OEE Alert Release Note

Version 2.0

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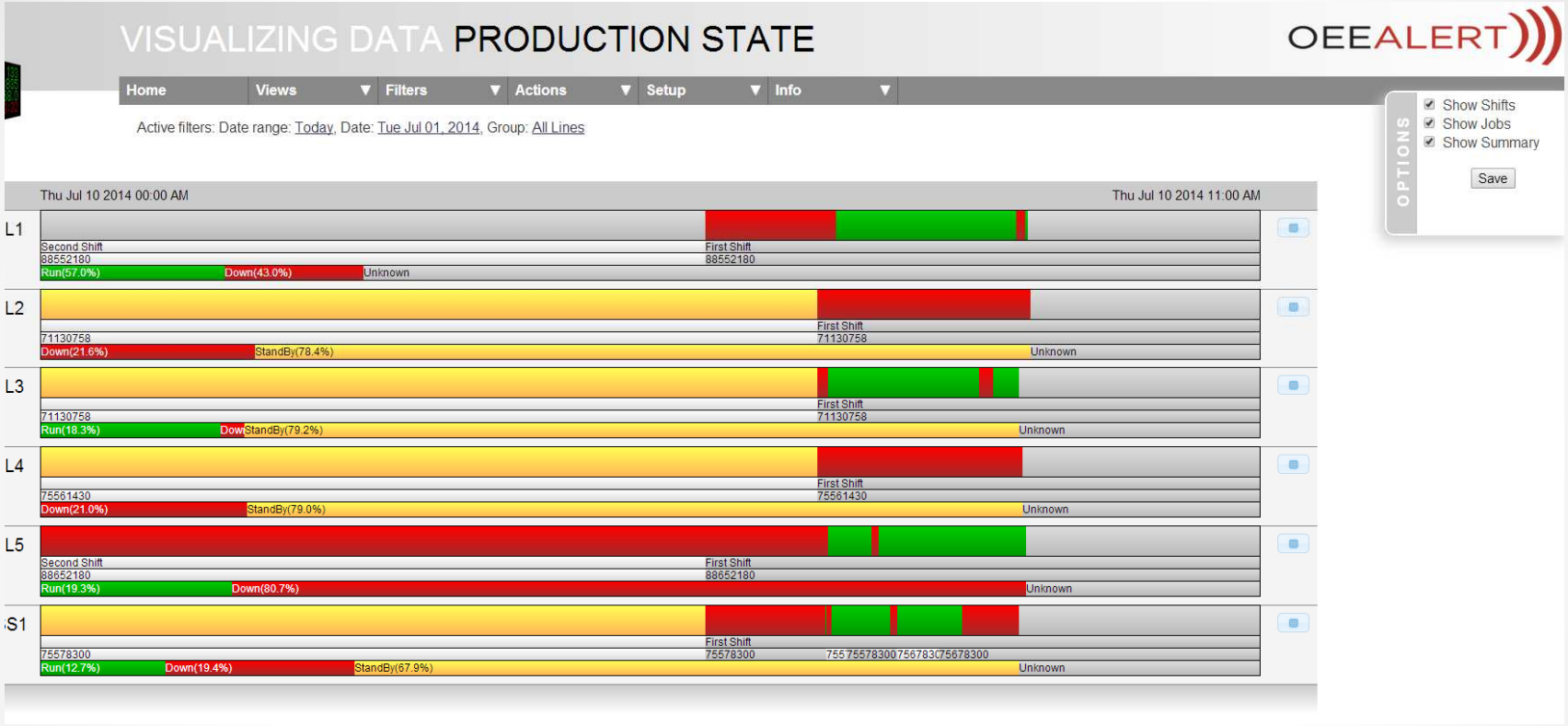
What's New in 2.0

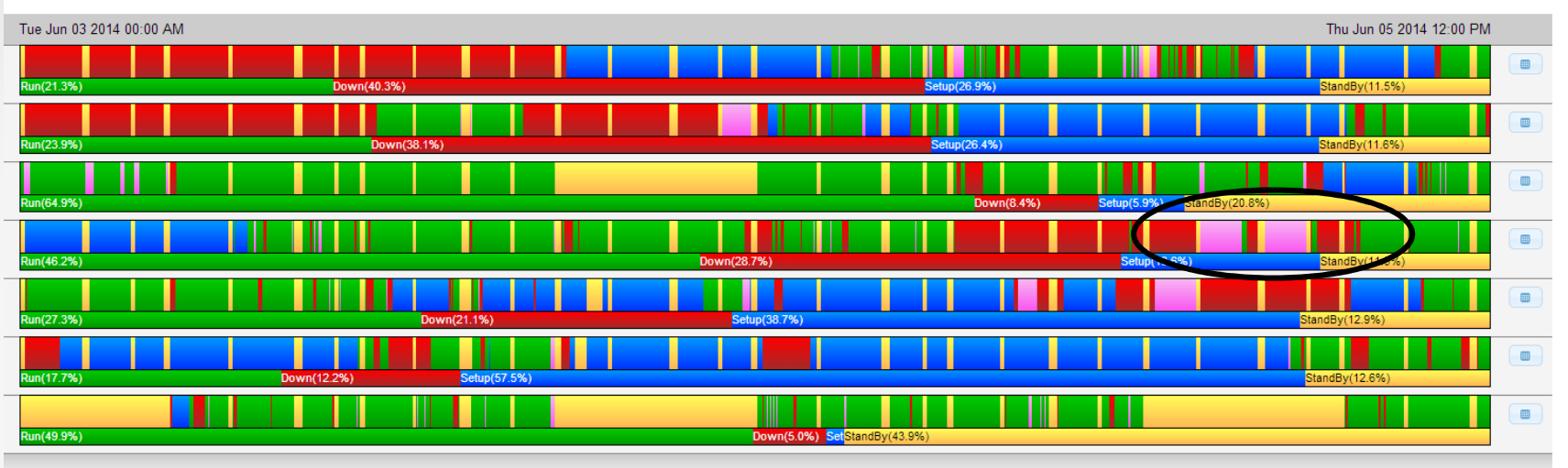
- Production State View
  - Change the color of a specific reason
  - Display a comment marker to indicate a comment for an event
- Hour-By-Hour View
  - 'Today' checkbox so the view always displays 'Today's' date.
  - Goal Delta - parts produced above or below the predicted number of pieces for that hour
- Display View
  - View Vorne XL displays horizontally
- Actions
  - Set Comment
  - View/Print all comments
  - View/Print Alerts sent
- Preferences
  - Additional preferences to provide more control over the reported data
- Kiosk "Mode"
  - Multiple tabs displaying different categories or groups

Production State - Options



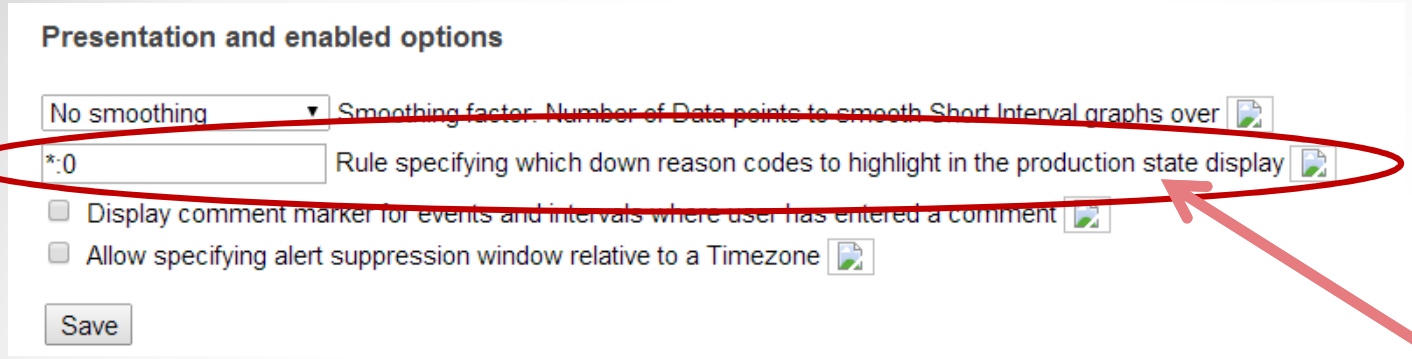
The **OEE Alert Production State** screen now displays the correct shifts and job/part information when you select to Show Shifts or Show Jobs.

