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## Welcome to enVision 3.6

**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<sup>™</sup>.

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 3.6



## More Information 3.6

### 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.

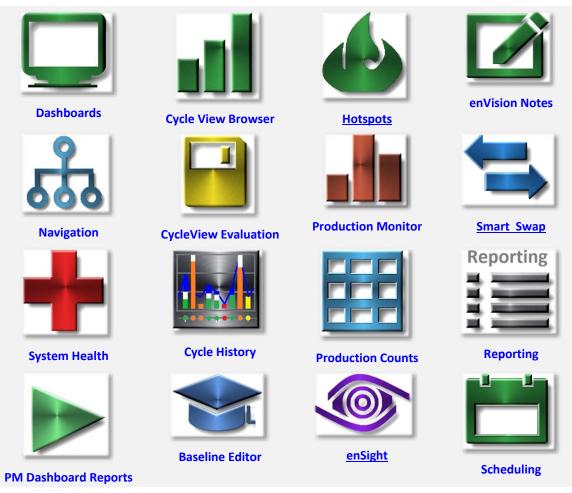






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## Sectional Content 3.6



- <u>Navigation</u>
- <u>Cycle View Browser</u>
- Baseline Editor (Auto Learn)
- Cycle View Evaluation Module
- <u>Smart Swap</u>
- <u>Cycle History</u>
- Production Counts in New Window
- Dashboards
- Hotspots
- enVision Notes / Notes in Cycle View
- <u>Scheduling</u>
- Production Monitor
- <u>Reporting</u>
- <u>enSight</u>
- <u>Conditional Notifications</u>
- System Health Monitor

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## Software Application 3.6

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** •

BEET

- **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 3.6



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.

- <u>Navigation</u>
- Plant Navigation
- Main Tree Object and Description
- How to Navigate with enVision
- Top Navigation Bar
- Main Tree Navigation
- Object String Navigation
- Object Tree

PLANT AREA LINE	<ul> <li>Simulations</li> <li>Test Area</li> <li>Test Line 2 Copy</li> <li>Sta 1</li> </ul>
STATIO	SSET SO1 Fixture SSET CYCLE TIME GROUP CYCLE TIME TRANSFER IN ROBOT LOAD PIN CLAMPS CLOSE TRANSER OUT



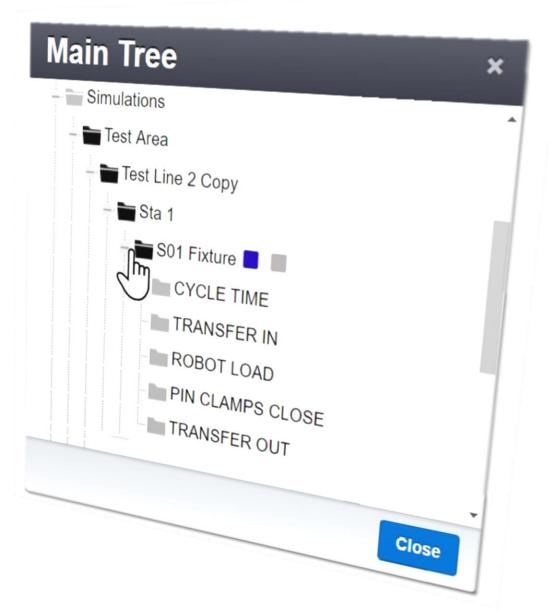
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### **Plant Navigation 3.6**

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
- <u>Settings</u>
- About (enVision 3.6)



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## Main Tree Object and Description 3.6

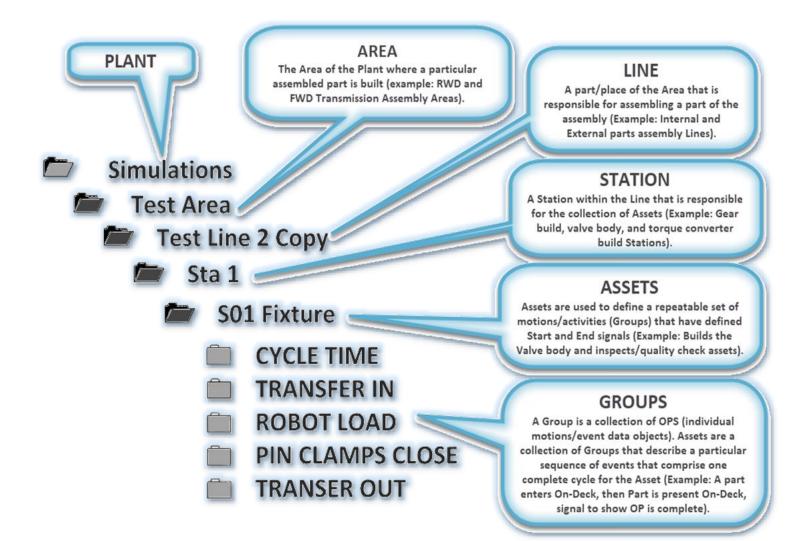
**AREA** The Area of the Plant where a particular assembled part is built (example: RWD and FWD Transmission Assembly **Areas**).

**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 3.6

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** lcon to proceed.

BEET enVision       Dashboard       I cycle View       Image: Hotspots       Image: Reporting       Image: Notes       Image: Hotspots       Image: Hotspo
A Object Tree ) Simulations € ) Test Area € ) Test Line 2 Copy € ) Sta 1 € ) S01 Fixture € )          Image: Clicking on other the PEET or on Vision icon will take you to the energing home page         Image: Clicking on other the PEET or on Vision icon will take you to the energing home page
Clicking on either the BEET or enVision icon will take you to the opening home page.
Dashboard The Dashboards tab will open the Dashboard section of enVision including the Dashboard and User Dashboard section.
The Cycle View The Cycle View tab will open the enVision Cycle View Browser.
<b>•</b> Hotspots The Hotspots tab will open the enVision <u>Hotspots</u> section.
<sup>I</sup> ≡Reporting The Reporting tab will open the enVision Reporting module.
☑ Notes The Notes tab will open the enVision Notes Module.
enSight 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 <b>enVision</b> 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.
admin 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 3.6

BEET	enVision	Dashboard	<b>,  </b> Cycle View	& Hotspots	s	☑ Notes	1	enSight		8 1	۲	i	<b>+</b> a	admin
ரி Object Tree	Simulations 🖁	Test Area 🔓	Test Line 2 Copy ငိ	Sta 1 🔓	S01 Fixture 🔓		m		3	e 🖘 4	h №		<b>N</b> II	
Us	er Dashb	oards				(te	Me	Dashb	oard	User Das	hboard	Ç		

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 the enVision browser.

Cheshboard     C	4/2017 7:00:00 AM to 8/15/2017 6:00:00	M)) Could B CO B R B COULD AND A COULD AN
ET enVision	Dashboard	,II Cycle View 🍐 Hotspots 🛛 🗮 Reporting
Dbject Tree Simulations 🖞		est Line 2 Copy ໍ <sub>ເຊ</sub> 👌 Sta 1 ໍເຊ 👌 S01 Fixture ໍເຊ
v 60%		at styleget
Address 20		The Object Tree icon is
45		used to Navigate to an object within the
ர் Object Tree	8/14/2017	
sss Object free		E stig Gen) E stig Gen) at
MTBF & MTTR (In Seconda)		E K
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	8/14/2017	



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.

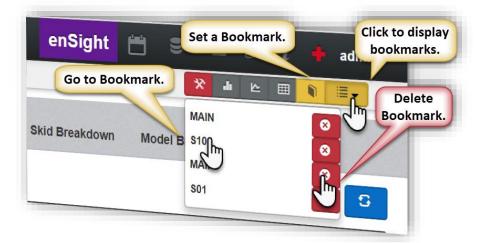
#### **Bookmark Icons**



The bookmark lcon 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 3.6

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

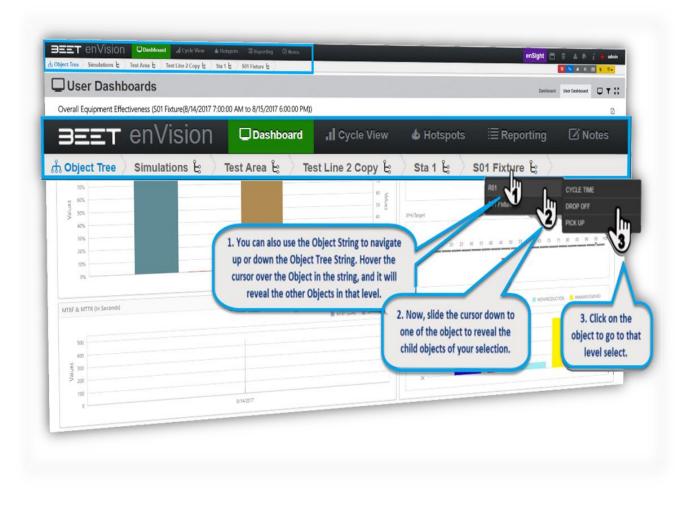
You can drill down to the object you desire by clicking on the sign. This will reveal the lower level objects.

Main Tree Simulations Test Area	×
Test Line 2 Copy Sta 1 Sol Fixture CYCLE TIME TRANSFER IN - ROBOT LOAD	Selecting the Object Tree icon will open the Main Tree window.
Drill down to a lower level.	ree

#### **Object String Navigation 3.6**

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 3.6**

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.

Dashboard II Cycle View & Hotspots ≣ Reporting	1 Notes	enSight 🛗 🗟 🔺 🥻 🍦 admin
No Cycle	Selected	
0         05/01/2018         ERanger         05/01/2018         10::00:21 am to 05/01/2018         10::14::15 am           7.5         5 </th <th>Main Tree Simulations Test Area Test Line 2 Copy Sta 1 Sta 1 Sta 2 Sta 3 Test Line 5 DeviceWISE_TEST Training Master</th> <th>X Close</th>	Main Tree Simulations Test Area Test Line 2 Copy Sta 1 Sta 1 Sta 2 Sta 3 Test Line 5 DeviceWISE_TEST Training Master	X Close



#### Settings

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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 i buttons. Click on it to access the ability to change your password and log out of the **enVision** browser.

py 🖞 🤇 Sta 1 🤤 🔵 S01 Fixture 🖞 🔵	
Settings	
Old Password	
New Password	
Min 7 characters	Enter the old password, then input the new password. Click
Submit	Submit to change password.
Log Out	Close Log Out of the ENVISION Application
	by clicking the Log Out

#### About enVision 3.6

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.

ET enVision	Deshboard d Cyce	e Mew de Hotspots - 3	Reporting [2 Note	C 5 4 5 🖬 🖬 🖬
out				
Application Name:	Envision2			
1	3.0-111			and the second s
Release Code:	BalandS07rac18et6bala0r5et	Calification (Calification)		
DLL Version:	3.0.0168.01	DLL DAIN	06i88-2917 10:00:08	9
Smart Tag Count:	26,793	Operation Tag Count:	16,333	L L
Asset Count:	730	Analog Tag Count:	18	
Group Count:	9.9-9			
Server ID:	NDLACTYMAY IOTracTual Diselectrometer		a far a suite	and the second second
License ID:	106730764628408671			
License Status:	Valid			
Enabled Features:	Live View Production Monitor			
	45207 Helm Street - Plymou	lytics Technology nh. Michigan 48170support@be ort Web Siteclick here.	et.com	
			1	Close
				Close



## Cycle View Browser 3.6

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
- <u>View Types</u>
- Object Properties
- <u>Distribution Cycle</u> View
- Messages (Cycle View)
- <u>Smart Swap</u>





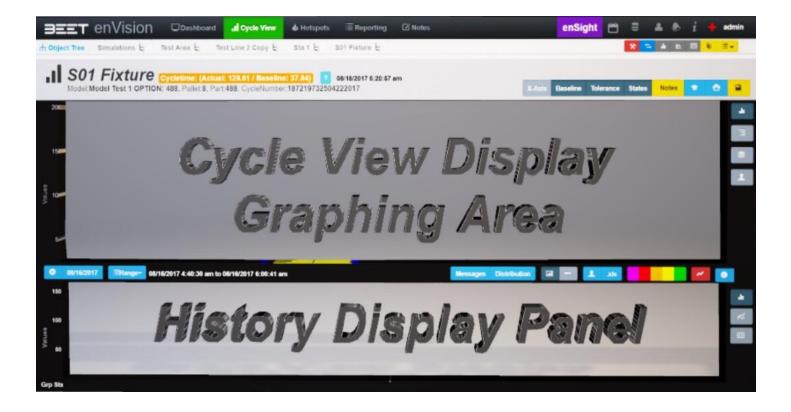


#### **Opening Cycle View 3.6**

Make sure you have the tab selected on the **enVision** top menu.

BEET	enVision		rd .I Cycle View		≣ Reporting	🕼 Notes
ர் Object Tree	Simulations 🖞	Test Area ُ	Test Line 2 Co	Sta 1 🔓	S01 Fixture 🔓	

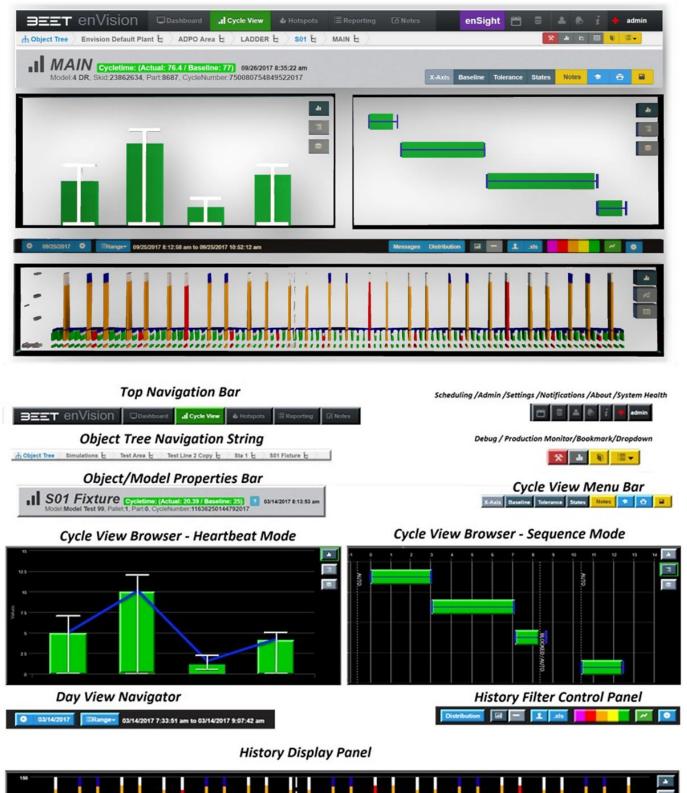
You can then access the cycle browser by using the **Main Tree** window to navigate to your desired object. *Click* on the +- sign beside the object. This will reveal the lower level objects. Proceed until you reach the object desired. *Click* on the object and the Cycle Browser will open. After selecting 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**.





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Cycle View Breakdown 3.6







\*

#### Selecting a Cycle 3.6

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.





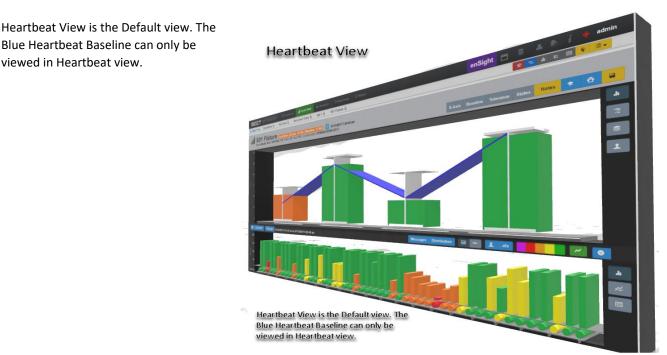
## View Types 3.6

Blue Heartbeat Baseline can only be

viewed in Heartbeat view.

.

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 he Cycle Compare window.





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



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**User Parameter History** 



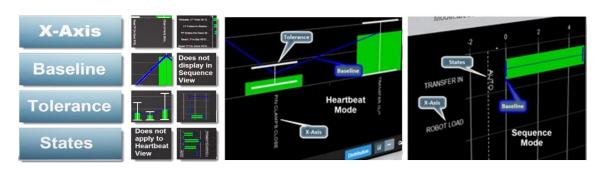


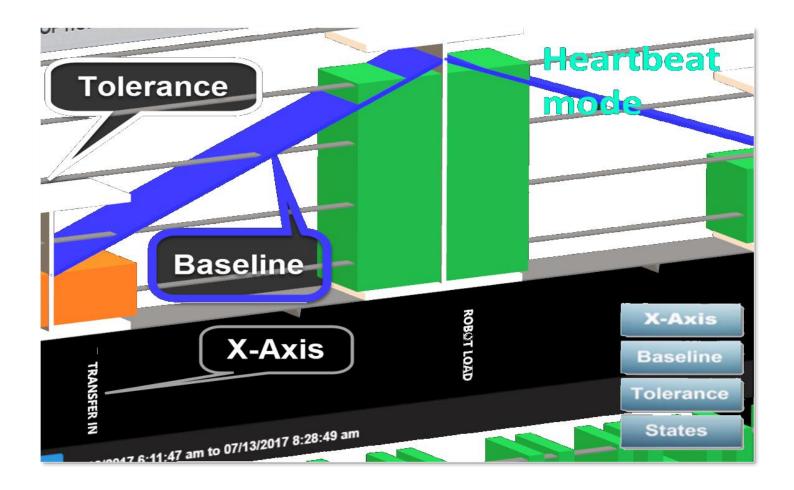
#### **View Options**

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 2** can only be viewed in the Heartbeat view as the **States 4** tab is only active in the Sequence view as shown in the figures below.

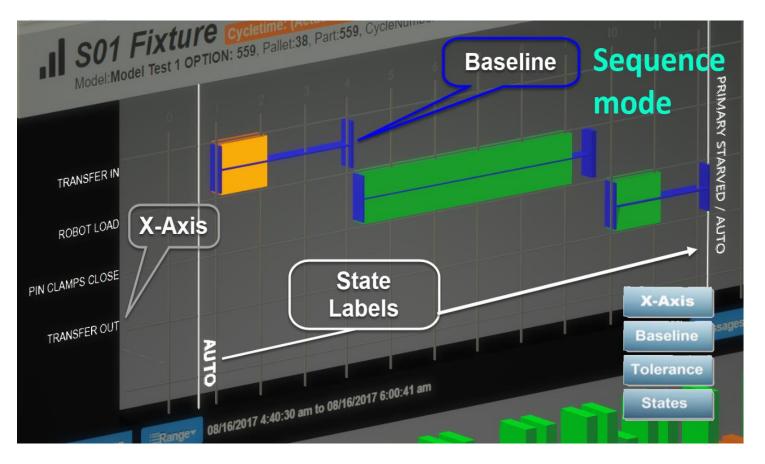


Below is a list of options you can apply to your Cycle view.





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### **Object Properties 3.6**

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 )**.

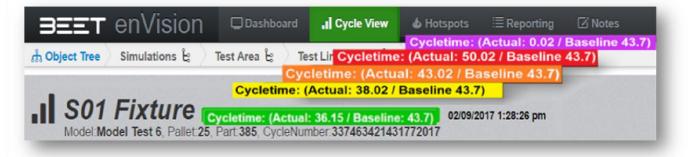
Good / Green -Normal, Optimum Performing Range

Watch / Yellow -Watch, Not Optimum but within defined Tolerance window.

Warning / Orange -Warning, Outside Defined Tolerance Window

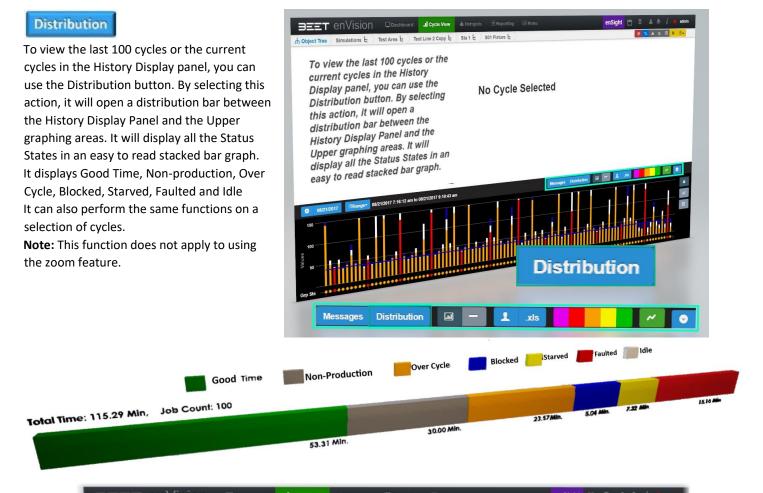
#### Fault / Red -Fault

Missing / Purple - Missing Data due to Stoppage or Missing Input/Output.





#### **Distribution – Cycle View 3.6**







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## Messages (Cycle View) 3.6



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.

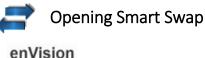


#### Messages

Cod	Message	2	۲ Q s	earch	
	Message	Ŧ	Start	T End	Y
	Q		Q	Q	
	Code: Alarm SYS S12 ALARM-SysMsg[24].11 SYS S12 ALARM-SysMsg[24].11 SYS S12 ALARM-SysMsg[24].11 SYS S12 ALARM-SysMsg[24].11 SYS S12 ALARM-SysMsg[24].11 SYS S12 ALARM-SysMsg[24].11 SYS S12 ALARM-SysMsg[24].11		2017-09-05. 2017-09-05. 2017-09-05. 2017-09-05. 2017-09-05. 2017-09-05. 2017-09-05.	2017-09-05 2017-09-05 2017-09-05 2017-09-05 2017-09-05	
	Code: Faulted SYS S01 PART OUT OF POSITION-SysMsg[18].0 SYS S01 PART OUT OF POSITION-SysMsg[18].0 SYS S05 PART OUT OF POSITION-SysMsg[18].4 SYS S02 PART OUT OF POSITION-SysMsg[18].1 SYS S10 R14 ROBOT FAULT-SysMsg[12].9 SYS S02 MOTION FAULT-SysMsg[19].1		2017-09-05 2017-09-05 2017-09-05 2017-09-05 2017-09-05 2017-09-05	2017-09-05. 2017-09-05. 2017-09-05.	



#### Smart Swap 3.6

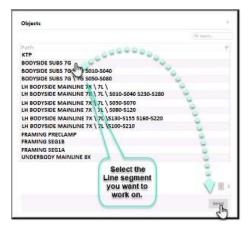




Open your Google Chrome app and login to enVision by using the address. Go to the top menu bar and click on Smart Swap icon on the right.



### 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.

	nart Swa	P					09/07/2017 Night		0	0							ate Worko		ew All Work		
BODYSIDE SU	35 7G\		Bacc	mmandad Cur	ies / Actual Cycle			Foult	Fault				1st Rvt	2nd Rvt	3rd Rvt	4th Rut	Sth Rvt.	6th Rvt	7th Rvt	BB Rvt	Lost R
Asset	GBSD	Feed Stick	Die	Punch	Magazine	Setter	Parte	C Shifts	Minutes This Shift	Highest Warn %	Model	Average	Warn %	Ware %	Warn %	Worn %	Warn %	Warn %	Warn %	Warn %	Warm
							6				CC_R	0	0	0	8		0	0	0	0	0
	100000 /	100000 /	300000 /	500000 /	0/	0/	<u>_</u>	0	0	0	CC_L	0	9	•							
70-010-11	28474	29475	120402	427712			-				SC_L	0	0	0				2			0
											SC_R	0	0	0	0	0					2.81
							۷				CC_R	1.88	1/2	1.61		0	•	-			
		100000 /	300000/	500008 /	0/	0.1	<u></u>		7.1	36.11	CC_L	6.83	2.38	7.62							5.71
70-020-13	100000 /	1000007	272646	192/1				40.6	7.1	98.11	SC_L	1.92	0	0	0	0					16.8
	19964	11111					-				SC_R	22.22	13.89	2.5	0	0	0	0	•		
				500000 /	0/	0/			0	0	cc		0		0	0	0	0	0	0	0
70-020-16	100000 /	1000007	300000/	15791			4	10.7	0		00										
	87.82	4742		500000 /	0/	0/	<u>u</u>		0.3	0	cc		0		0	0	0	0	•	0	
70-020-17	100000/	100000/	300000/	0			<u> </u>	3.9	0.0					-							
	89907	89937	89557				0				CC_R										0
					0/	0/			0		CC_L	0	0						-	0	0
	100000/	100000	300000 /	500000 /			<u> </u>	8.7		×.	SC_L	0	.0								D
76-030-11	87576	87970	254008	218912			-				SC_R	Ø	0						1.4-1		0
						0/	0			0	CC	0	0		0			1	1.0	1	
	1000007	100000 /	300000 /	500000 /	10		<u>_</u>	24.5	0.3	•	SC	0	0		0				1	1.0	0
7G-030L-1	19162	30562	100329	58544						0	CC	0	0		0				1.0		0
	100000 /	100000 /	5000007	500000 /	0/	0/		32.5	0.4	0	SC	0		0	0			-	-	0	0
7G-030R-1	41.492	41492	106/75	291130			<u> </u>				CC_R	0	0	•			-				0
							<u>_</u>				CC_L			0					1.0		
	100000 /	100000 /	3000007	500000 /	0/	07	1	0	0	0	SC_L	0	0	0	-						0
70-040-13	84281	\$6203	221008	226878							SC_R	0	0	0							8.84
							V				00	6.21	0	•							0
		1000001	260000 /	500000 /	0/								0		0			1		0	1.35
70-055L-1	100000/	bind	11401	807498									0	0.30	2.36				10.11		0
	24884		300000 /	500000/	.07	Sh	nift:						0		0	0.54		0	0	0	0.42
7G-055R-1	100000 /	100000/	107805	21401		31							0			1.85		0	0	0	
1 de apres et	62373		300000/	500000 /	0/								0		0.38	1.00	0	0	.0		0
	100000/	100000 /	225689	69610									9	0.38	3 33		0	0	0	0	0
7G-076L-2	85+28	82194	300000/	500000 /	0/								0	6.67		-					
	10/0000 /	100000 /	2000007	225548		(	09/07/2017	light			Ψ.										
7G-070R-2	24063	\$4963																			



### 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.

BOOYSIDE SU	mart Swa 85 791	P				C	907/2017 Night			
			Rec	ommended Cyc	ies / Actual Cycle	85		Fault Boutes 6	Fault Minutes	Highest Model Hands Bands Bands Shahe Shah
Asset	GBSD	Feed Stick	Die	Punch	Magazine	Setter	Pater 4	Shifts	This Shift	
76-010-11	1000007	100000 / 25674	300800 / 135412	500000 / 407140	0/ 8	4/ +	20		0	
76-020-13	100000/ 19964	190000 / 38084	200000/ 27964K	500000 / 89871	0./ 8	87 - 1	000	40.5	7.1	The User can set the Fault Minutes and/or % Warning Cycles in the filter to narrow
76-020-16	100000/	100000 / 1742	300000/ 88014	500000 / 75783	0/ 0	8/ 8	<u> </u>	10.7	0.3	down the rivet robots
76-020-17	100000 / 89557	100000 / 2007	300800 / 89557	\$000007		1	-			displayed on the screen.
76-030-11	100000 / 87678	\$200000 / \$7979	200800 / 254008	500000 / 218812	0/	*	1000	£7 215	0	RATE AND A DESCRIPTION OF A DESCRIPTIONO
7G-030L-1	100000/	100000	1 000000	500000 / 58344	0.1 0	8/ 1	-0	22.5	0.4	
70-030R-1	58582 100000 / 41482	1000000 / 41482	300900 / 126775	500000 / 251138	8	1			0	Fault Min% % Warn
70-040-13	100000 /	100000 / exert	200800 /	500000 / 204974	0/ #	8/ + 		14.0	2.1	
70-055L-1	\$00800 / 34884	100000 / 36864	300800 / 11.881	500000 / 907498 500000 /	0/ # 0/	8		12.7	15	
70-065R-1	1000007	100000 / 25725	300800 / epress 300800 /	E1401 500000/	8/	8 8/ 8		0	0	0 0
70-070L-2	\$00000 /	190000/ 83108	21548 360800 /	68110 500000/	8 0/	0/		0	-	

