

Autodesk User Conference 2016 Powered by **cadline**



Building & Infrastructure User Conference

Technical Masterclass:
Vault and Common Data Environment

Presented by: Chris Turner, Industry Specialist



Autodesk Vault and Common Data Environment (CDE)

The Common Data Environment (CDE) is an important component of projects delivered that follow the BS1192 and PAS1192:2 procedures. In this session we demonstrate the information security, workflow and tracking features of Autodesk Vault Professional that are needed to deliver a CDE.

Objective of the session:

Common Data Environment (CDE)

On a typical construction project, a lot of information is produced. The data is often: -

- Unstructured.
- Poorly co-ordinated.
- Hard to find.

A different approach is needed to remove the inefficiencies that are inherent to the traditional way that we manage design data. The first step is to implement a COMMON DATA ENVIRONMENT (CDE). A CDE can be used to structure and organise digital data so it can be collected, managed and shared effectively within your teams. The British Standards PAS 1192-2 document, outlines how to deliver projects at BIM Level 2 and the CDE is very much a part of this.

Using the Autodesk Vault for your CDE, we can set up and configure: -

- Common working areas.
- Projects to be shared.
- Controls for various status codes such as work in progress, shared, published and archived.
- How data passes through these gates with compliance at each point, allowing data to flow between areas.

Furthermore, Vault revision control can be used so you can automatically capture the revision history of your files as you work.





Chris Turner

Industry Specialist

Meet the Presenter

Chris is an Industry Team Leader. Responsibilities include data management consultancy solutions, customer training, technical support and team management.

With 30 years technical, business and sales experience in the CAD industry, Chris has worked with some varied products. Initially trained on the Intergraph 3D systems back in 1985, he moved into working, training and supporting the high end Computervision products in South Africa. His first touch on Autodesk products was on AutoCAD with Designer and AutoSurf add-ons and not long after that championed Autodesk Mechanical Desktop.

Since moving to the UK in 1999, Chris joined Autodesk Distribution and was heavily involved directly with the Autodesk team on launching their new manufacturing product 'Rubicon' which later became Inventor. This involved training and developing Autodesk channel partners that market and support Autodesk manufacturing solutions today. After 6 years working with Autodesk, Chris joined Cadline in 2005 and together with a great team of industry specialists, he has enjoyed working with many customers who have successfully implemented Autodesk Inventor and data management solutions.

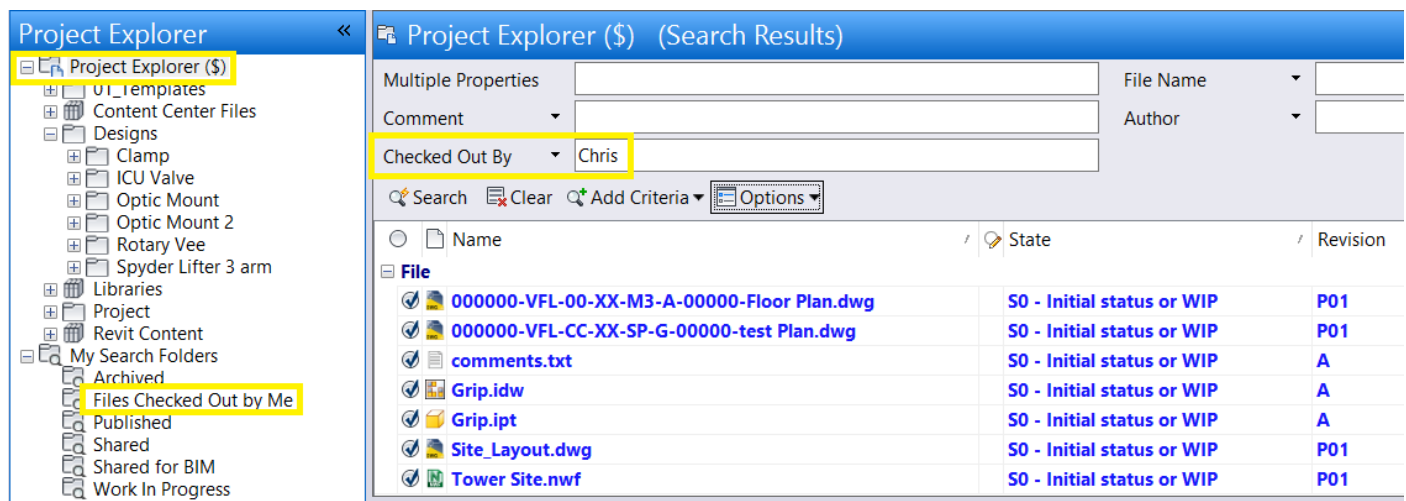


Guidance notes:

Autodesk Vault – Search for Checked Out Files

I've often had the case (and have been asked) where I can find out which files I have 'checked out' of the Vault. This is common practice, especially if you want to check daily or weekly which files are checked out and which ones need to be checked back in or to use 'Undo Check Out' etc.

With Vault you have some very powerful tools for searching the database. This is of course one of the biggest benefits to using Vault, even if you are just using Vault Basic. Simply do an Advanced Search for 'Checked Out By' your 'Username'. It really is that quick and simple.



The screenshot shows the Autodesk Vault Project Explorer interface. On the left, the 'Project Explorer (\$)' tree is visible, with 'Files Checked Out by Me' highlighted. The main pane, titled 'Project Explorer (\$) (Search Results)', displays search criteria: 'Checked Out By' set to 'Chris'. Below the criteria, a table lists search results:

Name	State	Revision
000000-VFL-00-XX-M3-A-00000-Floor Plan.dwg	S0 - Initial status or WIP	P01
000000-VFL-CC-XX-SP-G-00000-test Plan.dwg	S0 - Initial status or WIP	P01
comments.txt	S0 - Initial status or WIP	A
Grip.idw	S0 - Initial status or WIP	A
Grip.ipt	S0 - Initial status or WIP	A
Site_Layout.dwg	S0 - Initial status or WIP	P01
Tower Site.nwf	S0 - Initial status or WIP	P01

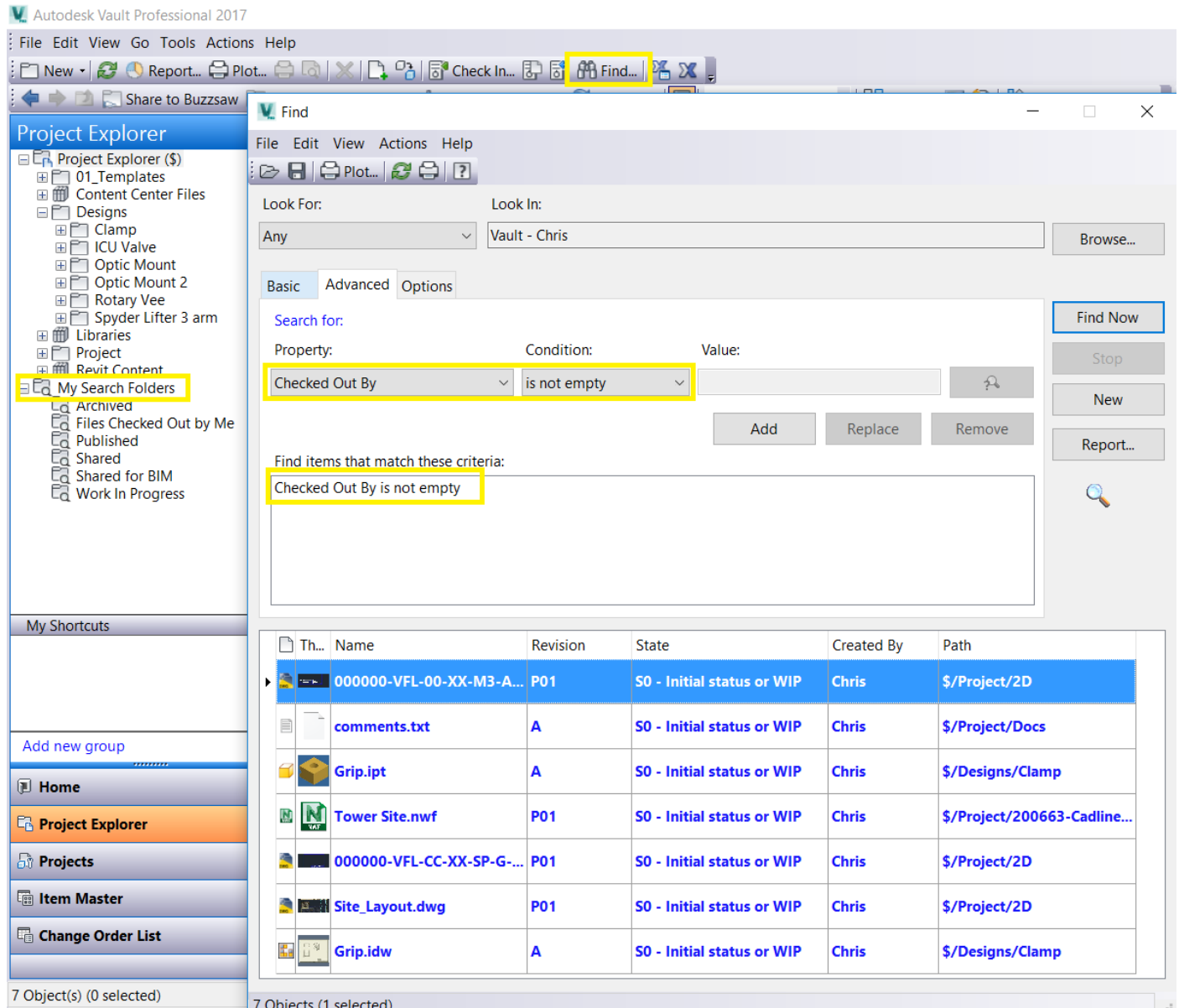
A great TIP is to make sure you SEARCH from the top folder! In my case above, I searched the entire Vault from \$.