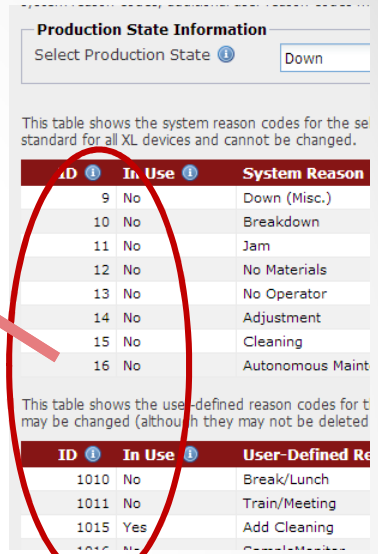
Production State - Change a Reason Code Color



You can now set a preference to change the color of a specific down reason or a range of reason codes to pink. This is very useful to highlight those elusive 'None' down events where the correct reason was not entered.

Production State – Change a Reason Code Color

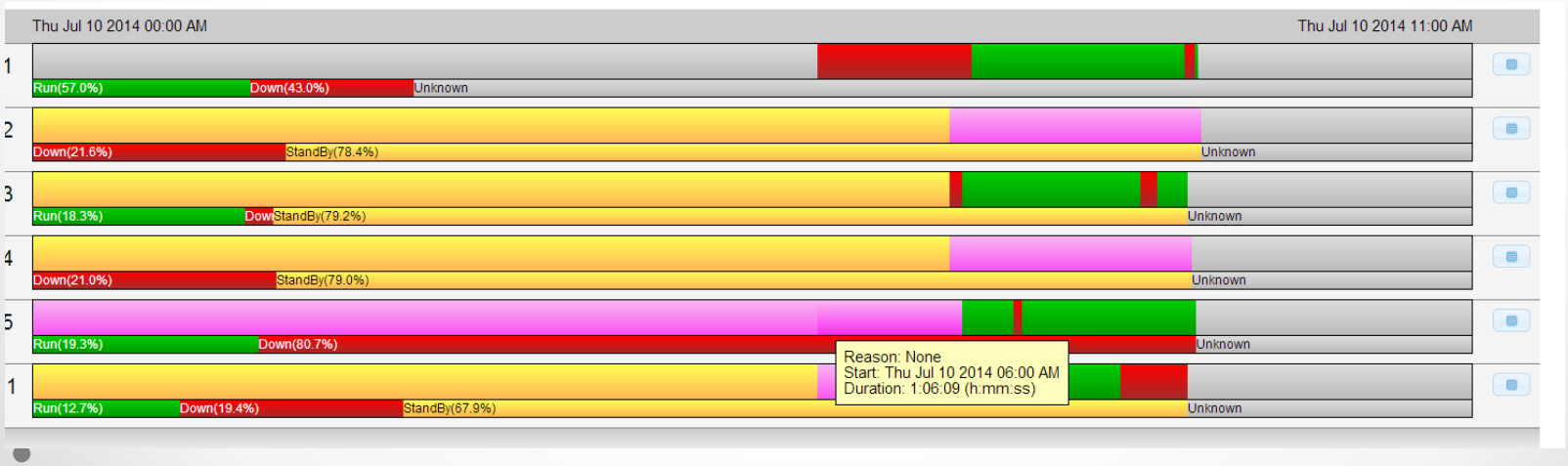




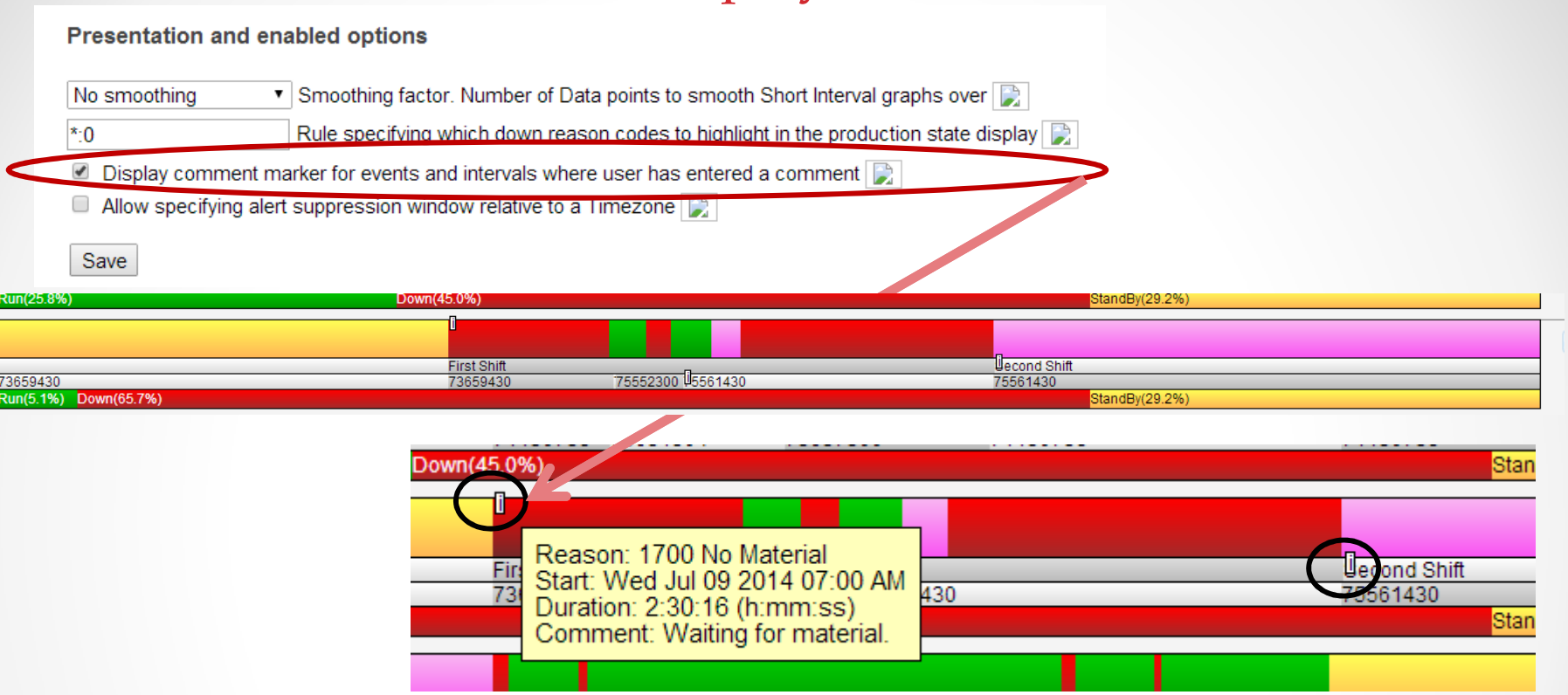
Reason codes set up in this rule will render in a different color (pink).

Setup – Preferences = The format to designate which lines and reason codes will be the different color are:

- Device:code range (dash separated), or device:code. (Device can be '*' for all.
- Multiple rules are separated by a semi-colon (;).
- The reason code references the reason number that you have programmed into each Vorne XL unit.
- Reason code zero is the default for the Reason = None.



