CADfix 10 Service Pack 2

January 2016

CADfix 10/SP2 Summary

- Import/Export
  - CAD version updates
    - Inventor 2016
  - New Creo export of .prt files
  - New PLMXML import
  - Import/Export of density
  - Import/Export of mixed units assemblies
  - New non-watertight option for STL/3DS
- Wizard
  - Improved smart healing
  - Repair splits complex torus faces
- Assemblies
  - Mixed units support added
- Morph
  - More robust mesh->Brep matching stage
- 3D Printing
  - Improved and more robust slicing

- Facets
  - Faster more robust facet generation
- Join/Split/Offset/Weld
  - Much improved Weld tool
- Build
  - Lofted surface creation now accepts guide rail curves
  - Improved creation of swept bodies
- GUI
  - New hidden part display mode
  - New "similar bodies" selection
  - Miscellaneous improvements
- CADfixForSOLAR
  - Numerous improvements
- Misc.
  - Cross platform .fbm support
  - Extended CFI api
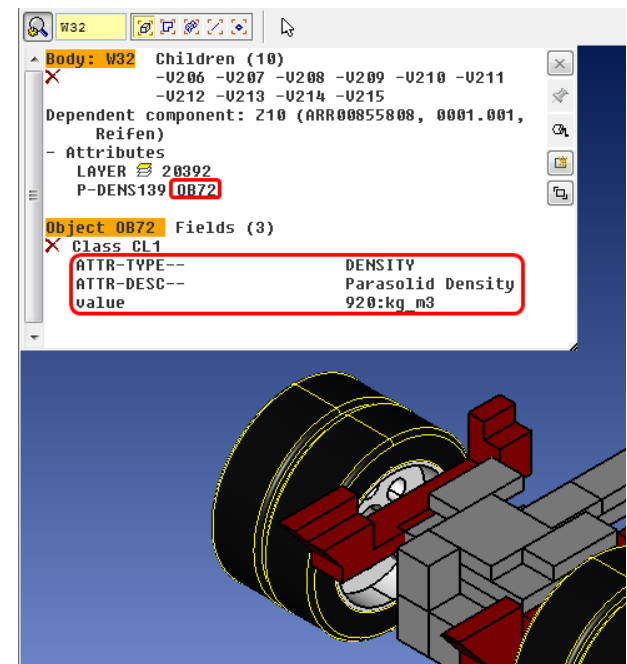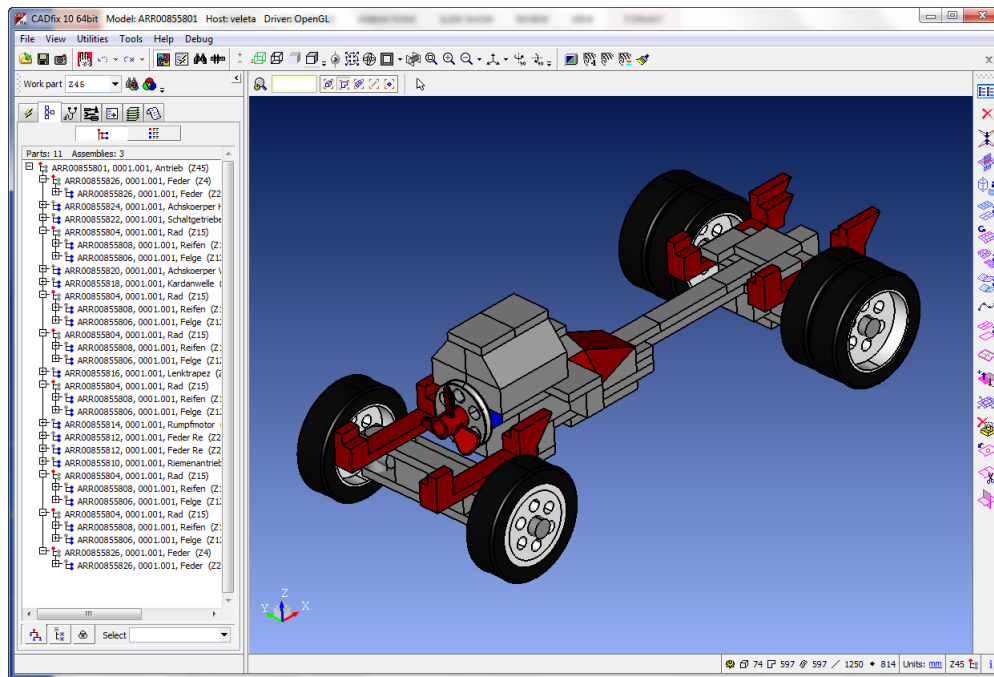 - Bugfixes.

