

## Release Status

### New Supported CAD Systems, Kernels

Kernels: ACIS R11, Parasolid 14.1

### New Supported Platforms and Operating Systems

HP-UX 11.0 PA2, Solaris 2.9  
(HP-UX 10.20 dropped)

## Import/Export

### CATIA V4

Import of header details: Author, Model dimension, CATIA version

### DXF/DWG export

ACIS embedded solids only

### STEP import

Import free points, layers and user attributes

### Parasolid import / export

Support for assemblies

Export of open shells as multi-face sheet bodies

Improved setting of edge tolerances (Use Parasolid functions)

### ACIS Import

Import of attributes: color

### STL import

Option to import as special CADfix faceted surfaces

### STL export

Option to export in NASTRAN format

Option to export in CADfix neutral mesh format (.fme)

### MESH export

Option to export mesh (generated using the Mesh Manager) to NASTRAN format, CADfix neutral mesh file (.fme)

## Major face-lift for GUI

### Integrated work-area on left of graphics window

Wizard, Diagnostics, Manual Repair and Transformation tools integrated into common work area on left-side of graphics window

Persistent progress monitor can be closed and reopened

Improved assembly processing

### Simplified Wizard process

Bare minimum inputs: Target system/format, Target quality, Export file

The 5 stages of the Wizard process (Import, Repair, Transform, Prepare and Export) no longer prominent in the GUI.

### Improved work-flow

If Wizard fails, user now automatically passed onto optimized Diagnostic scan.

“What to do next?” advice for each type of failure, e.g. failed to repair, failed to prepare, failed to export.

Individual failure criteria have similar “What do I do about this?” advice and recommendations.

Each failure criteria now comes with a hierarchy of recommended tools that are appropriate for fixing the problem.

Diagnostic checks area constantly re-assessed and updated with users being progressed through to a successful conclusion

### Interactive tools closely linked to diagnostics

Manual Find/Fixes now available directly from diagnostics scan

### Customize menu option

User tools defined and stored in a tool chest

User or Site Tools may be dragged onto the user icon bar

### Set manager and browser

Additional menu options

- Add, Remove, Intersect and Delete set contents
- Select from ALL or Working set
- Make this the working or Display set

Set Browser has a make this the working set or Display set option  
**Attribute Manager**

Includes an assign to set contents or set itself option

## Wizard Process

### Import

Addition of an **All Format** option which shows all-available formats.  
Many CAD format import options contain extra facilities e.g. user attributes

### Repair

Handle more special cases:

- Large surfaces distort model size
- Improved splitting of closed NURBS surfaces
- Keep unused entities option

### Transform

Auto-edge joining in Transform stage  
Auto-face joining in Transform stage  
Complex hole removal

### Prepare

Better prepare for Parasolid to fix some known cases that cause the Parasolid tolerant edges or body checker to fail.

- Extra Integrity option for parametric conditioning

### Export

Better integration of Parasolid, Acis and Pro/Engineer body checking and diagnostics allowing a further prepare on failed parts

- Open shells as individual faces for Parasolid export

## Diagnostics/Interactive Repair

### Diagnostics & Repair

Diagnostic tool and Interactive Fixer tool now merged to form a single tool for diagnosing and interactively fixing problems.

- More intuitive to use than current separate Diagnostic and Fixer tools
- Much wider range of criteria (most from new JAMA PDQ criteria)
- Helpful diagnostic summary and problem descriptions including images
- Criteria can be viewed and filtered in various ways
- Preset values of criteria can be saved and loaded via a file.
- List of possible fixes displayed for each criteria
- Extensive right-hand click menus throughout
- Severity color code indicator

#### JAMA model quality criteria

- Diagnostic tool extended to cover most of the top 45 JAMA PDQ criteria, and some of the other less important ones.

#### Greatly extended range of Finds and Fixes:

- G1/G2 discontinuities (edges & surfaces)
- Overlapping edges, surfaces, faces and bodies
- Small radius of curvature (edge & surface)
- Self-intersecting edges, faces, & bodies
- Tiny faces and solids (based on area and volume calcs.)
- more...

## Defeaturing/Simplification

### Defeaturing Tools (used to be called Transformer)

Hole removal for face models  
Improved hole and protrusion removal for solids. Finds complex connections of interconnected holes. Copes with counter-sunk holes. Faster.  
New tool for splitting overlapping faces  
Narrow regions Find.

### Planar Splitter Tool

Improve robustness of splits, particularly through cylindrical/toroidal faces

## General

### Area and mass properties tool

New tool for calculating face and body mass properties

### Information panel

Helpful information displayed along bottom of Graphics area e.g. shortest edge on opening model, assembly mode or component mode.

### Model management overhaul

Undo/Redo

### Model interrogation

New integrated compact probe option with adjustable drag open and close window

### Graphics

Dynamic view controls now configurable. Can be set to emulate other CAD systems.

Activate dynamic rotation mode holding down CNTL key also default I-DEAS controls implemented.

Dynamic zooming with mouse wheel.

Speed-up of display drawing

User configurable colors for connectivity display

Collapse and open left-side panel