

Cracking Vault with AutoCAD Plant 3D and AutoCAD P&ID

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PD5871

In this class you will learn about the facets of AutoCAD Plant 3D software in Vault software. We will cover the features that Vault software has to offer an AutoCAD Plant 3D project or an AutoCAD P&ID project. Specifically we will look at Replication, Lifecycles, Categories, and Attribute Mapping. We will cover the process of creating a new AutoCAD Plant 3D project or an AutoCAD P&ID project and migrating it to Vault software. Then we will look at the migration of an existing AutoCAD Plant 3D project or an AutoCAD P&ID project or an AutoCAD P&ID project to Vault software. We will also examine in detail how to manage Data Manager outputs in Vault software. We will cover the specific rules around utilizing Vault software for your project, and we'll also cover the environmental settings and workflow systems you should consider before attempting your project in Vault software. An AutoCAD Plant 3D project or an AutoCAD P&ID project in Vault software should be an exciting and positive experience for the extended design team. This course is the first step in determining that sort of experience.

Learning Objectives

At the end of this class, you will:

- Identify environment and workflow settings that can effect a successful Vault software project
- Learn how to create new, and how to migrate existing, AutoCAD Plant 3D software projects or AutoCAD P&ID software projects in Vault software
- Learn about attribute mapping, categories, lifecycles, and revision schemes with AutoCAD Plant 3D and AutoCAD P&ID software projects

About the Speaker

Jarrod Mudford is a piping designer by profession, working out of New Zealand predominantly in the food and beverage industry. With also a lot of experiences in the oil and gas, geothermal, mining, and water treatment industries, his accolades compliment his career as a Plant Solutions consultant with Autodesk, Inc. His role involves in-depth implementations of solutions with customers' workflows. He enjoys passing on his extensive knowledge to others and assisting in the success of companies utilizing Autodesk products, particularly Plant Design Suite software. Jarrod also has vast knowledge of Inventor software, Navisworks project review software, and Vault software, and he is versed in the advantages of using these alongside AutoCAD Plant 3D software and AutoCAD P&ID software. jarrod.mudford@autodesk.com

The Set Up of the Vault Environment

Accessing the Vault Options

When setting up the Vault Options, you must be a Vault Administrator. You will need to speak to your IT Administrator for such rights.

Open the Autodesk Vault application

All of the Vault Options are available from selecting, Tools > Administration > Vault Settings

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File Edit View Go	Тос	Is Actions Help			
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🔶 🖄 🔲 D	Û	Workspace Sync		🕅 Workspace Sync	📮 🖬 Change State 📮
Project Explore		Labels		Explorer (\$)	
Project Explorer		Customize			0.0
Projects Finite Standard Content		Job Queue		2	/ 🖓 Sta
		Administration	►	Vault Settings	
ित् My Search Folde		Options		Global Settings	
	Σ	Autodesk Exchange App Manage	r	lates	
	X	Autodesk Exchange Apps			
				7	

Once you have selected *Vault Settings*, the Vault Settings window will appear. It is from this window that you can access all of the settings we will cover in this section.

Files Visualization Behaviors Items Change Orders Custom Obje Options	
Options	ects
Find Duplicat	
	es
 Disable Check In of Design Files 	
Working Folder	
Define Working Folder Options Define	
Close He	р

Unique File Names

Enforce Unique File Names must not be selected when using AutoCAD Plant 3D with Autodesk Vault. Because there are common file names between projects, this prevents the AutoCAD Plant 3D project being created in Autodesk Vault.

Ensure that Enforce Unique File Names is not selected.

Y	Vault Settings						
[Files	Visualization	Behaviors	Items	Change Orders	Custom Objects	
	Option	IS					
		Enforce	Unique File	Names		Find Duplicates	
		 Disable 	Check In of	Design F	iles		
	Workir	ng Folder					
		Define Wo	rking Folde	r Options		Define	
					Close	Help	

Define Working Folder Options

The working folder for Autodesk Vault is the location on your local hard drive that will contain the AuotCAD Plant 3D project files you are working on. The working folder must be set by the administrator to enforce a consistent workspace location for all users.

