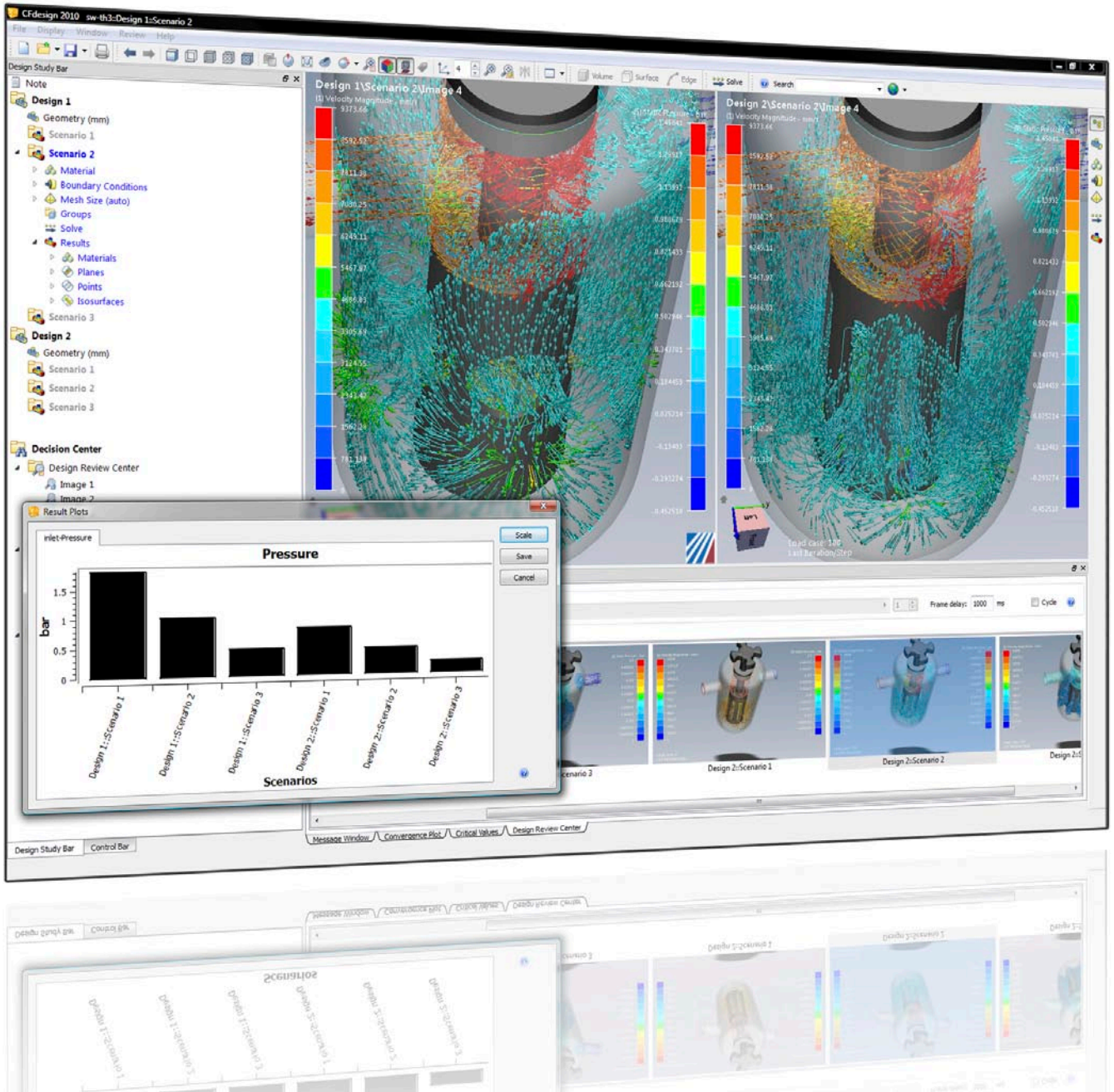
Top Ten Reasons to Start Using

CFdesign 2010 provides an innovative multi-scenario design study environment allowing engineers to define critical flow and thermal values for their simulations so the best performing design options are instantaneously brought to the forefront for deeper investigation and confident decision making.

1. **Design Study Environment**
   The fastest, most flexible environment for setting up single or multi-scenario flow and thermal design studies.
2. **Decision Center**
   Innovative tools for assessing performance comparatively against competing designs as well as specified critical values.
3. **Design Review Center**
   The ultimate visual design exploration experience built to simplify and sharpen the decision-making process.
4. **Lightweight Cloning**
   Quickly create lightweight copies of designs and scenarios to dramatically reduce the load on computer memory and graphics.
5. **Direct Modeling**
   Inside CFdesign, create external flow volumes or define a mesh refinement region, modify by simply pushing or pulling on handles.
6. **Design Study Manager**
   Create and manage multiple designs and scenarios within your CAD environment.
7. **Design Study Bar**
   A handy digital prototyping control panel to create, add, change and manage multi-scenario design studies.
8. **The CFdesign Answer System**
   Finding answers to your CFdesign-related questions has never been easier.
9. **Core i7 Support**
   Continuing the evolution of CFdesign's support for high performance computing, with 2.5x speed up out of the box.
10. **CFdesign 3D Viewer**
    Share design studies and collaborate with the whole team.

