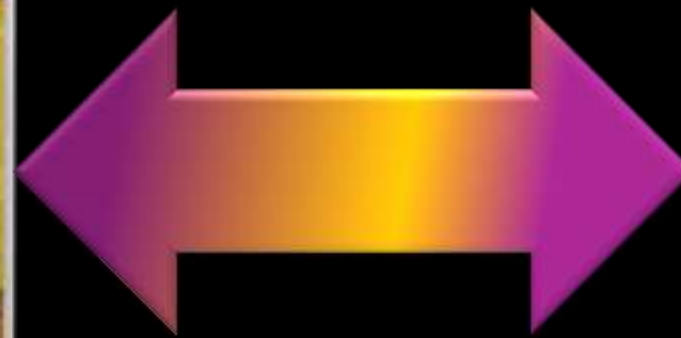


Autodesk® Vault Professional 2012 Integration to SAP® Made Easy

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Senior Consultant / MFG / CE

... What is It ?.....



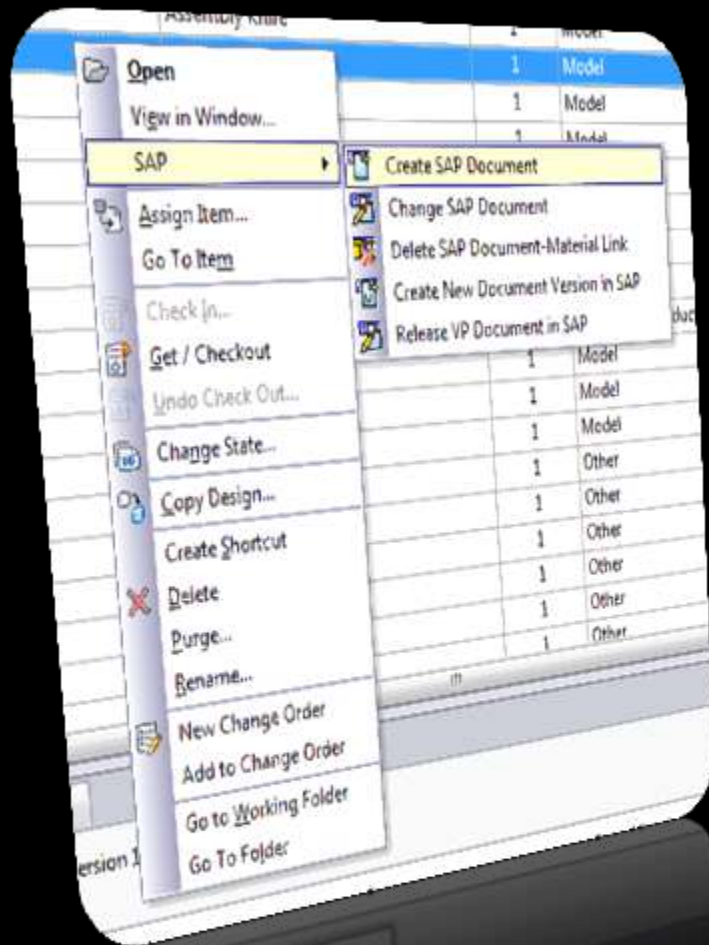
Which Technology will be used?



Appearance



- Integrated into the Autodesk Vault Professional Environment
 - Configurable Menus
 - Context Menu



Workflow Engine / Job Server

Main Menu & Toolbar



Documents / DIR



File Edit View Go Tools Actions Help

powerJobs | New | Report... | Plot... | Check In... | Find... | ?

Share to Buzzsaw | Update from Buzzsaw | Add from Buzzsaw | Default View | Layout | Workspace Sync... | Change Category...

>> 200 Search 200

Name	SAP DOCUMENTNUMBER	Title	Description	State	Re...	Originat...	Class
100034.ipt		rope pulley		Work in Pr...	-	Administr...	
100035.idw				Work in Pr...	01	Administr...	
100035.ipt	10000000908	machine fra...		Work in Pr...	01	Administr...	
100033.ipt	10000000909	electrical dri...		Work in Pr...	-	Administr...	516 K...
100025.iam	123456			Work in Pr...	-	Administr...	225 w...