Click the Define button on the Vault Settings window

	Ro	Vault Settings								
	Files Optior	Visualization	Behaviors	Items	Chang	e Orders	Custor	m Objects	-	
 Enforce Unique File Names Find Duplicates Disable Check In of Design Files 										
Working Folder Define Working Folder Options Define							fine]		
						Close		Help		

Select the *Enforce consistent working folder for all clients* option and then in the *Client Working Folder* field enter the location of the local workspace.

PRE	Working Folder Options	×							
W	orkspace Folders								
0	Allow clients to define working folder								
۲	Enforce consistent working folder for all clients								
CI	Client Working Folder:								
C	C:\AU2014\Vault\								
Au	utodesk Inventor Project File for Vault Options								
	Enforce consistent project file for all clients								
D	efault Inventor Project File:								
	OK Cancel Help								

It must be ensured that all users have the same drive formats on their workstations, and that there is enough hard drive space to contain the AutoCAD Plant 3D project.

Click the OK button to close the Working Folder Options window

Categories

Accessing the Categories is via the Behaviours tab on the Vault Settings window. Click the Categories... button.

Y	RD	Vault Settings							
ſ	Files	Visualization	Behaviors	Items	Change Orde	rs Custom Obj	ects		
	Lifecyo	cles and Revisio	ons						
	5	Edit and Manage Lifecycles and Revisions Lifecycles							
		Revisions							
	Catego	ories							
	Edit and Manage Categories Categories								
	Rules								
	Proper	ties							
	+	Edit and M	anage Prop	erties		Properties.			
						Data Card.	•		
						Revision Tab	le		
	Numb	ering							
	00-1 00-0	Define Cus	tom Numbe	ering Sch	emes	Define			
	Report Management								
	e	Define Report Color Assignment Define							
l					Close	Не	lp		

On the Configure Categories window, at the top left, there is a drop down list for the different category types. The Folder Category "PlantProject" is already created for you upon creating the first AutoCAD Plant 3D project in the Vault. You must create the category using the AutoCAD Plant 3D application. If you are at this location and the category is not there, then create a project in the Vault using AutoCAD Plant 3D

¥.	Configure Categories ×
Folder Categories 💌 📑 New [🗅 Copy 述 Edit 🕅 💥 Delete 🧭 Set Default
Category Name	Description
	Regular Folders
PlantProject	Plant Project Tag
Project	Project Folders
Behaviors	
Lifecycles Properties	
🗹 Edit 📳 Assign	
Name	Description
► 🖉 <none></none>	Null lifecycle definition for opt-out scenario
	Close Help

From the drop down list, select *File Categories*. Notice in here there is "PlantProjectFile" already created. Again this is only created for you once you generate the first AutoCAD Plant 3D project in the Vault.

Configure Categories						
File Categories 🔹 📑 New 🕒 C	Copy 述 Edit 🔀 Delete 🧭 Set Default					
Category Name	Description					
Deliverable	Deliverable Document					
OfficeFile	Office File					
PlantProjectFile	Plant Project File					
Behaviors						
Lifecycles Pavisions Proportion						
Enecycles Revisions Properties						
🗹 Edit 🔡 Assign						
Name	Description					
► 🖉 <none></none>	Null lifecycle definition for opt-out scenario					
	Close					
	ciose Heip					

The Categories created by AutoCAD Plant 3D project should not be deleted, modified, or renamed. These categories are currently set by the system and will affect the Vault and AutoCAD Plant 3D projects in an undesirable manner.

Lifecycles

Accessing the Lifecycles via the *Behaviours* tab on the Vault Settings window. Click the *Lifecycles...* button.

Y	Vault Settings								
[1	
	Files	Visualization	Behaviors	Items	Change	Orders	Custom Objects		
	Lifecyo	cles and Revisio	ons					-	
		Edit and N	lanage Life	cycles an	d Revisio	ns	Lifecycles]	
		Revisions							
	Catego	ories						_	
	Edit and Manage Categories Categories								
							Rules		
	Proper	ties						_	
		Edit and M	anage Prop	erties			Properties		
							Data Card		
							Revision Table		
	Numb	ering						_	
	00-1 00-0	Define Cus	tom Numbe	ering Sch	emes		Define		
	Report Management							_	
	2	Define Rep	oort Color A	Assignme	nt		Define		
						Close	Help		

