TransMagic R12

----------Version: 12.22.600 - 12/10/2019----------

- Updated Format Versions:
    - ACIS 2020 1.0 (R30)
    - CATIA V5/V6R2019 (R29)
    - CATIA V6 R2019x (R29)
    - Inventor 2020
    - Parasolid v31.1
    - SolidWorks 2020
    - DWG 2020
    - DXF 2020
    - MicroStation V8
    - NX 1847 (Continous Release)
    - Creo 6.0
    - SolidEdge ST11
    - NGRAIN 5.0, 5.1
    - 3D PDF 2019 SP2
    - JT 10.5
- New Functionality:
    - New Format Support: XCGM. XCGM is the native kernel format for the CATIA CGM geometry kernel.
    - New Format Support: VDA-FS. VDA-FS is a legacy German standard geometry exchange format.
    - New licensing system. TransMagic is now using the industry standard Flexera licensing technology (formerly FlexLM). In addition, this licensing will be user serviceable with a new User Portal coming on line soon to facilitate the user managing their own licensing.
- Added new option, Pause Network Activation Auto Transfer, which allows users with Network licenses to pause the return of a license so they can take it on a trip, take it home, etc.
- Added a new program utility launchable from the TransMagic Program group named TransMagic License Settings, which allows you to see all your license properties and also in the case of a network license, who is currently using the license.
- Undo! A long-requested feature. The Undo is now intelligent and instantaneous. All versions of TransMagic now feature an Undo function hooked up to both a button on the Operations Toolbar and CTRL+Z. This feature is now enabled for all versions of TransMagic.
- Added support for Assembly Cuts starting with Creo. Other formats will be coming on line soon in patches to R12sp2. This is a significant piece of technology with 3 modes:
    > (1) Apply these Boolean cuts with TransMagic. In this mode if cuts hit instances, these instances will be divorced and become independent parts.
    > (2) Read the tool bodies but do not apply the cuts. This mode will bring in the tool bodies which will show up as transparent red shapes and there will be an XML file placed in the incoming file directory that lists the tool bodies by name and the bodies they are intended to cut. This way the user can apply these cuts in their CAD system and preserve instancing and BOM.
- PMI MBD support added for SolidWorks Read.
- If Always Zoom To Selection is checked in the assembly browser, this now applies to PMI as well.
- The TMR format now supports full PMI and MBD data save and restore. You can now open a file that contains PMI, save to TMR and restore the TMR later and continue to operate with full PMI functionality. Previously, full PMI functionality was only accessible when opening the native formats and was not saved to the TMR format so there was no way to save progress for this functionality.

- New Metadata Support - Versioning. The version or revision, depending on what the native CAD system calls it, is under the UDA, or User Define Attribute, node in the Assembly Browser.
- Search directories can now be added to the Settings of TransMagic for finding subordinate parts and assemblies. Many times, while loading assemblies, the relative path structure will have changed for subordinate parts and assemblies. TransMagic will list which files in cannot fine. However, instead of having to copy these missing parts or assemblies, you can now simply add the file paths for them so that they will be found on the next file loading operation. This can be found in Settings, under Application, under Advanced.
- Added an option to the Save As dialog for MagicBatch to create output directories based on the file type being saved. This allows for easier organization when batch processing many different file types out to disk.
- Supported new NGRAIN feature called Voxels Per Meter which allows the voxel density to remain static relative to a per Meter unit of measurement.
- When a user selects and then Exports a single body, part or sub-assembly, that body, part, or sub-assembly name will be the default name in the Save As dialog.
- Implemented new behavior for assemblies that contain assembly-level-geometry when saved out to formats that do not support this type of structure: All of the assembly-level-geometry bodies will be inserted into a multi-body part named after the containing assembly or sub-assembly and appended with _AssemblyLevelGeometry so that the user can easily identify this new part.
- MagicBatch: Implemented a new error handling mechanism that allows the process to proceed through even catastrophic translation failures.
- 3D PDF output now supports the same Show or Hide state in TransMagic.
- 3D PDF support has been upgraded to show individual face color rendering. Previously only body color was supported.
- Material properties now consider the Application Unit and display based on Metric or SI units. Units have always been recognized by mass properties calculations, they were simply always being displayed as Metric in the Assembly Browser.
- Magic Heal Tools for handling Non-Manifold Geometry:
    - Show Non-Manifold: This function highlights in CYAN any non-manifold edges and vertices while it renders any geometry directly adjacent to them WHITE to make finding them easier in the case of large files.
    - Unhook Non-Manifold: This function will automatically disconnect non-manifold edges which will result in one or more of the following entity types: Body, Sheet or Wire-Frame. Non-Manifold Vertices cannot technically be separated from the rest of the body like edges. In the case of Non-Manifold vertices, the Show Non-Manifold function becomes the most valuable function as the user can easily find the faces adjacent to the Non-Manifold vertex and then manually unhook them or by delete the face with embedded vertex and recovering it, thus resolving the condition.
- Added a new tool to MagicHeal named Set Guide, which allows you to set guide curves which help to control the shape of the MagicSurface as it is required to pass through these guide curves.
- Added a new Rename With Indexing function. In the Assembly Browser, click on the top-level assembly node, right-click and select Rename With Indexing. This function will then proceed to rename all parts the same name as specified, but also append an index serially to * all of the renamed sub-assemblies, parts and bodies. This index number starts with a default of 0 but the user can specify any number for the start number.
- There is a new user-editable Material Property file named TMMaterialInfo.XML and stored in the CSIDL_COMMON_DOCUMENTS\TransMagic\Settings folder. Users can add or remove materials from this file or fill out missing information such as that mentioned in the bullet above. The TM Material Property node in the Assembly Browser uses this file for building its material list dialog. Any materials added or removed will be reflected in the list in this dialog.
- Hooked up 3D rotation to the keyboard arrow keys, add SHITF+ for 90-degree rotation, add CTRL+ for pan, add ALT+ for axial rotation, all are very useful during Repair operations if you don't have a 3D mouse.

