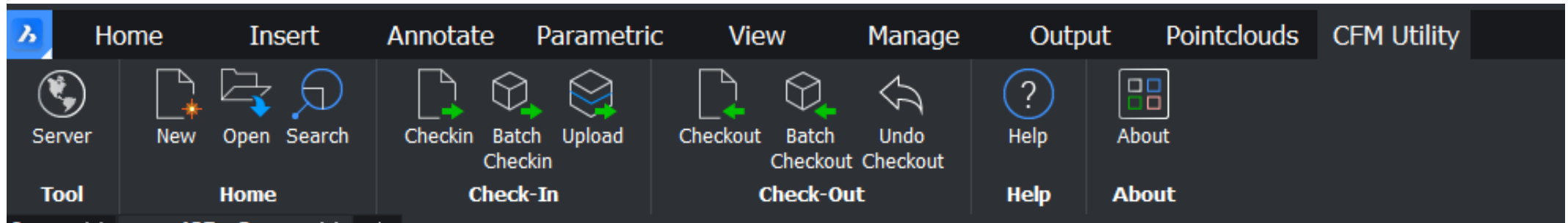


Technical Document – CFM Utility

- BricsCAD

What is CFM Utility?

- CAD File Manager (CFM) utility is a client-based application developed by CADOpt that provides a common data link between a BricsCAD and a Windchill server.
- The core capability of the CAD File Manager (CFM) utility allows you to manage your CAD data within the BricsCAD.
- When the BricsCAD is connected to the CAD File Manager (CFM) utility, several PDM commands, such as Check In and Check Out, are embedded within BricsCAD to enable you to interact with Windchill without having to leave the CAD environment.
- Refer below image of CFM Utility in BricsCAD.



- CFM Utility is developed as Standalone VB.net application. It requires basic license of BricsCAD Lite.
- CFM Utility will work without support of BricsCAD VBA, BricsCAD .NET. So, CFM utility will work with Basic license of BricsCAD Standard version.
- CFM Utility will work with BricsCAD Pro as well.
- Refer below info regarding BricsCAD compatible,

BricsCAD Lite is highly compatible with AutoCAD® LT 2022

There's no need to change your printers, templates, blocks or sheet set layouts to move to BricsCAD – they are fully compatible. Command names, aliases, and system variables are the same in BricsCAD and AutoCAD®. BricsCAD is based on native DWG for the highest compatibility with other CAD users across all industries.

- ✓ Command compatible
- ✓ Menu (.CUI, .CUIX) compatible
- ✓ Macro/script compatible
- ✓ Support file (.PC3, .LIN, .PAT, .DWT, .SSM) compatible
- ✓ Based on 2018 DWG technology

AutoLISP Support

BricsCAD Lite fully supports LISP, and is compatible with AutoCAD®'s AutoLISP format, making it simple to reuse existing routines. Our advanced BLADE LISP environment allows you to quickly develop customizations that can slash the time it takes for repetitive drafting tasks.

[Explore our Developer Reference](#)



Why use Lisp?

Lisp routines are the easiest way to automate processes and workflows for bulk layer manipulations, changing entity properties, automate drawing and XREF relationships, standardize plotting and publishing workflows, etc.

[Click here for the sample Video](#)

- CAD File Manager (CFM) utility requires Core PDM functionalities which will be bundled with Windchill Base license.
- CFM Utility requires basic license of Windchill Base license, and it can also work with Windchill Advanced & Windchill Premium as well.
- Refer below image which covers functionalities of Windchill base package,

Windchill Base

Base Package

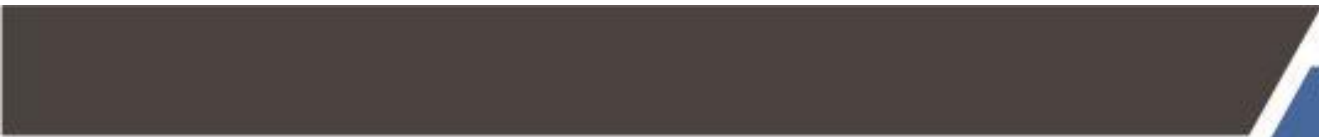
- Core PDM
- Visualization (AR, 3D, 2D)
- Design Collaboration
- Project Planning/Execution
- Doc Management
- Business systems Integration
- Change Mgmt.
- PTC Non-CAD Integration
- Creo View Lite

- Refer below image from PTC Licensing Basis table document (rev. December 2020) which refers licensing terms.

(1) Integrations. If the Customer creates an interface or otherwise enables real time or automated access between a Windchill implementation and a system of non-PTC software, all users in the Windchill system must have either a ThingWorx Navigate View, ThingWorx Navigate Contribute, Windchill Base, Windchill Advanced, or Windchill Premium license.