Production State – Display Comment Marker

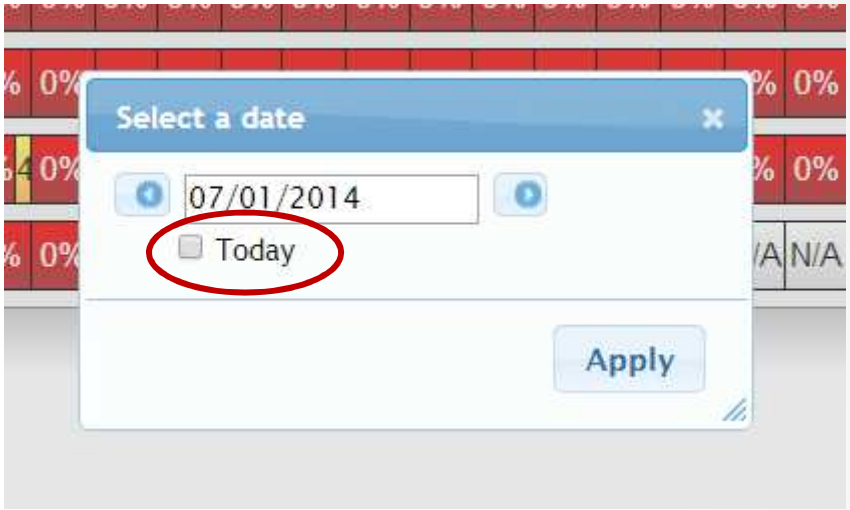


Comment display markers

- When a comment is entered (Actions > Set Comment) for an event or interval, the comment is displayed as part of the hover help shown when moving over the event or interval in the production state view.
- It is not clear where comments were entered until you hover over it. If comments are entered sporadically, a visual marker can be enabled to show which events and intervals have comments.
- If you are in the habit of annotating every down event, this may be visual overload, which is why you can turn it off by unchecking this setting

Hour-By-Hour – Always default to 'Today'

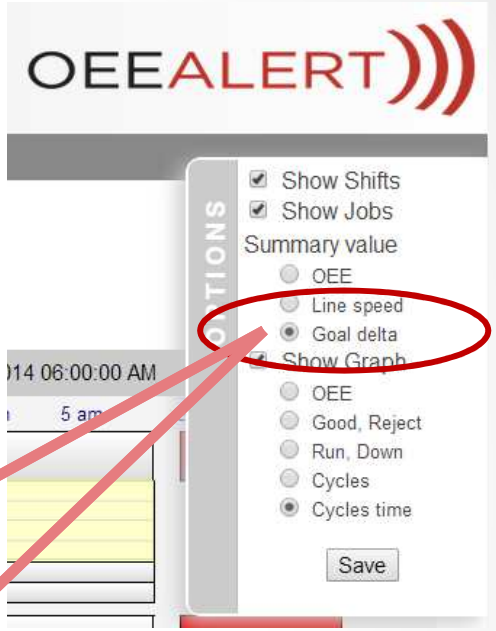
By selecting the **Today** checkbox, OEE Alert Hour-By-Hour page will always reflect the current day each time you open the browser page.

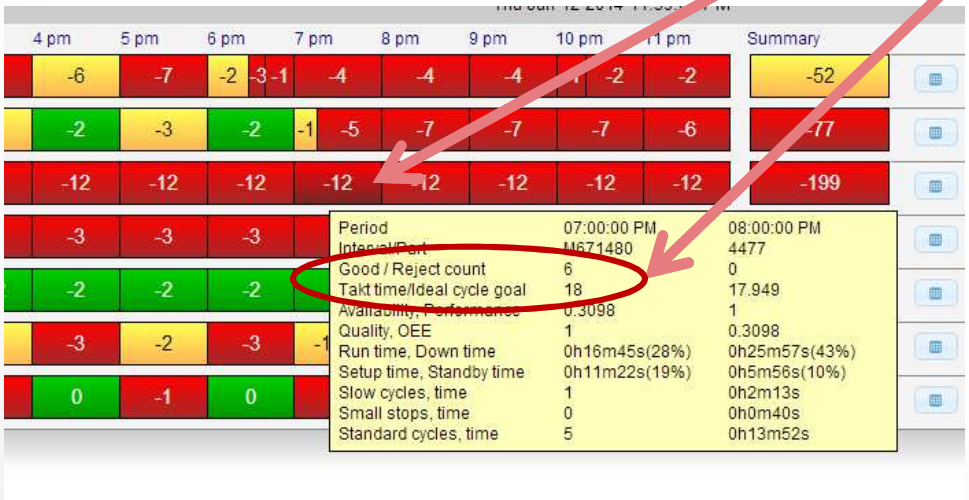


Hour-By-Hour – Goal Delta

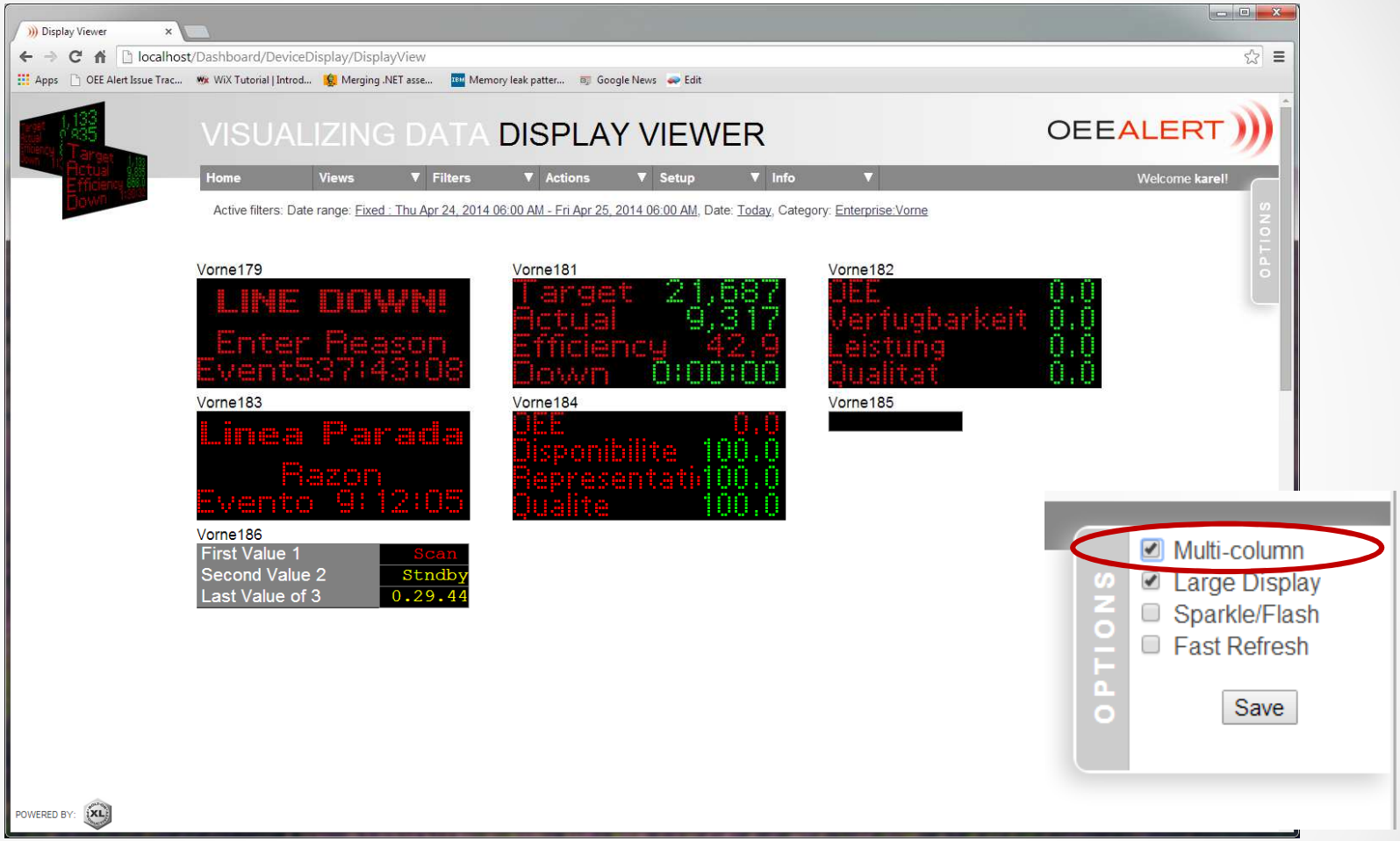
Goal delta

- The number of parts produced above or below the predicted number of pieces for that period, based on takt time and scheduled run time.
- This is a variation on line speed, but instead of displaying the absolute amount (count), it displays the difference (or delta) from the target.
- This may be a negative number (less produced than targeted, line speed is too low) or positive (more produced than targeted).
- This is on option in the Hour-By-Hour view.