- Implemented two new Bounding types: Bounding Sphere and Bounding Cylinder. These shapes, particularly cylinder for turning shops, are very useful for calculating various stock sizes.
- Added a new Read Free Edges option to the DWG reader. DWG can often contain massive quantities of free edges which are many times not desired. Having the ability to * disable the reading of these free edges can greatly improve the read performance when these massive quantities of free edges exist and are not needed.
- Added a new Orient View To Face option. To use, select a planar face, right-click and select Orient View To Face and select one of the four directions.
- Added option to reverse the mouse wheel zoom to user preference. This also helps for the zoom to feel as expected when using TransMagic on a Windows tablet as well. This option is in Settings under the Application and General tab.
- Added new Change Legend Color feature to MagicCheck. This feature allows you to change the color mapping gradient colors to which ever colors you choose. You can also change them all to the same color to create a true\false rendering style.
- Performance: Greatly improved Assembly Hierarchy and geometry refresh performance. Along with this is an associated modern 0-360 style progress meter during these refreshes.
- Implemented Multi-core MagicCheck validation and revision algorithms. This feature vastly increases the validation and revision checking algorithms to use all cores available to process the checking operation. The performance increase is on average 40% faster.
- Interface: New interface refresh and skins added.

----------Version: 12.10.800 - 09/12/2017----------

- Other Items In This Patch:
- Implemented new behavior for assemblies that contain assembly-level-geometry when saved out to formats that do not support this type of structure: All of the assembly-level-geometry bodies will be inserted into a multi-body part named after the containing assembly or sub-assembly and appended with _AssemblyLevelGeometry so that the user can easily identify this new part.
- Assemblies, parts or bodies that are marked as hidden in TransMagic now show up as hidden when saved out to 3D PDF. They are still present, just hidden, same as they were in TransMagic.
- Primarily a customer bug-fix patch. You will have been notified if your issue is resolved.

----------Version: 12.10.700 - 08/03/2017----------

- Updated version: Inventor 2018
- Updated version: Added V5 R27 Write
- Primarily a customer bug-fix patch. You will have been notified if your issue is resolved.

----------Version: 12.10.600 - 06/08/2017----------

- TM Batch: Added new option to the Select Output Folder dialog that allows the user to specify that a unique output directory be created for each individual output part or assembly. This greatly simplifies batch jobs when processing input formats where the same extension is used for both parts and assemblies, for example with formats such as Parasolid *.x_t, JT *.jt and NX *.prt formats. In these cases the user may not know which input files are parts and which are assemblies. This output directory then contains either parts or assemblies depending on the input type.
- TM Batch: Implemented a new error handling mechanism that allows the process to proceed through even catastrophic translation failures.
- New functionality: When a user selects and then Exports a single body, part or sub-assembly, that body, part, or sub-assembly name will be the default name in the Save As dialog.