In the Lifecycles Definition window, you can set up a new Lifecycle Definition, or select an existing one. Select a Lifecycle Definition and then select *Edit...*

			Lifecycle	Definitions
ilter:	<all definitio<="" lifecycle="" td=""><td>ns> 🝷 🔛 N</td><td>lew 🗈 Copy</td><td>🛃 Edit 🗙 Delete 🛛 🖫 Assign</td></all>	ns> 🝷 🔛 N	lew 🗈 Copy	🛃 Edit 🗙 Delete 🛛 🖫 Assign
Na	ame		Description	
Ba	asic Release Process		Basic manufact	uring lifecycle process for release control
AL	J2014		Lifecycle for Au	itodesk University 2014
Sir	mple Release Process		Simple lifecycle	e process for document control
Lo	ng Lead Time Release Pr	ocess	A process for re	eleasing long lead time manufacturing projects
Lo	ng Lead Time Release Pr	ocess with	A process for re	eleasing long lead time manufacturing projects with Chan
<n< th=""><td>None></td><td></td><td>Null lifecycle de</td><td>efinition for opt-out scenario</td></n<>	None>		Null lifecycle de	efinition for opt-out scenario
	ecycle States: Add 🗐 Remove 🔗 Se	t Default		General Transitions Security Control Comments State Name:
	Name	Description	n	State Name:
1	Work in Progress	State for fr	ee-form desi	Work in Progress
-	For Review	State for ta	rgeted desig	
	Released	State for co	ontrolling acc	State Description:
	Quick-Change	State for co	ontrolling acc	State for free-form design creation and modifications
				Close Help

In the window that appears, Select the Category drop down list and select *PlantProjectFile*. This will apply the Lifecycle Definition to the category.

Lifecycle D	efinition - 'AU2014'
Definition Name:	Description:
AU2014 Category: PlantProjectFile Base Deliverable OfficeFile Folder Categories Folder Categories Folder Categories Folder Categories Base Custom Object Categories Custom	Lifecycle for Autodesk University 2014 Image: Control Comments State Name: Work in Progress State Description: Cc State for free-form design creation and modifications
Close	OK Cancel Apply Help

Once the Lifecycle Definition is applied to the Category, click the OK button.

Revisions

Accessing the Revisions is via the *Behaviours* tab on the Vault Settings window. Click the *Revisions*... button.

Y	RD	Vault Settings							
			D 1 - 1					1	
[Files	Visualization	Behaviors	Items	Change	Orders	Custom Objects		
	Lifecyo	cles and Revisio	ins					_	
		Edit and Manage Lifecycles and Revisions Lifecycles							
		Revisions							
	Catego	ories						_	
	Edit and Manage Categories Categories								
							Rules		
	Proper	ties						_	
	+	Edit and M	anage Prop	oerties			Properties		
							Data Card		
							Revision Table		
	Numb	ering						-	
	00-1 00-0	Define Cus	tom Numb	ering Sch	emes		Define		
	Report	t Management						_	
	e	Define Report Color Assignment Define							
L						Close	Help	,	

In the Revision Scheme Definitions window, you can set up a new Revision Scheme Definition, or select an existing one. Select a Revision Scheme Definition and then select *Edit...*

Scheme Name		Description
Standard Alphabetic Format		Only characters are permitted within the primary format
Standard Numeric Format		Sequential numbering starting from 1
Default ASME Y14.35M Forma	at	Only ASME Y14.35M characters are permitted within the primary format
<none></none>		Null revision scheme for opt-out scenario
cheme Details		
scheme Values:		Preview Scheme Format Comments
Туре	Value	Revision primary sequence values:
Delimiter		1
Primary Scheme Format	Numeric	2
Secondary Scheme Format	Numeric	
Tertiary Scheme Format	Numeric	5
		6
		9 ~
		Example Revision Formats
		Delimiter Character:
		Primary: 1
		Secondary: 1.1
		Tertiary: 1.1.1

In the window that appears, Select the Category drop down list and select *PlantProjectFile*. This will apply the Revision Scheme Definition to the category.