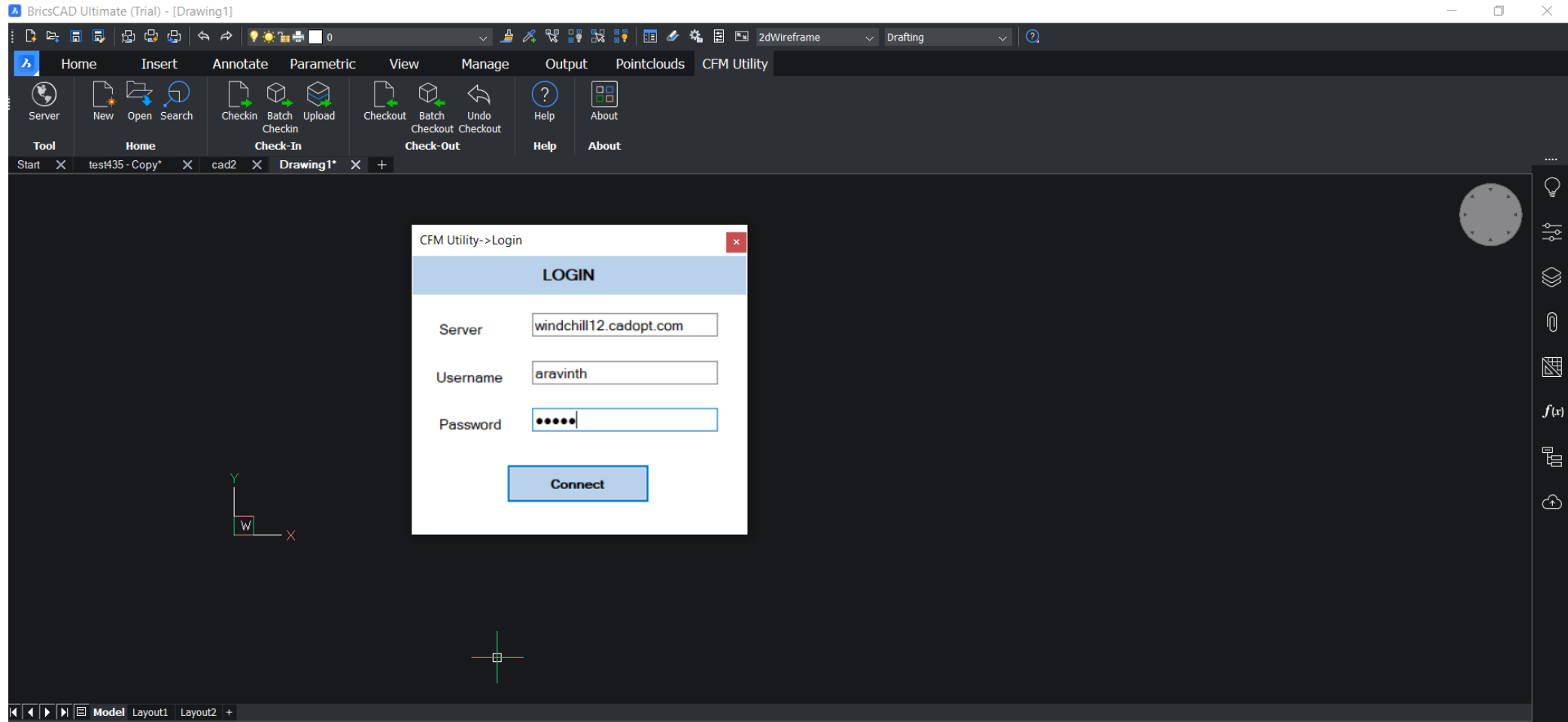


CFM Utility Functionalities



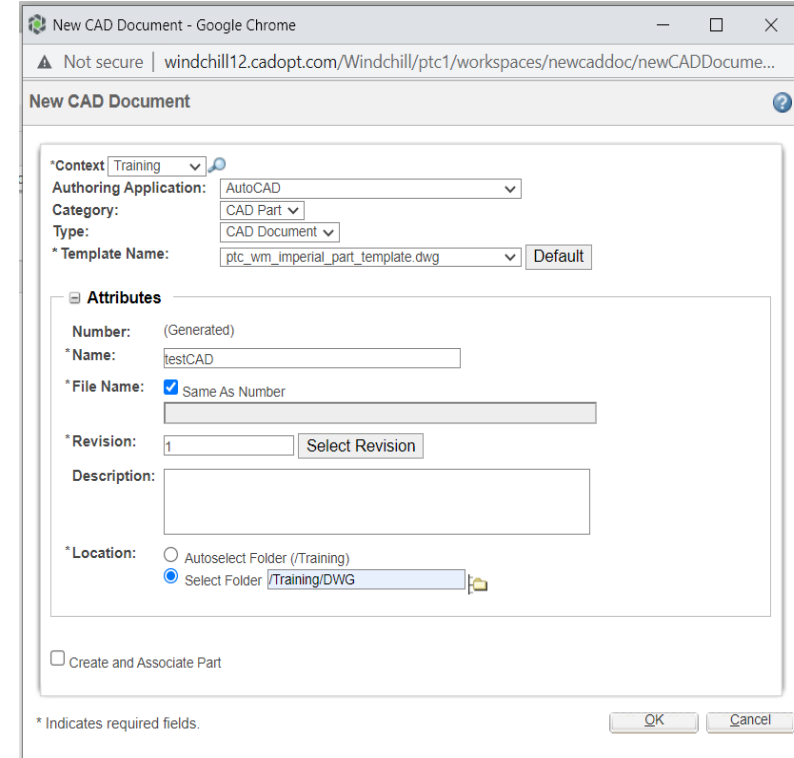
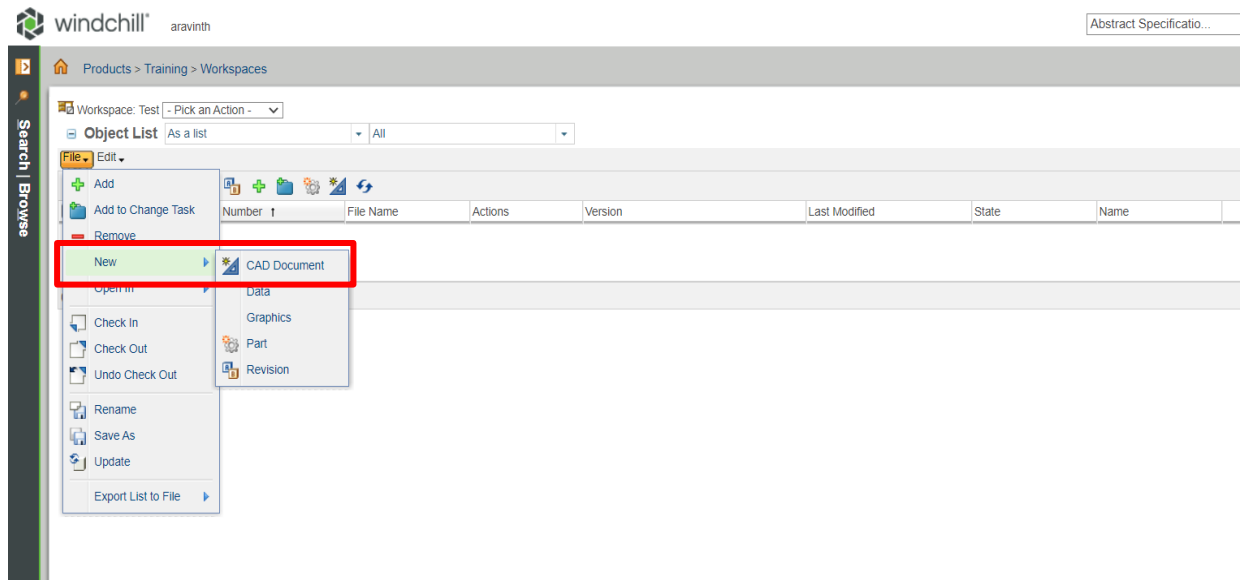
Windchill Login

- Login with Windchill Credentials



New CAD Document

- Create a new dwg drawing by(File-> New->CAD Document) New CAD Document option which is available in Workspace via browser.
- Enter all required attribute details.



The 'New CAD Document' dialog box is shown. It contains the following fields and options:

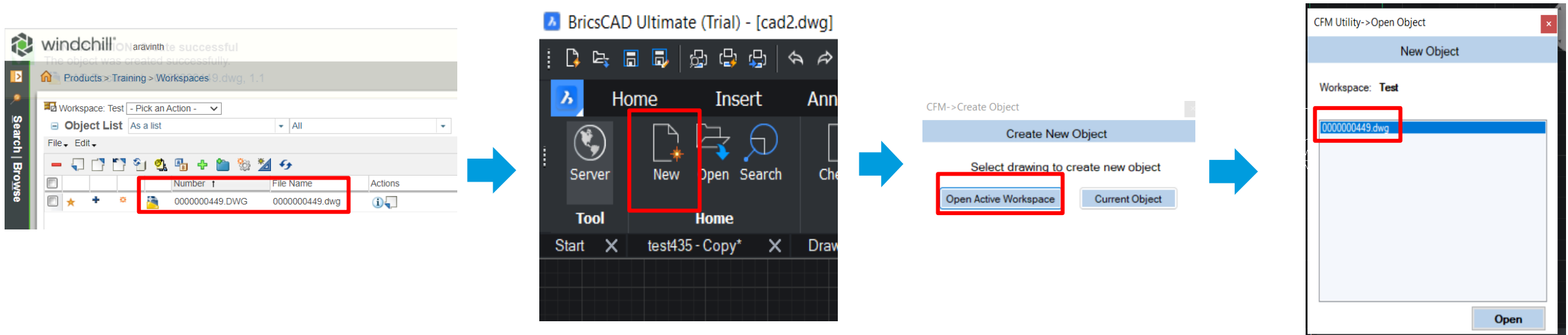
- *Context:** Training
- Authoring Application:** AutoCAD
- Category:** CAD Part
- Type:** CAD Document
- *Template Name:** ptc_wm_imperial_part_template.dwg (Default)
- Attributes:**
 - Number:** (Generated)
 - *Name:** testCAD
 - *File Name:** ☒ Same As Number
 - *Revision:** 1 (Select Revision)
 - Description:**
 - *Location:** ☐ Autoselect Folder (/Training) ☒ Select Folder (/Training/DWG)
- ☐ Create and Associate Part

* Indicates required fields.

