Ovation™ View HMI

Features

- Modern web-based graphics.
- Numerous drawing tools to form lines, ellipses, polygons, stars, arrows, pipes, and complex shapes.
- Extensive library of drag-and-drop widgets to draw tanks, valves, pumps, fans, buttons, gauges, and more.
- Tabular properties window to quickly configure a widget's position, style, events, animations, and other characteristics in one convenient location.
- Macros support to create custom widgets.
- Uses the Ovation Developer Studio to compile and download graphics to workstations.
- Offers remote viewing in a web browser using the Ovation Data Hub application. Desktop and mobile devices are both supported.
- Legacy graphics and Ovation View HMI can reside on the same system to aid in graphic transformation.

Overview

Ovation™ View HMI (Human Machine Interface), introduced as a key feature in Ovation 4.0, provides a modern, functional, and visually appealing graphics package with animations, gray-scale high-performance graphics, Key Performance Indicator (KPI) dashboards, and easy-to-use tools. Ovation View HMI consists of a builder and a runtime viewer and shares some of the best features of the legacy graphics application but incorporates new functionality, enhancements, and modernization that make it faster and easier to create, modify, and test graphics. An extensive widget library provides new ways to visualize Ovation data to create an attractive and intuitive operator experience to control any plant safely and efficiently. The same HTML displays in the control room are accessible for remote monitoring, viewing, and control without any conversion process. Microsoft Edge WebView2 runtime software is required to view the graphics.

Familiarity with Ovation Developer Studio

The new graphics and resources are configured, managed, and downloaded in Ovation Developer Studio. New nodes, called Displays, store the next-generation graphics. (Legacy graphics nodes remain in the Graphics node in the Studio tree.) In addition, Ovation View HMI graphics can reside on the same system as the legacy graphics package allowing a gradual and seamless transition.

Widgets

The Ovation View HMI graphics package supports two- and three-dimensional widgets such as pumps, valves, and motors. Widgets are resizable, moveable, rotatable, and flippable. Each widget has a properties panel for configuring color, line width, font, and other characteristics. Widgets are easy to align and space using shortcut buttons on the toolbar.

Standard drawing widgets include text, rectangles, rounded rectangles, ellipses, Bezier and Quadratic curves, images, polylines, polygons, dynamic lines, process points, stars, rings, arrows, pipes, time, and dates. User input widgets allow operators to enter values on the graphics and include entry fields, checkboxes, radio buttons, combo boxes, sliders, range sliders, and menus. Extensive two- and three-dimensional tanks, pumps, valves, fans, motors, turbines, and solar panels for process control usage are also included. Pipe widgets with built-in

gradients such as tees, elbows, collars, flanges, and more, are included to design pipe diagrams. A map widget lets you add a map to the graphic. Adding process point values and markers to the maps enables zooming in, out, and panning with the mouse.

The Ovation View HMI product supports a variety of charts, linear gauges, and radial gauges to build KPI dashboards to display the most important metrics instantly.

Properties Window

When a widget is selected, a properties field displays to configure the widget's settings. The properties window contains Shape, Style, Event, and Animate tabs that define and design multiple characteristics for each widget.

Most widgets accept mouse events. Mouse events are bound to the border of the shape. If there is an irregular shape, the mouse event triggers when you click within the shape's border. Widgets can be updated when the mouse hovers or presses the shape, and if it has a mouse-defined event, the cursor changes to a pointer handle. Tooltips, popup messages that appear when hovering over a shape with mouse events, provide additional information.

The new Ovation View HMI graphics package supports various animations from changing widget positions, stretching or shrinking widths, rotating or turning angles, simulating conveyor belt movement or pulsing, fading in and out, and moving objects back and forth.