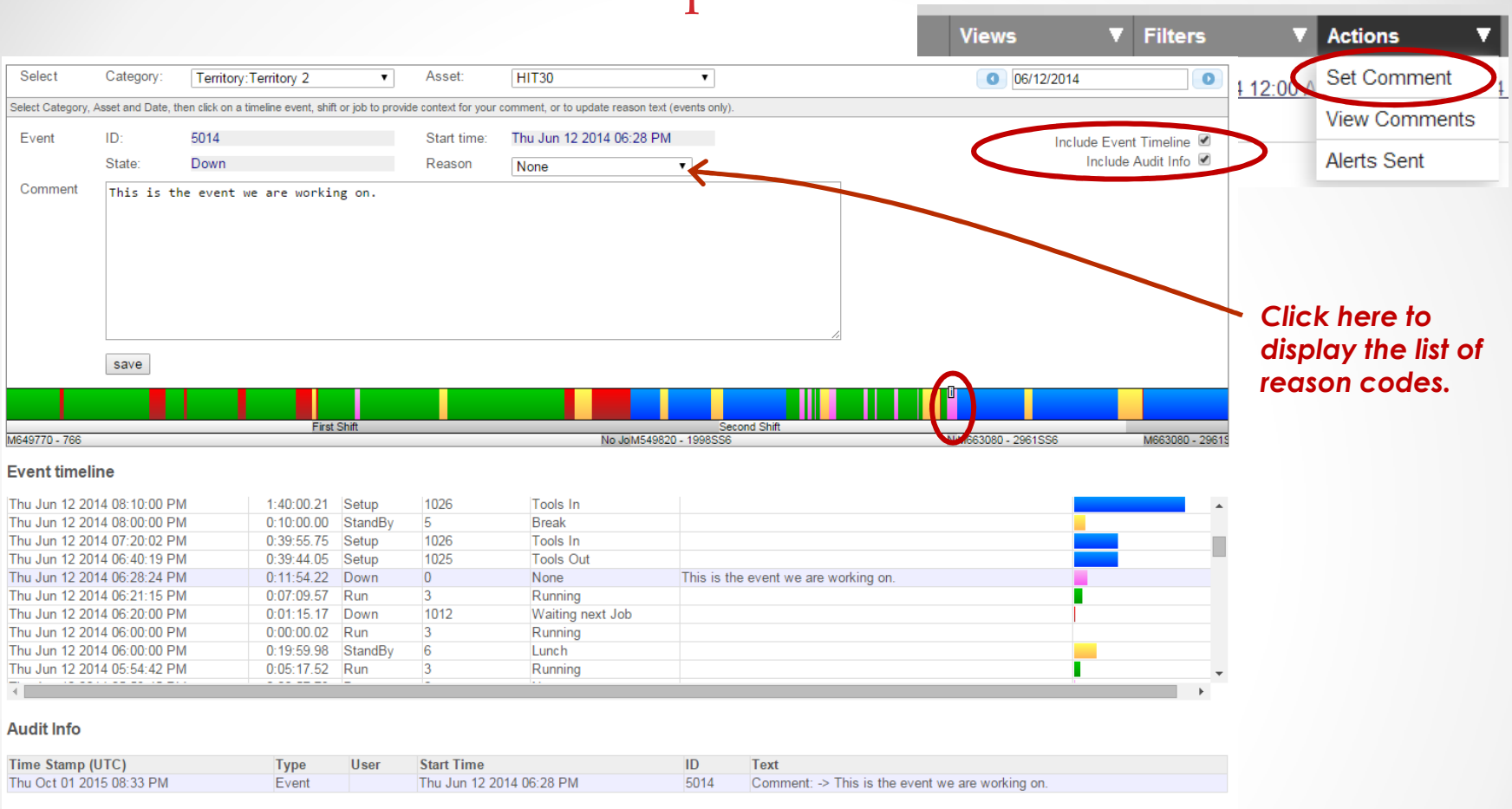


Display Viewer – horizontal display



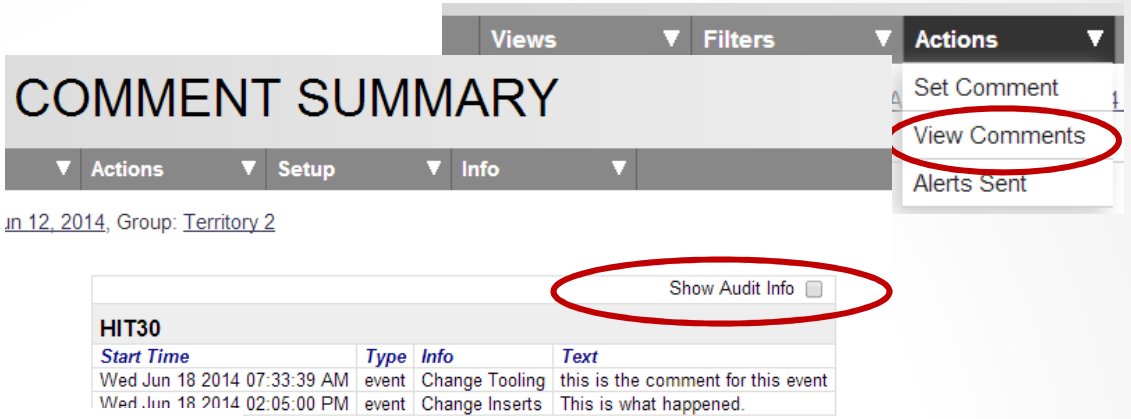
View all of your live Vorne XL displays on one screen - now horizontally or vertically. Select **Multi-column** to view horizontally.

Actions – Set Comment – update reasons & add comments



- We have now added a list of the events in time sequence so that you can either click on an event in the production state view or select the specific event and either change the reason text and/or enter comments for the selected event.
- You can also add comments to Shifts and Jobs.
- The Audit Info provides an audit trail of the changes.

