

ProModel AutoCAD Edition Version History

10.14.336 (January 2023)

Enhancements and Improvements

- Simulation Models when performing a SAVE AS in AutoCAD will copy over all ProModel files needed for the simulation. A prompt will display upon a SAVEAS in AutoCAD if the files already existed.
- Ability to use Subroutines added and accessible from model elements.
 - Parameters can be passed to the subroutine to provide more dynamic modeling experience
 - Subroutines can also have a return type of Real or Integer.
- Ability to use arrays accessible from model elements.
 - Arrays can provide a my dynamic modeling experience; allowing the user to reference tables of data with the ability to read and write to those tables.
 - Data can be imported and exported to Excel.
 - Array data can be either Integer, Real or Expression.
- Added statement pane to logic editor for quick access to frequently used statements.
- Views can now be added to the Model under the tools section of the ribbon.
- Ability to select flow entity from dropdown added during flow creation.
- Resolved issue with interrupt priority in German.
- Upgraded MS.Extension.Logging to 3.1.0.
- Improved Packaging Tooltip Dialog.

10.13.271 (September 2022)

Enhancements and Improvements

- Vault is now supported with ProModel AutoCAD Edition. – The simulation can now take advantage of the versioning and revisioning controls of Autodesk's Vault. This has been tested with 2021, 2022, and 2023 editions.
- Licensing now uses MS web edge view 2 runtime. This removes dependance of IE.
- Added ability to choose to keep a resource in setup downtimes for a location.
- Addressed Shift Carryover issues with Load Perm – improvements with recapture in some load perm situations were made to the engine.
- When you create a new flow with a new entity name, a default graphic is given to the Entity if it did not previously have one assigned.
- Improvements made to the AutoCAD launcher; subsequently it has been move to the "Contents" folder.
- Improved ability to use elements added to a simulation from ProModel Professional (i.e. if you reference an array in ACAD that you created in ProModel, once you have simulated once, you will not see errors regarding the name or usage within AutoCAD.)
- Removed error message about "square root of a negative number" related to conveyors.
- Resolved issue with Distance Traveled() – if the resource unit valued was less than what you entered for the function, you would see a misleading error message.
- Right Clicking on a shift file assignment will now allow the user to open the file.

10.12.224 (July 2022)

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10.11.197 (April 2022)

Enhancements and Improvements

- Critical update for issues related to Time Series data collection. We have resolved issues where time series data was being corrupted.

10.11.187 (April 2022)

Enhancements and Improvements

- Updated Simulation Start Trace Step button to toggle when Trace is checked in the Simulation Options.
- Fixed issue with Model Instructions window from previous model being left open after starting a "New" Model.
- Upgraded the Visual Studio Pre Req for RDB server 32 and 64 bit from 2010 to 2013.
- Fixed issue where in some cases typing a local variable equals a negative local variable ("int a = -s").
- Improved debugger window to display the logic centered in the debug window.
- Logic Editor inline compiling – user logic will now compile on the fly
 - Logic tool tips for how to use the statements and functions now available.
 - Logic Parameter tool tips added.
 - Logic now has a completion provider to help insure proper construction of logic.
 - Theme aware.

- Errors as you type are displayed.
 - Logic snippets for **If**, **While**, and **Do** added – If the user types one of the 3 statements and then hits the TAB button twice, the structure of required logic is completed.
- Forge Viewer OBJ clipping issue resolved.
- Fixed issues where sometimes Entities would not show in the correct 3D position.
- Improved issue found with Path Segment distances not being stored properly.

10.10.143 (January 2022)

Enhancements and Improvements

- External Files
 - Entity Location files – Create an Excel matrix look-up table to be used in logic. You can auto-generate a template directly from within the UI.
 - External Arrivals – Users now have the ability to use an external Excel file for their Entity arrivals. From within the UI you can auto generate a template to build your external arrival file, which will include all the attributes used within the model at the time the file is created.
- Shifts – Resources and Locations can now have a shift assigned to improved modeling availability.
- Multiple Graphics for Entities – Users can now choose to have multiple graphics to be assigned for an entity. In logic, the entity's graphic can be changed with a GRAPHIC statement.
- Ability to use blocks/Assets as Entities.
- Route Quantity – as an entity routes to a new destination, it can route with a different quantity.
- Improved validation error process to improve speed
- Optimized Compilation Speed – the model compiles around 7+ times faster than v10.9
- Resolved issues with Logic not Updating within the .MOD
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- Sample models – Within Help, and accessible directly from the ProModel Ribbon, you can access Sample Demo models.
- Improve launching the ProModel AutoCAD ribbon.
- Improve Packaging.
- Improve conveyor modification - If you modified a conveyor and change the end of the conveyor without changing the head of it any outgoing routes still go out of the previous end of the conveyor.
- Resolved duplicating a scenario – there was an issue where during duplication it would visually remove the last run date until the user closes scenario manager and re-opens.
- Support for Entity graphics ability to be turned off for simulation for the background graphics.
- Improvement to Variable names – Update variable graphic label on variable name change. if you rename the variable name, it should rename the label on the variable IF the label was not changed manually if label = variable name they should synchronize if you change variable name

ProModel 3D Animator for Inventor®

(An add-on to ProModel AutoCAD® Edition)

Enhancements and Improvements

- Enhanced stability of ribbon within Inventor
- Requirement for model to be saved added to improve issues seen with the Animate and Modify Entity Spots
- Ability added for multiple Entity graphics with in the 3d forge viewer.

10.9.124 (November 2021)

ProModel AutoCAD Edition now allows the user to build and simulate directly in AutoCAD 2020, 2021, and 2022 leveraging Factory Design Utilities.