File

History Uses Where Used Change Order Preview SAP Classification Web View Lifecycle Status

System: SAP Test_System

Client: 550

Document: 10000000909

Document Type: DRW

Document-Material link:

Vault Revision	Document Version	Document Part	Date	SAP user	SAP Description	Laboratory	SAP Document	SAP Change
-	00	000	23.09.2011...	116441	Yes we can also...	001	WR	

Properties

100033.ipt

System

User Defined

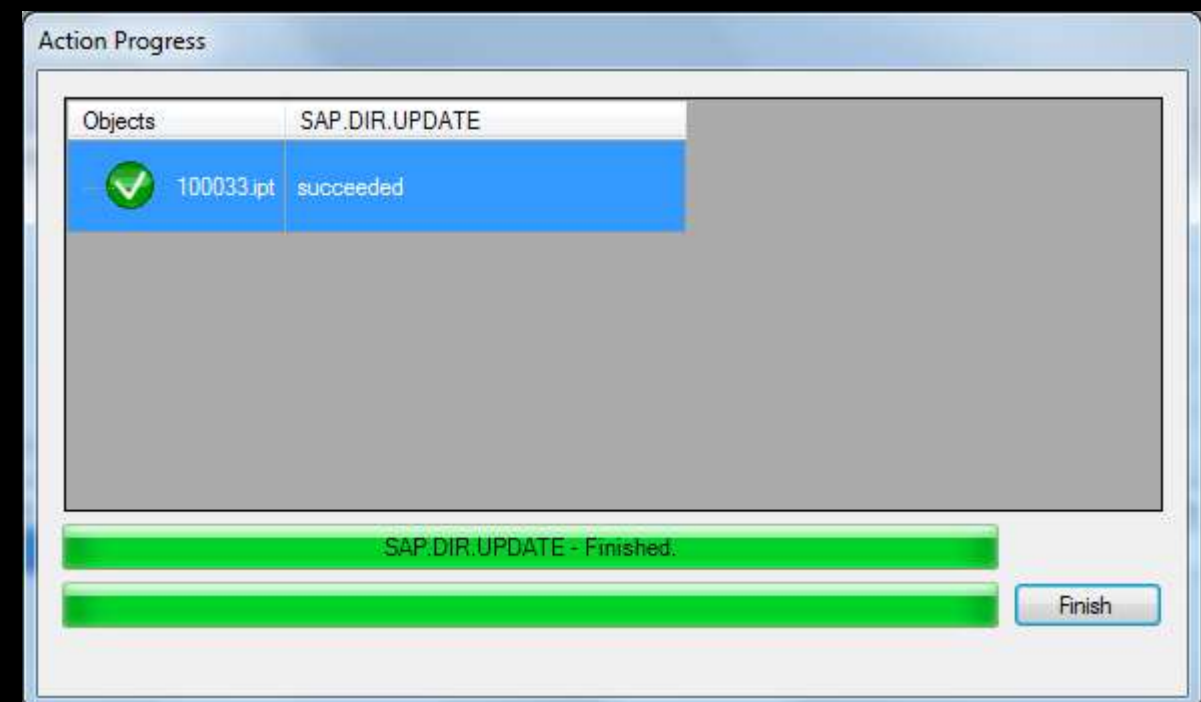
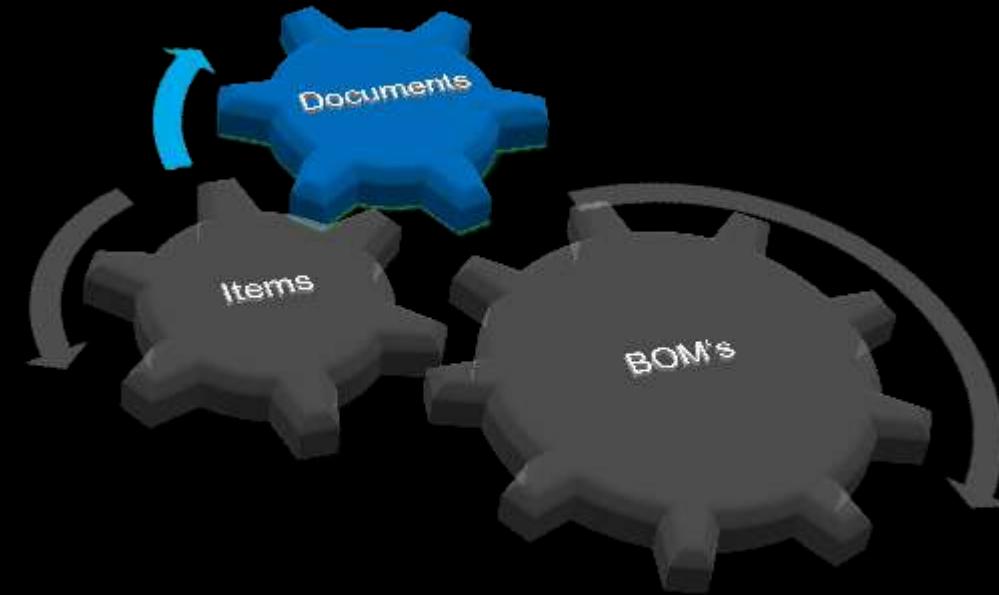
architect	
AS Contact	
Assembly ID	516
Author	loerink
Building Owner	
car entrance	
car suspension	
car weight	
Checked By	
Class	516 Kab Innenauss...
Comission	2234567840
Comments	
Company	
control fuse pr...	
Cost	
Cost Center	
cylinder stroke	