Also note how I **saved this search** and I can then use it anytime to find out which files I have 'Checked Out'. The Saved Searches are 'LIVE' so you will always get the latest information.

Using this method is great, but what about if I want to **search for ALL files 'Checked Out' of the Vault by ALL users?**



You can use the FIND Tool at the top of the Vault toolbar and setup a Vault Advanced Search. Just set the criteria to FIND files whose Property 'Checked Out By' condition is set to 'is not empty'.



Autodesk Vault Professional 2017

File Edit View Go Tools Actions Help

Look For: Any Look In: Vault - Chris

Basic Advanced Options

Search for:

Property: Checked Out By Condition: is not empty Value:

Add Replace Remove

Find items that match these criteria:

Checked Out By is not empty

Find Now Stop New Report...

Th...	Name	Revision	State	Created By	Path
	000000-VFL-00-XX-M3-A...	P01	S0 - Initial status or WIP	Chris	\$/Project/2D
	comments.txt	A	S0 - Initial status or WIP	Chris	\$/Project/Docs
	Grip.ipt	A	S0 - Initial status or WIP	Chris	\$/Designs/Clamp
	Tower Site.nwf	P01	S0 - Initial status or WIP	Chris	\$/Project/200663-Cadline...
	000000-VFL-CC-XX-SP-G...	P01	S0 - Initial status or WIP	Chris	\$/Project/2D
	Site_Layout.dwg	P01	S0 - Initial status or WIP	Chris	\$/Project/2D
	Grip.idw	A	S0 - Initial status or WIP	Chris	\$/Designs/Clamp

7 Object(s) (0 selected) 7 Objects (1 selected)

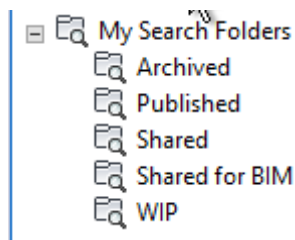
Again, **save the Search** and then you can use it any time.

Sometimes spending a few minutes just setting up your display, saving a few searches etc. can save you a HUGE amount of time. These settings are relative to the Vault Client only, so everyone can setup up their own Vault layout as they choose.

