



TransMagic Presents:

Unleashing the Power of Engineering Data

Everyone Can be a CAD Super Hero



Presented to US Air Force
December 10, 2015



3D Design Has Changed the World!

- More Efficient Manufacturing
- Improved Speed, Accuracy, Safety
- Faster Planes, Trains and Automobiles

Machining & Finishing



Tooling Development



Assembly & Packaging



The Productivity GAP with 3D CAD

Because of CAD System Incompatibility

*“34% of CAD users end up having to remodel that geometry from scratch half the time”**

Lost or Wasted Time

- CAD Model Errors
- Undocumented Design Changes
- Poor Data Quality
- Routine Design MIS-Communications



* The 2013 State of 3D Collaboration and Interoperability Report

Impact on Engineering Time Management

Non-Productive Activities

- Repairing CAD Errors
- Re-Mastering Designs
- Translating Files
- Comparing Revisions Visually

= Hidden Cost

*“32% of organizations miss project deadlines because of design problems”**



Risky Business

- Many Failures Linked to:
 - Lack of Compatibility
 - Erroneous File Translations
 - Lack of Access to Critical Data

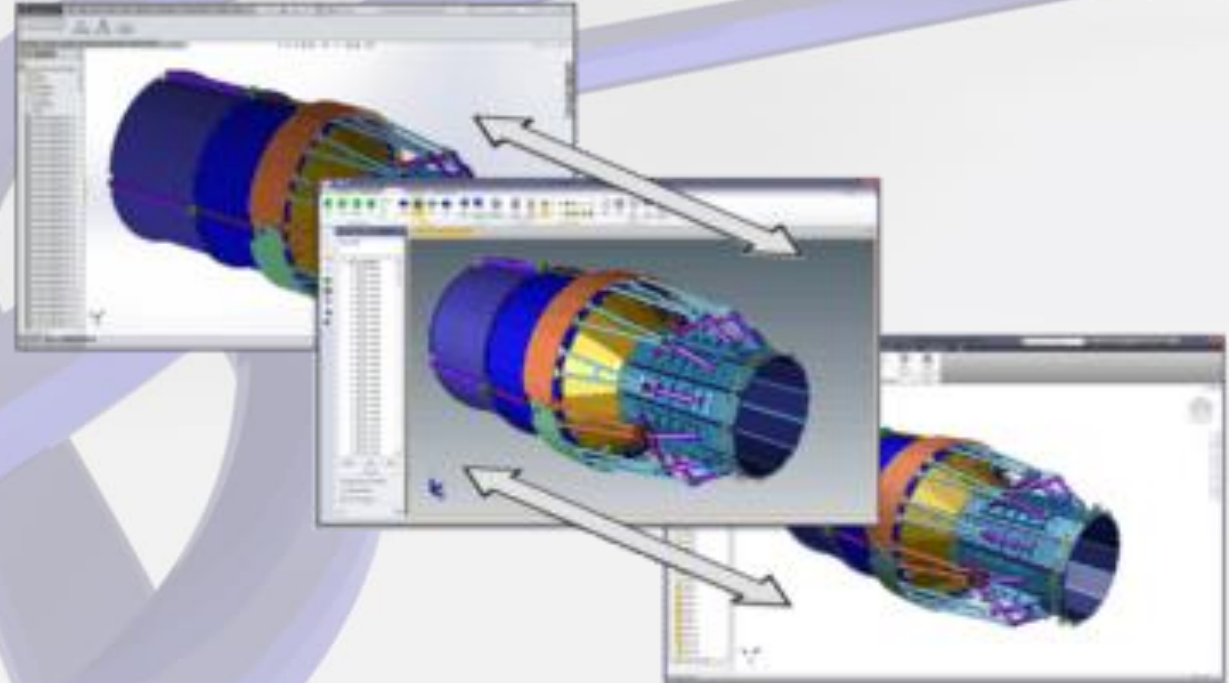
The Biggest FAIL

CAD A \neq CAD B



You Can Take Control

- Ensure Accurate Engineering Data
- Streamline Data Exchange
- Bridge the Gap
- Improve Efficiency
- Eliminate Hidden Cost and Time Wasters



The Future is Here!