Help To... | Help Co... | Properties

Vault Professional Integration to SAP



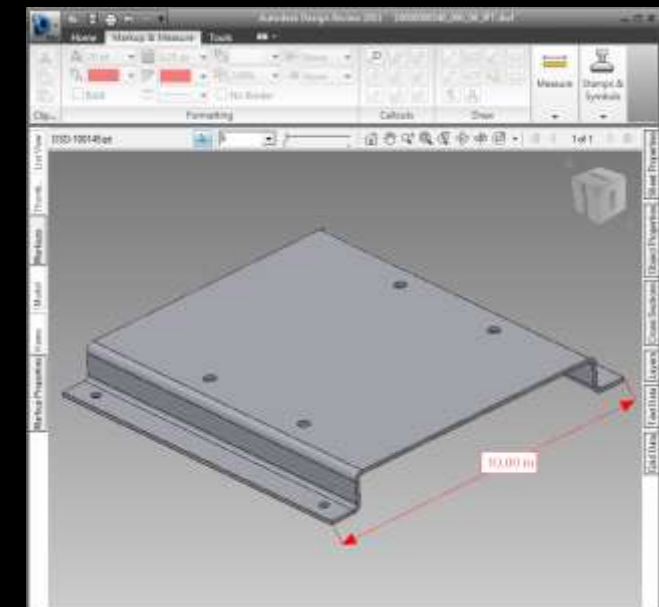
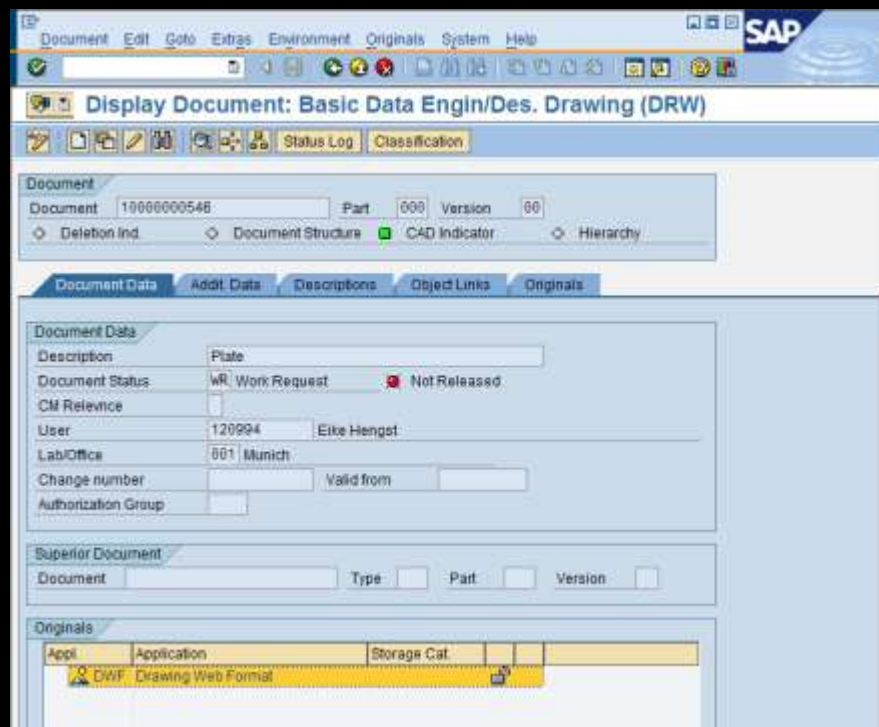
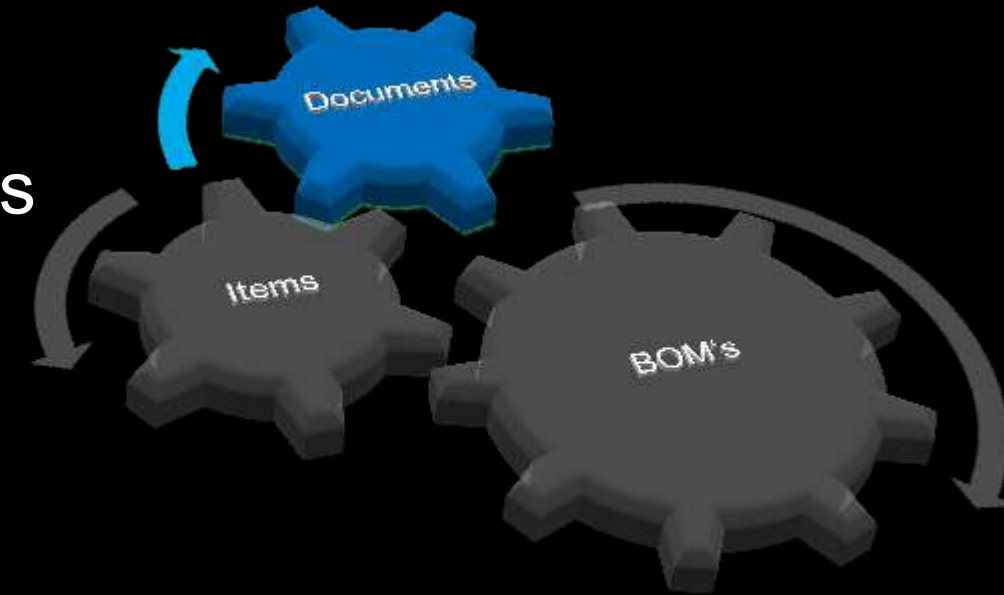
- SAP Documents (DIR)
 - Create (Multilingual)
 - Update
 - Create New Version
- Classification & Attributes (create/update)
- Create Document/Material Link
- Release of Documents in SAP from Vault



