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Welcome to Envision 3.2

ENVISION enterprise solution helps companies to optimize automation processes, minimize unnecessary maintenance, and increase production throughput. In the scope of process diagnostics and quality management, ENVISION’s patented technology is a quantum leap beyond traditional motion sensing diagnostics tools.

Whereas existing diagnostic tools use vibration sensors or other signals, ENVISION creates digital traces of all sets of events pertaining to the automated or manufacturing processes. Envision solution LISTENS to the rhythm of machine and automated operations; ILLUMINATES untapped and currently invisible process data to pinpoint possible problem areas before a critical failure; and TRANSFORMS how systems’ operational and quality performance is measured and managed.

CAPTURING THE HEARTBEAT OF AUTOMATION: ENVISION monitors and records every automated motion and process in real-time. ENVISION actually acts as an EKG of an automated system – comparing the actual process performance against ideal (design intended) cycle time to gauge the health of the system.

Beet Analytics Technology brings the power of digital technology and advanced knowledge of factory automation together, creating a powerful Automation Intelligent System, ENVISION™.

ENVISION demystifies the industrial operations by digitizing each automated process down to every minute detail and presents it in a simple and intuitive way.

ENVISION enables true Preventive Maintenance to minimize downtime, improve production throughput and achieve faster problem solving.

ENVISION creates a competitive advantage by addressing key operational challenges including:

Provides accurate real-time and historical machine and process performances information to the right user at the right time. Enables proactive preventive maintenance by highlighting potential problem areas and providing prioritized list of “Hotspots” in the manufacturing and automation processes.

Enables all users to monitor and analyze the system performance anywhere via web.

Delivers high return-on-investment by increasing throughput, reducing machine downtime and achieving faster root-cause analysis.
What's New 3.2
More Information 3.2

Fully Hyperlinked Document

When opened on a web page or downloaded to a PDF format, this document contains several ways to use hyperlinks to navigate through the document:

- In the upper header, the BEET logo and the Sectional Icons can be used to jump to the Table of Contents (BEET icon) or the Sectional Contents page.
- The Sectional Content Page consist of the Main Sections of this manual. Simply Click on one of the Icons or the Title below, to go to that section.
- The Sectional Contents icons are located in the upper header.
- On some of the section, the large pictures have active hyperlinks that will allow you to jump to the section related to the button you have select. On the Cycle View page below, all the buttons on that picture will have a hyperlink to the selected section. Hover the cursor over the picture below to see the available buttons that will take you to the corresponding sections.
Sectional Content 3.2

- **Navigation**
- **Cycle View Browser**
- **Baseline Editor (Auto Learn)**
- **Cycle View Evaluation Module**
- **Notes in Cycle View**
- **Cycle History**
- **Production Counts in New Window**
- **Dashboards**
- **Hotspots**
- **ENVISION Notes**
- **Scheduling**
- **Production Monitor**
- **enSight**
- **System Health Monitor**
- **PM Dashboard Reports**
Software Application 3.2

Envision features many helpful tools to help maximize productivity. The following section describes those features in detail, as well as giving instruction on how to use them.

- Navigation
- Cycle View Browser
- Baseline Editor (Auto Learn)
- Cycle View Evaluation Module
- Notes in Cycle View
- Cycle History
- Production Counts in New Window
- Dashboards
- Hotspots
- ENVISION Notes
- Scheduling
- Production Monitor
- Reporting
- enSight
- Conditional Notifications
- System Health Monitor
Navigation 3.2

This section, Navigation will go through the instructions of how to navigate through the ENVISION Browser via the Object Tree, Cycle View Browser, and various controls of ENVISION.

- Navigation
- Plant Navigation
- Main Tree Object and Description
- How to Navigate with ENVISION
- Top Navigation Bar
- Main Tree Navigation
- Object String Navigation
- Object Tree
Plant Navigation 3.2

In ENVISION, your plant is broken down in to a hierarchy of manufacturing categories. The Factory Plant defines the organizational tree down to the component level. The top 3 levels (Areas, Lines, and Stations) are used to organize the tree into a meaningful and friendly navigation structure. The lower 2 levels (Assets, Groups) are the data objects.

See Main Tree Object and Description

- How to Navigate with ENVISION
- Top Navigation Bar
- Main Tree Navigation
- Object String Navigation
- Object Tree
- Settings
- About (Envision 3.2)
Main Tree Object and Description 3.2

**AREA** The Area of the Plant where a particular assembled part is built (example: RWD and FWD Transmission Assembly Areas).

**LINE** A part/place of the Area that is responsible for assembling a part of the assembly (Example: Internal and External parts assembly Lines).

**STATION** A Station within the Line that is responsible for the collection of Assets (Example: Gear build, valve body, and torque converter build Stations).

**ASSETS** Assets are used to define a repeatable set of motions/activities (Groups) that have defined Start and End signals (Example: Builds the Valve body and inspects/quality check assets).

**GROUPS** A Group is a collection of OPS (individual motions/event data objects). Assets are a collection of Groups that describe a particular sequence of events that comprise one complete cycle for the Asset (Example: A part enters On-Deck, then Part is present On-Deck, signal to show OP is complete).
How to Navigate with ENVISION 3.2

Navigating to the area of your plant you would like to monitor can be done at any time using the top navigation bar in the ENVISION browser. Navigate to any object to view in depth critical performance data. If you are reopening, it may return to the area of the object tree you were previously viewing. If not, then it will open to the Dashboard with only the **Object Tree**. Select the **Object Tree** Icon to proceed.

Clicking on either the BEET or enVision icon will take you to the opening home page.

- The **Dashboards** tab will open the Dashboard section of enVision including the Dashboard and User Dashboard section.
- The Cycle View tab will open the enVision **Cycle View Browser**.
- The Hotspots tab will open the enVision **Hotspots** section.
- The Reporting tab will open the enVision Reporting module.
- The Notes tab will open the enVision Notes Module.
- The **enSight** tab will open the enSight Module in a new window.
- The Scheduling button will open the Scheduling module.
- The Admin button will open the Administrator Module.
- The Setting button will open a Settings window where you can update the User password and to Log out of the enVision application.
- The i button (About) will open an About window which will contain the information (Release Code, DLL Version, Smart Tag Count, Operation Tag Count, Asset Count, Analog Tag Count, Group Count, Server ID, License ID, License Status, and Enabled Features) about the currently logged on enVision application.

This + button (System Health) open the system health module. In this module you can view the stats regarding to the health and condition of the EAS and EDC.

This is a display tab of the current logged in user.

- Debugging (Admin)
- Production Monitor
- PM/Average Cycle
- Production Counts in a New Window
- Bookmark
- Display Bookmarks
Top Navigation Bar 3.2

When first opening Envision, and navigating to a selected object, it will open to the Dashboard window. The Top Navigation Bar can be found at the top of your ENVISION browser.

Many of the icons in the upper right hand side of the browser, will allow the user to navigate to another module within enVision. These are the Scheduling, Admin, Conditional Notifications and System Health. In the lower grouping of icon buttons there is the Debugging, Production Monitor, PM Average Cycle, and Productions Counts icon buttons.

They will also have a bookmark button and a bookmark display button.

**Bookmark Icons**

- The bookmark Icon will allow a user to mark the current location with an easy to use bookmark.
- The Display Bookmark icon will display all the bookmarks in the logged on version of enVision.
Main Tree Navigation 3.2

*Click Object Tree* on the navigation bar to open the *Main Tree* window to navigate to the Object desired.

You can drill down to the object you desire by clicking on the sign. This will reveal the lower level objects.
Object String Navigation 3.2

You can also navigate by using the Object String next to the Object Tree Icon. **Click** on the Object label Icon (S01 Fixture) to open a window to proceed to the next level down. Or hover over an Object label and a drop down option will appear to go to the next level down.
Object Tree 3.2

( TOC ) / ( SEC )

Select the + box next to each item to further expand the areas. Continue to expand areas until you reveal the object you desire, then **Click** on the Object to open the cycle browser. This will open the browser window with the last 100 cycles.

Click on the Cycle View Tab at the top of the browser to open the cycle view. Once selected, the Cycle view browser will open with the **Last 100 cycles** in the History Display Panel, displayed for that object.

The upper graph will be empty (No Cycle Selected), until you select a cycle to view. Simply select a cycle to view by Clicking on the lower graph (History Display Panel) in the Cycle view browser.
Settings

The Settings window within the enVision browser can be opened by clicking on the person icon in the upper right-hand corner between the Admin and About buttons. Click on it to access the ability to change your password and log out of the enVision browser.

About Envision 3.2

The i button (About) will open an About window which will contain the information (Release Code, DLL Version, Smart Tag Count, Operation Tag Count, Asset Count, Analog Tag Count, Group Count, Server ID, License ID, License Status, and Enabled Features) about the currently logged on enVision application.
Cycle View Browser 3.2

The cycle browser provides graphical data on your processes cycle status, including the machine heartbeat. The Cycle Browser has two main displays, the Cycle View Upper display and the History Display panel.

- Opening Cycle View
- Cycle View Breakdown
- Selecting a Cycle
- View Types
- Object Properties
- Distribution – Cycle View
- Messages (Cycle View)
- Smart Swap

![Cycle View Browser 3.2](image-url)
Opening Cycle View 3.2

Make sure you have the tab selected on the ENVISION top menu.

You can then access the cycle browser by using the Main Tree window to navigate to your desired object. Click on the + - sign beside the object. This will reveal the lower level objects. Proceed until you reach the object desired. Click on the object and the Cycle Browser will open. After selecting the desired object, the cycle browser will launch to this browser. A cycle has not been selected yet, so the upper graph will be empty and say No Cycle Selected.
Cycle View Breakdown 3.2
Selecting a Cycle 3.2

To Select a cycle, go to the bottom of the cycle browser, known as the History Display Panel. From here you can select a cycle to view in the Upper Graphical area of the cycle browser. While browsing over the History Display Panel, you can hover over a cycle to view the details of that cycle. Select a cycle by clicking on that cycle. After you click on it, a white line will appear above the selected cycle, and the upper window will update with the selected cycle.
View Types 3.2

Located to the right of the Upper Graphing area, are 4 buttons to change the views to either Heartbeat or Sequence and to change the User Parameters graph. The fourth button is to open the Cycle Compare window.

Heartbeat View is the Default view. The Blue Heartbeat Baseline can only be viewed in Heartbeat view.

Sequence View contains state labels which can only be seen in the sequence view.
User Parameter History

View Options

Below is a list of View options you can apply to your cycle view. These buttons are in the top right corner of the cycle browser, they are Cycle view tabs. X-Axis, Baseline, Tolerance, and States. The Baseline can only be viewed in the Heartbeat view as the States tab is only active in the Sequence view as shown in the figures below.

Below is a list of options you can apply to your Cycle view.
Object Properties 3.2

The Object Properties are located in the top left of the cycle browser. **Model, AGV, Part, CycleNumber, Cycle time, and time data** can all be located here. The highlighted Cycletime is dependent on the status of the cycle displayed. It can be **Green (Good)**, **Yellow (Watch)**, **Orange (Warning)**, **Purple (Missing)**, or **Red (Fault)**.

Good / **Green** - Normal, Optimum Performing Range
Watch / **Yellow** - Watch, Not Optimum but within defined Tolerance window.
Warning / **Orange** - Warning, Outside Defined Tolerance Window
Fault / **Red** - Fault
Missing / **Purple** - Missing Data due to Stoppage or Missing Input/Output.
Distribution – Cycle View 3.2

To view the last 100 cycles or the current cycles in the History Display panel, you can use the Distribution button. By selecting this action, it will open a distribution bar between the History Display Panel and the Upper graphing areas. It will display all the Status States in an easy to read stacked bar graph. It displays Good Time, Non-production, Over Cycle, Blocked, Starved, Faulted and Idle. It can also perform the same functions on a selection of cycles.

Note: This function does not apply to using the zoom feature.
In the Cycle View browser, there is the Message module. It can be opened by selecting the Message button that lies in the middle of the browser, to the left of the History Filter Control panel (Distribution button). Selecting this will open a window to view the current messages based upon the cycles in the History Display Panel.
Smart Swap 3.2

Opening Smart Swap

Open your Google Chrome app and login to ENVISION by using the address. Go to the top menu bar and click on Smart Swap icon on the right.

Selecting an Object

After selecting the Smart Swap Icon, the Object screen will show up. Click the Line segment you want to work on, or click the Area (KTP) to work on all ENVISION zones. Click on the “Select” button at the lower right-hand corner. In a few moments, the data will be displayed in a new Smart Swap window. In this window, the time period defaults to the current shift, but you can select another shift.
Configuring Smart Swap Data

Once the data and time period is set, you can set the **Fault Minutes** and/or **% Warning Cycles** in the filter to narrow down the rivet robots displayed on the screen.
The Message History or Cycle History can be brought up for any one of the robots.

The user can jump to **Cycle View** for any of the joints with none-zero % warning cycles.

The user can then generate a work order by selecting the Swap to perform.
Please refer to the figure below for the various parts map of the Smart Swap Screen.
Baseline Editor (Auto Learn) 3.2

The Learned Baseline Editor is an application/tool within the ENVISION Cycle browser, that can take a selection of objects at the Asset level and filter the data values to view the baseline data. Within the Learned Baseline Editor, lies a baseline table that you can filter and sort to see the data averages of certain values.

Opening the Baseline Editor

The Learned Baseline Editor can only be used in the Cycle View browser. Open the Cycle View browser and drill down to an Asset level. In the lower part of the Cycle View browser (History Display Panel). Select a cycle from the History Display Panel. From there, navigate to the upper part of the Cycle View browser, on the upper right above the upper graph window. Select the light blue button with the oxford cap (graduation cap) on it.