Master 3D Design Data from Anywhere in the World

Get CLEAN Data to Anyone

Bridge the Gaps in Communication to Avoid Disasters

With

MULTI-CAD CAPABILITY

CONVERT and SHARE DATA

Design Access to Non-Engineering Staff

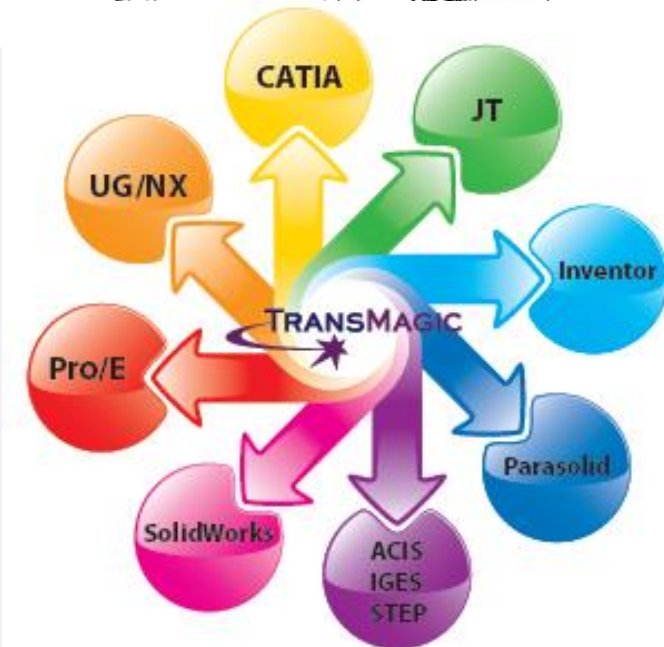
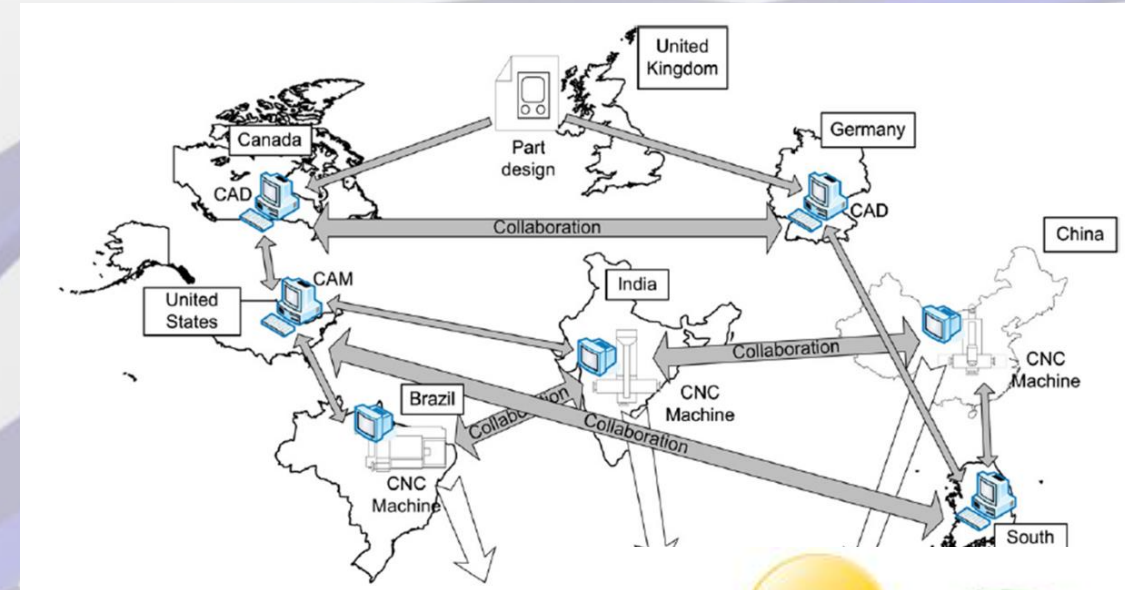
Best Format for LOTAR and MRO