Vault Professional Integration to SAP



- SAP Documents (DIR)
 - Chained Actions & Conditions / Custom Def's
 - Attach DWF or native Files to DIR
 - Attach one or more Files to one SAP DIR
 - e.g. Model and Drawing to one DIR



Items / Material Master



File Edit View Go Tools Actions Help

New powerJobs Report... Plot... Check In... Go to: Enter an item number Find... ?

Share to Buzzsaw Update from Buzzsaw Add from Buzzsaw All Items Workspace Sync... Change Category...

Item Master

Search Item Master

Category Name	Number	Description (Item,CO)	SAP MATE...	State	Revision
<input type="checkbox"/> Assembly	100025		1516	Work In Progr...	A
<input type="checkbox"/> Part	100011			Work In Progr...	C
<input checked="" type="checkbox"/> Product	100001			Work In Progr...	B
<input checked="" type="checkbox"/> Assembly	100019			Work In Progr...	B
<input type="checkbox"/> Part	100010		1340	Work In Progr...	A
<input type="checkbox"/> Part	100033		1515	Work In Progr...	A
<input type="checkbox"/> Part	100034		1518	Work In Progr...	A
<input type="checkbox"/> Part	100035		1512	Work In Progr...	A

Properties

100033

System

User Defined

EAN Category	
height	5
Industry Sector	Mechanical Engin...
length	2
Length Unit	Meter
MAT_Descripti...	STE 690
Material Type	EIGEN
norm number	DIN 202
Old Material N...	BAAN 122334
SAP ECO #	
SAP MANDANT	550
SAP MATERIAL	1515
SAP Plants	Munich
SAP SYSTEM	SAP_Test_System
SAP SYSTEMID	ADK
Spare Part	True
supplier	HARDY

General History Bill of Materials Where Used Change Order View SAP Web View

System: SAP Test_System

Client: 550

Material Number 1515

1515 (100033)

