

# OEE Studio Release Note

## **Version 4.0**

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# What's New in 4.0

- **Enhancements**
- **Favorites Screen** - Provides ability to Archive or De-Activate reports and Identifies who created the report and when it was created
- **Trends - Time and Frequency Loss Charts** – optionally display Trend, Time and Average Duration or Occurrences
- **Availability – Graphical Comparison** – Optionally show the Occurrences on the chart.
- **Availability – State Comparison** – The states included on the screen are also reflected on the Dashboard.
- **Shift Data & Job Data** – Incorporate new fields from **OEE Alert** – Labor Hours, Scale Factor 1 and Scale Factor 2.
- **Shift Data & Job Data** – Optionally enable Series labels on the charts.
- **Shift Data & Job Data** – Provides the ability to split Y-Axis to display disparate data in relation to each element.
- **Shift Data & Job Data** – Added new fields to help quantify production loss within the 'Hidden Factory'
- **Define Custom Fields** – Additional automatic date groupings – Day of Week and Week of Year
  
- **New Report – Top Losses** - Review the top losses (Down, Setup, Standby) over time, comparing today, yesterday, this week, last week, this month and last month.
  
- **Schedule & Email Reports** - Provides the ability to Schedule Canned reports for emailing
  
- **Updated Website** – More online help - check it out!! [www.oeestudio.com/toolbox.html](http://www.oeestudio.com/toolbox.html)

# Favorites Screen

The screenshot shows the 'Saved Favorites' interface. At the top, there is a search bar with 'Enter text to search...', 'Find', and 'Clear' buttons, and a 'Remove Filters and Revert to Default Layout' button. Below the search bar are filters for 'Group Name' and 'Screen'. The main area is a table with columns: Status, Title, Hierarchy, Group Name, Availability, Date Range, and Schedule Status. The table lists several favorites, including 'MTTR - Pouch', 'Loss Events - Parts - carton fix', 'Loss Events - Parts carton cost', and 'Cartoner Cost Project'. The 'Show' and 'Edit' buttons for the 'Cartoner Cost Project' row are highlighted with a red rectangle.

Status	Title	Hierarchy	Group Name	Availability	Date Range	Schedule Status		
Active	MTTR - Pouch	Enterprise VettiGROUP	Weekly	All Users	Current Week	Unscheduled	Show	Edit
	VettiGROUP Created by DebbieO 12/20/2017							
Active	Loss Events - Parts - carton fix	Enterprise VettiGROUP	Weekly	All Users	Current Week	Unscheduled	Show	Edit
	VettiGROUP Created by DebbieO 3/8/2018							
Disabled	Loss Events - Parts carton cost	Enterprise VettiGROUP	Weekly	All Users	Current Week	Unscheduled	Show	Edit
	VettiGROUP Created by DebbieO 3/12/2018							
Active	Cartoner Cost Project	Enterprise VettiGROUP	Weekly	All Users	Current Week	Unscheduled	Show	Edit
	VettiGROUP Created by DebbieO 3/12/2018							

- Click on the Show button to launch your favorite report.
- Click on the Edit button to modify the settings.

The screenshot shows the 'Modify Favorites' dialog box. It has sections for 'Identification', 'Date Range', and 'Status'. The 'Title' field contains 'MTTR - Pouch' and the 'Description' field contains 'VettiGROUP Created by DebbieO 12/20/2017'. The 'Group Name' is set to 'Weekly'. The 'Date Range' section has 'Range' set to '1' and 'Week(s)' selected. The 'Available To' section has 'All Users' selected. The 'Status' section has 'Disabled' selected. The 'Delete Permanently' button is highlighted with a red rectangle. There are 'OK' and 'Cancel' buttons at the bottom.

- Each time that a Favorite is saved, it identifies who created the report and when it was created.
- Selecting 'Disabled' archives the Favorite report.
- If you want to permanently remove the report, click on the Delete Permanently button and it will be deleted from the database.

# Archive Favorite Reports

**Modify Favorites**

**Identification**

Title: Loss Events - Parts cartoner cost

Description: VetiGROUP  
Created by DebbieO 3/12/2018

Group Name: [Empty]

**Date Range**

Range: 1 [Day(s) selected] [Week(s)]

Available To: [All Users selected] [Just Me]

Status: [Active] [Disabled selected] [Delete Permanently]

Buttons: Set Scheduling, OK, Cancel

Scheduling is not supported for this screen

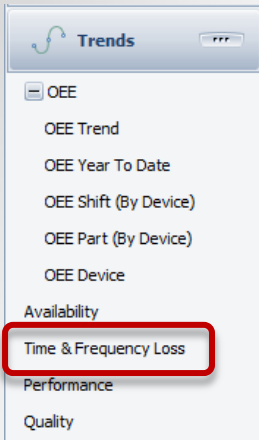
The Favorite Report can be permanently deleted by clicking this button.

Setting the Status of the saved Favorite Report to Disabled keeps the report available and now lets you hide it from view.

Disabled	Loss Events - Parts cartoner cost	VetiGROUP Created by DebbieO 3/12/2018	Enterprise VetiGROUP
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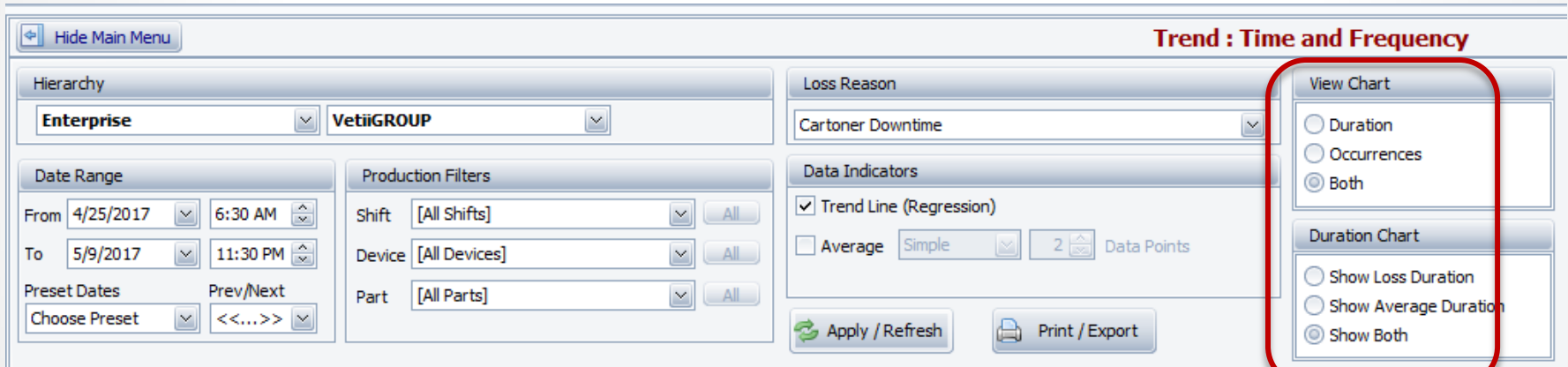
The status of the report on the Favorites screen now shows that the report is "Disabled"