Work with All Supplier Design Data

COMPARE REVISIONS – FIND ALL CHANGES

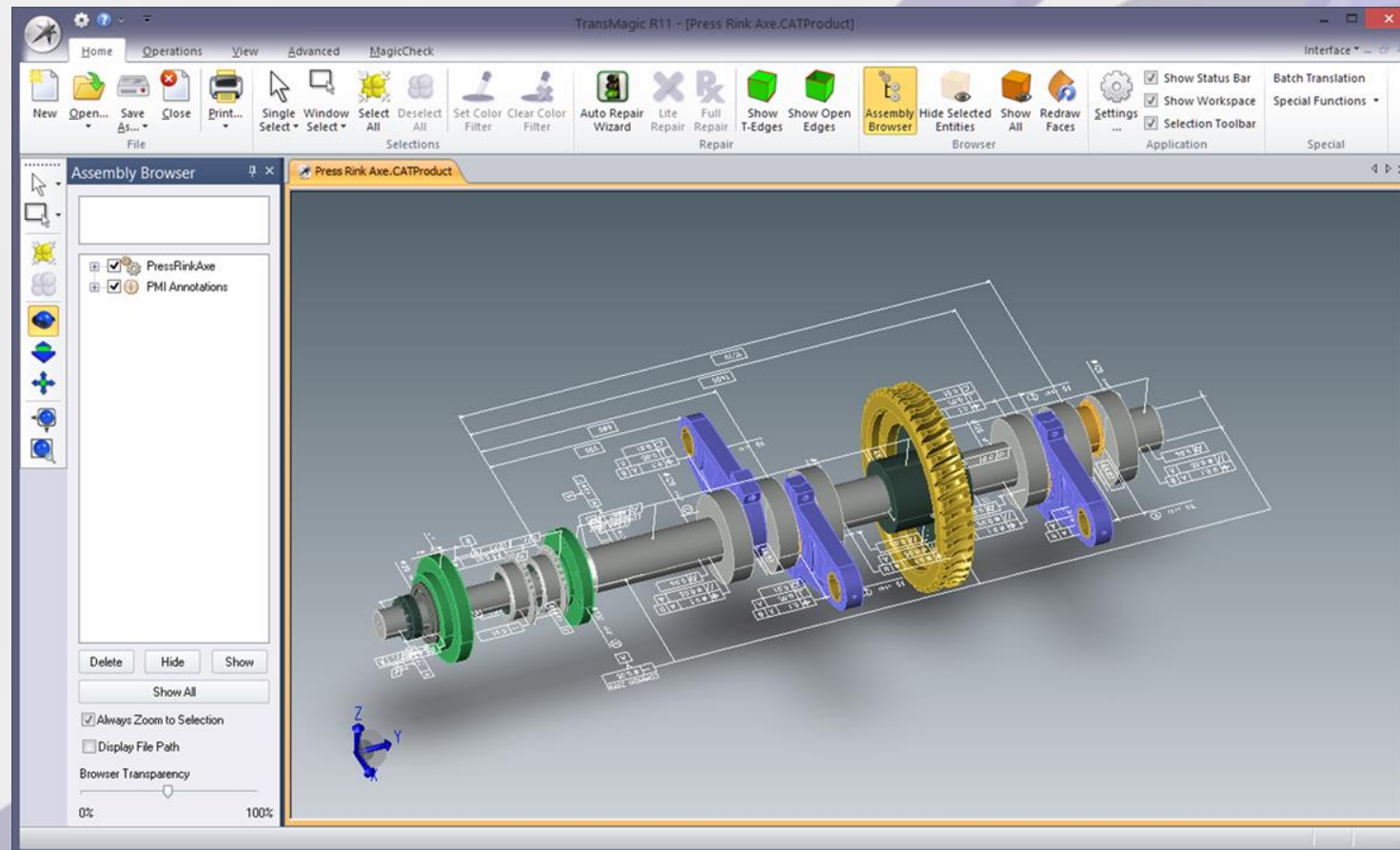
Know What Changed From Revision A to Revision Z