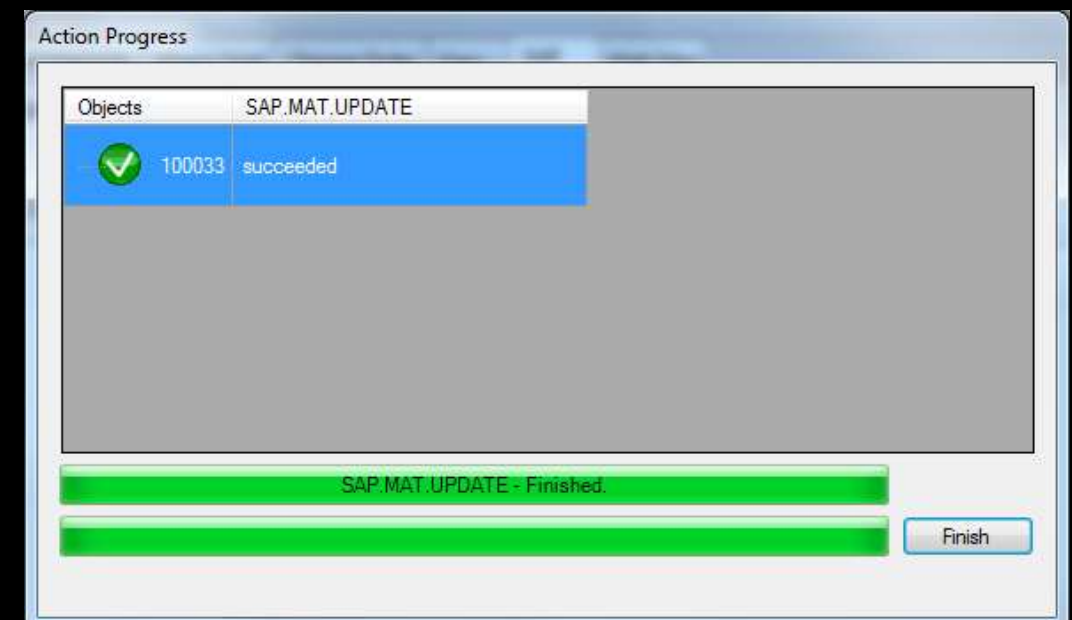
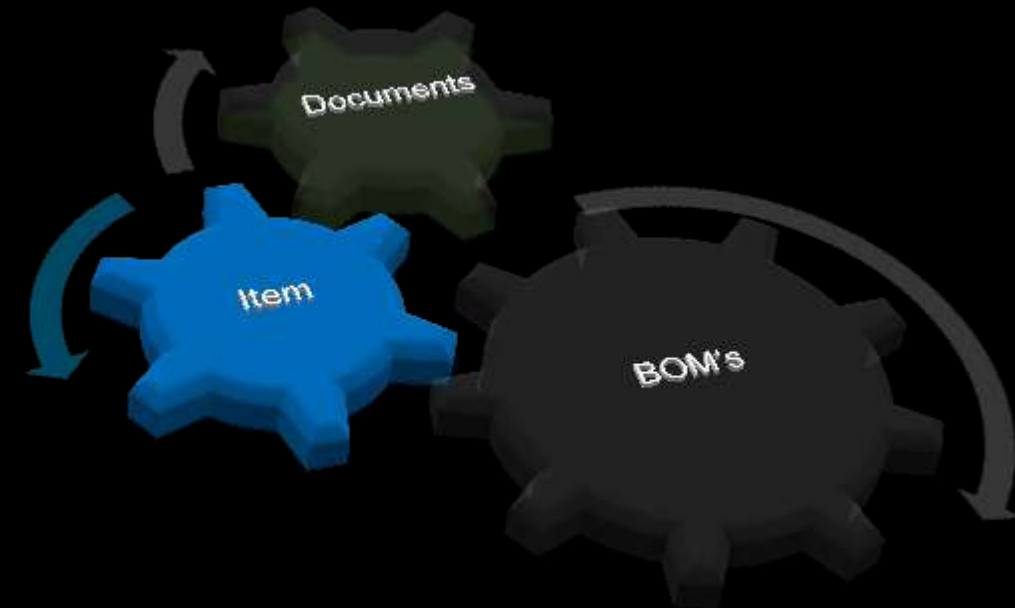
Field	Value
Material Number	1515
Plant	
Description	100033
Mat-Type	HALB
Base unit of measure	EA
Purchasing Status	01
Stock Handling Status	KSGC
Net weight	3,000
Gross weight	0,000
Size and Dimension	
Total Stock	

Help To... ? Help Co... Properties

Vault Professional Integration to SAP



- SAP Material
 - Create* (Multilingual)
 - Create with Classification
 - Create* from SAP Template
- Update
- Create Document/Material Link
- Chained Actions & Custom Definitions
- Write to Long Text Fields (Multilingual)



Bill of Materials



General History Bill of Materials Where Used Change Order View SAP Web View

System:

Client:

Material Number

Home

1519 (100002)

- 1517 (100022)
- 1515 (100033)
- 1518 (100034)
- 1512 (100035)