After selection of the Baseline Editor button, the Learn – Baseline Editor setup window will open. It displays an editing area, Select Learn Mode and Select # of Cycles, where you can select the number of Cycles to display. You can choose up to ~ 1000 cycles if needed. After you select the number of cycles and Learn mode, click on the Confirm button to the left of the edit box.
After selecting the Confirm button, the **Learn – Baseline Editor** window will open. In this window, it offers a selection of options to filter and sort the available data. The Object data is separated into three sortable groups: **Model, Group, and Tag**. The available data values are the Events, Mean Cycle Len. (Length), Mode Cycle L (Length), Median Cycle Length, Min Tol. (Minimum Tolerance), Max Tol. (Maximum Tolerance), Min Normal (Minimum Normal), and Max Normal (Maximum Normal).

All the Tolerance Values are read from the Classification section in the Admin Module.

To sort the Object data columns, you can utilize the **Filtering feature** to the right of each edit box. Clicking on it reveals your filtering choice. Click on the filter button and input the object value and it will start to auto display some choices. After a single row has been changed or altered in any way, click the Update button. Click the **Update All** button when all the data changes are completed.

Except for Events and Median Cycle Length, the others can be adjusted by clicking on the value. It will then highlight and offer you a choice to increase or decrease the value. You can also manually input the number to make it exact.

The checkbox for “Overwrite Existing Tolerance Values” will always be unchecked (Default), therefore if the box is checked, then it will Overwrite the existing Tolerance Values.
The Mean, Median, and Modes will read from whichever one is selected. So, make your selection based upon which cycle length value you want it to read from. Click the Update All button after your selection.

NOTE: When all data is completed, click the Update All button to save the work. Not selecting the Update All button will cause a loss of your work. Click Update All before exiting.
Cycle View Evaluation Module 3.2

Overview

The Cycle View Evaluation Module will allow users to view multiple cycles at the Asset and Group object level in the cycle view browser. It can be utilized with any cycle, regardless of its status (watch, warning, etc.). The three main parts used for this module is the Cycle View Browser, Cycle Compare (Collection) Window, and the Cycle Compare Browser.

- Open Cycle View 3.2
- Selecting Cycles to Compare 3.2
- Open Cycle Compare Window 3.2
- Configure Cycle Collection 3.2
- Adding More Cycles 3.2
- Zoom Feature 3.2
- Deleting a Cycle 3.2
- Deleting a Collection 3.2
- Cycle Toggle Feature 3.2
- Reference for CEM
Open Cycle View 3.2

First, we need to navigate to get to the Cycle View Browsers, so that the History Display Panel can be accessed. After opening the ENVISION browser, click on the blue Object Tree icon to open the Main Tree. Navigate the Main Tree to drill down to the Asset or Group level. This module is active at the Asset levels and below.

The Cycle View window will update with the last 100 cycles. Select a cycle from the History Display Panel.
Selecting Cycles to Compare 3.2

Once the ENVISION browser is open, select the Cycle view tab from the top menu tab and a new Cycle View window will reveal with the last 100 cycles in the History Display Panel (in the lower browser window).
Select a cycle from the History Display Panel. Once a cycle is selected, it will have a white dash line through the selected cycle, showing that it is selected.
Open Cycle Compare Window 3.2

When the cycle is clicked on, the upper display window will show the cycle selected. In the upper right-hand side above that window will be the Cycle View Menu bar. On the far right side is the Cycle compare button.
Configure Cycle Collection 3.2

When the **Cycle Compare** window opens, input a **Name** for the cycle’s folder, then select the **Create a New Cycle Collection** button. This will update the window with a new folder (**CEM 001**) and the first selected cycle.

You can click the **View** button and the upper display will reveal the selected cycle as shown below. This will only show the cycle selected.
Adding More Cycles 3.2

To add more cycles, select another cycle from the History Display Panel. Once selected, select the **Cycle Compare** button. The Cycle Compare window will open. Click on the first cycle that was selected, then select the **Save to Collection** button in the upper right-hand side of the window. This will add it to your selection. **Ensure** that you select the correct cycle you want to compare with. If many cycles (assets) are already present in the Cycle Compare window, it is possible to add to a different collection, so selecting the wrong cycle will pair your selection to that cycle instead of the intended one.

Now with 2 (or more) cycles in the Cycle Compare folder (**CEM 001**) you can select the **View** button, and this will show the 2 (or more) cycles in the upper browser window. The cycles will be displayed layered one atop of the other. Hovering over a bar will reveal the details of the cycle. On the left hand side, it will display the cycle information of the cycles selected and stored in the Cycle Compare Collection. To exit this mode, you can select from one of the **Cycle View** buttons to the right of the window, such as the **Heartbeat** and **Sequence** views buttons.
Zoom Feature 3.2

While viewing the cycles in this cycle compare window, you can zoom in to a collection by click and holding, then drag the zoom selection area over your intended cycles. The selected area will be highlighted, then Update to a zoomed in view on your selection.

NOTE: The zoom selection area is highlighted with a deeper color.

The zoomed area is now reopened to the selected area. Click on the Reset Zoom button in the upper right-hand corner of the graphing area. This will return the selection to the original display size (default).

Note: The Zoom Function works in the upper graphing area and the History Display Panel.
Deleting a Cycle 3.2

From the Cycle Compare Window, select a single cycle from the list in the Cycle Compare window and select the Delete Cycle button to delete the cycle selected.

The Cycle Compare window will update to show the Collection Folder CEM 001 and the unselected cycle.

In the event that you deleted a cycle in favor of a different one, you can close the Cycle Compare window and select a different cycle to compare with the remaining cycle. Click on a new cycle in the History View Panel, then click the yellow Cycle Compare button to open the Cycle Compare Collection. Click on the cycle that you want to compare, then click the Save to Collection button. See Adding More Cycles.
Deleting a Collection 3.2

Select a Collection Folder from the list in the Cycle Compare window, then select the **Delete Collection** button to delete the folder and the cycles in it.

**SPECIAL NOTE:** Though the data for the cycle and collection have been deleted, it still can be viewed if you have not closed the Envision Browser or navigated to another collection. Simply click on the Teal colored cycle compare button under the Heartbeat and Sequence buttons. This will reopen the last cycle compare set that was previously viewed before.
Cycle Toggle Feature 3.2

When viewing the Cycle Compare Browser with multiple cycles, it is possible to remove the cycle data from the present Compare window. With two or more cycles displayed, you can click on the left-hand side of the window, and select from the cycle information area. Click on any one or more of the Cycle Information tiles to remove from the Cycle Compare browser area. Click on it again to add it back to the browser.

The first cycle will be on the top in the left-hand side information window, and will be on the bottom bar on the Compare Cycle Window.

Clicking on the Cycle Information tile will toggle to deselect or select a cycle.
Note: This is only for the cycles that were selected and saved to the collection. You can add additional cycles if needed.
Reference for CEM
Cycle Compare (Collection) Window

Select a cycle on the History Display Panel, then open the Cycle Compare window, select a cycle you want to compare, then select the Save to collection button.

Input a name in the text box to identify the cycle, then click Create button to save it to the collection.

Select a Collection Folder, then select the Delete Collection button to delete the folder and the cycles in it.

Select a single cycle and select the Delete cycle button to delete the cycle selected.

Select the View button to display the selected cycles in the collection.
Adding Addition Cycles

Cycle Compare Browser
Notes in Cycle View 3.2

Within Cycle View browser, there is a button you can use to make notes about the object. The Notes button is located in the upper right-hand corner of the ENVISION browser.

- Enter Custom Note
- Opening Note
- Select Common Notes
- View Notes
Opening Note 3.2

Select Common Notes

Simply **Click** on the Notes button and a window will open labeled Cycle Notes. It will open to the Select Common Notes tab. It will offer you a few options to choose from including Select Common Notes, Enter Custom Note, and View Notes.

The Select Common Notes displays a list of the Notes in the current selection or where you are in the cycle view browser. **Enter Custom Notes** View Notes
Enter Custom Note 3.2

The **Enter Custom Note** tab, will allow you to input a note into the Notes database. Simply, **Click** on the Category space to reveal a drop down menu with choices. Select the proper Sub Category (Other in this example), then fill in your comments in the Comments section provided. When you are finished, **Click Save** to hold the position, or **xClose**.
View Notes 3.2

The **View Notes** tab will let you view the active notes at the object that you are viewing. The Note button will have a red circle with a number in it (number of active Notes). When you click on the Notes button, click the View Notes to display the active notes.

![Cycle Notes](image)
Cycle History 3.2

Overview

Cycle history can be used to identify areas of concern quickly. Located on the bottom of the cycle browser, the cycle history window shows the cycles of an object in sequence across a preset date range.

- Overview
- Color Code 3.2
- Location 3.2
- History Filter Options 3.2
- Cycle Date Options 3.2
- Cycle History View types 3.2
- History View
- Model View
- Table View
- Bar Chart
- Cycle History Day View 3.2
- Cycle History Higher Level View 3.2
Color Code 3.2

The history module provides performance history for any selected objects. Each cycle's object status is indicated by a color code.
Location 3.2

Ensure you have the *Cycle View* tab selected on the ENVISION top menu:

Use the Main Tree navigate to the object you would like to view for cycle information. Selecting your object will launch the cycle browser. The cycle history module is located in the bottom portion of the cycle browser. Select a cycle from the History Display Panel and the Upper Graphing area will reveal the cycle selected.
History Filter Options 3.2

History Filter Options

A list of cycle history options highlighted in Red, is located in the top right corner of the bottom window.
Bar Chart 3.2

Bar Chart is a bar style color coded graph that shows the actual timeline of the object in progress. It shows a visual representation of the uptime and downtime.
Collapse Table 3.2

Collapse Table – This button will collapse the graph or table in the lower Cycle browser window. When it’s collapsed, hovering over the icon will restore the graph temporarily, until the cursor is moved off the lower graph, then it will collapse again. **Click** on the icon again to leave it up.
Column Chart 3.2

The Cycle History Panel contains a color-coded graph that indicates cycle statuses for a selected object over a period of time. This is showing the last 100 cycles.
Export last 1000 Cycles to Excel 3.2

This displays a spreadsheet program to view data.

From the Cycle Browser screen, you can select the .xls button to Export the last 1000 Cycles to Excel. This opens a spreadsheet program to view and plot data.

Click on the .xls button and History Export window will open so that you can configure what you want on your report.

First, set the date range by Clicking on the edit box. A calendar will appear. Click on date on the calendar to set the start date. Click again to set the end date. You can also use the presets at the bottom of the calendar window. Check off any of the statuses that you want to omit from your Excel report. Check off any Tags you want to omit from your report. When you are done setting up the Excel report, Click the Export button. The History Report window will disappear and you’ll receive a Notice in a green window that will let you know that it may take several minutes and it will notify you when the download is complete, with another small green window. The download tab at the bottom left of the browser will open and start downloading. When it is finished, Click on the pull down tab to reveal the menu. Choose Open, this will open an Excel file with the data configuration that was selected. An Excel document will now open with the data selected. It can now be viewed, plotted, and sent as needed. The file is in your Downloads folder.
Parameter History 3.2

This displays the Parameter History data in a window within the cycle browser to view. It shows the Parameter and the Value History. This will display within the cycle browser window.
Table View in New Window (v2.4 or lower) 3.2

This displays a new window with the cycle parameters in a separate window. This window can be moved out of the cycle browsers window so it can be view on a separate monitor if needed.
The table is displayed in the History Display Panel in v3.0 and above.
Toggle Filter 3.2

The Toggle filters are used to add or remove certain filters for display. Clicking on one or more of the color buttons will x it out and the History Display Panel will show only the color filters remaining.

Toggle Filter Good – Toggle this filter to suppress the Good data cycles
Toggle Filter Watch – Toggle this filter to suppress the Watch data cycles
Toggle Filter Warning – Toggle this filter to suppress the Warning data cycles
Toggle Filter Fault – Toggle this filter to suppress the Fault data cycles
Toggle Filter Missing – Toggle this filter to view the Missing data cycles
Toggle Trend Line – This turns on a trend line in the lower graph in Column chart view only.
Cycle Date Options 3.2

A list of cycle date options, is in the top left corner of the bottom graph window.

Users can also select the date tab on the left to access open a new graph chart, Click on the date range and a calendar will open that can be used to view any date range (Custom Range View).
Simply select the year, month, and date in the **Custom Range view**, to be included in the selection, by using the drop down tabs on the calendar. Other options are available as well. By selecting the **Last 7 days, 30 days, This Month, and Last month**, this will open another Graphic chart in the window that will display the selection chosen:
Cycle History View types 3.2

- Cycle History Day View
- Cycle History Higher Level View

History View

Shows the last 100 cycles for a selected object, which contain the Color Code and Cycle Length of each cycle.

Model View

Shows the variances for each cycle, by multiple models.

Table View

Opens a scroll able table where the graph was.

Bar Chart

Show a color coded graph that show the actual timing or the objects in progress.
Cycle History Day View 3.2

Use the date panel in the cycle history browser to access the day view for your object. Or \textbf{Click} forward or backward to get to the date desired.

Selecting either the "yesterday" or "today" tab will reveal an hourly view for that day in your cycle history browser. Simply select the hour you would like to see a cycle breakdown for.

Doing so will reveal a graph (Hour View) with bars representing each cycle in the selected hour. Roll the mouse pointer over a single bar for more information on that cycle:

Selecting the \textbf{Show Day View} tab, from the top menu will reveal history day view variance data:
You can view the cycle history for objects at levels higher than asset or group. Simply click any folder or labeled object above the asset or group level in the main tree.

Doing so will reveal a history graph indicating the status percentage of the object day-by-day.