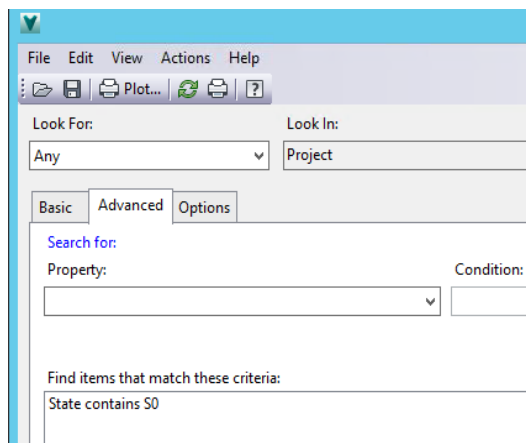


VAULT SEARCHING using PAS1192 Status Codes.

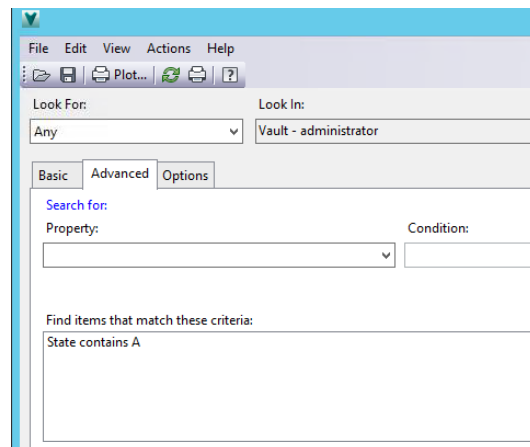
Vault searching is a very powerful feature, why not save searches so you can easily find quickly what you regularly need. A few examples of this could be setting up searches for all files that are currently in Work In Progress, or Published...



