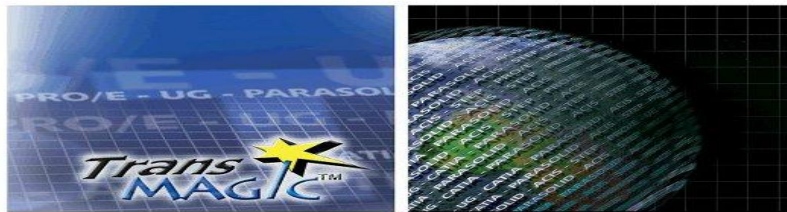


TMR8SP30ENG



Quick Start Guide
ENGLISH

TransMagic R8 SP3.0

Some critical points:

The goal of TransMagic is to be a simple, easy to use and deceptively powerful application for the translation, visualization & measurement of geometric formats. Geometric translation is an extremely intensive process mathematically speaking. Because of this TransMagic can consume a large amount of resources during the translation of very large and complex files.

TransMagic includes some very powerful "Repair" routines - that when used properly will help to increase your translation success. For hands-on video-based tutorials of these tools please see the "Tutorials" section in the program-internal help.

When translating files consider the application you're getting the file from and the application you're translating the file to.

When-ever possible use the native file format from the application you're getting from your customer or vendor. If they use Pro/E, NX, CATIA V4, CATIA V5, SolidWorks or Inventor then ask for their native file. Likewise if they use SolidEdge, MasterCAM, Visi, or any other Parasolid based application, then ask them for a Parasolid (*.x_t) file. If they use AutoCAD, Mechanical Desktop, CADKEY, IronCAD or any other ACIS based application, then ask them for a ACIS (*.sat) file.


Use STEP only if no other solid format is available. Use IGES as your last resort.

If you must use IGES, see if your customer/vendor has the option to write out an IGES file as an MSBO (Manifold Solid Boundary Object). This option is not often available in most IGES writers but if it is, it's at least a solid IGES format. The best IGES reader in the world can't help if the IGES writer created a terrible IGES file. Unfortunately, this is very often the case.

Finally, consider the application you're translating a file to and use the same methodology of native file formats where possible and then STEP and lastly, IGES.

This "Native Format Philosophy" will always yield better results than just trying an IGES file to see how it works. Save yourself some time and pain and try to get the native format.

Simple workflow:

1)  Import/Open. Click the Open button and select a part to read in.

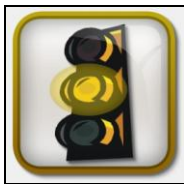
2) When you open a geometric file in TransMagic, the first thing you'll notice is that immediately after the part has been opened an interrogation process starts. This process is the Auto Repair Wizard. TransMagic is automatically analyzing the geometry that was just opened and is determining what, if any, additional steps may need to be taken to get the geometry into a high quality and useable state.

The Auto Repair Wizard has three states:



The Green Light

As the wizard states, your file looks good, you can now proceed to work with the file with confidence whether you're quoting, creating illustrations or translating the file out to another format.



The Yellow Light

This state has a different meaning for Solids, Surfaces and Sheet-Bodies:

Solids: For Solids this state means that issues were found with the file but they are not critical issues. They are issues that will likely not affect downstream operations. However, the recommended course of action at this stage is to perform the recommended action which is Lite Repair.

Surfaces: For Surfaces this state means that a surface model was loaded and the first recommended action is Lite Repair. In addition to correcting error, a primary function of Lite Repair is to stitch surfaces into solids automatically.

Sheet-Bodies: A Sheet-Body is a collection of surfaces that have been stitched together but they do not form a solid. Sometimes this is intentional but most of the time a sheet-body is the result of missing surfaces. Missing surfaces are usually the result of a defect in the translator that created the file. TransMagic is able to easily Repair these conditions as well with its "MagicSurface" technology. If there are missing surface they will be identified by the Auto Repair Wizard as "un-stitched edges".



The Red Light

This state means that severe issues have been found that will most likely affect downstream operations and even TransMagic operations. The recommended course of action at this stage is to perform the recommended action which is either Full Repair or Advanced Full Repair.

The beauty of the Auto Repair Wizard is that the best course of action is to follow the recommendations by simply clicking a single button. Decades of TransMagic industry knowledge and expertise are built into this easy to use wizard.

Another nice feature is that Repair operations are only applied to the parts that require them. This is a huge time saver as you don't have to check each part individually of a large assembly as the Auto Repair Wizard will do so. Different parts may require different levels of Repair as well which will also be determined by the Auto Repair Wizard.

3) Export your geometry out of TransMagic:

a) File / Export... - Exports what-ever is currently selected to a new file. Export will only save what is currently selected so this is a handy function for breaking apart various components of an assembly into individual parts or sub-assemblies.