Y es	Revision Scheme Definition	'Standard Numeric Format'
Definition Name:		Description:
Standard Numeric For	rmat	Sequential numbering starting from 1
Category:		
PlantProjectFile	~	
 ✓ File Categories Base Deliverable OfficeFile ✓ PlantProjectFile Item Categories Assembly Document Electrical Electrical Projectical General Part Product Purchased 	e ect :	Preview Scheme Format Comments Revision primary sequence values: 1 2 3 4 5 6 7 8 9
		Example Revision Formats
	Close	Primary: 1
		Secondary: 1.1
		Tertiary: 1.1.1
		OK Cancel Help

Once the Revision Scheme Definition is applied to the Category, select the OK button.

Assigning the Lifecycle and Revision Scheme Definitions to the Category

Accessing the Categories is via the Behaviours tab on the Vault Settings window. Click the Categories... button.

PRE	Vault Settings					×
	1					1
Files	Visualization	Behaviors	Items	Change Orders	Custom Objects	
Lifecy	cles and Revisio	ns —				-
	Edit and N	lanage Life	cycles an	d Revisions	Lifecycles	
					Revisions	
Categ	ories					_
	Edit and N	lanage Cate	egories		Categories]
					Rules	
Prope	rties					_
+	Edit and M	anage Prop	erties		Properties	
					Data Card	
					Revision Table	
Numb	ering					_
00-1	Define Cus	tom Numbe	ering Sch	emes	Define	
Repor	t Management					_
<u></u>	Define Rep	oort Color A	Assignme	nt	Define	
				Close	Help	

From the drop down list	. select File Categories.	Select PlantProjectFile fro	m the list of categories.

Y es	Configure Categories ×
File Categories 🔹 🖬 New	🛅 Copy 📝 Edit X Delete 🧭 Set Default
Category Name	Description
Base	Default Category
Deliverable	Deliverable Document
OfficeFile	Office File
PlantProjectFile	Plant Project File
Behaviors Lifecycles Revisions Propertie	Window :
Edit Eti Assign	Description
	Lifecycle for Autodesk University 2014
	Null lifecycle definition for opt-out scenario

In the lower portion of the window, select the *Lifecycles* tab, and then the Assign button.

In the Assign Category window, on the right hand pane, select the new Lifecycle Definition, and then click the Default button.

Assign	Category - Plant	ProjectFile	×
Drag a lifecycle definition from th the selected category. Remove fro All Lifecycle Definitions:	le list on the left to t om category by drag	he list on the right to assign it to ging it back to the left. Assigned Lifecycle Definitions:	
Name	Add >>	Name	
 Basic Release Process Long Lead Time Release Pro Long Lead Time Release Pro Simple Release Process 	<< Remove Default	✓ <none> AU2014</none>	
	ОК	Cancel Help	

Notice that the selected Lifecycle Definition has the check next to it. Click OK.

D th	Assign C rag a lifecycle definition from the ne selected category. Remove from	ategory - Plant list on the left to t n category by drag	ProjectFile he list on the right to assign it to ging it back to the left.	×
A	II Lifecycle Definitions:		Assigned Lifecycle Definitions:	
	Name	Add >>	Name	
•	Basic Release Process		<none></none>	
	Long Lead Time Release Pro	<< Remove	► 🖉 AU2014	
	Long Lead Time Release Pro			
	Simple Release Process	Default		
		OK	Cancel Help	

From the drop down list.	select File Categories.	Select PlantProjectFile from	the list of categories.
i ioni alo alop aominioq	ooloot i no oatogolloo.		and not of datagoindo.

PRE	Co	onfigure Catego	ries	×
File Cate	gories 🔻 📑 New [ြ Copy.	🛃 Edit 🔀 Dele	ete 🧭 Set Default	
		Description		
		Description		
	Base	Default Catego	ory	
	Deliverable	Deliverable Do	ocument	
		Office File	1.	
		Plant Project Fi	lie	
Lifecy	cles Revisions Properties	Desciption		
		Description		
▶ ♥	Standard Alphabetic Format	Only characters ar	e permitted within the	e primary format
	Standard Numeric Format	Sequential numbe	ering starting from 1	
	<none></none>	Null revision scher	me for opt-out scenari	0
			Close	Help

In the lower portion of the window, select the *Revisions* tab, and then the *Assign* button.

In the Assign Category window, on the right hand pane, select the new Revision Scheme, and then click the *Default* button.