System Requirements CFdesign 2010 Update Schedule

Design Study Environment



Before beginning the development of CFdesign 2010, we spent a lot of time interviewing customers. We wanted to better understand how CFdesign addressed their engineering needs and what we could change to help companies get the business impact they need from their CFD investment.

We learned and 2010 delivers:

- A more comprehensive, CAD-driven environment to achieve pass/fail and what-if engineering objectives.
- A faster, more flexible interface for the setup and management of design studies.
- An intuitive and instantaneous process for assessing performance comparatively against competing designs as well as specified critical values.

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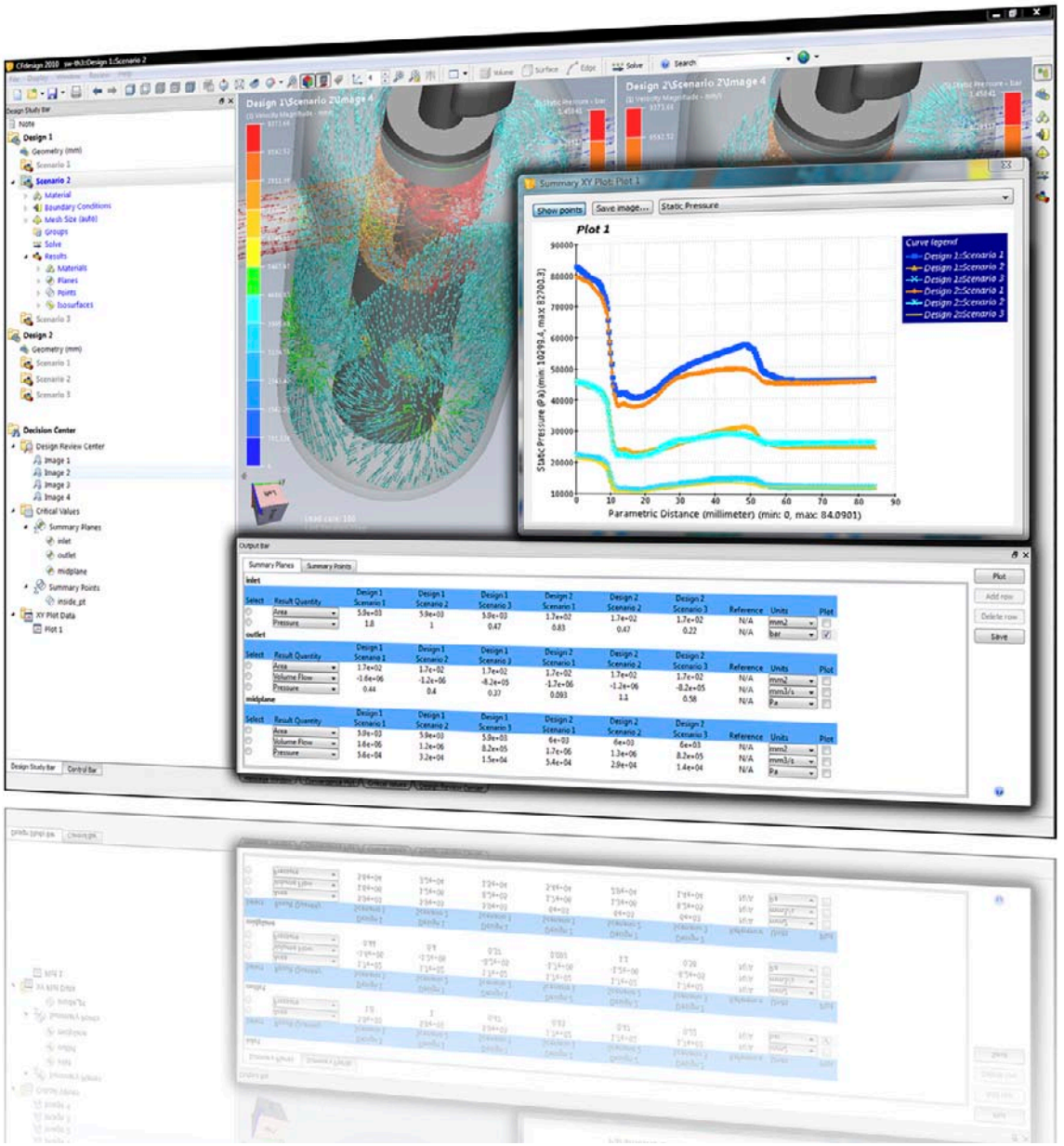
CFdesign 2010 has a new flexible decision-making environment called the Decision Center. This tool empowers you to make smart design decisions, quickly by extracting and comparing specific results values from each of your designs and scenarios. CFdesign then creates a complete performance picture by comparing all the results against the targeted critical performance values.