ITI

Import/Export

- CAD version updates
  - Inventor 2016
- Export of native Creo .prt files
  - Single parts can now be exported to native .prt files
- PLMXML support
  - New import of PLMXML assemblies
- Import/Export of density
  - Import from CATIA V5 and Creo
  - Export to JT and PLMXML
- STL Export
  - New option to relax watertight export checks
- Import of mixed unit assemblies
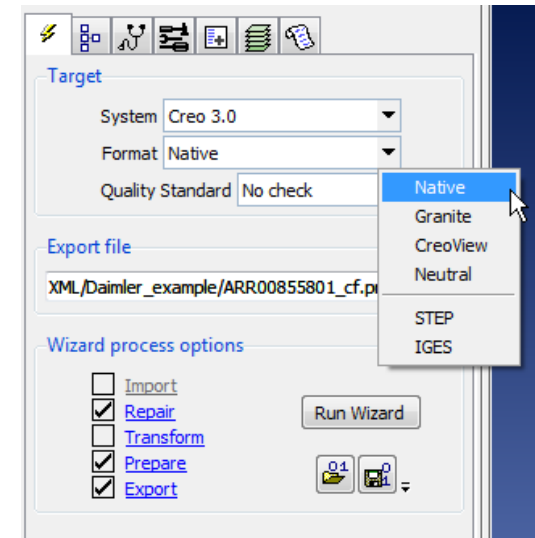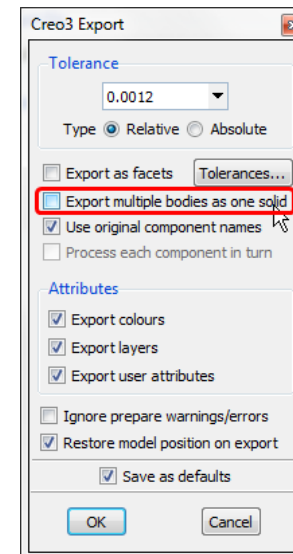 - Mixed units preserved and exported (to STEP only)

ITI

PLMXML Import

- ## Import of PLMXML assembly
  - Colour, layer & label
  - Material properties

Creo 3.0 Export

- ## New export to native Creo 3.0 .prt file
  - Some restrictions:
    - Only parts (.prt) supported in this release, assembly export planned for future.
    - Asssembly or multi-solid models exported as sub-folder of multiple .prt files, one per solid
    - Earlier versions of Creo not supported, only 3.0
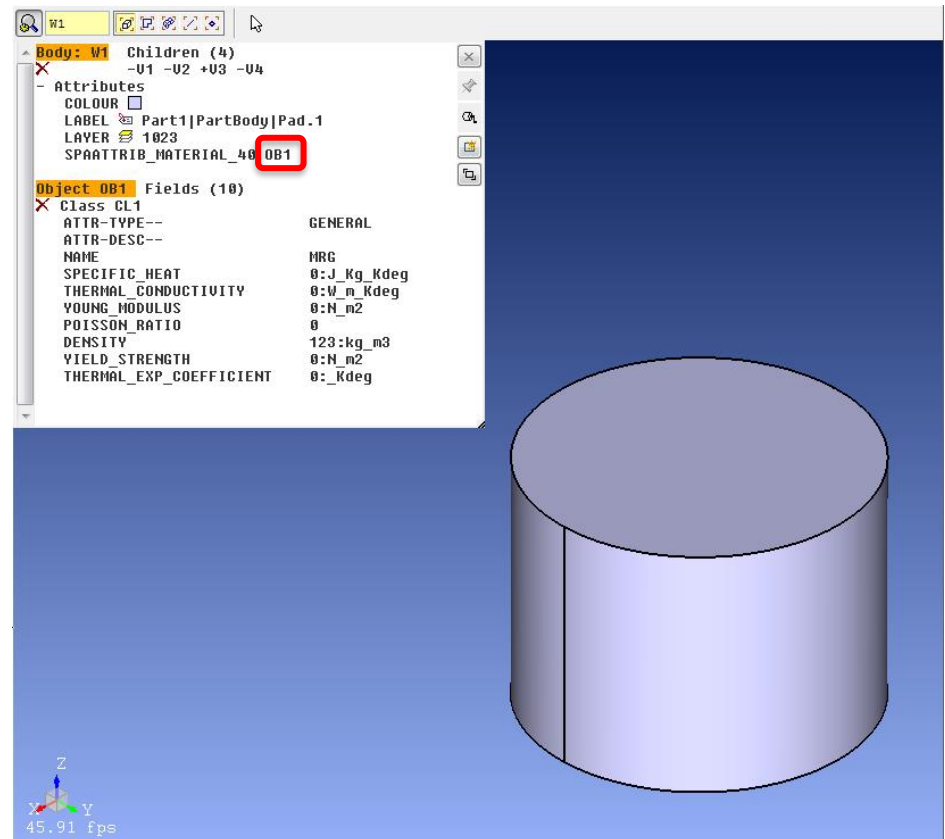   - New option to export all solids as a single part