Actions – View Comments



Show Audit Info

HIT30

Time Stamp	Item Start Time	Type	Info	User	Change
Mon Jun 16 2014 02:07:05 PM	Mon Jun 16 2014 06:19:05 AM	event	TPM		ReasonText: None -> TPM
Mon Jun 16 2014 02:06:30 PM	Mon Jun 16 2014 08:20:01 AM	event	Rerun		ReasonText: None -> Rerun
Mon Jun 16 2014 02:06:02 PM	Mon Jun 16 2014 08:40:00 AM	event	None		ReasonText: None -> Adjustment
Mon Jun 16 2014 02:06:48 PM	Mon Jun 16 2014 08:40:00 AM	event	None		ReasonText: None -> Adjustment
Tue Jun 17 2014 12:20:13 PM	Tue Jun 17 2014 06:05:00 AM	event	None		ReasonText: None -> TPM
Fri Jun 20 2014 05:27:21 PM	Fri Jun 20 2014 10:52:06 AM	event	Running		ReasonText: None -> Running

HS01

Time Stamp	Item Start Time	Type	Info	User	Change
Fri Jun 20 2014 11:50:37 AM	Fri Jun 20 2014 05:03:24 AM	event	Assist Operator		ReasonText: None -> Assist Operator

SL250

Time Stamp	Item Start Time	Type	Info	User	Change
Mon Jun 16 2014 02:07:50 PM	Mon Jun 16 2014 06:10:55 AM	event	TPM		ReasonText: None -> TPM

SL253N

Time Stamp	Item Start Time	Type	Info	User	Change
Mon Jun 16 2014 02:08:54 PM	Mon Jun 16 2014 06:46:15 AM	event	Part Check		ReasonText: Waiting next Job -> Part Check
Mon Jun 16 2014 02:08:13 PM	Mon Jun 16 2014 07:18:04 AM	event	None		ReasonText: None -> Running
Mon Jun 16 2014 02:08:22 PM	Mon Jun 16 2014 07:18:04 AM	event	None		ReasonText: None -> Running
Fri Jun 20 2014 11:51:16 AM	Fri Jun 20 2014 06:41:21 AM	event	Adjustment		ReasonText: None -> Adjustment

SL253S

Time Stamp	Item Start Time	Type	Info	User	Change
Fri Jun 20 2014 11:52:34 AM	Fri Jun 20 2014 06:29:02 AM	event	Adjustment		ReasonText: None -> Adjustment

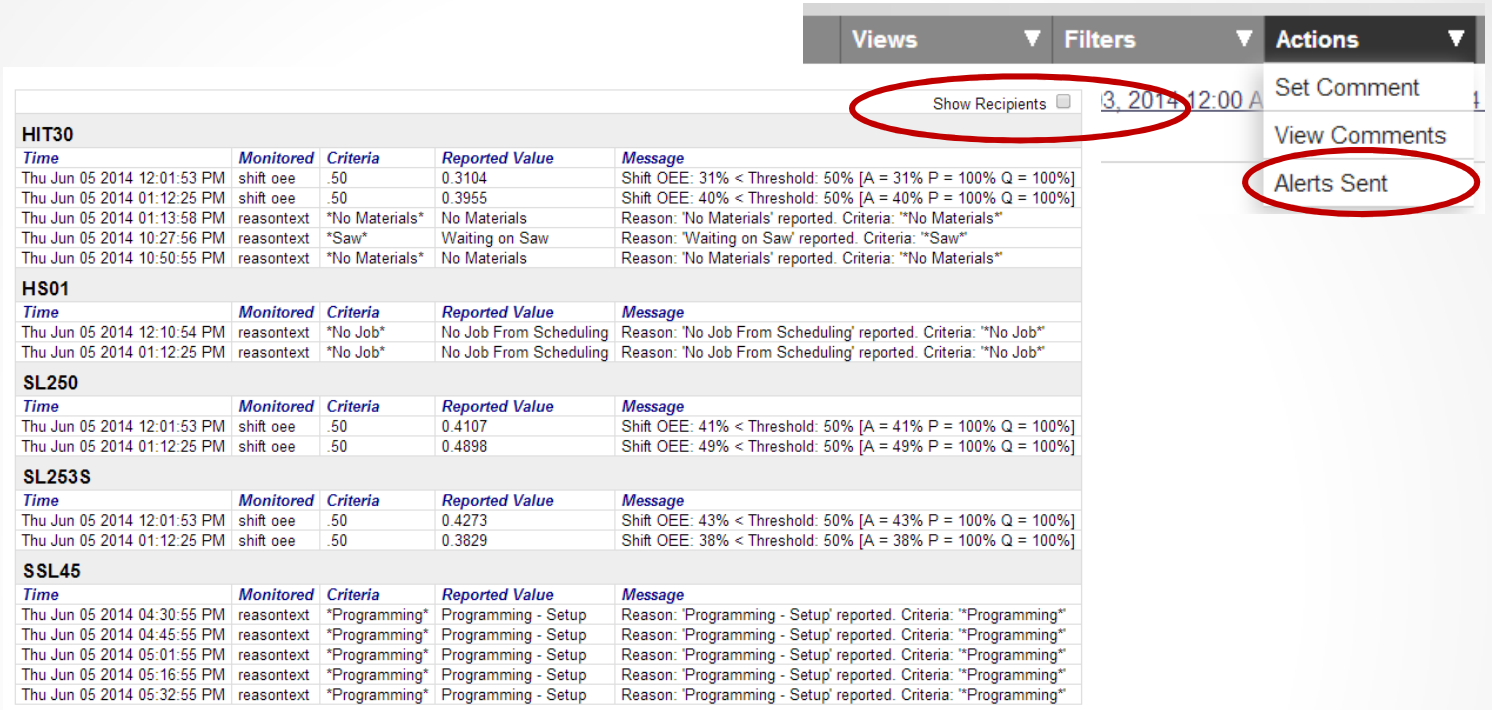
SL403

Time Stamp	Item Start Time	Type	Info	User	Change
Mon Jun 16 2014 02:09:35 PM	Mon Jun 16 2014 08:26:16 AM	event	Other Machine		ReasonText: None -> Other Machine

The display of the comments is dependent on the **Active filters: Date Range** selected

- You can View/Print Comments for all or some lines based on the selected grouping.
- The Audit Info provides an audit trail of the changes.

OEE Alert – Actions – Alerts Sent



HIT30

Time	Monitored	Criteria	Reported Value	Message
Thu Jun 05 2014 12:01:53 PM	shift oee	.50	0.3104	Shift OEE: 31% < Threshold: 50% [A = 31% P = 100% Q = 100%]
Thu Jun 05 2014 01:12:25 PM	shift oee	.50	0.3955	Shift OEE: 40% < Threshold: 50% [A = 40% P = 100% Q = 100%]
Thu Jun 05 2014 01:13:58 PM	reasontext	*No Materials*	No Materials	Reason: 'No Materials' reported. Criteria: '*No Materials*'
Thu Jun 05 2014 10:27:56 PM	reasontext	*Saw*	Waiting on Saw	Reason: 'Waiting on Saw' reported. Criteria: '*Saw*'
Thu Jun 05 2014 10:50:55 PM	reasontext	*No Materials*	No Materials	Reason: 'No Materials' reported. Criteria: '*No Materials*'

HS01

Time	Monitored	Criteria	Reported Value	Message
Thu Jun 05 2014 12:10:54 PM	reasontext	*No Job*	No Job From Scheduling	Reason: 'No Job From Scheduling' reported. Criteria: '*No Job*'
Thu Jun 05 2014 01:12:25 PM	reasontext	*No Job*	No Job From Scheduling	Reason: 'No Job From Scheduling' reported. Criteria: '*No Job*'

SL250

Time	Monitored	Criteria	Reported Value	Message
Thu Jun 05 2014 12:01:53 PM	shift oee	.50	0.4107	Shift OEE: 41% < Threshold: 50% [A = 41% P = 100% Q = 100%]
Thu Jun 05 2014 01:12:25 PM	shift oee	.50	0.4898	Shift OEE: 49% < Threshold: 50% [A = 49% P = 100% Q = 100%]