You can also view the State Duration by clicking the Cycle Data button in the top right corner to see a graph indicating how long the object was in the fault, blocked, and starved states, day-by-day.

At a Higher level in the Upper graphing area, you can deselect the parameters, by clicking on the name in the legend area. Clicking on the name will remove it from the graphical representation.
Production Counts in New Window 3.2

Opening the Production Counts

To open the Production Counts in a new window, go to the upper right hand side of the Cycle View Browser. Click on it and it will open a new window with and Parameters window within it.

Parameters Window

In the parameters window is where you configure the data you would like to view.

Select Date Range

To start, input a date ranges by clicking on the Select Date Range edit box. This action will reveal a calendar set that will allow you to select a date range. Click once to select the starting or end date. Click again on a date before or after to include the days in between your selections.

Your selected date range will appear in the edit box and above the calendar selection widget. When your date range is correctly configured, click on the Close button to continue.
Efficiency

The Efficiency parameter is set at a default value. If it is not what is desired, then it can be changed simply by selecting within the edit box and changing it to the desired value.

Select Area

Click on the edit box to reveal a drop down menu. In the drop down menu, will be the areas that are currently present in the Envision. Select the correct area you would like to view.

Hourly Target Rounding

The Hourly Target Rounding feature allows you to Round Down or Round to the nearest whole number. Simply select one of the choices:

When all items are complete, check over your inputted values. If everything is as you desire, the click the _Save_ button.

Change Parameters

If changes in the parameters entered are needed, then simply click the button to re open the Parameters window. Make your changes then click _Save_ button to re-save.

Reporting

Click the yellow [Print] button to download the result to an xls format.
### 2nd Shift | Friday 9/8/2017

**Target:** 344 OFFLOAD: 314 EFFICIENCY: 84%

<table>
<thead>
<tr>
<th>Machine</th>
<th>Hour 1 (60 min)</th>
<th>Hour 2 (60 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>LADDER</td>
<td>35</td>
<td>43</td>
</tr>
<tr>
<td>FLOOR PAN</td>
<td>33</td>
<td>47</td>
</tr>
<tr>
<td>UBODY_C01</td>
<td>39</td>
<td>44</td>
</tr>
<tr>
<td>UBODY_C02</td>
<td>37</td>
<td>43</td>
</tr>
<tr>
<td>BSINL</td>
<td>38</td>
<td>39</td>
</tr>
</tbody>
</table>

*Baseline: 77 seconds*

*Production Minutes: 480*

**Production Window:**
- 1:00 to 2:00 pm
- 2:00 to 3:00 pm
PM Average Cycle

Opening PM Average Cycle

To open the PM average cycle module click on the second set of icons in the upper right-hand side of the browser.

Once opened, an object selection window will appear. From there, make a selection to drill down to the object level you would like to see. Once you reach your object, click on the title, then click the green select button.
They configure Report window will reveal. The configure report window will require you to select a date a report a model and give you a choice to pick the top three objects.

First make a date selection click on the date range box and a calendar will reveal. First click on the start date it will highlight blue. Next clips the end date and the date range will then be highlighted. Once finished click the close button and the calendar will disappear.

Next, click on the pull-down for report make a choice by some by shift by week by week shift or by group breakdown. Click on your selection and the report filled will now display your selection.

Now, move down to the models area. Click on the pull-down to reveal all the available models scroll down to pick the correct model you would like to display.

Pictures selection turn your slush will appear in the models window.

Lastly check or uncheck the top three box. This will display the top three objects if it is selected. If you would like to see all the objects then leave it unchecked. Truck over the configuration report and if everything is to your desire click the Run button to load the configuration.

A loading new data box will appear and the day that will start to load.

At the level selected in this example, the first screen you would see is a carafe table of the data sorted by the level that was selected.

In this image, it shows the group objects with the Target and value. If you navigate to a higher level, then it will display a table and a graph as well.
Navigating to a Higher Level

To navigate to a higher level you can do one of two things. You can click on the object tree icon and that will open the object selection window. While the object selection window is open you can navigate down to the object you would like to view. You can drill down further or go to a higher level.

An alternate way to navigate to a higher level is to simply click on the levels above the levels that you are currently at on the object string or address. When you click on an electric higher the screen will reload and display at the level selected.
Select Top 3 on the Configuration Report window to reload the current screen with the Top 3 Objects.

Configure Report

As it may be necessary to change the parameters of what you would like to view, you can click on the configure report button.

This will reveal the configure report window. There you can make your changes to the date report model or select the top three or unselect the top three.

In this example, a change has been made to the Models data. A change from 2 DR to 4 DR PICK UP BUFFER B/DROP OFF FLR PAN.

Once you have made your changes you can now click the Run button to reload the new data.
The new window will appear with the changes that were made on the configuration report screen. In the upper graphing area there is an option to download this graph as a picture period in the lower table area there is a button that will allow you to download this table to an Excel file.

If there is a need to restart from the beginning, there is a reset all button available. Selection of this option will reset and return you to the opening object selection window. There you can start the whole process over.
Dashboards 3.2

- enVision Dashboard
- Dashboard Item and Description
- User Dashboard
enVision Dashboard 3.2

Dashboard Overview

When you log into Envision, you will be greeted by the dashboard screen. There are several graphs available that provide critical object data in the Dashboard panel. You can navigate up or Down the Object Tree by using the Object Tree Icon or by utilizing the Object String next to it. A drop down menu will appear if you hover over the Object Labels. There is also a new User Dashboard Tab. See User Dashboard.

Dashboard Item and Description

Navigation Panel: The main panel used to navigate the Envision interface.
Child History Table: A quick overview of the cycle performance of your main factory zones.
Offload Efficiency Table: Lets you know how efficiently cycles are being completed.
OEE Chart: A chart that quickly visualizes OEE data calculated automatically by Envision.
Cycle Status Graph: Visualize show positively or negatively cycle time is trending.
Notes Panel: Contains user created notes that are attached to specific machine processes. Can also be found in the notes section.
State Duration Graph: Visualize show often shifts were in certain states.
Fault Table: Visualizes what objects have most recently recorded a fault.
Hotspots Panel: Visualizes which objects have accumulated the most faults in a predetermined time-frame.
Dashboard Item and Description 3.2

Navigation Panel: The main panel used to navigate the Envision interface.

Child History Table: A quick overview of the cycle performance of your main factory zones.

Offload Efficiency Table: Lets you know how efficiently cycles are being completed.
**OEE Chart**: A chart that quickly visualizes OEE data calculated automatically by Envision.

![OEE Chart Image]

**Cycle Status Graph**: Visualize show positively or negatively cycle time is trending.

![Cycle Status Graph Image]

**Notes Panel**: Contains user created notes that are attached to specific machine processes. Can also be found in the notes section.

![Notes Panel Image]
**State Duration Graph**: Visualize how often shifts were in certain states.

**Fault Table**: Visualizes what objects have most recently recorded a fault.

**Hotspots Panel**: Visualizes which objects have accumulated the most faults in a predetermined time-frame.
In the Dashboard section is the User Dashboard Tab. Clicking on this tab or the Monitor Tab will open a new window that will slide in from the right, containing dashboard templates. The window has a series of action buttons along the top of the window. In the window lies the previously created templates. In the top of the window, lies buttons for Filter, Create New Dashboard, Import Dashboard, Refresh and Close Window.

User Dashboard Template Menu

Click on the Monitor Icon to open the User Dashboard Template Menu. On this menu, the user can select from all the Templates saved in the enVision program.
Day/Shift Filter

The Day/Shift Filter allows a user to set the beginning and end date range to apply to the selected or created User Dashboard Template.

Month/Shift button will allow the user to change the state of the range filter from a daily shift to month format. A month format will allow a greater range selection.

Optional Filters button will allow the user to apply filters to remove or add conditions as Shift, Shift Crew, Status, Classification.
Filter (User Dashboard 3.2)

The Filter button when selected, will show a drop-down window with a selection of Show All or My Dashboards. Selecting Show all will display all the created dashboards currently in Envision. Selecting My Dashboards, will only display the dashboards that were created by your logged in profile. It also has a Category sorting feature that will let you sort the Dashboard by Categories types:

- Maintenance
- Analytics
- Production
- System
- Other
Create New Dashboard (User Dashboard 3.2)

Selecting the **Create a New Dashboard** button, will open the New Dashboard Window as seen below. In this window, you will input a **Name** for the Dashboard, a brief **Description** of the dashboard if needed, a choice of **Category** (Maintenance, Analytics, Production, System, or Other) and a check box that will allow you to save it as Public or Private. Selecting Private will not allow you to edit the dashboard unless you are logged in as the creator of it.

After the New Dashboard Setup screen is completed, select the **Save** button, a new Dashboard Template will appear on the New Dashboard Selection window. All the data you inputted on the New Dashboard window, is now on the Dashboard Selection Template.
Import Dashboard (User Dashboard 3.2)

Selecting the "Import Dashboard" button will open an explorer search window. Use this, to find and select the file you would like to import. Clicking on the button will invoke an explorer window for you to locate the XML file that was exported earlier.

In this example, the Live Test was exported and was placed in the Download folder of the CPU it was exported from.
Template Actions (User Dashboard 3.2)

In the Dashboard selection window, are separate Templates of different dashboards. They all have a series of action buttons to choose from. These buttons will allow you to Run, Edit, Delete, Copy, Subscribe, and Export the selected Template.

- Run
- Edit
- Delete
- Copy
- Subscribe
- Export
- Default

Run
The Run button, will open a new window with the selected Dashboard. This may take a few moments for the Dashboard to load. If the Dashboard loads, and there is no data for that time period, utilize the Day/Shift Filter to zero in on the days you would like to view.

Edit
The Edit button will open the select Dashboard very much like the run button does, but with an area to the left of the dashboard that contain the editing template. In this Editing Template, is a selection of icons that represent the settings and options to add, remove, edit, or change any part of the current template. Note: the editing can only be utilized if you are logged in as the creator of the template.

Delete
The Delete button is used to Delete the template from the Selection Panel. This can only delete the Public Template. The Private Templates cannot be Deleted unless you are logged in as the creator of it.

Copy
Use the Copy button to copy the template (Live Test). When the Monitor button is selected, it will show a duplicate template labeled as Copy of Live Test in the Template selection area.

Subscribe 0
Use this feature to Subscribe to the Selected Template.

Export
This feature will allow you to export this Template to the download folder, which then will be able to be imported to envision.

Default
This feature dictates which Dashboard will open initially. If the Icon is Green, then this is the dashboard that will open. If it is turned off, then it will reopen the last dashboard that was viewed.
Run (Template Actions)

Clicking on the Run button on the dashboard that you selected. If the object is running on a current project, then an active screen will display. If not, select the Filter button on the far-right hand side next to the monitor. That will open the Day/Shift Filter, which is a range filter window that will allow you to select a start and end date. From there, click and hold the start time slider and slide it to the Day/Shift you want to start your date set. Then click and hold the end time move that to the Day/Shift you want to view. When everything is correctly selected, then click the “Apply” button.

Optional Filters

You can further filter your selection by clicking on the blue “Optional Filters” button. This button when selected will reveal a selection of four tables. Shift, Shift Crew, Status, and Classification.

After your filtering is completed, select the “Apply” button, the window will reload and display the data in the time that you selected. While reviewing this screen, you can move the cursor over the bars to reveal the details of that bar. The details show the statuses of the cycle (Good, Watch, Warning, and Missing).
In the upper right-hand corner above the display area, is an Export icon. This is it used to export graph to either a PDF or an image. PDF’s are generally good to send as email. Images can be made to print and display.

When selecting the export to image option, another window will open. It will be an export to image in the name of the test template that you are using. From there, in this form window, input the title name of the template. Next, check or uncheck the show title checkbox. This will show the time on the template. Next input the name of the title. Below that is the filter State, select None or Below. Next, choose which image format choose between PNG, Gif, or jpg. Next, you can set the resolution. The resolution is set a default of 96 DPI. In the event, you would like to display it on paper, before printing, it would be advised that you increase the DPI, so the printing and images, will be clearer and easier to read.

From here, check over your changes into the export to image window. If everything is satisfactory then click Export. If not, you can cancel or click the Reset button. The reset button will reset all the parameters and allow you to input them again.

Realtime (Current Shift)

After the selection of the Run button, when there is current activity in the shift, you can select the Realtime (Current Shift) button, to the left of the Apply button. Selecting this button will reveal an active window that updates every 10 seconds. This offers a real-time look at your object level selection.
Edit (Template Actions)

Next to the Run button is the “Edit” button. The Edit button will reload the window with a Toolbar to the left of the graphing displaying area. From there you have a choice of a graphing menu of: Common and Filters.

Editing Toolbar Tab
The Editing Toolbar consist of various types of graphing tools. It uses common, maps, and filtering types of graphing tools. Clicking on any one of the icons will instantly add it to the display area. It will initially partition the graphing area equally. When you install a new graph, you can place it wherever you want in the display area. Simply click and hold on the placement tab at the top of the newly installed graph.
After the installation of any graph will require you to link it to the correct data source. Click on any of the graphs in the display area and a Setting Widget will reveal to the left of the selected graph. You will use this widget to Bind the data to the selected graph. It can also be used to edit or change the properties of the selected graph.
Use these toolbars to configure your selection.

Binding
Binding allows you to input the objects you want to view.

Interactivity
Interactivity gives you features, that enable interaction between various dashboard items.

Options
The options tab, allows you to edit the Common, Axis X, Axis Y, Legend, Coloring, and Color Scheme.

Convert To
The Convert To tab allow you to change from one graphical representation to another. Note you may have to reconfigure the data binding if necessary.