# Trends – Time & Frequency Loss Charts



Optional selectors to view specific Trends and Durations.

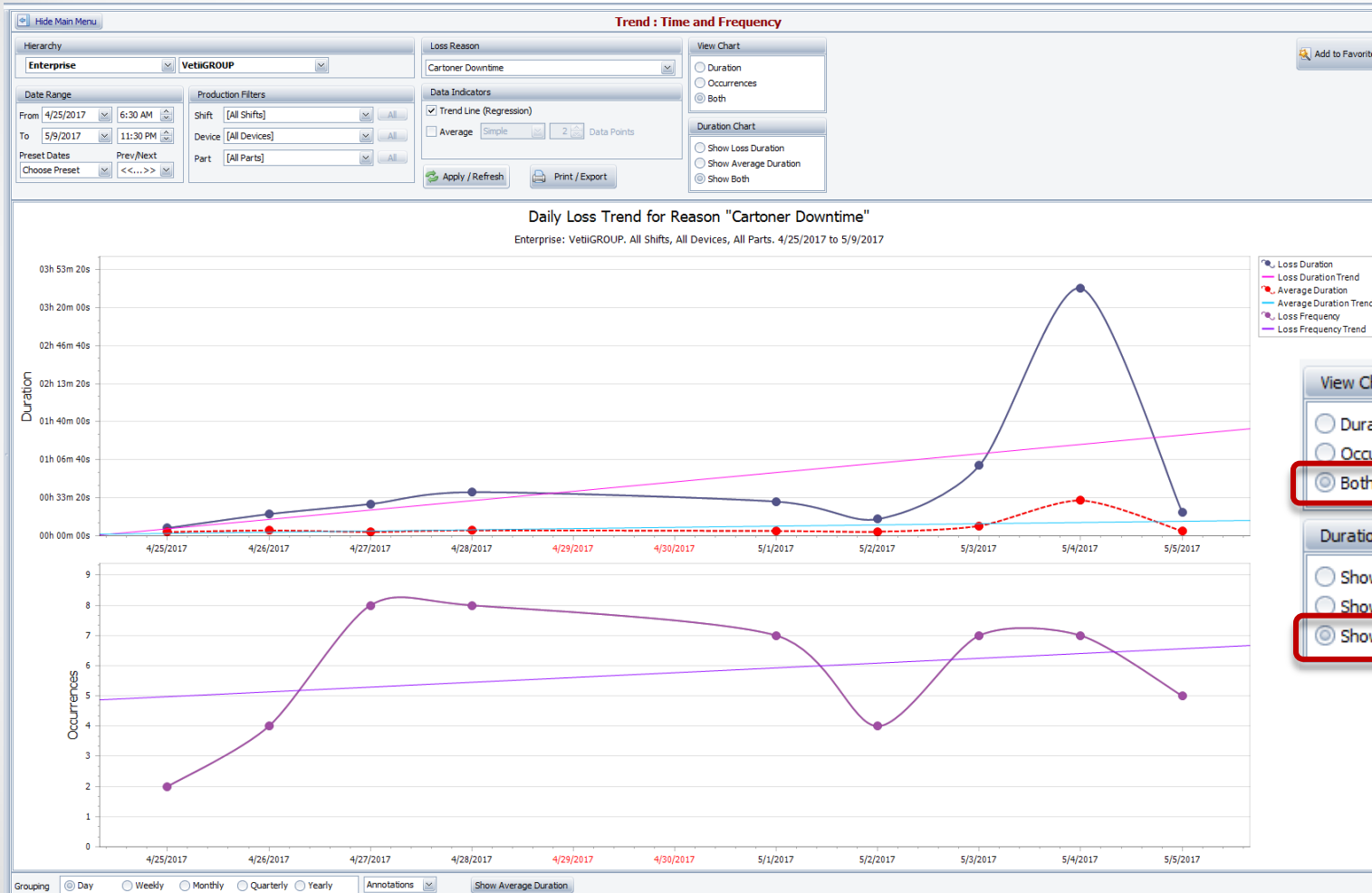
The next couple of pages will show the differences.