OK Cancel

New CAD Document (cont.)

- Once CAD document is created, retrieve created dwg directly in BricsCAD by picking New CAD Object icon.
- Then it will list newly created DWG from active workspace.
- Once it is opened, do the required drafting & Check-in the drawing.



New CAD Document (cont.)



- After new drawing check-in to windchill, provided attributes will be updated.

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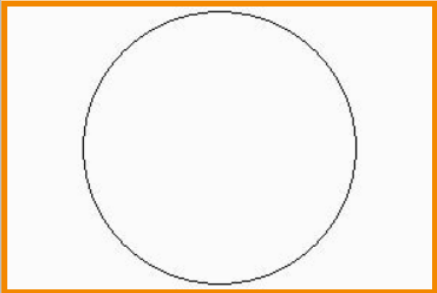
Products > Training

Actions

CAD Part - 0000000449.dwg, 1.1

DetailsContentRelated ObjectsChangesHistory

Visualization and Attributes | More Attributes



Visualization and Attributes

File Name: 0000000449.dwg

Number: 0000000449.DWG

Name: testCAD

Status: Checked in

Modified By: aravinth

Last Modified: 2022-03-25 17:06 IST

General

Version: 1.1

Generic: No

Authoring Application: AutoCAD

Instance: No

Type: CAD Document

Missing Dependents: No

Document Category: CAD Part

Incomplete Object: No

Document Subcategory:

Description:

Checkin Comments: add circle

Object Specific

PART_NAME:

SM_PARTNO:

EXISTING_REVISION:

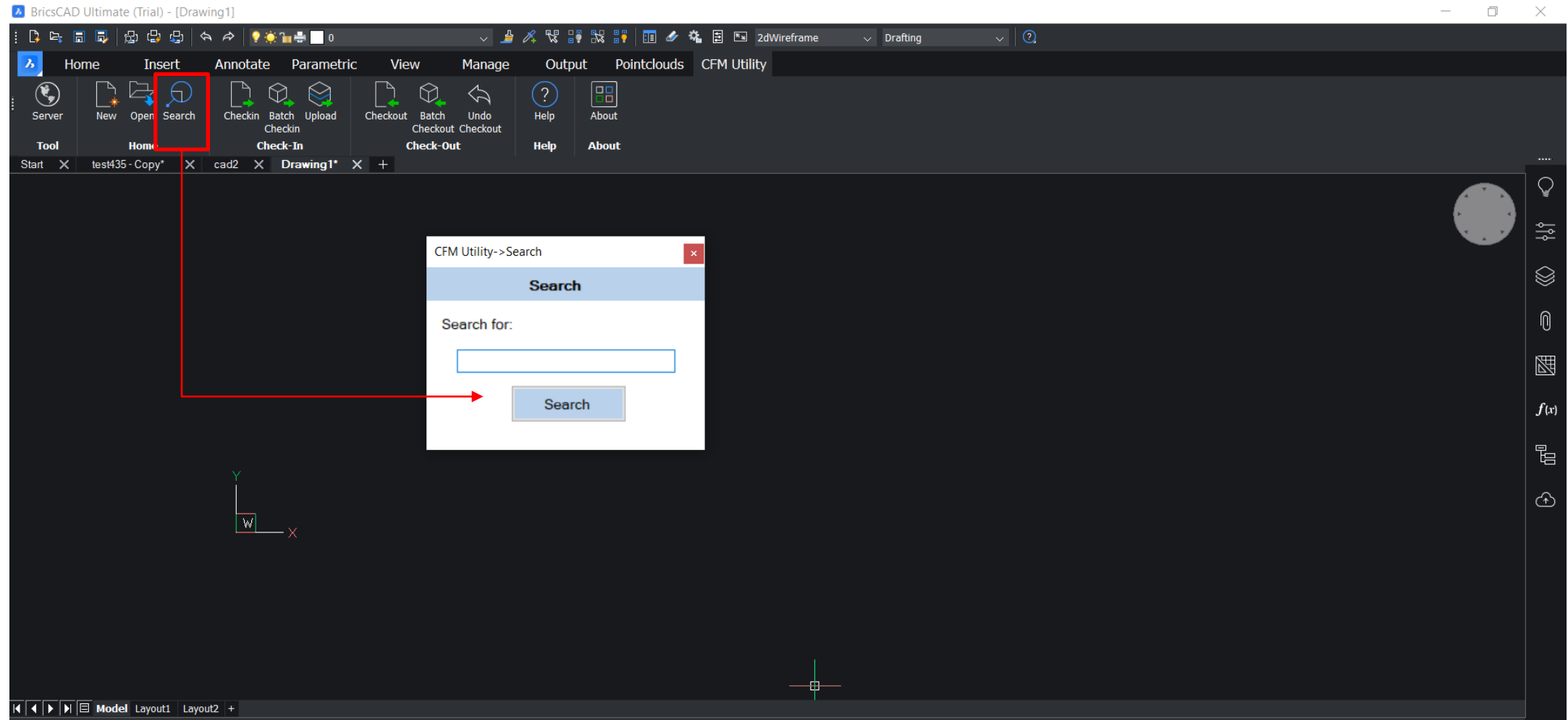
NEW_REVISION:

SUPPLY_TYPE:

TYPE:

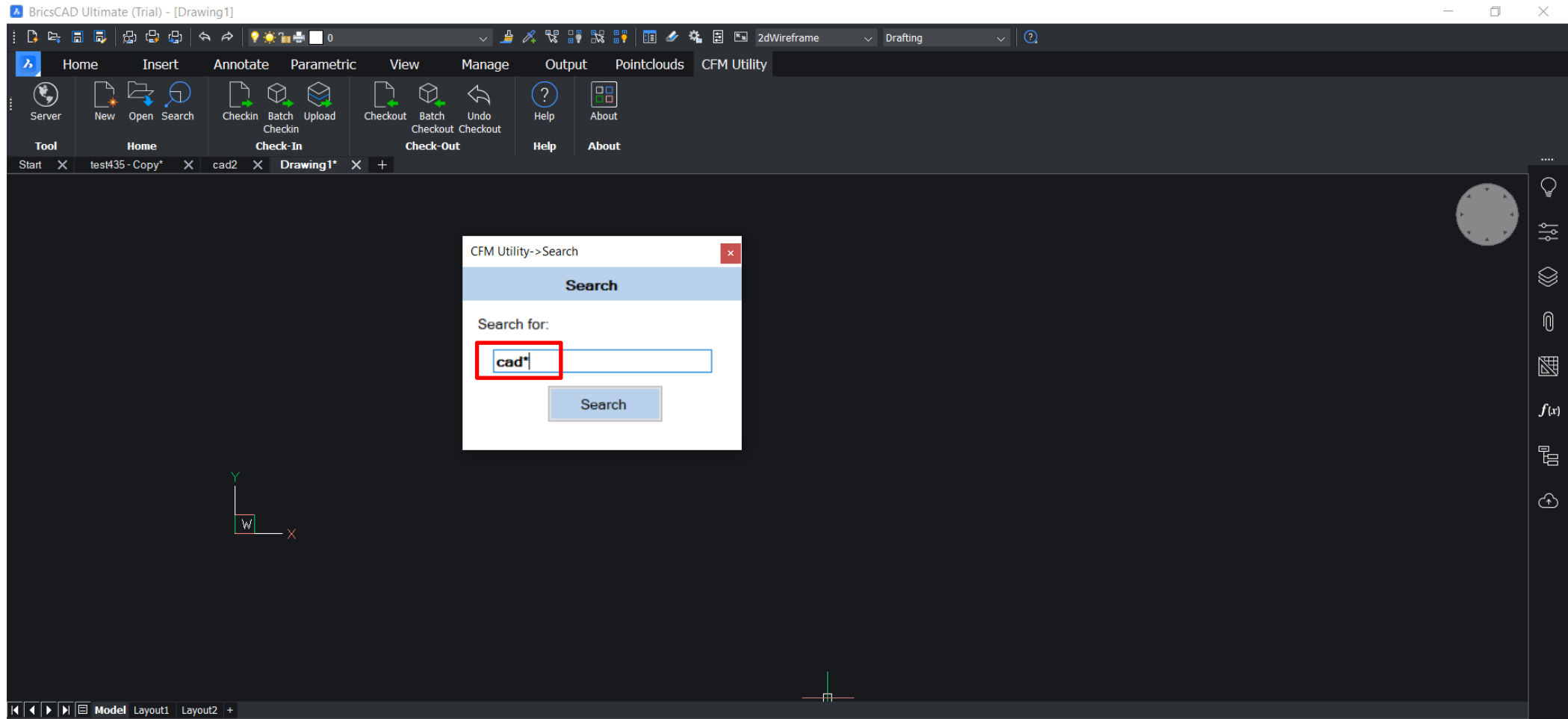
Drawing Search

- Search for required drawing number




Drawing Search

- Search for required drawing number



- Selected drawing in Windchill

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Abstract Specificatio...

Products > Training

Actions Folder - DWG

Folders (5 objects)

Search in selected folder

Name ↑

Training

Creo

DWG

Promotion Requests

SM Testing

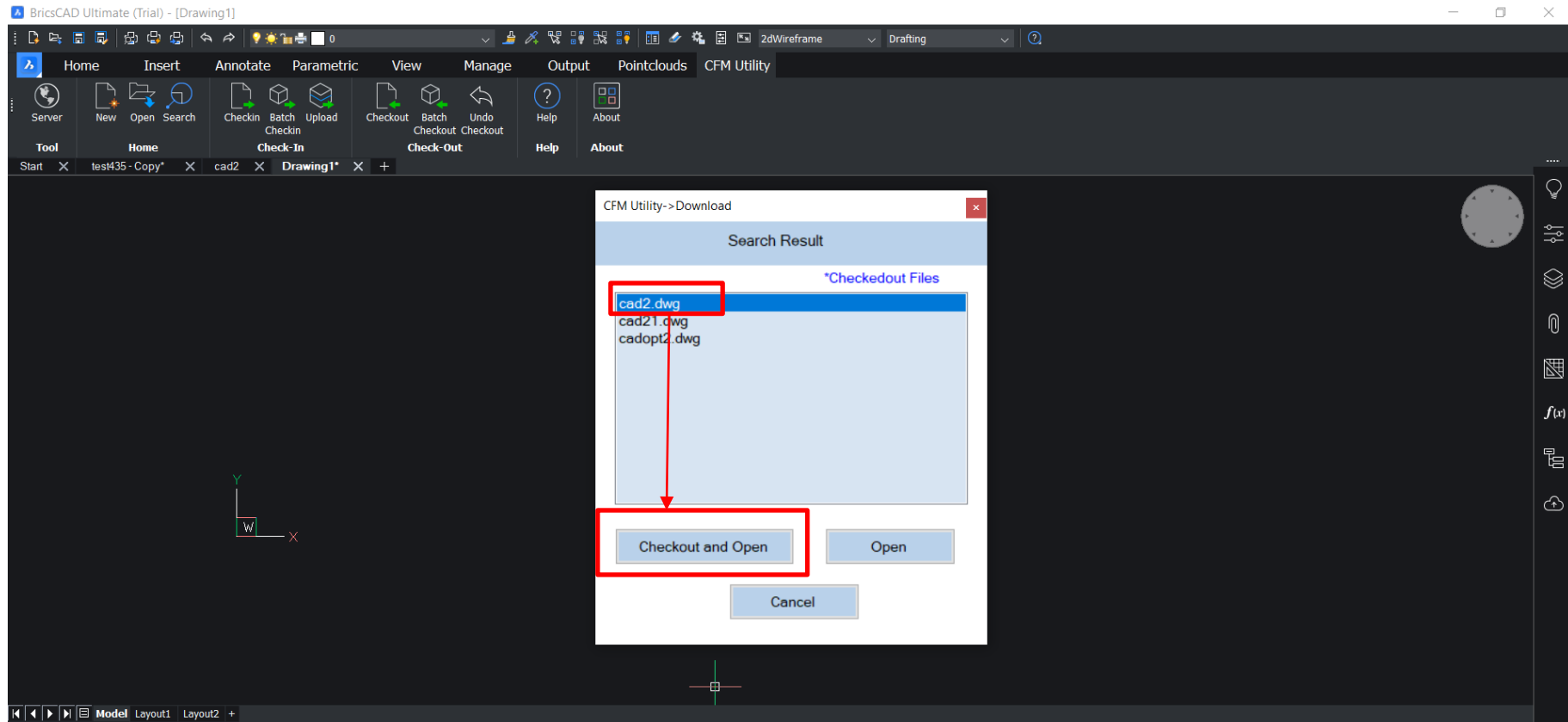
Folder Contents All

Actions

		Number	Name		Version	State
		0000000448	democad		1.1	Design
		0000000021	cad2		2.19	Design
		0000000446	cad21		1.1	Design
		0000000263	cadopt2		1.5	Design
		0000000445	test23		1.1	Design
		0000000442	0000423		1.2	Design
		0000000438	00000004041		1.1	Design