Delete
Use the Delete tab to remove the selected graphical representation from the display area.
Delete (Template Actions)

The **Delete** button is used to Delete the template from the Selection Panel. Simply select the red Delete button and the Dashboard Report and the Template on the selection page will be removed.

**Note:** This can only delete the Public Template. The Private Templates cannot be Deleted unless you are logged in as the Admin or logged in as the creator of it.

Please ensure that this Dashboard report is not being utilized by anyone else before it is Deleted permanently.
Copy (Template Actions)

Use the **Copy** button to copy the template (**Live Test**). When the Monitor button is selected, it will show a duplicate template labeled as **Copy of Live Test** in the Template selection area. It is best practice to make a copy to edit or augment. By doing this, you will be able to have a perfect reference to base your model off and it can be used to revert your copy back to the original state.
Subscribe (Template Actions)

Click on the blue "Subscribe" button to use this feature to Subscribe to the Dashboard Report you have selected. The Subscription emails contain direct links to the report. Simply configure the report by adding a Name for the report, range of dates, the navigated object to subscribe to, Other option, and an Email address with Message.

This will work in conjunction to the conditional notifications feature. It will allow the users to be notified by email or text message, when certain conditions are met. The Notifications can also be linked to a report via a subscription. When a notification is sent, it will invoke that subscription and send the attached dashboard or report to the recipient.

First, input a Name you would like to call the Report (there may be several subscriptions so, this would be ideal to identify between several similar subscriptions). Enter a Data Range (Last N Hours/Days, Current Shift, Last Shift, Today, Yesterday, Weeks, Months, etc.). Navigate to the object you would like to view. Select the optional data such as Status, Shift, and Shift Crew. Input the
Recipient(s), Email Subject, and Email Message.

Set the time and day you would like to have the Subscription sent to you by utilizing the excel based selection chart. Select a cell and the Hour will appear. Click on the minute and set it to your desire. Once everything is set, click the Save button.

Optional and Email Settings
In the image below, shows the editing selection boxes of each of the Optional and Email Settings.

Range – A predetermined range of time you would like to view.
Status – Good, Watch, Warning, Missing, or Fault.
Shift – The time that the shift takes place.
Shift Crew – One of the multiple crews in a single shift.
Classifications – The classification of the object.
Recipients – The person or Person’s email addresses that you would like to send it to.
Email Subject - The subject name of the email. Note there may be several related subscriptions, so this would be a way to distinguish between 2 or more similar subscriptions.
Email Message – Personal message about the subscription.

After every parameter is set to your desire, click the Save button to initiate the subscription, or Close to close the window.

Though Notification and Subscription are very similar in someways, there are many difference’s in the use and functions of these features. Below is a table of caparisons between Dashboard/Report Subscriptions and Conditional Notifications.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Dashboard/Report Subscription</th>
<th>Conditional Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger Point</td>
<td>Time based Schedule</td>
<td>When condition based on measure and time window is satisfied. Available measures are: Overcycle - duration in mins or no. of occurrences Blocked State - duration in mins or no. of occurrences Starved State - duration in mins or no. of occurrences Faulted State - duration in mins or no. of occurrences Available Time Windows are: Hour, Shift, Day, 7 Days, and 30 Days</td>
</tr>
<tr>
<td>Message Content</td>
<td>Dashboard/Report as attachment, E-mail body and Direct Web Link</td>
<td>Simple text, or dashboard/report when linked to a subscription</td>
</tr>
<tr>
<td>Attachments</td>
<td>Dashboard/Report PDF, XLS</td>
<td>Dashboard/Report PDF, XLS only if linked to a subscription</td>
</tr>
<tr>
<td>Recipient(s)</td>
<td>Single or multiple e-mail addresses</td>
<td>Single e-mail or phone no. for texts. Multiple e-mails only if attached to subscription</td>
</tr>
<tr>
<td>Limit on Number of Messages</td>
<td>Controlled by subscription schedule - no upper limit</td>
<td>Can be adjusted, but usually 25 per day per notification</td>
</tr>
<tr>
<td>Object Level</td>
<td>Works at any level</td>
<td>Asset Level Only</td>
</tr>
</tbody>
</table>
Export (Template Actions)

This feature will allow you to **export** a Template to the download folder. Simply click on the Export button, and the XML file will download the file to Download folder on the computer. From there, it can be imported to another Envision program if needed.

Default (Template Actions)

The default option is used to determine which User Dashboard opens when the Dashboard is initially opened or activated.
User Dashboard Menu (User Dashboard 3.2)

Above the Dashboard Icons is an tab Dashboard Menu Tab. This tab consists of the save option and the following tabs: Data sources, titles, currency, parameters, and color scheme.

- Save
- Data Sources
- Create Data Source
- Filter Editor
- Creating a Calculated Field
- Add Calculated Field
- Parameters
Save (UDM)

The same option is used to save your work. Once it is saved it cannot be reverted. Ensure that your work is ready to be saved, before you select it.
Data Sources (UDM)

When you select the data sources tab, it opens a data sources window to the right. It has two columns, the USED DATA SOURCES, and the Dashboard items related to the Data Sources. The use data sources in this example consist of Cycles, cycle shifts, Hotspots, States, and Notes. Depending on which data source you selected, the list will repopulate to the right. This is a list of common envision object names and functions that are associated with each data source, such as area name, asset name, Baseline, cycle count, etc.

To add an additional data source, click on the Add link on the top of the Used Data Sources column. This action will reveal the ADD DATA SOURCE Window. In this window, it will display the Data Sources available as well as an option to create one by use of the Create Data Source link on the top right hand side of the choices.
Create Data Source (UDM)

Clicking on this link will open another window, a Dashboard Data Source Wizard window. There will be two options available, make a choice of either, **Local SqlServer** or a **Default Connection**. Select to proceed to the next window to: **Create a Query** or **Select a Stored Procedure**.

![Dashboard Data Source Wizard](image)

Choose a data connection.

- LocalSqlServer
  - DefaultConnection

**Cancel**  **Next**  **Finish**
Filter Editor (UDM)

When applying filtering to a specific dashboard item, per the current parameter value, use the Filter Editor.

In the Filter Editor, you can compare a field value with the following objects. Click on the Filter Link above the 2nd table in the Data Sources window. The Filter Editor will open. In this window, will be an and area with a And icon in it. Hover over the And icon and a green + sign will appear. From there, you can either click on the And, or click on the + sign.

Clicking on the And will reveal a choice of several items. And, Or, Not And, and Not Or. Selecting one of these will display it in place in the window. This is the start of your filter.

Now click on the + sign. Clicking on the + sign will open a drop down window that will offer 2 choices. Add group or Add condition.

Clicking on the Add Condition option will reveal a set of configurable strings. By default, it will be as follows:

**areaName Equals Enter a value**

Click on the areaName, and a dropdown table will reveal. It will contain all the possible parameters available for your selection. Choose the proper parameter and it will appear in place of the previous areaName.

Click on the Equals label, and it will reveal a drop-down table to choose the operators you would like to use. Click on your choice and it will appear in place of your previous operator.

In the Enter a Value, clicking on the box will open an editing box for you to input a value based upon your previous selections. Click on the drop-down tab, and it will offer you two options to choose from, Value and Property. Choosing Value will open an editing box just the same as if you clicked on the box as previously explained. Choosing the Property option will open a table so parameters similar to the areaName parameter as the previous one.
Creating a Calculated Field (UDM)

The User Dashboard provides the capability to create calculated fields that allow you to apply complex expressions to data fields that are accessed from the dashboard’s data source. You can use these fields in data visualizations as regular data source fields.

Add Calculated Field

**TITLE**
Clicking on the title tab will open the title window. From here, there are several edit boxes to configure the Title.

**TEXT**
The first edit box is the TEXT. Enter the name of the template. There's a checkbox which allows you to make it visible or not.

**ALIGNMENT**
Below the text portion is alignment. From there you select where do you want it left Justified or centered. Also, there is a check box labeled include Master Filter.

**IMAGE**
Below the Alignment set, is the image box. Click on this and it will open a window which will allow you to select an image to display on your template next to the Title.

**PREVIEW**
The Preview window will display what the Dashboard Title will appear.
Parameters (UDM)

The Parameter tab displays the parameters used in the dashboard. It will allow you to Add, Remove, or Edit the parameters of the current dashboard.

Click on the Add Parameter link, and a Parameters window will open. This window contains a Parameter List, which list all the current parameters and has an Add link to add additional parameters. Selecting the parameter on the Parameter List and to the left of the list, is the Name edit box, Description, 4 check boxes (visible, Allow Null, Allow Multis, and Select All Values), Type, Default Value, and Look-Up String.

Name
This Name box is used to name the parameter.

Description
Use this edit box to describe the Parameter. Below the edit box are checkoff boxes to add to the Description. They are Visible, Allow Null, Allow Multis, and Select All Values.

Type
They Type category allows you to choose from several options. You can choose by String, Date, Number (16, 32, 64 bit integers, floating points double-precision floating-point, and decimal), Boolean, and Guid. Default Value
Input a default value.

Look-Up Strings
The lookup settings give you a choice of settings. No Look-Up, Static List, and Dynamic List.
The Hotspot module displays the list of motions that accumulate the variances over a period. It also shows the number of occurrences each day that contributed to the accumulated variances. ENVISION only uses non-faulted cycles for the hotspots calculation. This module shows the accumulated effects of minor variances in certain motions that can cause significant production loss (leakage) over time. For example, for a 60 second cycle time machine, a one second delay in one motion will cause approximately one part per hour production leakage.
Navigating 3.2

Use the Main Tree to navigate to the objects you want to view a hotspot report on. Once you have chosen your object, **Click** on the **Hotspot** tab from the top menu.

The module will launch after selecting the **Hotspot** tab. Each colored box in the module represents the number of over cycle Occurrences that occurred for the object in a given hour on a given day (**Occurrences** View shown below). The number in each cell represents the number of occurrences in that hour span.
Hotspots Option 3.2

Set Date Range

You can select the date range you would like for the Hotspot module using the drop-down calendar located in the upper left corner.

Variance

Use the Variance Accumulation tab located in the right corner of the module for the variance view. In the Variance view, the module lets you see the amount of over cycle variance for each hour (in Minutes) of your object cycle.
Hour Detail

By Clicking on any of the individual cells in the hotspot module, you can access a more detailed breakdown of over cycle processes in that hour. The number represents the Over cycle occurrences for that hour.

By selecting the Hour 218 on the figure above, this will display a detailed table revealing a comprehensive breakdown of processes that contributed to the accumulated over cycle time for that hour selected. Hovering over the bar will display the data for your selection. Clicking on the object bar will display a table of object data that may be sorted by clicking a column header to the top line.

The View Cycle button will open a new browser window with the object data for that selected cycle object.
Hotspot Views 3.2

In the top right corner of the Hotspot module are options for the other table views you can access.

- Timeline
- Count/Accumulation
- Skid (Pallet) Breakdown
- Model Breakdown
- Pivot

Filter

Use the Filter button to filter by Shift, Shift Label, Classification, Bottleneck, and CycleTime Overcycle.

Export to Excel

Use the Export to Excel button to download a copy to your download folder.
Timeline 3.2

The default view in the Hotspot module. A graph showing the total over cycle accumulation for each object.
Count/Accumulation 3.2

This tab shows the Variance Accumulation (in minutes) as well as the Overcycle Occurrences from a specific dates selected to view. This data can be exported to excel. Click the yellow button to and it will start a download to an excel file. A tab will open on the bottom left side of the browser. Open to view, plot, and send the excel data.
Pallet Breakdown 3.2

This reveals a graph showing which AGVs (carriers) contributed to your over cycle accumulation.
Model Breakdown 3.2

This Model Breakdown reveals a graph of Occurrences and Variance based upon Model Type. Hovering over the bar will reveal the details of the bar.
Pivot - Hotspots

Hotspots now has a new feature that will allow you to plot data on a Pivot Table. While in Hotspots, click on the Pivot tab to the right of the Model Breakdown Tab. Clicking on this will reopen the Hotspots window to a Pivot style table.

From here, you can click on the “Show Field Chooser” Icon on the upper right-hand side of the pivot table. This will open the Field Chooser setup window.
Choose from the All Fields area by checking the box, the dragging it over to the Row, Column, Filter, and Data fields. When this action is commencing, the Pivot table will populate and display your choices.

After your fields are set, you can click the x (close window) at the upper right-hand corner of the Field Chooser window.
ENVISION Notes 3.2

Overview

The Envision notes panel allows users to input descriptions about any given cycle they wish. This is a practical and convenient method of communicating issues as they happen across an assembly plant. Notes that have inputted at any time are persistently available to be viewed by authorized users.

In the Notes section of enVision, the user will now have the option to **Delete** or **Edit** their notes if they are an Admin or the author of the note.

Select the Edit button to re-open the Update Note window. From here, make any correction in Category and in the Note section. When the Note is finished, click the Save button to complete the editing.

Selecting the Delete button will open a warning box and give you a choice to Confirm to remove or not remove the Note permanently.
2/4/2017 8:54:38 AM

Test-Default

Simulations\Test Area\Test Line 2 Copy\Sta 1\S01 Fixture
Cycle Date:2/4/2017 8:52:00 AM, Model: Model Test 1, Pallet: 5, Variance: -20:01
Category: 237-b

Delete  Edit
Scheduling 3.2

The scheduling menu allows you to setup and configure a schedule for multiple shifts. It also will allow you to schedule Non-Production Events, such as Preventative Maintenance, Breaks, and other reasons for a scheduled shutdown.

Navigating

On the opening screen, select the calendar icon in the upper left corner of the Envision browser.

- **Navigating**
- **Scheduling Configuration**
- **Non-Production Event**
- **Extend Shifts**
- **Deleting Shifts**

Scheduling Configuration

Start by selecting a day on the calendar.