Material Property Import

- ## Material property import from:
  - CATIA V5
  - NX
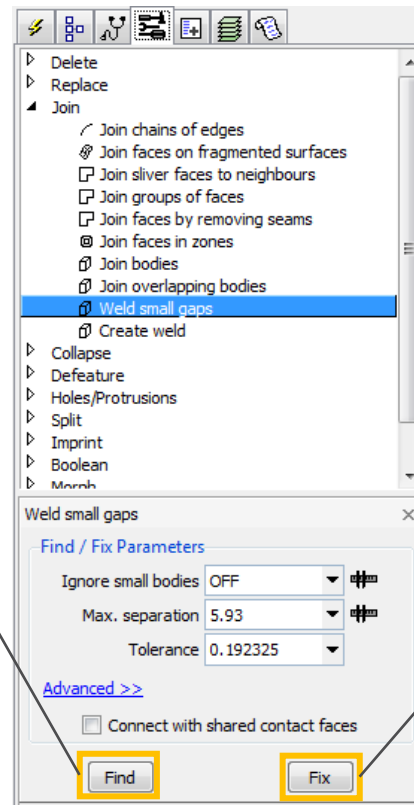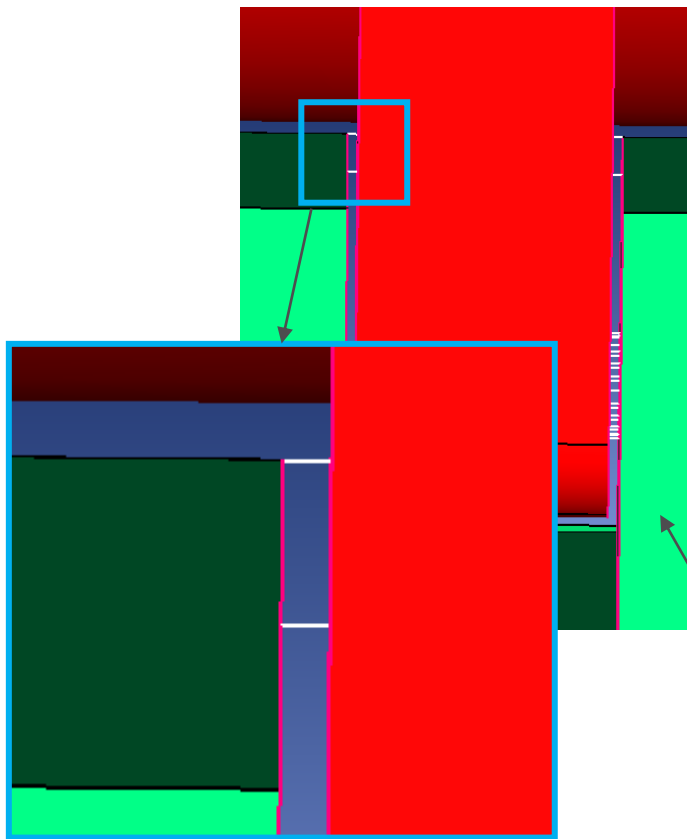 - Creo
  - JT/PLMXML

- ## View properties via probe tool
  - Double-click attribute

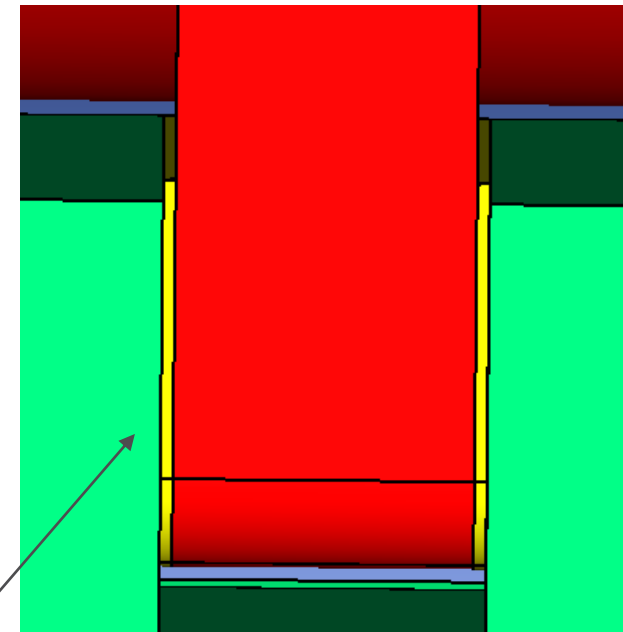- ## Available properties varies with system