Avoid Costly Errors Due to Missed Changes



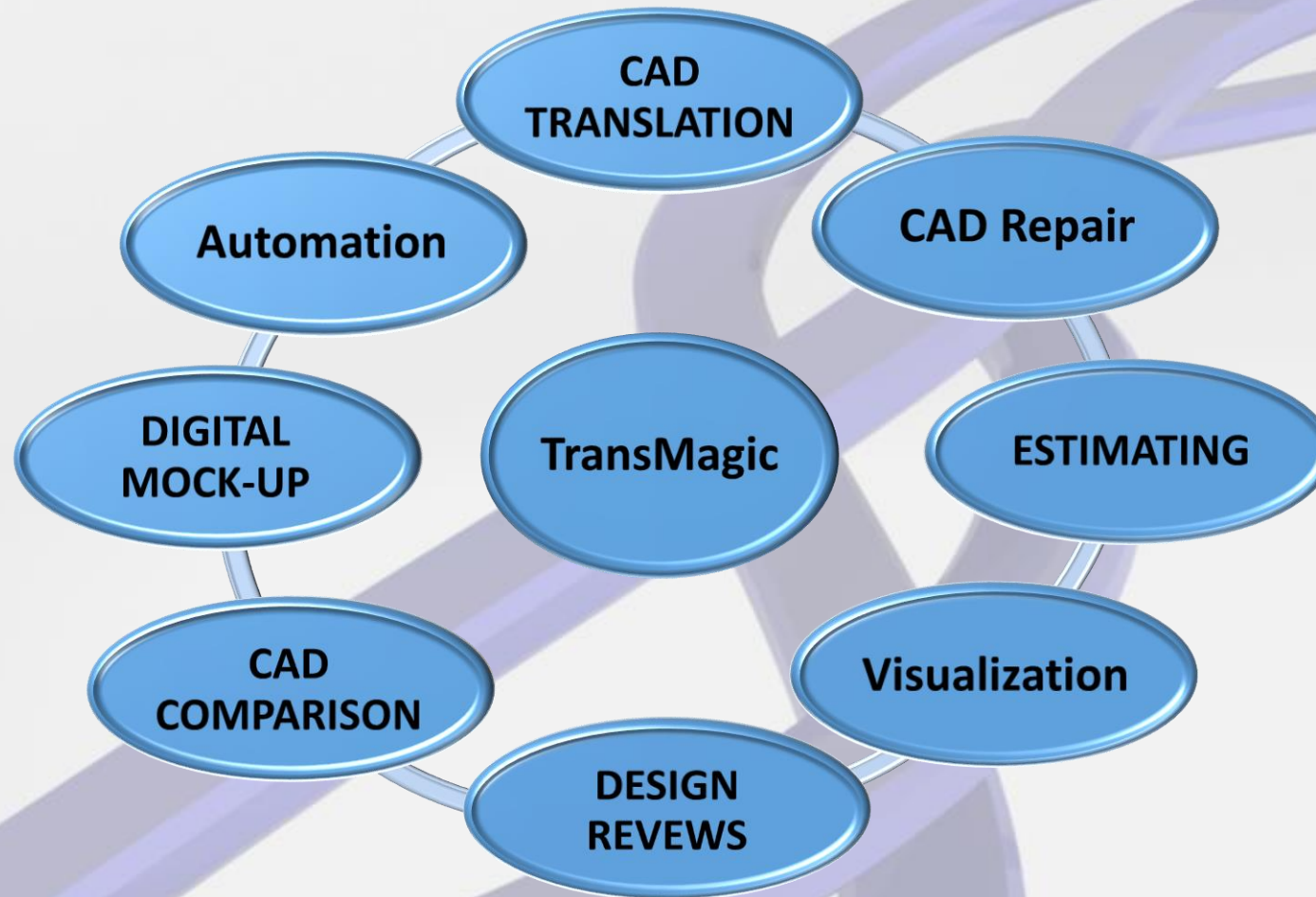
Solution for Engineering Data Access

- *Get All the Data*
- *Model Based Definition (MBD) 3D Annotations, GD&T*



Engineering Data Management Solutions

TransMagic: A Leader in 3D CAD Data Usability Since 2001



Advanced Engineering Data Access

All Major 3D Formats

- **Native CAD**
 - CATIA
 - SIEMENS NX
 - PRO/ENGINEER
 - SolidWorks
- **Neutral CAD Formats**
 - JT
 - IGES
 - STEP
 - DWG
 - 3DXML
- **Polygonal Models**
 - JT, STL, OBJ, PLY
- **Point Cloud Data**
- **2D Images** jpg, png, tiff
- **WEB Format** WebGL

