

PTC Creo CAD Workshop

September 26, 2015 – Glen Carbon, IL



Using Windchill to Manage CAD

*Rande Johnson, Mentor
FRC4931/FTC8620*

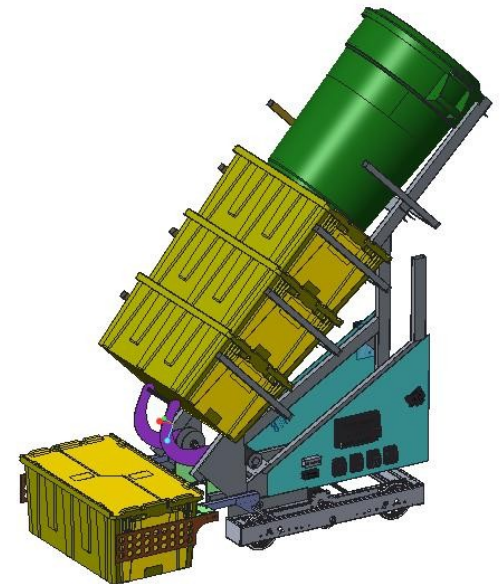
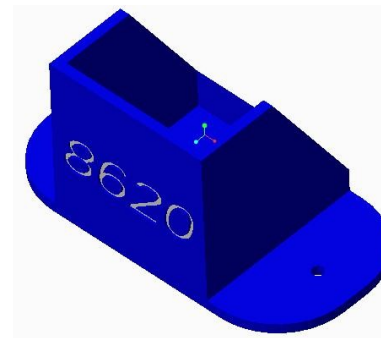
September 26, 2015



CAD Team



- Mentors: Jason Schutte & Rande Johnson
- Students: FRC4931, Lexi, Jacob, & Kyle
- Students: FTC8620, Garrett



September 26, 2015





What's the Process

- Request a Windchill project from PTC
 - Email academic@ptc.com
- Email sent to coach or CAD lead
 - Add users and set permissions
 - Users get email, need to create PTC.com account
- Configure Windchill server in Creo
- That's the setup...

Windchill Project Email



Windchill Invitation

[D. Jay Hunt](#) has invited you to the project [ETC-CAD WORKSHOP](#).

[Join Project](#)

Hello,

Welcome to our PTC Windchill project! Our team is using this project to manage and collaborate on documents and Creo CAD files, plan and schedule activities and tasks to learn how to use a Product Lifecycle Management (PLM) system.

To access our project, you will need a PTC account. If you do not have one, use the following link to go to the PTC Support page and create a new Academic account for yourself. Its quick and easy and will give you access to all the online tools and applications available from PTC.

<https://support.ptc.com/appserver/common/account/createAccount.jsp>

We look forward to working with you and if you ever have any questions about PTC Windchill or other PTC applications, be sure to visit the Academic Program Community. This community is specifically for the various PTC Academic Programs and many of them have their own dedicated community.

<http://communities.ptc.com/community/academic-program>

Project Name: [ETC-CAD WORKSHOP](#)

Start Date: Sep 25, 2015 EDT

Project Owner: [FIRST Manager](#)

Estimated End Date: None

Host Organization: FIRST

Your Role: Project Manager

Project Description: None

September 26, 2015



Create PTC.com Account



- <https://support.ptc.com/appserver/common/account/createAccount.jsp>

PTC[®] PRODUCT & SERVICE ADVANTAGE[®] [Why PTC](#)

Home > PTC.com Accounts > Create New PTC eSupport Account

Create New PTC eSupport Account

New Customer Partner Basic Academic

All fields marked with a * are required.

*First Name:

*Last Name:


*Title:

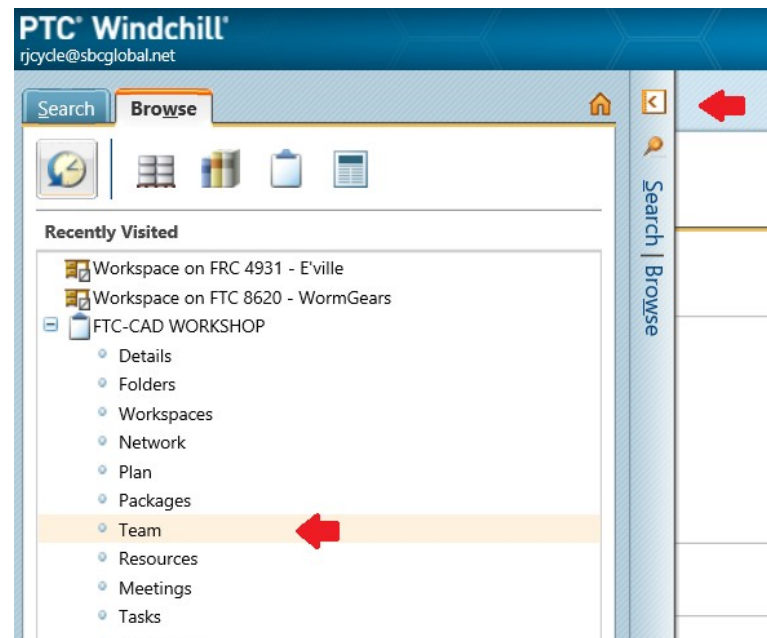
*E-mail:

September 26, 2015



Manage the Project

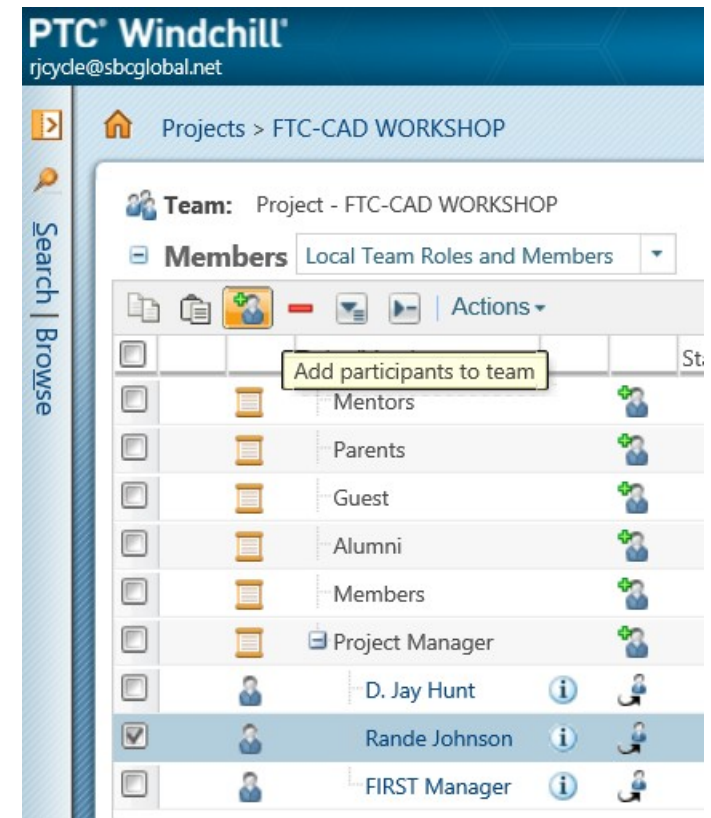
- Click on the “Project Name” link in the email
- Log in with your new credentials
- In the Project screen, select the Expand button 
- Then select “Team”



Now Add Your Team



- Click Add Participant



September 26, 2015



Add A User

- If your user already exists, just search for them
- Most will need to be added via email invite

Find Participant

Search for:

Search In:

Full Name: ?

User Name: ?

Email:

Organization Name:

Search Results:

Most Recent Participants:

Email Invitation:

Assign to Role:

Participant List:



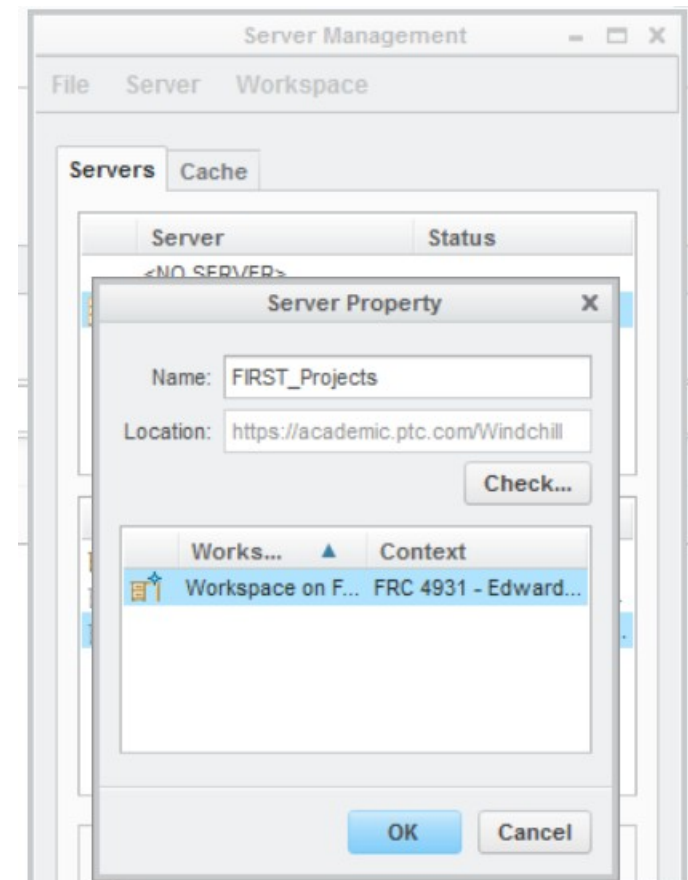
Users Join Project

- Users then get email asking them to JOIN project
- Once they do (may need to create PTC.com account)
 - They can access Windchill for viewing files
 - May need to install Creo View when prompted
 - They can access Workspace and edit parts

Configuring Creo

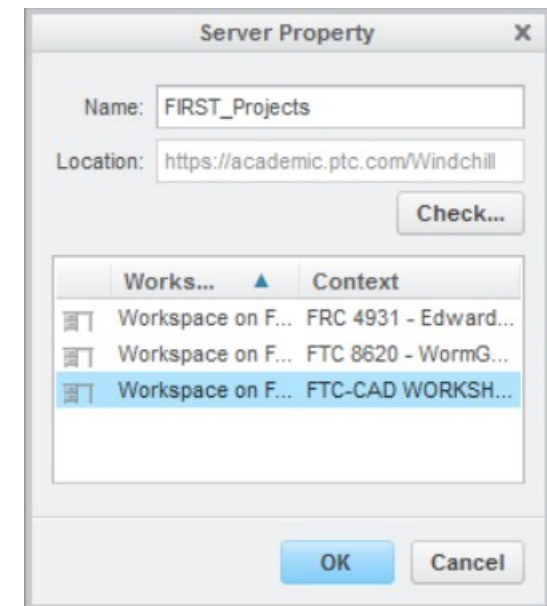


- Launch Creo and Select
 - File → Manage Session → Server Management
 - Server → Register New Server
 - Type a name like shown
 - Then add server location:
 - <https://academic.ptc.com/Windchill>
 - Use correct capitalization!!
 - Then hit “Check...”



Start Workspace

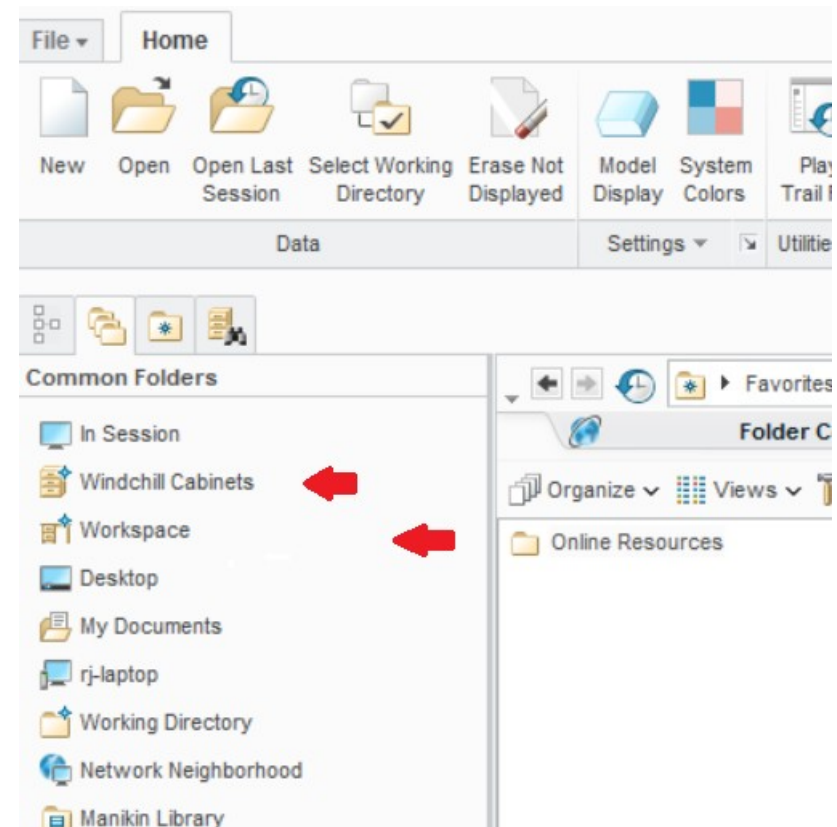
- If all is well, your workspace should appear
- Hit “Ok” to activate it
 - If you have multiple teams, you'll get warning
 - This is ok unless you have unsaved parts
- Hit Close



