

# Perform3D v11.0.0 Release Notes

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**Notice Date: 08-December-2025**

This document lists changes made to Perform3D since v10.1.0, released 07-February-2025. Items marked with an asterisk (\*) in the first column are more significant.

## Database Tables

### Enhancements Implemented

*	Ticket	Description
*	11056	<p>The database tables and API have been enhanced to include the ability to add, modify, and delete Structure Section definitions. The following database tables (Tables menu&gt;Show Tables) have been added under the Model Definition&gt;Other Definitions&gt;Structure Section Definitions headings and are available for interactive editing and display:</p> <ul style="list-style-type: none"><li>- "Structure Sections Definition"</li><li>- "Structure Sections Elements"</li></ul> <p>A new API interface cStrengthSections has been added with functions to add and delete Structure Section definitions as well as adding line and area elements to a Structure Section.</p>
*	11057	<p>The database tables and API have been enhanced to include the ability to add, modify, and delete load pattern definitions. The following database tables (Tables menu&gt;Show Tables) have been added under the Model Definition&gt;Other Definitions headings and are available for interactive editing and display:</p> <ul style="list-style-type: none"><li>- "Nodal Load Patterns"</li><li>- "Nodal Loads"</li><li>- "Element Load Patterns"</li><li>- "Element Load Pattern Sub Groups"</li><li>- "Element Load Pattern Sub Group Loads"</li><li>- "Self Weight Load Patterns"</li><li>- "Self Weight Load Pattern Elements"</li></ul> <p>A new API interface cLoadPatterns has been added with functions to add nodal, element, and self-weight load patterns and loads.</p>
	11115	<p>The database tables have been enhanced to include the ability to add or delete Mass Patterns, and add, modify, or delete Nodal Mass assignments. The following database tables (Tables menu &gt; Show Tables) have been added under the Model Definition&gt;Node Data&gt;Mass Data headings and are available for interactive editing and display:</p> <ul style="list-style-type: none"><li>- "Mass Patterns"</li><li>- "Nodal Mass"</li></ul>
*	11123	<p>The database tables and API have been enhanced to include the ability to add, modify, and delete load cases. The "Analysis Data Definition" selection group has been added to the available database tables (Tables menu&gt;Show Tables) with the following database tables available for interactive editing and display under the Analysis Data Definition&gt;Load Case Definitions&gt;Load Case Definitions headings:</p> <ul style="list-style-type: none"><li>- "Gravity Load Case"</li><li>- "Static Push-Over Load Pattern"</li><li>- "Static Push-Over Mode Shape"</li><li>- "Dynamic Earthquake Load Case"</li><li>- "Response Spectrum Load Case"</li><li>- "Dynamic Force Load Case"</li></ul> <p>A new API interface cLoadCases has been added with functions to add, update, and delete load cases.</p>

* Ticket	Description
11124	The Interactive Database Tables (Tables menu>Show Tables) have been enhanced with a new database table "Analysis Series" under the Analysis Data Definition>Analysis Series Data>Analysis Series Analysis List headings which can be used to view, add, modify, and delete analysis series. Additionally, the API has been enhanced with the new cAnalysisSeries interface to add or delete an analysis series or add load cases to the analysis list of an analysis series.
11711	An enhancement has been added to Interactive Database Editing (Tables menu>Show Tables), introducing a drop-down list for populating field values which have limited values, such as Force/Length Units, and Key values, in the Component Property Definition tables.

## Installation and Licensing Enhancements Implemented

* Ticket	Description
11220	The version number has been changed to 11.0.0 for a new major release.
11231	The following improvements have been made to sign-in licensing within the application. (1) The authentication process for sign-in licensing has been modified to now use the system browser on the client machine. This improves the sign-in experience by eliminating the connecting popup that was displayed on subsequent runs after signing in the first time. This change will require users to sign in to Perform3D the first time this new version is run. (2) Personal Access Tokens (PATs) can now be used for scenarios where the normal authentication flow is not possible, such as for headless machines. (3) Remote checkout licensing is now available for dark-site or air-gapped machines that do not have internet access.
11684	The standalone, network, and cloud key licensing options have been removed from Perform3D v11. All licenses will now use cloud sign-in licensing which is more flexible and secure.

## User Interface Enhancements Implemented

* Ticket	Description
11289	A new "Rename" button has been added to the Limit State Groups task within the Analysis phase, allowing users to conveniently modify the names of Limit State Groups. This improvement enhances clarity and customization during structural analysis workflows.
11692	The analysis list of all analysis series is saved when saving the model as a new structure (File menu>Save as New Structure) using the "Save structure and load cases only" option. Additionally, this ticket also resolves an issue where deleting the analysis results of a single analysis series using the "Delete an existing series" operation and "Delete analysis result but keep Analysis Series settings" option in the Run Analyses task (Analysis phase) may cause the analysis list of other analysis series to be inadvertently cleared.