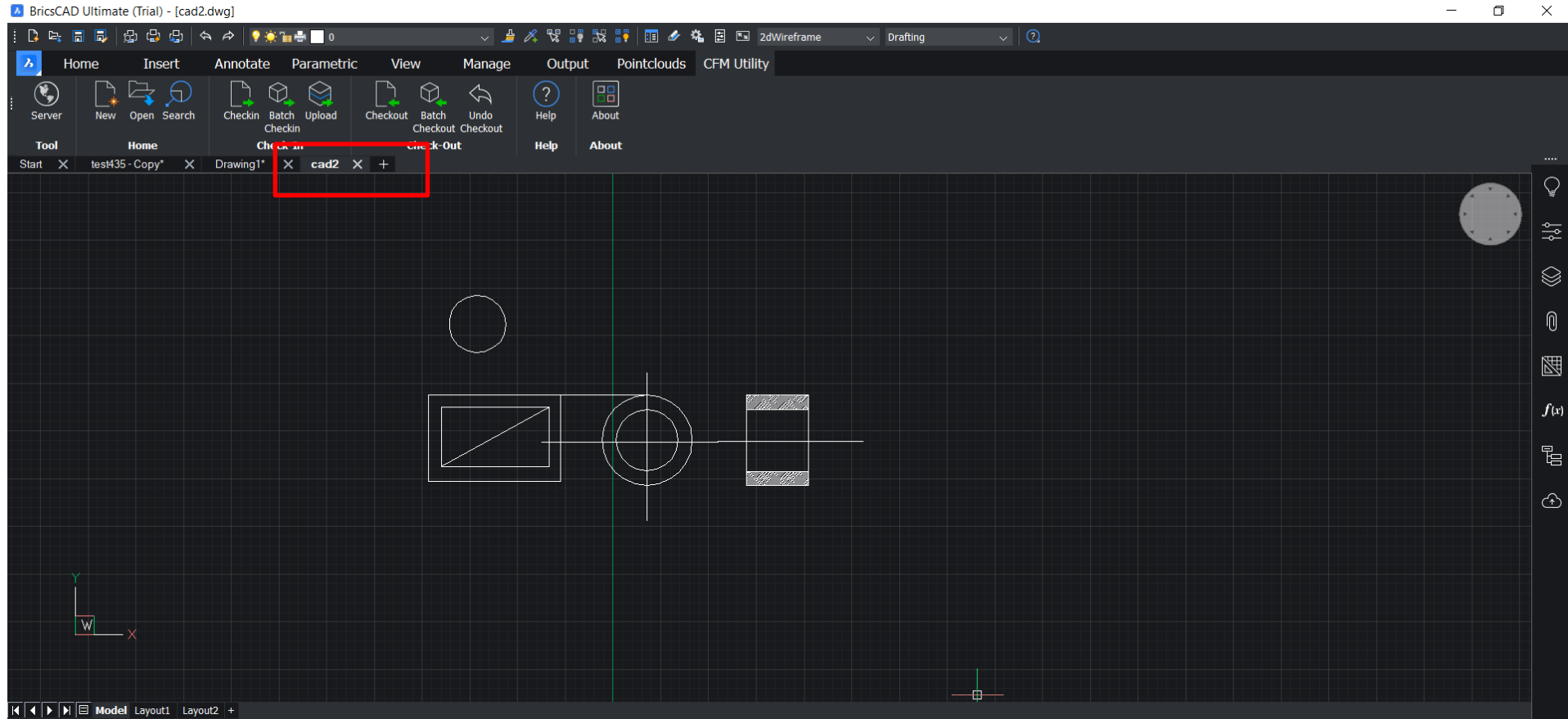
Checkout and Open

- Select required drawing from search result. Click on **Checkout and Open** to Checkout the selected drawing & it will be opened in BricsCAD.



Checkout Executed

- Drawing has been checked-out and opened in BricsCAD



- Currently, Drawing has been checked-out and same can be confirmed through browser

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Abstract Specificatio... Search... Quick Links

Products > Training > Workspaces

Recently Accessed

Workspace: Test - Pick an Action -

Object List As a list All (5 of 5 objects)

File Edit

Number ↑

File Name

Actions

Version

Last Modified

State

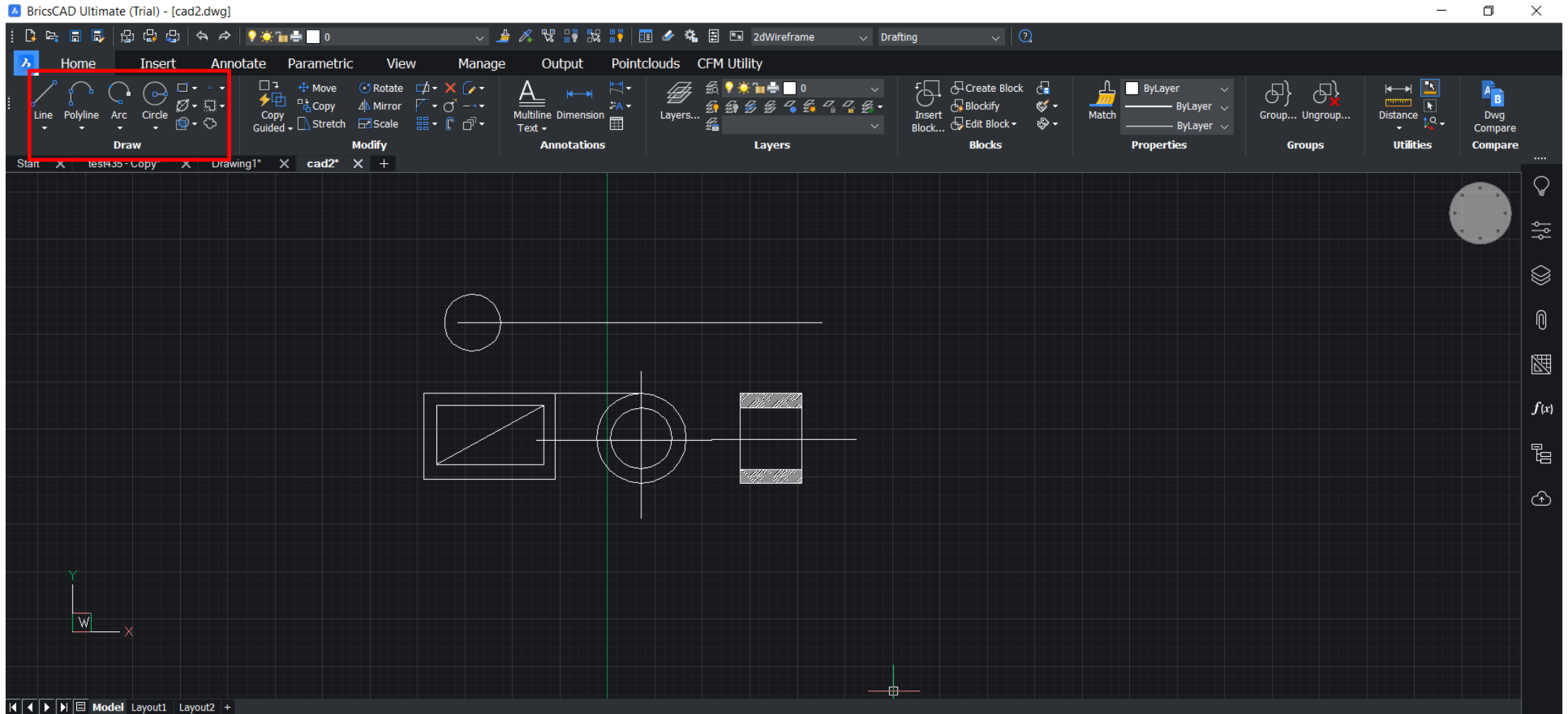
Name

			0000000021	cad2.dwg		2.19	2022-03-25 15:29 IST	Design	cad2
			0000000063	Drawing1.dwg		1.3	2022-03-25 09:54 IST	Design	Drawing1
			0000000263	cadopt2.dwg		1.5	2022-03-25 13:44 IST	Design	cadopt2
			0000000425	test435 - Copy.dwg		1.1	2022-03-24 19:12 IST	Design	test435 - Copy
			0000000443.DWG	0000000443.dwg		1.1	2022-03-25 13:46 IST	Design	cadoptdemo

(0 objects selected)