Vision Si	mart Swa	p					09/07/2017 Night •		0.3	B						Genera	ile: Worko	ider Vi	ew All Wor	Korders	Acem
			Rec	ommended Cyc	les / Actual Cycles			Fault	Fault	Highest			1st Rvt	2nd Rvt	3rd Rvt	4th Rvt	5th Rvt	6th Rvt	7th Rvt	8th Rvt	Last R
Asset	GBSD	Feed Stick	Die	Punch	Magazine	Setter	Part #	Minutes 6 Shifts	Minutes This Shift	Warn %	Model	Average	Warn %	Warn %	Warm %	Warn %	Warn %	Warn %	Warn %	Warn %	Warn 1
											CC_R	1.88	1.2	1.61	0	0	0	0	0	0	2.81
76-020-13	100000 /	100000 /	300000 /	500000/	0/	0/		40.6	7.1	36.11	CC_L	6.83	2.38	7.62	0	0	0	0	0	0	10.40
76-020-15	50066	10000	272646	\$9671	0	0		40.6	1.1	36.11	SC_L	1.92	0	0	0	0	0	0	0	0	5.77
											SC_R	22.22	13.89		0	0	0	0	0	0	16.67
7G-055L-1	100000 /	100000 /	300000 /	500000 /	0/	0 /		14.3	3.1	0.84	CC	0.21	0	0	0	0	0	0	0	0	0.64
10-0001-1	26104	26804	11401	907698	0	0		14.0	9.1	0.04	SC	0	0	0	0	0	0	0	0	0	0
7G-055R-1	1000007	100000 /	300000 /	5000007	0 /	0 /		12.7	2.6	0.38	CC	0.29	0	0.38	0.38	0	0	0	0	0	0.38
/G-000R+1	62375	28722	1070.85	81461	0	0		12.7	2.0	0.38	SC	0	0	0	0	0	.0	0	0	0	0





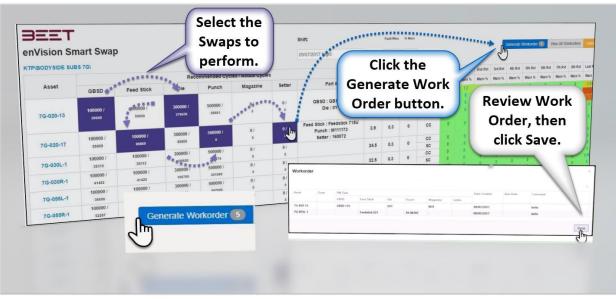
The Message History or Cycle History can be brought up for any one of the robots.

and the second se										8	Q. Sauth.
NVision S	mart Swap			- 1	Duty a column reacter have to pro	T Cole	W. Mersey	T there	T Declarge	T . T	Duration
	man Swap				0	at P	9	9	9	a.	
PIBODYSIDE SI	100 000				3629-26-629-13	Enderi	SERVERS SCIENCE Root File Construiter	4.754	2017-05-07720-16-07.585-54-00		
and anot side si	JBS TG				\$829.55-829-13	Employed	\$520013Cht3.But10s Blast Controller		2017-06-07715-40-26-031-04:03		
					5429-76-829-13	Faulteri	5020R13CNLLRot1Fit - Rivert Controller	1. 8758	2017-26-07722082-65.911-54:00		
Asset			Recom	mended Cycl	\$829535-829-11	2 mailtoni	STUBBERSCHLENGERFEITE	4.756	2017-09-077201221.077-04.00		
0.000	GBSD	Feed Stick			1020-20-020-13	Faulteri	SUBBLE MOTOR FIDE Righten Hand To		2017-06-07720-19-06-28-04-00		
	0030	Feed Stick	Die	Punch	\$629,75,829,13	faulteri	KO20011 HOVTFIG #115 Blockhoov Material	T	3017-04-07719-40-24.504-04-00		
					1620L3G-020-13	Familierd	SUBBLE HUTTER #106 RigMon. Head To		2017-06-07720-07-45-983-64-09		
- martine and the	1000007	100000 /	200000/	500000 /	\$625,75-020-13	Southed	SOURCE SERVICE FILES Righton Head To		2017-09-07720-12-22-019-04:00		
70-020-13			275426	5000007	sales hi ale 11	fauthort	5020833CNLRvt1DtyEauld - Rivet Cen	1	2017-06-07710-10-32-264-04-08		
12	Message History	20505	2/1424				5020013CNLLRet1DlyEartel - Rivet Can	C 8 PM	2017-04-07720-16-13.792-04:00		1
2	Cycle History			-			SUMMER SCHLURet Strylaudid - Rivert Carls	· # PM	3017-05-07720(12-37.801-04.00		
	cycle history	100000/	300000	MA	ADE 22	History	S020033CNLRet1Fit - Rivet Controller	L., 11.AM	2017-09-07711-56:19.913-56:00		
76-020-17				IVIC	SSUELI	nstory	SE20EE3CNLLRoteFix - Roart Controller	L. 9 AM	2017-05-07129:10:44.046-04:00		
10000	89869	19869	89969				SCORESINVTRIE PTTS RouMan: Material	T., FLAM	2017-09-0711155-08-299-04-00		
		100000/	300000	2222			\$02001300/TEX #105 RieMon: Head To	9 AM	3817-05-07739/10-04.116-04-08		
7G-030L-1	100000 /		000000	CVC	Hict	orv	SERVER CONTRACTOR STREET		2017-09-07111:55:25:042-04:08		
10-000-1	30332	38312		Cyu	list	Ory	5020012CNL/Jort1DyEardd - Rivet Cett	MA 9	2017-05-07109/50-49-835-04:00		
	100000 /	1000001	30000	· ·			SEARCESCNLEWEFFE - River Controller	L., 4 AM	2017-09-07104:17:59/714-04:00		13
7G-030R-1	#1822	#1422	196705				SOURCE MONTH #105 Blocklost thead has	4.88	2017-09-07104/12/58 748-64:00		12
		1000001	3000001	500000 /		Faulteral	\$020513CNLAW1DyEach4 - Rivet Cat	1	2017-09-07104/1045-962-04/09		93
	1000007		11545	967858							
7G-055L-1	36856	36856	3000001	5000007							
	100000/	1000007		81285							
7G-055R-1	\$2297	20647	9,97030								0

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.

- Viciny	Click to ac	e (7G-020-13 ccess the Mes History opti	sage		order Swap will highlig		09/07/2017 Night •	)	0.3	% War		Warn Cycle	-	Ge	nerate W	/orkorde	10	View All	I Workord	lers	Admir
	7/		Rec	omn ded Cyc	ies / Actual Cycles			Fault	Fault	Highest			1st Rvt	2nd Rvt	3rd Rvt	4th Rvt	5th Rvt	6th Rvt	7th Rvt	8th Rvt	Last F
Asset	GBSD	Feed Stick	Die	Punch	Magazine	Setter	Part #	Minutes 6 Shifts	Minutes This Shift	Warn %	Model	Average	Warn %	Warn %	Warn %	Warn %	Warn %	Warn %	Warn %	Warn %	Wan
			1	1							CC_R	1.88	1.2	1.61	0	0	0	0	0	0	2.1
76-020-13	100000 /	100000 /	300000/	500000 /	0 /	0/	GBSD : GBSD 135	40.6	7.1	6.63	CC_L	3.31	0	3.31	0	0	0	0	0	0	1
10-020-15	59656	59656	278436	69661	0	0	Die : OYT	40.6	7.1	0.00	SC_L	1.92	0	0	0	0	0	0	0	0	5
											SC_R	0	0	0	0	0	0	0	0	0	
7G-020-17	100000 / 85869	100000 / 89869	300000 / 89869	500000 / 9	0/	0/ 0	Feed Stick : Feedstick 715U Punch : M111173 Setter : 160072	3.9	0.3	0	cc	0	0	0	0	0	0	٥	0	0	
	100000 /	100000 /	300000 /	500000 /	0/	0/		24.5			CC	0	0	0	0	0	0	0	0	0	
7G-030L-1	38212	39312	105920	58274	0	ø	/	24.5	0.3	0	SC	0	0	0	0	0	0	0	0	0	
7G-030R-1	100000 /	100000 /	300000 /	500000 /	0 /	0/		32.5	0.3	0	CC	0	0	0	0	0	0	0	0	0	
/G-030K-1	41422	41422	106705	251060	0	0/		32.5	0.5	0	SC	0	0	0	0	0	0	0	0	0	
7G-055L-1	100000 /	100000 /	300000 /	500000 /	0 /			14.2	3	0.99	CC	0.25	0	0	0	0	0	0	0	0	0.
10-000L+1	36656	36656	11343	907550	0	//		14.2		0.00	SC	0	0	0	0	0	0	0	0	0	
7G-055R-1	100000 /	100000 / 28647	300000 /	500000 / 81385	0/	1.		12.7	2.5	0.38	cc	0.29	0	0.38	0.38	0	0	0	0	0	0.
Actual cycl (62297)		Henrob Sv Cycles (100			Part List of selected Sw	1000000	Fault Minutes the Last 6 Shi		F	ault M this s	inutes hift.	)									





## Baseline Editor (Auto Learn) 3.6



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.

Learn - Baseline Editor			×
<u>Select Learn Mode</u>	Select # of Cycles (max ~ 1000):	Confirm	
		Close	,



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.

ledian Iode idate All Upp odel	date Design Values for E Group						All cl	the Tol assifica	erances a tion secti Mod	are read ion of the ule.	from the Admin
odel Test 1	Y CYCLE TIME	Tag T	Events	Mean Cy L.	Mode Cy L.	Median Cy	Min Tol.	Max Tol.	Min Normal	Max Normal	
odel Test 1	TRANSFER OUT	CYCLE TIME	45	54.21	32.34						
odel Test 1 odel Test 1	TRANSFER OUT	PALLET CLEAR OF DECEL PALLET EXITING	55	1.73	2.03	41.1	0	0	0		
AND IEX 1	PIN CLAMPS CLOSE	PIN CLAMP 1 CLOSED	55	4.24	5.04	2.03	0	0		0	Update
		COMP TOLOSED	55	1.06	1.08	5.04	0	0	0	0	Update
_					1.00	1.07	0	0	0	0	Update
									0	0	Update
				_							Opdate

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.

<ul> <li>Mean(Average</li> <li>Median</li> <li>Mode</li> </ul>	Update Design Values fo					or da Upda	ate but ges to	ue, cl tton t the c	e Object ick the o save yo object.		2
Overwrite Existing Tolerance Values		"Update All", after						Upd	ate		
Mean(Average) Median	all the chang	es are completed.							Min Normal	Max Normal	
Mode Jpdate All Update Design Values	for Existing Models		Events	Mean Cy Len N	lode Cy Len	Median Cy L	en Min Tol.	Max Tol.	Min Norman		
Model	Group	Tag						0	0 0	Updale	-
T	T		100	90.11	1,47	33.64 0.98	0	0	0 0	Update	
	CYCLE TIME	CYCLE TIME PALLET CLEAR OF DECEL	100	1.21 0.1 3.06 2.4		2.48	0	0	0 0	Update	
Model Test 1 Model Test 1	TRANSFER OUT	PALLET EXITING	100	4.9 3.1	98	3.95	0	0	0 0	Update	
Model Test	TRANSFER OUT	NO PALLET PRESENT		0.93 0.1		0.93	0.15	0.1	15 1	5 Lawfints	-
	to sort the data.	PIN CLAMP 3 CLOSED PIN CLAMP 1 CLOSED	100	0.98 0.5		1.08	0.15	0.1			_
		PIN CLAMP 4 CLOSED	100	1.05						0 C ko	080
2.2	t box to autofill			-							
💐 and find the ob	ject desired.				-	-					
		Tag		Eve	ents						
			T			Mode	Cy Len	Med	lian Cy Len	Min Tol.	
Group	Tag	CYCLE TIME	ls equa	lto		i					
		PALLET CLEAR OF DECEL	ls not e								
		PALLET EXITING	Starts v			-					
CYCLE TIME	Is equal to	NO PALLET PRESENT	Contair			32.34	•	41.1	1	0	:
TRANSFER OUT	Is not equal to	PIN CLAMP 3 CLOSED		ot contain							
TRANSFER OUT	Starts with	PIN CLAMP 1 CLOSED	Ends w								
	Contains	PIN CLAMP 4 CLOSED		100			1		_		
TRANSFER OUT										es can be	
PIN CLAMPS CLOSE	Does not contain										
	Does not contain Ends with						С	hang	ed by a s	elector or	by



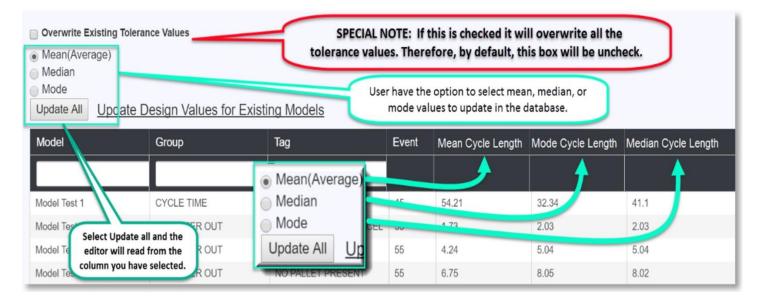
Except for Events and Median Cycle Length, the others can be adjusted by clicking on the value. It will then highlight and offer you a choice to increase or decrease the value. You can also manually input the number to make it exact.

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 3.6

## Overview



BEET

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 3.6
- Selecting Cycles to Compare 3.6
- Open Cycle Compare Window 3.6
- Configure Cycle Collection 3.6
- Adding More Cycles 3.6
- Zoom Feature 3.6
- Deleting a Cycle 3.6
- Deleting a Collection 3.6
- Cycle Toggle Feature 3.6
- <u>Reference for CEM</u>



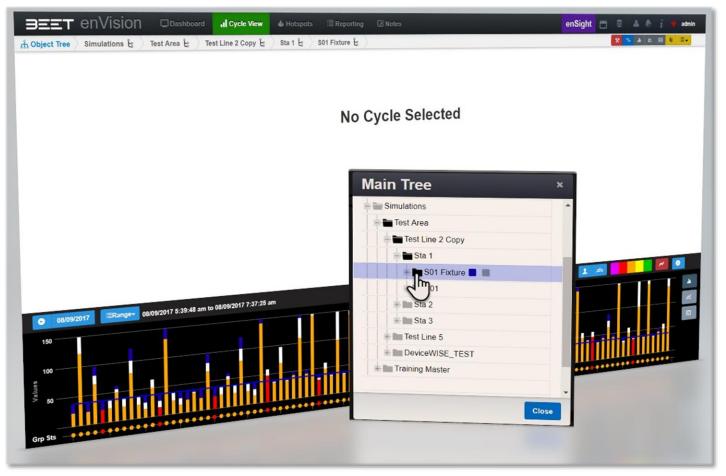




## **Open Cycle View 3.6**

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.

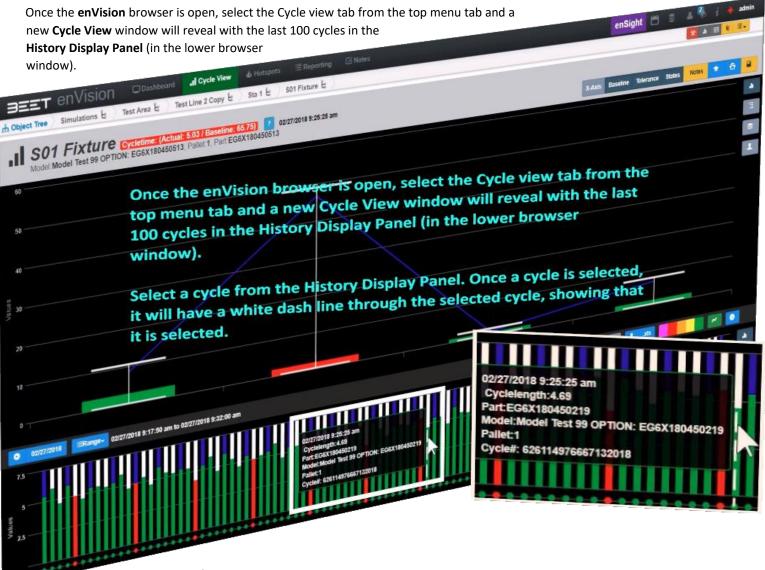
The Cycle View window will update with the last 100 cycles. Select a cycle from the History Display Panel.





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# Selecting Cycles to Compare 3.6



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 3.6**

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.





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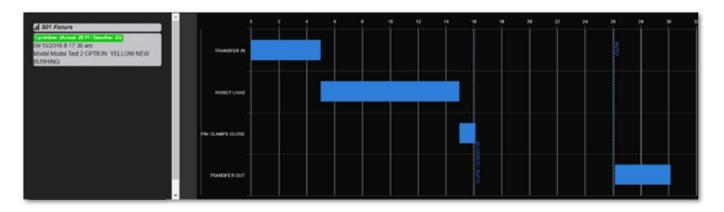
# **Configure Cycle Collection 3.6**

BEET

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.

CEM 001 Create a New Cycle Collection		Save to Collection	n
R01 08/17/2016 8 59:09 am Model Model Test 1 R01 08/17/2016 8 19:50 am Model Model Test 6 Test123 R01 09/27/2016 12:58:54 pm Model Model Test 1 S01 Fodure 09/27/2016 1:00:52	1st, Select and input a name for the Cycle. Select and Create a New Cycle Collection button. The new folder with the select cycle will appear here as show		
Cern 001 S01 Fixture 09/15/2016 8:17:36 am Model Model Test 2 OP1	TION: YELLOW NEW BUSHING	View View	

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.



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## Adding More Cycles 3.6

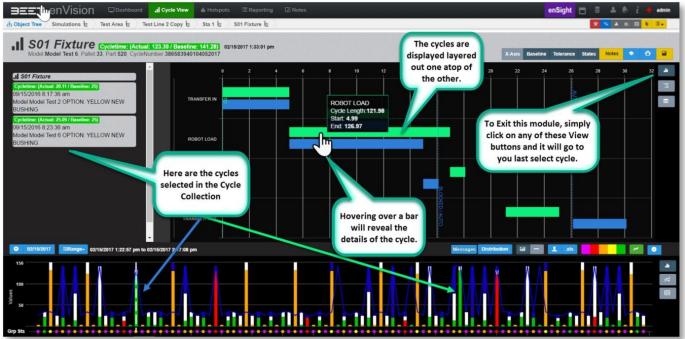
BEET

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.

	reate a New Cycle Collection	2nd, Select the Save to	Save to Collection
1st, Select and Highlight the cycle you want to compare. It will highlight while the cursor	Model Test 1	Collection button to add the newly selected	View
is hovering over it.	Model Test 6	cycle to the initial or previous selection.	View
R01 09/27/2010 08:54 pm Mo S01 Fixture 09/27/20 1:00:52		N: YELLOW NEW BUSHING	
cem 001 S01 Fixture 09/15/2016 8:17/36			View
S01 Fixture 09/15/2016 8:200	am Model Model Test 6 OPTIO	N: YELLOW NEW BUSHING	

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.





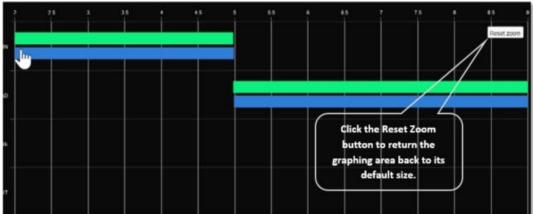
#### Zoom Feature 3.6

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 3.6

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.



CEM 001	Create a New Cycle Collection	Save to Collection
R01	The unselected cycle will	View
R01 Test123	remain in the collection	
R01 09/27	7/2016 12:58:54 n Model Model Test 1	View
S01 Fixtur cem 001	re 09/27/2011 00:52 pm Model Model Test 1 OPTION: YE	LLOW NEW BUSHING
S01 Eixtur	re 09/15/2016 8:17:36 am Model Model Test 2 OPTION: YE	



# **Deleting a Collection 3.6**

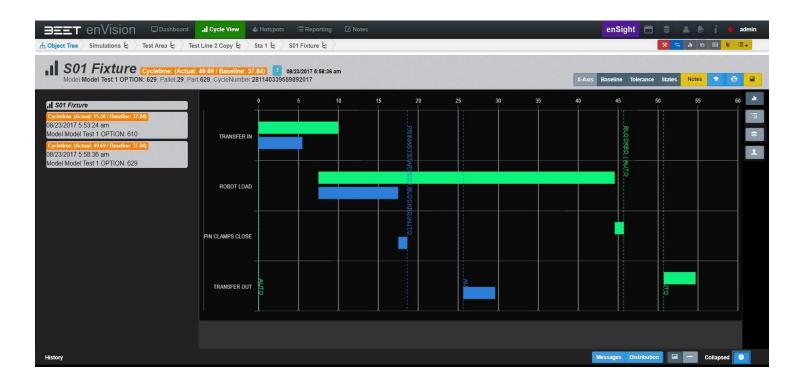
Select a Collection Folder from the list in the Cycle Compare window, then select the **3Delete Collection** button to delete the folder and the cycles in it.



Cycle Comp	are			*
CEM 001	Create a New Cycle Co	Rection	Save to Collector	
	To delete a Collection, click on the Folder (CEM 001).	Select the Delete Coll		•
	27/2018 12 ST pm Model Model Test 1	button. This will delet collection folder	View	ï
501 Fee	une 09/15/2016 1:00:52 pm Model Model Ten		SUSHING	
E Delate Cy	cie	E Deiet	e optiection O Close	

**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.

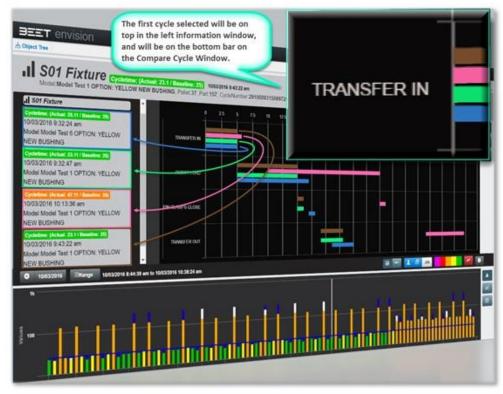




## **Cycle Toggle Feature 3.6**

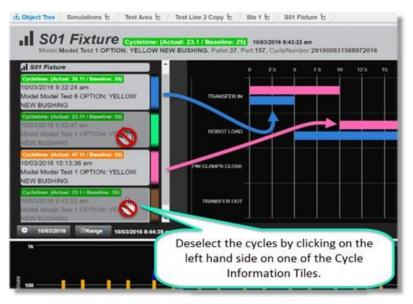
When viewing the Cycle Compare Browser with multiple cycles, it is possible to remove the cycle data from the present Compare window. With two or more cycles displayed, you can click on the left-hand side of the window, and select from the cycle information area. Click on any one or more of the Cycle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

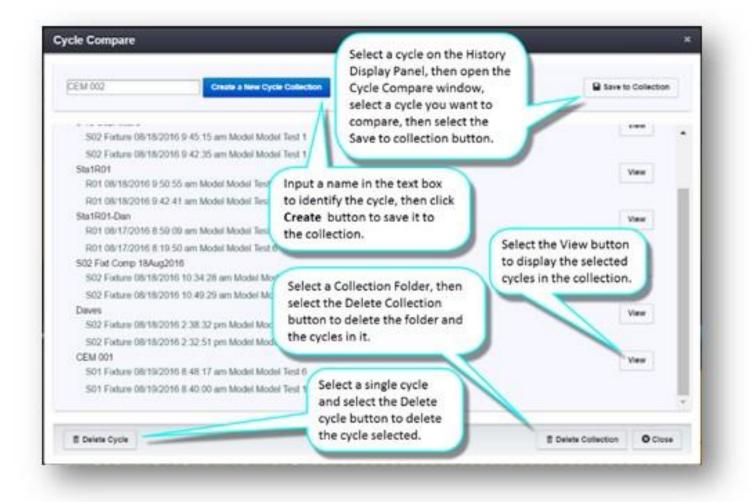




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### **Reference for CEM**

Cycle Compare (Collection) Window





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Adding Addition Cycles



#### Cycle Compare Browser





# Cycle History 3.6

#### **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.

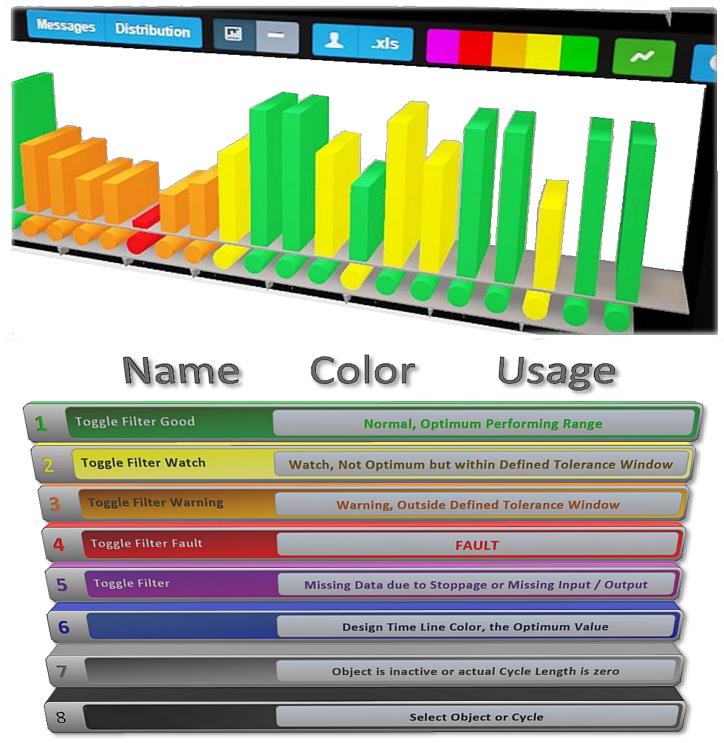


- Overview
- Color Code 3.6
- Location 3.6
- History Filter Options 3.6
- <u>Cycle Date Options 3.6</u>
- Cycle History View types 3.6
- History View
- Model View
- <u>Table View</u>
- Bar Chart
- Cycle History Day View 3.6
- Cycle History Higher Level View 3.6



#### Color Code 3.6

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



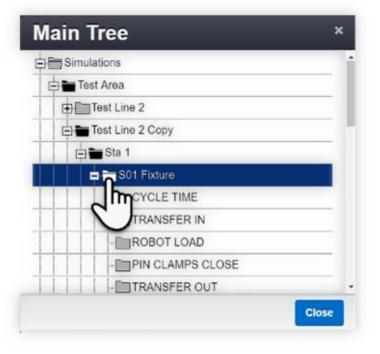
#### Location 3.6

BEET

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.