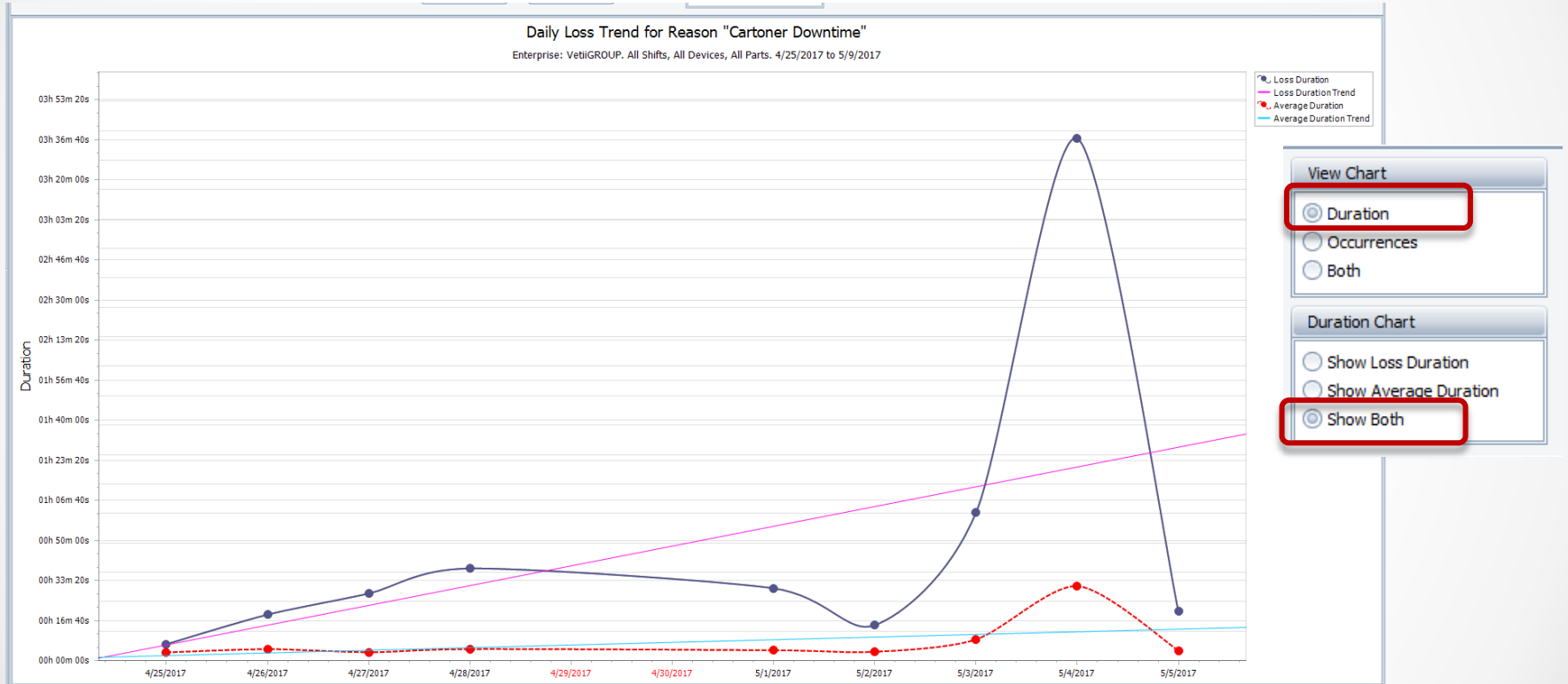
There are two option boxes.

- **View Chart** is used to select which Chart you want to see.
- **Duration Chart** is used to select which trend lines to see in the Duration Chart.