SL253S

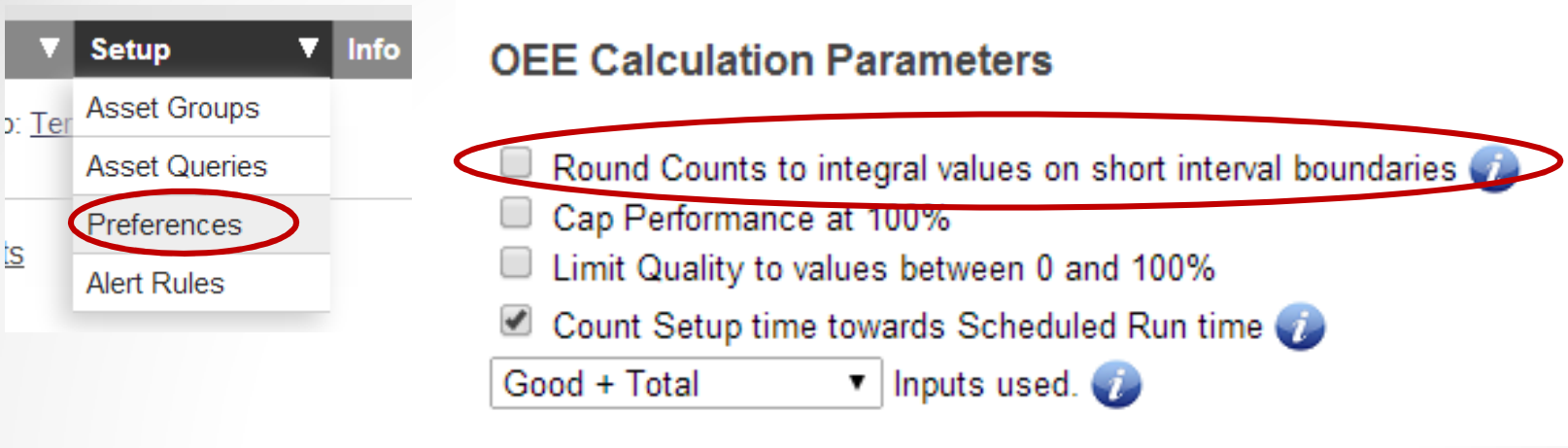
Time	Monitored	Criteria	Reported Value	Message
Thu Jun 05 2014 12:01:53 PM	shift oee	.50	0.4273	Shift OEE: 43% < Threshold: 50% [A = 43% P = 100% Q = 100%]
Thu Jun 05 2014 01:12:25 PM	shift oee	.50	0.3829	Shift OEE: 38% < Threshold: 50% [A = 38% P = 100% Q = 100%]

SSL45

Time	Monitored	Criteria	Reported Value	Message
Thu Jun 05 2014 04:30:55 PM	reasontext	*Programming*	Programming - Setup	Reason: 'Programming - Setup' reported. Criteria: '*Programming*'
Thu Jun 05 2014 04:45:55 PM	reasontext	*Programming*	Programming - Setup	Reason: 'Programming - Setup' reported. Criteria: '*Programming*'
Thu Jun 05 2014 05:01:55 PM	reasontext	*Programming*	Programming - Setup	Reason: 'Programming - Setup' reported. Criteria: '*Programming*'
Thu Jun 05 2014 05:16:55 PM	reasontext	*Programming*	Programming - Setup	Reason: 'Programming - Setup' reported. Criteria: '*Programming*'
Thu Jun 05 2014 05:32:55 PM	reasontext	*Programming*	Programming - Setup	Reason: 'Programming - Setup' reported. Criteria: '*Programming*'

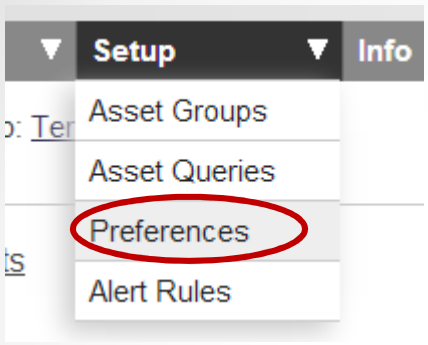
- You can View/Print Alerts Sent for all or some lines based on the selected grouping.
- The Show Recipients displays the all of the recipients of each alert.

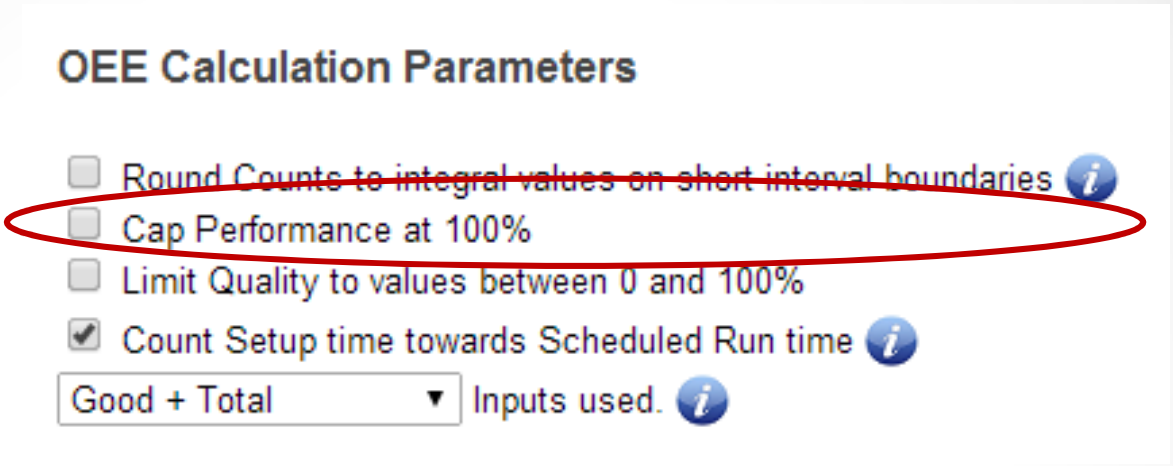
Preferences – OEE Calculation Parameters – Round Counts



- ***Round Counts to integral values.***
  If you count discrete items, you expect counts for short intervals to be integral values.
- But the way information comes to the application is by means of the data collector, which queries for data at configured intervals. These intervals most likely do not coincide with the reporting intervals.
- For instance: The short interval ends at 10am, and data was collected at 9:59:45am and 10:00:45, giving us good counts of 75 and 80 respectively.
- Strict interpolation gives us 25% of 5 (the delta) for the previous hour and 75% of 5 for the next hour, or 1.25 and 3.75.
- This may be appropriate when the counts represent a processed length, but probably not for a discrete count. Checking 'Round Count to integral values' will cause it to report 1 and 4 instead.

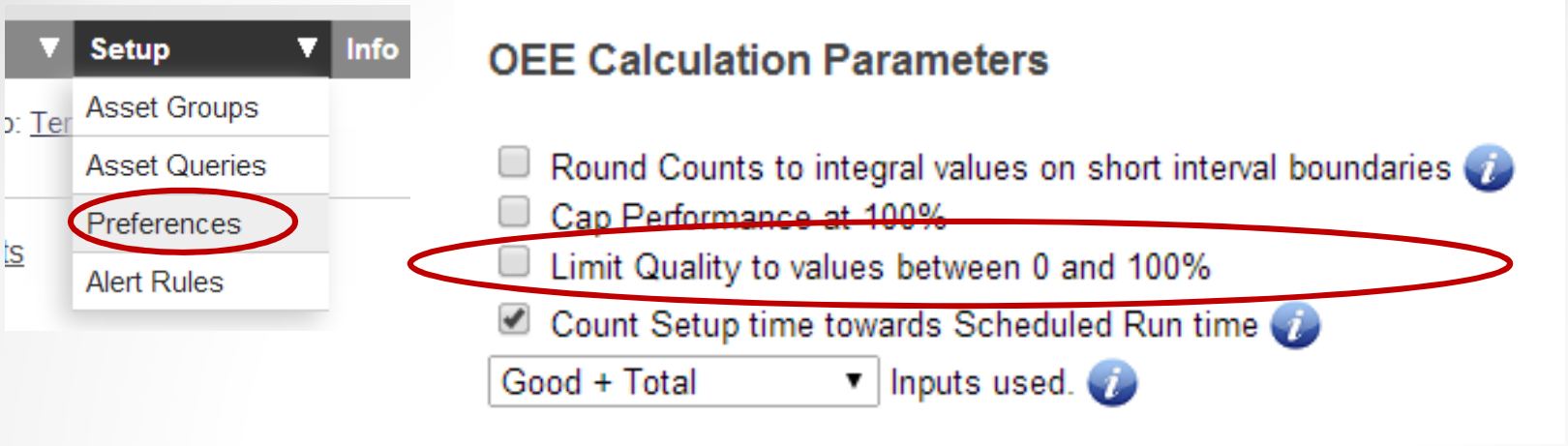
Preferences – OEE Calculation Parameters – Cap Performance