*“40% of CAD users have to deal with 5 or more CAD formats monthly” **

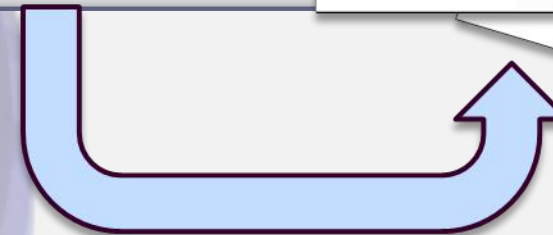
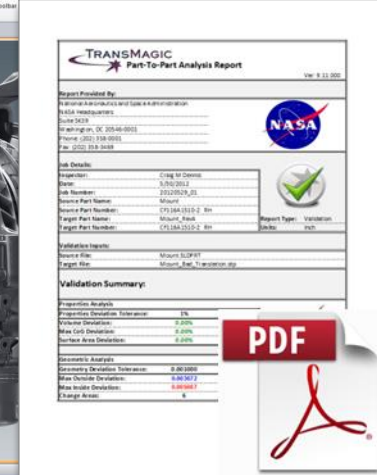
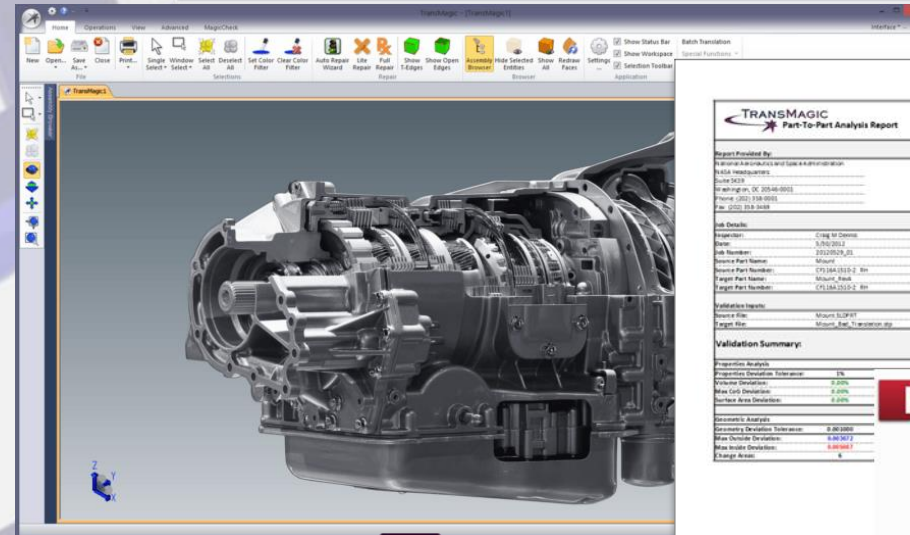
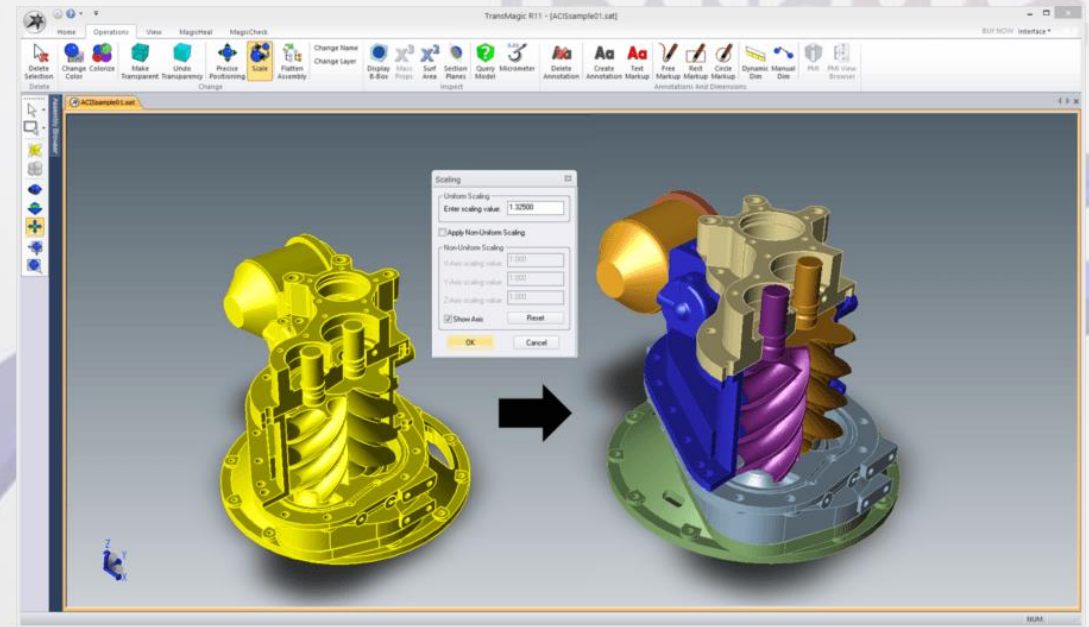
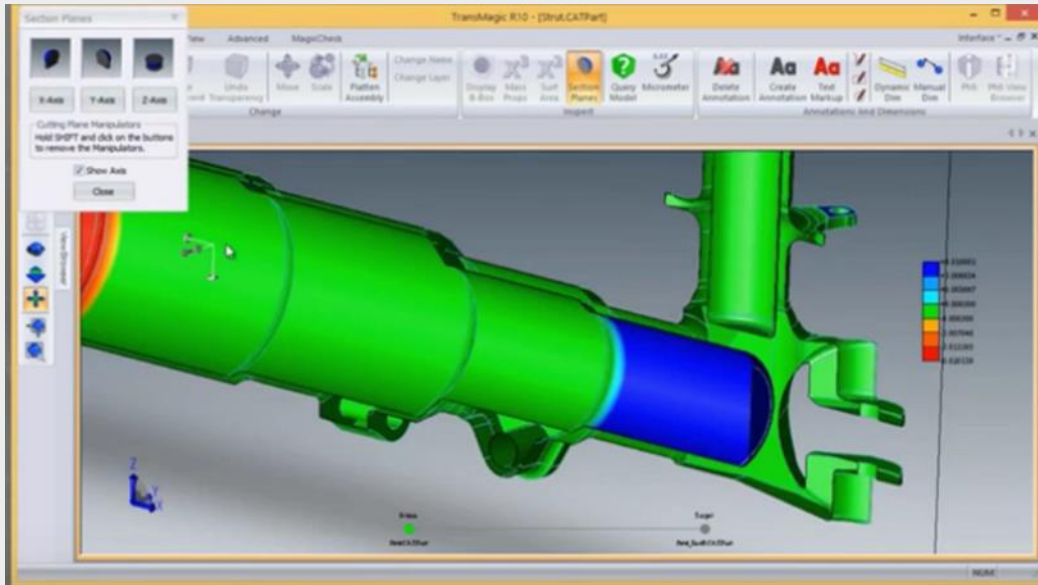
Streamlined Data Flow