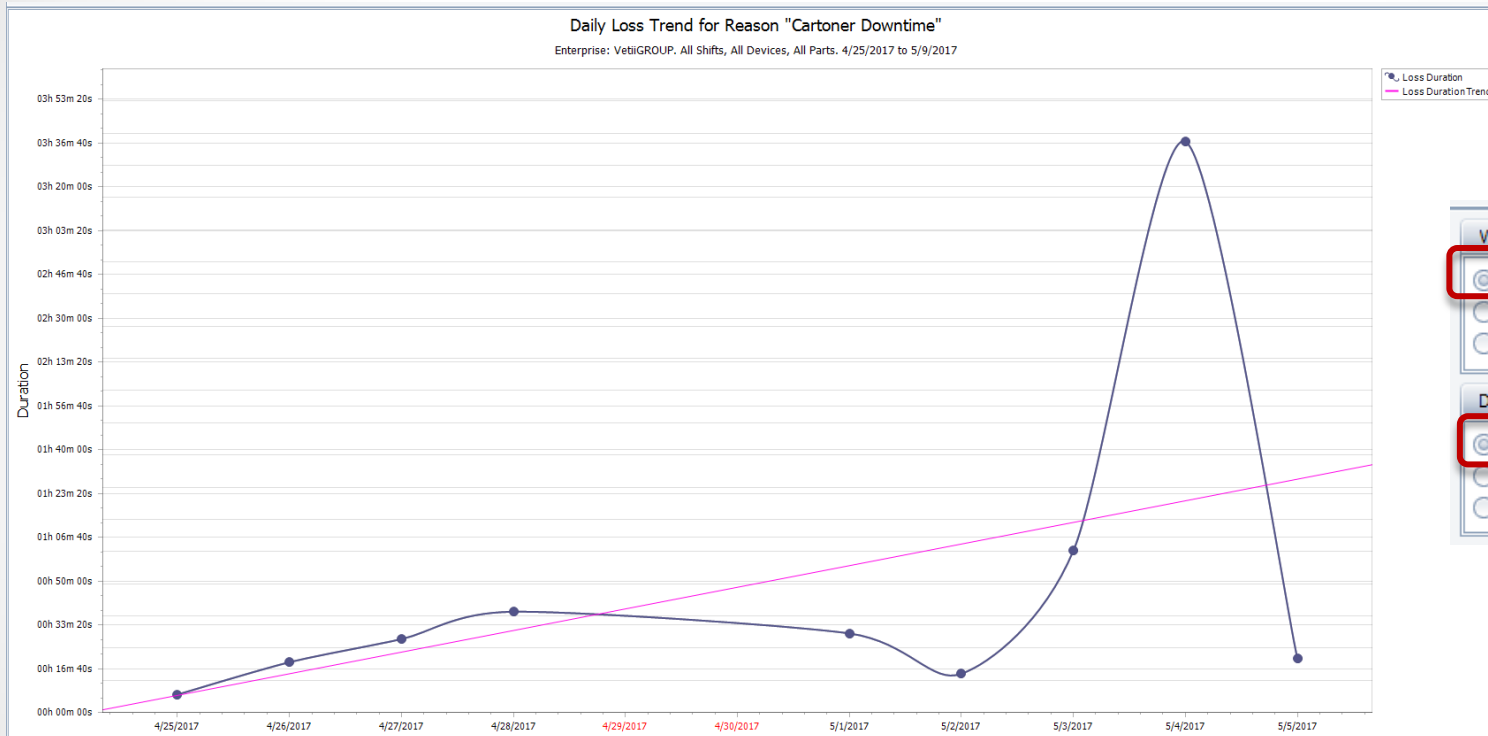
# Both Views



# View Duration Chart Only



# View Duration Chart – Loss Duration Only



View Chart

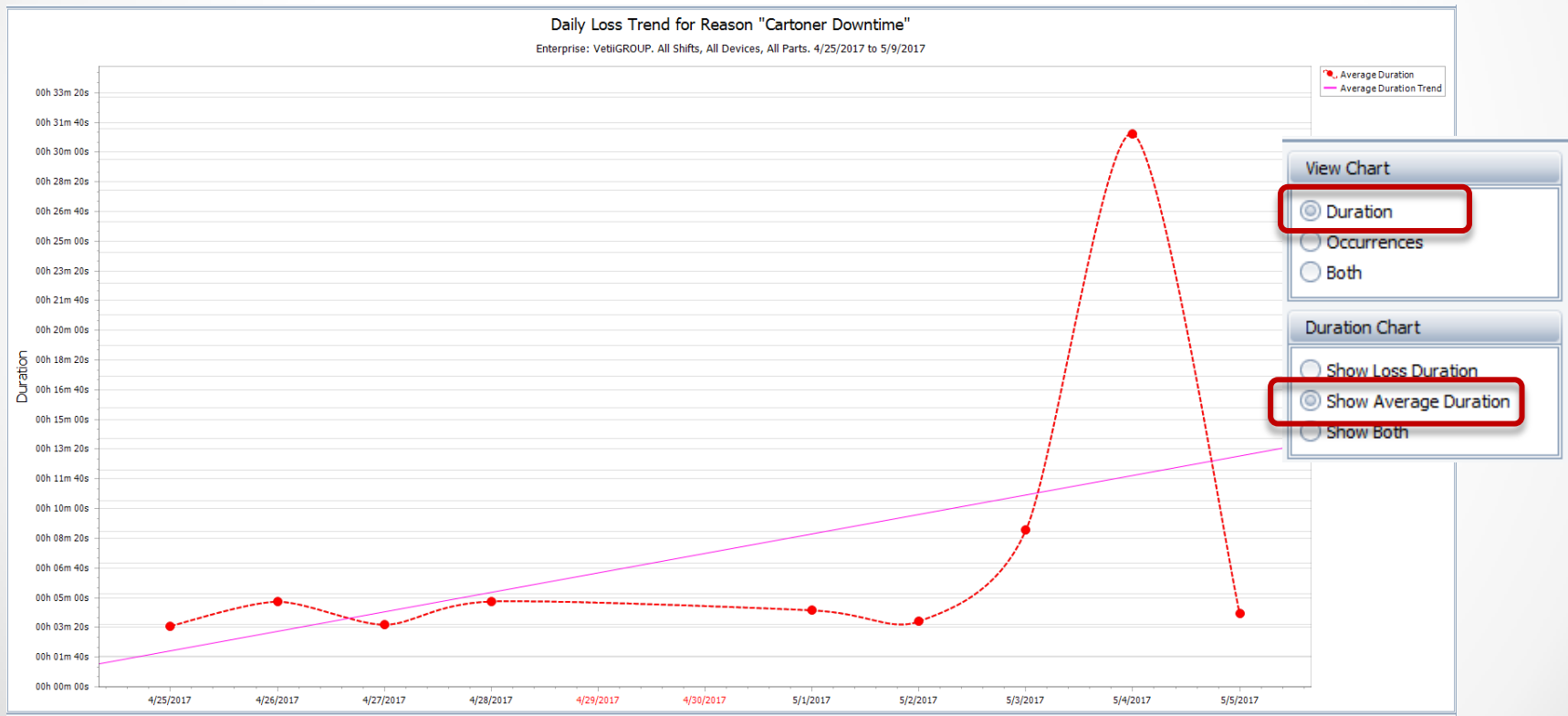
- Duration
- Occurrences
- Both

Duration Chart

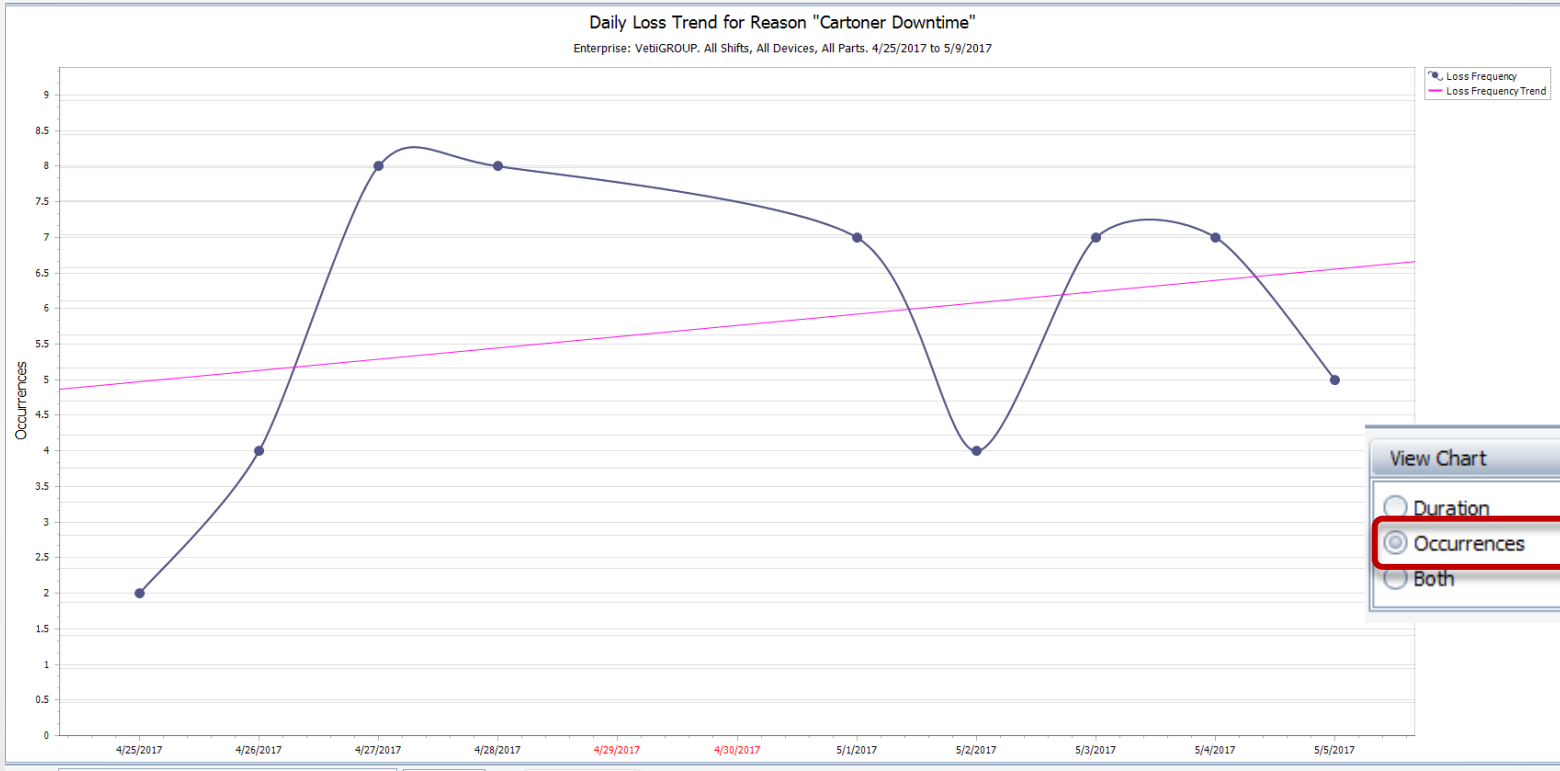
- Show Loss Duration
- Show Average Duration
- Show Both