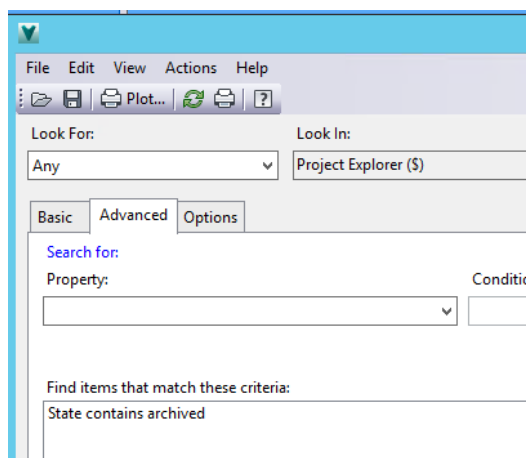
WIP



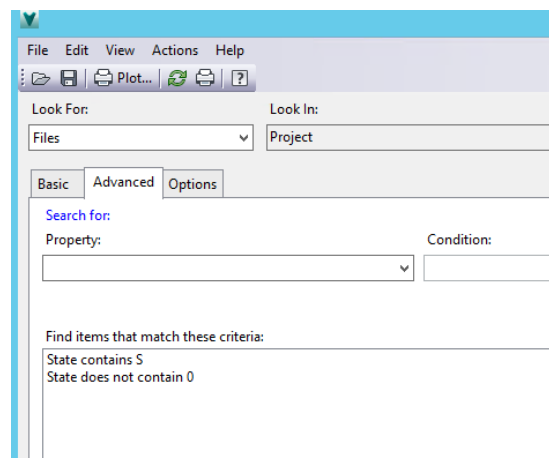
PUBLISHED



ARCHIVED

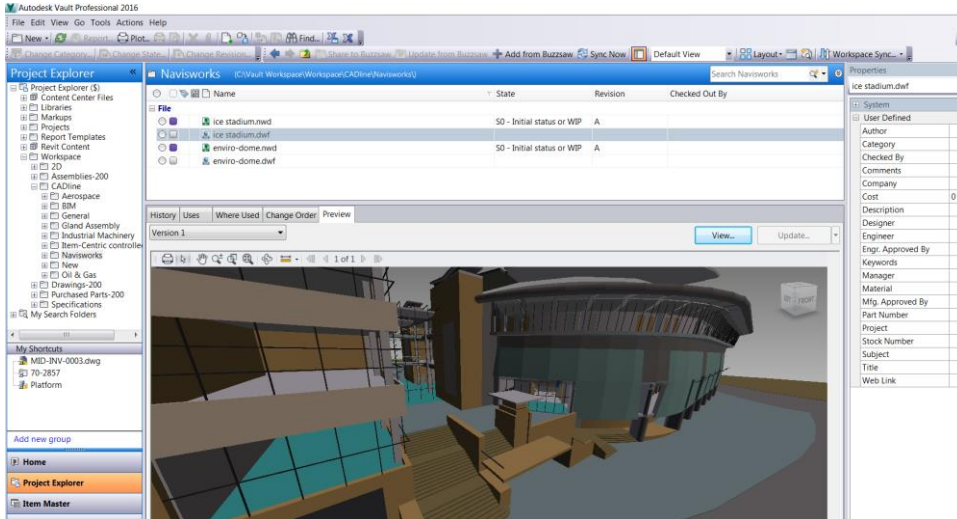


SHARED

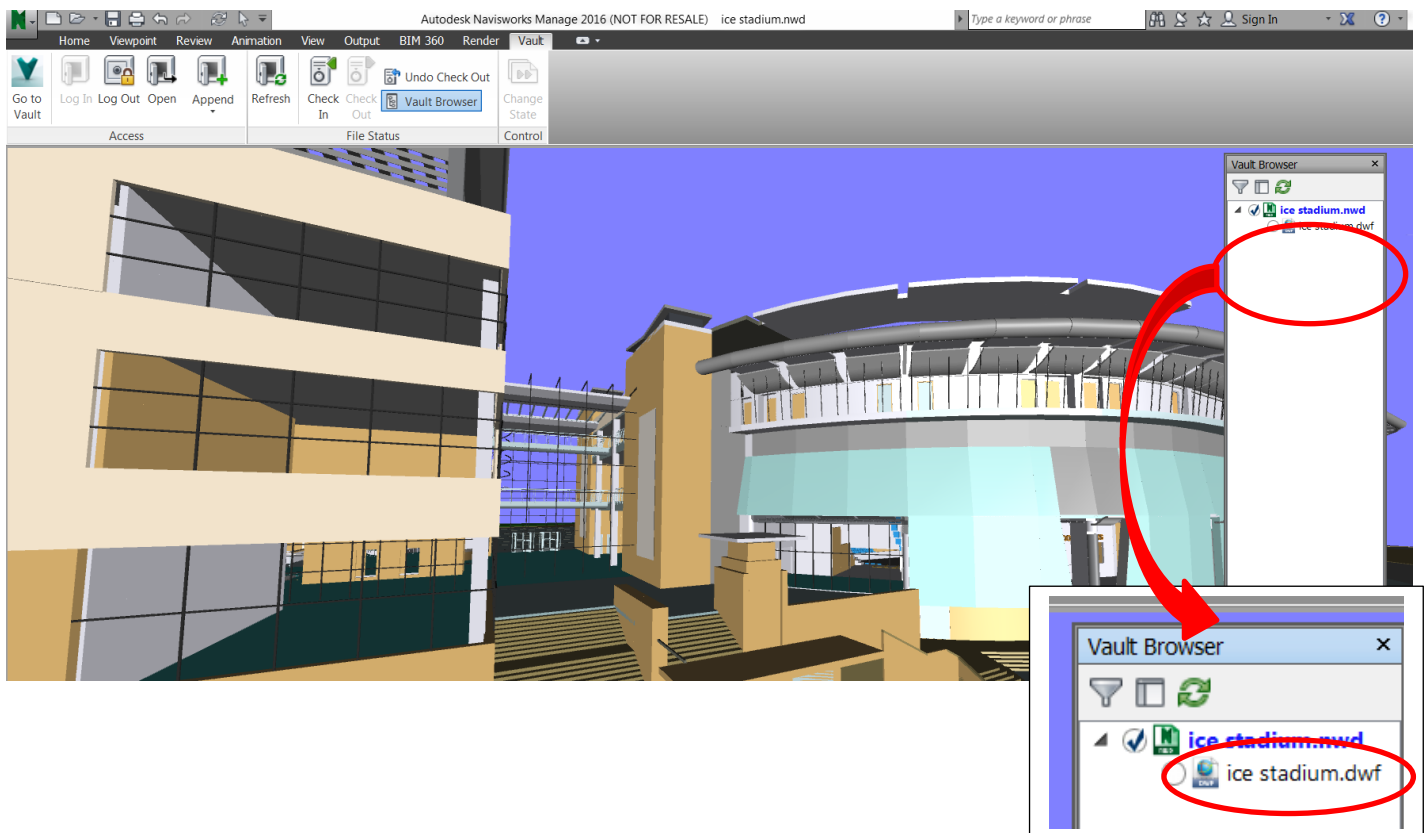




VAULT – WORKING WITH NAVISWORKS



Navisworks is one of many CAD products supported for Autodesk's Vault data management solutions. Read on to read my simple tip to connect DWF3D images that are not auto-generated via the check-in process ...

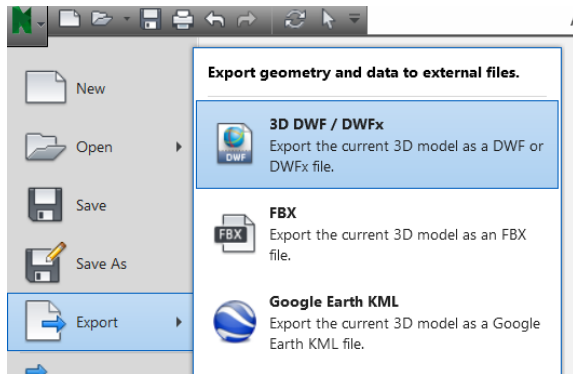


The common application Vault ribbon allows the usual easy to operate check-in / check-out routines, plus lifecycle management directly from Navisworks; but notice in the image above the linked dwf file defined in the Vault Browser.