Welcome to Windchill!





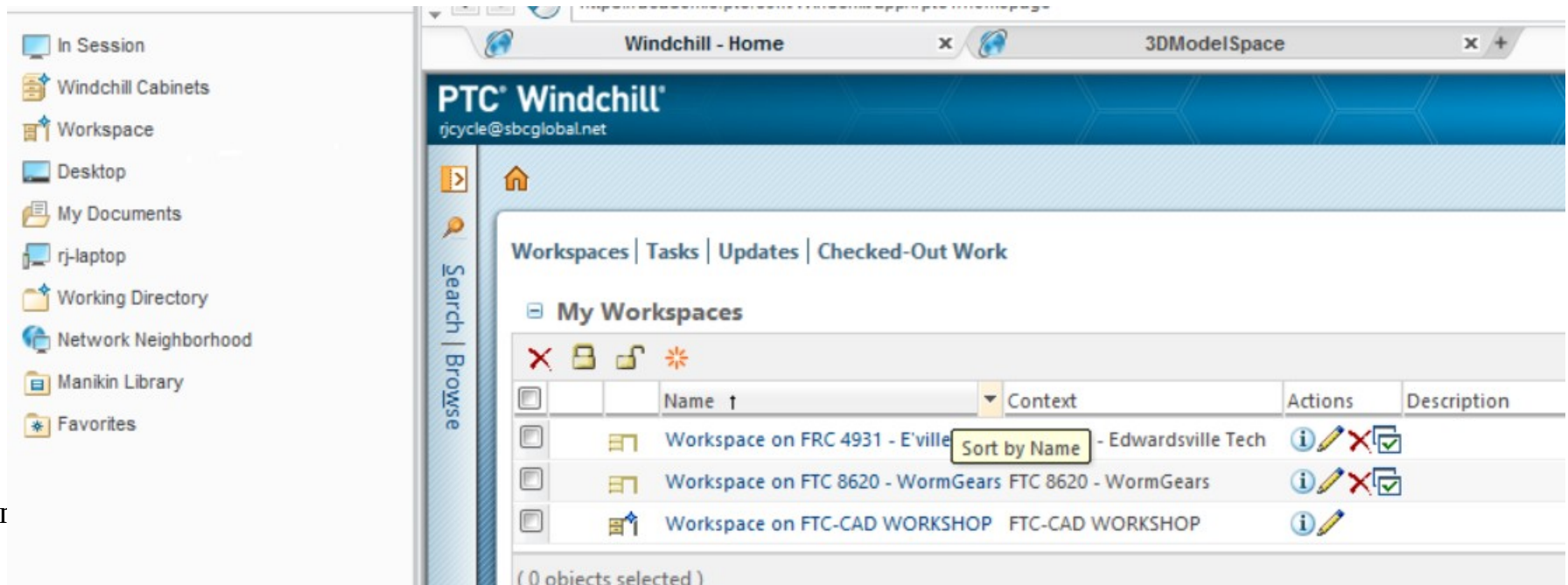
- You should now see new entries on your Creo navigation screen



September 26, 2015

One Last Step











- Select Windchill Cabinets or Workspace
- Hit home button 
- Hit the Edit icon next to your Workspace 