# View Duration Chart – Average Duration Only



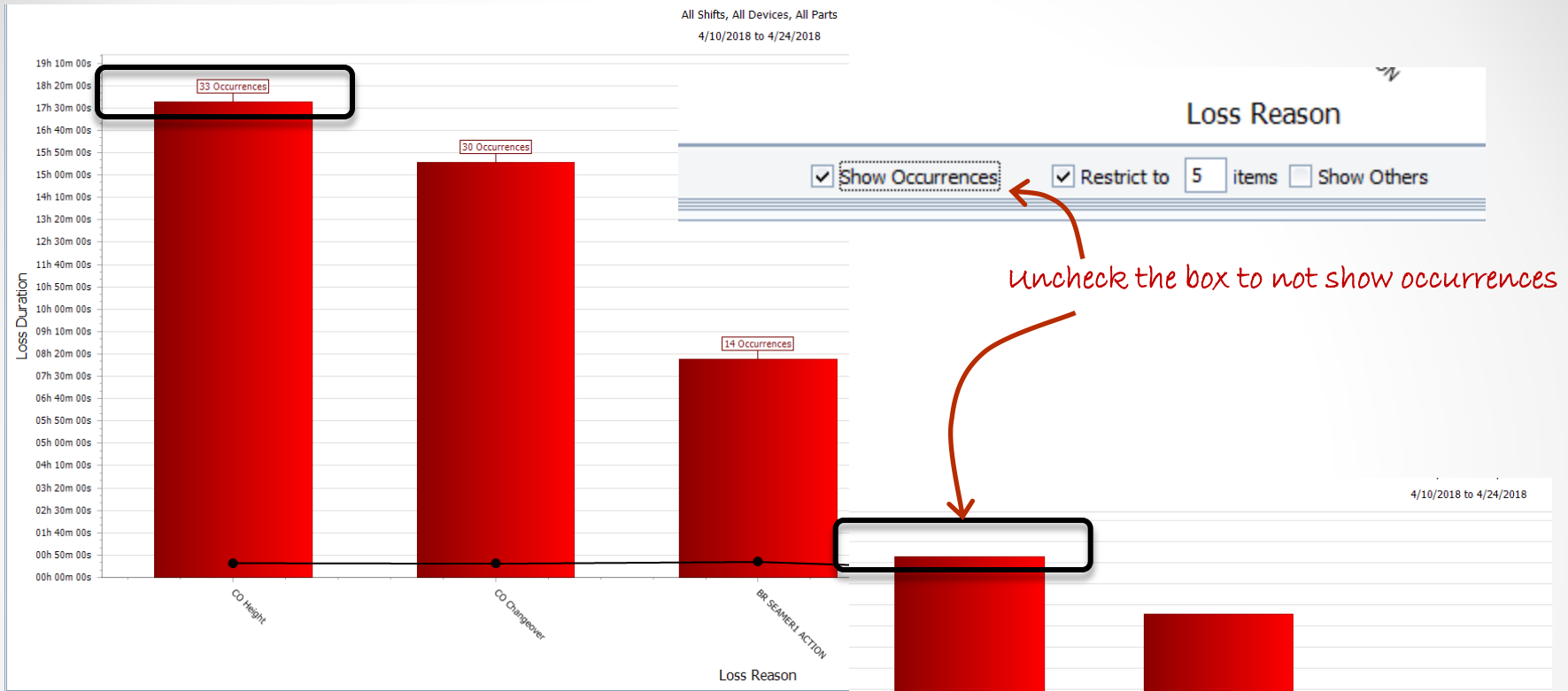
# View Occurrences Chart Only



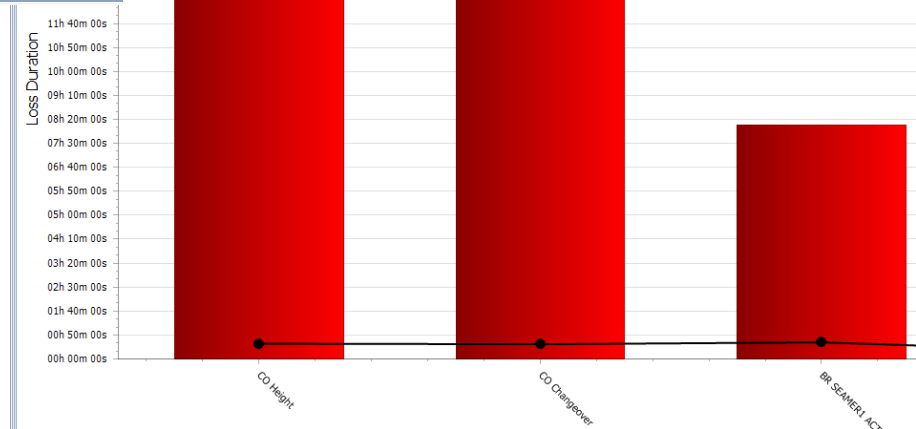
View Chart

- Duration
- Occurrences
- Both

# Availability – Graphical Analysis - Graphical Comparison



Optionally show the occurrences on the chart.