All Revision Schemes:		Assig	ned Revision Schemes:
Name	Add >>		Name
Default ASME Y14.35M Form.			<none></none>
	<< Remove	 Image: A set of the set of the	Standard Alphabetic For
	Default		Standard Numeric Format

Notice that the selected Lifecycle Definition has the check next to it. Click OK.

Assign C	ategory - Plant	ProjectFile	×
Drag a revision scheme from the lis selected category. You can remove All Revision Schemes:	t on the left to the the revision scheme	list on the right to add it to the e by dragging it back to the left. Assigned Revision Schemes:	
Name	Add >>	Name	
Default ASME Y14.35M Form	<< Remove	<none></none>	
		Standard Alphabetic For	
	Default	Standard Numeric Format	
	OK	Cancel Help	
	Assign C Drag a revision scheme from the lis selected category. You can remove All Revision Schemes: Name Default ASME Y14.35M Form	Assign Category - Plant Drag a revision scheme from the list on the left to the selected category. You can remove the revision schem All Revision Schemes: Name Add >> Default ASME Y14.35M Form << Remove	Assign Category - PlantProjectFile Drag a revision scheme from the list on the left to the list on the right to add it to the selected category. You can remove the revision scheme by dragging it back to the left. All Revision Schemes: Add >> Add >> Name Add >> Name Standard Alphabetic For Cot Cancel Help

Migrate an existing, and create a new AutoCAD Plant 3D Vault Project

Migrate an existing project.

Firstly, you will need to log in to the Vault. Select the Log In button on the Vault ribbon.



Enter your credentials on the Log In window. Then click OK.

	Log In	x
AUTODESK [®]	VAULT	
Authentication:	Vault Account	~
User Name:	FRODO	
Password:		
Server:	localhost	~
Vault:	AU2014 ~	
	Automatically log in next session	
	OK Cancel <	<

Open the project you wish to migrate, and with all drawings closed, enter PLANTPROJECTTOVAULT into the command line. The "Vault Project Setup – Existing Project" window will appear.

Vault Project Setup - Existing Project 🗕 🗖	
SQLite project conversion to Vault	
Vault projects require that a local copy of the project be located in a workspace on your local machine. If your project is already local, you can copy it to another location of your choosing. If the project is not local, it will be copied to the chosen location on your local machine.	
Workspace location	
Existing project folder:	
C:\Users\mudforj\Documents\Projects\Existing Project	
Local working folder location:	
C:\AU2014\Vault\	
Delete existing project after transfer	
Vault location	
Project location in vault	
\$	
Test Connection Database name prefix: Iocalhost existing project Test Name	
Authentication:	
Windows Authentication Vindows credentials will be used automatically when users open	
the project	
Oser name. Password.	
A	
P&ID drawings folder:	
C:\Users\mudforj\Documents\Projects\Existing Project\PID DWG	
Plant 3D Model Drawings folder: C:\Lisers\mudfor\Documents\Projects\Existing Project\Plant 3D Models	
Ornographic output tolder: C:\Users\mudforj\Documents\Projects\Existing Project\Orthos\DWGs	
Project specsheets folder: C:\Users\mudforj\Documents\Projects\Existing Project\Spec Sheets	
Project supporting files folder:	

Once the above window has been completed with all the necessary information, click Start.

The AutoCAD Plant 3D project will start the migration process, and give an indication of its progress.

	Creating valit Project - Existing Project
Your vault pr	oject is being created.
This might take	several minutes.
CS150.pspc CS150.pspx PipingPart.ml MasterDataba PnId.dcf PnIdPart.ml projSymbolSty DocumentList ControlValveL NozzleList.ml ValveList.xml	l asePnld.dlk yle.dwg xml ist.xml
<	>
Vault informe	tion
	JUOFI
Vault server:	localhost
Vault server: Vault name:	localhost AU2014
Vault server: Vault name: Vault folder:	localhost AU2014 \$\Existing Project
Vault server: Vault name: Vault folder:	localhost AU2014 \$\Existing Project
Vault server: Vault name: Vault folder: SQL Server in	localhost AU2014 \$\Existing Project
Vault server: Vault name: Vault folder: SQL Server in SQL Server:	Iocalhost AU2014 \$\Existing Project
Vault server: Vault name: Vault folder: SQL Server in SQL Server: Database name	Iocalhost AU2014 \$\Existing Project formation mudforj-pc\plant e: ExistingProject
Vault server: Vault name: Vault folder: SQL Server in SQL Server: Database name	localhost AU2014 \$\Existing Project modforj-pc\plant e: ExistingProject
Vault server: Vault name: Vault folder: SQL Server in SQL Server: Database name	localhost AU2014 \$\Existing Project formation mudforj-pc\plant e: ExistingProject formation

When the window disappears, the project will be completely migrated and ready for you to use.