By selecting a date on the calendar, the area to the right of the calendar will now reveal the Create Shift Menu. From here you can enter the name of the shift, which shift (if multiple shifts are present), Start time, and End time.
Enter the name of the Shift (Red). Some shifts have 2 or more other shifts so you can enter which shift it is by labeling them Crew A and B or 1, 2, and 3. Enter the Start Time for the shift by Clicking inside the edit box. This will open a time clock menu. Click on the Hour to set the Hour, then Click on the minutes. Select A.M. or P.M., then Click Save when you are done.
We have selected a Start time of 3:00 P.M. and an End time of 11:00 P.M.

Non-Production Event

During a shift, it may be necessary to have a scheduled shutdown for Preventative Maintenance, Breaks, or a Shift change. For that, we have an area to input a Non-Production Event.

To set this up, start by Clicking in the box under the NPE. Input the Name/Reason in that Edit box. Click in the Start time box to open a Time Clock Menu. Use this to input the Start Time for the event. Now input the End time. Verify after inputting the times, that the correct time to the right of the Start and End time is correct at intended. If not, you can simply select the delete button or make a correction to either. Select the Planned Schedule to make this repeat for all the shift’s select. Set the Cycle Speed Factor if it isn’t already set to specification. Now select the Repeat Shift checkbox if you would like to add duplicate shifts throughout the week.
After checking the Repeat shift box, a Repeat Until edit box and a weekday selection menu will appear. Use the Calendar to select the date that you to repeat the weekly schedule. This will repeat until the date you select. Now select the days that you would like to repeat on the Weekday Selection menu.

Check over the information you have inputted in this configuration menu. If everything is correct, select **Save** to continue.
The page will update and look similar to this. The calendar will show the shifts, and the area next to the calendar will now have an Edit Red shift window. Also, at the bottom, you now have an option to Extend to future shifts.

**Extend Shifts**

After selecting **Save**, more options will reveal. The **Apply to Future shift's** check box will appear. Check off the **Extend** button to open an **Extend until** edit box. Input the data you would like to extend the shifts until. Select the days, then **Click Save**.

After selecting **Save**, more options will reveal. **Apply to future shifts** check box will appear. Check off the **Extend button to open an Extend until** edit box. Input the data you would like to extend the shifts until. Select the days, then click **Save**.

This will appear under the **Extend** check box. Input the date and the days, then click **Save to update the schedule.**
Deleting Shifts

The Scheduling module also allows you to delete a shift or All (Future) shifts. To delete a shift, Click on the shift name on the calendar, then select Delete Shift. You can Delete All Shifts (Future) by Clicking on a shift on the calendar, then Click this button. All future shifts will be deleted.
The Production Monitor is a browser that can provide a quick live report on plant productions. The Production Monitor can display data for the entire plant, including overcycle time in accumulated events, production data for each zone hour by hour or by a selected shift.

- Location
- Select Historical Shift
- Change Object
- Alternate Navigational options
- Navigating by Object Title
- Hour View and Shift View
- Rollup Hotspots
- Filters
- Show and Hide
- Production Lost
- Buttons and Descriptions
- Reporting (Production Monitor)
- Screen Print
- Over Cycle (Last 50000) and Over Cycle (Selected Shift)
- Top Assets by Line, Station, and Top 3
- Top 3 Pallets (AVG)
Location 3.2

The Production Monitor button is located in the upper right hand corner of the Envision Browser window in highlight. Once selected, it will open a new window with the Production monitor. In this new window, there will be an Objects window for you to navigate to the object you desire. **Click** through the Objects string to get to the object desired. Once you have revealed the level desired, then **Click** on the **Save** button. This will open a new Browser.

This Production Browser can be opened in levels from AREA, LINE, STATION, to ASSET.

A browser window will open to the location selected. The Production Monitor will default to the current day or shift. If there is not any data for current shift, it may be necessary to look back into the past for data. This module works with current data and historical data.
Select Historical Shift 3.2

This opens and displays a **Previous Shifts** window that will allow you to choose from the Current Shift all the way to the last few months. To view a specified date, scroll down to the date, and shift desired and **Click** on it. This will re-open the window (at the same level) of the day and shift selected.

Once the browser is open to the location desired, an alternate way to navigate to a higher or lower object can be done either by selecting the Change Object Icon, Object Labels, or the Object String Tab.
Change Object 3.2

This displays a window to navigate up or down an Object Tree. Click on the Object in the white part of the window: Click in an Object in the black portion of the Object window;

Simulation > Test Area > Test Line 2 Copy >_ >
to navigate Upward to an Object desired. Click the Save button to open the objects below the selected object.

Alternate Navigational options

There are additional ways to navigate to a higher level or drill down to a lower level object, by using the Object Title Label, or the Object String (Address) on the top left hand side of the Production Monitor Browser.

Clicking on the Object Title Label 1 of the upper graph will open a new Production Monitor window with a new graph of the objects below the selection.

Clicking on the Object String 2 at the top of the browser. Doing this will open a new browser with a higher level Object.

Navigating by Object Title

The titles on the upper portion of the Production monitors are active links to the next level below the current object being viewed.
Clicking on the S01 Fixture will reopen the window that selected level. You can drill down to the Asset level.

**Hour View and Shift View 3.2**

**Hour View and Shift View**

After selecting location from the Object Tree a browser will open. These examples show the Hour View and Shift view side by side. In the lower part of the browser is the lower graph in a Rollup Hotspots View ON and OFF. The Shift View shows the bars separated by it’s classifications and color coding. They are yellow for Starved, orange for Overcycle, and blue for Blocked.

In the Hour view, the bars are separated by the 13 hours. The classification are used in stacked style bars.

Hovering over the bars with the cursor will reveal the details of the cycles.
Rollup Hotspots 3.2

The Rollup Hotspots button will take the top 10 variances, will roll the group object displayed into the Assets in a display.
Filters 3.2

The Filters tab allows the user to select and sort by Classification.

The Filter tab is located on the upper right hand corner of the Production Monitor browser.

By selecting the filter button in the Production Monitor browser, a filter options window will open. From there, you can select the classifications you would view. You can also select to view Bottleneck, Disable PM visibility, show Notes Icon, Show Detail Icon, and adjust the number of Hotspots you would like to view (1 – 10).
Show and Hide

When using the Production Monitor, it is possible to remove objects from view. Click on the Show/Hide button and a window will appear with a list of the objects with check boxes next to them.

On the initial use of this feature, the boxes will all be unchecked. Check or select the objects you want to display on the Production monitor. Now select Apply. The Production monitor will reload and reveal the updated browser, with only the selected objects. Click on it again and it will show your selection. To re-add the deselected objects, simply check the unchecked boxes, click Apply, and the browser will reload with all the objects in display.
Production Lost 3.2

When the Production Lost button is selected, the browser window will open to a similar window as previous, however, the bottom graph will change the scale and will have the total Units lost presented. In the upper graph, it looks similar Minutes (mode/default), but the Minutes and Units will be reversed.
Buttons and Descriptions 3.2
Reporting (Production Monitor) 3.2

This displays a window with a selection of Report to view by Preview, Excel, or PDF. **Click** on the selection under reports, then choose the option to view.

When the Reporting Button is selected, a window will open with a menu in the upper left hand corner. There are 7 choices of ways to view object data.
Screen Print 3.2

Select Screen print will copy the current browser window and open it in a PNG format. At the bottom left hand corner, a tab will open to view the .png file. Select Open, and it will open a window to view the Screen Print. The background will be a lighter shade for printing and displaying.

Over Cycle (Last 50000) and Over Cycle (Selected Shift) 3.2

Both Over Cycle (Last 50000) and Over Cycle (Selected Shift) work the same way to download to an Excel file for viewing. Simply click on the Excel button and the current file will be download.
Top Assets by Line, Station, and Top 3 3.2

All 3 have the same 3 view options to choose from. Selecting preview will open a preview window within the reporting window. Choosing Excel or PDF will download and open the object data to the chosen format.

When Top Assets by is selected it will open to a screen containing a Calendar option. The user can pick a day from the list or click on the Date box to access a custom calendar to make a selection.

User the Calendar option to select a time period, such as Today, Yesterday, Last Week, Last Month, or This Month. The User may also utilize the Custom Range option. This will allow the user to select a specific time period by selection of a start and end date. Click Submit when the dates are set.

After you've submitted, you can now pick the type of preview you would like to view. You can preview in the browser window, or download to an Excel sheet or PDF.
Top 3 Pallets (AVG) 3.2

This opens a window with a drop down to select the date. It also has the choices of Preview, Excel, and PDF. Preview is shown in this example.
Reporting 3.2

Overview

Reporting and Dashboard modules are features of Envision that allows a user to design, personalize, setup, and configure customized reports. You can also have it send reports at specific times and choices of reports.

- Opening the Module (Reporting)
- Opening Dashboard Reports
- Run (Reporting)
- Reports (Reporting)
- Creating a New Report
- Report Editor Board
- Configuration Menu Panel
- Field List
  - Field List
- Properties
  - Properties
  - ACTIONS
  - STYLES
  - APPEARANCE
  - FONT
- Report Explorer
  - Report Explorer
- Creating a New Report
- Report Editor Board
- Subscribe (Reporting)
- Overview (Subscribe)
- Configuring Subscription (Subscribe)
- Setting up the Subscription (Subscribe)
Opening the Module (Reporting 3.2)

Open the Envision browser. In the upper menu, select the Reporting Tab. This will open the Starting page menu. The browser will reopen at the starting screen for the Envision Reporting browser. In the main window, there is a menu that consists of a list of previously designed report templates, that can be sorted or filtered based upon category.

The Reports page has a list of previously configured reports ready to be utilized. You can create and design a new report to suit your needs. To use an already configured report, select the green button (green) and it will open the setup window for the configured report selected. To open the Edit report window, select the (yellow) Edit Report button to open the reports editing window. To edit the Report Name, click on the edit name button. To delete a report template, select the red Delete button (red), and this will delete the report template selected. You can make a copy of a report by selecting the copy button, and this will create another copy to use. To subscribe to a report, select the Subscribe button (blue).
Opening Dashboard Reports

Open the Dashboard Reports by **Clicking** Reporting Tab on the top menu, then click on the **green Run** button of your selected report. Once selected, it will reveal the Dashboard Reports Setup screen.
Run (Reporting 3.2)

Selecting the Run button will open a Report Parameters window. This window configures and selects the data for the report. In this window, you have the options to set the date range, select an object from an object tree, and filter the report data by Status, Shift, Shift Crew and Classification.

Click on the edit box of the Select Date Range, and a 2-month calendar will open. Choose the start date by Clicking on it, then Click again on the end date. This will highlight the date range you select. On the bottom of the 2-month menu, are some shortcuts that can be used as well.

Once the date ranges are set, you can now navigate to the object of your desire, by using the Object Tree located below the Select Date Range menu. Click on the + sign to reveal the object below the current selection. Once you reach the level intended, Click on the Title (label) desired.

After it has been selected, you can also filter and/or sort the results of your report by utilizing the selection menus on the right-hand side of the windows. You can sort by Status, Shift, Shift Crew, and Classification. These are optional. Click the Save button and the report window will launch and display the data based upon the report selected (or based upon how the report was setup).

After Clicking the Save button, the Dashboard will update the data to the template chosen and display in a browser.
Creating a New Report

Click on the +Create New tab to open the Create New Report information window. In this window, you can input the necessary information needed to create a report template. Input the Name of the report, then the Description which appears under the name of the report on the Report List Window. Select the appropriate category for the report. Choose the orientation of the report, between Portrait or Landscape (default is Landscape).

After selecting Save on the Create New Report information window, Report Editor Board window will appear. From here, you can setup, configure, and populate the report with the necessary information that you desire.
Report Editor Board

The Upper menu consist of typical commands common to a windows program. On the left side is the types of objects to install on the Report Editor board. Once an object is placed on the Report Editor board, they can be configured by using the menu on the right-hand side of the window. In default, the configuration menu pane is open. If not, click on the arrow in the top left hand corner to reveal the configuration menu pane.
Configuration Menu Panel 3.2

The Configuration Menu Panel is separated into three parts needed to setup and configure the parameters installed in the Editor/Designer window. They are **Properties**, **Field List**, and **Report Explorer**.

- **Field List**
- **Properties**
- **Report Explorer**
Field List 3.2

The Field List can be setup with **DataSources** and **Parameters**. Each of these can open to reveal many different options depending upon what object parameter is chosen. Simply **Click**, hold, and drag the object over to the Editor Board and drop. **Click** on the object and go to **Properties** to configure.

Add DataSource

There are several sections under the Add DataSource Tab. They are Cycles (Hourly, Shift, Week, ShiftNoPallet, and WeekNoPallet), Hotspots, States, Notes, OEE, and Raw Cycles. Click on the icon to reveal the objects within.

Once revealed, the objects added onto the Report Editor Board.
Parameters

In this example, under the Parameter label are **NumberDays** and **Baseline**. These are objects that can be dragged and dropped onto the Report Editor Board.

You can add more parameters by selecting the + sign next to it. Click, configure and then you can add them to the report.

In these screenshot example, we selected **assetname** under the cycle label. **Click** and hold, then drag it over to the appropriate place on the Reporting Editor Board.
Properties 3.2

The Properties are, Actions, Styles, Appearance, Behavior, Data, Design, Navigation, Layout and Page Settings. Each of these can open to reveal many different options depending upon what object parameter is chosen. In other words, there are different options for different types of parameters. Not all parameters use all the same Priority Parameters.

