CFD Without Borders

Using FloWizard

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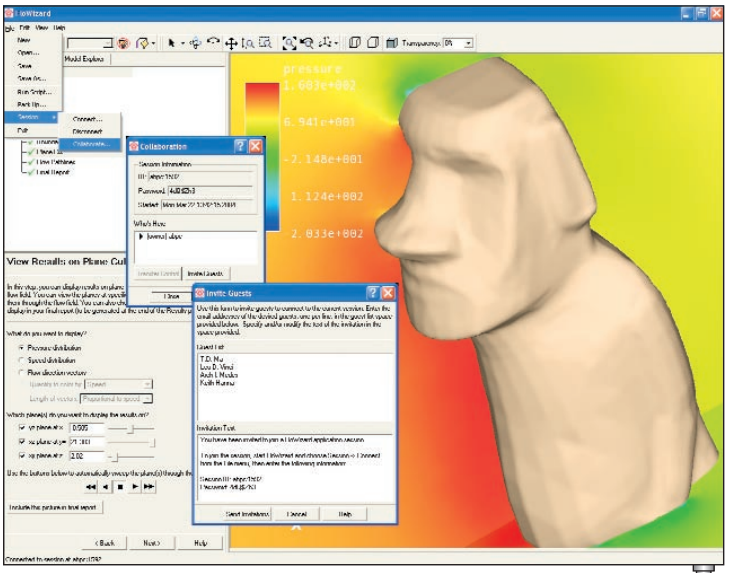


Guests are invited to the host's session

Now that CFD is making it into the mainstream of engineering design, many organizations have a need for tools that go beyond the stand-alone software approach that has characterized the CFD industry for so many years. An efficient data exchange system is crucial to the success of teams that include CAD engineers, designers, analysts, and researchers. Not only does the CFD software have to be able to exchange files with other CAD, meshing, and CAE analysis packages, it should also enable communication between the different team members. To meet this important need, FloWizard will be the first CFD software on the market that includes collaboration as a standard feature.

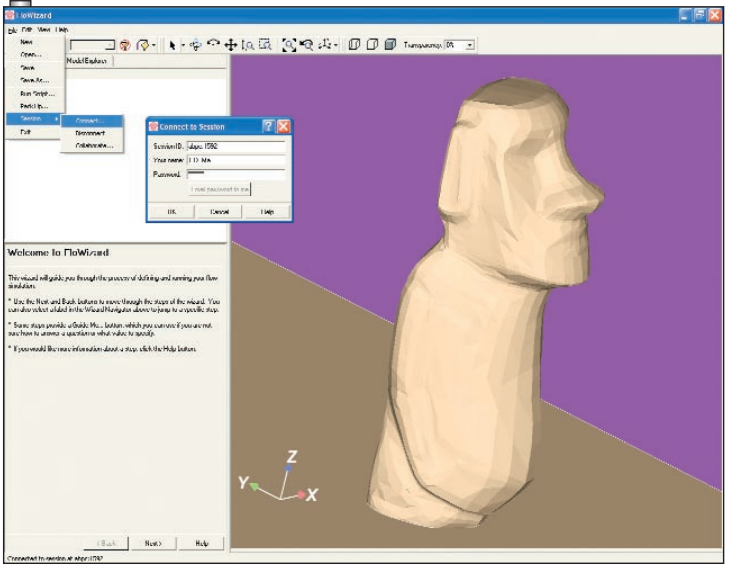
Collaboration allows two or more people on a network to share in a FloWizard session. Thus, people in different locations can work together to review a CFD model at the same time. Collaboration is useful for design review meetings, and other team cooperation and support functions.

To enable a collaborative session, a "host" user, or owner, starts FloWizard and enables collaboration from the FloWizard menu. He can then invite "guest" users to his session. FloWizard generates a unique session ID and password, and these are e-mailed to the invited guests. When the invited guests start FloWizard and supply the session ID and password, they are connected to the host's FloWizard session.

For collaboration, there are two main approaches, both of which can be used with FloWizard. The first one is referred to as WYSIWIS (What You See Is What I See). Whatever is shown on the host's desktop is broadcast to all guests. The host can also cede some control of his computer to others. The WYSIWIS approach is quite generic, and application independent. However, because broadcasting is data intensive, it is not suited for applications that involve large models, complex 3-D graphics, moving objects, or animations. Rather, it is most commonly used for simple applications such as online slide presentations or reviewing meeting notes, for example. Third party software is required for this type of collaboration.

The other approach is to create a "state level" mode of collaboration between users. This approach uses tools that are built-in to the standard release of FloWizard. With this approach, whenever the state of the model is changed, an updated set of data is broadcast to all guests. All local interactivity (rotate, zoom, pan) with the model happens on the users' machines independently. This approach offers a much higher level of interactive response for models with large data sets, while retaining the benefits of synchronization. It is, therefore, much more useful for data intensive workflow processes, such as CFD model reviews.

With FloWizard, not only is CFD modeling itself much easier, but the whole design process is streamlined from start to finish. The new collaboration feature, in particular, will help the successes and efficiencies of product design teams. ■



Guests connect to the host's session