# Availability – State Comparison

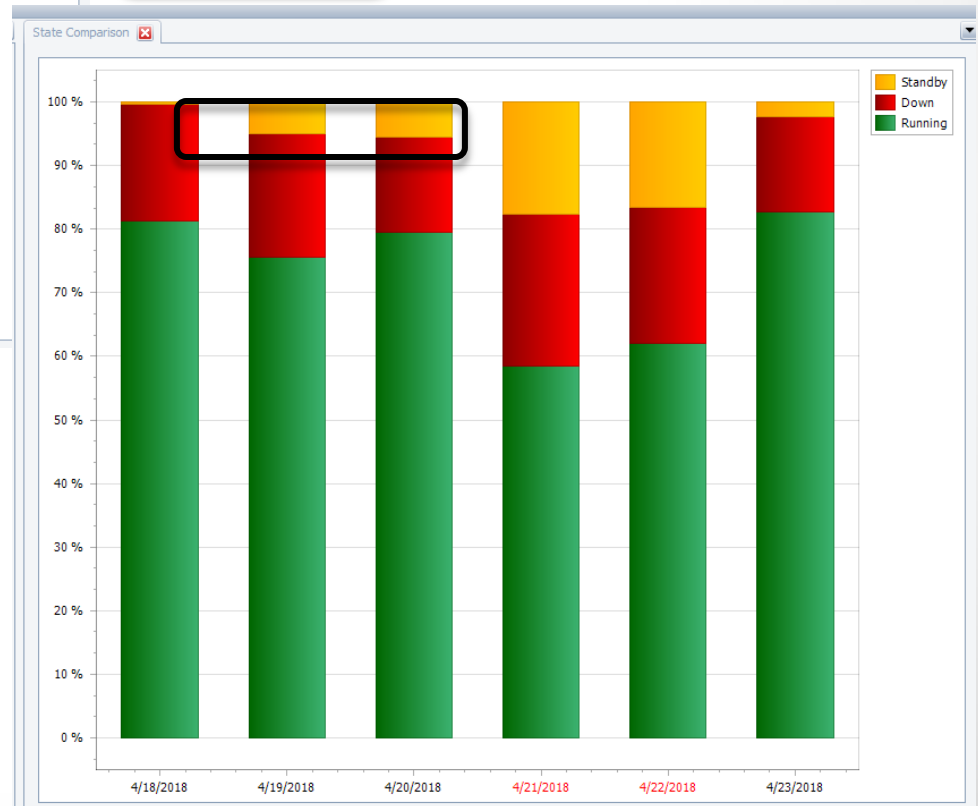


This is the State Comparison on the Dashboard before changing the report.

Include

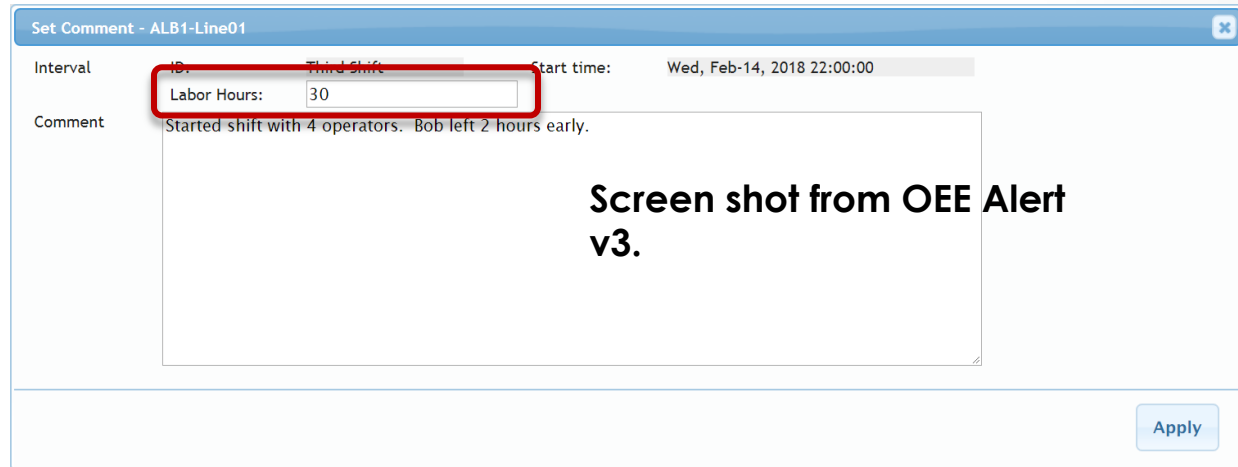
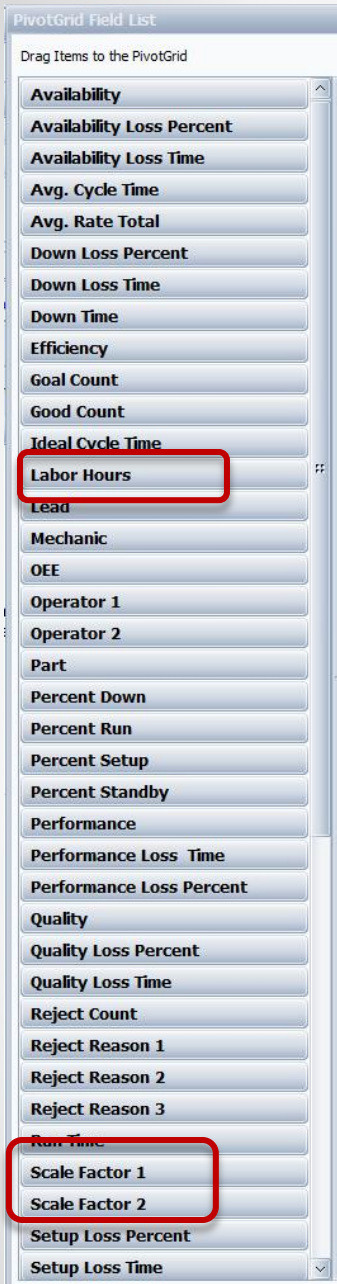
- Run Time
- Down Time
- Setup Time
- Standby Time

## Availability State Comparison



Unchecked Setup Time on the Availability - State Comparison Screen and it is now reflected in the Dashboard.

