

## Release Status

### Supported CAD Systems, Kernels

Kernels: ACIS R16, Parasolid 17.1, CATIA V5 R17.0, Unigraphics NX4, Pro/E Wildfire 3, SolidWorks 2007, Inventor 11, Xpatch (Radar signature prediction software)

### Supported Platforms and Operating Systems

Windows 2000 & XP (Vista unofficially supported)  
Sun Solaris 8  
SGI IRIX 6.5.3 (available on request)  
HP HP-UX 11  
IBM AIX 4.3.3  
Linux Red Hat Enterprise 4 & SuSE 10 - 64bit

## Import/Export

### General

Auto-creation of sets from colour and layer attributes  
Assembly import: browse and select extended to Pro/E, CATIA V5, UG and SW  
Export of surfaces-of-revolution NURBS surfaces can be converted to surfaces-of-revolution on export controlled by auto-detection or by original form attribute of NURBS surface  
New facet turn angle control for STL and Xpatch export

### ACIS R16

Import supports reading of ACIS files up to R16  
Export supports writing of ACIS files up to R16  
More control over the export body checker use  
UNIX support now limited to Solaris

### CATIA V5/R17

Import/export support for CATIA V5 versions up to R17  
Now also available on Solaris platform

### Centaur/Flite3D

Export options for equally spaced spline points and max patch aspect ratio  
Improvements to the fitted splines  
Import of .dat geometry

### IGES

Export now supports export of labels as property entities (type 406).  
Import of labels from IGES ("Entity Label" field [max. 8 chars.] or from an assigned 406 label attribute)

### Inventor 11

Import supports reading of parts up to 11.0

### Parasolid 17.1

Import supports reading of Parasolid files up to 17.1  
Export supports writing of Parasolid files up to 17.1

### Pro/E Wildfire 3

Import supports reading of parts and assemblies up to WF3  
Export supports writing of parts and assemblies up to WF3  
Now also available on Linux platform

### SC03

Export now contains tessellation data and units  
User can preview the exported model

### SolidWorks 2007

Import supports reading of parts and assemblies up to SW 2007

### Unigraphics NX4

Import supports reading of parts and assemblies up to NX4

Import has option to control imported units

## VDAFS

Improved speed of export

## Assemblies

Improved assembly structures interactive creation and editing

- Imported assemblies can be edited

New import option to ignore empty components

New Parasolid import option to explode assemblies

Ability to assign custom attributes to assembly components

Auto-generation of assembly from existing bodies

New tool to delete empty components from assembly tree

New tool for finding and merging duplicate components in an assembly

## User Interface

Menu File >> "Save as" logic has changed to comply with recognized standard:

- Now renames the live model instead of making a copy
- New "Save a copy" option in menu
- If the model path is also changed and your working directory preference is set to 'model' than this action also has the effect of changing the working directory
- Also has the effect of changing the name of the wizard export file to match the new model name

New "Display quality" menu facet turn angle control

Easier to use toolbox and tool management:

- Popup menu on toolbox to change, edit, hide or delete tool or toolbox
- Tear-off toolboxes
- New external configuration files to define new tools/toolboxes

Probe tool shows assigned attributes of geometry parts

The colour of an item and the transparency can be changed in the Picture list Manager

Improved Set Manager polygon picking

Set Browser modifications:

- Filter internal, assembly or labelled sets
- Adjust the column width

Improved screen pick for centre of rotation:

- Now allows centre to be positioned anywhere on an edge

New measurement methods for edges:

- True line length (as opposed to distance between end-points)
- Radius of curvature
- Angle measuring using three points

Mouse-wheel zooming now always active

Improved framing of display parts

## Wizard Process

Values in .cwc file can now be specified with units, e.g.

```
repair,maxTol [DEFAULT, value] : 0.01 inch
```

Automatic fillet removal now available in Wizard Transform stage

New option for conversion of units after import

New option for arbitrary scaling of model after import

New option for specifying the export set

## Diagnostics/Interactive Repair

Undo/Redo now preserves and restores diagnostic results

Diagnostic results now associated with working set, and automatically restored when set is re-selected

New tool for fitting curves through cloud of points

Easier to use tool for creating blend surfaces

Merging of duplicate faces has been modified to consider different embedded geometry and just the edges

Conversion to NURBS now allows filtering of surface type

New "Smooth surfaces" algorithm for poorly shaped faces/surfaces:

- Respects shape of original NURBS (old re-fit tool fitted to the trimmed region, e.g. the face)
- Fit controlled by single user tolerance
- Old functionality renamed to "Refit surfaces" and replaced on Quick-fit toolbox

Improved sloppiness report with interactive browsing:

- Highlights selected entities on screen
- New selection and Popup menu feature
- Direct access to Probe tool
- Previous sloppiness report can now be restored

Improved find/fix for narrow faces:

- Improved performance
- More robust fix
- Now available in Wizard Prepare stage

## Defeaturing/Simplification

"Delete Feature"/"Delete Fillet" tools

- Improved robustness
- Handles more complex cases
- All-or-nothing behaviour changed. Now removes as many features as possible and just leaves the failed ones.

New tool for finding and merging duplicate bodies:

- Joins touching bodies into one body
- Use with an exploded assembly to produce a single solid

Improvements to robustness of planar splitter tool:

- The planar splitter now allows complex cases and partial/restricted splits
- More methods for defining the splitting plane

New point creation from surface u,v position

Create a point at the intersection of two edges and optionally split the edges

New co-ordinate system manager for complex point creation

- Project a point on to surface,
- Create an edge perpendicular to surface

## General

Use of sockets removed to prevent problems with firewalls

Support for Firefox and Mozilla HTML browsers

## STL/Mesh Generation

New proximity-based mesh sizing algorithm for better quality STL/Mesh generation:

- Automatically refines mesh size in narrow regions.
- Produces very regular, high-quality elements