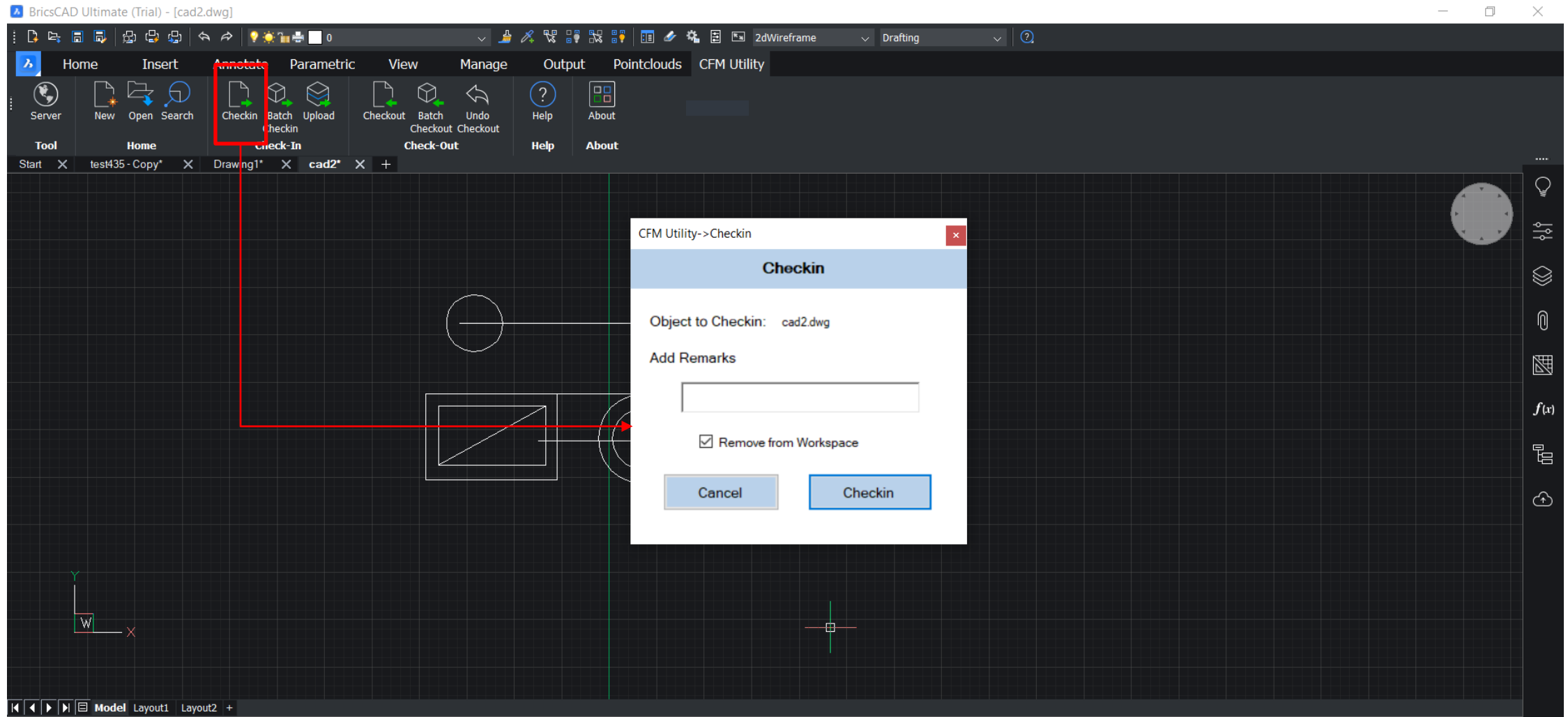
Adding Feature to drawing

- Required Modification can be added to drawing and user can save the drawing



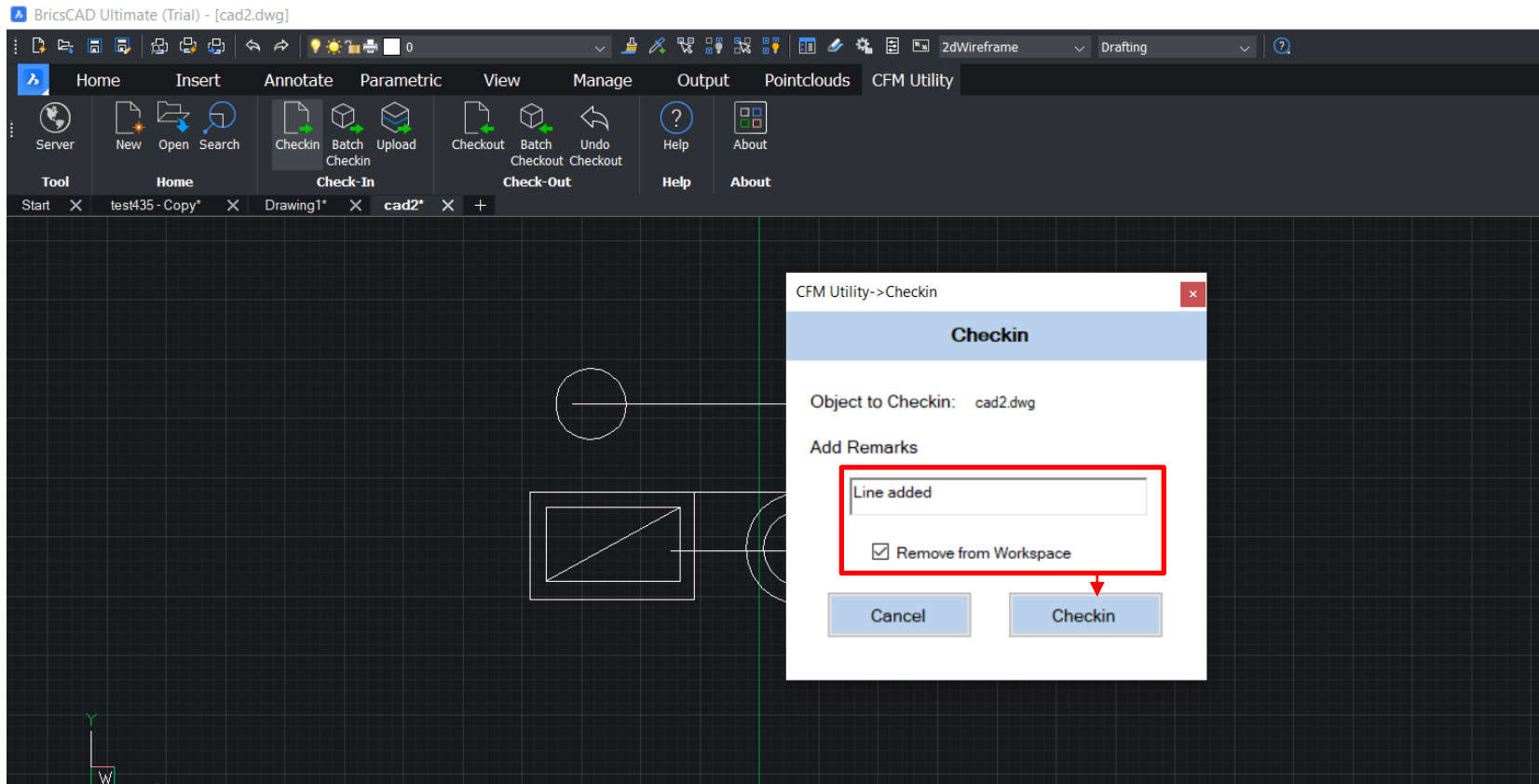
Drawing Check-in

- Once modified, drawing can be check-in using **Check in** option available in ribbon