Enhancements and Improvements

- Multiple outgoing routes to the same destination location will no longer leave duplicates in the built model.
- Debug and Runtime error windows will no longer get lost behind the simulation window.
- Debug and Runtime error windows will now color-code the logic correctly.
- Using an ALL entity flow on a non-English AutoCAD will now properly compile and run.
- The “Entities:” label was changed to “Entity:” for flow properties.
- Added missing space between the depth label and the unit for entity properties.
- Additional logic added in ProModel to Operational or Move Logic will no longer get lost.
- Fixed rare issue with certain CPU’s that will crash AutoCAD when building graphics during compilation.
- When creating a flow, the prompt for an entity will now properly allow you to click the All keyword.
- Improvements with German translation in Simulation Properties

ProModel 3D Animator for Inventor®

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Enhancements and Improvements

- Forge Animation improvements with entity spot placement for multi-capacity locations. – entities now flow to the proper placement of entity spot locations with multi-capacity.
- Resolved issues observed with 3d animation if the simulation was run with animation turned off.

10.9.112 (October 2021)

ProModel AutoCAD Edition now allows the user to build and simulate directly in AutoCAD 2020, 2021, and 2022 leveraging Factory Design Utilities.

Enhancements and Improvements

- Flow can now only have 1 Entity assigned to the flow. We have added the option as well for you to choose ALL for the entity. The ALL statement will allow the flow to use ALL entities added to the model.

- Duplicate Flows – Flows can now easily be duplicated so that the same process flow could be used by a different entity. Simply Right click a flow and select duplicate.
- Ability to rename Entities – from within routing users now have the option to pick a new name for the entity. The new named entity MUST have its own Flow.
- Location Counters – Locations now have a default counter. You can choose to have a location capacity counter in one of four places.
- Load/Unload – material handling can now be enhanced with ability to load and unload entities. Each entity will need to be in a separate flow. Base entities call in logic for entities to load to them. The loading entities must use route to the base entity's destination. When an entity is uploaded from the base entity, it will require its own flow.
- Group/Ungroup - material handling can now be enhanced with ability to group and ungroup entities. You can group the same entity or multiple entities into a group. Each entity will need to be in a separate flow. Groups can be given a new name, but the new named entity must exist in the Simulation Browser, and the Entity must have its own flow. When an entity is ungrouped, the entities will require their own flow.
- Improve capturing of background graphics – we found that there could be an issue if there was a rotation done to the drawing. We enhanced the model simulation/creation so that ProModel rotates the viewport to top view prior to compiling the simulation.
- Model Packaging. Now users can easily share the project they were working on with their team. From the ribbon you can now create a package file and choose to include the inventor files if needed (this is a must for working in our 3D solution) If the user would like to install a package, they can do so from the ribbon or through file association; simply double click the PMAPKG file and choose where to unpack the files. The model will open and associate with the correct Inventor® project

ProModel 3D Animator for Inventor®

(An add-on to ProModel AutoCAD® Edition)

Features

ProModel 3D Animator for Inventor® is our new 3D solution which now allows the user to take the model that they have created with Factory assets in AutoCAD to be opened in Inventor Professional and simulate in 3D the animation of your model. This new add- on works with Inventor Professional 2020, 2021, and 2022 leveraging Factory Design Utilities.

Opens the Animation viewer which loads the model and starts animation. The user can speed up, slow down pan, rotate and zoom in and out of the animating model.

10.8.81 (August 2021)

ProModel AutoCAD Edition now allows the user to build and simulate directly in AutoCAD 2019, 2020, 2021, and 2022 leveraging Factory Design Utilities.

- Logic is now accessible within flows. Both Processing and Routing.
- Model Elements added to provide more granularity within the model environment.
 - Variables – Can be visibly added to layout and used anywhere in processing and routing as well as logic.
 - Attributes – Can used anywhere in processing and routing as well as logic.

- Macros - Can used anywhere in processing and routing as well as logic as well as scenario parameters.
- Find and replace.
- Added Send route capability – allow entities to be sent to destinations based on logic conditions.
- Added Join route capability – allow Entities to join together within the simulation.
- Right click menu options for objects within the viewport. Allowing the user to navigate to where the model element is located within the Simulation Browser, or Simulation Properties.
- German, Portuguese, and Spanish Localization improvements.
- Improvements with validation.
- Light and Dark theme improvements.
- Conveyor Improvements.
- Arrival Improvements.
- Enhancements to how the ProModel Handles the AutoCAD view port.
- Improvements it undo/redo.
- Improvements to Error catching.
- Evaluation features for providing a trial of the AutoCAD Edition capabilities.
- Regular bug fixes.

10.6.33 (May 2021)

Enhancements and Improvements

- Improved Scenario grids
- Improved window section focus
- Improved Subroutine module stability
- Grid Blank Out resolved
- Caret selection stability improvements
- Tabbing stability issue improvements
- Logic tool tips improvements to display more intelligently
- Entity spot graphic in the grid improved view
- Improved Issues with model protection
- Improvements to dynamic plots
- OV viewer issues with resource name length improved
- Regular bug fixes.

(NEW Integration with)

ProModel AutoCAD® Edition

(requires additional subscription license)

ProModel AutoCAD Edition now allows the user to build and simulate directly in AutoCAD 2019, 2020, 2021, and 2022 leveraging Factory Design Utilities.

- ProModel AutoCAD Edition allows the user to build directly within AutoCAD:

- Locations
- Conveyors
- Process Flows
- Resource
- Path Networks
- Build Scenarios
- Push the model to ProModel for more advanced modeling capabilities