item

P3000

Edit

Back

Print Label

+

 Actions

Primary Information

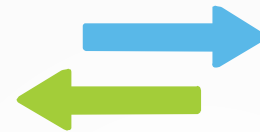
INTERNAL ID 1310	VENDOR NAME/CODE Razorleaf Corporation	PURCHASE UNITS Each
ITEM NAME/NUMBER P3000	UNITS TYPE Each	SALE UNITS Each
UPC CODE 10023	STOCK UNITS Each	SUBITEM OF
DISPLAY NAME/CODE Tester, Product, Part		

Classification

DEPARTMENT	CLASS Consumer Goods	LOCATION
SUBSIDIARY Honeycomb Holdings Inc.	PLM 360 PROJECT NAME RAC Product Tester - 1027	DESIGN FILE TYPE Part
<input type="checkbox"/> INCLUDE CHILDREN		

ERP Integration Use Cases For Vault: Vault Items I & B Integration

- Vault Items BOM Integration to ERP



Item Master Search Item Master

Number	Revision	State	Title (Item,CO)
100009	A	Released	Valve Asm
100008	A	Released	TankSubAsm

1 General History Bill of Materials Where Used Change Order View

Revision: A
Number: 100009
Title: Valve Asm
Description: Valve Asm
Units: Each

Category: Assembly
Lifecycle State: Released
Last Updated By: Administrator
Last Updated: 11/17/2015 6:41 PM

Associated files:

File Name	Version
-----------	---------

Properties:

Name	Value
Equivalence Value	
SAP Component Number	3127
SAP ID	10015

Display material BOM: General Item Overview

Material: 3139 Tank Assembly
Alternative BOM: 1

Material Document General

I...	I..	Component	Component description	Quantity	U.	A.	S..	Valid From	Valid to	Change No.
0010	L	3125	Hose	1	EA			09/18/2015	12/31/9999	
0020	L	3133	Tank SubAsm	1	EA			09/18/2015	12/31/9999	
0030	L	3127	Valve Asm	1	EA			09/18/2015	12/31/9999	

Other Integration / Jitterbit Use Cases for Vault

- File Access



- Migration



- Business Intelligence



How to Engage:

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 - Razorleaf Corporation
 - rodney.coffey@razorleaf.com
 - 330.676.0022 x 7124

Q & A