ACTIONS

Select an Object on the Editor Board (example below: [assetname]). Once the object is selected, the Properties Menu will update to include the data, setup and information on the selected object. On the Properties menu you can change, configure, and view the setup information for that item. Areas of the Report Editor Board can be collapse to hide or temporarily remove from view until restored. Simply double Click on the Header of the area you would like to collapse. Double Click again to restore the collapsed are back to open.

All the data pertaining to the object selected will be in the Properties Menu area. The ACTION Menu has several configuration and data that can be inputted based upon needs. To the right of every parameter is a small button. When this button is highlighted (light or darkened), that shows that there is data for this parameter and is in use. You can Click it and it will reveal a dialog box that will offer you a choice to Reset the parameter. If the button is not highlighted, you may input data to configure the object selected.
STYLES

Styles controls the formatting of the selected object. To start formatting, double Click the Styles drop down. There it will offer you a few choices. You can Create a new style by selecting the Create New Style tab or select the xrControlStyle1. If you selected the Create New Style, then it will initially name it xrControStyle2. Either way, they both can be renamed easily as needed.

Now that it is selected, you can go through each item and customize it to your needs. In this example, we selected xrControlStyle1. This will read in the EVEN STYLE box. To do this, Click on the EVEN (ODD or STYLE) STYLE drop down to open the STYLE Configuration menu.

In the Name box you can personalize the object by naming it, otherwise it will default to the system name xrControlStyle1. Click on the FONT drop down to reveal the editing menu for Font Name, Size and Unit. It also has a tab for formatting using Bold, Italic, Underline and Strikethrough.

PADDING controls how much space you would have around the object selected. Click on the drop down to reveal the setting for the objects border.

Color Design of the object is controlled by the next group of parameters. You can choose the colors of the Background, Foreground, and the border. You can also choose the style (line, slash, dotted) of border you need, with the width at your control.

All these configuration can be done for the ODD STYLE and STYLES. Other types of objects will have similar configuration and different ones.
**APPEARANCE**

Appearance Configuration Tab

Appearance controls the formatting of the selected object. To start formatting, double **Click** the Appearance drop down. There it will offer you a few choices to add to the appearance of the object selected. The choices are **Background Color, Border Color, Border Dash Style, Border Width, Foreground Color,** and **Text Alignment.** The APPEARANCE tab also contains Sub Menu Tabs for **FONT, PADDING,** and **FORMATTING RULES.** Once an object is selected, you can go through each Tab in the Appearance Menu and customize the appearance to your needs.

**Background and Foreground Color**

The first tab is the Background Color. **Click** on the drop down, to open a color configuration window. In this window. First select the **Vertical Color selector** to choose the color you would like to create. Now, move the **Color Target Reticle** to the Hue you desire. Next, use the **Alpha slider** to set the opacity of the color of the object selected. You can also manually input the color coding the **R, G,** and **B** if you have a specific color to match. Alpha can be set this way as well. Once the color is correctly configured, you can **Click OK** to set the Background color to the object selected.

**Border Color, Border Dash Style and Border Width**

The Border Color Tab works the same as the Background Tab above it. Simply configure the color you would like the border to be. The Border Dash Style is used by **Clicking** on the drop down to reveal the choices of several types of borders to choose from. The Border Width is set by either **Clicking** up or down on the Border Width Tab. **Click** up to increase the width or down to decrease the width.
FONT

*Click* on the **FONT** drop down to reveal the editing menu for Font Name, Size and Unit. It also has a tab for formatting using Bold, Italic, Underline and Strikethrough.

**PADDING**

This feature controls how much space you would have around the object selected. *Click* on the drop down to reveal the setting for the objects border.

**FORMATTING RULES**

Formatting rules are used in conjunction with an object to change the output data of the object selected to increase or decrease the detail of the output data. You can type the expression manually or select functions, operators and operands using editor controls. Note that the Expression Editor supports numerous standard functions, allowing you to easily perform different **string**, **date-time**, **logical**, **aggregate**, and **math** operations over data.
Report Explorer 3.2

The Report Explorer is a tool that can allow you to view the data, character and information of the objects on the screen.

The Editing Board is separated into several different areas representing an area of a structured document report. From top to bottom from a default view, it starts with the Top Margin (1), Report Header (1), Detail (1), Report Footer (1), and Bottom Margin (1).

Some of these can be duplicated and added to the table for additional content if needed. For example, if you wanted a second Detail area, you can add it by clicking on the Detail (1) area of the Editor board, then go over to the Report Explorer on the right menu and click on Detail (1). When you click on it, a pencil icon will appear. Click on the pencil icon and this will change the Report Explorer, to the Properties Menu. Under the Actions Tab, hover over the icons on the upper part of the menu until you reach the Detail Report Band. This will install another Detail Band below Detail (1) band. The same can be done for the other areas on the Report Editor Board.
While in the Report Explorer, you can view the data, character setup and status of the objects on the Editing board. Simply Click on an object on the screen and right side menu will update to the object you’ve select. When an object is selected, the Report section if closed, will open and display the section where the object is located and the actual objects below it.

In the image below, this shows the objects and setup of the Report Editing Board. What you click on the screen will be highlighted on the Report Explorer menu to the right.
Creating a New Report 3.2

Click on the +Create New tab to open the Create New Report information window. In this window, you can input the necessary information needed to create a report template. Input the Name of the report, then the Description which appears under the name of the report on the Report List Window. Select the appropriate category for the report. Choose the orientation of the report, between Portrait or Landscape (default is Landscape).

After selecting Save on the Create New Report information window, Report Editor Board window will appear. From here, you can setup, configure, and populate the report with the necessary information that you desire.
Report Editor Board 3.2

The Upper menu consist of typical commands common to a windows program. On the left side is the types of objects to install on the Report Editor board. Once an object is placed on the Report Editor board, they can be configured by using the menu on the right-hand side of the window. In default, the configuration menu pane is open. If not, click on the arrow in the top left hand corner to reveal the configuration menu pane.
Subscribe (Reporting 3.2)

Overview (Subscribe 3.2)

The Subscribe module allows a user to monitor and send notifications via, email and text messaging. The user will have to specify the parameters in which need to be configured to work properly.

The Subscribe button opens a window to setup and configures a way to send reports via email automatically. Simply fill out all the fields and select the time you would like to receive the report. Once set, it will send a report of the time that was selected. The report you receive is for the time you specified.

Though Notification and Subscription are very similar in someways, there are many difference's in the use and functions of these features. Below is a table of caparisons between Dashboard/Report Subscriptions and Conditional Notifications.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Dashboard/Report Subscription</th>
<th>Conditional Notification</th>
</tr>
</thead>
</table>
| Trigger Point            | Time based Schedule           | When condition based on measure and time window is satisfied. Available measures are: 
|                          |                               | Overcycle - duration in mins or no. of occurences Blocked State - duration in mins or no. of occurences Starved State - duration in mins or no. of occurences Faulted State - duration in mins or no. of occurences 
|                          |                               | Available Time Windows are: Hour, Shift, Day, 7 Days, and 30 Days |
| Message Content          | Dashboard/Report as attachment, E-mail body and Direct Web Link | Simple text, or dashboard/report when linked to a subscription |
| Attachments              | Dashboard/Report PDF, XLS     | Dashboard/Report PDF, XLS only if linked to a subscription |
| Recipient(s)             | Single or multiple e-mail addresses | Single e-mail or phone no. for texts. Multiple e-mails only if attached to subscription |
| Limit on Number of Messages | Controlled by subscription schedule - no upper limit | Can be adjusted, but usually 25 per day per notification |
| Object Level             | Works at any level            | Asset Level Only         |
Configuring Subscription (Subscribe 3.2)

Select the drop-down menu in the Range dialog box. It will reveal a range of choices. The choices with the letter “N”, when chosen, will open a dialog box under that will allow you to enter a number that represents the “N”. This allows you to specify an exact amount as opposed to Hour, Day, Week, or Month. In the example, 9 is selected, so the “Last N Days” will see it as the “Last 9 Days”.

N=The Number Entered in the Range* edit box (Enter number of days)

Next, below the Range field, navigate the Object Tree to go down to the object desired. You can also use the filters to the right of the Tree to sort and/or filter the object selection.

Status - Select the status’s that you would like to view.

Shift – Select the shift you would like to view.

Shift Crew – Choose a crew if this field is populated by the users.

Classification – Choose which classification to view.

Recipients – Enter an email address of the Recipients that you want to send the Dashboard report to.

Email Subject – Enter a Subject to appear in the subject line of an Email.

Email Message – Enter a message you would like to send as in email along with the report.
Setting up the Subscription (Subscribe 3.2)

Setting up the Subscriptions

Select the day and hour when you would like to receive the report. **Double-Click** on the cell and it will reveal a timestamp highlighted **in green**. The time stamps are hourly but can be edited to make and send a report at a specific time. After selecting a time, enter the specific minutes you would like to select. When finished, check over all fields, then select the **Save** button. From this example, the recipient of this subscription will receive reports on Monday at 5:00 a.m., Tuesday at 6:00 a.m., and Wednesday at 7:15 a.m.
enSight 3.2

enSight is a simple to use web base application that displays a graphical representation of fault. enSight shows informational and diagnostic messages displayed in real time.

- Getting Started
- Opening enSight
- Navigating enSight
- enSight Dashboard
- Dashboard
- Filter Date/Shift Range Tool
- Dashboard Waterfall Tab
- Dashboard OEE Tab
- Dashboard Summary Tab
- Realtime (Current Shift)*
- Layout
- Timeline Tab
- Messages
- Cyclelength
- Realtime Layout
- Realtime Timeline Tab
- Realtime Messages
- Realtime Cyclelength Tab
- Production History
- Adding Messages to PLC
Getting Started

- Opening enSight
- Navigating enSight
Opening enSight

To open the enSight browser, you need to have the Envision browser opened. In the upper right hand corner is the (purple highlighted) enSight tab. Selecting the ensight tab will open the new enSight browser. From there, a loading icon will appear. This may take a few moments to load the browser. Once the enSight browser is loaded, a Object Tree window will appear on the left hand side of the screen. From there, you may navigate down to the object you wish to view. You can also open the Object Tree by selecting the (Blue) Object Tree icon in the upper left-hand corner of the browser window. Navigate to your selection. This Object Tree works the same as the Object Tree in the ENVISION browser.
Navigating enSight

In the enSight browser, the Main menu is on the left-hand side. Click on the top icon in the black side bar and it will open the menu. Within the enSight browser is the Dashboard, Realtime (Current Shift), and History tabs. Each of these have a sub menu below each tab except for the Dashboard tab.

The side menu will expand to reveal the main choices including Dashboard, Realtime (Current Shift) and History.
enSight Side Main Menu

Main Menu

In the enSight browser, the Main menu expands to reveal the choices of **Dashboard, Realtime (Current Shift) and History**. The Realtime (Current Shift) and History Tabs contain sub tabs with more detailed choices to choose from.

Dashboard
Dashboard is the opening window for the Insight browser and the Main Home page for the enSight browser.

Realtime (Current Shift)
Below the dashboard is the real time for current shift it contains the **Layout, Timeline, Messages, and Cycle length**.

History
In the history tab, therein lies the **Message History** and the **Production History**.
enSight Top Menu

Top Menu

The Top Menu is located along top of the Insight browser, there are several icons. They consist of the Object Tree, Expand window, and a side menu toggle that reveals the **Live Feed**, **Preferences**, and **Admin Menus**.

Object Tree Icon

The Object Tree Icon is used to open and close the Object Tree containing the Factory window. In this window you can navigate up and down the Object Tree to the object you desire.
Expand

The Expand Window Icon is used to render the browser in Full Screen mode, similar to the F11 button with viewing a window. This action will display only the window, leaving the Browsers address and status bars hidden.
Side Menu Icon

The Side Menu Icon is used to reveal the side menu that contains the **Information**, **Preferences**, and the **Admin Menus**. Simply click on the icon on the top of the side menu to reveal each menu.

- Information
- Preferences
- Admin (Right Sidebar Menu)
Right Sidebar Menu

- Information
- Preferences
- Admin (Right Sidebar Menu)
Information

The Information Section contains the pertinent information of the current page you are viewing. In the Realtime Layout and Timeline screen, it will display the State buttons which can be selected to toggle on and off.
Preferences

The preference menu will allow you to configure how you would like to view the data by preference and layout of the current selected views (Dashboard, Layout, Timeline, Messages, CycleLength, Message History, and Production History.

Dashboard Preferences

Choose whether you would like to view Live data updates.

Layout Preferences

In the Layout section, you choose to display the Assets in the layout screen. For example when selecting the Layout View, it displays the Stations in boxes. Toggling the "Display Assets in Layout" will display the Assets label directly under the Station label. If there is two or more Assets, then it will create a several boxes with the same stations but different Assets.

Messages can be displayed in the layout section by turning on the "Display Messages in Layout" Toggle.

The Display Offloads Toggle will turn On or Off a smaller black box next to the outgoing arrow of the Station box on the Layout screen.

Fit to Screen will auto scale the data to fit in the display area.

The Enable editing, turns the layout into editing mode by adding an editing box where you can, resize and position the Station display boxes on the Layout screen.

The Configure Indicator button will open a new window that will allow you to configure how and what data will appear in the Station display boxes in the Layout screen.
Timeline and Messages Preferences

The Timeline Preferences option will allow you to choose the Display levels you want to appear in the Layout screen. Simply check or uncheck the levels you want to view.

Message History

In the Message History display, it offers the options to Include Child Messages, Timeline by Group (Message or Object), Chart on Pivot Table, and Message Color.

Cyclelength Preferences

This option will toggle whether to display group level objects in the Cyclelength table.

Production History
Admin (Right Sidebar Menu)

The Admin Tab contains the Manage Types and Manage Message Maps.