Critical Value Summaries

Identify any 3D point, collection of points, a plane or a part location within or on the model and CFdesign will display a critical value summary for all designs and scenarios in the design study. This function provides the insight that is impractical to obtain from physical testing and simply unavailable from any other CFD application.

Critical Value Graphing

Generate x/y plots and graphs using Critical Value and Summary Items. Get the complete performance picture in the language everyone understands. This is great for pass-fail studies and the preliminary down-select process for a what-if study.

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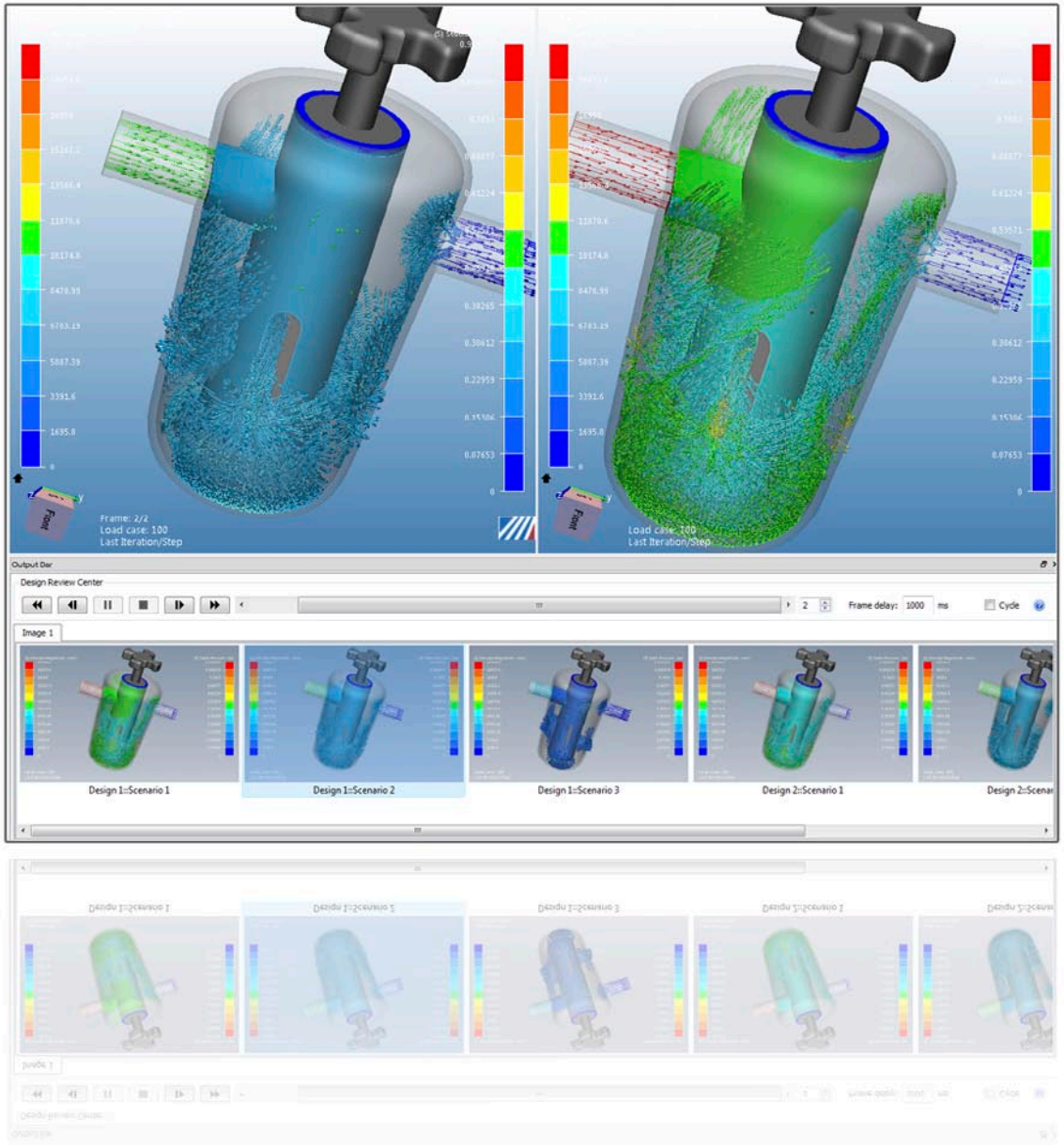

The ultimate visual design exploration experience built to simplify and sharpen the decision-making process. Now you can select a group of design or scenarios and add them into a filmstrip viewer. Simply drag and drop from the filmstrip into the Design Review Center window for comparing flow and thermal performance of two or more scenarios in a design study. Use the Design Review Center to answer questions like "Which design produces the most uniform flow distribution?" and "Which design keeps the critical components coolest?" The Design Review Center was improved to be much more resource efficient in CFdesign 2010 too and now only requires a fraction of the RAM (compared to earlier version) to display multiple result images side-by-side.