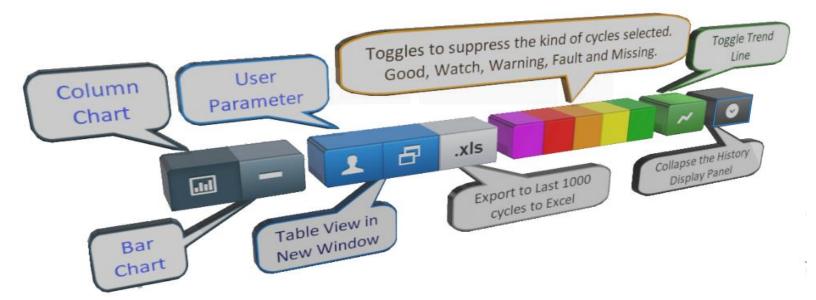


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History Filter Options 3.6

#### **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 3.6

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.



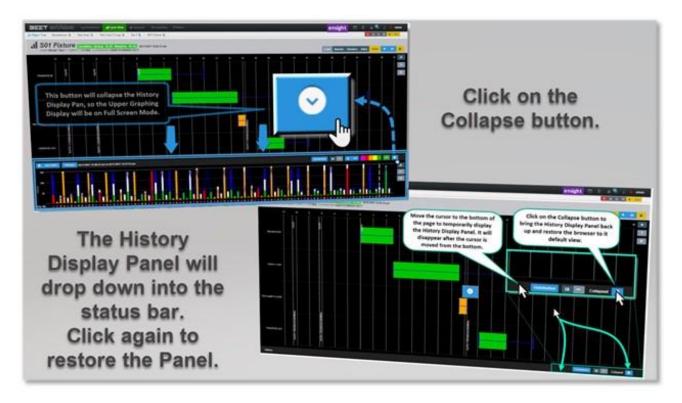




#### **Collapse Table 3.6**



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 3.6**

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.



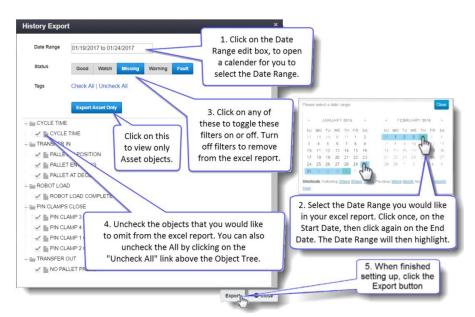
#### Export last 1000 Cycles to Excel 3.6

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.

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

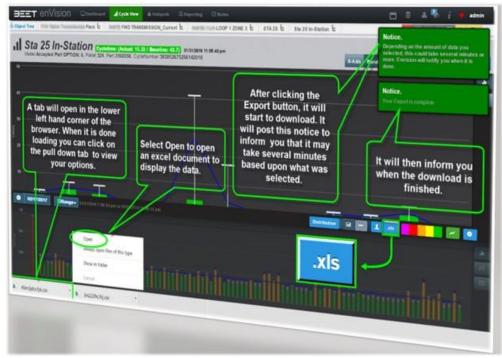


First, set the date range by *Clicking* on the edit box. A calendar will appear. *Click* on date on the calendar to set the start date. *Clic k* again to set the end date. You can also use the presets at the bottom of the calendar window. Check off any of the statuses that you want to omit from you excel 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 3.6

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.

Parameter History		×
Parameter	Value History	
BUFFER_CAPACITY	Value	
BUFFER_COUNT	12.5 0 14:30 14:31 14:32 14:33 14:34 14:35	<b>*****</b>
¢		÷
		Close 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.

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Drag a colum	in hea	der and drop it	her	e to group by th	ett	polumn						
Cycle Len_	Ŧ	Baseline	+	Model	-	Cycle#	Pallet	Ŧ	PartNumber	-	Detriftemp	T
136.43		25		Model Test 6 OPTION: 2		35655371045	35		315		11/04/2016 1(29:18 pm	1
		25		Model Text 1 OPTION: 2		35056371047.	36		316		11/04/2016 1/39:45 pm	
		25		Model Test 1 OPTION: 2		35057371050.	37		317		11/04/2016 1:40:13 pm	
136.54		25		Model Test 6 OPTION: 2		35058371064.	20		318		11/04/2016 1:42:29 pm	
		25		Model Test 1 OPTION: 2		35059371067.	39		319		11/04/2016 1:42:56 pm	







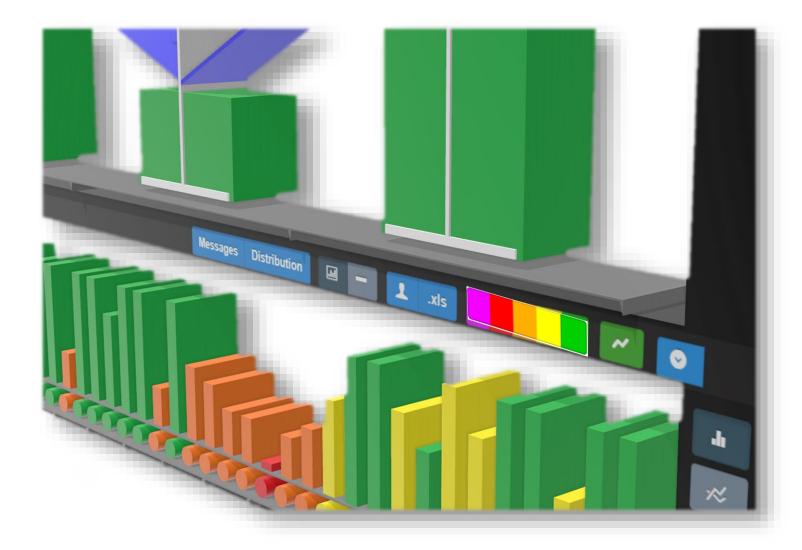


#### **Toggle Filter 3.6**

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.



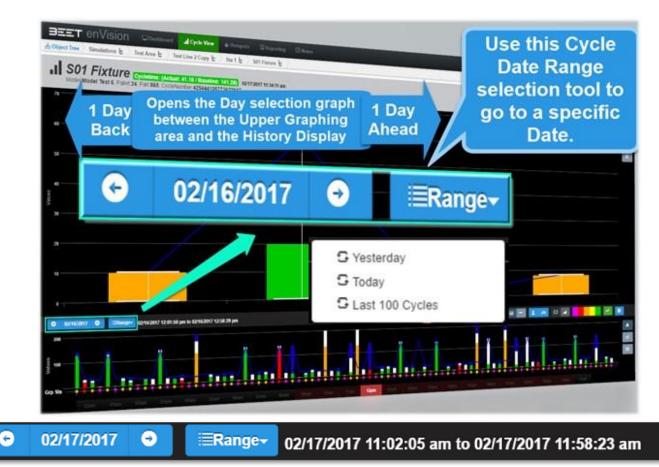
Toggle Filter Good – Toggle this filter to suppress the Good data cycles
Toggle Filter Watch – Toggle this filter to suppress the Watch data cycles
Toggle Filter Warning – Toggle this filter to suppress the Warning data cycles
Toggle Filter Fault – Toggle this filter to suppress the Fault data cycles
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.



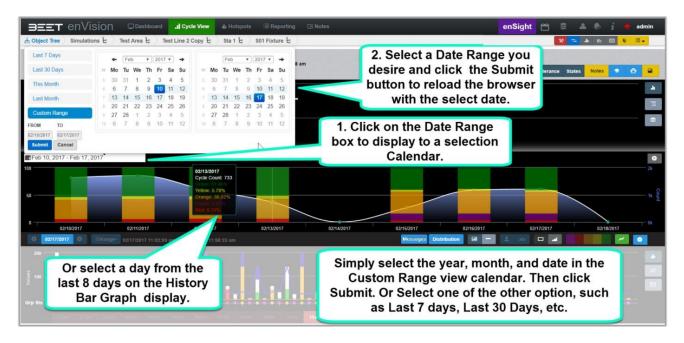


## Cycle Date Options 3.6

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

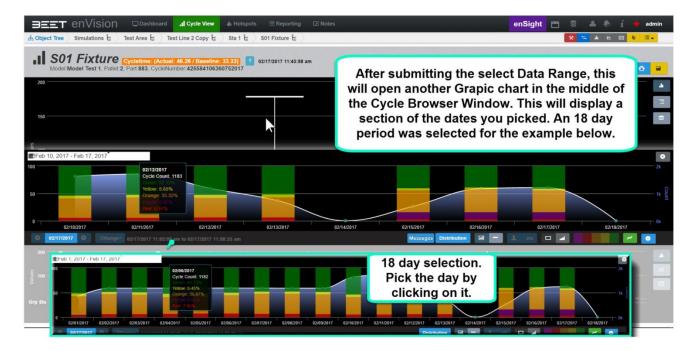


Users can also select the date tab on the left to access open a new graph chart, *Click* on the date range and a calendar will open that can be used to view any date range (Custom Range View).





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:



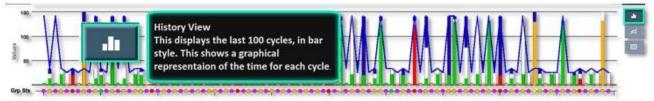


## **Cycle History View types 3.6**

- <u>Cycle History Day View</u>
- <u>Cycle History Higher Level View</u>

#### **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.



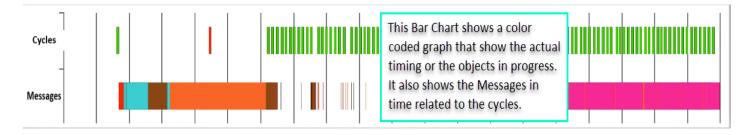
## **Table View**

Opens a scroll able table where the graph was.

Cycle Length	Baseline	Model Cyclell	Palet	Part	DateStamp	
	141.28	Model Test 6 42680411139554	12017 38	1118	02/17/2017 1:07:53 pm	1
	33.33	Model Te	30	1119	02/17/2017 1:08:21 pm	
		Model To an annual suggestion and the statement	40	1120	02/17/2017 1:08:25 pm	
	100 million (100 million)	Model To Table View	1 1	1121	02/17/2017 1:08:48 pm	
49		Model T The table View display	s the 2	0	02/17/2017 1:08:53 pm	
				1123	02/17/2017 1:09:19 pm	
82		Model T cycle data in a table for	rm. 4	0	02/17/2017 1:09:23 pm	
10.4		Model T. C.	4	1131	02/17/2017 1:11:39 pm	
		11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1				

## Bar Chart

-Show a color coded graph that show the actual timing or the objects in progress.



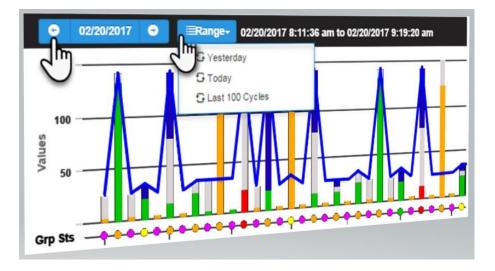




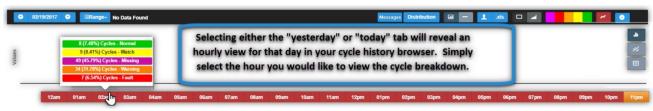


#### Cycle History Day View 3.6

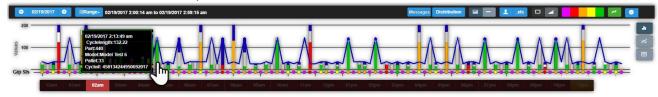
Use the date panel in the cycle history browser to access the day view for your object. Or *Click* forward or backward to get to the date desired.



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 Show Day View tab, from the top menu will reveal history day view variance data:







#### Cycle History Higher Level View 3.6



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 3.6

## **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.



envision Produ	ction History 07/01/2017 - 08/07/2017		Change Parameters 🙆
	D Parameters	×	
	Select Date Range	- 1	
	07/01/2017 to 08/07/2017	- 1	
	Efficiency	- I	
	92.5	- I	
	Select Area Training Master		
	Hourity Target Rounding	~ I	
	Always Round Down     Always Round to nearest whole number	- 1	
	Save	Close	

## **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* onc e to select the starting or end date. *Click* again on a date before or after to include the days in between your selections.

Select Da	te Range	
Efficiency	es.	
92.5		
Select Ar	oa	
		•
Hourly Ta	rget Rounding	
. A	ways Round Down	
• A	ways Round to nearest whole number	

249	ect	Date	Ra	i De											
11/	01/2	016	10.1	1/10/	201	0									
	elect	ed 1	1.01	2016	10.11	107	916 (1)	Depty					1	Dese	1
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	90	MO	TH	WE	TH	FR	5.6	50	880	τu	WE	TH	FR	54	
	30	31	1	2	3	4	5	27	28	29	30	1	2	3	ι.,
	۰.	17	d.		10	18	12	4	5	8	7	.8		10	•
	13	14	15	16	1	ma	19	11	12	13	14	15	16	17	r.
	20	21	22	23	20	ds.	26	18	19	20	21	22	23	24	
	27	28	29	30	1	2	3	-25	28	27	29	25	30	31	

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

Parameters	
Select Date Range	
11/01/2016 to 11/10/2016	
Efficiency	
92.5	
Select Area	
Ladder	
LADDER ASSY LADDER ASSY (Beet Review) LH BODYSIDE MAINLINE Machining Area Moon Roof NAVISTAR SEAT INSPECTION SIDESILL	
LADDER ASSY (Beet Review) LH BODYSIDE MAINLINE Machining Area Moon Roof NAVISTAR SEAT INSPECTION	

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.

Select Date Range		
11/06/2016 to 11/08/2016		
Efficiency		
92.5		
Select Area		
Test Area	٠	
Hourly Target Rounding		
Always Round Down		
Always Round to nearest whole number		

## **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.

#### Hourly Target Rounding

- Always Round Down
- Always Round to nearest whole number

#### **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.



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arget: 344 OFFLOAD: 314 E	2017 FEICIENCY: 84%												
	Hour 1 (60 min)	Hour 2 (60 min)	Hour 3 (60 min)	Hour 4 (60 min)	Hour 5 (60 min)	Hour 6 (60 min)	Hour 7 (60 min)	Hour 8 (60 min)	Hour 9 (0 min)	+/-	Total		
lachine laseline: 77 seconds Production Minutes: 480	1:00 to 2:00 pm	2:00 to 3:00 pm	3:00 to 4:00 pm	4:00 to 5:00 pm	5:00 to 6:00 pm	6:00 to 7:00 pm	7:00 to 8:00 pm	8:00 to 9:00 pm 43	9:00 to 9:00 pm 0		344.00		
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LOOR PAN	33	47	38	42	38	36	30	33	1	-48.00	295.00		
JBODY_C01	39	43	39	41	35	40	31	77	4	-48.00	296.00		
UBODY_C02	37	39	33	40	41								
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FRAMER_C01	39	30	41		39	Bas	eline: 7	77 seco	onds				
	39	38	42	41	45	Due						1:00 to 2:00 pm	2:00 to 3:00 pm
		31	30	0		Pro	duction	n Winut	es: 480	,		inter to alloo pill	2.00 10 0.00 pm
FRAMER_C03	41			38	32	Tere						1.22	
FRAMER_C02 FRAMER_C03 PANEL_C01	38	0	-			Tar	jet					43	43
FRAMER_C03 PANEL_C01 GLASS	38	0 39	37	39	43								
FRAMER_C03 PANEL_C01 GLASS FENDER		0 39 36	37 40 25	38 41	43 32	LAI	DER					25	49
FRAMER_C03 PANEL_C01 GLASS FENDER WINDSHIELD	38	0 39 35 38	37 40 25 31	38 41 31 28	43 32 32	-	DER					35	43
FRAMER_C03 PANEL_C01 GLASS FENDER WINDSHIELD FTDRL	38 0 35 39	0 39 35 38 34	37 40 25 31 32	39 41 31 29 36	43 32 32 39	-	DDER	N				35 33	43
FRAMER_C03 PANEL_C01 GLASS FENDER WINDSHIELD FTDRL FTDRR	38 0 35 39	0 39 35 34 34 34 35	37 40 25 31 32 41	39 41 11 28 36	43 32 32 39	FLO	OR PA					33	47
FRAMER_C03 PANEL_C01 GLASS FENDER WINDSHIELD FTDRL FTDRR RRDRL	38 0 35 39	0 39 35 38 34 34 34 35	37 40 28 31 32 41	38 41 31 28 36	43 32 32 39	FLO							
FRAMER_C03 PANEL_C01 GLASS FENDER WINDSHIELD FTDRL FTDRR RRDRL RRDRL RRDRR	38 0 35 39	0 39 35 38 34 34 34 34 35	37 40 28 31 32 41	38 41 51 29 36	43 32 32 39	FLC UB	OOR PA	01				33 39	47 44
FRAMER_C03 PANEL_C01 GLASS FENDER WINDSHIELD FTDRL	38 0 35 39	0 33 33 34 34 34 34 34 35	37 40 28 31 32 41	35 41 11 25 36	43 37 32 39	FLC UB	DOR PA	01				33	47



# PM Average Cycle

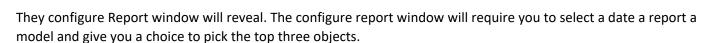
# **Opening PM Average Cycle**

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.

Object Selection	Object Selection	×
Name Envision Default Plant Envision Triver Upgrade	Name Envision Default Plant KTPO Area LADDER Sol TIME OPERATOR LOAD CLEAR TO ENTER PART PRESENT OPERATOR LOAD COMPLETE IST DUMP CLAMPS TO WORK ALL	
	Select	Close



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Click on the 09/11/2017 to 09/15/2017 Select how Date Range to to sort the OCTOBER 2017 select and Start Report and End Date. 18 19 Configure Report 09/25/2017 to 10/02/2017 Date Range By Sum By Sum By Shi By Week By Sum Report \* By Week/Shift Group Breakdow 2DR Models Тор 3 Jhղ Select the To see the top 3 Model type objects, check off to view the Top 3 Checkbox. Click Run to load the configuration. Close

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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 pulldown 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.

Loading new data.

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.

KTPO Area LADDER S01	MAIN >				
					⊕Print
By Sum for model 2 DR 0	9/25/2017 to 10/02/201				
ine	Station	Asset	Group	Target	Value
			OPERATOR LOAD	34	0
			CLEAR TO ENTER		
			PART PRESENT	25	0
			OPERATOR LOAD COMPLETE		
			1ST DUMP CLAMPS TO WORK ALL	0.85	
			1ST DUMP CLAMPS TO WORK 4DR		
			2ND DUMP CLAMPS TO WORK 4DR		
			DUMP TO WORK ALL	0.85	
			BK-UP CLAMPS TO WORK 2DR	0.85	
			CLAMPS TO WORK ALL	0.85	
			CLAMPS TO WORK 4DR		
			R03 WELD	41	
ADDER	S01	MAIN			
ADDER		WD=CI IN	BK-UP TO WORK	0.85	
			RETRACT PINS TO WORK 2DR	0.85	

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.

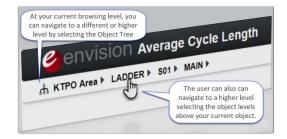




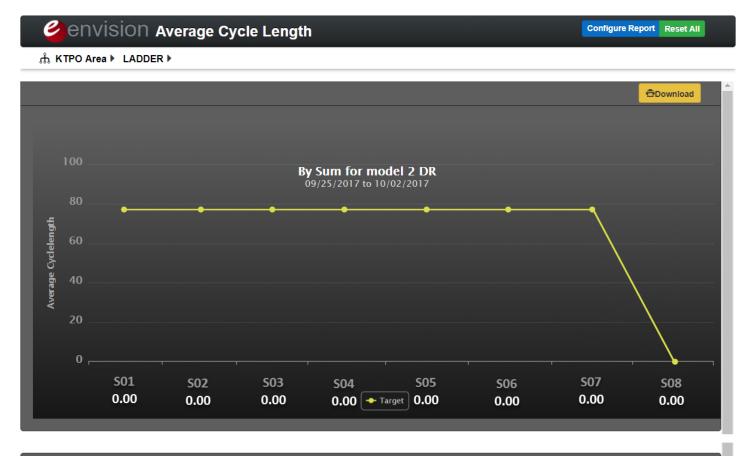
## Navigating to a Higher Level

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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. What's 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.



⊕Print

#### By Sum for model 2 DR 09/25/2017 to 10/02/2017

Machine	Target Cycle Length	Average Cycle Length	Differance
S01	77	0.00	-77.00
S02	77	0.00	-77.00
S05	77	0.00	-77.00
S06	77	0.00	-77.00
S09	77	0.00	-77.00
S10	77	0.00	-77.00
S12	77	0.00	-77.00
S13	0	0.00	0.00



Select Top 3 on the Configuration Report window to reload the current screen with the Top 3 Objects.

Cenvision Average Cycle Lengt	1	Configure Report Revent All	CONVISION Average Cycle Lengt	h	Configure Re	port Reset
100 100 100 100 100 100 100 100		506 507 508 6.00 0.00 0.00	100 60 60 70 70 0 501 0.00	By Sum for model 2 DR (Top 3) 09/25/2017 to 10/02/2007 ● 502 502 0.00 ● Teget		Countral
By Sum for model 2 DR 09/25/2017 to 10/0           Machine         Target Cycle Langel           Sch         77           Sch         72           Sch         72           Sch         72	22/2017 Average Cycle Lange 00 00 00 00 00 00 00 00 00 00	Different 1788 1780 1780 1780 1780 1780 1780 1780	By Sum for model 2 DR (Top3) 09/25/2011 Teaching Transformed Crist Lange Teaching Teaching Teaching Teaching Teaching Teaching Teaching Teaching Teaching Teaching Teachin	to 1002/2017 Average Cycle Longst E00 0.00 DDP 3 Select	Difference 17.90 17.90 17.90	Grue

# **Configure Report**

Configure Rep	configure report button.	•
Configure Report	:	×
Date Range	09/25/2017 to 10/02/2017	
Report *	By Sum	T
Models		•
Тор 3		
		Run Close

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

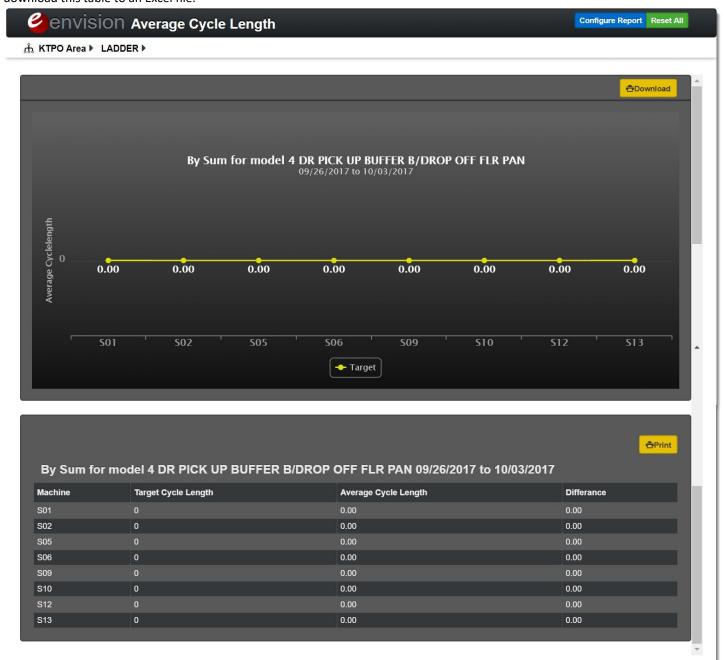
This will reveal the configure report window. There you can make your changes to the date report model or select the top three or unselect the top three.

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.

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## **Reset All**

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Reset All

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 3.6



- enVision Dashboard
- Dashboard Item and Description
- User Dashboard



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# enVision Dashboard 3.6

## **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 <u>User Dashboard</u>.

## Dashboard Item and Description

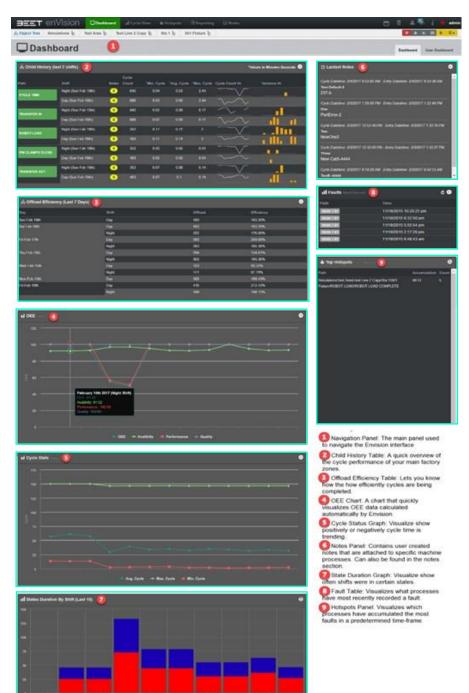
Navigation Panel: The main panel used to navigate the enVision interface. Child History Table: A quick overview of the

cycle performance of your main factory zones. Offload Efficiency Table: Lets you know how the 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.





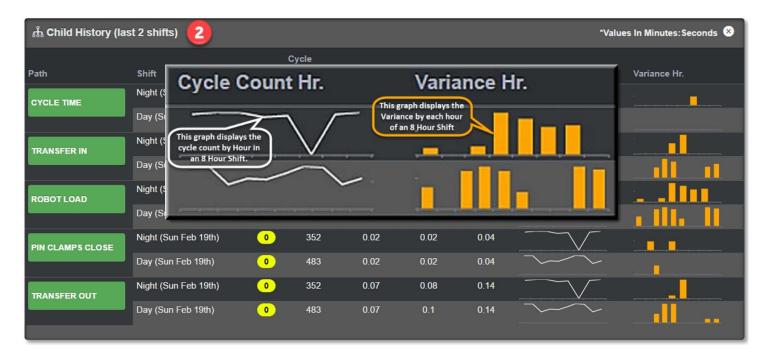


# **Dashboard Item and Description 3.6**

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

BEET	enVision	Dashboa	rd II Cycle View	<b>6</b> Hotspots	≣ Reporting	12 Notes	enSight	8	8 1	d i	e admin
ரி Object Tree	Simulations 🔓	Test Area 比	Test Line 2 Copy 🔓	Sta 1 🔓	S01 Fixture 🔓				ж "њ	n 🖽 🚺	1 ≣•
Da	shboard	(	1						Dashboard	User Dash	nboard

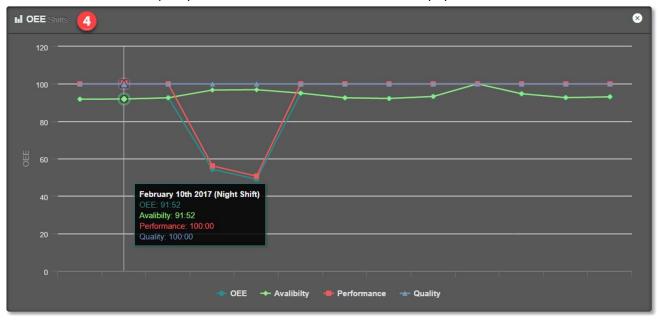
#### Child History Table: A quick overview of the cycle performance of your main factory zones.