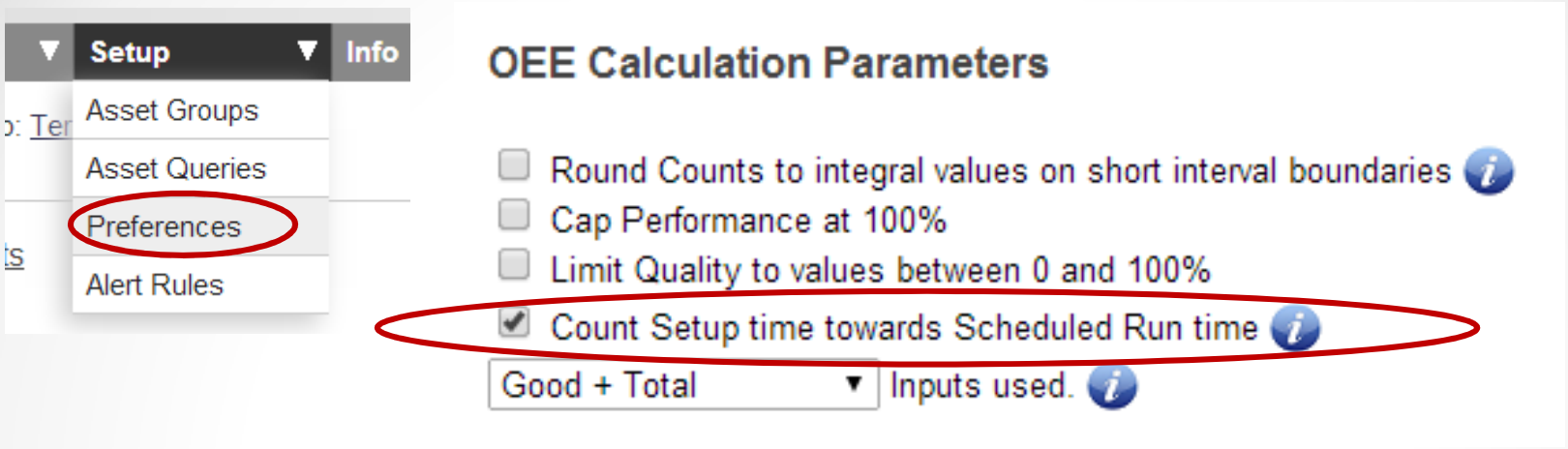
- ***Cap Performance***
- Due to how takt time and ideal cycle time are setup for a job, performance may appear greater than 100%. This will skew OEE, possibly pushing OEE above 100%, hiding the impact of availability and quality.
- Checking Cap Performance assures the reported performance value is bounded.

Preferences – OEE Calculation Parameters – Limit Quality



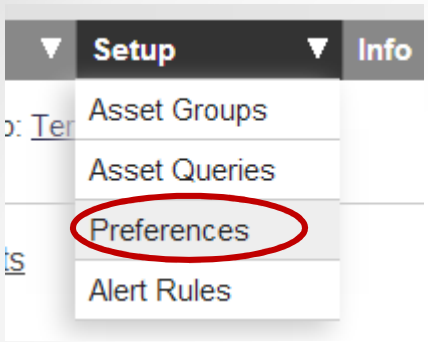
- ***Cap Quality***
- Sometimes items taken out (i.e. for QA) are re-added into the line, causing good to exceed total (quality > 100%).
- As this is counter-intuitive, this option allows you limit the reported quality value to the range of 0 - 100%

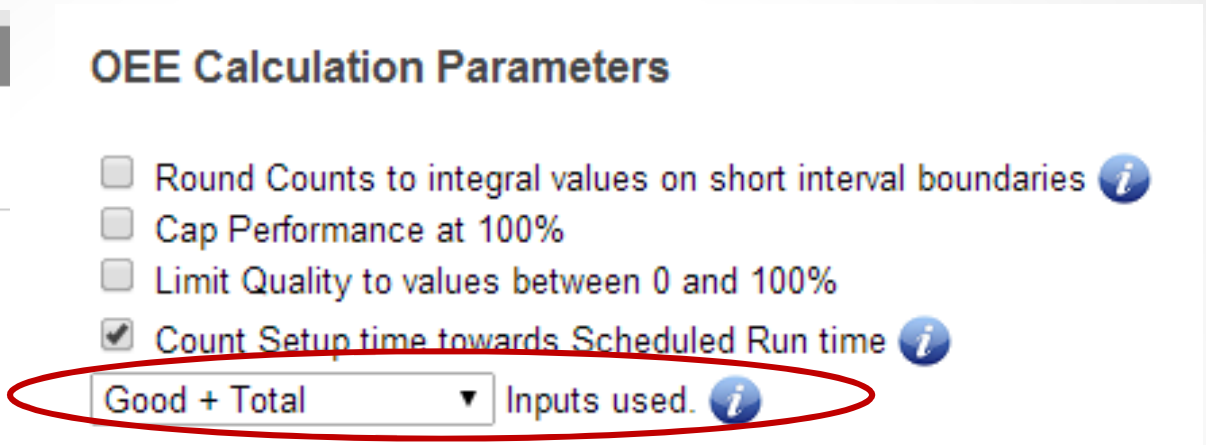
Preferences – OEE Calculation Parameters – Count Setup



- ***Count Setup towards scheduled run time***
- If checked, Availability = Run time / (Run time + Down time + Setup Time).
- Else, Availability = Run time / (Run time + Down time).
- Similarly, when calculating line speed, or goal delta (Hour-by-Hour view), setup time is included in calculating how many parts should be produced.

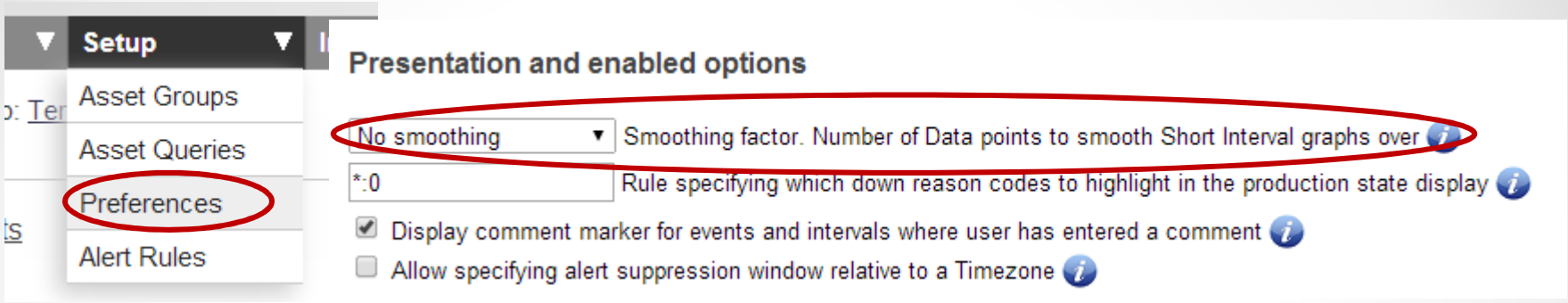
Preferences – OEE Calculation Parameters – Inputs Used