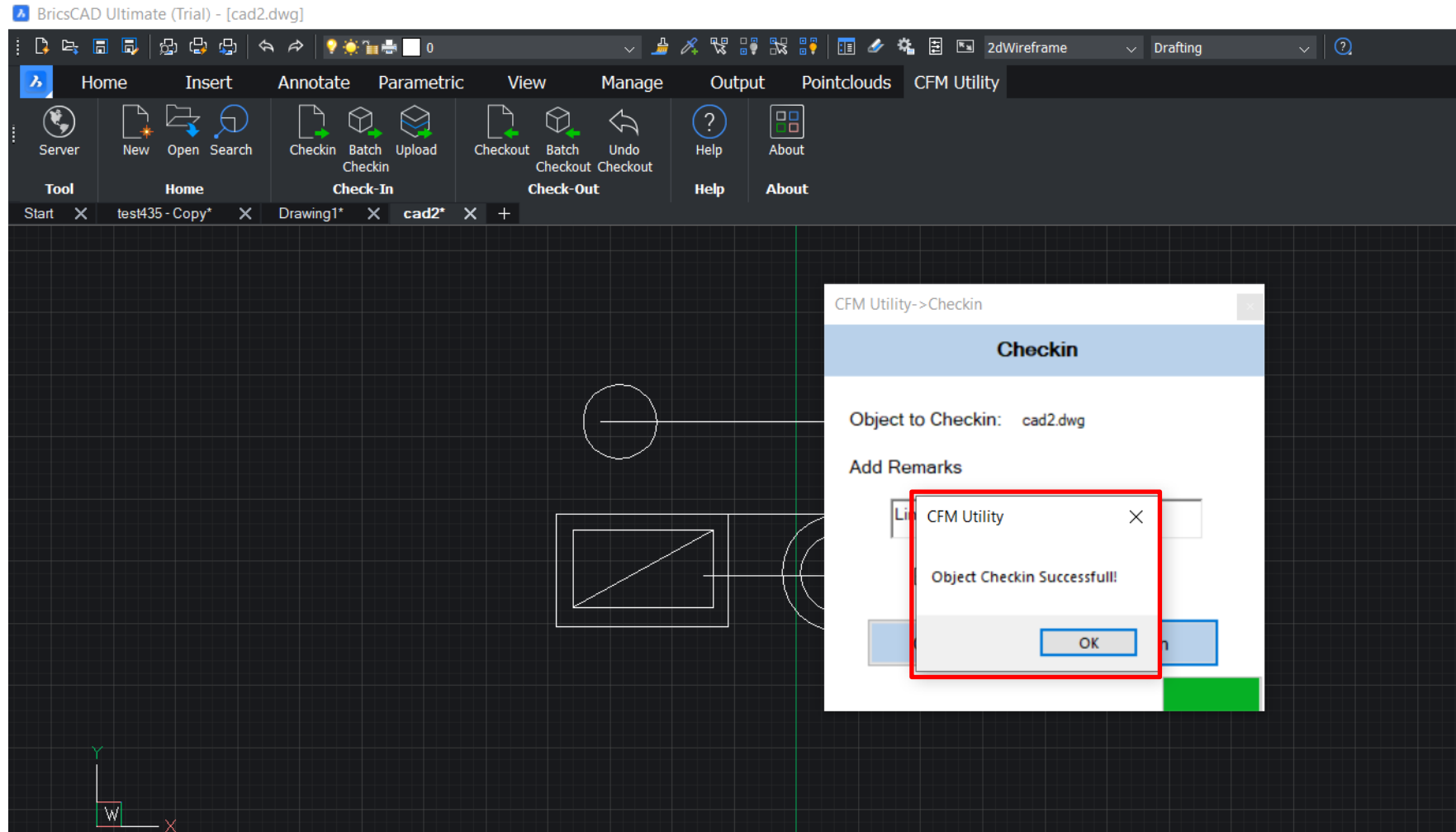
Drawing Check-in

- Remarks/comments can be added to respective drawing




Drawing Check-in

- Required drawing will be checked-in



- Again, the drawing checked-in back to Windchill with Modification

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Abstract Specificatio...

Search ...

Quick Links

Products > Training

Search | Browse

Actions

Folder - DWG

Folders (5 objects)

Name

Training

Creo

DWG

Promotion Requests

SM Testing

Folder Contents All

(24 objects)

	Number	Name	Version	State	Last Modified
	0000000021	cad2	2.20	Design	2022-03-25 15:45 IST
	0000000448	democad	1.1	Design	2022-03-25 14:47 IST
	0000000446	cad21	1.1	Design	2022-03-25 13:47 IST
	0000000263	cadopt2	1.5	Design	2022-03-25 13:44 IST
	0000000445	tesrt23	1.1	Design	2022-03-25 13:23 IST
	0000000442	0000423	1.2	Design	2022-03-25 12:16 IST
	0000000438	00000004041	1.1	Design	2022-03-24 21:01 IST
	0000000437	zwcadcheck1	1.1	Design	2022-03-24 21:01 IST

- Added remarks/comments will also be updated in that version

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Abstract Specificatio...Search...Quick Links