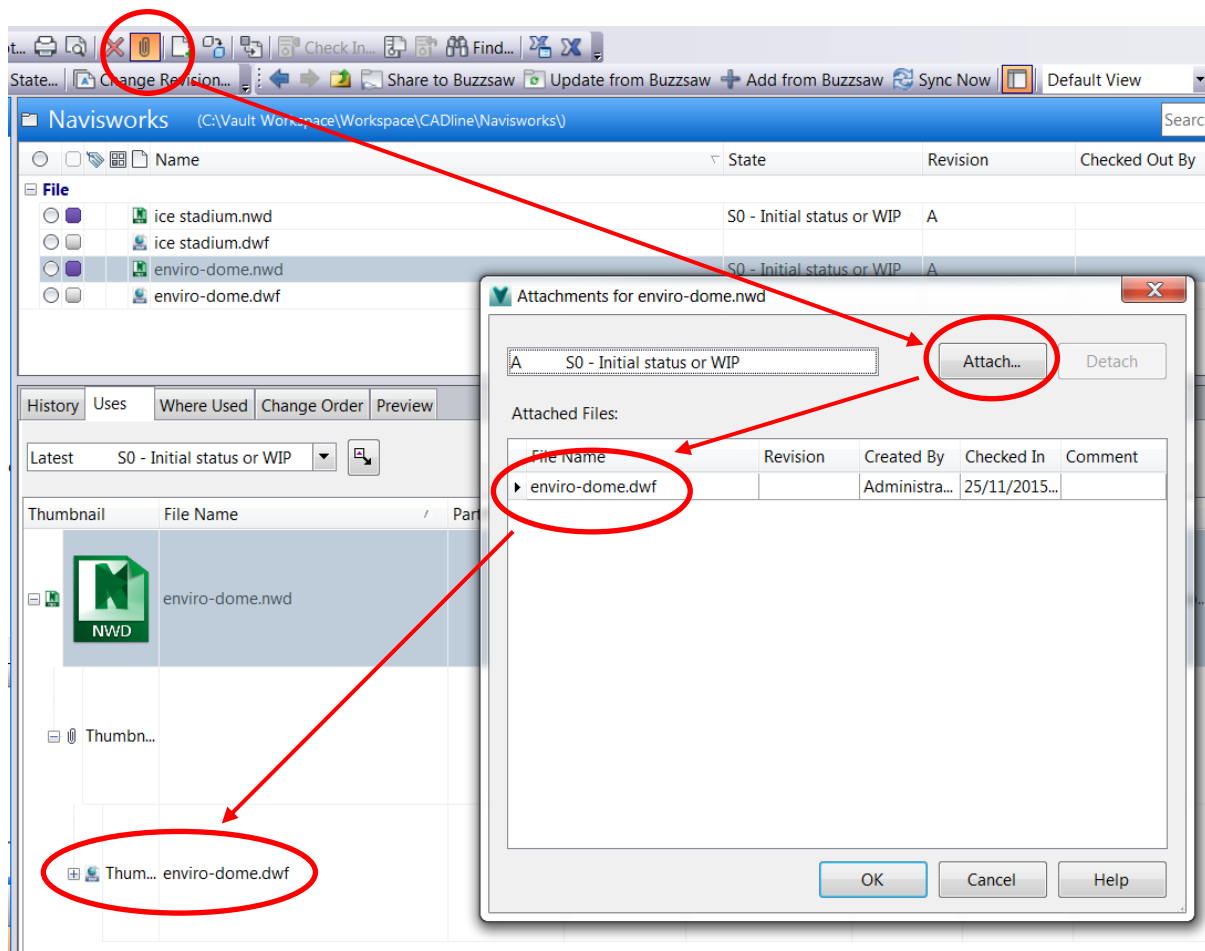


To create, check-in and link the dwf, follow the 3 simple steps below:

1. Export the Dwf / Dwfx (remember where you save the file!).
Application button > Export > 3D DWF / DWFX

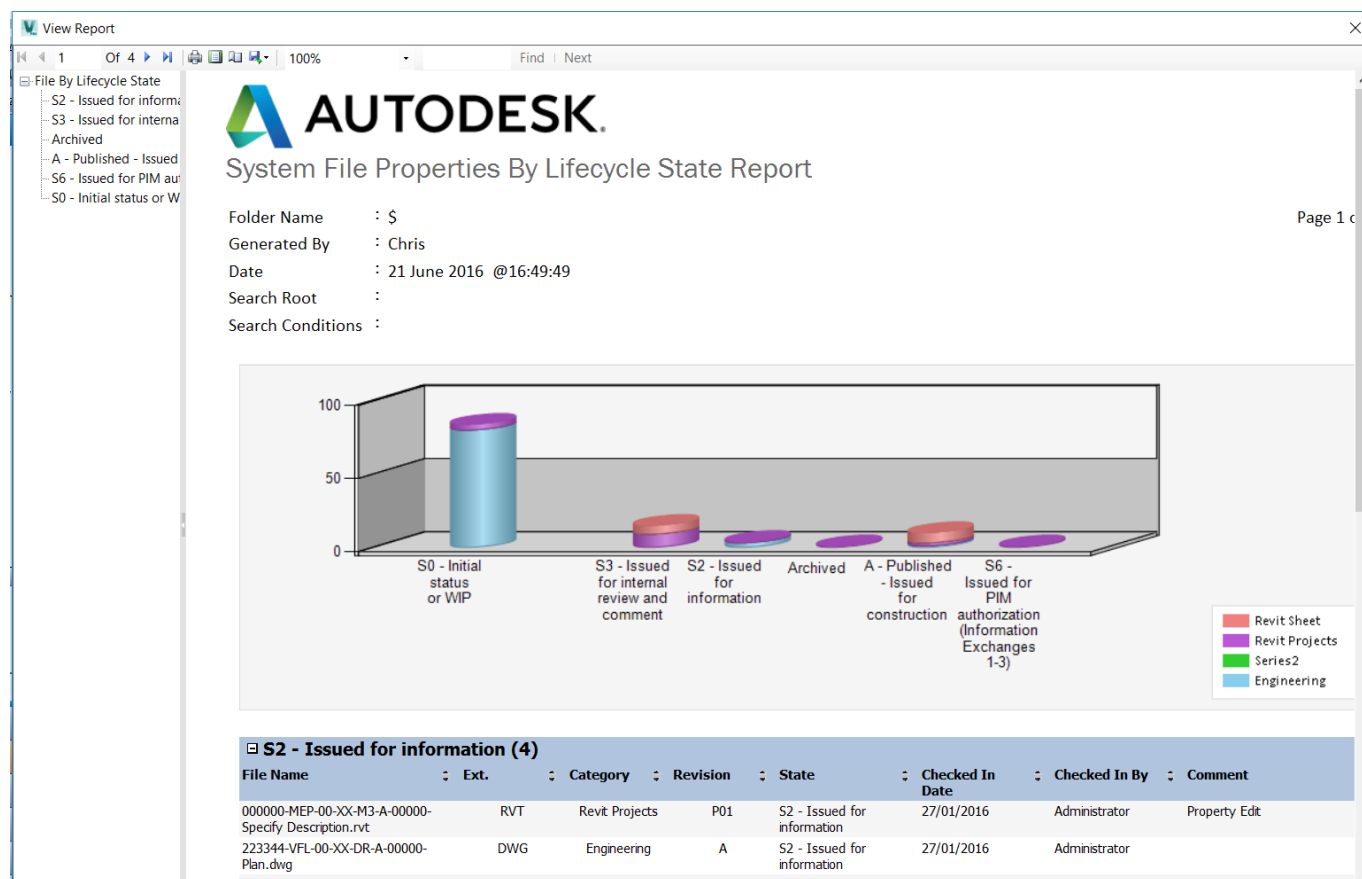


2. Check-in the DWF/ DWFX (drag-and-drop to the nominated folder is probably the easiest method).
3. Link the DWG / DWFX to the Navisworks , NWD file using the Attach tool. Note when attached, the DWF will be featured as child in the hierarchy on the 'Uses' tab.



VAULT REPORTS

Vault comes pre-populated with some default reports which are useful. These include a list of files, ordered by state.



You can also customise your own as we have done here, the report lists I can check which files have compliant names.



File Name Compliance Report

Folder Name : \$/Project
 Generated By : administrator
 Date : 4/12/2016 2:11:34 PM
 Search Root :
 Search Conditions :

Compliant Revit Projects

File Name	Originator	Last Edited By	Check In Date	Compliance
000000-VFL-00-XX-M3-A-00000-Test Description.rvt	Administrator	Administrator	4/11/2016 2:00:54 PM	Passed
123456-VFL-00-XX-M3-A-00000-Main_Building.rvt	Administrator	TTM	1/27/2016 12:56:25 PM	Passed
000000-MEP-00-XX-M3-A-00000-Specify Description.rvt	Administrator	Administrator	1/27/2016 12:01:45 PM	Passed
000000-VFL-00-XX-M3-A-00006-Specify Description.rvt	Administrator	Administrator	1/27/2016 10:58:30 AM	Passed
000000-VFL-00-XX-M3-A-00004-Specify Description.rvt	Administrator	Administrator	1/27/2016 10:58:30 AM	Passed
000000-VFL-00-XX-M3-A-00003-Specify Description.rvt	Administrator	Administrator	1/27/2016 10:58:29 AM	Passed
000000-VFL-00-XX-M3-A-00002-Specify Description.rvt	Administrator	Administrator	1/27/2016 10:58:29 AM	Passed
000000-VFL-00-XX-M3-A-00001-Specify Description.rvt	Administrator	Administrator	1/27/2016 10:58:28 AM	Passed

Non-Compliant Revit Projects

File Name	Originator	Last Edited By	Check In Date	Compliance
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Make sure you check out Cadline Community for some tips on doing this and seeing other useful information on Vault.

<https://www.cadlinecommunity.co.uk/hc/en-us/articles/201886342-Vault-2015-Reporting-on-a-saved-search>

<https://www.cadlinecommunity.co.uk/hc/en-us/articles/202299682-Autodesk-Vault-2015-Send-files-with-customized-transmittal-report>

Reference and Links:

Thank you to Kim Hyde at Cadline for his supporting documents and blogs on Cadline Community

www.cadlinecommunity.co.uk

VAULT – WORKING WITH NAVISWORKS

<https://www.cadlinecommunity.co.uk/hc/en-us/articles/206013422-Vault-Working-with-Navisworks>

Autodesk Vault – Search for Checked Out Files

<https://www.cadlinecommunity.co.uk/hc/en-us/articles/201746842-Autodesk-Vault-Search-for-Checked-Out-Files>



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