All Major 3D Applications

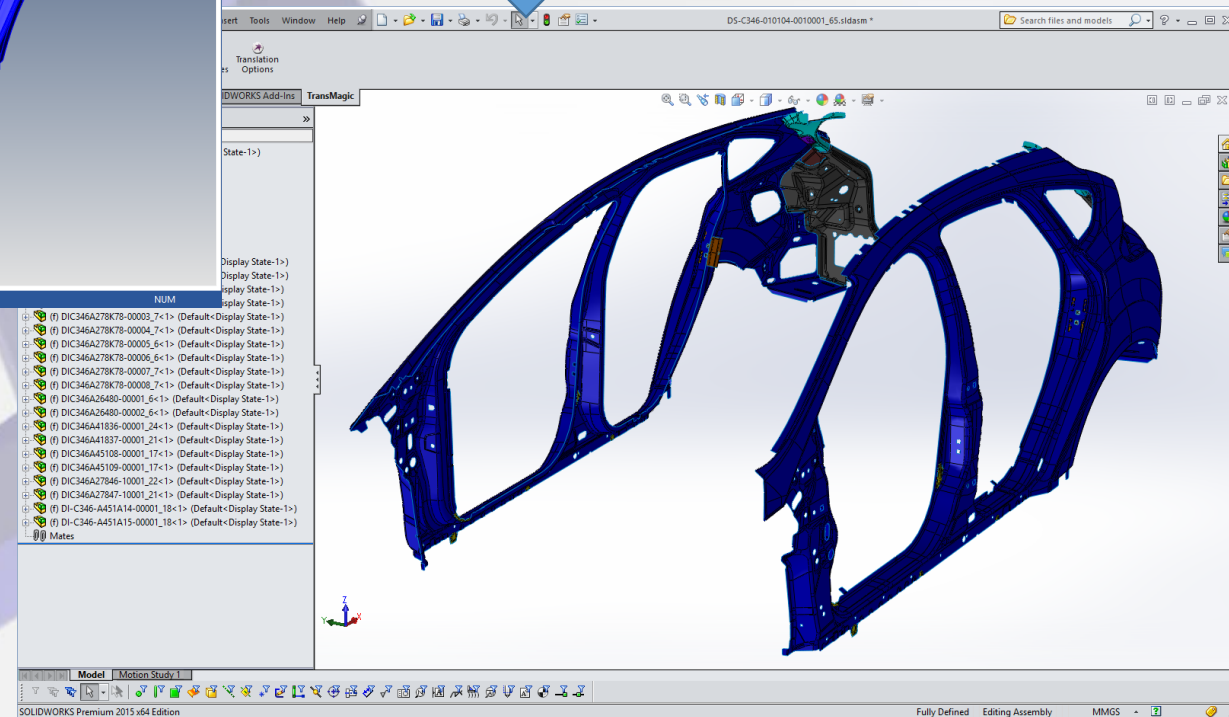
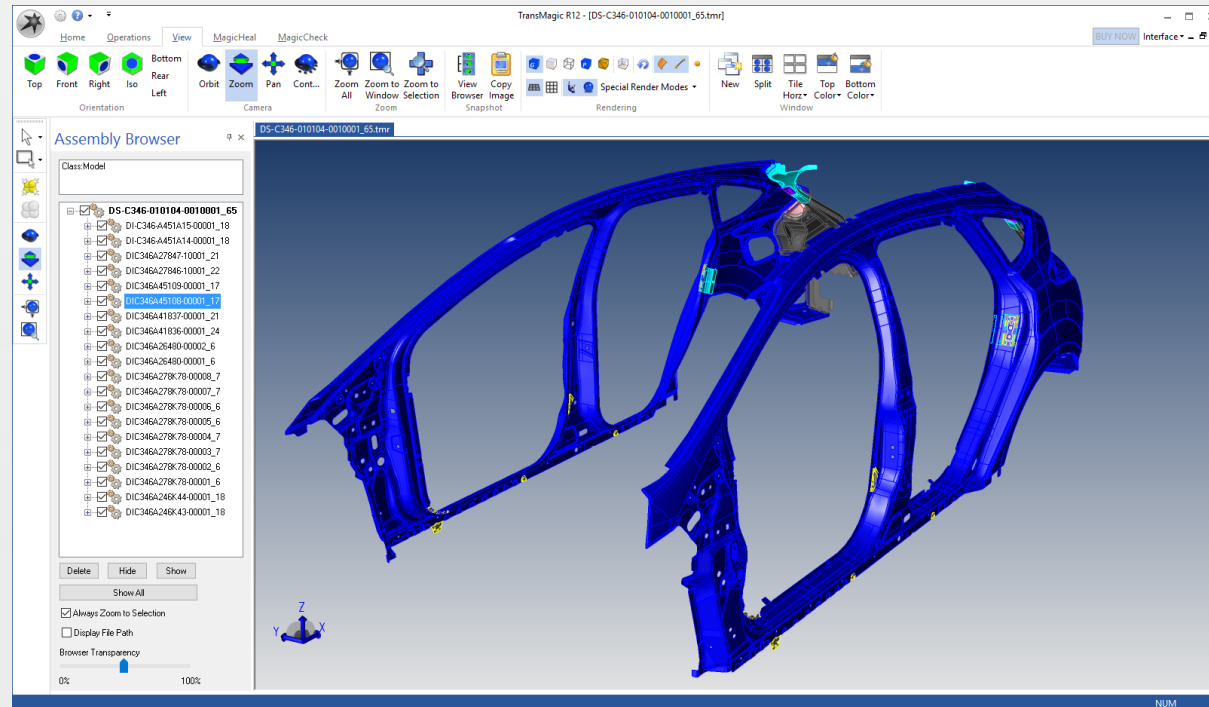
- Any CAD/CAM/CAE
- SIEMENS NX
- CATIA
- PRO/ENGINEER
- Solid Edge
- SolidWorks
- Inventor
- AutoCAD
- Mastercam
- 3D Printing