To select multiple individual parts hold down the Shift key while selecting parts using Single Select



or Window Select your desired geometry using the



Button.

b) File / Save As... - Saves the whole TransMagic session to a new file format.

TransMagic recommended formats for CAD-Systems

CAD-System	Recommended for import into TM	Recommended for export from TM
3ds max	*.sat	*.sat
ABAQUS	*.sat	*.sat
ADAMS	*.x_t	*.x_t
ALIBRE	*.sat	*.sat
AlphaCAM	*.x_t	*.x_t
AnSoft	*.sat	*.sat
ANSYS	*.sat	*.sat
Ashlar-Vellum	*.sat	*.sat
AutoCAD	*.sat	*.sat
Autodesk Inventor Baugruppe	*.sat or Inventor-Integration	*.sat or Inventor-Integration
Autodesk Inventor Einzelteil	*.ipt, *.sat or Inventor-Integration	*.sat or Inventor-Integration
CADKey	*.sat or *.x_t	*.sat or *.x_t
CADMAX SolidMaster	*.x_t	*.x_t

Camtek PEPS	*.x_t	*.x_t
CATIA V4 Export	*.exp, *.dat, sequential files	*.model
CATIA V4 Einzelteil	*.model	*.model
CATIA V5 Baugruppe	*.CATProduct	*.CATPart
CATIA V5 Einzelteil	*.CATPart	*.CATPart
CheckMate	*.sat	*.sat
CimatronE	*.sat	*.sat
DCS Products	*.sat	*.hsf or *.sat
Design Space	*.x_t	*.x_t
DesignSTAR	*.x_t	*.x_t
EdgeCAM Solid Machinist	*.x_t	*.x_t
Esprit	*.x_t	*.x_t
Euklid Design	*.x_t	*.x_t
Factory Mill	*.x_t	*.x_t
FeatureCAM	*.x_t	*.x_t
Femap	*.x_t	*.x_t
FEVA	*.sat	*.sat
GAMBIT	*.sat or *.x_t	*.sat or *.x_t
GibbsCAM	*.sat or *.x_t	*.sat or *.x_t
Hoops MetaFile		*.hmf
Hoops StreamFile		*.hsf
I-DEAS	*.x_t or *.stp	*.x_t or *.stp
IGES	*.igs	*.igs
ImpactXOFT	*.sat	*.sat
Inventor	see Autodesk Inventor	see Autodesk Inventor
IronCAD	*.sat or *.x_t	*.sat or *.x_t
IX Speed	*.sat	*.sat
MasterCAM	*.x_t	*.x_t
Mechanical Desktop	*.sat	*.sat
MegaCAD	*.sat	*.sat
MicroStation	*.sat or *.x_t	*.sat or *.x_t
Missler Goelan	*.x_t	*.x_t
Missler TopCAD	*.x_t	*.x_t
Missler TopSolid	*.x_t	*.x_t
MoldFlow	*.sat or *.x_t	*.sat or *.x_t
MSC.ADAMS	*.x_t	*.x_t
MSC.Patran	*.x_t	*.x_t
MSC.visualNastran	*.x_t	*.x_t
NASTRAN	*.sat	*.sat
PARAMARINE	*.x_t	*.x_t
Parasolid	*.x_t, *.xmt_txt	*.x_t
PATRAN	*.sat	*.sat
PowerSHAPE	*.x_t	*.x_t
Pro/ENGINEER Baugruppe	*.asm	*.x_t or *.stp
Pro/ENGINEER Einzelteil	*.prt	*.sat or *.x_t or *.stp
SAT	*.sat, *.sab	*.sat
SheetWorks	*.x_t	*.x_t
SmartViewer	*.x_t	*.x_t
Solid Builder	*.x_t	*.x_t

SolidDesigner	*.sat	*.sat
SolidEdge	*.x_t	*.x_t
SolidWorks Baugruppe	*.sldasm, *.x_t	*.x_t
SolidWorks Einzelteil	*.sldprt, *.x_t	*.x_t
STEP	*.stp	*.stp
StereoLithographie		*.stl
SURFCAM	*.x_t	*.x_t
Think3	*.x_t or *.stp	*.x_t or *.stp
TopSystems t-flex CAD	*.x_t	*.x_t
TracePro	*.sat	*.sat
TurboCAD	*.sat	*.sat
Unigraphics CAM	*.x_t	*.x_t
Unigraphics	*.prt or *.x_t	*.x_t
Vellum	*.sat	*.sat
Vertex	*.sat	*.sat
Virtual Gibbs	*.x_t	*.x_t
VirtualINC	*.x_t	*.x_t
VISI-CAD	*.x_t	*.x_t
VISI-CAM	*.x_t	*.x_t
VX CAD/CAM	*.x_t or *.igs (or VX-Integration)	*.x_t or *.igs (or VX-Integration)