### Offload Efficiency Table: Lets you know how the how efficiently cycles are being completed.

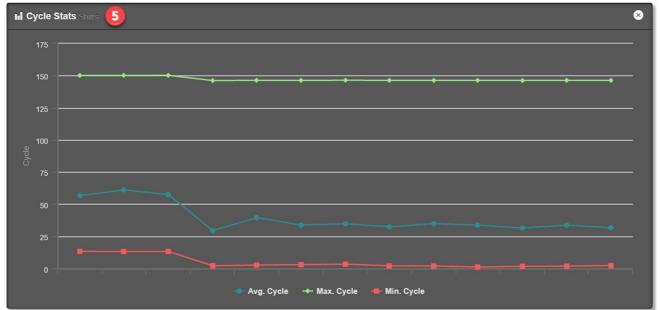
க் Offload Efficiency (Last 7 Days)			8
Day	Shift	Offload	Efficiency
Sun Feb 19th	Day	483	193.20%
Sat Feb 18th	Day	483	193.20%
	Night	352	176.00%
Fri Feb 17th	Day	393	200.68%
	Night	363	185.36%
Thu Feb 16th	Day	264	134.81%
	Night	363	185.36%
Wed Feb 15th	Day	163	83.23%
	Night	121	61.79%
Mon Feb 13th	Day	369	188.43%
Fri Feb 10th	Day	416	212.43%
	Night	388	198.13%





OEE Chart: A chart that quickly visualizes OEE data calculated automatically by enVision.

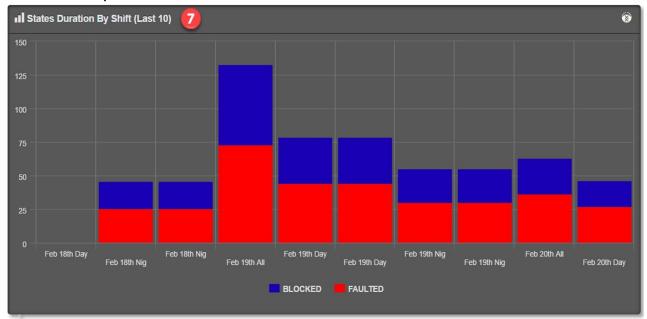
Cycle Status Graph: Visualize show positively or negatively cycle time is trending.



**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.

II Faults Most Re	cent	⊗ \$
Path	Time	
S050LFX1	11/18/2015 10:20:25 pm	
S050LFX1	11/18/2015 9:32:50 pm	
S050LFX1	11/18/2015 5:55:54 pm	
S050LFX1	11/18/2015 2:17:29 pm	
S050LFX1	11/18/2015 8:48:43 am	

Hotspots Panel: Visualizes which objects have accumulated the most faults in a predetermined time-frame.

Top Hotspots Last 24 hours		
Path	Accumulation	Count
Simulations\Test Area\Test Line 2 Copy\Sta 1\S01 Fixture\ROBOT LOAD\ROBOT LOAD COMPLETE	06:51	5

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## **User Dashboard 3.6**



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- User Dashboard Template Menu
- Day/Shift Filter
- Filter
- <u>Create New Dashboard</u>
- Import Dashboard
- <u>Template Actions</u>
- User Dashboard Menu

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.



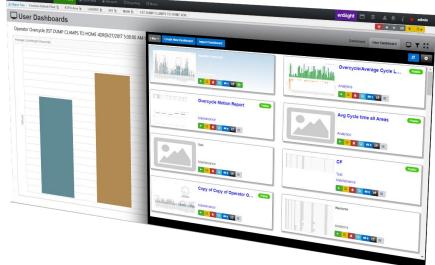
## User Dashboard Template Menu



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.



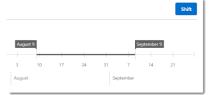


## Day/Shift Filter



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.

Dashboard I Cycle View & Hotspots I Reporting Ø Notes el the Object Tree Envision Default Plant the ADTPO Area the ADDER the Soft the MAIN the ADTPO Area the ADDER the Soft the ADDER t	
User Dashboards	Dashboard User Dashboard 🖵 🕇 💈
Day/Shift Filter (1st Shift 09/19/2017 - 1st Shift 09/24/2017)	1st Shift 09/24/2017
Ist Shift 08/26/2017         2nd Shift 08/29/2017         3rd Shift 09/01/2017         1st Shift 09/08/2017         3rd Shift 09/11/2017         1st Shift 09/08/2017         3rd Shift 09/11/2017	
Optional Filters	Realtime(Current Shift) Apply
1st Shift 09/19/2017         1st Shift 09/24/2           /15/2017         /15/2017           3rd Shift 09/18/2017         3rd Shift 09/21/2017	+++



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.

		Classification
st Shift nd Shift rd Shift	<ul> <li>Good</li> <li>Watch</li> <li>Warning</li> <li>✓ Fault</li> </ul>	<ul> <li>↓ Unknown Bodyside Supervisor Clamps</li> <li>▼ COUNTPOINT</li> </ul>







Create New Dashboard

Import Dashboard

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

Show All My Dashboards

#### Categories

Maintenance Analytics Production System Other





## Create New Dashboard (User Dashboard 3.6)

# **Create New Dashboard**

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,

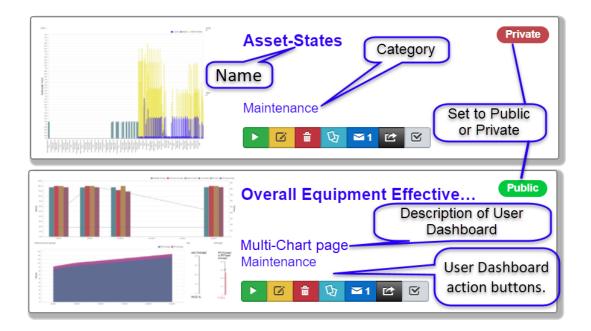
Production, System, or Other) and a check box that will allow you to save it as Public or Private. Selecting Private will not allow you to edit the dashboard unless you are logged in as the creator of it.

After the New Dashboard Setup screen is completed, select the "  $\sspace{\sspace{2}}$ 

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.

Live		
Description		
dsfsdfds or a brief descri a similar dashboard.	ption of the dashboard	d, to distinguish from
Instructions Any special instructions to the user to	of nutsting report	Uncheck Private checkbox to make the dashboard Public.
Category*	Select a Category: Maintenance Analytics Production	Proster

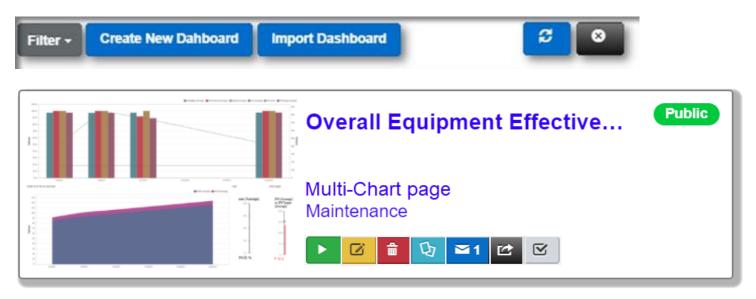


## Import Dashboard (User Dashboard 3.6)

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.



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In this example, the Live Test was exported and was placed in the Download folder of the CPU it was exported from.

Organize • New folder							C
This PC	Name	Date	Туре	Size	Tags		
Tibraries	🕵 DriverNavigator_Setup (	8/23/2016 10:23 AM	Application	2,158 K	в		
🗳 Network	Live Test	12/13/2016 10:38 AM	XML Document	9 Ki	8		
1 Audio	🔹 wisetup-web	8/30/2016 12:18 PM	Application	1,211 K	B		
IN PROCESS	Attachments_2016620	6/20/2016 7:36 AM	Compressed (zipped)	1,744 K	В		
1. END USER N	EnvisionDeployResult	5/18/2016 2:05 PM	Compressed (zipped)	425 K	в		
2. TRAINING GI	a20	7/7/2016 8:16 AM	ENX File	9 K	В		
3. ADMIN MAN	AREA Forward	7/7/2016 8:25 AM	ENX File	10 K	В		
	M4VVJE6Q40163T4L-v1	12/13/2016 10:38 AM	File	50 K	в		
3. ADMIN MAN     4. Output Softv     5. UNSORTED F	01_OBLVN_Light_Table	8/15/2016 8:17 AM	JPG File	323 K	В		
-							
File nam	MP.				~ All Fi	los	

## Template Actions (User Dashboard 3.6)

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.

• <u>Run</u> • <u>Edit</u>	Overall Equipment Effective	Public
• <u>Delete</u>		
• <u>Copy</u>		
• <u>Subscribe</u>	Multi-Chart page	
• Export	Maintenance	
• <u>Default</u>	Waintenance:	
1 ×		

#### Run

а==т

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.



#### Сору

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

## **0**

#### 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

2

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 I move that to the Day/Shift you want to view. When everything is correctly selected, then click the "**Apply**" button.

bject Tree Sim	VISION Deshboard all Cycle Vine alatons & Test Area & Test Line Z Copy &	& Hottoots ⊟ Reporting Statik: S01 Plature k	12 Notes			enSi	ight 🗄	8 A 4 i	e admin
User I	Dashboards						Daahbean	User Dashboar	
Day/Shift F	Filter (Night 12/8/16 - Day 12/14/16)								Month
			Nuger 12/0/10		Day 12/14/18				
64p 11/95/14	Ngec113010 5 <sub>40</sub> 109016 High 101016	Day 12:1716 High: CAV16	0.6.04%	Ngla (2994 - Day (2937	a kije strane	34y 12/12/16 - Kig(4-12/00/1	0	Nige (2021)	Day 12/26/16
it.									
Optional Filturs									_
2							Ih Real	me(Cuirect Matt)	Apply
dettaño	Night 12/8/16	-				Day 12/14/	16		
			-	++++	-	1.1.	1.1.	-	
	1,1,1,1			+ + + +	-	1, 1,	1, 1,	H.	
	Day 12/8/16	Night 12/	9/16	Day 12/1	3/16	Night 12/14	<b>   </b>	H.	

#### **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.

y/Shift Filter			Mon
otional Filters Shift	Shift Crew	Status	Classification
st 3 st 4 le	24 Test 4	Good Watch Warning Fault	Unknown null 11111111 Aaron's 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*).

SEET enVision Obstant drawne annual Tearing Draw	anSight 3 🗸 🗸 👘 🚥
Name Taxe Encounters & New Area & Sections 2 (April 8 - Barting April 8 - Barting April 8 - Apri	<b>A</b> B <b>B A C</b>
User Dashboards	Landmann Unar Justiciaan 🖸 1
Live Test	0
Part 1	
	🖀 Great 🔳 Operang 🗮 Manera
14	
14	
14	
18	
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OCT JPR (MARK JPR TOWER)	and the control of



In the upper right-hand corner above the display area, is an **Export icon**. This is it is 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 un check the show the 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.

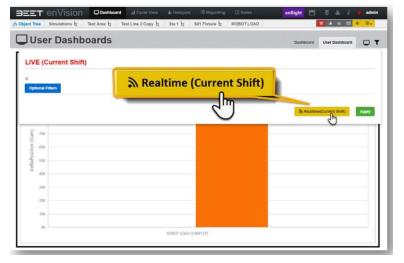
File Name:	Live Test	
Show Title:		
Title:	Live Test	
Filter State:	None	
Image Format:	PNG	•
Resolution (dpi):	96	

From here, check over your changes into the export to image window. If

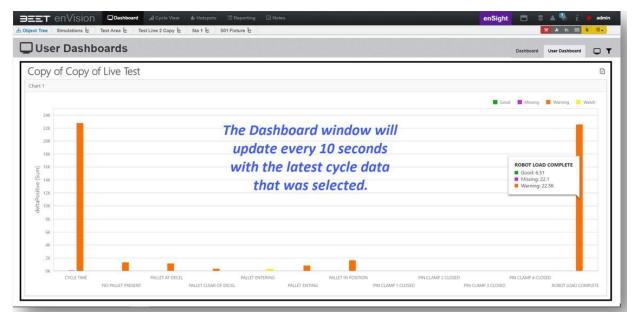
everything is satisfactory then **click Export**. If not, you can **cancel** or click the **Reset** button. The reset button will reset all the parameters and allow you to input them again.

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#### 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)



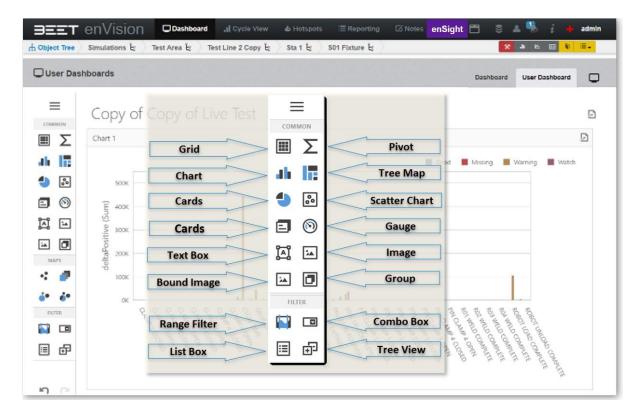
Next to the Run button is the "**Edit**" button. The

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

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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.





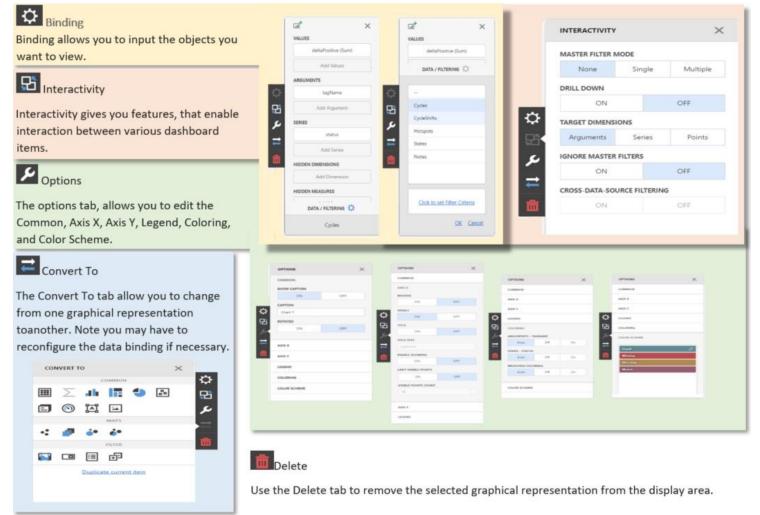
After the installation of any graph will require you to link it to the correct data source. Click on any of the graphs in the display area and a Setting Widget will reveal to the left of the selected graph. You will use this widget to Bind the data to the selected graph. It can also be used to edit or change the properties of the selected graph.

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#### 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 allows 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.

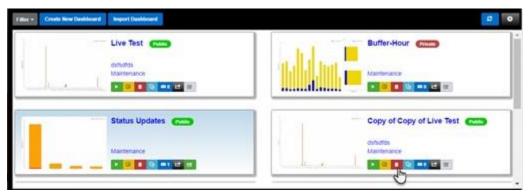




#### **Delete (Template Actions)**

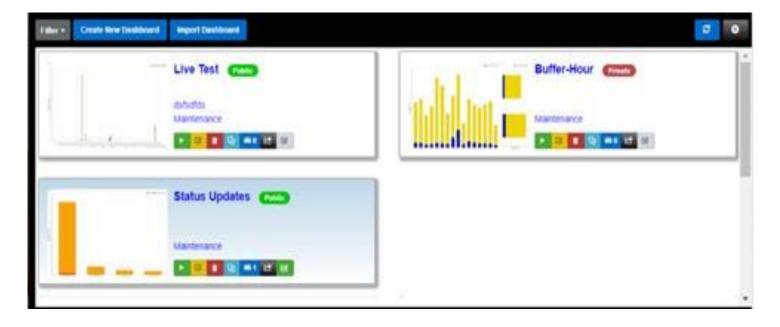


The **Delete** button is used to Delete the template from the Selection Panel. Simply select the red Delete button and the Dashboard Report and the Template on the selection page will be removed.



**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 (<u>Live Test</u>). When the Monitor button is selected, it will show a duplicate template labeled as <u>Copy of Live Test</u> in the Template selection area.

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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.

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#### 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 Rage (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.

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	envision 5.0 - Co	
Feature	Dashboard/Report Subscription	Conditional Notification
Trigger Point	Time based Schedule	When condition based on measure and time window is satisfied. Available measures are: Overycle - 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

## enVision 3.6 - Comparison Chart



### **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.

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#### **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 3.6)

#### DASHBOARD MENU

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.

- <u>Save</u>
- Data Sources
- <u>Create Data Source</u>
- Filter Editor
- <u>Creating a Calculated Field</u>
- Add Calculated Field
- Parameters

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## 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.

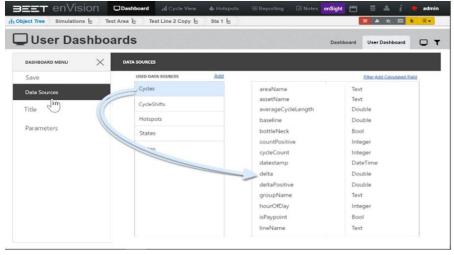


## Data Sources (UDM)

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 <u>Create Data Source</u> link on the top right hand side of the choices.



+

Cycles	
CycleShifts	
Hotspots	
States	
Notes	
OEE	
RawCycles	



#### 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: Cre ate a Query or Select a Stored Procedure.

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Choose a data connection.			
LocalSqlServer			
DefaultConnection			
Cancel		Next	





#### 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 2<sup>nd</sup> 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**.

Add group	× And +	
Add condition	areaName Equals	Enter a vitilize 👻



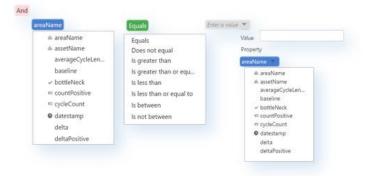
Add group will add another And sign below and right of the top Filter. The icon will have a red X on the left, and a green + sign on the right. Clicking the red X will delete the added group.



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* **6**.

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.

averageCycleLength Is greater than totalLength	And			
		averageCycleLength	Is greater than	totalLength *





## 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.

DASHBOARD MENU 🗙	TITLE	
Save	TEXT	PREVIEW
Data Sources	Copy of Copy of Live Test	Copy of Copy of Live Test
Title	Visible	
Parameters	ALIGMENT	
	Left	
	Center	
	Include Master Filter	
	IMAGE	
	(none)	

#### 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.

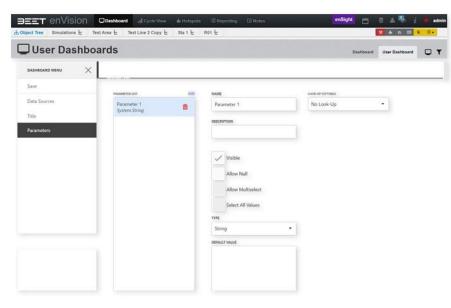
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## Parameters (UDM)



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.

#### Туре

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.



# Hotspots 3.6

- <u>Navigating</u>
- Hotspots Option
- Hotspot Views
- <u>Timeline</u>
- <u>Count/Accumulation</u>
- Model Breakdown
- Pallet Breakdown
- Pivot Hotspots

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## **Overview**

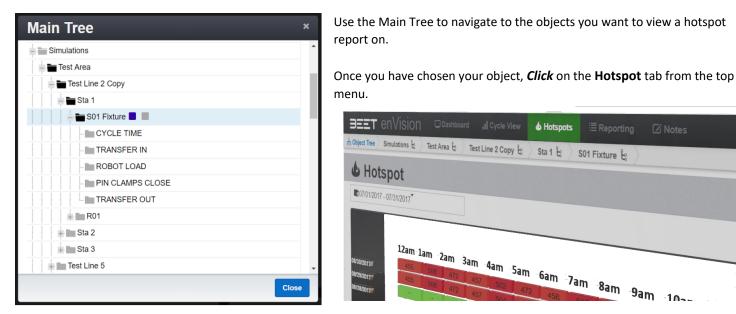


The Hotspot module displays the list of motions that accumulate the variances over a period. It also shows the number of occurrences each day that contributed to the accumulated variances. enVision only uses non-faulted cycles for the hotspots calculation. This module shows the accumulated effects of 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.

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09/28/2017	•	•	•	•	•	-	•	-	-	-	•	•	-	•	-	-	-	-	-	•	-	-	-	•
09/27/2017	697	624	711	393	-	741	475	-	-	-	•	•	-	•	•	-	•	-	-	•	•	-	-	•
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09/25/2017	696	334	•	•	26	724	751	754	664	680	683	657	301	738	803	759	743	542	601	745	157	797	732	713
09/24/2017	662	426	32	426	659	•	•	•	-	-	•	•	42	742	731	813	517	738	772	383	820	597	679	600
09/23/2017	•	-	-	18	36	566	632	766	667	644	710	544	482	700	711	543	755	650	765	752	497	590	802	761
09/22/2017	455	123	537	652	519	721	750	647	762	748	662	741	373	273	243	85	-	-	-	-	-	-	-	-
09/21/2017	525	290	543	605	456	668	737	583	338	•	61	285	548	620	519	543	418	501	704	544	555	540	686	641



## **Navigating 3.6**



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

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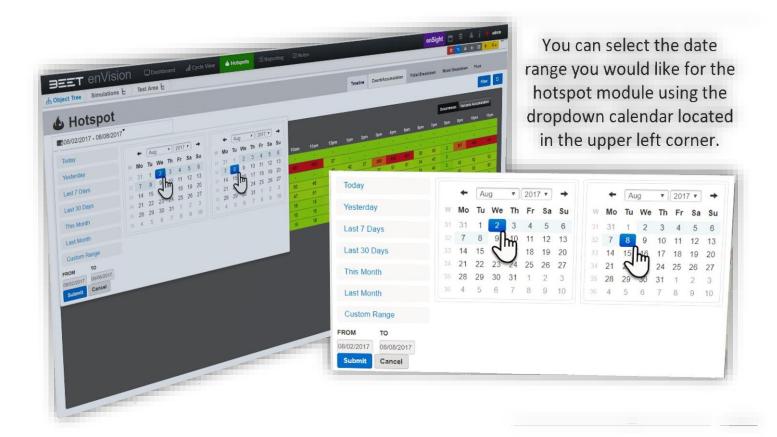
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## **Hotspots Option 3.6**

## Set Date Range

BEET

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

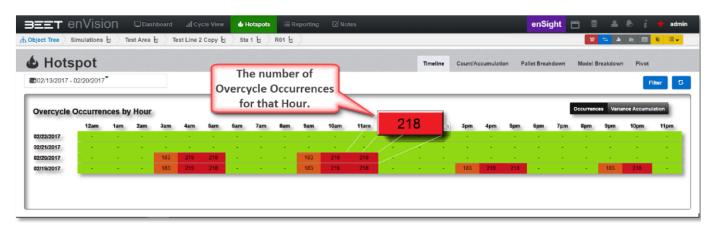
Use the **Variance Accumulation** tab located in the right corner of the module for the variance view. In the Variance view, the module lets you see the amount of over cycle variance for each hour (in Minutes) of your object cycle.

Hots		•			amo					nce for each object cycle.	hour (ir												Filter
		Accur	outatio	n hv H	iour ()	dinute	c)	2	<u>_</u>											Occurren	ces Varia	ince Accum	viation
Overcycle \	anance	Accui	PUIAUU		ion li	anna an	-1				1.0									-	_		_
Overcycle \	12am	iam	2am	Jam (	4am	Sam	6am	7am	8am	22.99	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	٦,	ן 11pm
Overcycle \	12am	fam	2am	3am	4am	Sam .	6am	7am	8am	22.99	11am	12pm	1pm -	2pm	3pm	4pm	őpm	6pm	7pm	8pm	Spm -	٢	) 11pm
-	12am	fam -	2am -	Jam	4am -	Sam -	6am -	7am -	Sam	22.99	11am	12pm -	1pm -	2pm -	3pm -	4pm -	Spm -	6pm -	7pm -	8pm -	9pm -	ح^ل	) 11pm
02/22/2017	12am	fam -	2am -	Jam	4am	5am -	6am	7am 	8am	22.99 2299 <b>30.55</b>	11am - -	12pm - -	1pm 	2pm - - -	3pm - - -	4pm - -	5pm - -	6pm - -	7pm - -	8pm - -	9pm 	<del>ر</del> ا ا	) 11pm



## 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.



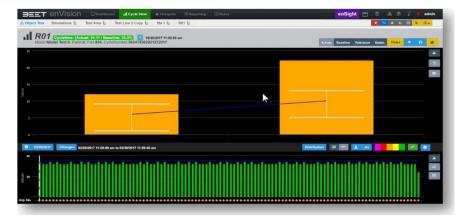
By selecting the Hour **218** on the figure above, this will display a detailed table revealing a comprehensive breakdown of processes that contributed to the accumulated over cycle time for that hour selected. Hovering over the bar will display the data for your selection.

*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 3.6**

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



- <u>Timeline</u>
- <u>Count/Accumulation</u>
- Skid (Pallet) Breadown
- Model Breakdown
- <u>Pivot</u>

### Filter



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

		_
Show only bottlen	ecks 🗇	
Show only where CYCLETIME is over	er 🖯	
Shift(s)	test 2 test Test-OR day Afternoon Midnights	1
Shift Label(s)	Crew A Shift 1 (3hr) Crew B Crew C Weekend	
Classification(s)	dddssssdd-555555 TestA2 TestB2	i
	Apply Schedule Factor TestC2 COUNTPOINT	
Reset	Apply C	lose

# Export to Excel

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



## Timeline 3.6

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

Test Line 2 C		🌢 Hotsp Sta 1 ໍ່ະ		E Reporti Fixture と		Notes									e	nSight	<b>194</b>	• •	
					•					0.000000						Juli		بر <mark>ک</mark> ک	<pre>     i + ac     i =     i =     i =     i =     i =     i =     i  i     i</pre>
											Time	line (	Count/Accu	mulation	Pallet E	Breakdown		l Breakdowr	
r																			Filter
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138 217	218									-pin	Jhiu	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm
145 <b>21</b> 9	219						145	1											
														217	213				



## Count/Accumulation 3.6

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.

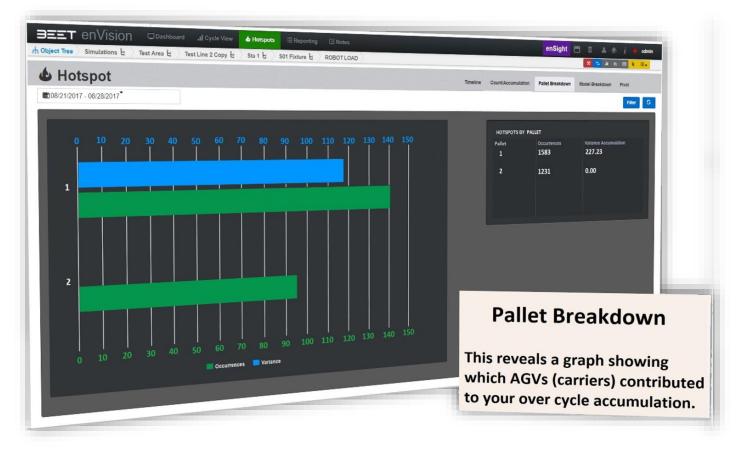
BEET enVision □Dashboard						i 🕂 adı
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Hotspot		Timeline	Count/Accumulation	Pallet Breakdown	Model Breakdown	Pivot
■08/01/2018 - 08/31/2018						Filter
Variance Accumulation in minutes	s / Overcycle Occurrer	nces 08/01/2018	8 to 08/31/2018	Variance	Occurr	➡Export to Excel
Тад	s / Overcycle Occurrer	nces 08/01/2018	3 to 08/31/2018	Variance	Occurre 21244	➡Export to Excel
	s / Overcycle Occurrer	nces 08/01/2018	3 to 08/31/2018	Variance 09:10 00:00	Occurre 21244 1	➡Export to Excel
Tag TRANSFER OUT/PALLET CLEAR OF DECEL	s / Overcycle Occurrer	nces 08/01/2018	3 to 08/31/2018	09:10		➡Export to Excel





### Pallet Breakdown 3.6

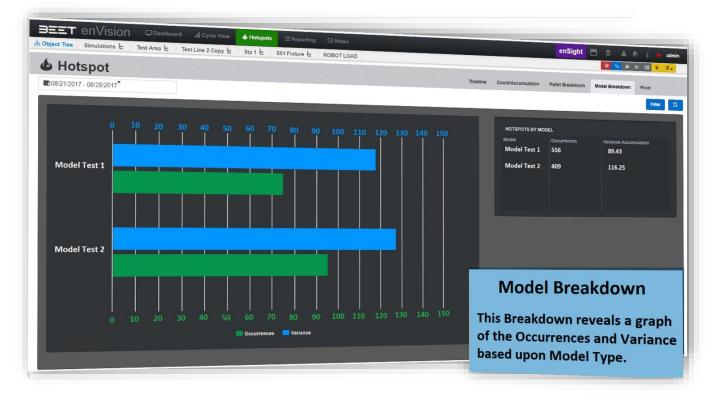
This reveals a graph showing which AGVs (carriers) contributed to your over cycle accumulation.