- Resolved NGRAIN Advanced Options bug when specifying unique NGRAIN Group names. Previously these Avanced Options were being ignored.
- Resolved NGRAIN bug where random faces were missing in the NGRAIN file. There are no longer missing faces.
- Resolved CATIA bug where edge colors were not being supported. They are now correctly supported again.

----------Version: 12.10.500 - 05/23/2017----------
- New MagicHeal Tools in Technology Preview:
- Show Non-Manifold: This function highlights in CYAN any non-manifold edges and vertices while it renders any geometry directly adjacent to them WHITE to make finding them easier in the case of large files.
- Unhook Non-Manifold: This function will automatically disconnect non-manifold edges which will result in one or more of the following entity types: Body, Sheet or Wire-Frame. Non-Manifold Vertices cannot technically be separated from the rest of the body like edges. In the case of Non-Manifold vertices the Show Non-Manifold function becomes the most valuable function as the user can easily find the faces adjacent to the Non-Manifold vertex and then manually unhook them or by delete the face with embedded vertex and recovering it, thus resolving the condition.
- Update the Export Views To File function in the view browser to create a 3D PDF file with the views in the standard view area of the PDF file.
- Add additional use-cases for dimensions in Dynamic Dimensioning.
- Entities marked as hidden in TransMagic can be saved out to 3D PDF and will come into the 3D PDF document as hidden as well.
- Resolved all known failure cases with the new Poly-to-CAD function.

----------Version: 12.10.400 - 04/14/2017----------

- Material properties now consider the Application Unit and display based on Metric or SI units. Units have always been recognized by mass properties calculations, they were simply always being displayed as Metric in the Assembly Browser.
- Added a new Rename With Indexing function. In the Assembly Browser, click on the top-level assembly node, right-click and select Rename With Indexing. This function will then proceed to rename all parts the same name as specified, but also append an index serially to all of the renamed sub-assemblies, parts and bodies. This index number starts with a default of 0 but the user can specify any number for the start number.
- Some less common Material Properties are now present in the TM database and if not present they were being displayed as zero, 0, which was confusing. Now if a material property is not available in the database it is not shown.
- There is a new user-editable Material Property file named TMMaterialInfo.XML and stored in the CSIDL_COMMON_DOCUMENTS\TransMagic\Settings folder. Users can add or remove materials from this file or fill out missing information such as that mentioned in the bullet above. The TM Material Property node in the Assembly Browser uses this file for building it's material list dialog. Any materials added or removed will be reflected in the list in this dialog.
- Added Show-NoShow properties to the Legend Bar in MagicCheck. The Show-NoShow state of this Legend will be recorded in the Views created in the View Browser and also output to reports.
- Added a Copy To Clipboard button to the Surface Area calculation dialog. This makes it simpler to paste this information into an e-mail, quote, doc, etc.
- Added saving of settings to registry upon clicking the OK button. Previously, setting were saved to the registry after application exit. In the case there was a crash or the user killed the process, these settings would never get saved. Now they are saved as soon as the OK button is clicked.
- Re-localized the Chinese version to resolve several confusing translations and also updated text for new functionality.

- Resolved long TransMagic shut-down time. Previously, TransMagic was taking a long time to exit.
- Resolved issue with Inventor Add-Ins where formats we're not being properly cleaned out from the File Open and File Save dialogs after TransMagic was removed from a system.

----------Version: 12.10.300 - 02/22/2017----------

- Hooked up 3D rotation to the keyboard arrow keys, add SHITF+ for 90 degree rotation, add CTRL+ for pan, add ALT+ for axial rotation, all are very useful during Repair operations if you don't have a 3D mouse.
- Added the abilty to select arc-centers as a position useable for 3 Pt move in both Precise Positioning and MagicCheck.
- The Assembly Browser now supports the visualization of the file structure for all Viz-Rep formats.
- The Material Node now updates based on the Application Units selected. Previously, it was relative to whatever was saved in the incoming document.
- Resolved an issue where floating licenses weren't being checked-in.
- Resolved an Undetermined License State error when the username had UNICODE characters in it.