Components

Indicator	Quantity
(100022)	1
(100033)	4
(100034)	1
(100035)	3

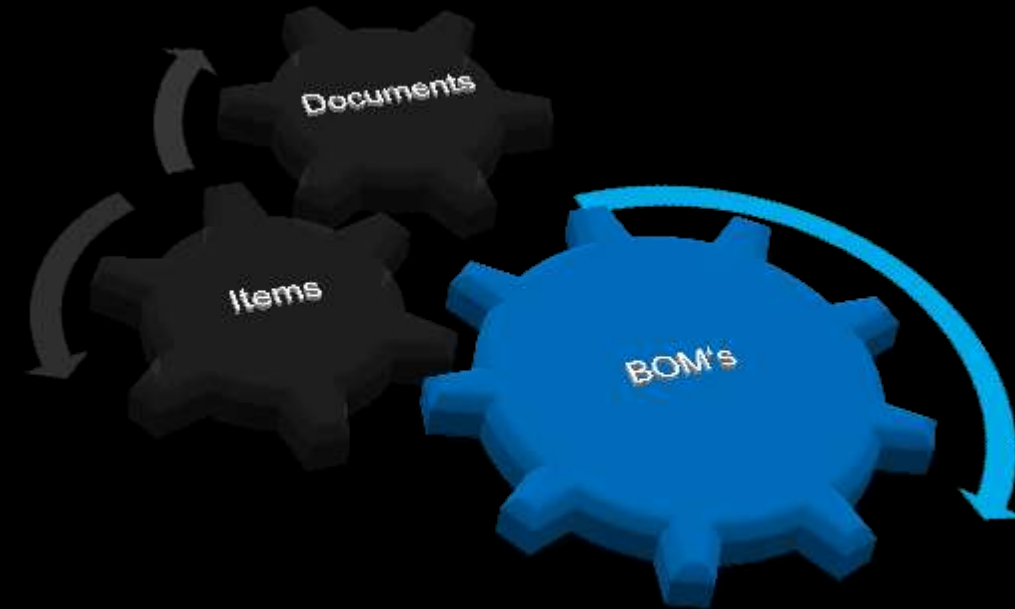
Material

Field	Value
Material Number	1519
Plant	
Description	good morning
Mat-Type	HALB
Base unit of measure	EA
Purchasing Status	01
Stock Handling Status	KSG
Net weight	0,000
Gross weight	0,000
Size and Dimension	
Total Stock	

Vault Professional Integration to SAP



- SAP BOM (Material Based BOM)
 - Create (Plant / Group)
 - One Level
 - Multi Level
 - Update (Plant / Group)
 - Triggered Material Master Creation
 - Triggered DIR-Creation
 - „View“ or „Compare“ BOM from SAP within the Vault Interface



Action Progress

Objects	SAP_BOM.UPDATE	SAP_MAT.UPDATE	S/
100025	working...		E
✓		succeeded	
✓			BU
!			

SAP_BOM.UPDATE - SAP_BOM.UPDATE

100034-SAP_MAT.UPDATE

Finish

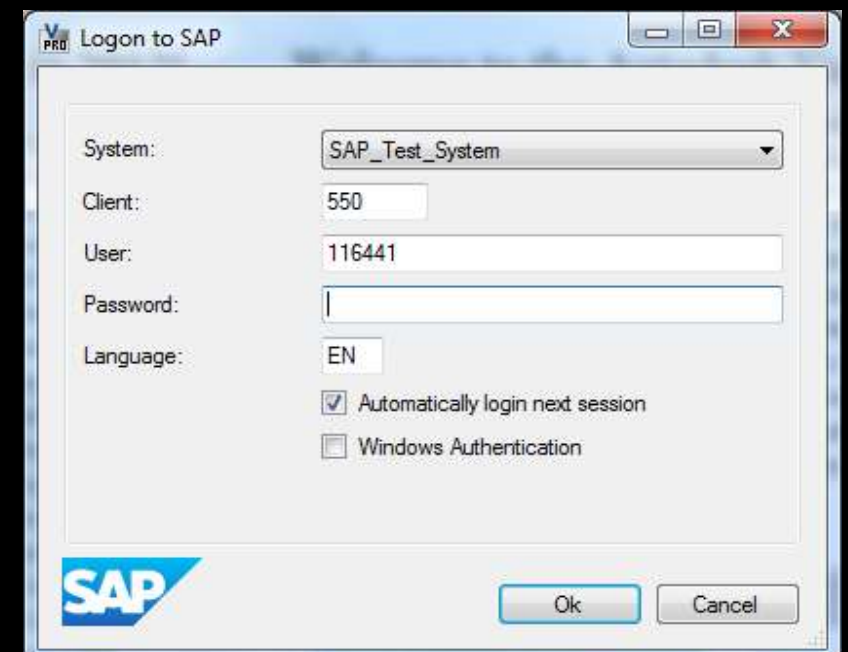
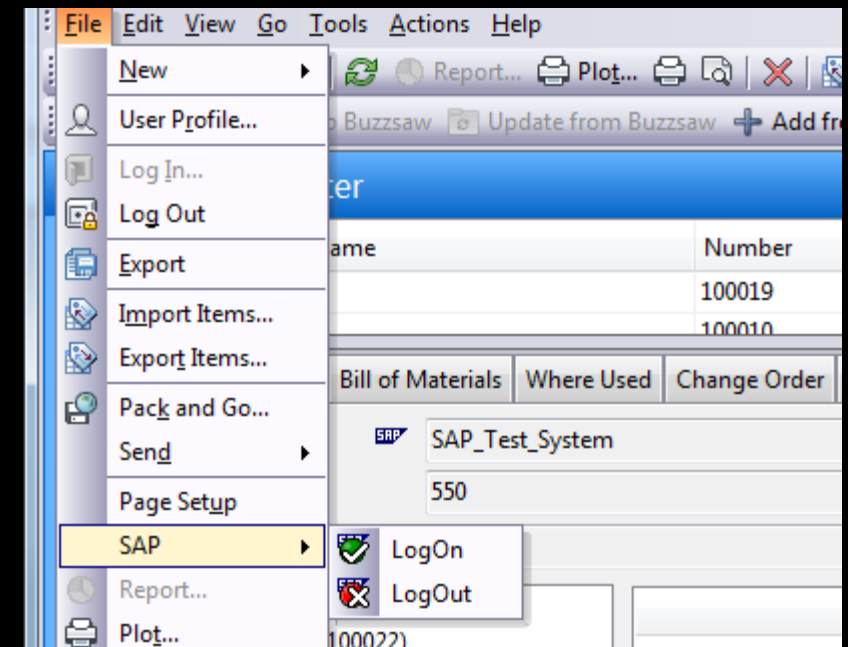
Vault Professional Integration to SAP