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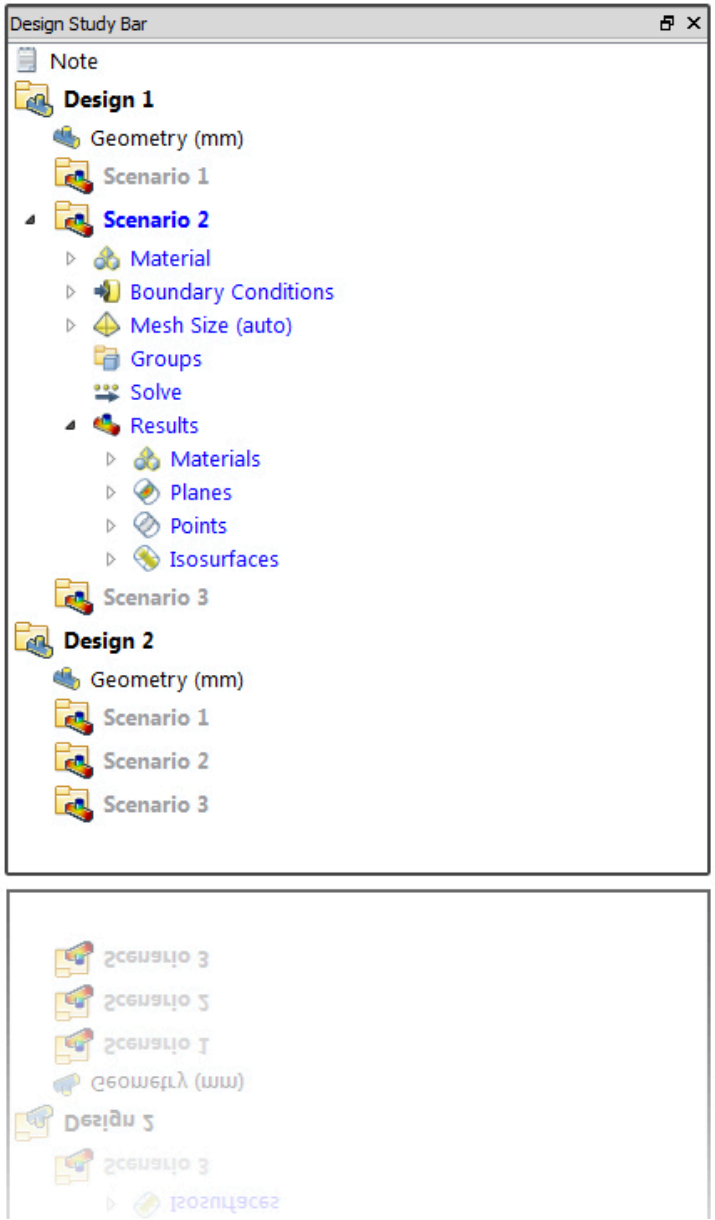
Lightweight Cloning

Speed and ease of use is what the Lightweight Scenario Cloning option is all about. Creating a new simulation scenario is as simple as right-click. Each cloned scenario is an easily editable lightweight twin of the original, dramatically reducing the load on computer memory and graphics.