**Analysis  
Incidents Resolved**

<b>*</b>	<b>Ticket</b>	<b>Description</b>
	11643	An incident was resolved where, when one analysis stopped with an "Analysis failed to converge" message, the subsequent analysis in the same analysis series may stop prematurely with an "Analysis failed to converge" message even though this same analysis may complete when run separately. This issue only occurs for two analyses in one analysis series being run consecutively. When this issue occurred, the ECHO files associated with the prematurely stopped analysis was incomplete and did not show the convergence error message.

**API  
Incidents Resolved**

<b>*</b>	<b>Ticket</b>	<b>Description</b>
	11245	An incident was resolved where the documentation incorrectly stated the required dimension of the "Dimensions" input parameter for the following API functions: <ul style="list-style-type: none"> <li>- cCrossSections.AddBeamReinforcedConcreteSection</li> <li>- cCrossSections.AddBeamNonStandardSteelSection</li> <li>- cCrossSections.AddColumnReinforcedConcreteSection</li> <li>- cCrossSections.AddColumnNonStandardSteelSection</li> </ul> The documentation has been corrected to specify that the "Dimensions" input parameter requires 4 elements. The two reinforced concrete section API functions have also been improved to allow the definition of the section shape type "Symmetric I Section".
	11282	An incident was resolved where, after changing the model through the API, immediately saving the model and closing the program may result in some of the changes made through the API not being saved by the program.
	11285	An incident was resolved in the AddFluidDamperCompoundComponent API method, where the function may fail to add Fluid Damper compound components due to the inability to locate a valid linear bar component.
	11301	An incident was resolved in the AddElasticMaterialForFiberSection API method where an error would occur if the parameters "PositiveStress" and "NegativeStress" were not valid positive and negative values, respectively, even if the "StressCapacities" parameter was set to "No". This behavior has been changed so the parameters "PositiveStress" and "NegativeStress" are only validated when the "StressCapacities" parameter is set to "Yes", as consistent with the Perform3D API documentation.
	11461	An incident was resolved where, for a Frame Compound Component that was created through the API, adding a strength section to the compound component through the GUI (Component Properties task, Build phase) may cause the program to crash. This issue did not affect Frame Compound Components created through the GUI.

**Database Tables  
Incidents Resolved**

<b>*</b>	<b>Ticket</b>	<b>Description</b>
	11258	The following Cross Section Component Properties database table names were revised: <ul style="list-style-type: none"> <li>- "Beam Steel Non Standard Concrete Section" has been revised to "Beam Non Standard Steel Section"</li> <li>- "Beam Steel Standard Concrete Section" has been revised to "Beam Standard Steel Section"</li> <li>- "Column Steel Standard Concrete Section" has been revised to "Column Standard Steel Section"</li> </ul>
	11333	An issue was resolved where viewing the "Shear Wall Elastic Section Auto" and "General Wall Elastic Section Auto" database tables when the number of elastic wall components was greater than the number of inelastic wall components may cause the program to crash.

* Ticket	Description
11334	The "Horizontal Axial Bending Inertia" field in the "Shear Wall Compound" database table was incorrectly named and has been corrected to "Horizontal Axial/Bending Young's Modulus".
11691	An incident was resolved where, if the analysis series data used in a Table Named Set (Tables menu>Define Table Named Sets) is deleted, the Table Named Set definition may become corrupted and trying to view the affected Table Named Set may cause the program to crash.

## Results Display and Output

### *Incidents Resolved*

* Ticket	Description
11288	An incident was resolved where the Energy Balance plots (Energy Balance task, Analysis Task) were not correctly displayed for Element Groups (Element Groups tab).

## Structural Model

### *Incidents Resolved*

* Ticket	Description
11259	An incident was resolved where multiple nodes could be created with identical unique names if new nodes are added when reopening the program after the model had been changed by adding new nodes, deleting some of those nodes, and then closing the program. Multiple nodes with identical unique names did not affect the analysis results, but could cause confusion when viewing the Database Table nodal results which are reported based on the unique name.

## User Interface

### *Incidents Resolved*

* Ticket	Description
11257	An incident was resolved where, when exiting the program with unsaved changes in the model, clicking the Cancel button in the "Save Before Exit?" form will close the program without saving. This behavior has been corrected so the Cancel button will close the form without closing the program.
11269	An incident was resolved where only 20 loads were allowed in a Dynamic Force load case (Set up Load Cases Task, Analysis Phase). This has been resolved to allow 40 loads as shown in the Load Cases form.
11281	An incident was resolved where the Set and Run Analyses form for the Run Analyses Parallel task (Analyze phase) did not update the form to show the details of the selected analysis series. This was a form display issue and did not affect the settings of the analysis series being run or the analysis results.
11634	An incident was resolved where viewing the Properties tab in the "Element Object Information" right-click information form for Shear Wall elements with assigned component properties may cause the program to crash. This was a display issue and did not affect the model data or results.