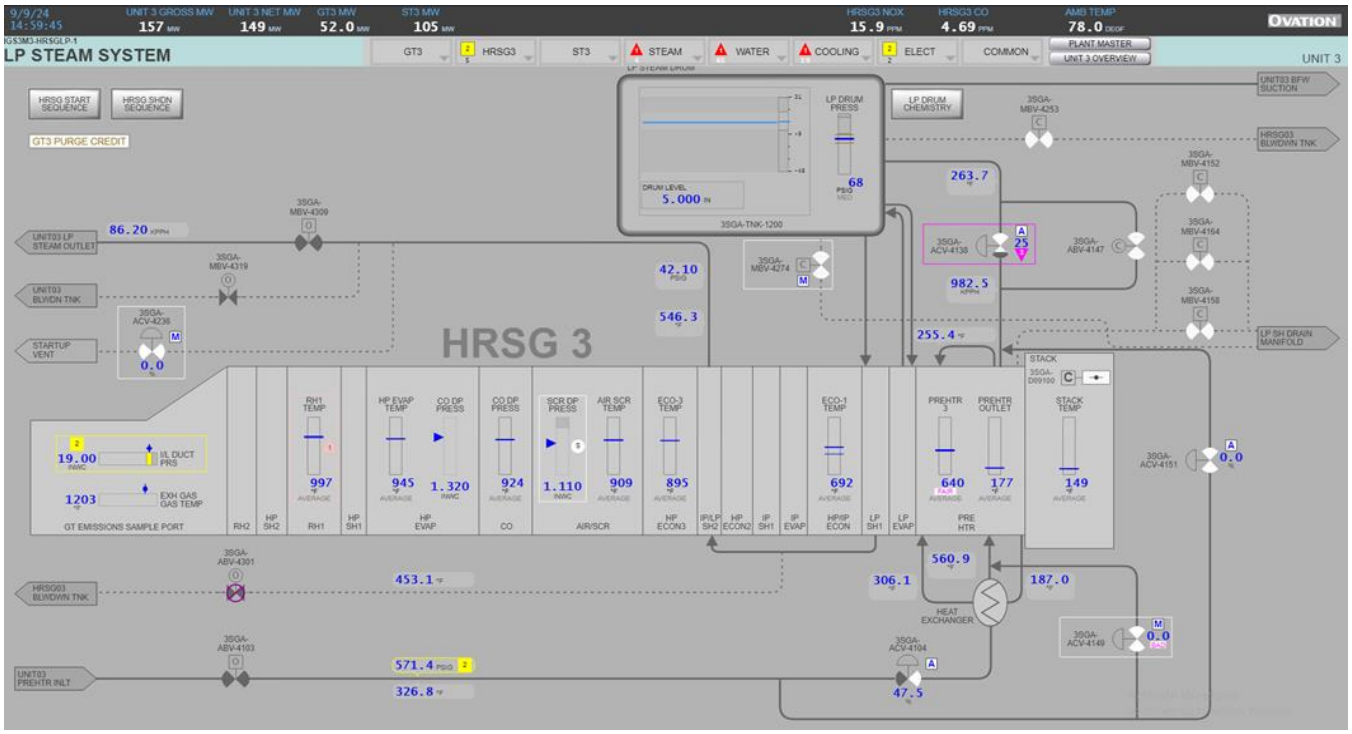
Ovation View HMI Enhanced Features

- **Find and Replace** – finds widgets using a specific point, variable, or string, and replaces the widget individually or in mass.
- **Zooming** – zooms up to 1000 percent and zooms in and out with the mouse wheel or buttons on the toolbar. There are also shortcut buttons on the toolbar to fit the screen and zoom to 100 percent.
- **Quick View** – provides the ability to see and test a designed graphic. Compiles and launches the graphic in a quick view staging area that requires no downloading.
- **Mathematical expressions** – utilizes expressions to normalize values, convert units, and calculate averages. The mathematical expressions are entered in the value properties fields of a widget or variable.
- **Charts** – provides an effective visualization of data in process control. Radar charts show how close all the values are to each other. Scatter plot charts demonstrate the efficiency range of a pump curve. Line charts identify stable control over time or how fast control responds to setpoint changes. The following chart types are available: bar charts, doughnut charts, pie charts, line charts, radar charts, scatter charts, and polar area charts. Line charts automatically backfill from the Ovation Process Historian (OPH) if the point's Audio Visual (AV) field is trended and recorded in the OPH.

Ovation View HMI Additional Functionalities

- Macros do not need to be compiled. They are updated and compiled automatically when the graphic using them compiles. This streamlines the process and saves time.
- The Ovation View HMI application displays the project files in a tree view. Graphics developers can quickly open graphics without returning to Ovation Developer Studio.
- Standard drawing widgets have a radius property to round corners automatically.

- Ovation View HMI supports an outline view showing all the widgets on the graphic with their z-order (the order in which symbols are painted at run time). This makes it possible to select widgets nested in groups.
- Multi-select mode allows editing properties of multiple symbols.



Licensing Information

Customers with an Ovation system with licenses for the legacy Graphics Builder must purchase separate licenses for Ovation View HMI to take advantage of the full capability. Customers without an Ovation View HMI license can try the new functionality and create a limited number of Ovation View HMI displays alongside the existing legacy graphics.

Customers with an existing term-licensed, subscription-based Ovation system are entitled to Ovation View HMI software licenses without separate software fees, and licenses will be co-termed with their system term licenses.

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