

Using Pro/ENGINEER Peer-to-Peer Design Conferencing

The Pro/ENGINEER Peer-to-Peer Design Conferencing package—powered by Groove Networks technology—introduced with the Wildfire release makes it easy for engineers to collaborate simultaneously with others, enabling multiple users to share control of live design sessions, no matter where they are. This tutorial is designed to illustrate the steps for using the Pro/ENGINEER Wildfire Conferencing application. (Note that conferencing with more than 15 users at one time is not supported.)

Getting Started

Open the PTC Conference Center one of two ways:

- From the current Pro/ENGINEER session: Click Applications >Conference.
- By starting a standalone Peer-to-Peer Design Conferencing application: Click Icon on the Windows desktop or from the Windows Start menu.

Start the Conference Server

Once launched, the Conference Center will check to see if the Conference Server is running. The Conference Server is set up to provide communication links between all PTC Conference Center users. If it has not been started, a dialog box will appear informing you. Select the Start button to start the Conference Server. Once it starts, the Conference Center login-in screen will be displayed in the bottom right-hand corner of your screen. (Note: In the production release of Pro/ENGINEER Wildfire, if you are running a Windows 32-bit machine, you will only be able to start the local server. The ability to point to another server is not available. However, if you are on a UNIX machine, the above window will not have the option to connect to a local server, it will be grayed out. In that case, you will have to point to a remote server.)

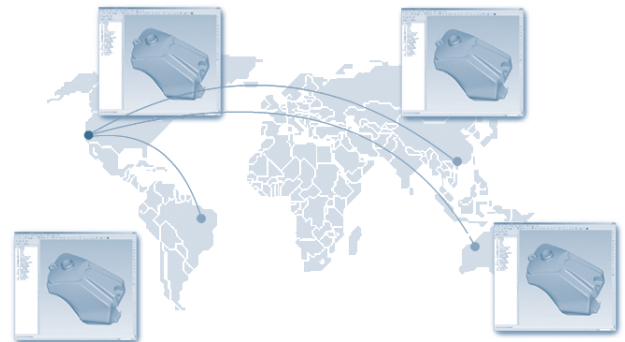
Logging into the PTC Conference Center

If you have already established a User Name and Password, you can enter it in the selected fields and click OK. If you are a first-time user, you must create a New Account. Selecting the New Account button will open the Create New Account GUI. Input your account user name and password, and click Apply. Click OK when the account is established. You are now logged into the Conference Center.

Using the Conference Center—My Conferences

By default, when you enter the PTC Conference Center, the My Conferences screen will be displayed and you will be looking in the My Conferences Only area. By default, you will only see the conferences you are part of or ones you have created. If you want to search for other conferences taking place at this time, you can press the down arrow beside the Look In area field and choose either your domain or LAN. The program finds any conferences with the name, the host, and your

Peer-to-Peer Connectivity



PTC, in partnership with Groove Networks, enables users to connect their session of Pro/ENGINEER real-time to any other user's or group of users' Pro/ENGINEER session anywhere around the world in a fast, flexible, and secure way.

role. If you created the conference, you will be represented as the Owner; if you joined, your role will be a Member. If you have not joined a listed conference, you have not established a role yet.

Selecting a listed conference, you can try and join it by clicking the Join button. If there is data stored in the specified Shared Space for that conference, it will be automatically streamed to your shared space for the conference.

Create a New Conference

Create a conference by selecting Conference/Create. First specify the conference name. Enter an access code to control access. Click OK to Create; a screen will open for the new conference, listing the Conference name, the Session State, and the participants. You will be the only listed participant, with the role Attendee, until you invite others to the conference.

Exporting a VCARD

In order to be invited to a conference outside of your firewall, you must complete your personal V-Card and export it. The V-Card can then be emailed to colleagues to add to their contact list. Select Preferences from the Conference pull-down menu and fill out your profile. When you're finished, click the Export V-Card button and save it to your local machine. Once saved, email the V-Card to anyone you want to conference with. When you receive their V-Cards, you can import them into your contacts list from the My Contacts Window (Contact/Import).

