What's New in CAESAR II

The latest CAESAR II release delivers a number of significant new and extended capabilities in response to current market requirements, as well as direct feedback from the growing CAESAR II user community. The following changes have been made to CAESAR II.

CAESAR II 2017, Version 9.00

Added Support for Latest Code Standards

Piping Codes

- Updated the software to the latest ASME B31.4 code standards, which included the ASME B31.4 2009, B31.4 2012, and B31.4 2016 code editions. (RI-TX-13126, CR-TX-15394, CR-TX-15395, CR-TX-15396, CR-TX-15397, CR-TX-15806, CR-TX-15807, CR-TX-15808, CR-TX-15724, CR-TX-16114, CR-TX-16117)
  The development updated included the following changes and improvements:
  - Updated materials applicable to the B31.4 code in the **Material Database Editor**. (CR-TX-15345)
  - Updated the **Allowable Stress** tab in the **Piping Input** module by including an **Allowable Stress Indicator** option for **B31.4** and **B31.4 Ch XI** and **Design Factor** and **Hoop Stress** options for **B31.3 Ch IX**. (CR-TX-15393)
- Updated the software to support EN-13480 Creep code standards. (CR-TX-16461, CR-TX-3910, CR-TX-9844, CR-TX-16879)

  The development update included the following changes and improvements:
  - Updated applicable materials in the Material Database Editor to support En-1380 Creep. (CR-TX-16832)
  - Added a new **Creep** (CRP) **Stress Type** in the **Static Analysis - Load Case Editor**. (CR-TX-16833
- The software supports Canadian Z662-11 (Chapter 11), June 2015. (CR-TX-15572)

Equipment Codes

- The software supports API-560, 5th Edition, February 2016. (CR-TX-16898)

Enhanced Piping Input Usability

- The **Break at Element** dialog box (of the **Model** > **Break** command) defaults to the halfway-point node number and distance for the **Insert Single Node** option.

- The **Displacements** tab displays free and fixed designations to eliminate confusion. The **Fix DOFs** option applies the fixed value of **0.0** to any undefined field of a vector with one or more defined fields.
- Updated the software by creating a new **Insert Restraint** dialog box. The **Insert Restraint** dialog box allows you to right-click an element to insert restraints and define restraint options.

Streamlined Load Case Editing/Creation

- Updated the **Static Analysis - Load Case Editor** by adding the ability to copy and paste rows and to allow load cases selected in **List** view to remain selected when you switch to **Group Edit** view.

Improved Distance Measuring

- Updated inconsistent functionality in the **Distance** dialog box. Previously, if you selected **Origin and Selected Element** as your **Measure Method**, the **Distance** dialog box defaulted to **To and From Nodes** as the **Measure Method** after you took a measurement. The functionality was updated by retaining your selected **Measure Method** option for the duration of your use of the **Distance** dialog box.

Improved 3D Model/Graphics

- Node numbers display in front of piping elements when you use **Options** > **Node Numbers** and rotate graphics.
- Symbols for LIM restraints (axial limit stops) display on the outside of the pipe and remain visible when you use **Options** > **Restraints**.
- Expansion joints created with **Model** > **Expansion Joint** now have a default color of blue.
- Displacements, forces, and moments display graphically as arrows with **Options** > **Displacements** and **Options** > **Forces**. You can also change the default colors and arrow sizes in the **Graphics Settings** of the **Configuration Editor** or by using **Plot Properties**.
- Displacements on CNodes display graphically as arrows with **Options** > **Displacements**.

Updated User Interface

- CAESAR II 2017 features a news channel on the main window where you can find out product information (such as hotfixes to previous versions and the latest version of the software available). In addition, refer to the news channel for upcoming events, product training opportunities, and future webinars. Use the quick icon links at the bottom to get to the product web pages, the latest newsletter/blog postings, and Intergraph CAS social media sites.
- Updated the look of the CAESAR II splash screen that appears when launching the software to the latest Intergraph PP&M standards.

Enhanced Data Exporting Usability

- In addition to choosing **Nozzle Flex** types for **WRC 297**, **API 650**, and **PD 5500,** you can also select a new user-defined **Custom** type. The **Custom** nozzle type includes user-defined nozzle flexibility values for **Axial** (radial force), **In-Plane Bending**, **Out-of-Plane Bending**, and **Torsional** (moment). Many improvements have also been made to the **Nozzles** auxiliary panel layouts to improve usability.

  To improve usability, individual flexible nozzle input export options are now combined into a single **Flexible Nozzles** option on the **Data Export Wizard**.

- Updated the software by adding a new **LCASE_NAME** column to files exported to Microsoft Access through the **Data Export Wizard**. The **LCASE_NAME** column was added to certain tables in CAESAR II .mdb files to allow you to identify the names of the load cases when integrating with Smart 3D.

Upgraded User Documentation

- Updated the *Hinged Joint* section of the *CAESAR II Application Guide*. Updated the **Hinged Joint Model** graphics to include all of the necessary components to model a hinged joint.
- Updated **Restraints** in the *Piping Input Reference* section of the *CAESAR II User's Guide*. Each restraint type includes a graphic example to assist identification.
- Added navigation information, such as the location on ribbons and menus, to command topics to aid discovery when browsing the help.
- Updated the *Global Coordinates* section of the *CAESAR II User's Guide*. Previously, the user's guide referenced global coordinates as **X**, **Y**, **Z** and local coordinates as **x**, **y**, **z**. The user's guide now references local coordinates as **a**, **b**, **c** to reduce confusion between local and global coordinates.
- Updated portions of the user documentation to the latest Intergraph PPM standards for formats, which included adding more white space and indentation for field property formats.
- Converted the CAESAR II 2017 readme document to .pdf format to comply with the latest Intergraph PP&M standards. Previously, the document, which contains an overview of the system requirements, new features, and fixes in CAESAR II 2017, was published in .mht format, which caused compatibility issues with certain web browsers.
- Updated the software to call the .chm-based help when you press F1 in the modules from the **Components** and **Equipment** sections of the **Analysis** tab and the modules from the **Interfaces** tab. Previously, these modules displayed in a text-based help dialog box.
- Added a new **Creep Loading** topic to the *Technical Discussions* section of the *CAESAR II User's Guide*.