- Manage Types
- Manage Message Maps
- Import PLC Files
In the **Manage Types** module, you can setup and configure the messages that will be displayed in the enSight browser. The user can configure the **Priority**, **Code**, **Description**, **Definition**, **Background**, **Font Colors**, and whether it will appear in Live-View.

Simply click on a cell and an editing highlight window will open for you to edit the contents. **Background and Font Color**

The Background and Font Color control are similar when you want to add or change a color. Simply select the color sample on the Message Type table. A **Color Config. window** will reveal. Click on the **Background** or **Foreground** pull down box and a color pallet will open above it. Use the reticle to choose the color you would desire. Use the slider or RGB edit boxes to change the coloring. Click **OK** to set the color. Any changes made require you to save.
After the changes are made, select the **Save** icon to save your changes.

*Live-View*

**Check off the selection box** if you want these parameters to appear in the **Live-View Module**.
Manage Message Maps

The Manage Message Maps module allows you to control and configure the messages in the PLC for the Object using the IO Expression.

The Table consist of multiple columns including Message, Code, IO Expression, PLC, Object and Active (Status).
Import PLC Files 3.2

The user can upload PLC files by selecting the "Select File to Upload" button in the upper left-hand corner of the enSight window.

Selecting this will reveal a window to navigate and upload a specific file desired.
enSight Dashboard

Dashboard

- Filter Date/Shift Range Tool
- Dashboard Waterfall Tab
- Dashboard OEE Tab
- Dashboard Summary Tab

The enSight Browser will open with the Dashboard module. The Dashboard has three display tabs, Waterfall, OEE, and Summary. It will open to the default Waterfall display window.

Waterfall
OEE

Summary (State)

Test Line 2 Copy Dashboard

- Non Productive: 48.21 min
- Blocked Down: 345.16 min
- Planned Maintenance: 12.59 min
- Power Off: 10.01 min
Filter Date/Shift Range Tool

You can view a single shift or add more by utilizing the Filter Date/Shift Range tool at the top of the window (above the graphical data).
The range tool consists of a span of dates. Within the span is a Start Tab and an End Tab with a highlighted area between them. Each can be moved left or right to increase the amount of time selected between the Start and End label.

Simply click and hold one of the dark grey sliders (1st Shift 10/25/16), then slide it to the range you would like to view.
By dragging one of the sliders over, you will be selecting the shifts for the days between your sliders.

You can also take a selected range and slide it forward or behind along the range of the range selection tool. This action allows the user to maintain the same amount of a selected range, but also allowing the user to move it forward or backwards through the time graph.
Dashboard Waterfall Tab

Waterfall displays the time usage from the shift or selected shifts from the Filter Date/Shift Range Tool, above the graphical data.

When the Dashboard is first opened, it is opened at the current Time and Date at the End Tab, with the Start time ~ 3 days before. In this case, there may no data to display.

Use the Filter Date/Shift Range Tool to move the Start and or End time to encompass a range of area or to a specific period where there is data.
Dashboard OEE Tab

- **OEE Tab**
- **OEE graph**
- **OEE Summary**
- **JPH graph**

The OEE tab, displays the Overall Equipment Effectiveness of a selected shift or shifts, as well as the JPH or Jobs Per Hour, number of parts made, and the average jobs per hour. Above this graphical data is a Filter Date/Shift Range sorting tool.

**OEE graph**

The OEE graph in the upper left side of the lower graphs, displays the OEE, Performance, Availability, and Quality.
OEE Summary

The OEE Summary in the upper right side of the lower graphs, displays Parts, JPH, Availability, Performance, Quality, and the OEE in percentage, all in numeral form.

JPH graph

The JPH graph is in the lower left side under the OEE graph. It shows the Jobs per hour in a graphical form.

After sliding the Filter Date/Shift Range tool to the left the OEE, OEE Summary, and the JPH graphs will expand and update to show the multiple shifts and totals.
Dashboard Summary Tab

The State Summary tab consists of a summation of time spent in a state, as well as how it compares to the preceding shift or shifts selection.
To compare with the other shifts, simply use the Filter Date/Shift Range slider to adjust range and slide the range from certain points on the range tool. Click and hold one of the sliders, and increase the range by moving it away from the other. Release and the graphical data below will update and show the results of your range selected.

You can also take a preset range and move the whole selection by clicking and holding the highlighted area of your selection as shown. The graphical date will update when you release the cursor.
Realtime (Current Shift)*

Below the dashboard is the real time for current shift it contains, time line, and cycle length. The Realtime section consist of several subsections:

- Layout
- Realtime Timeline Tab
- Realtime Messages
- Realtime Cyclelength Tab

Layout

The layout view displays the current state and messages in real-time.
Timeline Tab

The Timeline section contains an active Real time scrolling table to represent the Timeline. The Timeline displays a Real time timeline that scrolls from right to left. In the scrolling time graph, it displays the real-time messages for each station. The time graph is setup with the stations in the column and the time across the top row.

Messages

Cyclelength

Cyclelength tab shows an updating table with the last 5 cycles down to the group level.
Realtime Layout

Layout

The layout view displays the current state and messages in real-time. The color and code is based on the legend at the top of the page and is completely configurable. The objects displayed are the selected Assets that were selected on the object tree. The layout view is completely configurable, including layout, size, shape and content.

Open the Factory Tree and navigate down to the level you wish to see the layout of. When it opens, it will show the Stations within the Line you selected (Test Line 2 Copy).

The user can now utilize the Layout toggles to add or remove more information about the Objects displayed.
Layout Information 3.2

In the Layout, when Information tab is selected, it will display a legend of all the configured states on the right hand side of the browser. While in this mode, any change of state will be represented by a change of color to the actual object of concern and a message will appear below the Layout Area.
Layout Preferences 3.2

The Preference tab when selected offers the options to Display Assets in Layout, Display Messages in Layout, and the option to Enable Editing.

Display Asset in Layout

Select the Display Assets in Layout to add the Asset labels to their corresponding Stations.

Display Messages in Layout

The Display Messages in Layout button will control the display of the Offload boxes. Turning off this feature will remove the Offload box and the ability to monitor the total cycles by hour.
Enable Editing

The Enable Editing option will reopen the browser with an editing tool in the upper right hand corner. Use the tool to change the size, and/or position, via use of the mouse or inputting coordinates. Once it is to your liking, click the Save button to save your work and toggle the Enable Editing button to the off position to exit the editing mode.
Resizing an Object

Resizing an object can be done in two ways. The first way is to do it manually, by selecting the Resize option. After selecting an object, clicking on this will allow the user to grab a corner of the object and drag it to make it larger or smaller. Make it the size you desire and that's it.

The second way is to utilize the edit box. Simply fill in the edit box, then check off the check box to the right, then click Save. The object will update.

Repositioning an Object
To move an object manually, select the Position option. This will allow you to use the cursor to make the changes. Simply click and hold, then move the object to the position you desire on the layout screen.

You can also utilize the edit boxes for X and Y Positions. Simply input the X and Y coordinates, then select Save to complete.

Layout Admin 3.2

The Admin Tab contains the Manage Types and Manage Message Maps.
Layout Admin

- Manage Types (Layout)
- Manage Message Maps (Layout)
- Import PLC Files (Layout)
Import PLC Files (Layout)

The user can upload PLC files by selecting the "Select File to Upload" button in the upper left-hand corner of the enSight window. Selecting this will reveal a window to navigate and upload a specific file desired.
Manage Message Maps (Layout)

The Manage Message Maps module allows you to control and configure the messages in the PLC for the Object using the IO Expression.

The Table consist of multiple columns including Message, Code, IO Expression, PLC, Object and Active (Status).
Manage Types (Layout)

In the Manage Types module, you can setup and configure the messages that will be displayed in the enSight browser. The user can configure the Priority, Code, Description, Definition, Background, Font Colors, and whether it will appear in Live-View.

Simply click on a cell and a editing highlight window will open for you to edit the contents.

Background and Font Color

The Background and Font Color control are similar when you want to add or change a color. Simply select the color sample on the Message Type

A Color Config. window will reveal. Click on the Background or Foreground pull down box and a color pallet will open above it.
Use the **reticle** to choose the color you would desire. Use the slider or **RGB** edit boxes to change the coloring. Click **OK** to set the color. Any changes made require you to save.

After the changes are made, select the **Save** icon to save your changes.

**Live-View**

**Check off** the **selection box** if you want these parameters to appear in the **Live-View Module**.
Realtime Timeline Tab

The Timeline section contains an active Real time scrolling table to represent the Timeline.

The Timeline displays scrolls from right to left. Within the scrolling time graph, it displays the real-time messages for each station. The time graph is setup with the stations in the column and the time across the top row. The User can filter what objects to display by opening the Right Side Menu and selecting the Preference Tab, then the user can select and unselect the Display levels.
In the information tab lies the color coded States Legend. This can be used to identify the state messages that are appearing in real-time.

Hovering the Cursor above the message will reveal the State Message, address and the Duration of the event.
Realtime Messages

Messages in Realtime can be viewed in Realtime in the browser. The Messages in the Realtime tab displays all the messages as they occur in a color coded list by state. Each message displays the Date, Time, Code (State), Message, Object, and the Duration of the event.

Adding Messages to PLC

Messages for the PLC’s are in the L5X files which can be loaded into a PLC. Go to the upper right-hand side menu by clicking on the arrows. This action will open the Right-Side Menu and offer you three options to proceed. Select the Manage Message Map button located under the Admin tab of the Right-Side menu.
The enSight window will reload to the Message Map window. From here, click on the Select File to Upload button to open the File selection window.

Select the file (LSX) you want to Upload to your source file.

Once the file is selected, the window will show a message “Please wait. Uploading file...”.

Please wait. Uploading file...
It will load all the tags from the PLC and send to the user, so that the user may select the messages that are desired to be downloaded to the PLC.

Select the messages to bind to the PLC. Once all the selected messages are completed. Review your selection before proceeding on to the PLC selection.
Once all the messages are selected, you can now select the PLC that you may bind them to. Go to the Select PLC selection box and click on the drop-down menu.

This will reveal a list of existing PLCs. Make a selection of one of the PLC’s from the list. After your selection, click on the Accept button to bind the selected messages to the selected PLC. This may take a few moments depending on the amount of messages to bind to the PLC.

When it is finished, it will display a small black box with a message reading “Notice, enSight messages successfully created!”
Realtime Cyclelength Tab

- **History**
- **Message History Tab**
- **Table View**
- **Timeline**
- **Pivot**

Cyclelength tab shows an updating table with the last 5 cycles down to the group level. Along with the last 5 cycles, it displays the cycles statistics shown including the number of Last Cycle Date, good count, over cycles count, average cycle length, minimum, and maximum cycle length.

You can Collapse all the selected objects down to the station by using the collapse button or you can expand all the stations out to the group level, along with filtering of the station and asset level.

You can also close the side menus and click the full screen button to fully open the display window.
History

- Message History Tab
- Production History
Message History Tab

In the history tab, therein lies the message history and the production history. The Message History tab has two tabs available, the Table tab and the Timeline tab. You can use the Range filter (Date/Shift) to specify the time range desired.

Table View

Displays all messages for the shifts selected in the Range filter.

The message information includes the Date, Day of Week, Hour, Shift, Object, Code, Timestamp, and Duration in seconds. The data on the table can be filtered and sorted by using the filters at the top of each column or you can drag and drop the column header to the sorting line to sort the data by the selections made. This example shows the table is sorted by the code column.
Timeline
Pivot

The Pivot dashboard item displays a cross-tabular report that presents multi-dimensional data in an easy-to-read format. It also incorporates a configurable graph above the Pivot table.

To add, edit, or delete parameters to change your pivot table, select the Field Chooser icon in the middle right hand side of the browser window, between the pivot table and the graphing areas. Selecting this icon will open the Field Chooser window.

From this window, you can change the content of the Pivot table and graphing area. Simply check the parameters you will include in the pivot table. Then click and hold on the name, then drag it to the Row, Column, Filter, or Data Fields.

After every change, a loading... icon will appear and changes will take place.
To remove a field, simply click and hold, then drag the parameter out of the field box. It will then show the loading icon, then the screen will update.
To close the Field Chooser window, click the x (close) button in the upper right-hand corner.
Production History
Production History in Full Screen mode.
The address and bookmark bars are removed similar to using the F11 Full Screen Mode.
Adding Messages

Messages for the PLC’s are in the L5X files which can be loaded into a PLC. Go to the upper right-hand side menu by clicking on the arrows. This action will open the Right-Side Menu and offer you three options to proceed.

Select the Manage Message Map button located under the Admin tab of the Right-Side menu.
The enSight window will reload to the Message Map window. From here, click on the **Select File to Upload** button to open the File selection window.

Select the file (LSX) you want to Upload to your source file.

Once the file is selected, the window will show a message “Please wait. Uploading file...”. 
It will load all the tags from the PLC and send to the user, so that the user may select the messages that are desired to be downloaded to the PLC.

Select the messages to bind to the PLC. Once all the selected messages are completed. Review your selection before proceeding on to the PLC selection.

Once all the messages are selected, you can now select the PLC that you may bind them to. Go to the Select PLC selection box and click on the drop-down menu.
This will reveal a list of existing PLCs. Make a selection of one of the PLC's from the list. After your selection, click on the Accept button to bind the selected messages to the selected PLC. This may take a few moments depending on the number of messages to bind to the PLC.

When it is finished, it will display a small black box with a message reading “Notice. enSight messages successfully created!”. 
Conditional Notifications 3.2

At the Asset level, under the notifications icon, you can open the Conditional Notification window. From this window, you can have Notifications sent to you via Text and Email.