▪ How does the Communication to SAP work in the Product?

▪ Basic Workflow

- Login / Logout
- Communication via RFC
- SAP BAPI Direct- execution
- Menu- & Object Focus



Vault Professional Integration to SAP



- What about the Installation of the Product ?

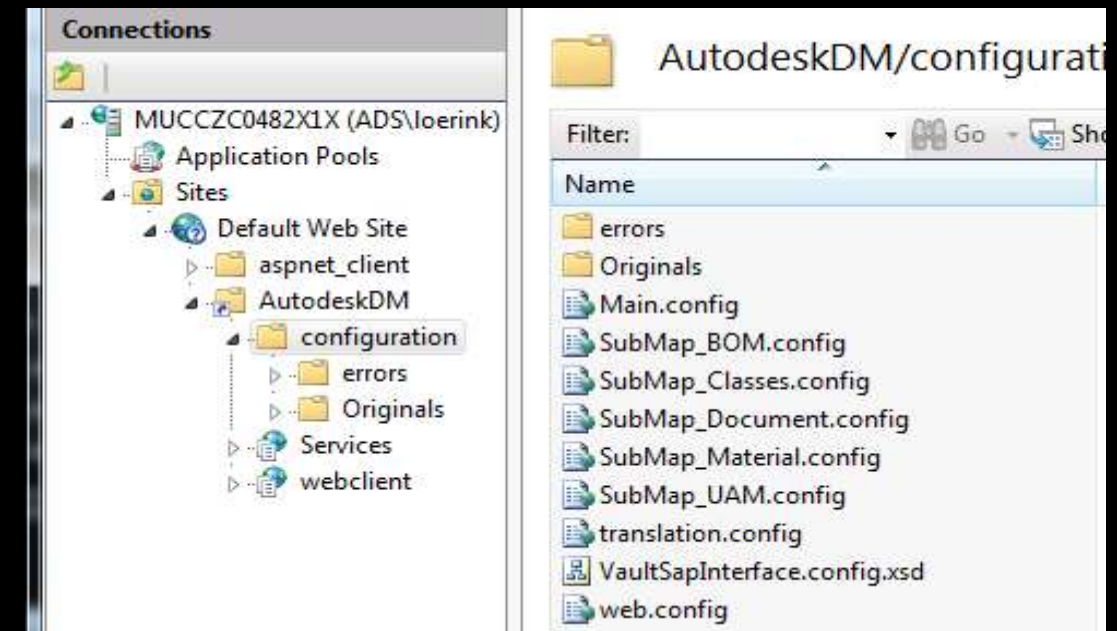
- Product Content:

- MSI Installation (also Silent)

- Installation per User

- User Rights in Vault

- Configuration can be stored on the ADMS server Webpage



Vault Professional Integration to SAP



- What about the Licensing ?
 - After Install of the Product you will have:
 - License Manager (Unique Application)
 - 6 Licenses to connect to SAP® right away (Fast Install)
 - How: all as SAP Transports

License data			
Product:	Autodesk Vault Professional SAP Connector		
License ID:	DF511F073512BBF1991800		
Installation number:	99999999999		
Created on:	26.04.2010		
Number:	6	in use:	1
Expires on:	31.12.9999		
License type:	N Named User		

User Name	Last logon	Deleted	Del. date
		<input type="checkbox"/>	

Vault Professional Integration to SAP



SAP System

SAP GUI Version	SAP System
6.40, 7.1, 7.2	Minimum : 4.6 C 4.7,
WIN7 (64 Bit) nur 7.2(*)	ERP2004, ECC 5.0, ECC 6.0