----------Version: 12.10.200 - 02/08/2017----------

- Modified 3-Pt Move in MagicCheck to work with parts, assemblies or any combination of the two. Previously, it only worked for aligning two parts.
- Restructured the Collada format support to support assembly hierarchy.
- Assembly structure is now preserved after running Polygon Reduction - and also supported to the output Viz-Rep format if that format supports it, such as with JT, DWG and Collada.
- Continued to enhance Poly-to-CAD: Now polygon handedness is supported regardless of which direction it's facing, previously only outward facing polygons were supported. Also supported cases where zero-area polygons are ignored and thus zer-area faces are NOT created.
- Fixed issue where the TransMagic Window was losing focus and appearing behind other windows after certain operations. Now the TransMagic window is always kept in focus.
- Fixed Lite Repair performance regression.

----------Version: 12.10.100 - 01/25/2017----------

- Added new TransMagic TMR Write options pages with the ability turn on or off the saving of a variety data types and display types that TransMagic supports. By default, all types are on.
- Added PMI-to-Wires functionality to the JT format.
- New high performance Assembly Browser. The browser may look the same but it has been completely re-written and re-structured to perform, react and refresh at a much higher performance leve.
- Added a new tool to MagicHeal named Set Guide, which allows you to set guide curves which help to control the shape of the MagicSurface as it is required to pass through these guide curves.
- Updated version: NX11
- Updated version: Solidworks 2017
- Updated version: Inventor 2017
- Resolved issue with over-riding PMI colors. Before this fix the color over-rides wouldn't be applied to outputs such as 3D PDF and JT and also wouldn't be applied to the PMI View Browser. The color over-ride now permantly changes the incoming color for all outputs and PMI View Browser.

----------Version: 12.10.000 - 12/01/2016----------

- New functionality: The STEP format now supports AP242, the new MBD/PMI Application Protocol, for read operations. This is the long anticipated MBD format for step that allows views, captures, GD&T, FTA, material and manufacturing notes.
- New functionality: Poly-to-CAD. This function, on the Operations tab under the Polygon Tools group, allows you to convert polygonal, or Viz-Rep files to CAD, or B-Rep files.
- New functionality: SolidWorks PMI read support. We now support the native reading of SolidWorks PMI data which can be written out to several native PMI support formats such as 3D PDF, JT and STEP AP242.
- Back by popular demand: TM Express. Full power translation and Auto-Repair, light-weight and simplified viewing. This program is launchable from the TransMagic program group in All Programs.
- Updated version: ACIS R27
- Updated version: CATIA V5/V6 R2016x (R26)
- Updated version: Parasolid R29
- Updated version: JT 10.2
- ***Other Highlights From Previous Patches***
    - TransMagic now supports a settings file readable from the hard disk. The benefit is that this file can be copied from machine to machine with common settings and interafce customization easily saved by the file. This file exists in this directory: "C:\Users\Public\Documents\TransMagic\Settings\TransMagic_R12.ini. You can copy this file from machine to machine by copying the Settings directory including this file to different machines. If this file exists, it will override the registry settings for TransMagic.
    - MagicCheck Enhancment: Multi-core MagicCheck validation and revision algorithms. This feature vastly increases the validation and revision checking algorithms to use all cores available to process the checking operation. The performance increase is on average 40% faster.
    - Implemented two new Bounding types: Bounding Sphere and Bounding Cylinder. These shapes, particularly cylinder for turning shops, are very useful for calculating various stock sizes.
    - General Enhancement: Converted 2D DWG or DXF from a view only format to full vector geometry support. The 2D DWG or DXF entities will now be converted to true vector based line data that can be saved out to other CAD formats. This changes the DWG or DXF support from View Only to a full vector-based translation which is significantly more useful.
    - General Enhancement: We have now mapped the DWG or DXF BLOCK structure to a traditional assembly structure. This preserves the original BLOCK structure organization and now makes it even more useful when saving 2D vector-based or 3D data out to other formats.
    - New Format: Collada Read has been added to all products. We are still working on this format. It is currently a primitive viz-rep with color support. We will continue work on it to complete full support of the format.
    - Updated Format Version: NGRAIN 6.0
    - Implemented User Defined Attributes (UDA) functionality under Body and Part levels. Most native CAD systems allow the application of these user defined attributes, which can literally be any textual information the user wants to apply. You can see these in the Assembly Browser by Body (Orange Block) level node and looking for the UDA node.
    - New Format: STEP Compressed format, also known as STEP ZIP or STEPZ. Essentially as the name implies, this is a zip compressed STEP file.
    - Revised the Layer Manager to be more intuitive and useful for manipulating entities on layers.