Create a new project.

Firstly, you will need to log in to the Vault. Select the Log In button on the Vault ribbon.



Enter your credentials on the Log In window. Then click OK.

Log In ×								
AUTODESK° VAULT								
Authentication:	Vault Account							
User Name:	FRODO							
Password:								
Server:	localhost 🗸							
Vault:	AU2014 ~							
	Automatically log in next session							
	OK Cancel <<							

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P3D Home Ir	nsert	Annotate	Manag	ge V	iew
	A	<i>م</i> ک	Ŭ,	Ļ	
Project Data Manager Manager	P&II Annot	D Assign ate Tag	Edit Block	Draw	L., (
Project Manage	er	P&ID		Sche	matic
📷 Open Project	R				
New Project		~	<u> </u>	<u>-</u>	
Project Setup			i i i i i i i i i i i i i i i i i i i	rce File	
P&ID Drawir Related Files	ngs wings			Sou	

Select New Project from the drop down menu on the Project panel.

On the first window of the Project Setup Wizard, enter the project details. Ensuring that the *Create this project in vault* check box is marked, and the *Vault folder path* is completed.

5	Pro	oject Setup Wizard (Page 1 of 6)
Specify	y general settings	s
Enter a nar	me for this project:	
New Vau	lt Project	
Enter an o	ptional description:	
New Vau	It Project for AU2014	
_		Vault folder path :
✓ Create	this project in vault:	\$/Projects
Local work	ing folder location:	
C:\AU201	4\Vault\	
Copy s	ettings from existing project ct project XML file:	From vault server
		<< Back Next >> Cancel

Move through the *Project Setup Wizard* as normal to complete the setup of the project in Vault.

Using the AutoCAD Plant 3D project with Vault

Open a Vault project.

Firstly, you will need to log in to the Vault. Click the Log In button on the Vault ribbon.



Enter your credentials on the Log In window. Then click OK.

	Log In	x
AUTODESK [®]	VAULT	
Authentication:	Vault Account	~
User Name:	FRODO	
Password:		
Server:	localhost	~
Vault:	AU2014 ~	
	Automatically log in next session	
	OK Cancel <	<

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Home In	sert Annotate	Manag	e View
5 🏼	/ ^A 🛷	Ū,	نے ب
Project Data Manager Manager	P&ID Assign Annotate Tag	Edit Block	Draw 🕒
Project	P&ID		Schemati
Drawing1*	× 🕂		
PROJECT MANAC	GER		
deleeete	~	🔊 🕅 -	·J
Open			iles
🖪 Open From Vault			
New Project			uno
deleeete			S
4 Existing Project			
4 AU Project 2			
C:\AU2014\Vault\AU	J Project 1\Project	.Xm	6
U4 Suncor Demo			N N
C:\SuncorVault\Proj	ect 1\Project.xml		lic [
44 2015Ext1_test			d d

From the Project Manager dropdown, select Open From Vault...

Select the project from the list and then click Open.

ault Location: lo	calhost			
Project Name	Project Description	Last Modified	Vault Folder Path	
AU Project 1		19/11/2014 11:40:54 p.m. by Administrator	\$/Projects/AU Project 1	
AU Project 2		19/11/2014 11:55:06 p.m. by Administrator	\$/Projects/AU Project 2	
AU Project 3		2/10/2014 12:42:24 a.m. by Frodo	\$/Projects/AU Project 3	
Existing Project	Existing Project for AU2014	24/11/2014 6:30:05 p.m. by Frodo	\$/Projects/Existing Project	
ocal workspace:				
cal workspace:	\Existing Project			Change

Create new drawings and add to Vault.

Create new drawings in the project manager as normal. These will appear in the project manager with a Vault icon beside them. The initial Vault icon defines the drawing as "Not in Vault".