**NOTE: The user will need to have the Analyst role to create and maintain Conditional Notifications.**

Though Notification and Subscription are very similar in someways, there are many difference's in the use and functions of these features. Below is a table of comparisons between Dashboard/Report

<table>
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<tr>
<th>Feature</th>
<th>Dashboard/Report Subscription</th>
<th>Conditional Notification</th>
</tr>
</thead>
</table>
| **Trigger Point**        | Time based Schedule          | When condition based on measure and time window is satisfied. Available measures are:
|                          |                               | Overcycle - duration in mins or no. of occurrences
|                          |                               | Blocked State - duration in mins or no. of occurrences
|                          |                               | Starved State - duration in mins or no. of occurrences Faulted State - duration in mins or no. of occurrences Available Time Windows are:
|                          |                               | Hour, Shift, Day, 7 Days, and 30 Days |
| **Message Content**      | Dashboard/Report as attachment, E-mail body and Direct Web Link | Simple text, or dashboard/report when linked to a subscription |
| **Attachments**          | Dashboard/Report PDF, XLS     | Dashboard/Report PDF, XLS only if linked to a subscription |
| **Recipient(s)**         | Single or multiple e-mail addresses | Single e-mail or phone no. for texts. Multiple e-mails only if attached to subscription |
| **Limit on Number of Messages** | Controlled by subscription schedule - no upper limit | Can be adjusted, but usually 25 per day per notification |
| **Object Level**         | Works at any level            | Asset Level Only |
Range (Conditional Note 3.2)

Select the Range you would like to view from Hour, Shift, Day, 7 Days, and 30 days. Each range is a selection of how long the notification duration will be.
The Hour selection will make the notification loop duration last for an hour before recycling. The Shift will be a 10-hour duration. Day will be a 24-hour duration, and so on.
Condition (Conditional Note 3.2)

Condition

After the Range is set, you can now select the Condition. You have a choice between And or Or. When using AND, all the selected conditions need to be true in order for it to register as Notification. Using OR, will allow it to send a notification if any of the selected conditions have occurred.

Check off the Measures that needs to be monitored. In each measure, there is an Accumulated Duration and Occurrences. Input a value you would like to be monitored.
Email (Conditional Note 3.2)

Input the email address of the recipient of the notification. The recipient will receive an email every time the conditions trigger the notification.
Text Message (Conditional Note 3.2)

Input the phone number of the recipient of the notifications. The recipient will receive a text message every time the conditions trigger the notifications.

However, there are a few limitations for using the text messaging feature:

There is a 25 text* message limit per day on one notification. Once it reaches 25 notifications, it will no longer send any more until the next day. This is controlled by the administrator. It can be increased if need be. The emails, however will keep being sent. Note: in the text message, there is an option to text STOP to halt the sending of the notifications via texting. This feature can be used once then restored. If it is used a second time, then it will not send any more until the next day. You can go back and edit the Conditional Notification to have it restart if needed.
Link to Subscriptions (Conditional Note 3.2)

Link to Subscriptions

These notifications can be linked to a subscription. Simply click on the up tab and the subscriptions links will appear. Select the subscription you would like link the Notification to.

Once set, it will send the notification of the selected Report, Dashboard, etc, to the recipient via email or text message.

NOTE: Users need to have the Analyst role to create and maintain Conditional notifications.
System Health Monitor 3.2

The Envision browser now has a System Health Monitor. It is in the upper right-hand corner on the Top Navigation Menu. It is utilized by simply clicking on it.

It will open the System Health window. This may take a moment to load. When it finishes loading, it will display a section for EAS (Envision Application Server) and an EDC (Envision Data Collector).
EAS Monitor 3.2

In the EAS section, it will have multiple displays. From left to right, it will display the EAS CPU Usage, EAS Memory Usage, and EAS Disk Space. The EAS Disk space may have several drives present, depending upon the demand of the system used.
The EDC will have several multi displays. Each display consists of a CPU, **Memory, and Drive Space. Each display will have a highlight bar above it displaying the net address, and the Last Contact Date and Time.
Glossary

- AOI
  - Add On Instructions
- CE
  - Collector Engine
- COS
  - Change of State
- EAS
  - Envision Application Server
- EDC
  - Envision Data Collector
- xls
  - Excel spreadsheet
- FIS
  - Factory Information System
- OP
  - Operation
- OPC
  - OLE Process Control
- OEE
  - Overall Equipment Efficiency
- PB
  - Push Button
- PLC
  - Programmable Logic Controller
- SSL
  - Secure Socket Layer
- SMTP
  - Simple Mail Transfer Protocol
- UID
  - Unique Identifier
- VPS
  - Virtual Private Server
Product Support

**Standard Support**
Every licensed Envision user is entitled to: 60 days of free email based product support, support@beet.com

Unlimited access to the on-line support materials available at Beet Analytics Technology support website http://support.beet.com

Critical bug fix updates for the version of software purchased.

**Service Maintenance Level Support**
**Submitting Suggestions and Reporting Issues**
Every licensed user who holds an active service maintenance contract for Envision is entitled to: Unlimited email based support for the duration of the subscription license support@beet.com

Unlimited access to the on-line support materials available at Beet Analytics Technology support website http://support.beet.com

Critical bug fix updates for the version of software purchased

Product enhancement updates for the duration of the service maintenance contract

If you wish to make a suggestion or report an issue you have discovered using Envision, you can do so using our support website http://support.beet.com. Alternatively, you can email Beet Analytics Technology Support at support@beet.com

The amount of information you can provide us with about the nature of a problem you are having will directly affect our ability to resolve it. The more information you can provide about your environment, the steps to reproduce and any other relevant information the better – *please be verbose!*
Trouble Shooting

See the Product Support section for available content at Beet Analytics Technology support website:
http://support.beet.com

For more information or questions, go to the Envision Customer Knowledge Base website:
https://docs.beet.com/display/EKB/Envision+Customer+Knowledge+Base

See Troubleshooting articles on the Envision Customer Knowledge Base website:
https://docs.beet.com/display/EKB/Troubleshooting+articles
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3.2 Payment Terms: a) In consideration of the rights, licenses and services provided hereunder, Licensee shall pay Beet Analytics Technology the charges applicable to each license of a Licensed Software at the price identified in the applicable Quote. Unless otherwise agreed to in writing by Beet Analytics Technology, (i) all charges shall be invoiced upfront and (ii) Licensee shall pay all invoices by within thirty (30) days from invoice date. b) Late Payments. Licensee shall pay interest for late payment at a rate of 1.5% per month or highest lawful rate on all sums unpaid at the due date, plus reasonable attorneys' fees and costs incurred by Beet Analytics Technology in collecting unpaid amounts. c) Taxes. All prices are exclusive of taxes. Licensee shall be responsible for payment of any and all taxes, duties, excises, import VAT or similar charges of any nature whatsoever, now in force or enacted in the future, that are levied, assessed, charged, withheld, or collected for or in connection with Licensed Software and/or in relation to the transfer or usage provided hereunder or otherwise arising in connection with this EULA, but excluding taxes based on Beet Analytics Technology net income. If Licensee is or may be required under any law or regulation of any governmental entity or authority, domestic or foreign, to withhold or deduct any portion of any payment due to Beet Analytics Technology pursuant to this EULA, then the sum payable to Beet Analytics Technology will be increased by the amount necessary to yield to Beet Analytics Technology an amount equal to the sum it would have received had no withholdings or deductions been made. Licensee shall indemnify Beet Analytics Technology against any losses or costs incurred by Beet Analytics Technology due to any failure of Licensee to make such deduction or withholding.

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8. Miscellaneous

8.1 Purchase Orders. Licensee’s purchasing terms and conditions shall not in any way supersede, modify, vary or otherwise supplement the terms of this EULA.

8.2 Notices. All notices required hereunder shall be in writing, in English and shall be deemed to have been given (i) the date delivered in person or by reputable express courier service, (ii) three (3) days after sending the notice if sent by certified or registered mail, (iii) the date sent by facsimile, addressed to the parties at their addresses in the Ordering Documents, or at such other address as either party may designate to the other by notice served as hereby required, or contained in the relevant order form.

8.3 Force majeure. Neither Party hereto shall be liable for any default in the performance of its obligations under this EULA resulting from (i) a case of force majeure as defined by the law governing this EULA and the courts in such jurisdiction and (ii) the following causes: strikes (whether previously announced), war (declared or not), riots, governmental action, acts of terrorism, acts of God (fire, flood, earthquake, etc.).
8.4 Severability. If any part of this EULA is found to be invalid, illegal or unenforceable in any respect, the remaining provisions shall nevertheless be binding with the same effect as if the invalid, illegal or unenforceable part was originally deleted.

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8.6 Amendments & Non-Waiver. No waiver, alteration, modification, or cancellation of any of the provisions of this EULA or of any Affiliate Participation Agreement shall be binding unless made by written amendment signed by all parties. A party's failure at any time or times to require performance of any provision shall in no manner affect its right at a later time to enforce such provision.

8.7 Audit. During the term of this EULA and for a period of three (3) years thereafter, Licensee shall establish and maintain accurate information records relating to the use, and when applicable, destruction of the Licensed Software. Beet Analytics Technology shall have the right at any time, at its own expense and under reasonable conditions of time and place, to audit and copy these records. Licensee also hereby authorizes Beet Analytics Technology to verify its compliance with the terms of the EULA. For such purpose, Beet Analytics Technology may conduct an audit on Licensee's premises during normal business hours, in a manner that minimizes disruption to its business. Beet Analytics Technology may require Licensee to provide it or any third party Beet Analytics Technology engages to conduct such verification, with machine access, copies of system tools outputs, or other electronic or hard copy system information as appropriate. If the audit reveals unauthorized use of any Licensed Software, Licensee shall promptly pay to Beet Analytics Technology any amounts owed as a result of such unauthorized use at the then current list price. In the event such unauthorized use is five percent or greater of Licensee's authorized licenses for the applicable Licensed Software, then in addition to Licensee paying the applicable charges, Licensee shall reimburse Beet Analytics Technology for the cost of such audit. In a joint effort to prevent software piracy, Licensee shall comply with any changes in the Licensed Software licensing security mechanism that aims at preventing fraud. By invoking the rights and procedures described above, Beet Analytics Technology does not waive its rights to enforce this EULA or to protect its intellectual property by any other means permitted by law.

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8.9 Entire EULA; Order of Precedence. These General Terms together with the Ordering Documents comprise the complete agreement between the parties relating to the subject matter hereof and supersede all prior and contemporaneous proposals, agreements, understandings, representations, purchase orders and communications, whether oral or written. If there is a discrepancy, inconsistency or contradiction between any Licensed Software and terms contained herein, the provisions of the corresponding Licensed Software Terms shall prevail, but solely with respect to those Licensed Software described in such Licensed Software Terms. Licensee acknowledges that it has full knowledge of all terms herein and incorporated herein, and agrees to be bound by and to comply with such terms and has not relied on the future availability of functionality or product updates with respect to any Licensed Software in entering into this EULA hereunder. The terms of this EULA shall have no force or effect with respect to any claim based on the use of any intellectual property rights of Beet Analytics Technology outside the scope of the licenses expressly granted herein.

8.10 Governing law and Jurisdiction. This EULA shall be governed and construed in accordance with the laws of, and the legal relations between the parties shall be determined in accordance with, the laws of State of Michigan, United States of America, without regard to any conflict of laws principles and excluding application of the United Nations Convention for the International Sale of Goods. The parties irrevocably waive all rights to trial by jury for any such litigation between them. All actions and proceedings arising out of or relating to this EULA shall be exclusively heard and determined by the Courts of the State of Michigan, United States of America. Notwithstanding the foregoing, Beet Analytics Technology may, in its sole discretion, bring any claim or dispute (including but not limited to seeking injunctive relief and/or equitable remedies) arising out of, or in connection with the validity, interpretation and/or performance of this EULA before any courts and or administrative authorities having jurisdiction over the subject matter of any such claim or dispute. This provision shall survive any termination or expiration of the EULA. Licensee acknowledges and agrees that the paragraph immediately above shall not prevent, restrict or otherwise limit in any manner, Beet Analytics Technology's rights to seek equitable remedies, including injunctive relief before any competent court in any jurisdiction.

8.11 Survival. The following sections of these General Terms shall survive termination thereof: "License Limitations", "Intellectual Property", "Warranties, Limitations and Disclaimers", "Limitation of Liability", "Term and Termination", "Miscellaneous", "Glossary"..

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8.13 Counterparts. This EULA may be executed simultaneously in two (2) or more counterparts, each of which will be considered an original, but all of which together will constitute one and the same instrument.
9. Glossary

" Authorized Users" means (i) the employees of Licensee, including employees of Licensee's directly and indirectly wholly-owned subsidiaries within the USA that are controlled by Licensee and unincorporated divisions of Licensee, but not employees of other legal entities (including employees of any legal entity that is a part of a group of companies affiliated with Licensee, but that do not qualify as direct or indirect wholly owned subsidiaries of Licensee), and (ii) Licensee's consultants, agents and contractors who are working on Licensee's premises, provided they are not competitors of Beet Analytics Technology and they have agreed in writing to restrictions on the use of the Software and obligations of confidentiality no less stringent than those set forth in this Agreement. For the purpose of this definition, "controlled" is defined as the direct or indirect ownership of more than 50% of the voting securities of an affiliate. Licensee shall hold Beet Analytics Technology harmless and shall indemnify Beet Analytics Technology for any loss, cost, damage or expense (including reasonable attorney's fees) incurred by Beet Analytics Technology as a result of the failure by an Authorized User to abide by the terms of this Agreement. Documentation means, at any time, the current user documentation in any form or media as delivered together with the Licensed Software by Beet Analytics Technology for use in connection with Licensed Software.

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