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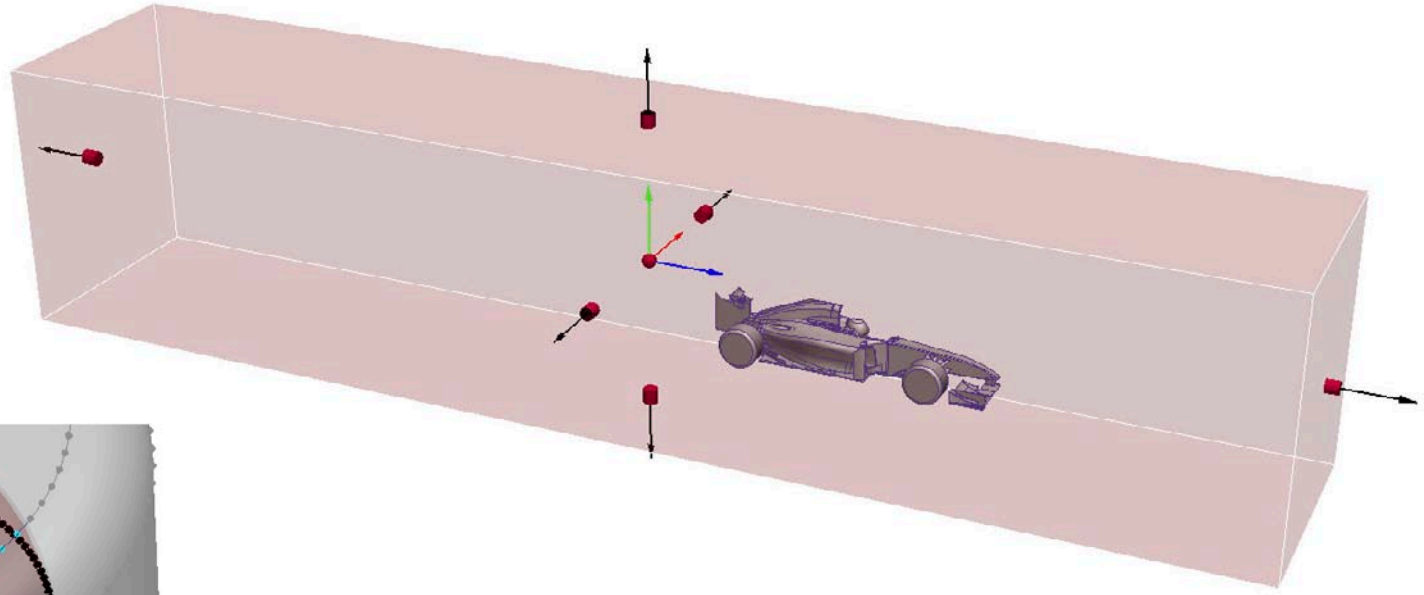
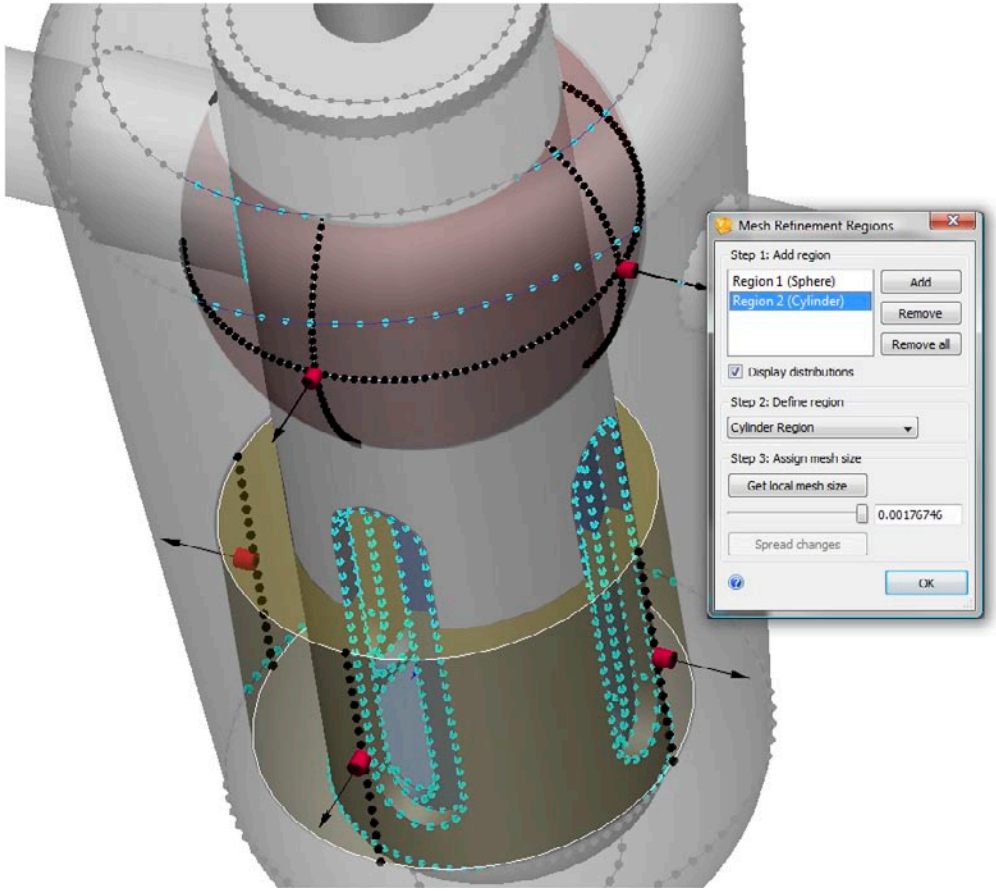
Direct Modeling of External Flow & Mesh Refinement





CFdesign 2010 provides two new direct modeling capabilities that enable users to create an external flow volume around a model or encapsulate a region for mesh refinement. Both options are adjusted by simply pushing and pulling on a handle to create the desired size. To further intensify the focus of the mesh with high curvature or refinement regions can be defined as cubes, cylinders, and spheres.