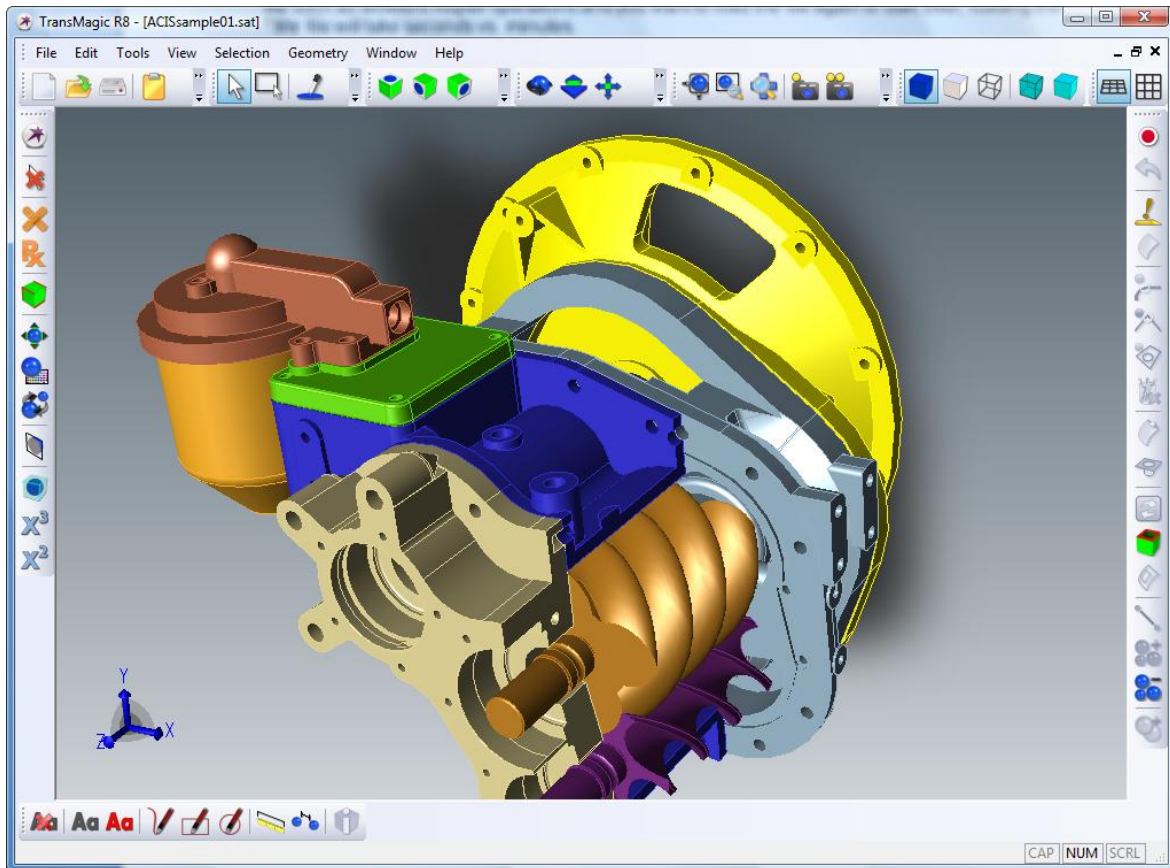
Tips:

TransMagic offers many ways to cure issues in a file but some more advanced Repair operations (like full repair, advanced full repair and MagicSurface) simply require you to know the tools available to you and the video Tutorials are a great way to learn these tools. Simply use the program-internal help-function to learn more.

The TransMagic interface has many options that will turn themselves "off" and "on" based on your selection. In addition to the Icons along the top and sides of TransMagic, virtually every function is embedded in a Right-Click mouse button menu. The Right-Click menu changes based on your selection type. You can change your selection type by Right-Clicking and then selecting "Filter Selection". There you'll see you have the option to select Body, Face, Edge, Vertex and the Window Select Filters for Solids Only, Surfaces Only and Wire-Frames Only. Each type of selection has different Right-Click options available to it when selected.

Note: in order to "see" vertices, you'll also have to Right-Click and then select Show->Vertices.

Note that when you are at the "Body" selection level, which is the default, and you have a part or parts selected, you can use the File->Export menu option to Export only what you have selected. This differs from File->Save As in that File->Export only save what you have selected and File -> Save As saves out the entire document and all parts within it. This is useful in breaking down larger assemblies into sub-assemblies. You can also easily select parts from the Assembly Browser under Tools->Assembly Browser. Likewise, if you have an open document, File->Import will let you insert additional parts into the already open document vs. File->Open which simply opens a new document for the selected file.



Support:

Need help or support? Please contact your TransMagic reseller first. Alternatively you could contact us directly. We are happy to help:

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