# New Data Elements from OEE Alert



**Screen shot from OEE Alert v3.**

In OEE Alert v3, you can enter Labor Hours for each Shift and or Job. This data is then saved with the Shift record and or the Job record.

You can use this value to calculate Parts Per Labor Hour (PPLH).

# Calculate Parts Per Hour & Parts Per Labor Hour

Options

Field Description: PPH

Result Type:

- Boolean
- Integer
- Date and Time
- String
- Date Only
- Currency
- Decimal
- Custom Date Interval

Summary Type:

- Count
- Std Dev
- Sum
- Std Dev P
- Min
- Var
- Max
- Var P
- Average

Expression editor

IIf([Avg. Cycle Time] = 0, 0, 3600 / [Avg. Cycle Time])

New Custom Expression

Options

Field Description: PPLH

Result Type:

- Boolean
- Integer
- Date and Time
- String
- Date Only
- Currency
- Decimal
- Custom Date Interval

Summary Type:

- Count
- Std Dev
- Sum
- Std Dev P
- Min
- Var
- Max
- Var P
- Average

Expression editor

IIf([Avg. Cycle Time] = 0, 0, 3600 / [Avg. Cycle Time] / [Labor Hours])

Create 2 Custom Defined Fields.

(<http://oeestudio.com/navigation.html>)

				Grand Total					
	Shift	Start Time	End Time	Labor Hours	Avg. Cycle Time	PPH	Total Count	Run Time	PPLH
L-Line03	Third Shift	2/14/2018 11:00 PM	2/15/2018 7:00 AM	30.0	0.37	9,729.73	59,821	05h 46m 21s	324.32