## Model Breakdown 3.6

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.

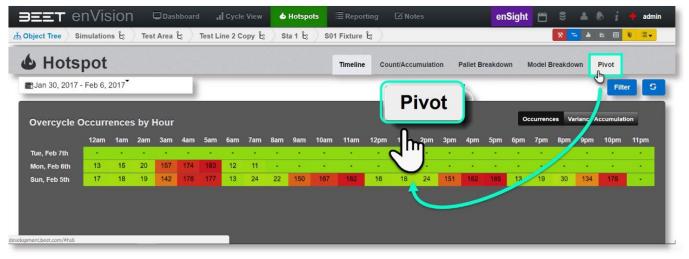




#### **Pivot - Hotspots**



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.

	<b>b</b> Hotspots	≣ Reporting   ☑ Notes	enSight 🛗 🛢 🔺 🕭 🧯 🛊 admin
${thind} { m Object \ Tree}$ Simulations දී $ ightarrow$ Test Area දී $ ightarrow$ Test Line 2 Copy දි	Field Chooser	×	🛠 🐂 🛦 🗠 🗐 🌒 🗐 🗸
<b>b</b> Hotspot	III Fields	III Row Fields	Pallet Breakdown Model Breakdown Pivot
∰Jan 30, 2017 - Feb 6, 2017 <sup>▼</sup>	Area Asset Classification Date		Filter
Delta Drop Column Fields Here	Day Day (Sum) Day Hour (Sum) Day Of Week ✓ Delta	⊞ Column Fields	
Grand Total	Group	Σ Data Fields	23893.40
		Delta	
	_		1



All Fields	Row Fields
Area	
Asset	
Classification	
Date	
Day Day (Sum)	Column Fields
Day Hour (Sum)	
Day Of Week	
✓ Delta	
Group	
Filter Fields	Σ Data Fields
riter rields	Z Data Fields
	Delta

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

BEET 6	EnVision Dashboard al Cycle View	Hotspots EReporting CNot	les		enSight 🗂 🗟 🌲 🗞 👔 🖷 admin
nh Object Tree	Simulations 🛓 🛛 Test Area 🛓 👋 Test Line 2 Copy 🛓	Field Chooser		×	🗙 👟 A E 🖬 👌 💷
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Jan 30, 2017	7 - Feb 6, 2017	Area	Group	17	Filter
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Group 1 T PIN CLAMPS CLOSE	* 0.00	Day Day (Sum) Day Hour (Sum)	EE Column Fields	17	55.77
ROBOT LOAD TRANSFER IN TRANSFER	46.58 0.00 0.00	Day Of Week	Shift (Sum)	17	11118.31 961.47 772.57
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BEET	enVision	Dashboar	rd .I Cycle View	👍 Hotspots	Rep	orting 🖾 Notes	en	Sight	- -	4.8		admin
n Object Tree	Simulations 🖁	Test Area 🖁	Test Line 2 Copy 🔓	Sta 1 🔓	S01 Fixtur	• £ )			* *			≣.
& Hot	spot				Timeline	Count/Accumulation	Pallet Breakdown	Model	Breakdowr	Pivo	t	
🗂 Jan 30, 20	17 - Feb 6, 2017									I	Filter	5
Delta	Asset ↑♥	Shift (Sum) 1 🖤	Station 1 🖤								1	p 🖸
Group 1	▼ S01 Fixture										6	- <u>n - n</u>
Group				▶ Day	▶ Day ▶ Night				Night			
PIN CLAMPS CLOSE						276.62				55.77		
ROBOT LOAD			46.58	3	8400.32			11118.31				11118.31
TRANSFER IN			0.00	)	1299.98			961.47				961.47
TRANSFER OUT			0.00	0		961.7	В					772.57



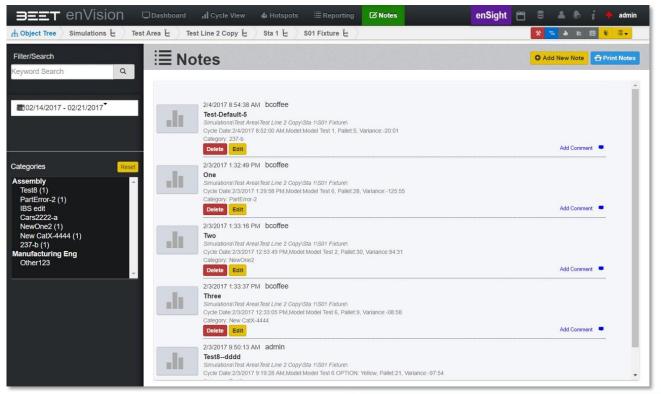


# enVision Notes 3.6



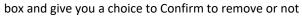
### **Overview**

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





Confirm	
Are you sure wa	nt to delete?
Yes	No

2/4/2017 8:54:38 AM bcoffee Test-Default Corrected to read Good Simulations/Test Areal 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 Add Comment

#### the author of the note.

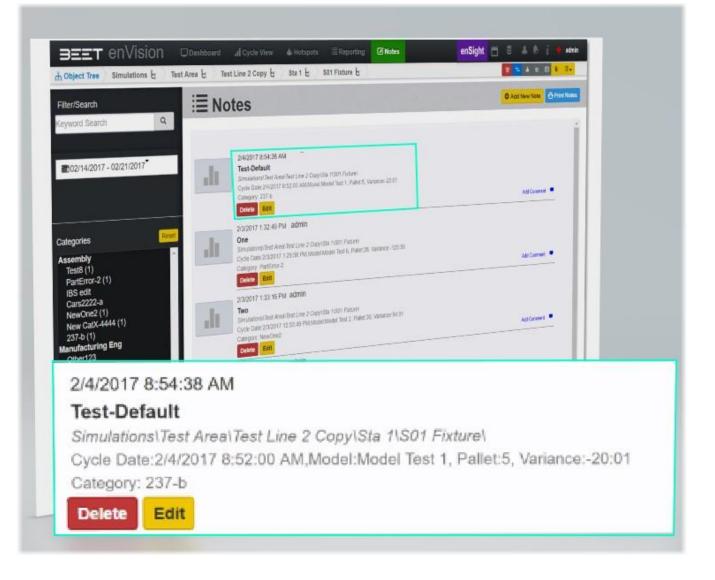
Select the Edit button to re-open the Update Note window. From here, make any correction in Category and in the Note section. When the Note is finished, click the Save button to complete the editing.



Selecting the Delete button will open a warning remove the Note permanently.

# BEET









# Notes in Cycle View 3.6



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 3.6**

#### 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

elect Common Notes	Enter Cus	stom Note		View Notes
AAAAAA Category: Test8				
n-237-edit1002 Category: IBS edit				-11
sadsadsadsa Category: Cars2222-a				
Test 001 ASSM Category: Test8		-		
Test 002 MFG Category: Other123		Test 002 MFG		
Test ATTC Category: PartError-2		Category: Oth	ner1.	23
Test ATTC1 Category: Test8				
Test ATTC2 Category: Other123				
Test BC Category: Test8			_	O Close
			Save	Close



#### Enter Custom Note 3.6

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**.

Select Comr	non Notes	Enter Custom Note	View Notes
Category	Other123	▼	
Comment	Assembly Test8 PartErro IBS edit Cars222 NewOne New Ca	r-14 123 2-a 33	<b>U</b>
	237-b Manufacti		Save Save

#### View Notes 3.6



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.

Су	cle Not	es	08:33 am admin Noted by selecting the yellow Note button in the cycle view s note will leave an icon that will link to this particular cycle.	×	
S	elect Com	mon Notes	Enter Custom No	ote	View Notes
Ş	Fault	cycle Notec	by selecting the		-
					S Close





# Scheduling 3.6



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.

- <u>Navigating</u>
- Scheduling Configuration
- Non-Production Event
- Extend Shifts
- <u>Deleting Shifts</u>

# **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.

REA Forward	📛 S	ched	dulin	g BEE	T Trainin	g Area		MTD Targets
EET Training Area	Febr	uary 201	7 1000-10			<	month >	Start by selecting a date
	SUN	MON	TUE	WED	THU	FRI	SAT	on the calendar. Once selected, the area to the
	29	30	21.	1	2	3	4	right of the calendar will
Click Here!	5	°_Ihr	7	8	2	10	11	reveal a Scheduling Configuration Table.
	12	2	14	15	16	17	18	
	19	20	21	22	23	24	25	
	26	27	28	1	2	3	4	
	5	6	7	8	9	10	31	



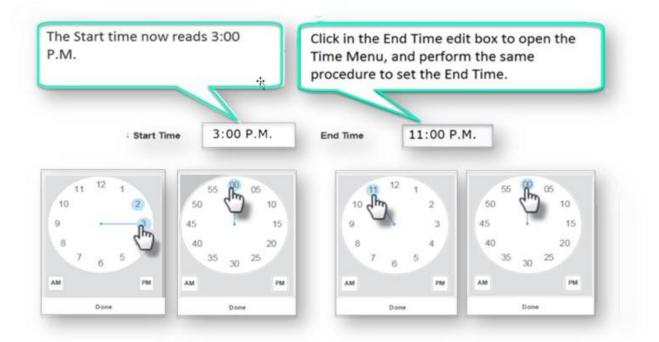
Enter the name of the Shift (**Red**). Some shifts have 2 or more other shifts so you can enter which shift it is by labeling them Crew A and B or 1, 2, and 3. Enter the Start Time for the shift by *Clicking* inside the edit box. This will open a time clock menu. *Click* on the Hour to set the Hour, then *Click* on the minutes. Select A.M. or P.M., then *Click* Save when you are done.

Februa	ry 2017 -	10.			<	and 3	Create Shift (Mon Febr	and the	
- 81.00	-	TVE	NED	THU	191	547	Greate Gritt (Mon Pepr	ward of	
19	30	31	1	2	3	4	Name		
5		7	8	9	10	11	Laber Dom A, O	ww.0,.em.)	
12	13 18	14	15	16	17	18	Bart Time	End Time	()
19 \	20	21	22	23	24	25			
26	27	28	1	2	3	4.	Not Production Event Add Non Production Event	Start Tona	Knil Time
	4	10	1		10	11.	Parried Schedule 2		
_			-		-	_	Cycle Speed Factor	i	
							Report State U		
							and a second sec		

Februa	ry 2017 🗠	100		( month >		Shift in th	
SUN	MON		TUE WED TH		Create Shift (Mon February	6)	Enter which shift is
29	30	31		e Start Time 4 to open a	Name	1	designated for this date.
5	6 N	7		ing menu.	Label (Grow A, Grow B	l, elc.)	
12	13 15	14	This will reveal the	Hour Clock. Click on	Start Time	End Time	
19	20	21		Once done, then the uill appear. Set it			
26	27	28		en click AM or PM.	Non Production Event Add Non-Production Event	Start Time	End Time
5	6	7	11 12 1	55 60 05	Planned Schedule		
			10 2 9 • 3	50 10 45 15	Cycle Speed Factor i		
			8 4 7 6 5	40 20 35 30 25	Repeat Shift 🗐		
			-	A0 70	Save		
			Done	Date			



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.

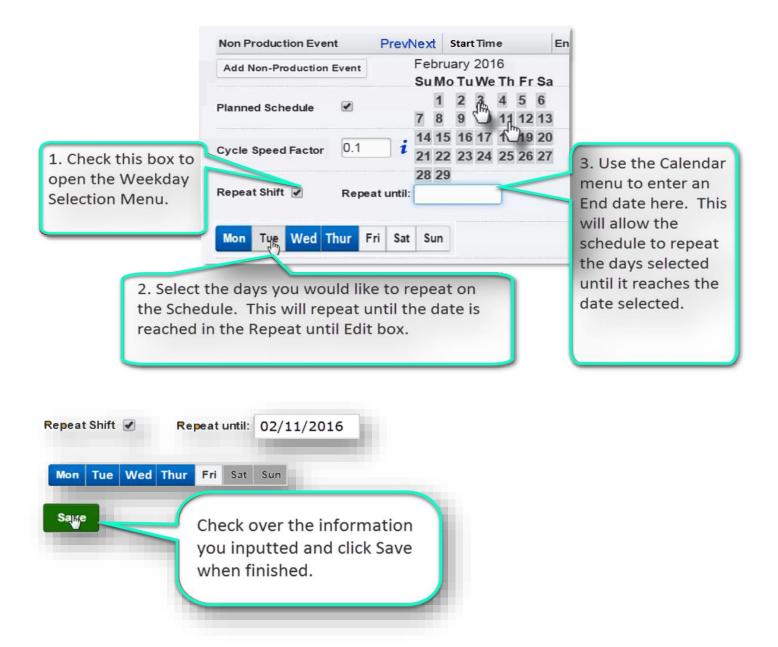
Enter an event in the Non-Production Event Box. This is									
used for a scheduled Downtime (aka Lunch, Shift change, or PM).	Start Time Shift Lenth: 9 h	03:00 PM	tes	End Time 12			2:00 AM		
Click on a Start Time and use the Time Clock Menu to set the Start and End Time. The total time	Non Production	n Event		Start Time	End				
	Shift Cha	l≩ nge		12:00	12:30	30 min	0		
	Add Non-Production Event Check off the Planned Schedule butto								ule button
will show next to it. To remove the	Planned Sched	ule 🗹 🕈	_	<	1			N 44100-044186040	
To remove the Event, click the Delete button.	Cycle Speed Fe	octor 0.1	i	-	-				
	Repeat Shift				Se	t the Cyc	le Speed F	actor.	
						: Shift Ch selection	eckbox to menu.	T	

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.

Februa	ry 2017 🖂	n O			<	month >	Edit Red sh	ift (Mon February	(6)		
SUN	MON	TUE	WED	THU	FRI	SAT	Delete Shift	Delete All Shifts (Futu	·•)		
<u>9</u>	30	31	1	2	3	4	Name	Red			
i	6	7	8	9	10	11	Label	Crew A			
12	Red 13	Red 14	West 15	Red 16	17	18	Start Time	3:00 PM	End Time	11:00 PM	1
19	20	11ad 21	11 and 22	Red 23	24	25	Shift Lenth: 0 ho	urs & 0 minutes			
26	27	28	1	2	3	4	Non Production I Add Non Product		Start Time	End Time	
5	6	7	8	0	10	11	Planned Schedul				
							Cycle Speed Fact	tor 0 i			
							Repeat Shift 🗐				
							Save				

### **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 **Ext end until**: edit box. Input the data you would like to extend the shifts until. Select the days, then **Click Save**.

SUN	MON	TUE	WED	THU	FRI	SAT	Edit Red shi	ft (Tue February 6)		
9	30	31	1	2	3	4	Delete Shift	Delete All Shifts (Falses)		
							Name	Red		
i:	6	7	8	9	10	11		Kotos:		
	Ref	Red	Red	Red			Label	Crew A		
2	13	14 Red	15	16	17	18	Start Time	3:00 P.M.	End Time	11:00 P.M.
9	20	21	22	23	24	25	SNR Lenth: 6 Jeau	a & Q inimites		
5.	Ret	Red	Red		200		No Production E		Start Line	End Time
6	21	28		12 7	The calend	arnow	Add Non-Product			porte contra
					shows the	extended				
	6	7	1.0	9	shifts after	you click	Planned Schwohde	*		
					Save.		Cycle Speed Fact	a 0.2 i		
-					100	1997 B. 1978 B. 1987	Apply to future sh	~ *	Apply to future shift	s 12
								1. C.		
10000	fter selecti							and the second se		
re	veal. Appl	y to futu	re shift's o	heck bo	(54)		Shift Extends to 2	12/2016 Extend 2	Shift Extends to 2/17	7/2016 Extend 🗷
re W	veal. Appl ill appear.	ly to futu Check off	re shift's of the Exten	check bo d buttor	n to 🦵		Shift Extends to 2	12:2016 Extend		
re w	veal. Appl ill appear. ben an Exte	ly to futu Check off and until:	re shift's of the Exten edit box.	check bo d buttor Input th	n to		Shift Extends to 2	12:2016 Eatend	Shift Extends to 2/17 Extend until: 02/18/	2016 Per-heat
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re W Oj da	veal. Appl ill appear. oen an Exte ata you wo	ly to futu Check off and until: uld like to	re shift's of the Exten edit box. extend the	check bo d buttor Input th he shifts	n to	Extend ch date and	appear under	the ut the n click	Extend until: 02/18/	2016 Pertuary 2016 Stable Tel Vier In Fr 1 T 2 3 4 5 1 7 8 9 12 111 22 Fr 1 1 2 3 12 12 12



## **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.

	ry 2017 🔤	ay O			<	month >	Edit Red shift (Mon February 6)
SUN	MON	TUE	WED	THU	FRI	SAT	Delete Shift Delete All Shifts (Future)
29.	30	31	1	2	3	4	
5	6	7	8	9	10	11	Name Red C
	Ited or	-	Red	Electron and			Label Crew A
12	13	14	15	16	17	18	
	Hard and	Hed	Red	Red			Start Time 02.55 PM End Time 08.55 PM
9	20	21	22	23	24	25	Shift Lenth: 6 hours & 0 minutes Vou can Delete A
	Red	Red	Red				Non Production Event Shifts (Future) b
26	27	28	1	2	3	4	Add Non-Production Event Clicking on a shift
	0		1	9	10	11	Planned Schedule 🛞 the calendar, the
	To De	lete a sl	hift, click	on the			click this button.
	shift r	name or	the cale	endar, ti	ne		Cycle Speed Factor 0.2 <i>i</i> future shifts will deleted.
	211117.1						

Edit Red shift (Mon February 6	
Delete Shift Delete All Shifts (Future	
Name Red	
Label Crew A	
Start Time 02.55 PM	End Time 08 55 PM
Shift Lenth: 6 hours & 0 minutes	You can Delete All
Non Production Event	Shifts (Future) by
Add Non-Production Event	clicking on a shift on
Planned Schedule 🛛	the calendar, then click this button. All
	future shifts will be
Cycle Speed Factor 02	deleted.

# BEET

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# Production Monitor 3.6

Overview



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.

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





# Location 3.6

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.

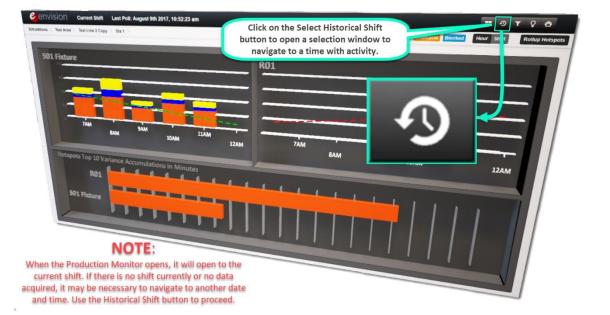
*Click* through the Objects string to get to the object desired. Once you have revealed the level desired, then *Click* on the **Save** button. This will open a new Browser.

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



#### Selections in the white areas will allow you to select a lower level w you to select a object, or drill down to an object el object Current Shift envision Objects Default Plant By clicking on the Simulations (in Click on the object you the white area), the object window will refresh with the Simulations in would like to open the Production Monitor to the dark area. The next level object will now be in the white area Click through the Objects string to get to the object desired. Once you have revealed the level desired, then Click on the Save button.

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.



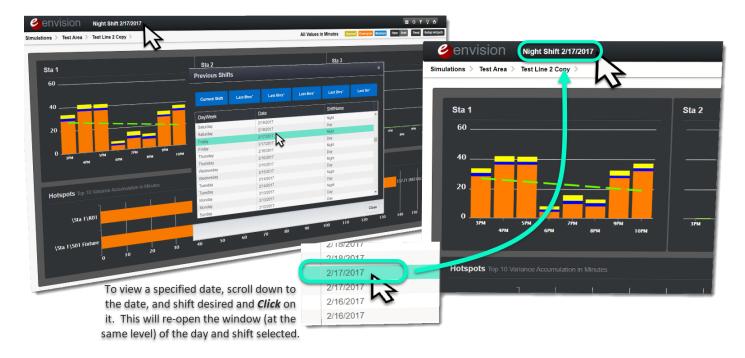




# Select Historical Shift 3.6



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 reopen 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.



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# Change Object 3.6



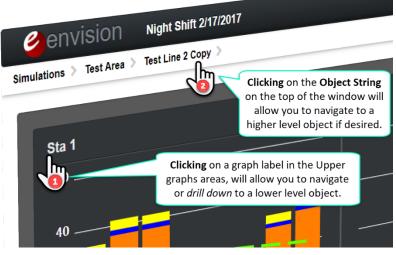
This displays a window to navigate up or down an Object Tree. *Click* on the Object in the white part of the window:

**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.



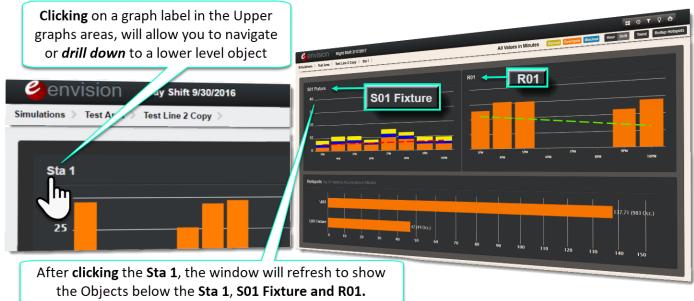
Objects Simulations > Test Area > Test Line 2 Copy > Sta 1 Sta 2 Sta 3 Close Save Click and select in the **Click and Select in the dark** white area to drill down area to navigate to a higher through the Object Tree level (e.g from a Line Object to your desired level. to an AREA or PLANT).

*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

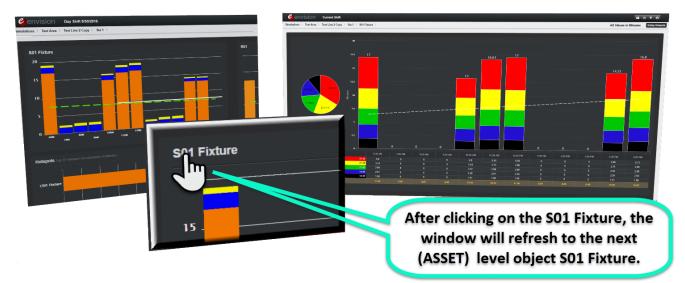
The titles on the upper portion of the Production monitors are active links to the next level below the current object being viewed.



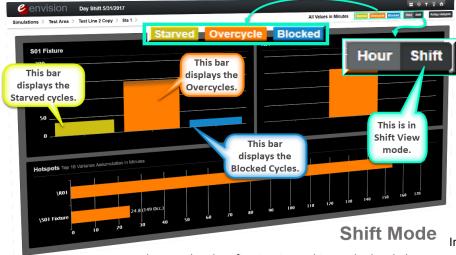


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Clicking on the S01 Fixture will reopen the window that selected level. You can drill down to the Asset level.



# Hour View and Shift View 3.6



### Hour View and Shift View

After selecting location from the Object Tree, a browser will open.

These examples show the Hour

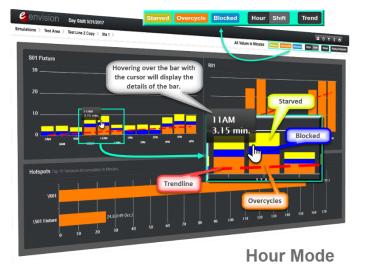
View and Shift view side by side. In the lower part of the browser is the lower graph in a Rollup Hotspots View ON and OFF.

The Shift View shows the bars separated by its 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 is used in stacked style bars.

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

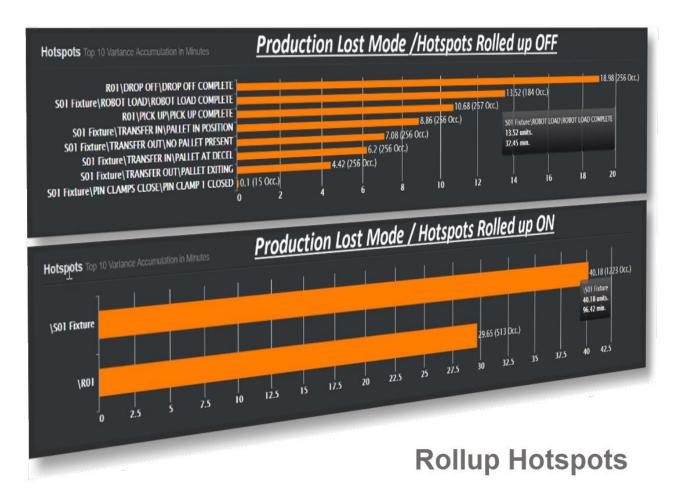




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# **Rollup Hotspots 3.6**

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





# Filters 3.6



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.

Filter Options ×
Classifications
Apply Schedule Factor
ATest
COUNTPOINT
dddssssdd-555555
FakeObject
Lefthand
Operator
Pin
Righthand
Robot
TestA
Top 10 Hotspot
Show Notes Icon Show Detail Icon
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envision current Shift Last Poll: August 16th	2018, 10:14:12 am	
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	Show Notes Lon Show Detail Lon	
	Save	

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).



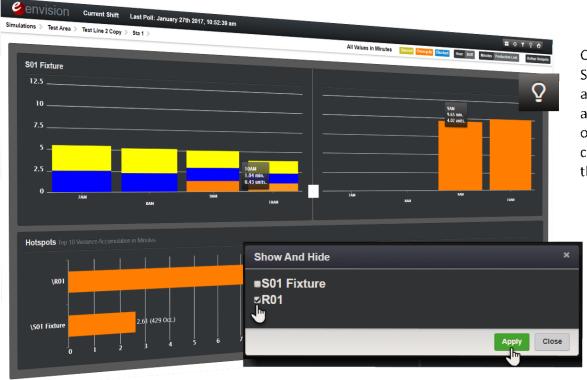




# Show and Hide

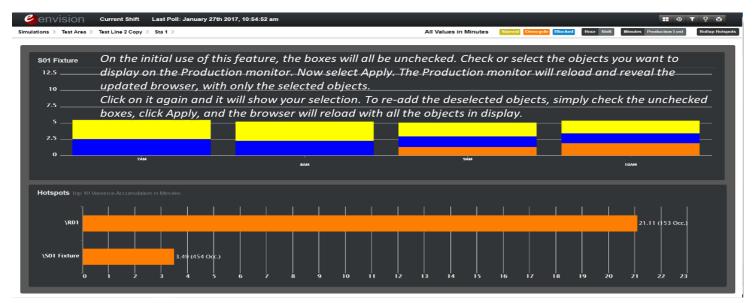


When using the Production Monitor, it is possible to remove objects from view. Click on the Show/Hide button and a window will appear with a list of the objects with check boxes next to them.