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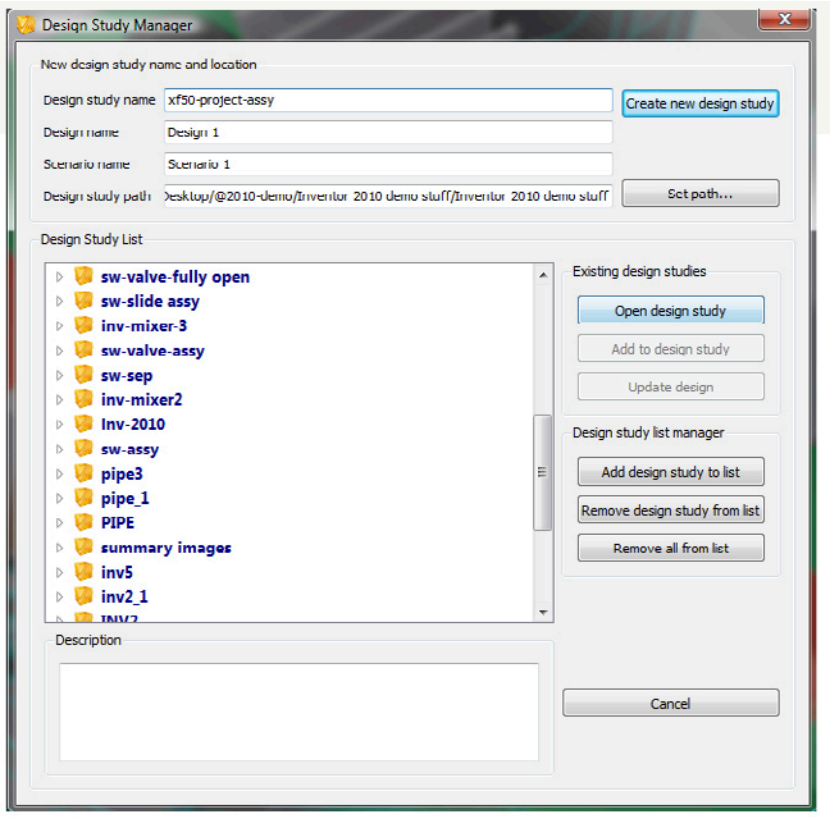
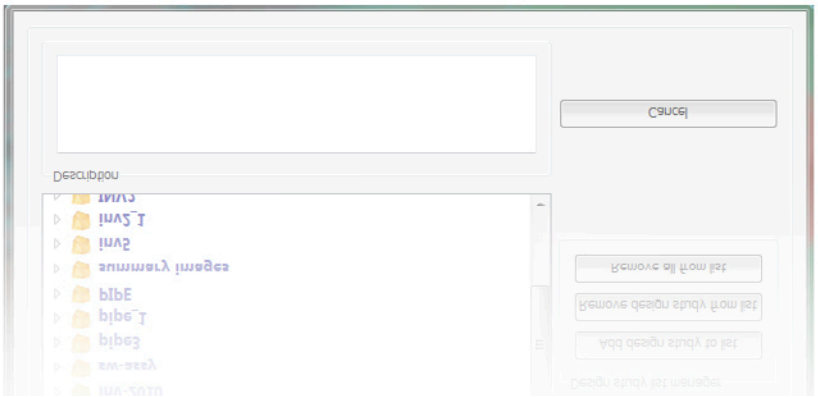
Design Study Manager





The Design Study Manager is a new utility which helps you organize and keep track of your CAD models and design studies. Now, when opening your CAD model in 2010, the new utility automatically opens and lists all of the CFdesign files it finds on the local workstation. Each design file is presented in a tree view along with associated scenarios when expanded and can be updated without exiting CFdesign. Manage analysis results and scenerios from inside your CAD system.

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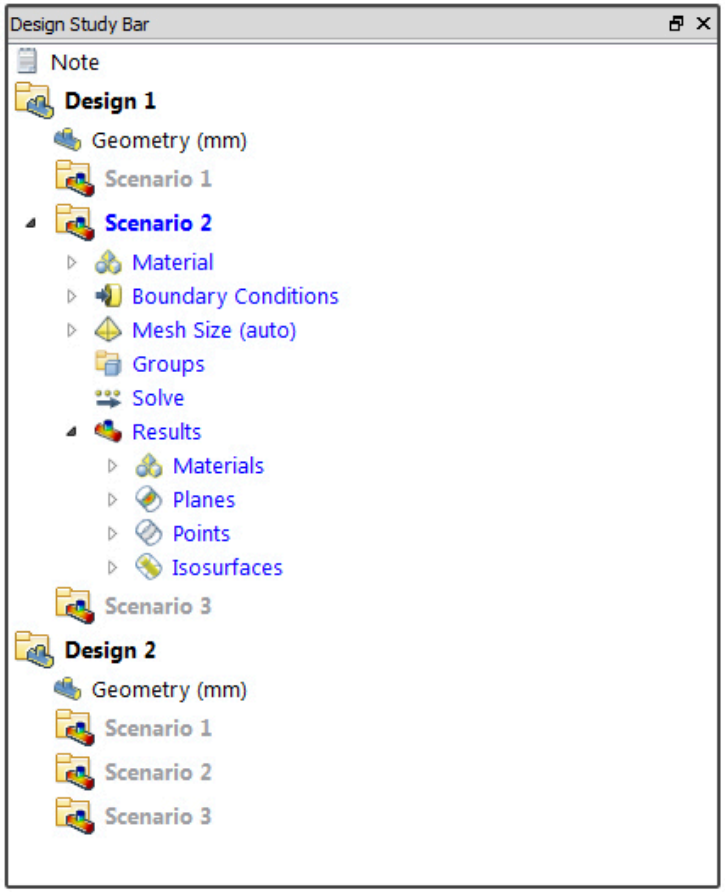
Design Study Bar

The new Design Study bar is an interactive tree-based tool which helps you set up, organize, and manage every aspect of the CFdesign process. An abundance of right-click functionality allows you too quickly and easily accomplish task like assigning or viewing settings like boundary conditions and material properties, creating or cloning both scenarios and designs. New status icons will help you identify potential problems such as an incomplete setup.