    ----------Version: 12.01.900 - 11/18/2016----------

- Resolved issue on certain machines where a customer running R12 sp0 with expired maintenance would recieve an error and also prevent launching of the program.

- Resolved issue in SolidWorks Add-In where any level of automatic repair was causing a crash.
- Resolved issue in TM Command writing out to the HSF format.
- Resolved display of Japanese characters in PMI display.
- Continued work on the Poly-to-CAD tool. More cases are now operational.

----------Version: 12.01.800 - 10/20/2016----------

- IMPORTANT NOTES!:
     1) This patch resolves a SolidWorks reader bug. This fix requires that you reset some application settings.
     2) After upgrading to this release, go to Settings (gear icon) and click the Reset All Settings To Defaults button.
     3) This will be the last sp0 patch. Sp1 is scheduled for a November 14th release.
- Completed support for mass properties calculations of parts and assemblies while taking into account their specific material properties.
- Completed support for the manipulating dimensions on views using the Add Dimensions To View dialog. This allows the user to create multiple views with dimensions constrained to that view. The user can then save out these multiple views to the TMR format and eventually 3D PDF in R12 sp1. This is a great productivity enhancer for quoting.

----------Version: 12.01.700 - 10/06/2016----------

- Multi-core MagicCheck validation and revision algorithms. This feature vastly increases the validation and revision checking algorithms to use all cores available to process the checking operation. The performance increase is on average 40% faster.
- Implemented User Defined Attributes (UDA) functionality under Body and Part levels. Most native CAD systems allow the application of these user defined attributes, which can literally be any textual information the user wants to apply. You can see these in the Assembly Browser by Body (Orange Block) level node and looking for the UDA node.
- New Format: STEP Compressed format, also known as STEP ZIP or STEPZ. Essentially as the name implies, this is a zip compressed STEP file.
- Revised the Layer Manager to be more intuitive and useful for manipulating entities on layers.
- Added a Copy To Clipboard button to the Missing File References dialog so the user can easily copy the list of missing file references and paste into a Word document, e-mail, etc.
- Introduced new Poly To CAD Preview Technology. This function, on the Operations tab under the Polygon Tools group, allows you to convert polygonal, or Viz-Rep files to CAD, or B-Rep files. We are still working the kinks out, thus it is Preview Technology. It will be offically released in R12 sp1.

----------Version: 12.01.600 - 08/18/2016----------

- IMPORTANT NOTES!:
     1) This patch is a customer bug-fix patch. It resolves the 3 issues referenced below. If the fixes below do not apply to you then you can skip this patch.
     2) After upgrading to this release, go to Settings (gear icon) and click the Reset All Settings To Defaults button.
- Removed a dependency on a no longer supported verson of the Xerces XML API.
- Resolved off-line network installation issue.
- Resolved DWG and DXF Write issue.
- Removed a dependency on a no longer supported verson of the Xerces XML API.

----------Version: 12.01.500 - 08/09/2016----------

- Updated the Missing File References dialog to include JT missing file references.
- Developed a new predictive heuristic that will detect a certain variety of JT files with incorrect or exploded transforms and proactively correct these files upon reading them into TransMagic.
- Upgraded OpenSSL to 1.0.2h.
- Added assembly support to Collada.

----------Version: 12.01.400 - 07/28/2016----------

- IMPORTANT NOTES!:
  1) We have resolved the Admin Privileges install issue. This issue will not allow certain Admin users to automatically upgrade. If this applies to you, simply run the TransMagicR12.01.400.exe installer from your Downloads directory. As this fix applies to 12.01.400 and greater, future updates will not have this issue.
  2) After upgrading to this release, go to Settings (gear icon) and click the Reset All Settings To Defaults button.
- General Product Enhancement: Converted 2D DWG or DXF from a view only format to full vector geometry support. The 2D DWG or DXF entities will now be converted to true vector based line data that can be saved out to other CAD formats. This changes the DWG or DXF support from View Only to a full vector-based translation which is significantly more useful.
- General Product Enhancement: We have now mapped the DWG or DXF BLOCK structure to a traditional assembly structure. This preserves the original BLOCK structure organization and now makes it even more useful when saving 2D vector-based or 3D data out to other formats.
- New Format: Collada Read has been added to all products. We are still working on this format. It is currently a primitive viz-rep with color support. We will continue work on it to complete full support of the format.
- Updated Format Version: NGRAIN 6.0
- Updated Format Version: JT 10.1 and 10.2
- Resolved Parasolid write issue that was affecting about 30% of all Parasolid based output formats. This included Parasolid, JT and SolidWorks outputs. It manifested itself as missing surface (even though they were there). If this affected you, or just to be sure, see the first bullet in this release and reset all defaults AFTER this upgrade.