Products > Training > DWGRecently Accessed

Actions

CAD Part - cad2.dwg, 2.20

Design

DetailsContentRelated ObjectsChangesHistory

Version History | Timeline

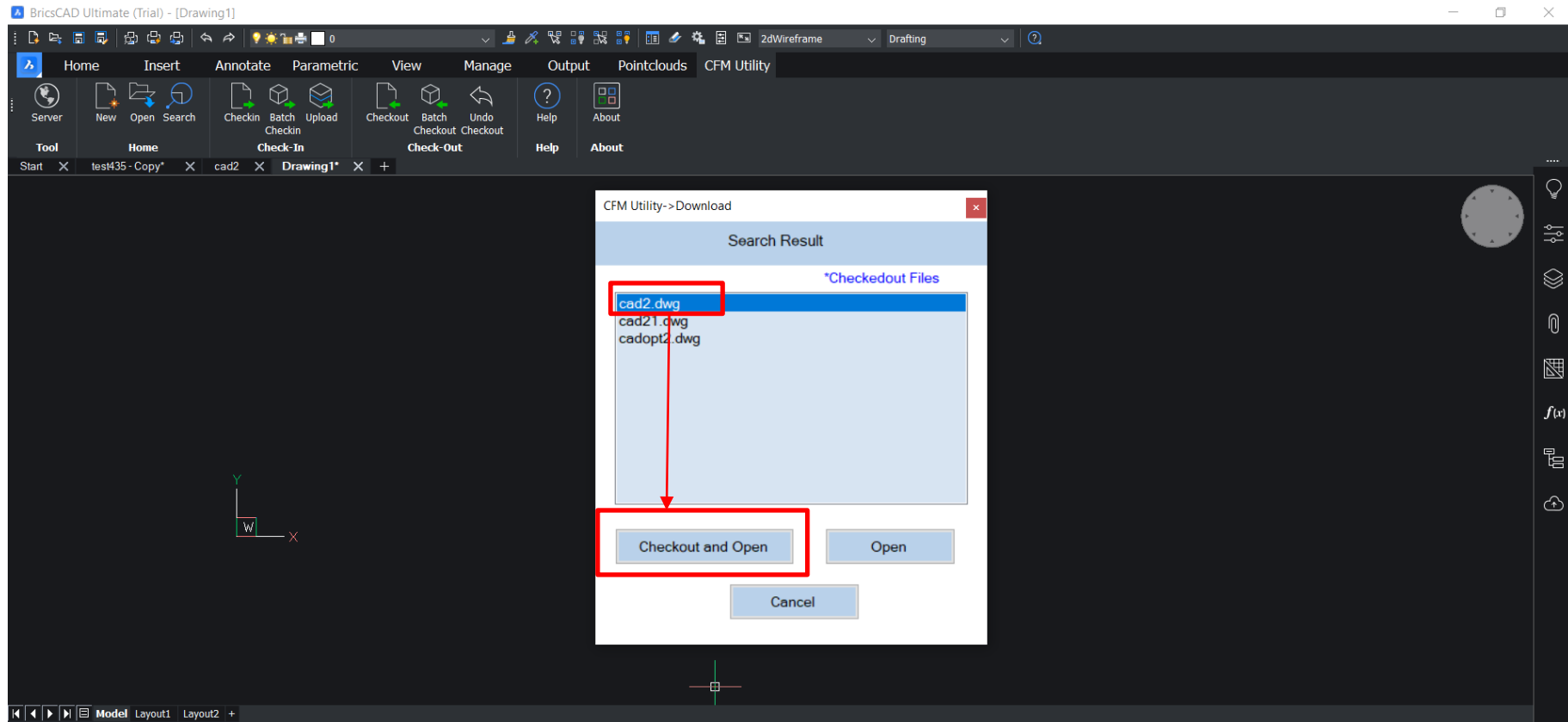
Version HistoryGeneral

(26 objects)

	Version		File Name	Size	State	Comments	Modified By	Last Modified	Authorization	Predecessor	Revision
	2.20		cad2.dwg	16.1 KB	Design	Line added	aravinth	2022-03-25 15:45 IST			2
	2.19		cad2.dwg	16.1 KB	Design	added feat	aravinth	2022-03-25 14:43 IST			2
	2.18		cad2.dwg	30.8 KB	Design		aravinth	2022-03-21 18:22 IST			2
	2.17		cad2.dwg	30.8 KB	Design		aravinth	2022-03-21 17:48 IST			2
	2.16		cad2.dwg	30.8 KB	Design		aravinth	2022-03-21 17:37 IST			2

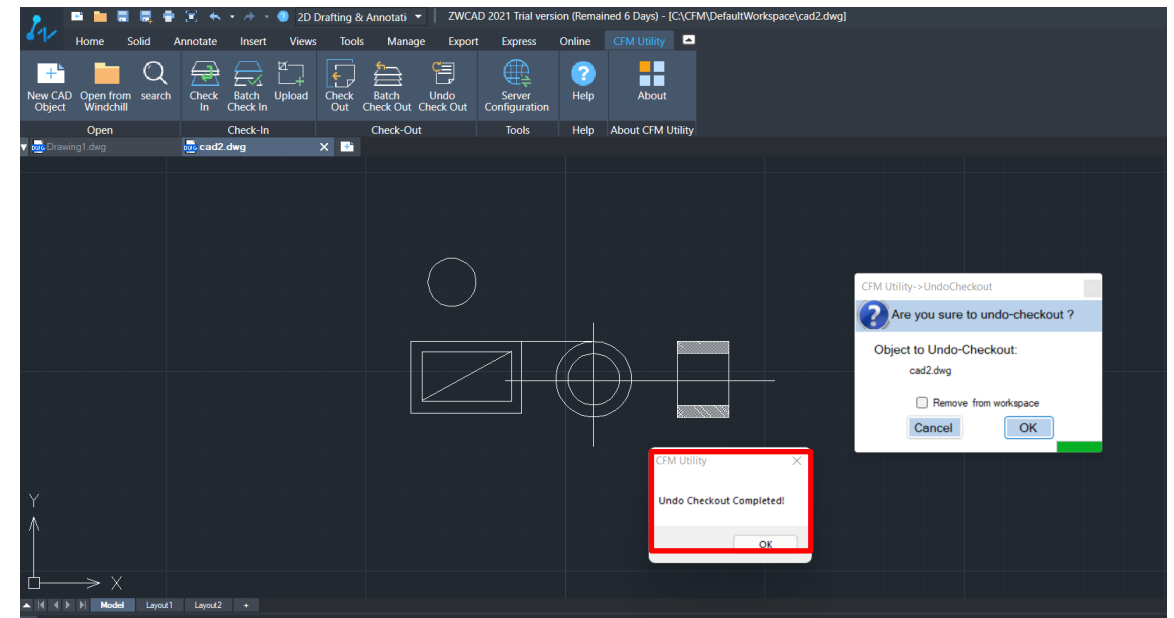
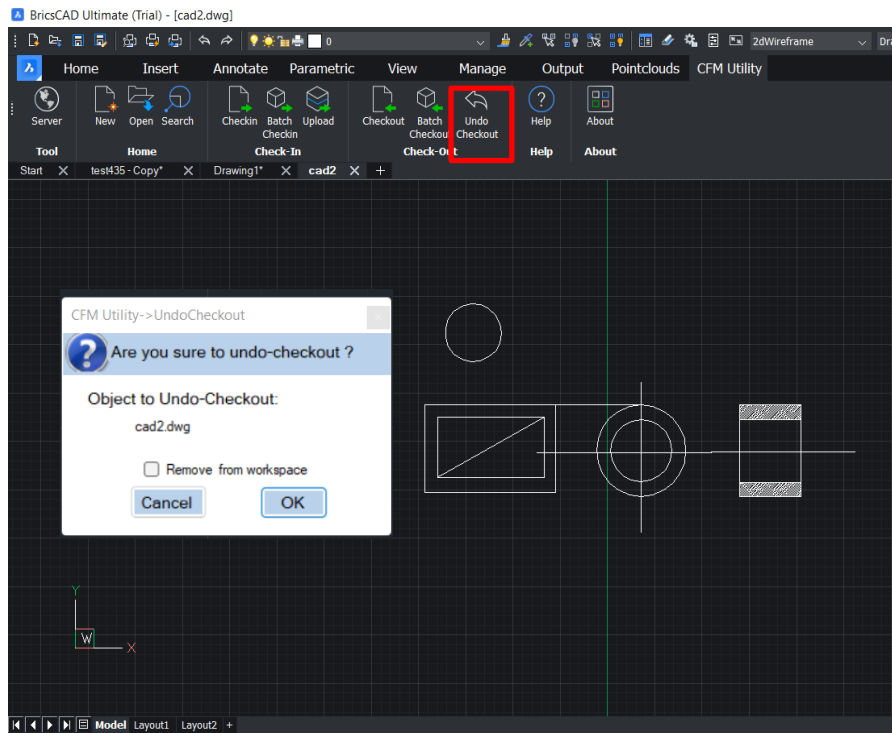
Checkout and Open – Undo Checkout

- Select required drawing from search result. Click on **Checkout and Open** to Checkout the selected drawing & it will be opened in BricsCAD.



Undo Checkout

- Drawing has been checked-out and opened in BricsCAD





CADOpt
Technologies

Web : www.CADOpt.com

Email : info@cadopt.com

Thank You