Inviting Individuals to the Conference

You are able to invite people to conference in two different ways, from Conference/My Contacts or the Extended Invitations list.

My Contacts

Click Conference/My Contacts, which will open the My Contacts GUI. If you have been part of other conferences, there will be names under the My Contacts section. If not, you can search the LAN for existing users using the Search for Contacts section. Results will be listed in the display area. Highlight the name and click the “+” icon to add the contact. When you have a name in your contact list you would like to invite, highlight it and select the Invitation icon.

Using the Conference Shared Space

A shared space is a place where conference participants can share files and collaborate on a project. When you log into the Conference Center and create a conference, a corresponding shared space is created on your server machine. As you invite other participants to the conference, a copy of the shared space is created on the server machine of each participant. Any change in a file is shared in real time among all conference participants. (Note: For UNIX machines, the shared spaces are stored on a remote machine that runs the PTC Conference server.) You can upload data to the conference Shared Space from the Conference Center or from within Pro/ENGINEER.

Add Models to the Shared Space from the Conference Center

From within a conference, select the Shared Space icon to open the Shared Space Explorer, which will show you all the shared spaces for each of the conferences you are part of. You can add models that you want to share by selecting the folder with the conference name and then clicking the Add Object icon. Or from the File pull-down menu select Add.

Browse to search your local and network drives. You can select multiple files (parts, assemblies, drawings, etc.). (Note: This Explorer does not know the children of assemblies or drawings; you will need to select the associated components.) Once added, files will automatically be streamed to the other individuals in the conference Shared Spaces (note that network bandwidth may be a limiting factor).

Add Models to a Shared Space from Pro/ENGINEER

In order to save objects to a Shared Space from within Pro/ENGINEER, the Conference Server needs to be running. Either before you join an existing conference or when you have created a new conference, you are able to save files to the conference Shared Folder. To save objects directly to the shared space, select File > Backup or File > Save a Copy. Click the desired space from the Look In list in the respective dialog box and navigate to the conference folder where you want to store the object. If you are not currently logged into the PTC Conference Center, you will be asked to authenticate yourself.

Create a Shared Pro/ENGINEER Session

To perform live peer-to-peer shared sessions with Pro/ENGINEER, a license of Design Collaboration Extension (DCX) is required for each participant. With a conference created and users invited, any participant can initiate a shared session. To start the session, from the application pull downfield select the Pro/ENGINEER command, which has a license of DCX. Then click the Run button in the Conference Session area of the Conference Center to start Pro/ENGINEER. When the Leader clicks Run, the Leader has the choice of using the active Pro/ENGINEER session or starting a new one.

In Pro/ENGINEER, a few things will happen. The first is that the session leader will be shown in the role of Presenter in the participant list, with a black diamond beside their name. All other participants must press the Play button to start Pro/ENGINEER and become Observers. (A new session is started automatically so that configuration settings are properly synchronized.)

As the Presenter, you have full control to spin, pan, zoom, build features, redefine features, etc., which will appear on all observers' machines. Observers will not be able to take control until they request it or the presenter offers it.

Shared Session Controls

Control can be passed at any stage in the design process, even in the middle of a feature. As an observer, request control by selecting the Presenter in the participant list, click the RMB, and select Request Control. The current Presenter will receive a message window in which they can accept or decline the request. If the Presenter accepts, the Observer will become the new Presenter and take control of the session. The current Presenter can also grant control to an Observer by right clicking on a participant and choosing Grant Control. The Observer will get a message window and may accept or decline control. At any point during the session, the Chairman (whoever created the conference), can take control from anyone without asking. The Chairman selects the current Presenter, right clicks, and selects Take Control.

Completing a Shared Session

To end a shared session, either the observers can hit the Stop button or the Presenter can hit the Stop button. (If a single Observer clicks Stop, only he or she will exit the session.) When the Presenter stops the session, it will terminate and all visible information on the Observers' machines will be cleared. If there was nothing saved into a shared space, the open work will be removed from the Observers without a trace. However, if there were files saved to the Shared Space, the participants in the conference may continue to access that information after the shared session has ended.

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