----------Version: 12.01.300 - 06/24/2016----------

- MagicCheck: Implemented multi-thread analysis! The Analyze button now has a bottom half button which is the MT Analyze which will use your multi-core processor to divide up the analysis work and greatly increase the performance of analysis. As this is a major change, it is in preview technology mode now and will be in testing for a period of time. It will then become the default Analyze function at some point in the future. In addition, you need to change your rendering mode to Dot Rendering as this is currently the only supported multi-core mode. Crank the resolution up though, as this is so fast that it's still faster than the standard mode. We will implement the Color Mapping mode in the next patch.
- Implemented two new Bounding types: Bounding Sphere and Bounding Cylinder. These shapes, particularly cylinder for turning shops, are very useful for calculating various stock sizes.
- Resolved STEP read hang issue that had affected about 30% of STEP files.
- If you use Precise Positioning to move a Bounding Box then the size dimensions will now move with the box. Previously, if you move the box, the dimensions would disappear.

- MagicCheck: Resolved View Browser issue in PDF report output where the views in the PDF file did not match the exact zoom level of the views in the View Browser.
- Resolved issue where if a SolidWorks file was open in SolidWorks, and then a SolidWorks file was saved out of TransMagic, then TransMagic would erroneously shut-down both the SolidWorks writer and the running copy of SolidWorks itself.
- Resolved Collada output issue... If the incoming file had PMI, was then reduced using Polygon Reduction and then saved out to Collada, the save operation would fail.

----------Version: 12.01.200 - 05/25/2016----------

- MagicCheck: Resolved issue related to 3-Pt Move where the icon was de-activated after stitching had been run.
- MagicCheck: Resolved issue related to 3-Pt Move with PMI enabled.
- MagicCheck: Resolved issue related to 3-Pt Move dialog appearing repeatedly.
- MagicCheck: Resolved micrometer issue returning 0 for certain measurments.
- Resolved issue where the Auto-Repair Wizard was activated but you could click on the screen and then de-select the parts with issues, then the Auto-Repair Wizard would simply repair and empty selection and give the green light.
- Resolved issue where some STEP files, especially large files, where either taking a long time to start loading or were hanging altogether on loading.

----------Version: 12.01.100 - 05/10/2016----------

- IMPORTANT!: After upgrading to this release, go to Settings (gear icon) and click the Reset All Settings To Defaults button.
- TransMagic now supports a settings file readable from the hard disk. The benefit is that this file can be copied from machine to machine with common settings and interface customization easily saved by the file.
  This file exists in this directory:
  "C:\Users\Public\Documents\TransMagic\Settings\TransMagic_R12.ini
  You can copy this file from machine to machine by copying the Settings directory including this file to different machines. If this file exists, it will override the registry settings for TransMagic.
- Implemented a new option which gives the user ability to not include Property Measurements in the MagicCheck reports. These include volume, center of gravity, surface area and topology checks. The default is NOT to include these properties in the reports. The reason is that the primary use of Validation in MagicCheck is to satisfy the Boeing D6-51991 spec. This spec does not call for the inclusion of any of these properties. This spec only calls for a Geometry Validation within 0.001 inch unless otherwise specified. Thus, the primary objective is to create the Validation report as concisely for the D6-51991 spec as possible without extraneous data or calculations.
- Changed the default check value to 0.001 inch and the default precision to X.XXX as per the Boeing spec D6-51991.
- Changed default value of Generate The Standard Views to OFF in MagicCheck. With the addition of 3D PDF as the primary reporting format for MagicCheck these extra views are not needed as they were in the previous 2D report formats.
- Added polygon options list -h command in TMCmd. Simply send the command: tmcmd -hpoly As this option set is relative to all polygonal formats, it has it's own option list at the command line. This has also been added to the TM Command docs.
- Moved the TMInfo.txt start-up file from the typical [Install Directory]\TransMagic RXX spX\System\code\bin, which requires admin privileges to edit, to the user accessible common directory C:\Users\Public\Documents\TransMagic\Licensing.
- Boolean operations are now supported with either Expert or the MagicHeal Add-On.</