Improved Welding tool

- ## New "Weld small gaps" tool
  - Can now "Find" gaps to weld before "Fix"
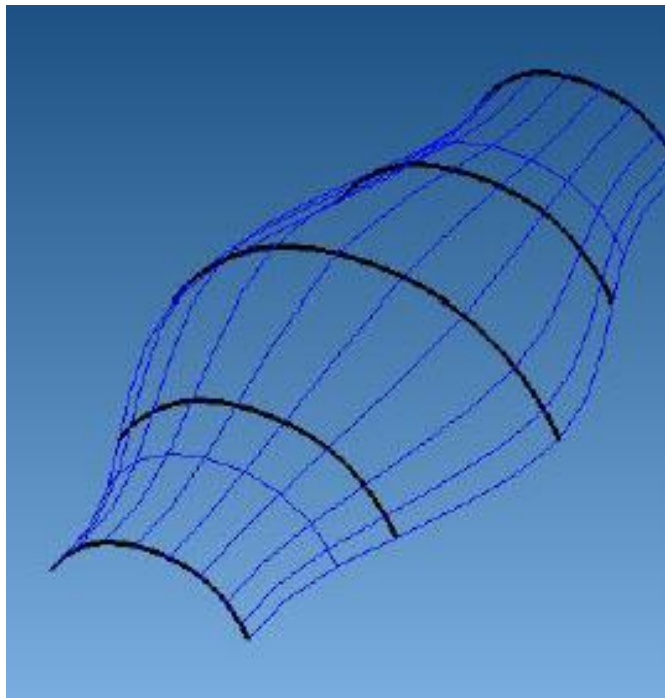 - Potential weld geometry highlighted in white
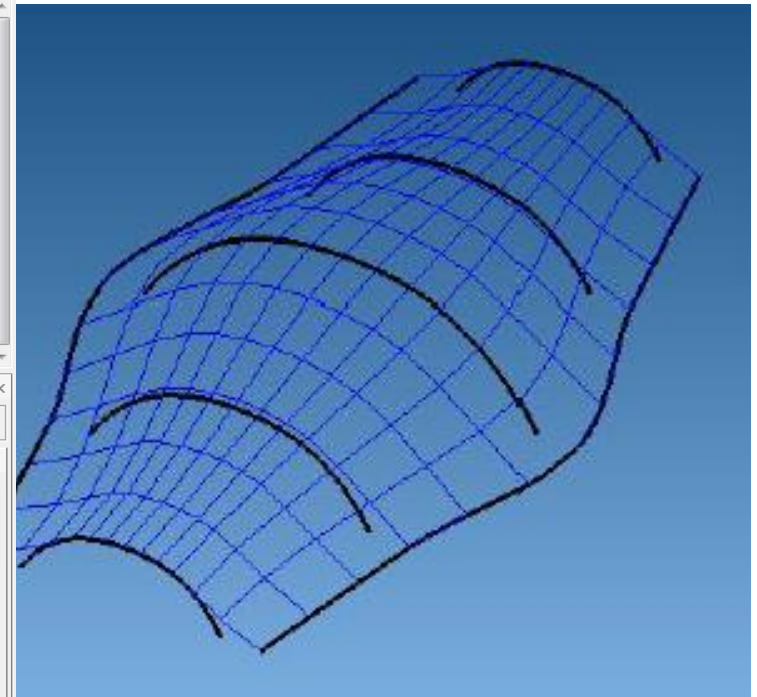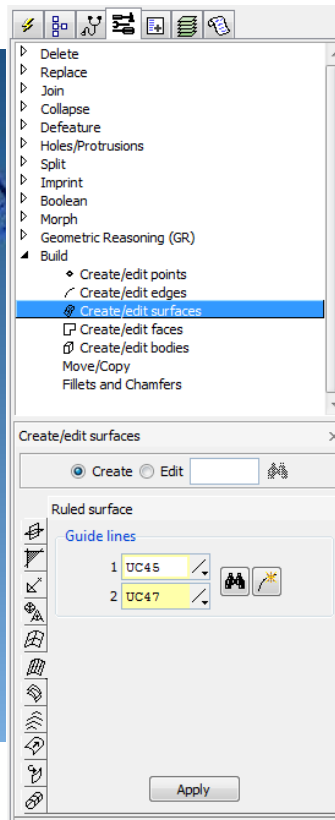
Resulting weld bodies in yellow