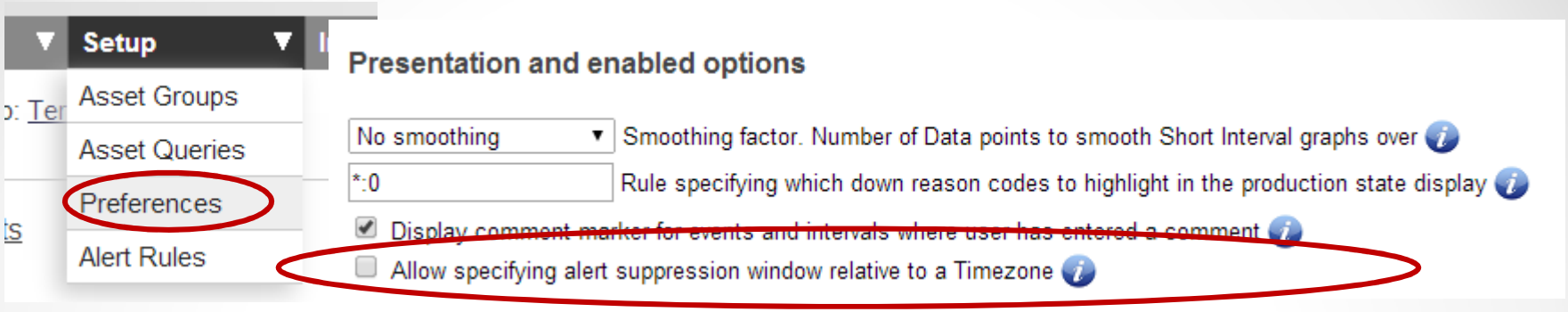
- ***Inputs Used***
- If you are using two inputs on the Vorne, you have a choice of what to measure: Total + Good, Good + Reject or Total + Reject.
- To fully calculate all OEE components, two inputs are required.
  When counting a single count, you typically have Total (= Good), with reject = 0, resulting in a fixed quality of 100%.
- It is possible that the device has been wired and programmed with additional inputs, having independent counts for total, good and reject, resulting in total not necessarily being good + reject.
- For instance, total may be your 'in' count, where 'in count' = work-in-progress + 'out good' + 'out reject'. For this reason we allow you to select which fields to use for the OEE calculations. If you use a single input, choose either Good + Reject or Total + Reject, as reject will be 0 anyway

Preferences – Presentation & Enabled Options - Smoothing

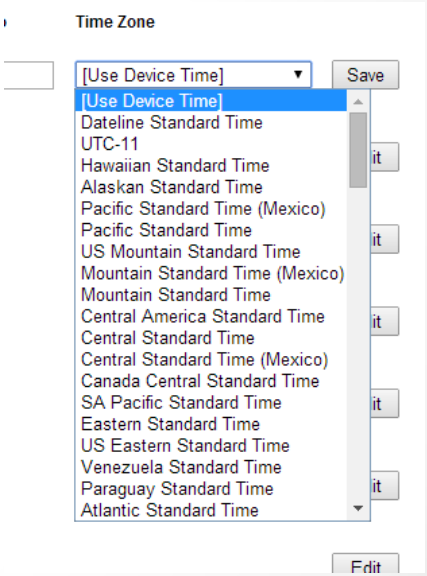


- ***Smoothing***
- The Hour-by-Hour view has the ability to show graphs of a variety of data points.
- These data points correspond to the collection frequency of the data collector, for instance one data point per minute.
- The data displayed is for that one minute interval. If the good count at 9:57 is 1500 and at 9:58 it is 1549, we counted 49 between the two data collection samples.
- This number is normalized based on the actual time between two samples and plotted.
- Sometimes there is short time variation in the speed of the line, causing the graph to show a fair amount of jitter. This reflects the reality of the sampling, but may hide longer term ups and downs, which may be more meaningful.
- A smoothing option is offered to average the sample values by taking into account neighboring values.
- The smoothing controls whether it is used, and when used, how many samples we average over.

Preferences – Presentation & Enabled Options – Alert Suppression



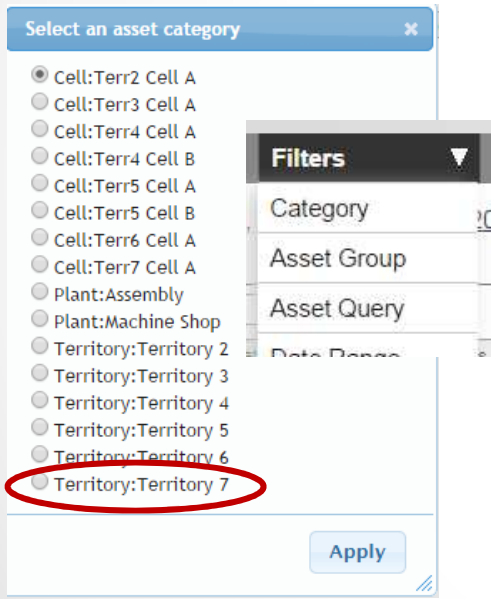
- ***Alert suppression by time zone***
- Alerts are sent when they happen, to whomever is configured to receive them.
- The recipient time filter screen (accessible from the Alert Rules setup screen) allows you to limit the alerts you receive to only certain times of the day, i.e. time corresponding to a specific shift.
- To allow for the fact that you might not want to receive alerts during weekends, an excluding time window can be specified, for instance from Friday 6pm till Monday 7am.
- Normally the times entered are device (asset) times, which is appropriate for most clients, which have devices in a single time zone.
- If you are monitoring devices in multiple time zones, you may want to specify an exclusion window relative to the time zone of the recipient.
- Checking this option enables a time zone dropdown on the Filter Recipients screen.



Kiosk "Mode"
Display same view on different tabs for different categories or groups

Use Case – reason for this capability

- To be able to display groups of devices on a different tab and to be able to cycle through the tabs without changing the groups. **Useful on a big screen TV.**
- You may have your devices grouped by **Filters – Category** to see how the categories are setup. You will need to know exactly how they are setup as this is how you will configure the page.

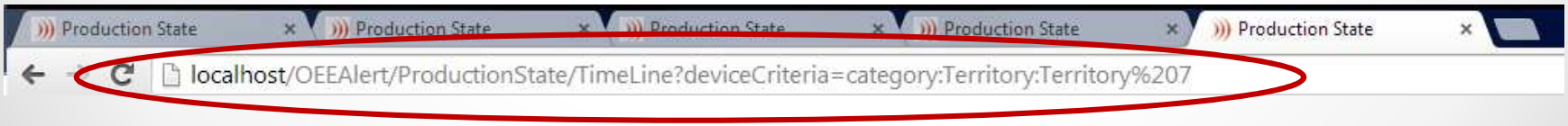


To make a browser tab always display the same category or group:

- After you have selected the View, such as Production State or Hour-by-Hour, you would make the following changes to the browser address:

Enter exactly as follows for each type of Filter:

?deviceCriteria=category:Territory:Territory 7
?deviceCriteria=category:Plant:Assembly
?deviceCriteria=group:Scheduling
?deviceCriteria=group:myGroup[debbie] (personal groups)
?deviceCriteria=query:Main Building



OEE Alert v2.0

In order to support the new Vorne v1.3.x firmware, you must upgrade to the latest

XL Bolt-on Data Collector version 1.7.12

http://www.sulzerconsulting.com/downloads/vorne/XL_Bolt-On_Data_Collector.zip

Version 2.0 of OEE Alert supports all versions of Vorne XL device firmware (0.7.x and higher).

Installation Files

http://oeealert.com/downloads/OEEAlertSetup.zip

If you have questions or need assistance, please contact either
Debbie Olk (OEE Alert, OEE Audit or custom reports)
or
Jim Sulzer (XL Bolt-On Data Collector).

Contact Us

- As the Vorne Authorized Reporting Consultants, we provide customized reporting solutions, including working with data from your ERP/MRP systems.
- We provide sales, support and customization for OEE Alert. (www.OEEAlert.com)

- In addition to customized reporting, we provide support and customization for the OEE Audit reporting software (designed specifically for the data captured from the Vorne XL devices).

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www.DebTechSystems.com