----------Version: 12.01.000 - 04/18/2016----------

- New Format: 3DXML Read and Write has been added to Expert, Pro and SuperView. Supports graphical PMI (turn on edges).
- New Format: WebGL (HTML extension) has been added as a VisRep format that is viewable in any HTML5 browser - no viewer necessary! File extension is .html. This format is ready-made for mobile viewing. This format is available in all TransMagic core products, and will be implemented in TransMagic COMMAND in a forthcoming patch. This format is will be hooked up to the Polygon Settings page in the Options dialog in a forthcoming patch.
- New Format: Hybrid CATIA files; TransMagic will now automatically detect files that have both Visrep and Brep data, and give users the option to open the file as Brep or Visrep geometry.
- New Format: CGR files are now supported for both Read and Write.
- Updated Format Version: Parasolid 28.0
- Updated Format Version: JT 10.0 support
- Updated Format Version: SolidWorks 2016 support
- Updated Format Version: Inventor 2016 support
- Updated Format Functionality: STEP files can now refer to external parts, and TransMagic can load any external part currently supported by STEP.
- Updated Format Functionality: 3D PDF files can now embed other files for Technical Data Package.
- Updated Format Functionality: 3D PDF now supports full assembly structure, part names, transparency, and PMI fonts.
- Updated Format Functionality: View Browser and PMI View Browser can both now output to 3D PDF.
- Assembly Restructuring: Parts can now be removed from assemblies (in addition to being able to add componenets to assemblies and form new subassemblies, a feature added in R11.
- Assembly Restructuring: Instanced or patterned parts can now be broken and converted into discrete components.
- MBD and PMI: Capture support added to PMI View Browser, enabling instant visualization and documentation of section views, break-outs, and close-up views.
- MBD and PMI: PMI captures and views can now be saved out to 2D and 3D PDF, as well as sent to the View Browser.
- MBD and PMI: JT PMI selection now behaves consistenly with CATIA V5\V6, Pro/E/Creo and UG/NX.
- General Product Enhancement: Cutting planes (Section Planes) are now remembered by the View Browser when capturing new views.
- General Product Enhancement: TransMagic now starts up in local language of user PC setting.
- General Product Enhancement: Japanese and Chinese languages now fully updated.
- General Product Enhancement: Import and Export have been removed from the Open and Save buttons and added to the File Menu in order to reduce confusion for new users.
- General Product Enhancement: Custom Toolbar functionality has been enhanced by adding all Ribbon Tab functions.
- General Product Enhancement: Material Nodes have been added to the part-level, visible in the Assembly Browser. You can right click on any given material and change its properties.
- General Product Enhancement: Update function now downloads to the users Downloads folder instead of the Temp folder.
- Gneral Product Enhancement: New Layer Manager under Operations > Change Group.
- General Product Enhancement: Special Render Modes to enhance publishing capabilities, including Transparent, Transparent Wireframe, Triangulated Wireframe(B-Rep), Hidden Wireframe(B-Rep), Solid Outline(Viz-Rep), Illustration(Viz-Rep), Optimize For Print HLR and Optimize For Print Greyscale.
- General Product Enhancement: Added support for Windows 10.

- TechDocs (Preview Technology): Save CAD data including 3D VisRep, company, file and part information out to 3D PDF.
- TechDocs (Preview Technology): Optionally attach CAD or other external attachments to 3D PDF file for easy transport of related project data.
- MagicCheck: Split-Window View for Validation and Revision Comparison.
- MagicCheck: Added new side-by-side comparison mode, where Source and Target components are separate, with viewing commands affecting both views.
- MagicCheck: MagicCheck Reports can now output to 3D PDF, enhancing security and visibility, in addition to .xlsx and .html output.
- MagicHeal: Cover Hole or Boss renamed to Skin Between Edges for better clarity.
- MagicBatch: CGR to JT added (Visrep).
- TransMagic Command: Support for all polygon formats to be processed.
- TransMagic Command: Support for all polygon formats to be processed by using the Assembly XML + PMI functionality via TM COMMAND (previously this functionality was only supported for HSF and STL).
- TransMagic Command: In individual translator pages in TM COMMAND, the PMI page shown/not shown depending on whether that particular format support PMI or not.
- Resolved several customer-specific incidents. You will have been notified via e-mail if one of your incidents was resolved in this patch.