Click on the Show/Hide button and a window will appear with a list of the objects with checkboxes 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.



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## **Production Lost 3.6**

BEET

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.



#### **Production Lost**

S01 Fixture\ROBOT LOAD\ROBOT LOAD COMPLETE 13.52 units 32.45 min.

#### Minutes

S01 Fixture\ROBOT LOAD\ROBOT LOAD COMPLETE 32.45 min. 0.00 units



Buttons and Descriptions 3.6







#### **Reporting (Production Monitor) 3.6**



The Reporting feature of the Production Monitor 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.

Reporting		×
Reports	Reporting	<b>^</b>
Screen Print		
Over Cycle (Last 50000)		
Over Cycle (Selected Shift)	Screen Print	
Top Asset By Line		
Top Asset By Station	Over Cycle (Last 50000)	
Top 3 Asset		
Top 3 Pallet	Over Cycle (Selected Shift)	
	Top Asset By Line	
	Top Asset By Station	
	Top 3 Asset	
	Top 3 Pallet	
		•
		Close





#### Screen Print 3.6

BEET

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.

	Open Always open files of this type
	Show in folder
	Cancel
pmreport 12-7png	🎽 💁 pmreport 12-7png



#### Over Cycle (Last 50000) and Over Cycle (Selected Shift) 3.6

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.

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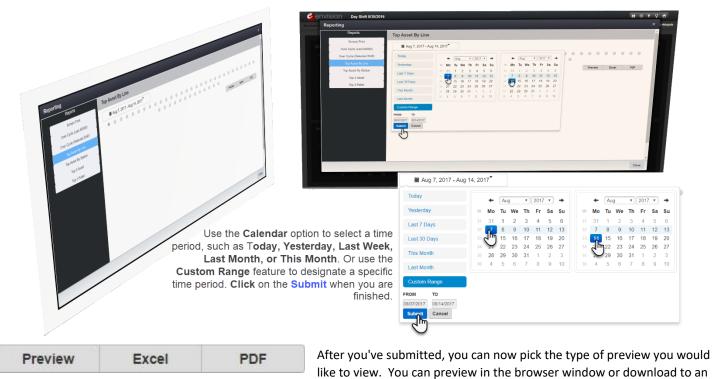
#### Top Assets by Line, Station, and Top 3 3.6

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.

Reporting		×
Reports	Top Asset By Line	-
Screen Print		
Over Cycle (Last 50000)	■ Aug 7, 2017 - Aug 14, 2017	
Over Cycle (Selected Shift)		0
Top Asset By Line		_
Top Asset By Station	Preview Excel PDF	
Top 3 Asset		
Top 3 Pallet		
		- 1
		-
		Close

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.



Excel sheet or PDF.



#### Top 3 Pallets (AVG) 3.6

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.

Reports	Top 3	Pallet												
Screen Print														
Over Cycle (Last 50000)	1	Oct 1, 201	15 - Oct 7,	2015						1	Preview	Excel	PD	
Over Cycle (Selected Shift)	1 _													
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	9		STA 31		n-STP Ente						0129950767			
	10		STA 30		n-S Release						31 29950765			
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# Reporting 3.6



#### **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.

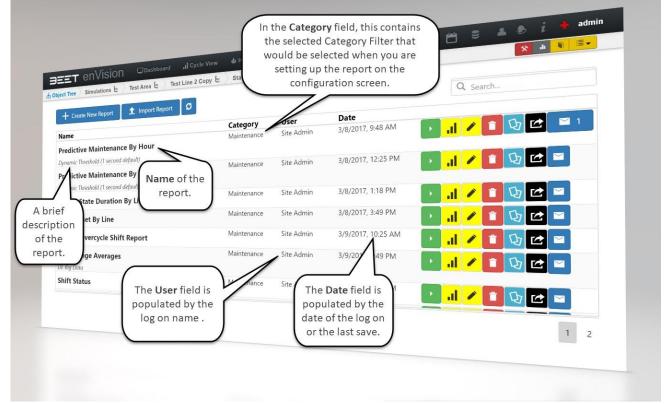
- Opening the Module (Reporting )
- Opening Dashboard Reports
- Run (Reporting)
- <u>Reports (Reporting )</u>
- Creating a New Report
- Report Editor Board
- Configuration Menu Panel
- Field List
  - o Field List
- <u>Properties</u>
  - Properties
  - ACTIONS
  - o <u>STYLES</u>
  - APPEARANCE
  - <u>FONT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

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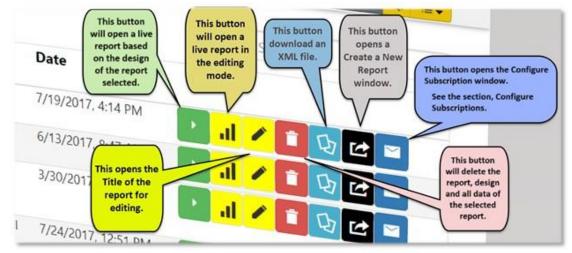
# **Opening the Module (Reporting 3.6)**

BEET

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* the **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.



Report Parameters			×
SelectDate Range*	Status (Optional) Good Watch Warning Fault Missing	Shift Crew (Optional) Crew A Shift 1 (3hr) Crew B Crew C	*
ITT     Ford KTP	Shift (Optional)	Weekend     Classification (Optional)	v
Brocks     Simulations     Test Area	test 2 test Test-OR day	Unknown null Aaron's Classification Apply Schedule Factor	
Test Line 2 Copy	Afternoon Midnights TEST2 t44	ATest COUNTPOINT dddssssdd-555555 FakeObject	
	<b>T</b> 55	✓ Lefthand	Ŧ
Reset		Save	Close





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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.

Report Parameters	
SelectDate Range*	
07/09/2018 to 07/13/2018	
Select Object*	
Simulations	
- Test Area	L
Test Line 2 Copy	L
📑 🚞 Sta 1	L
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- TRANSFER IN	L
- ROBOT LOAD	L
- PIN CLAMPS CLOSE	L
R01	

Report Parameters

SelectDate Range\*

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1	2	3	4	5	6	7	29	30	31	1	2	3	4
8	9	10	11	12	13	14	5	6	7	8	9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25
29	30	31	1	2	3	4	26	27	28	29	30	31	1

Once the date ranges are set, you can now navigate to the object of your desire, by using the **Object Tree** located below the **SelectDate 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.

	Shift Crew (Optional)				
*	Shift 1 (3hr) Crew B	*			
	Classification (Optional)				
	Apply Schedule Factor COUNTPOINT dddssssdd-555555 Lefthand Operator Pin Righthand				
		Crew A Shift 1 (3hr) Crew B Crew C Classification (Optional) Unknown Apply Schedule Factor COUNTPOINT dddssssdd-555555 Letthand Operator Pin			

22		Current	Page	> 88	10.	4	Close
Print Print Report Page	Save To Save To First File • Window • Page		int: 79 Next Page	Last Find Page Text	Parameters Panel	Document Map	
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	asset Name	1 S01 Fixture					
	cycle Count	S01 Fixture					
	asset Name	S01 Fixture					
	cycle Count	2					
	asset Name	S01 Fixture					
	cycle Count	1					
	asset Name	S01 Fixture				0	
	cycle Count	8					
	asset Name	S01 Fixture					
	cycle Count	10					
	asset Name	S01 Fixture					
	cycle Count	1					



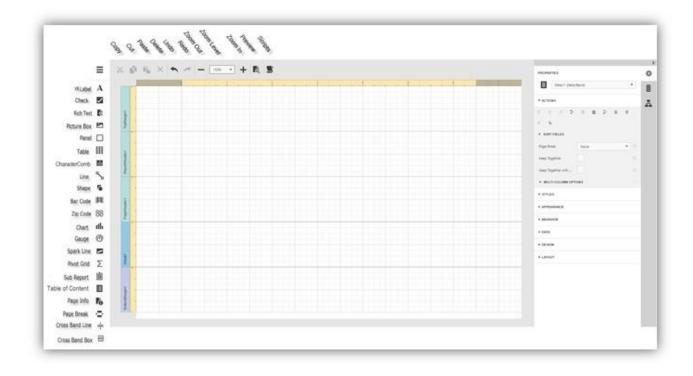
#### Creating a New Report

*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).

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Object Tree Simulations	ີ່ ¦ຮູ່ ) Test Area ເ <sub>ຊ</sub> ິ່ງ Test Line 2 Co	Create New Report		× × * * * * *
+ Create New Repor	t 🏦 Import Report 🛛 🗭	Name	Input the Name of the Report Here.	arch
Name Report 001	Description Pm testing	Description	Input a brief description about the report, that would differentiate from a similarly named report.	Check of this box to make the report Private.
Report 003	k here to open the eate New Report dow or Click on the	Instructions	Any special instructions to the user for running report Input any special instructions for the users of the report.	
	button.	Category *	Maintenance v Private	Click on the Save button when you have completed the setup.
Report 005	Pm testing			
Report 001	Pm testing		none of the categories nce, Analytics, System,	Save Close

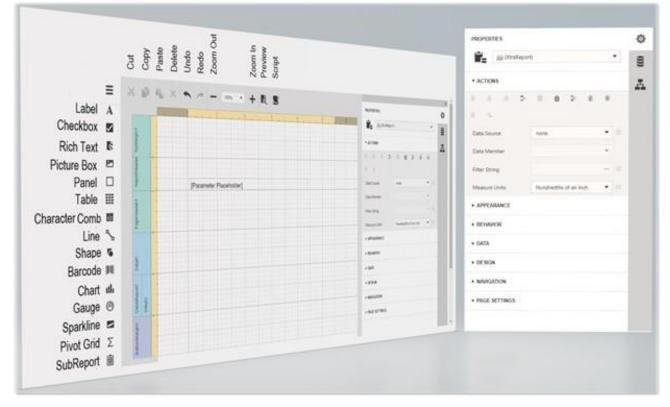
After selecting **Save** on the Create New Report information window, **Report Editor Board** window will appear. From here, you can setup, configure, and populate the report with the necessary information that you desire.





### **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 3.6**

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 3.6

FIELD LIST	₽₀	Ф	The Fiel
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ab groupId ab groupName ✓ isPaypoint			
? Parameters			Cuclos

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.

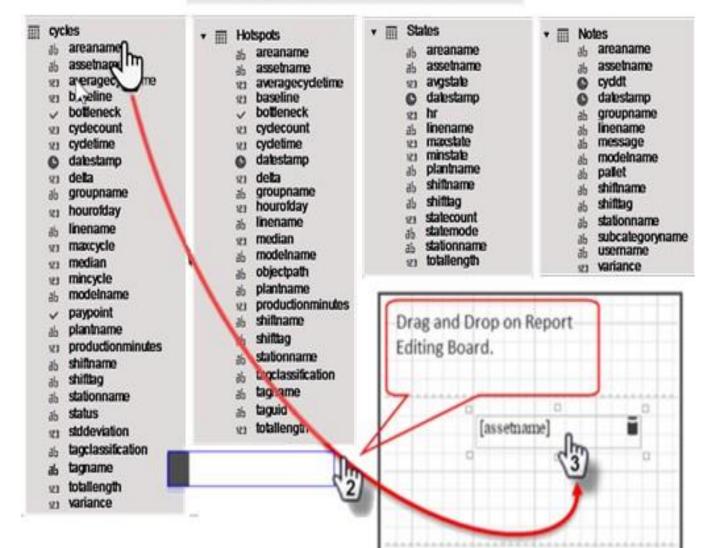
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#### Add DataSource

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.







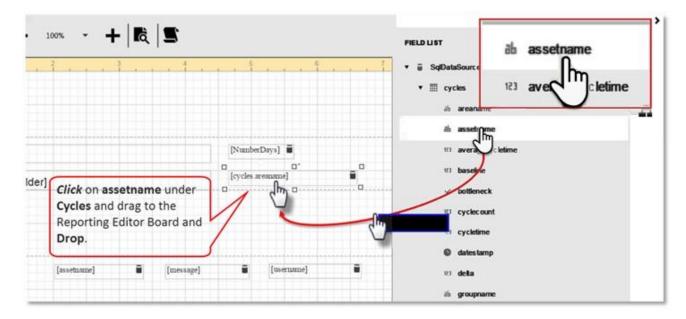


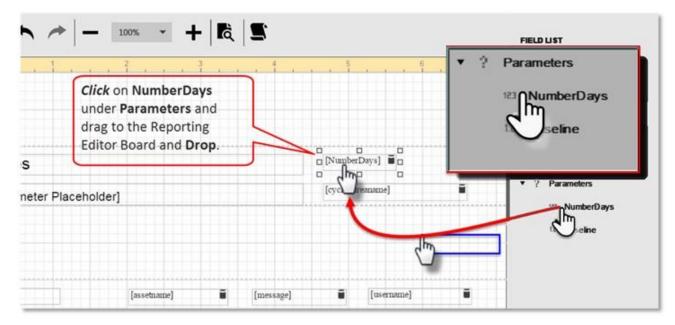
#### **Parameters**

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 3.6**

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

	TIES		ø
	Detail1 (DetailBand)	•	0))
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<ul> <li>APPE</li> </ul>	ARANCE		
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+ DATA			
• DESK	in		
+ LAYO	ut		

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 *do uble 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.

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Alarged		edit box.			* ACTIONS	17 patroneo	
14	Select an object [assetname] on the				N N 10	E N N E Re	set
durth is	Detail1 area. When selected, the Priorities Menu to the right will	The DATA B	INDING will show the		Text	label4	L,
-	update the ACTION Tab to the object selected.		ct Select and that has		- DATA BINDING	Notes.asseinar	• )
Hunder		Deen tasket	to that position.		• SUMMARY		-
64			Click on this to open	-	Angle	0	¢ =
		(warne)	a window to reset	[vanane]	Bookmark		
Detailt	0		the parameter. This button is to reset the		Parent Bookmark		
1 mg	Double click on the Area Header to		object. It is highlighted when an	-	Auto Width		
polfa	collapse the Page area. The area will then have a label (BOTTOMMARGIN1)		object is data		Can Grow	~	
a l	BOTTOMUMCEN		present.		Can Shrink		
Im	1				Multiline		
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#### 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.

ASTYLES			* STYLES		* STYLES		
EVEN STYLE	Select	ě.	EVEN STYLE	Select Create New Style	EVEN STYLE	xrControlStyle1	•
<ul> <li>ODD STYLE</li> </ul>	Select	3	<ul> <li>ODD STYLE</li> </ul>	Create New Style	ODD STYLE	Select	•
<ul> <li>STYLE</li> </ul>	Select	•	<ul> <li>STYLE</li> </ul>	ScontrolStyle2	<ul> <li>STYLE</li> </ul>	Select	•

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, <u>Underline</u> 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.

Select a Nar parameter o to xrContro	or it will default		STYLES     EVEN STYLE	xrControlStyle1	• •	Double click of drop down to configuration STYLES.	
of the object	ls the alignment ct in the editing		Name	xrControlStyle1		FONT	
and preview	w as displayed.		Text Alignment	Select.,	*	Font Name	Times New Roman
* PADDING	(Border around obj	ect) 🗕	> PADDING		_	Size	9
Left	0	\$	Background C	rgba(0, 0, 0, 0)	•	Unit	Point
Right	0	\$	Foreground C	rgba(0, 0, 0, 1)	•	B I U S	Point
Тор	0	•	Border Color	rgba(0, 0, 0, 1)	•		World
Bottom	0	:	Borders				Pixel
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#### **APPEARANCE**

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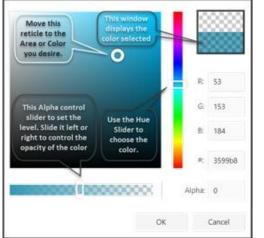
Appearance Configuration Tab



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

Border Dash Style	Solid	*
Border Width	Solid	
Borders	Dash	
	Dot	
FONT	Dash-Dot	
Foreground Color	Dash-Dot-Dot	
PADDING	Double	

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.

Border Width 1	-	Ľ
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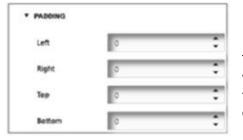
The Border Width is set by either *Clicking* up or down on the Border Width Tab. *Click* up to increase the width or down to decrease the width.





#### 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

<b>V</b> FORMATTING RULES	
formattingRule1	
Name	formattingRule1
Condition	· ·
Data Source	none
Data Member	
► FORMATTING	

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** oper ations over data.

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	() - + < 3	≼ ≥ > 00 00 0
FUNCTIONS	OPERATORS	FIELDS
<ul> <li>Aggregate</li> </ul>		111 NumberDays
Date-Time	8	12 Baseline
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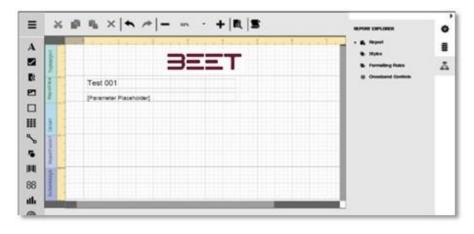


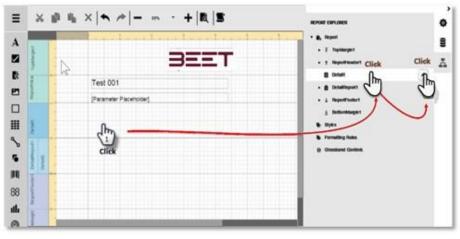
### **Report Explorer 3.6**

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

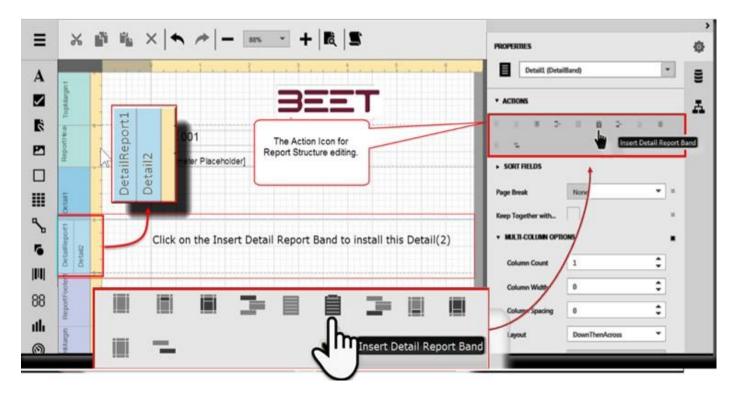
The Editing Board is separated into several different areas representing an area of a structured document report. From top to bottom from a default view, it starts with the Top Margin (1), Report Header (1), Detail (1), Report Footer (1), and Bottom Margin (1).

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 *Clic king* 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

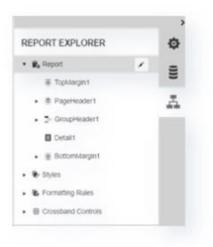




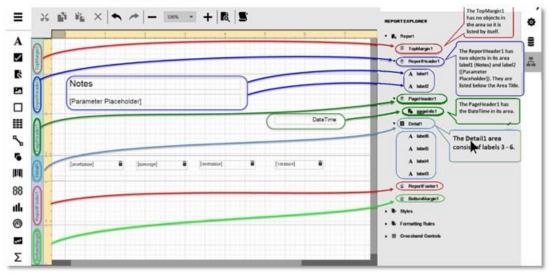
another Detail Band below Detail (1) band. The same can be done for the other areas on the Report Editor Board.



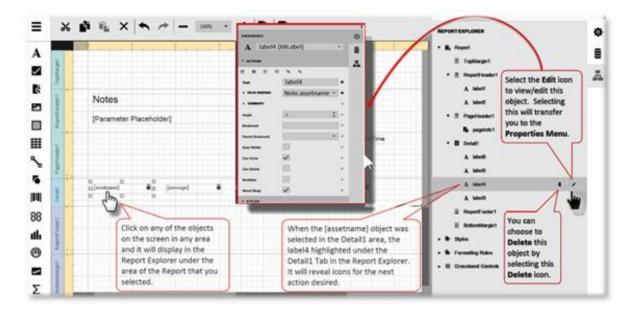




While in the Report Explorer, you can view the data, character setup and status of the objects on the Editing board. Simply Click on an object on the screen and right side menu will update to the object you've select. When an object is selected, the Report section if closed, will open and display the 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 3.6**

*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).

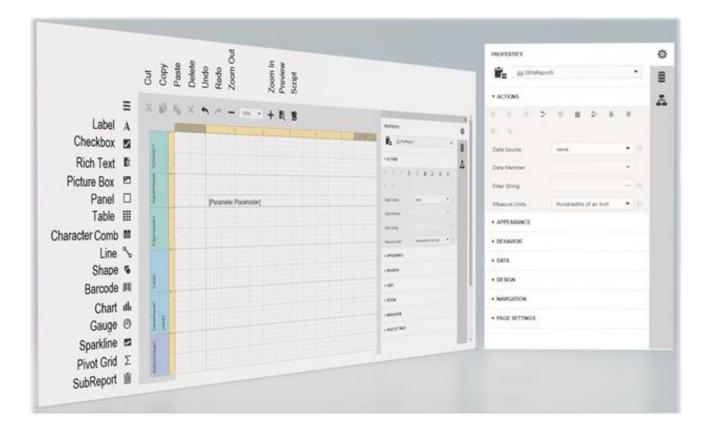
		Create New Report	t ×	
+ Create New Repo	ort 1 Import Report	Name	Input the Name of the Report Here.	
Name Report 001	Description Pm testing	Description	Input a brief description about the report, that would differentiate from a similarly named report.	
Report 003 C	ck here to open the reate New Report ndow or Click on the	Instructions	Any special instructions to the user for running report Input any special instructions for the users of the report. Click on the Save button wh	en
in resting	button.	Category *	Maintenance	
Report 005	Pm testing			
Report 001	Pm testing	Select f	from one of the categories	

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 3.6**

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.



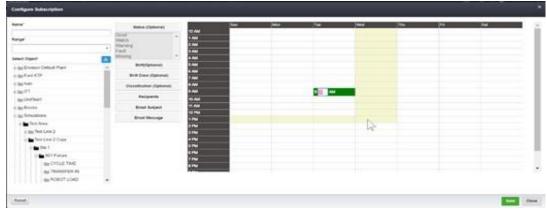
# Subscribe (Reporting 3.6)

Overview (Subscribe 3.6)



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.

	enVision 3.6 - Compariso	n Chart
Feature	Dashboard/Report Subscription	Conditional Notification
Trigger Point	Time based Schedule	When condition based on measure and time window is satisfied. Available measures are: Overycle - 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

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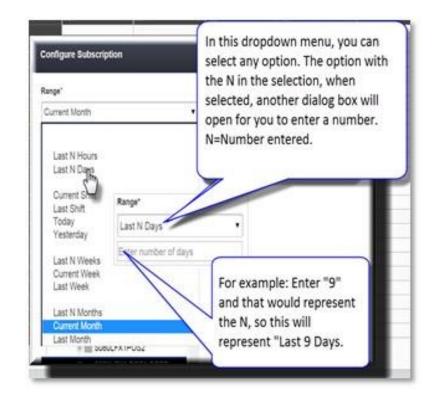
# **Configuring Subscription (Subscribe 3.6)**



BEET

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.

- D1/25/2017 to 01/31/2017

  Select Object

  Simulations

  Test Area

  Him Test Line 2

  Test Line 2 Copy

  Sta 1

  Test Line 2

  Test Line 5

  Him Test Line 5

  Him DeviceWISE\_TEST
- **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.

Report Parameters

SelectDate Range\*

Email Message – Enter a message you would like to send as in email along with the report.



# Setting up the Subscription (Subscribe 3.6)

## 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.





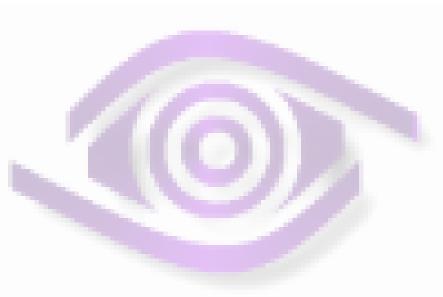
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# enSight 3.6



**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.

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



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# **Getting Started**

- Opening enSight
- Navigating enSight

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Overal Equipment Effectiveness (Sta 18/29/2017 7:00:00 AM to 24 or 2017 6:00:00 PM())	H Target 100 80 60 <u>Set</u> 0	OEE 0.19% Availability 94.45% Performance 0.20% Quality 100.00%
MTIR A MTR (A Seconds)	20	Pry/laget <u>0 3 10 15 28 25 30 35 40 45 50 55 60 65 70 75 80 65 90 65 100</u> ▼ -94.9
enSight	t	

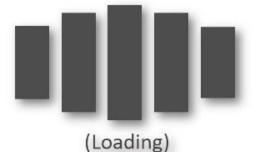


# Opening enSight

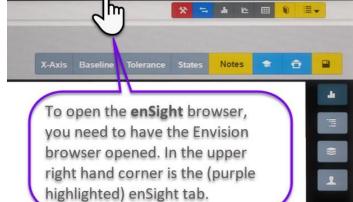
To open the **enSight** browser, you need to have the enVision browser opened. In the upper right hand corner is the (purple highlighted) enSight tab.

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.



enSight

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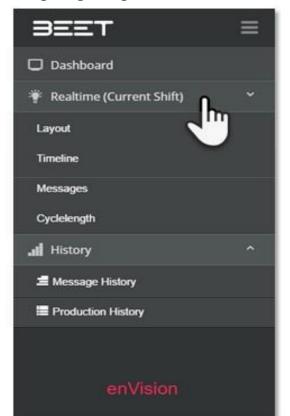
2

admin

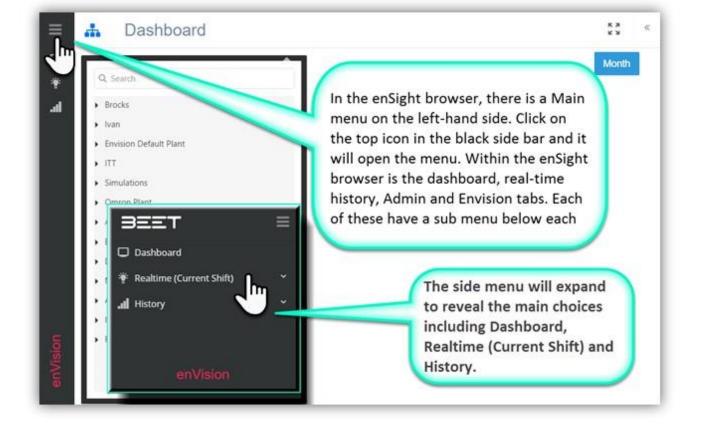
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+ Brochi	Envision Default Plant	N	
Invision Default Plant	<ul> <li>Simulations</li> </ul>		
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• Art • D05			
. KT# 1837	S01 Fixture		
DWSON Kents			
<ul> <li>DIUTEST</li> <li>MINO_MEDD</li> </ul>	TRANSFER IN		
	ROBOT LOAD		-
	PIN CLAMPS CLOSE		
An Object Tree window	TRANSFER OUT		



### 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.





#### 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.

≡ <u></u> #	Dashboard	× 20
unition of the second s	Dashboard   Realtime (Current Shift)   History   enVision	In the enSight browser, the Main menu expands to reveal the choices of Dashboard, Realtime (Current Shift) and History. The Realtime 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

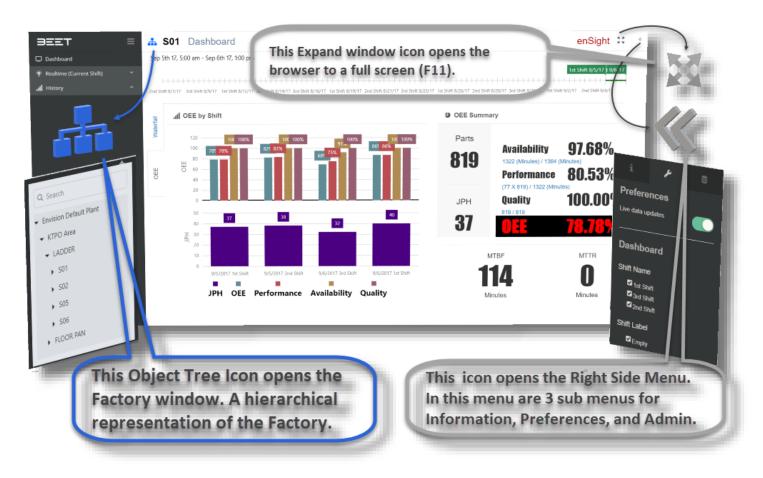
In the history tab, therein lies the Message History and the Production History.