SAP®

Installation for Language:

- German
- English
- Language Extension can be provided by Autodesk Consulting/Partner or the Customer

Vault Professional Integration to SAP



- Import of existing Data

Case 1

(mass population of Vault Items)

Table Entry Edit Goto Settings Utilities(M) Er

Data Browser: Table MARA Select

Table: MARA
Displayed Fields: 22 of 206 Fixed Columns:

MANDT	MATNR	ERSDA	ERNAM
100	00000000000000000001	22.02.2007	KUECHLER
100	00000000000000000002	22.02.2007	KUECHLER
100	00000000000000000011	15.03.2007	VETTER
100	00000000000000000012	15.03.2007	VETTER
100	00000000000000000013	15.03.2007	VETTER
100	00000000000000000014	15.03.2007	VETTER
100	00000000000000000015	15.03.2007	VETTER

Import Wizard

Specify Source
 Specify File
 Specify Job
 Specify Mapping
 Preview Results
 View Results

Specify File
Enter the type of file.
File type:
CSV (Comma Separated Values)
TDL (Tab Separated Values)
Design Web Format
XML

BOM Indicator
 Level numbers
 Parent item

File Name: _____

Select 'Next' to continue

Specify Mapping
Select a field name from the import file, drag and drop it on a Vault Professional attribute. Select and drag a field name from the Vault Professional map to remove from the list. Select Help for more details.

Import File

Field Name
VR;"Version 2.0";

Vault Professional

Attribute	Field Name
Level	
Number	
Title (Item,CO)	
Quantity	
Category Name	
Item Description	
Revision	
Units	

Preview import file field values
< Previous Next >

Attribute mapping
Clear Mapping Save Map Load Map

Select 'Next' to continue

< Back Next > Cancel Help

Vault Professional Integration to SAP



- Linking of existing Data in Vault & SAP

Case 2 (daily work)

Change SAP Material

Name	Value
EHT_Farbe	Rot
SAP MANDANT	550
SAP MATERIAL	303
SAP SYSTEM	SAP_Test_System
Werkstoff	

System: SAP Test_System
Client: 550
Material Number: 303

303

- 271 (VMG-155977)
- 304 (VMG-155980)
- 305 (VMG-155978)
- 306 (VMG-155976)
- 307 (VMG-155975)

BOM Head Properties

Field	Value
Material Number	303
BOM usage	3
Plant	0001
Alternative	
Revision level	
Valid from	21.05.2010
Change No.	
BOM Status	01
Valid from	21.05.2010

Components

Indicator	Quantity
271	1
304	4
305	1
306	1
307	1

Vault Professional Integration to SAP



▪ What can be Configured ?

```
range.powerJob.VaultHelper.psm1 x vaultsapinterface.config x SubMap_BOM.config x Main.config x Vault_SAP_Interface.xml x SubMap_Material.config x SubMap_Document.config x SubMa
<?xml version="1.0" encoding="utf-8"?>
<vault_sap_interface xsi:noNamespaceSchemaLocation="VaultSapInterface.config.xsd" xmlns:xsi="http:
  <!-- Debug console and configuration help - 0 console deactivated, 1 active but hidden, visibl
  <debug console="1" />
  <!-- Text mapping for translation -->
  <translations location="translation.config" />
  <!-- default SAP connection settings -->
  <connections>
  <!-- Menu configuration -->
  <menus>
  <!-- User configuration -->
  <users>
  <!-- User Groups configuration-->
  <groups>
  <!-- Command configuration -->
  <actions>

  <maps>
  <!-- Configuration for material templates -->
  <item>
  <!-- Configuration for views of documents and materials -->
  <views>
  <!-- Configuration for manage files (Upload to SAP, save to local folder or both, rename) -->
  <document>
  <workarounds>
  <jobserver>
```

FAQ

Vault Professional Integration to SAP



- Do I have to change anything within the integration or within SAP after install ?
→ **No**
- Do I have to configure the Integration after the install ?
→ **Yes (XML)**
- Can i do a „Quick Deployment (*)“ with the software ? (* = Testinstallation @ customer)
→ **Yes (6 Licences are contained in the software after install)**



Summary

Vault Professional Integration to SAP



- **What are your Advantages ?**
 - **Autodesk Standard Product!**
 - **Development aligned with Vault !**
 - **Data Transfer to SAP can be configured! (Original/Neutral)**
 - **Data Control is maintained by Engineering!**
 - **Better CAD Support then SAP direct Integrations**
 - **One SAP Integration for many CAD Applications!**
 - **Data only needs to be entered in Engineering once!**