Project		Γ	[+1[Top][2D Wireframe]
Existing Project	gs 00 4-PID1		
🔁 🔁 AU201	Open		
🔁 🚰 AU201	Open Read-only		
🖕 🔤 🔁 AU201	Add Work History		
🔁 🔁 AU201	Remove Drawing		
🚽 🔁 🔛 AU201	Rename Drawing		
Related File:	Locate Drawing		
	Refresh Xref List		
	Vault •		Refresh from Vault
	Data Manager		Check In
	Validate		Get / Check Out
Details	Publish		Undo Check Out
Status: File is acces	Export to AutoCAD		New Revision
Number:	Drawing Autogen Properties		Delete Workspace File
Name: AU2014-PIC	Properties		Ŷ
File location: C:\AU File is locked by us	2014\Vauit\Existing Project er 'mudforj' on machine 'Mag		

To add the drawings to Vault, you can either right mouse click on the drawing in the project manager and select Vault>Check In

Or when you have the drawing active on the screen, click Check In.



When the Check In window appears, you can select the following options: *Keep files checked out:* This will add the current version of the drawing to the Vault but keep it checked out for continued changes. This will delete the local copy of the drawing after the check in. Include comments with the check in. These comments will appear in the Vault. Delete working copies: Comments:

		Check In - AU2014-PID1.dwg	
_	Geep files checked out	t	
	elete working copies		
<u> </u>	Name	Vault Path	File Size
~	AU2014-PID1.dwg	\$/Projects/Existing Project/PID DWG/AU2014-PID1.dwg	256.13 KB
<			>
< file	s / 256.13 KB		>
< file	s / 256.13 KB ments to include with	this version:	>
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Ensure the file is checked in the list, and then click OK.

Take note that the Vault icon has changed.



If you would prefer to check in a bulk lot of drawings at the same time, you can right mouse click on any of the higher level nodes in the project manager and go through a similar process.

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This will check in all drawings at the lower level, which are checked out to you only.

Inside Vault.

In the Vault Explorer, you can navigate to the project and you will notice that the files are now in the Vault.

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Checking out the drawing.

Back in AutoCAD Plant 3D, a user checks out a file by opening the file and clicking the *Check Out* button on the File panel.



The Project Manager in AutoCAD Plant 3D will show the user that the file is checked out to them by displaying a different icon. Files that are checked out to other users will also be displayed in the project manager.



Vault Explorer will also show that the files that are checked out.

When the file is checked out from the Vault, the user that has current ownership of the file can work on the file as normal. Saving will save the file to the local workspace.

A user can Synchronize to Vault, any changes that have been made on their local workspace. This will update the Vault and central database with the latest information, yet retain the ownership/check out of the files. This is something that should be done on a regular basis.

To run the synchronization, click the Synchronize to Vault button on the Project panel.



It is also recommended that each user runs the Refresh from Vault command regularly to capture the changes that have been synchronized by other users.

To run the refresh, click the Refresh from Vault button on the Project panel.



Clear the local workspace.

The local workspace can become over run with files that are n longer necessary to retain. The drawing files can be cleared from the local workspace via the project manager. It is possible to clear the files individually or by an entire folder or node.

To clear the workspace by selecting individual files, right mouse click on a file, select Vault>Delete Workspace File



This will remove the single file from the workspace.

The other option to clear the local workspace is to select the higher level node and go through the same process. This will clear the entire set of files below that level, from the local workspace.

Changing the lifecycle state of the file.

Changing the file to the next state in the lifecycle is done within Vault Explorer. Select the drawings that you want to change the lifecycle state, and click *Change State*

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In the Change State window, select from the drop down at the top right, the new lifecycle state.

Change State - Multiple Files								
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Depending on the lifecycle state and its settings, files may become locked to users.



The process of changing the lifecycle state is repeated, and changed to the desired state. Some lifecycle states are set for only certain groups or users to control. As a file is moved through the lifecycle states, it will eventually come to a released state. The revision of the file is also set inside Vault.

If a change is required on a drawing, the file must be change back to a lifecycle state that is allowed to be checked out for changes. During this lifecycle change, the revision can also be bumped to the next number.

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This process repeats itself throughout the design project.