#### enSight Top Menu

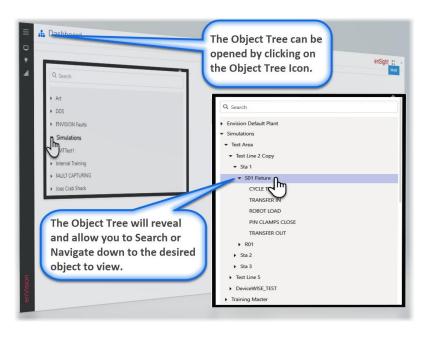
#### Top Menu

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.

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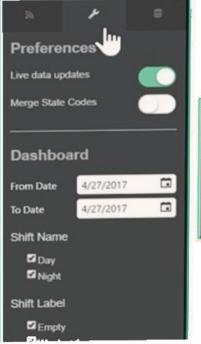
#### Side Menu Icon

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)



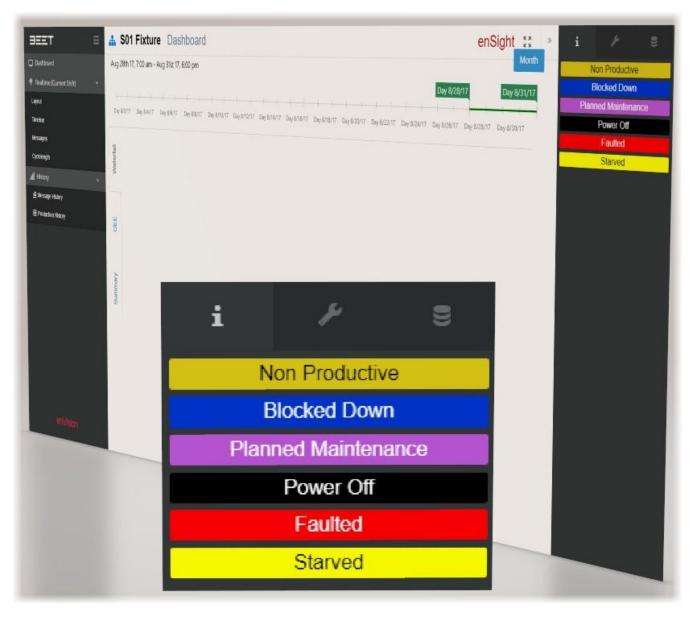
# Preferences







- Information
- Preferences
- Admin (Right Sidebar Menu)









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.



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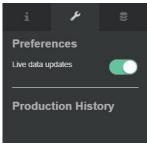


#### Preferences

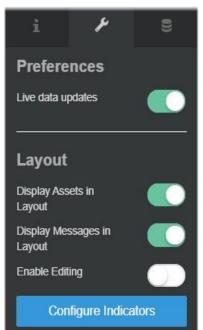
The preference menu will allow you to configure how you would like to view the data by preference and layout of the current selected views (Dashboard, Layout, Timeline, Messages, CycleLength, Message History, and Production History.

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#### **Dashboard Preferences**



#### Layout Preferences



Choose whether you would like to view Live data updates.

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.



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#### **Timeline and Messages Preferences**

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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.

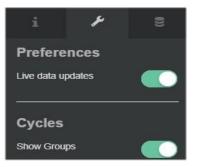
#### Message History

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.

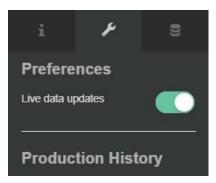
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#### **Cyclelength Preferences**

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



#### **Production History**



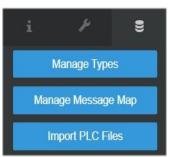


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Admin (Right Sidebar Menu)

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

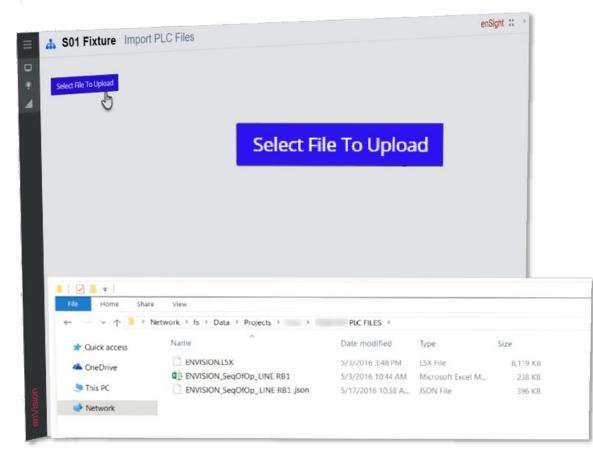
- Manage Types
- Manage Message Maps
- Import PLC Files



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#### Manage Types

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**.

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

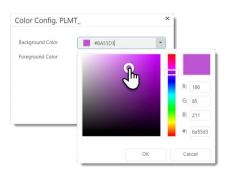
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2	NPROD	Non Productive	This type of event indicates that the associated factors such as model part type or deman
3	PM/POE	Power Off	This tupp of quant causes the MR (Master

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.









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#### Live-View

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

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#### 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.

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

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Import PLC Files 3.6

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

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

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File     Home     Share       ←     →     ↑     ●       ★     Quick access	Network > fs > Data > Projects >	Date modified 5/3/2016 3:48 PM 5/3/2016 10:44 AM	L5X File Microsoft Excel M	8,119 KB
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File     Home     Shart       ←     →     ↑     >       ★     Quick access        ▲     OneDrive       ●     This PC	Network > fs > Data > Projects > > > > Name Projects > > > > > > > > > > > > > > > > > > >	Date modified 5/3/2016 3:48 PM 5/3/2016 10:44 AM	L5X File Microsoft Excel M	8,119 KB 238 KB

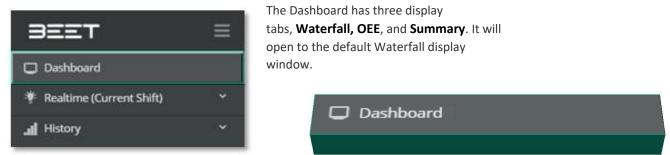
# enSight Dashboard

## Dashboard

BEET

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

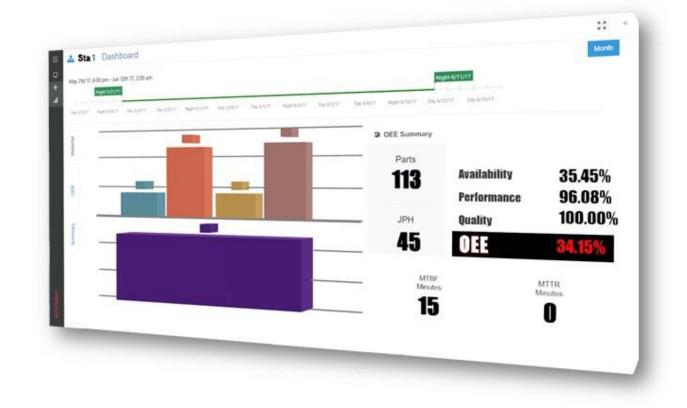
The enSight Browser will open with the Dashboard module.







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#### Summary (State)

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	where the event the structure structure structure structure structure structure	Blocked Down
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	ensuring stated by stream	Power off
10	and the second by software wanted by solution by solution of	10.01 min



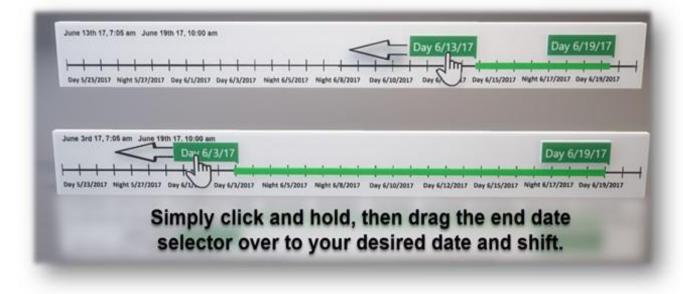
## <sup>177</sup> Filter Date/Shift Range Tool

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.



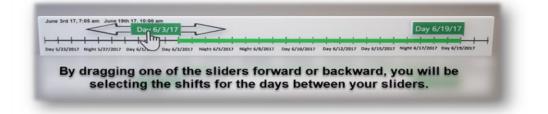




Simply click and hold one of the dark grey sliders (1 st Shift 10/25/16), then slide it to the range you would like to view.



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.

	Day 6/19/1
anne werterzer an wither and an wertersterr werterstretr werterstretr of TTTP/2017 Day 6/12/2017 Day 6/15/2017 Night 6/17/201	7 Day 6/19/2017
You can also take a selected range and slide it forward or behind along the range of the range selection tool by click and holding the green range bar.	

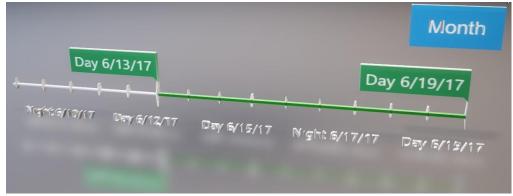


## Dashboard Waterfall Tab

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



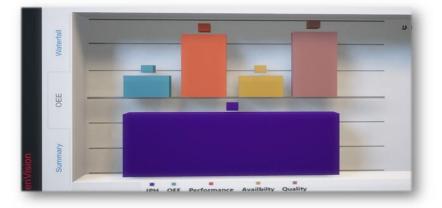
### **OEE Tab**

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	300
	250
OEE	出 200 —
0	150
	100
>	50
ummary	o
Sun	210
	190

The OEE tab, displays the **O**verall **E**quipment **E**ffectiveness of a selected shift or shifts, as well as the JPH or **J**obs **P**er **H**our, number of parts made, and the average jobs per hour. Above this graphical data is a Filter Date/Shift Ra nge 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



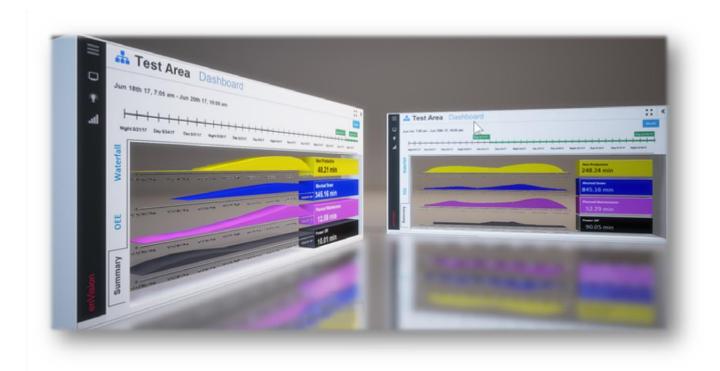
The JPH graph is in the lower left side under the OEE graph. It shows the Jobs per hour in a graphical form.

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.





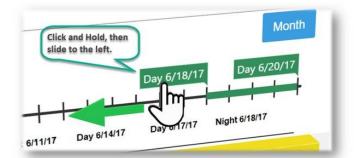
Dashboard Summary Tab



The State Summary tab consist of a summation of time spent in a state, as well as how it compares to the preceding shift or shifts selection.





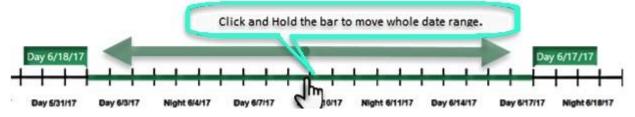


To compare with the other shifts, simply use the Filter Date/Shift Range slider to adjust range and slide the range from certain points on the range tool. Click and hold one of the sliders, and increase the range by moving it away from the other.

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)\***

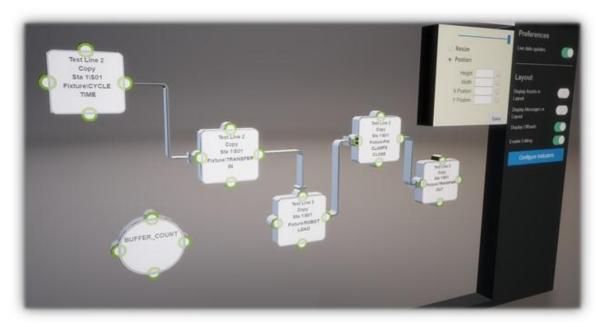
Below the dashboard is the real time for current shift it contains, time line, and cycle length. The Realtime section consist of several subsections:

- <u>Layout</u>
- <u>Realtime Timeline Tab</u>
- <u>Realtime Messages</u>
- <u>Realtime Cyclelength Tab</u>

### Layout

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



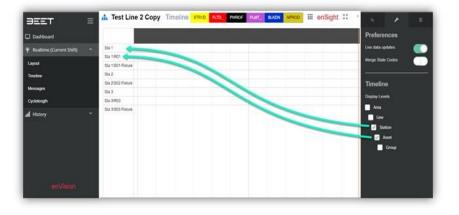




### **Timeline Tab**

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. I 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

	Alte Codes Mutti-Updat	Copect Muss-Update	Active Select File To L	P55_KTP_BSL_ML_S	050_070.L5X	11
				Pre-Filters: PLC		
1	Tag Name	Data Type				* Show in Active Messages
	FB1	Dint	Array	Description		
	FB2	DINT	[625]		Style	
	FB3	INT	[625]		Decimal	
	MB1		[625]		Decimal	
	MB2	DINT	[625]		Delmat	
-		DINT	[100]		Decimal	
	M83	DINT	[100]		Deleul	
	Rivets_Remaining	DINT	[100]		Decimal Decimal	
	SD60R02_tag	DINT	[100]		Debra	
	SOGOR03_tag	INT	[3]			
	SOGORD4_tag	INT			facinal .	
	S060R05_tag	INT	[101]			
	SOGOROG_tag	OINT	[101]		(beirs)	
	\$050 070Fix	DINT			Decieval	
-	\$050_0705RS	DINT	[101]		Decinal Dacimal	
		INT			Decimal	
	W81	DINT	[101]		Decinal	
	W82	DINT	111		Destroy	
	WB3	DINT	11500		Decinal	
	WB4	DINT				
	W85	DINT	111			
	W86	L POILOS				

## Cyclelength

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

Dashboard		Cotapse 88 Expand												Preferences	
		Station TW Acard									8	Q Search		Live data updates	
Realtime (Current Shift)	^	Group Y		0102	CVC 3	015.4	CICS.	Last Cycle	South Tax	Constant.		Aug Cyc	Max Cyc		
		Q	12.0% F	1.00.1	5,15,1	1,1, 4	1.00.0	case of Store	00000 000	from the er-	- mari vije	and the	weater class	Merge State Codes	
Layout		* Station Sta 1													
Timeline		* Station Sta 2													
		* Asset: 502 F	sture											Cycles	
Messages		CYCLE TIME	26,12	36,29	20.26	2524	26.3	21550	1143	ð.	30.11	25.26	20.5	Show Groups	-
		TRANSFER IN	5.05	5.06	5.04	5.09	5.28	215.55	1143	0	5.01	5.05	5.11	anow Groups	
Cyclelength		CLAMPS	1.01	1.06	1.06	1.02	1.00	215.54	828	0.	1	1.04	1.14		
History	~	CLOSE													
I HISTORY		ROBOIT WELD						215.44	1142	0	9.01	9.05	9.16		
		CLAMPS OPEN	1.04	1.07	1.08	1.08	1.06	215.46	1142	¢.	1.01	1.06	3.17		
		TRANSFER OUT	4.04	4.02	4.04		4.05	215.50	1143	0	4	4.05	4.16		
		* Station Sta 3					-								
		* Asset: 821													
		CYCLE TIME	16.84	18.61	18.55	16.78	18.56	215.59	1130	0	18.54	10.64	18.84		
		PICKUP	1004	10.05	10.21	10.04	10.01	215:50	1129	0	3.99	10.04	10.18		
		DROP OFF						215:59		3130	7.5	7.58	2.75		



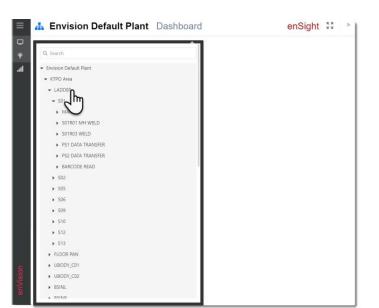
### **Realtime Layout**

### Layout

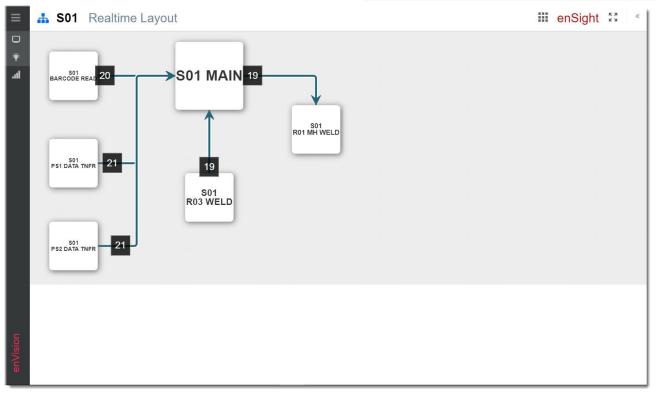
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The layout view displays the current state and messages in real-time. The color and code is based on the legend at the top of the page and is completely configurable. The objects displayed are the selected Assets that were selected on the object tree.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



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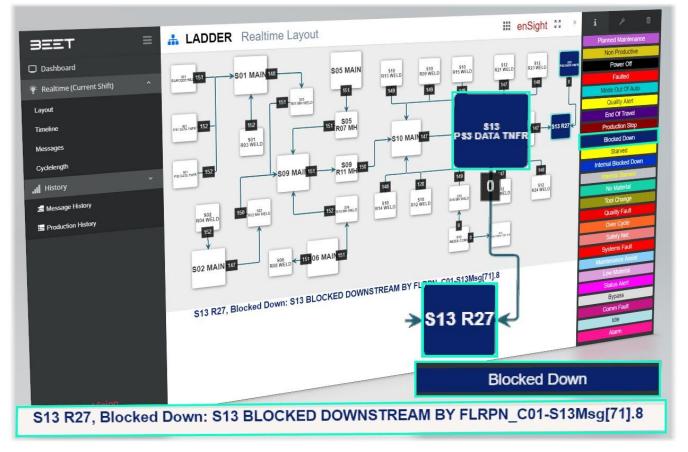
The user can now utilize the Layout toggles to add or remove more information about the Objects displayed.





### **Layout Information 3.6**

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.

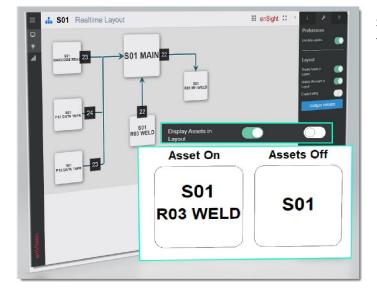




### **Layout Preferences 3.6**

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

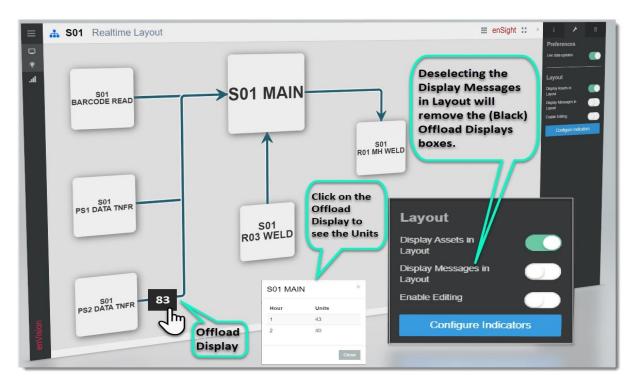
Display Asset in Layout



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

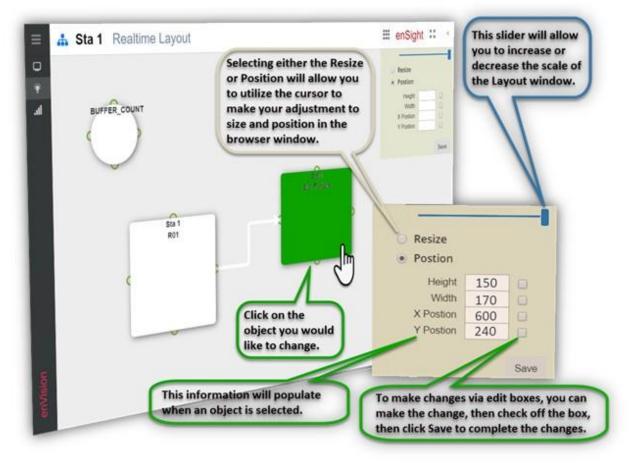
 $3\Xi\XiT$ 

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.

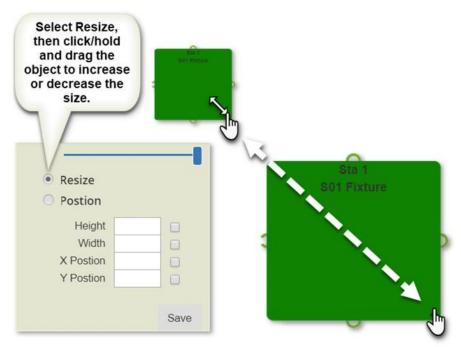






### **Resizing an Object**

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



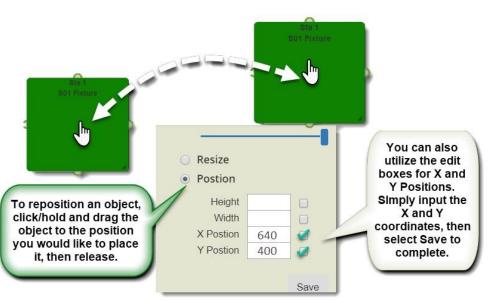
The second way it to utilize the edit box. Simply fill in the edit box, then check off the check box to the right, then click Save. The object will update. Repositioning an Object To move an object manually, select the Position option. This will allow you to use the cursor to make the changes. Simply click and hold, then move the object to the position you desire on the

you desire and thats it.

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 3.6

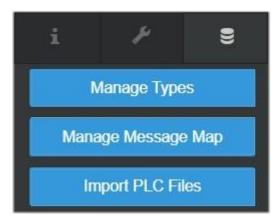
The Admin Tab contains the Manage Types and Manage Message Maps.

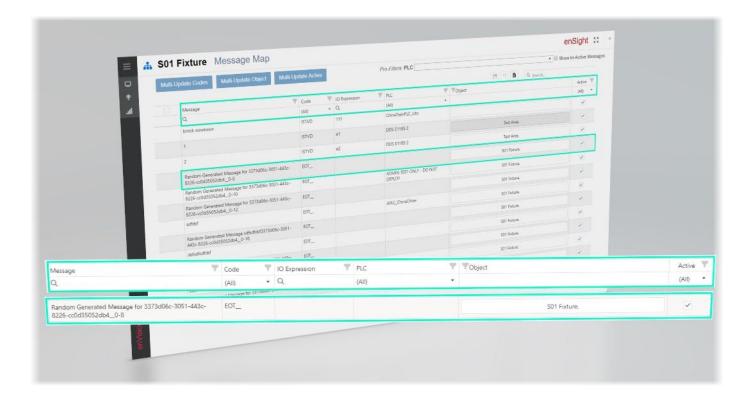




### **Layout Admin**

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





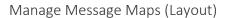


Import PLC Files (Layout)

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.

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File     Home     Shat       ←     →     ↑     ▲       ★     Quick access     ★	Network > fs > Data > Projects > > > > Name	Date modified 5/3/2016 3:48 PM 5/3/2016 10:44 AM	L5X File Microsoft Excel M	8,119 KB

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BEET

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).

- 544	ril-Updan Godin	Mart-Uptan	e Okyect	-	Ri-Update Active	54	lect File To Upload		10 Show I	n-Active Me
								15	7 0 0. tonth.	
	Message	7	TCode		1. S. C. S.	r.	PLC.	7	T Deject	Actual
	9		3440	+	Q.		(40)			(40
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	Onie_1H_Center SPARE	Jack Meillig -			Drive, (24, Center, Torq, M.		ACACACIOSOSO		Test Love 2 Calm.	
	Drive_DH_Center SPARE	Jan Melti I			Dive_DI_Center_Tera_M	4	ACACACIDIDID		Test Line 2 Class, Idea Class Sharik,	
	Drive_LH_Center SMAR	Son_Melt[4			Drive_DH_Cerniel_Tong_M.		ACACACIDI010		Sent Lone 2 Coppo	
	Drive_LH_Center SHARE	Reg, Merilli -			Drive, Dri, Center, Toro, M.	-	ACACACIEDIEDED		Test Low 2 Crass.	
	Drive_SH_Senter SPARE	Jon, Medilá -			Drive, SH, Carrier, Torq, M.		ACACACIDEDED		Tere Lane 2 Copy:	
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	Ovive 1H, Center SINKS	Jos Mellin-			Drive, LH, Center, Turo, M.		ACACACHERERE		Test Une J Copy. Ites Colo Shack.	8
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	tate Object	Multi-Update Active	ielect File To Upload	Show	In-Active N
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Menage	T TCode	O Expression	R.C.	The Contract	Active
Q	(Alt)	• 9	(An)	n.	144
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Drive_LH_Center_SortL_Min(0).1 SPARE	807_	Drive_LH_Center_Torq_M.	AAA Baseketball ACACAC008080	Test Line 2 Copy:	these .
Drive_LH_Center_Torq_MinU12 SPARE	BLKON ISTVD OUFLT	Drive_LH_Center_Tong_M.	ADMIN TEST ONLY - DO NOT DEPLOY AGENT PLC TEST APLC, ChinaOliver	Test Line 2 Copy,	
Drive_DH_Center_Torg_Min(0).3 SPARE		Drive_DH_Center_Torq_M.	CheruftanPLC_Lito On Loop 1 Zone II ALL	Test Line 2 Copy, Ioes Crab Shark.	~
Drive_LH_Center_Torg_Met(0)4 SPARE	- SALRT DEGRD	Drive_LH_Center_Toro_M.	Ch Loop 1 Zone 3 Sta 26 Ch Loop 1 Zone 3 Sta 27	Test Line 2 Copy.	
Drive_LH_Center_Rorg_Min8055 SPARE	IDLE,	Drive_LH_Center_Torq_M.	Ch Loop 1 Zone 3 Sta 31 DD Assembly Area Sim_4	Test Line 2 Copy.	
Drive_LH_Center_Torq_Mm018 SPARE	PVONL PLMT, PWROF	Drive_LH_Conter_Torq_M_	DDS 61189.2 DDS 61189.3 DDS 61189.4	Test Live 2 Copy.	
Drive_LH_Center_Torq_Min00[7 SPARE	FLTD, GAURT	Drive_DH_Center_Torg_M.	DDS ETTEP 5 DeviceWISE TEST	Test Line 2 Copy, Joes Crab Shack.	2
Drive_LH, Center_Torq_Min(0),8 STARS		Drive_LH_Center_Torq_M_	ENVISIONFaulti-1 ENVISIONFaulti-2	Test Line 2 Copy, Ioes Crab Shark,	~
Drive_LH_Center_Rorg_Min(0),9 SPARE	- BUKD NOMAT	Drive_LH_Center_Torq_M.	EW/SONFeuts-3 HILTS	Sect Line 2 Copy, Ioes Crab Shack,	×
Drive, LH, Center, Torg, Min(0):1 SPARE	0 -	Drive_UH_Center_Torq_M.	ACACAC008060	Test Line 2 Copy, Joes Crab Shark,	~



### Manage Types (Layout)

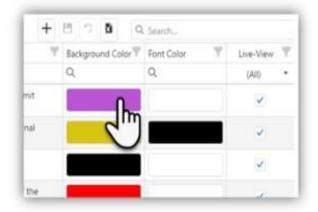
In the **Manage Types** module, you can setup and configure the messages that will be displayed in the **enSight** browser. The user can configure the **Priority, Code, Description, Definition, Background, Font Colors**, and whether it will appear in **Live-View**.