Translate – Repair Analyze – Report

See *all* the changes, not
just the documented ones



What You See is What You Get...



Competitive Difference

- **Improve Operational Efficiency**
- **Bridge Enterprise Communication Gaps**
- **Trusted Data Integrity and Accuracy**
- **Expansive 3D Data Support**
- **Keep Projects On Track**



TransMagic Delivers Productivity

- Open 3D CAD Models from All Major CAD Applications
- Quickly and Easily Get the File Format You Need
- Easy for Non-CAD Users
- Break Through Communication Bottlenecks
- Save Hours Every Day
- Ensure Accuracy of Data
- Prevent Downstream Errors



Case Study

- Challenge:
 - Team engineering and design
 - NGC uses CATIA
 - US Navy uses SolidWorks
- Solution:
 - TransMagic EXPERT + MagicHeal + MagicBatch
- Results:
 - Data exchange time reduced by 50%
 - Data re-work time reduced by 90% using TransMagic
 - Cut ONE YEAR off a data delivery time-line
 - \$750,000 savings in labor alone
- Northrop Grumman Claims Success
 - ***Without TransMagic, a year-long project would have taken two years!***

NORTHROP GRUMMAN



Aerospace & Defense Customers

NORTHROP GRUMMAN

Parker

Honeywell



Sikorsky

A United Technologies Company

LOCKHEED MARTIN



AM General
MOBILITY SOLUTIONS FOR THE 21ST CENTURY

**Rockwell
Collins**

Inflite



MARSHALL
AEROSPACE



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Thank You!

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