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rjcycle@sbcglobal.net

Workspaces | Tasks | Updates | Checked-Out Work

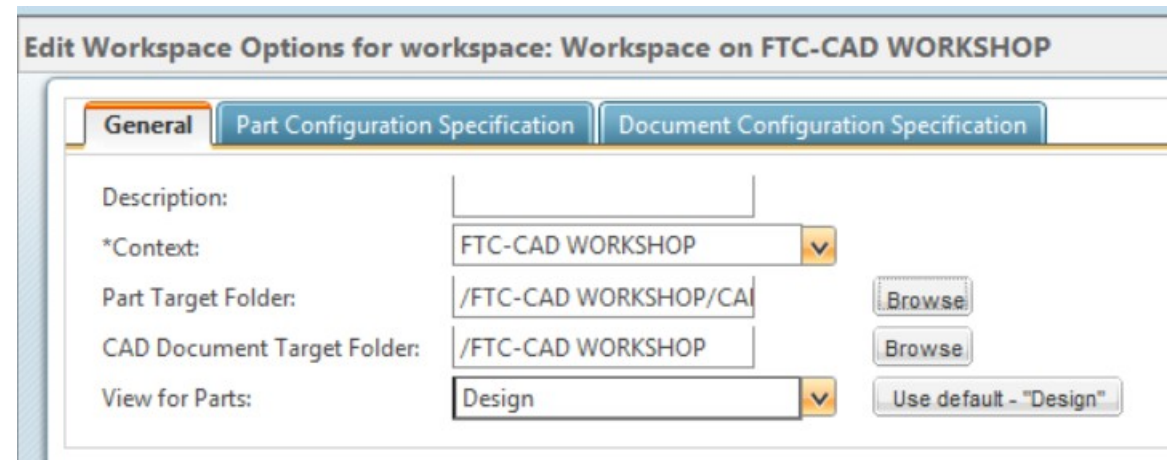
My Workspaces

Name	Context	Actions	Description
Workspace on FRC 4931 - E'ville	- Edwardsville Tech	   	
Workspace on FTC 8620 - WormGears	FTC 8620 - WormGears	   	
Workspace on FTC-CAD WORKSHOP	FTC-CAD WORKSHOP	 	

(0 objects selected)

Change Default Paths

- In the Edit Dialog
 - Select “Browse” next to Part Target Folder
 - Choose the “CAD Models” folder
 - This will store parts in right place automatically
 - Do again for CAD Document Target folder





Workspace vs. Cabinets

- The Windchill cabinets are your team parts on the server (in the cloud)
- The workspace is your local copy of the parts you are working with
 - Need to keep it small & clean
 - Otherwise other users will be locked out



Basic Part Creation

- Create a new part in Creo
- It automatically saves to your workspace
- Once you are done
 - Upload it
 - Check it in
 - Delete it from your workspace



Part Modification

- Copy a part to your workspace from the Windchill cabinets
 - Check it out to modify it
 - Make your changes
 - Save & check it back in
 - Delete it from your workspace when done



Assemblies & Part Families

- These items are made up of multiple parts
 - So when you pull down to your workspace, you may get more than one item
 - If you modify the assembly or generic part, you may be asked to check something else out too
 - GOOD: Windchill checks dependencies
 - BAD: If someone has something checked out, you're stuck
 - That's why you keep your workspace clean...
 - You should only check out parts while you work on them



Versioning

- Windchill automatically records who made changes
 - It adds an incrementing version number – e.g., “A7”
 - It also notes the person's name
 - And if used, it will also show version notes
 - Why the change was made...



Starting with Windchill

- Get the Kit Of Parts loaded into Windchill
- And make them yours
 - Give them good PTC Common Names
 - Give them good part numbers
 - Set the material properties
- Maybe PTC will create a KOP library we can all use someday...

Another Windchill Advantage



- Many folks on your team don't use CAD
- But they are involved in decisions based on CAD
- But how?
 - Creo View is a viewer for Creo
 - It works in a standard web browser
 - So does Windchill...
 - Non-CAD users can still review CAD files!!

Summary



- Windchill does a lot of the dirty work of managing CAD files
 - Tracks revisions, checks in/out, and handles part dependencies
 - But, you need to help it do its job
 - Do not keep parts checked out or in your workspace
 - Impacts the ability of other team members