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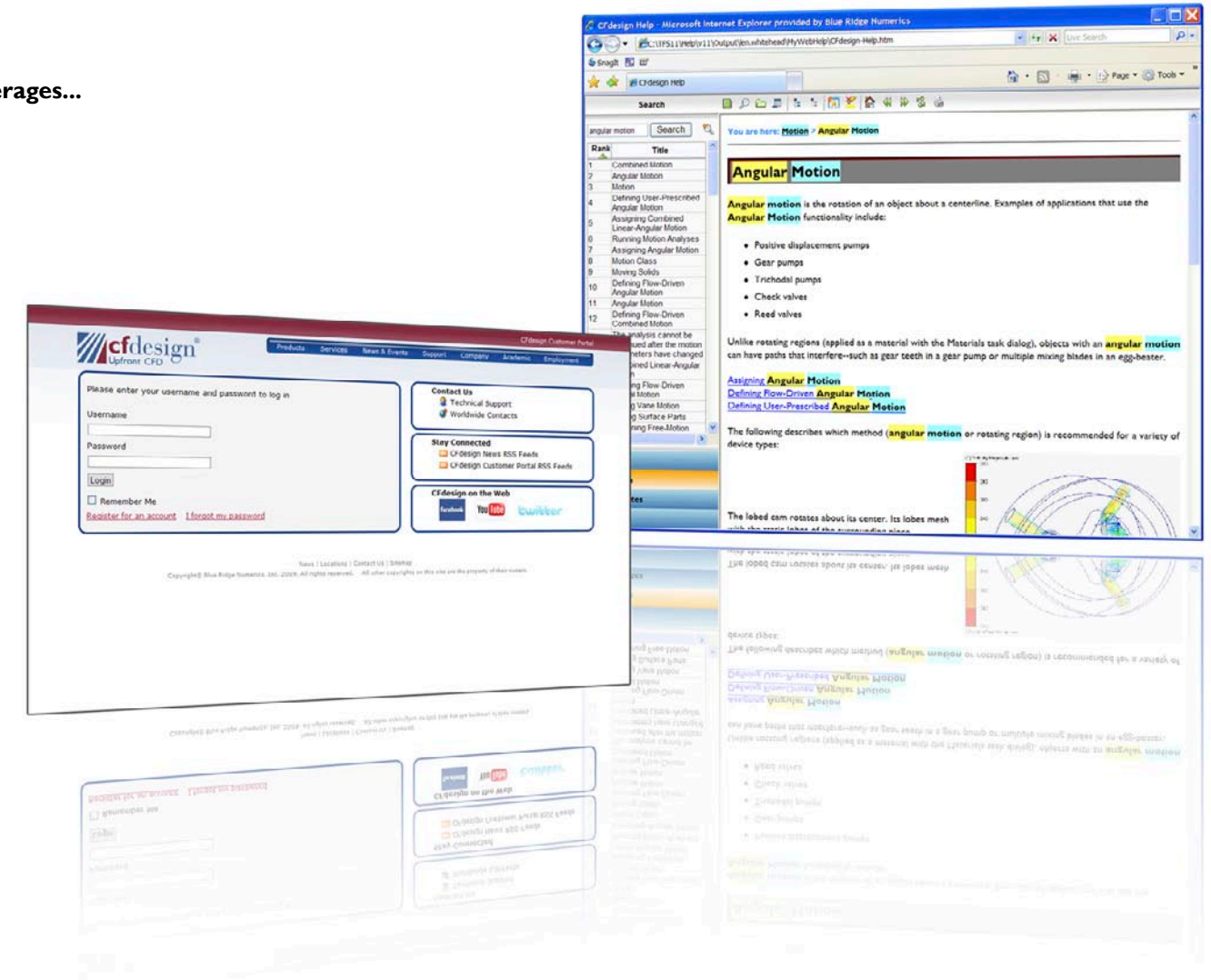
The CFdesign new Answer System consists of several components; each delivers answers to your questions in a different way. All components of the System are located in the CFdesign Portal. In addition to the Portal, help is also accessible from anywhere in the CFdesign interface.

Comprehensive information center that leverages...

1. The new online help system
2. The Knowledge Base
3. CFD-tv
4. User Forums



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Intel Core i7 Support

CFdesign 2010 supports the new Core i7 processor from Intel, delivering great simulation speed-up so more scenarios can be included in design studies. Our services group has reported results up to 2.5X faster than workstation w/ Intel® Core™2 Quad processor.

Also CFdesign 2010 now automatically utilizes up to 4 cores out of the box without the need for additional HPC software. The CFdesign HPC Module is still available for customers looking for an even more robust solution with up to 5.5x results.