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۳.	Times	Code	7.1	economic .	V Defenten	.7	Background (		Filed Datas	. 7	-	т	Manager	Merseage N	-
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		494		arried Marmangelia	This type of each indicates that ingeline ignorpost has been interformely interrupted to order to permit maintenance personnel to execute professional memoryce extractly.		-	- 0			- 9	-			
	-	1.141600	1	or Postable	This type of event indicates that the associated equipment is not required to production due to enternal factors such as model participe of destand-based operation						12				
	1	Peter		teet Of	This type of event causes the SAR Mayler Reling) wilky to devening the or system offi-						14				
	1	6.8m),	1	and a second	This type of event searce a mathine staggage and can be due to any demoted condition or follow of the charactere process:										
		NOL.		Note Chill Of Purity.	This type of event dispatche machine suit of automatic and is not already classified as one of the above the	rin;						_			
		- QART	- 9	welly then	This type of event seases a martine or porveyor stoppage due to a detected product or process defect.										
		1 KT	2	od Of Taker	This type of event relations any strappings due to a strong exceeding to infrast july guess.			1							
		1000	1	reductors lines	This type of waret causes a mathem or conveyor strapping caused by mercul control or actionatically for scheduled break or non-production form:										
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		57845		laned.	This type of event causes a machine to well for a load operator by quitewen submativitied the machine spin time is in excess of the normal design time.	1					a.				
		845	1	ternal Borred Down	This type of event causes a mamme or indent to wait for an unitself operation by its entreent automation INTERNAL BLOOKD state is an immediate event that is not effected at the composite martine level.	.7*									
i.	6	8740	1	nernet Married	This type of event causes a martine or interest is wait for a kyet operation by econemic automation. The INTERNAL DIARNED date is an immediate event that is not reflected at the composite martine tave.										

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

T 1 Priority	Code 🖤	Description 🖤	Definition
Q	Q	Q	Q
1	PLMT_	Planned Maintenance	This type of event indicates that machine maintenance personnel to execute profes
2	NPROD	Non Productive	This type of event indicates that the associated factors such as model part type or deman
3	PIA/ROE	Rower Off	This type of mont causes the MP (Master

### Background and Font Color



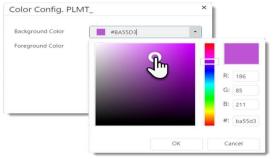
The Background and Font Color control are similar when you want to add or change a color. Simply select the color sample on the Message Type

A **Color Config. window** will reveal. Click on the **Background** or **Foreground** pull down box and a color pallet will open above it.

្
Save



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.

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-	Mground Color	🝸 Font Color 🛛 🍸	Live-View	T
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#### 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.

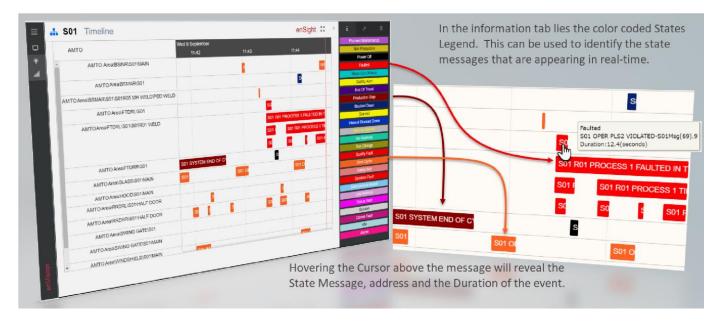
The Timeline displays scrolls from right to left. Within the scrolling time graph, it displays the real-time messages for each station. The time graph is setup with the stations in the column and the time across the top row. The User can filter what objects to display by opening the Right Side Menu and selectging the Preference Tab, then the user can select and unselect the Display levels.



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Messages	KTP	O Area/FTDRR/S01		Over C										
Cyclelength	KTPO/	VealGLASS/S01/MAIN	S01 OPER OV		VER OVER CI In: 10.8(secc		501Msg[83].	.8						
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I Message History	KTPO Area	RRDRUS01HALF DOOF	t											
Production History	KTPO Area	WINDSHIELD/S01/MAIN						501	STATION OV	VER CYCL				
enVision														



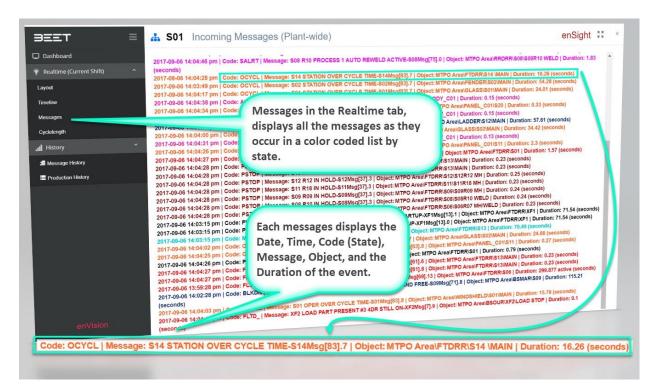
In the information tab lies the color-coded States Legend. This can be used to identify the state messages that are appearing in real-time.





### **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 messages 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.



L 10 fairs from The Party States States (States)	hermen RC + Show In-Active Messiages	
	22 (br	
	Show In-Active Messages	

-



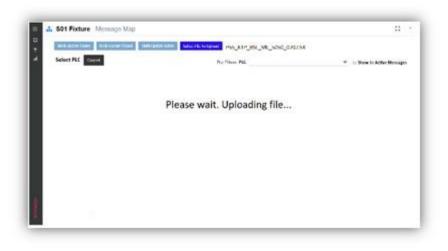
The enSight window will reload to the Message Map window. From here, click on the Select File to Upload button to open the File selection window.

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					Ten Park	

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.

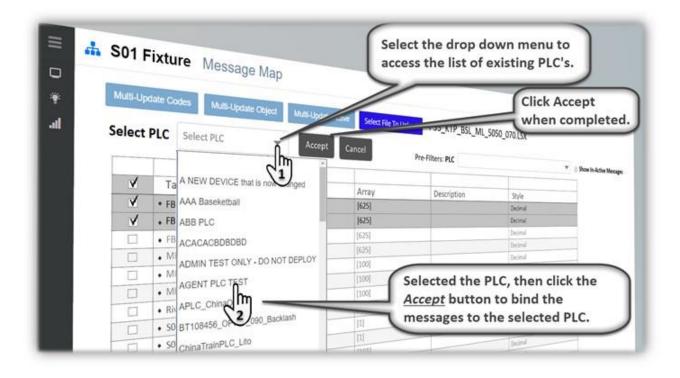
Select the messages to bind to the PLC. Once all the selected messages are completed. Review your selection before proceeding on to the

PLC selection.

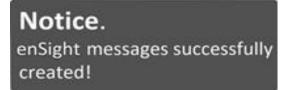
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al	Select PLC Select PLC	Accept	Course 1			
		Accept	Cancel	Pre-Filters: PLC		▼ U Show In-Act
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	* FB2	INT	[625]		Decimal	
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	• MB1		[100]		Decimal	
	• MB2	DINT	[100]		Decimal	
		DINT	and the second		Decinal	

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!"



📥 S0'	1 Fixture Messa	ige Map		
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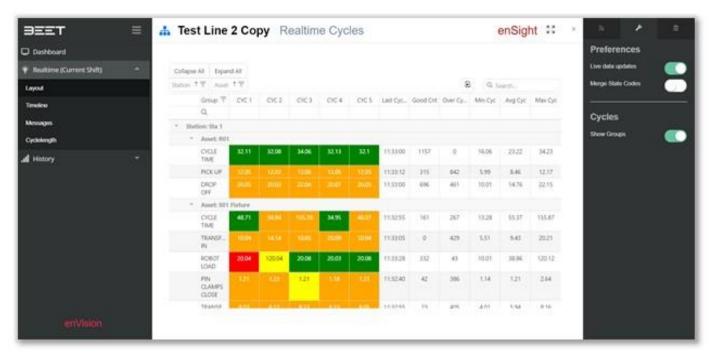


### Realtime Cyclelength Tab

- History
- Message History Tab
- Table View
- <u>Timeline</u>
- <u>Pivot</u>

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.

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Group T Q	cic t	CVC 2	CVC 5	CVC 4	CYCS	Last Cycle Date	Good Crit	Over Cyc Crit	Min Cyc.	Avg Cyr.	Max Cyc
<ul> <li>Station: Sta 1</li> </ul>											
* Amet R21											
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PICKUP	100	200	12/00	12.04	0.0	11.33.47	354	543	5.99	8.45	12.17
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<ul> <li>Asset: S01 Flature</li> </ul>		Arron I.	to have			and a second second					
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TRANSPER IN			1100	10.01	15.04	11.33.05	0	-429	\$.51	8.43	20.21
ROBOT LOAD	20.04	12004	20.08	20.03	20.06	11:3125	\$32	43	10.01	38.86	120.13
PIN CLAMPS CLOSE	128	128	1.00	1.21	1.10	113330	42	367	1.14	121	2.64
TRANSFER OUT						113345	23	406	4.01	5.95	6.16
- Station: Sta 2											
* Amet: \$52 Picture											
CICLETIME	20.31	20.25	20.31	20.26	20.25	11.22.37	1318	0	20.1	20.26	20.48
TRANSFER IN	5.04	504	5.05	5.04	5.1	1133.43	1219	0	4.99	5.05	5.11
CLAMPS CLOSE						1132.44	957	0	1	1.04	1.11
ROBOT WELD						11.33.32	1318	0	0.99	9.06	11.17
CLAMPS OPEN						11:33:35	1318	0	1	1.06	1,12



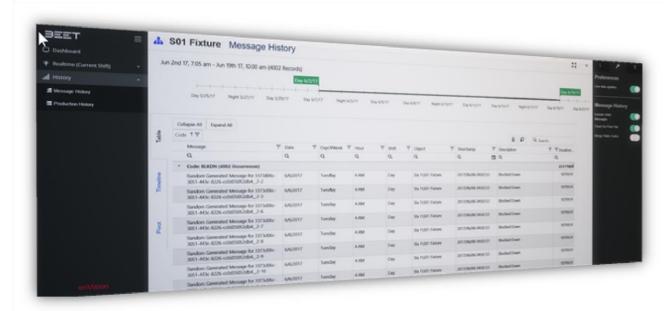
### History

- 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.



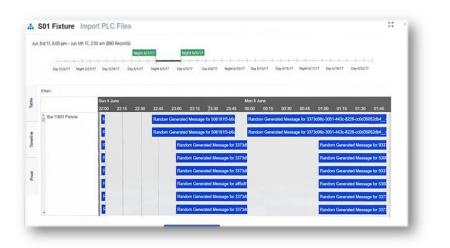
The message information includes the Date, Day of Week, Hour, Shift, Object, Code, Timestamp, and Duration in seconds. The data on the table can be filtered and sorted by using the filters at the top of each column or you can drag and drop the column header to the sorting line to sort the data by the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

n 2nd 17, 7:05 am - Jun 19th 17, 10:00 am (4002 !	Day 6/2/17							Day 6/19/
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<ul> <li>Code: BLKDN (4002 Occurrences)</li> </ul>								25171629
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Random Generated Message for 3373d06c- 3051-443c-8226-cc0d35052db4_2-3	6/6/2017	Tuesday	4 AM	Day	Sta 1\S01 Fixture	2017/06/06 04:02:53	Blocked Down	10799.91
Random Generated Message for 3373d06c- 3051-443c-8226-cc0d35052db4_2-6	6/6/2017	Tuesday	4 AM	Day	Sta 1\S01 Fixture	2017/06/06 04:02:53	Blocked Down	10799.91
Random Generated Message for 3373d06c- 3051-443c-8226-cc0d35052db4_2-7	6/6/2017	Tuesday	4 AM	Day	Sta 1\S01 Fixture	2017/06/06 04:02:53	Blocked Down	10799.91
Random Generated Message for 3373d06c- 3051-443c-8226-cc0d35052db4_2-8	6/6/2017	Tuesday	4 AM	Day	Sta 1\S01 Fixture	2017/06/06 04:02:53	Blocked Down	10799.91
Random Generated Message for 3373d06c- 3051-443c-8226-cc0d35052db4_2-9	6/6/2017	Tuesćay	4 AM	Day	Sta 1\S01 Fixture	2017/06/06 04:02:53	Blocked Down	10799.91
Random Generated Message for 3373d06c- 3051-443c-8226-cc0d35052db4_2-10	6/6/2017	Tuesciay	4 AM	Day	Sta 1\S01 Fixture	2017/06/06 04:02:53	Blocked Down	10799.91
Random Generated Message for 3373&06c-	6/6/2017	Tuesciav	4 AM	Day	Sta 1\S01 Fixture	2017/06/06 04:02:53	Blocked Down	10799.91





### 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.



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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.

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**Production History** 

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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.

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Show In-Active Messages	Show In-Active Messages	Manage Types Manage Message Map
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(AJI) 👻		

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.

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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.

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-		DINT	[100]		Decimal	
	MB3	DINT	(100)		Deteral	
	Rivets_Remaining	DINT	[100]		Theorem 1	
	SD60R02_tag	DINT	[100]		Declarad	
	SOGOR03_tag	INT	[1]		Destruit	
	SOGORD4_tag	INT	[1]		Desired	
	S060R05_tag	INT	[101]		Decimal	
	5060R06_tag	DINT	[101]		Decimal	
		DINT	[101]		Decimal	
	\$050_070Fix	DINT	[101]		Decinal	
	\$050_070\$R5	INT	[202]		Decimal	
	W81	DINT	[101]		Decimal Decimal	
	W82	DINT	111		Technol	
	W83	DINT	150		Decimal	
	WB4		[150]			
	W85	DINT	[11]			

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.

Kutti-Update Codes     Mutti-Update Object     Mutti-Update Adv	Select File To U	P55_KTP_BSL_ML_	5050 07015X	
with the second s	Select File To U	pload P55_KTP_BSL_ML_	5050 07015X	
	Select File To U	ploud P55_KTP_BSL_ML_	5050 07015X	
		and a start with the start starter		
all Select PLC Select PLC - Accept	Cancel			
	CONC.	Pre-Filters: PLC		▼ = Show in Ac
Tag Name Data Type	Array	Description	Style	_
	[625]		Decrual	
Y 'FBL	[625]		Decinal	-
v + FB2 DINT	Set Street A		Decinal	
INT	(625)		Decircul	
DINT	[625]		Decimal	
• MB1	[100]		Decinal	
• MB2 DINT	[100]		Decinal	

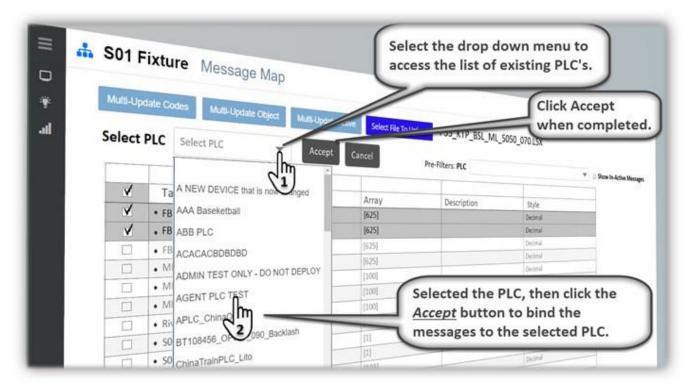
Once all the messages are selected, you can now select the PLC that you may bind them to. Go to the Select PLC selection box and click on the drop-down menu.

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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*!".

Notice. enSight messages successfully created!

≡ <mark>∦</mark> S0	1 Fixture Messa	ge Map		
	S-Update Codes Muttillion	date Object Multi-Update		
	ect PLC Select PLC	date Object Multi-Update	Active Select File To	Inland
	ect PLC Select PLC			opioad
1		Accent		
5		Accept	Cancel	Dea 5
	/ Tag Name		Cancel	Pre-Fl
	V Tag Name		m	Pre-F
	✓ Tag Name ✓ • FB1 ✓ • FB2		Array	Pre-F
	Y         Tag Name           Y         * F81           Y         * F82           I         • F83	Data Type	m	Pre-F
	✓ Tag Name ✓ • FB1 ✓ • FB2	Data Type	Array	Pre-F



## **Conditional Notifications 3.6**

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At the Asset level, under the notification's 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 caparisons between Dashboard/Report

	enVision 3.6 - Comparison Ch	art
Feature	Dashboard/Report Subscription	Conditional Notification
Trigger Point	Time based Schedule	When condition based on measure and time window is satisfied. Available measures are: Overycle - 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





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.

so	1 Fixt	ture						
* c	Hour Hour And	on ⊚ Or		7 Days 🌒 3 Duration (Min.)	0 Days	Occurrences		
		Measure Over Cycle Faulted Blocked Starved	Accumulate			Text	Message	
	Link t	o subscription -	Email					Cost Low

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 3.6)**

### 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.

Соп	ditional No	tification					1	
5	View All Notific		AND, all the selecte register as Notification	d conditions need	etween And or Or. Whe to be true in order for i low it to send a notifica ns have occurred.	t to		I
	Condition And	Shift O Or Measure	Day 7 Days 3	10 Days	Occurrences			I
	Fi B S Link to Si	iver Cycle aulted locked tarved ubscription	• Email		Text Message	Case	See	
ition Id	n Or		eck off the Measures tha asure, there is an Accum		and the second se			
-	Measure	Accumu	lated Duration (Min.)	Occurrences		lverages Hr.		
1	Over Cycle	10		1000	6	10:00 Min. / 0 O	0C	
	Faulted	2		10	6	0:26 Min. / 4 O	00.	
/	Blocked				6	0:06 Min. / 26 (		
1	Starved			Input the	values you would like t be monitored.	• Min. / 28 (	Okir.	-

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.

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## **Email (Conditional Note 3.6)**

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Input the email address of the recipient of the notification. The recipient will receive an email every time the conditions trigger the notification.

S01	Fixture	
	nge Hour © Shift © Day Indition	Input the email address of the recipient of the notification. The recipient will receive an email every time the conditions trigger the notification.
	And Or Measure Accumulated Duratio	n (Min.)
	Faulted Blocked Starved	
1	Link to subscription . Email	Text Message Creat



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## **Text Message (Conditional Note 3.6)**

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.

ang	ge our	o Shift	⊜ Day ⊜ 7 Days ⊚ 30 Days	Text Messages Input the phone number of the recipient of the notifications. The recipient will receive a text message every time the
	ditio	n		conditions trigger the notifications.
And	nd	Or Measure	Accumulated Duration (Min.)	
		Over Cycle		
		Faulted Blocked		Text Message
	Link t	Starved o subscription	Email	Close Sav



## Link to Subscriptions (Conditional Note 3.6)

### 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.

View All Notification S01 Fixture	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.	
Range Clear Link C: Unnamed (Report) III (Report) Test (Dashboard) Test (Dashboard) Test (Dashboard) adf (Dashboard) adf (Dashboard) Test (Dashboard) Test (Dashboard) Test (Report) Linnamed (Dashboard) Test (Report)	Atted Duration (Min.)	med (Report)
	Link to	subscription

NOTE: Users need to have the Analyst role to create and maintain Conditional notifications.





CPU

60

70 80 90 100

20 30 40 50

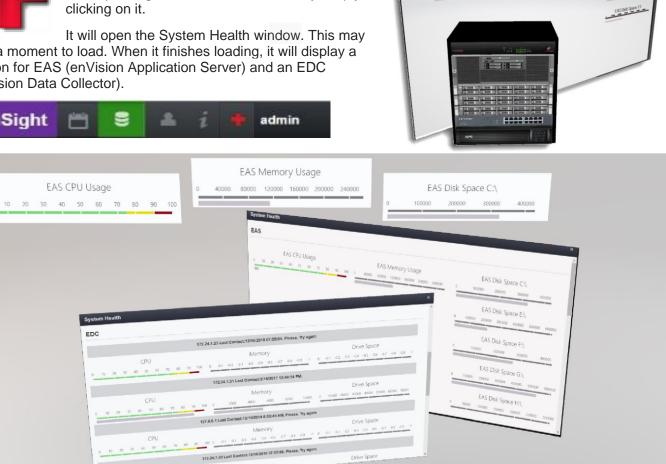
10



0  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).

### enSight admin



Drive Space

8000

10000

Memory 4000 6000

Momory

2000

EAS

EAS CPU Usage

□ d 6 2 4 <del>8 4</del> 4 **+ 11** 11 11 11 11 11 11 11

EAS Disk Space CI

EASDER Space EL

EAS Memory Usage

Drive Space

0

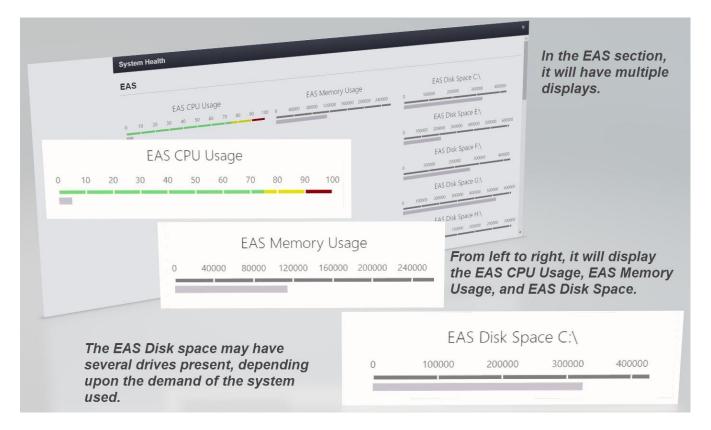
10000 20000 30000 40000 50000 60000 70000

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## **EAS Monitor 3.6**

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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.



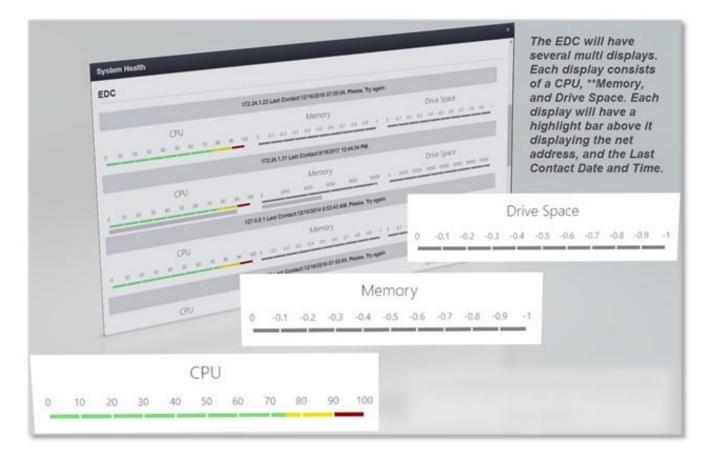
	EAS CPU Usage	EAS Memory Usage	EAS Disk Space C:\
10 20	30 40 50 60 70 80 90 100 0 40000	80000 120000 160000 200000 240000	0 50000 100000 150000 200000 250000 300000 350000 400000
	EAS CPU Usage		EAS Disk Space E:\
10	20 30 40 50 60 70 80	90 100	0 100000 200000 300000 400000 500000 60000
			EAS Disk Space F:\
	EAS Memory Usage	e	0 50000 100000 150000 200000 250000 300000 350000 400000
0 40000 80000 120000 160000 200000 240000		EAS Disk Space G:\	
			0 100000 200000 300000 400000 500000 6000
	EAS Disk Spa	ce C:\	EAS Disk Space H:\
			0 40000 80000 120000 160000 200000 240000 280000



□ d 6 2 4 <del>8 4</del> 4 **+ 11** 11 11 11 11 11 11 11

### EDC Monitor 3.6

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.



#### System Health

EDC

172.24.1.23 ** Last Contact:12/16/2016 07:55:04. Please, Try again				
CPU ** Memory ** Driv	ve Space			
10 20 30 40 50 60 70 80 90 100 0 -0.1 -0.2 -0.3 -0.4 -0.5 -0.6 -0.7 -0.8 -0.9 -1 0 -0.1 -0.2 -0.3 -0.4 -	0.5 -0.6 -0.7 -0.8 -0.9 -1			
172.24.1.85 ** Last Contact:/11/12/2015 3:20:20 PM. Please, Try again				
Traze, too Last contact to taze of a case, the rease, thy again				
CPU ** Memory ** Driv	ve Space			
10 20 30 40 50 60 70 80 90 100 0 -0.1 -0.2 -0.3 -0.4 -0.5 -0.6 -0.7 -0.8 -0.9 -1 0 -0.1 -0.2 -0.3 -0.4	-0.5 -0.6 -0.7 -0.8 -0.9 -1			
172.24.1.31 ** Last Contact: 1/24/2017 2:25:31 PM.				
CPU ** Memory ** Driv	ve Space			
- 10 20 30 40 50 60 70 80 90 100 0 1000 2000 3000 4000 5000 6000 7000 8000 0 10000 20000 30000	40000 50000 60000 70000			
127.0.0.1 ** Last Contact:12/16/2016 07:55:04. Please, Try again				
CPU ** Memory ** Driv	ve Space			
	-0.5 -0.5 -0.7 -0.8 -0.9 -1			
אלשי כאשי 200 - 100 - 100 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -	-10.9 -10.9 -10.9 -10.9 -1			
127.0.0.1 ** Last Contact:12/10/2014 8:53:43 AM. Please, Try again				



# Glossary

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

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Critical bug fix updates for the version of software purchased.

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Unlimited access to the on-line support materials available at Beet Analytics Technology support website <a href="http://support.beet.com">http://support.beet.com</a>

Critical bug fix updates for the version of software purchased

Product enhancement updates for the duration of the service maintenance contract

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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!* 





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

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

See Troubleshooting articles on the Envision Customer Knowledge Base website: <u>https://docs.beet.com/display/EKB/Troubleshooting+articles</u>

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