Build Tools

- ## Lofted surface creation with guide rails
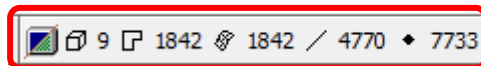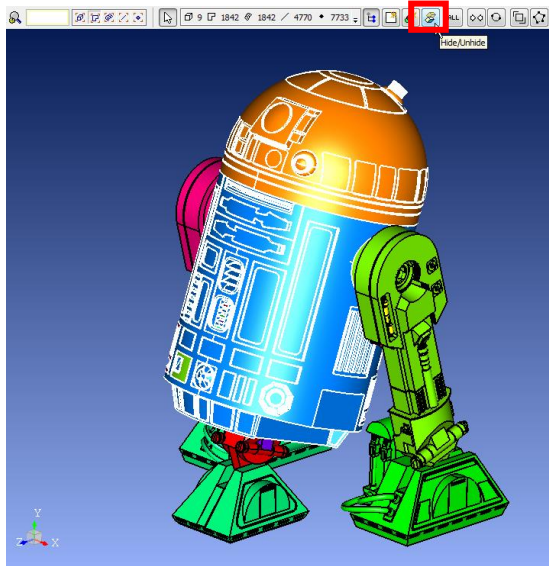 - 1 or 2 guide rail curves can now control lofted surface creation
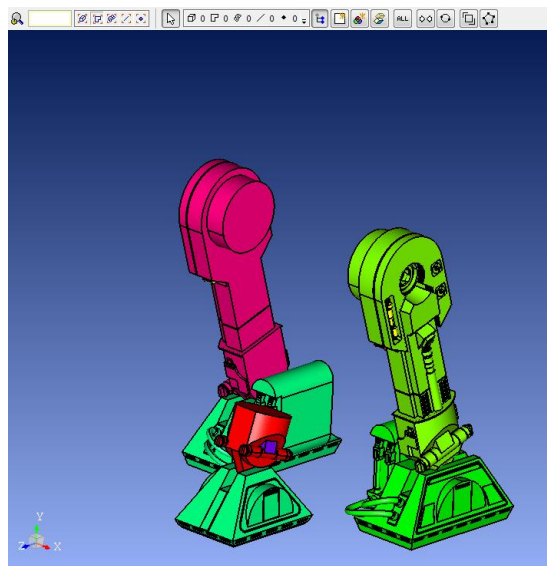

No guide rails
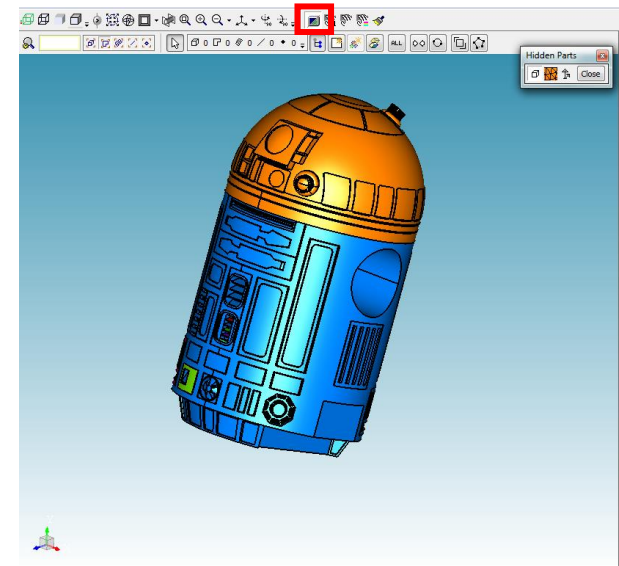
With guide rails

New Hidden Part Display Mode

- ## Display mode shows hidden parts
  - Background colour indicates hidden mode
  - Switch between normal and hidden modes with
  - Un-hide selected entities with <ctrl-h> or
  - Entity counter shows hidden parts

Hide selected entities

Entities hidden

Switch to hidden view mode

Select "Similar" Bodies

- New option in model tree – body view
  - Pick one body, then auto-select similar bodies
  - Useful in gross simplification of large multi-solid models