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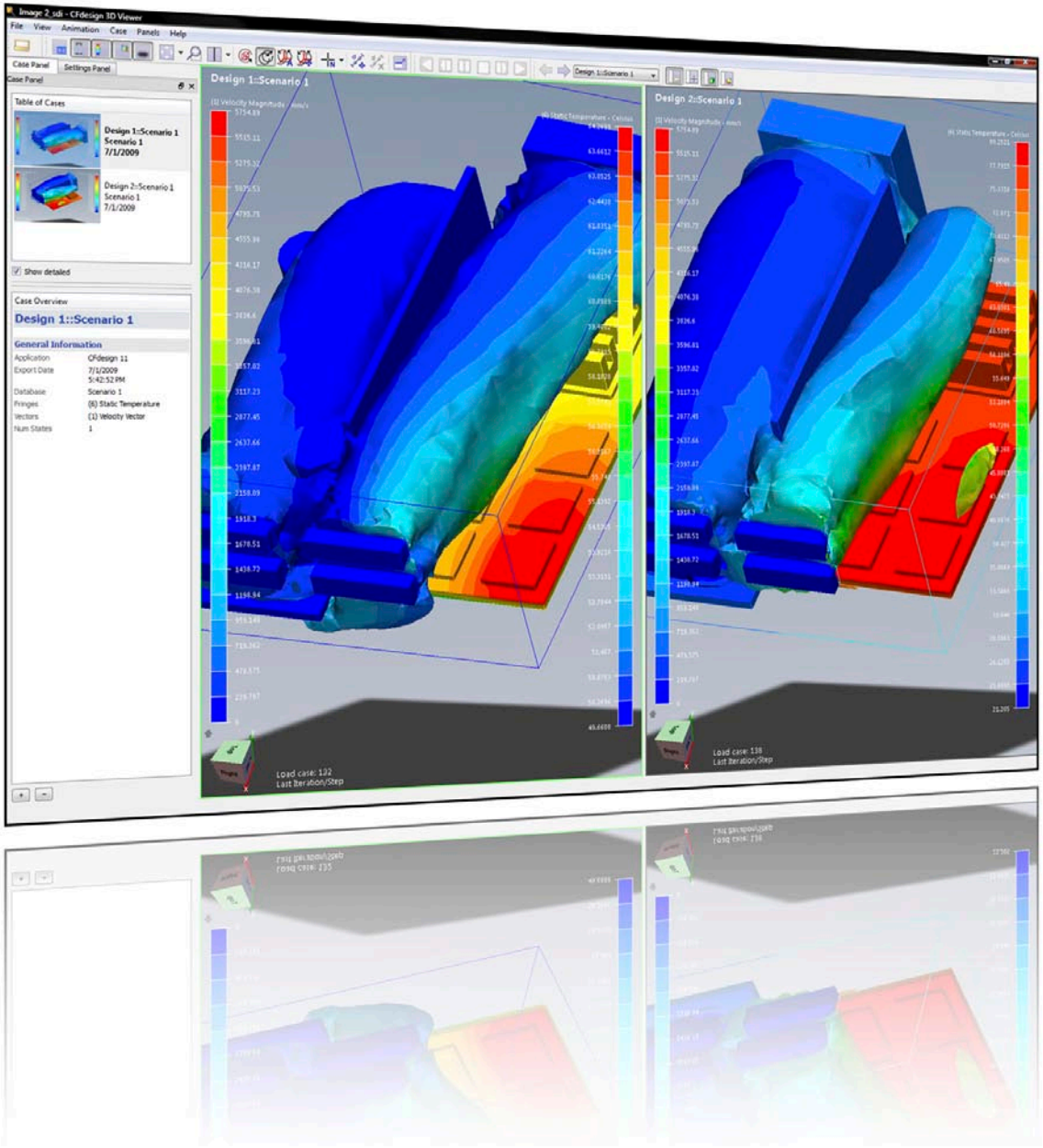
CFdesign 3D Viewer



The CFdesign 3D Viewer (formerly the Design Communication Center) has been redesigned to improve collaboration across engineering groups. The User Interface is ideal for comparing results from multiple scenarios and designs, and the look and feel are more consistent with the CFdesign user interface along with key and mouse commands.

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OS Support:

Windows XP 32-bit and 64-bit

Windows Vista 32-bit and 64-bit

CAD Support:

Autodesk Inventor 2009 and 2010

CATIA V5 R17, R18 and R19

CoCreate Modeling 2008

Pro/ENGINEER Wildfire 2, 3 and 4

Siemens NX 5 and 6

SolidWorks 2008 and 2009

Solid Edge V20 and ST

SpaceClaim 2008 and 2009

Minimum Hardware Requirements :

Intel® / AMD® 2 GHz , 2 GB of RAM, 60 GB hard drive

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CFdesign 2010 Update Schedule

CFdesign 2010 Initial Release
Septemeber 2009

CFdesign 2010 Winter Update
January 2010

CFdesign 2010 Spring Update
April 2010

CFdesign 2010 Summer Update
July 2010

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