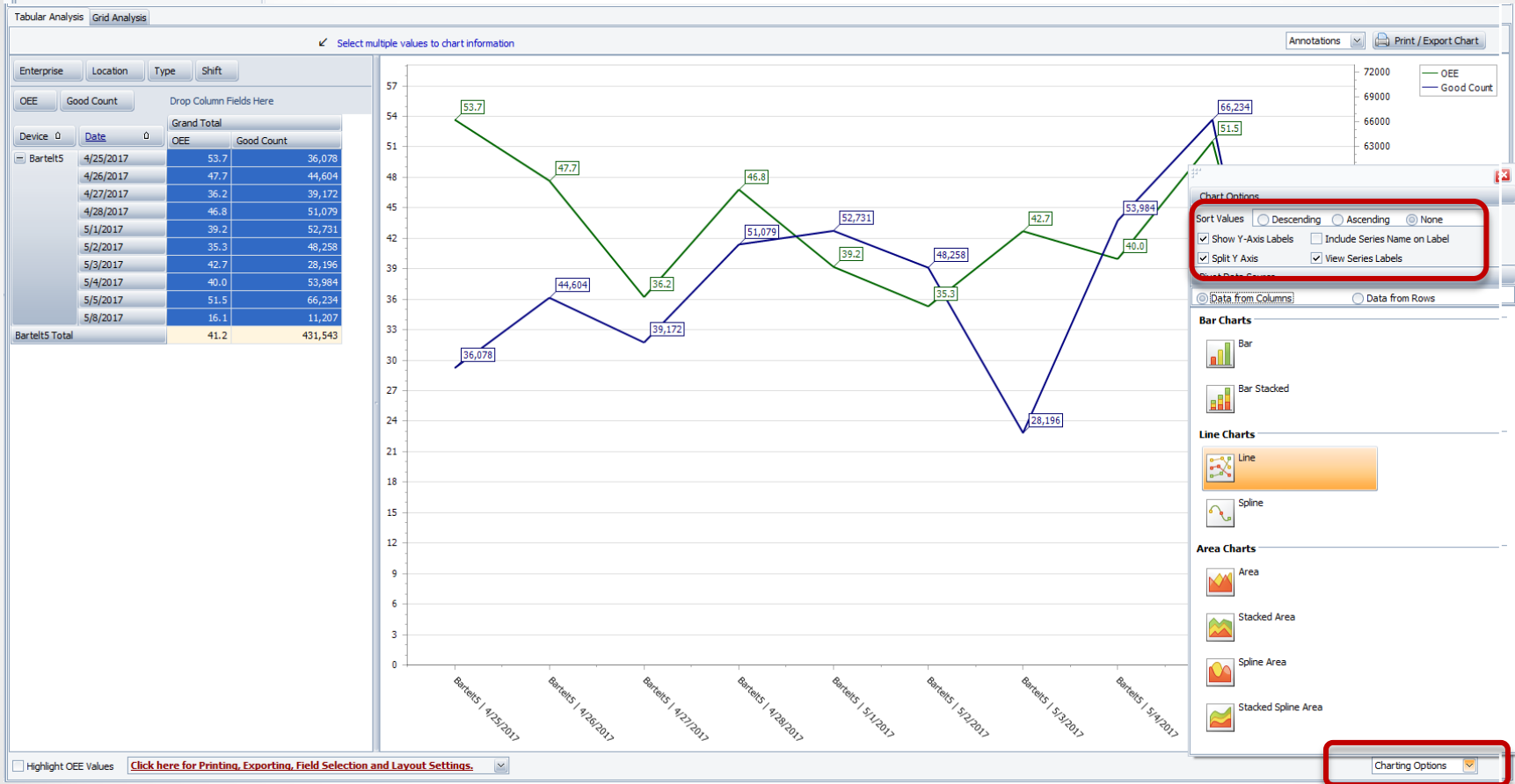
Shift Data

Shift Analysis

Job Data

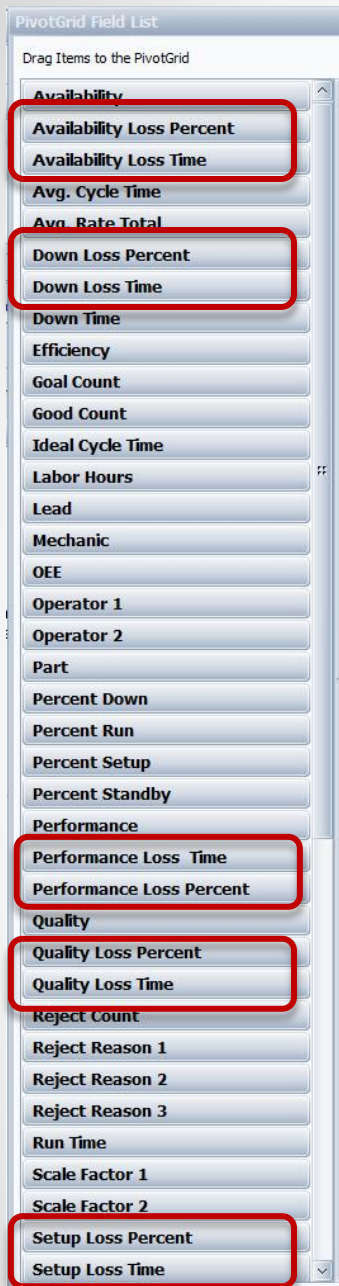
Job Comparison

# Split Y-Axis



Let's say that you wanted to compare OEE vs. Good Count for a line, for a date range.

- Select OEE and Good Count from the Pivot Grid list.
- Create your custom date field.
- Select the Charting Options



## New Data Elements to Quantify Production Loss Finding Your 'Hidden Factory'

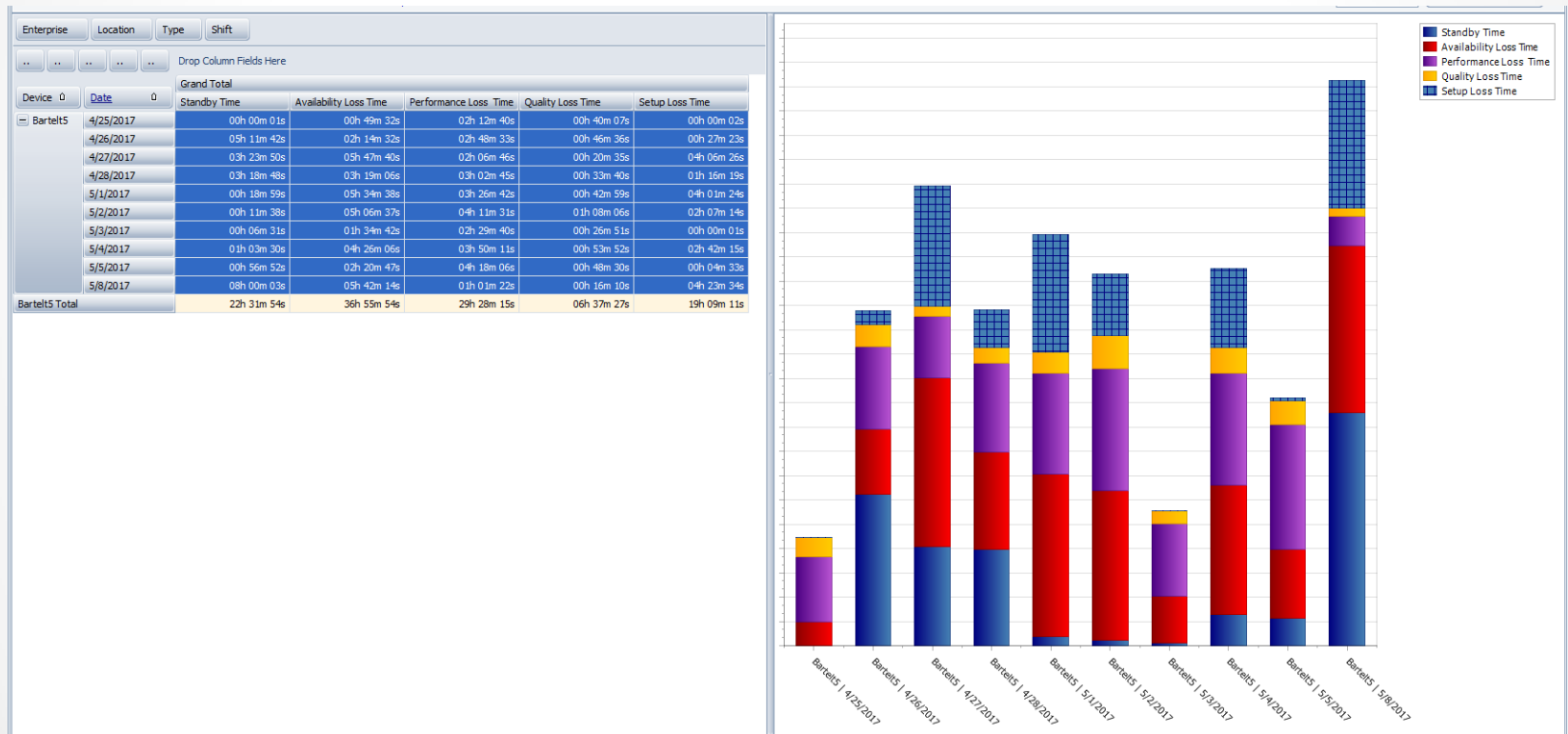
The following new fields were added to the Shift Analysis and Job Comparison screens. These fields are available in both Time and Percent.

- **Schedule Loss** (time where production could be running – but is not scheduled)
- **Availability Loss** (time where production should be running – but is not)
- **Performance Loss** (time where production is running – but not as fast as it should)
- **Quality Loss** (time where production is running – but one or more pieces are not good the first time through)
- We have also added **Setup Loss** and **Total Loss** since they were available.

To learn more go to <https://www.oeec.com/hidden-factory.html>



# Example of Production Loss Chart



You can filter by Enterprise, Area, Location, Line and Shift.

# More Custom Date Intervals

Now includes Day of Week and Week of Year.

**Options**

Field Description: DayOfWeek

Result Type:

- Boolean
- Date and Time
- Date Only
- Decimal
- Integer
- String
- Currency
- Custom Date Interval

Summary Type:

- Count
- Sum
- Max
- Average
- Std Dev
- Std Dev P
- Var
- Var P

The largest value.

Append Summary Type to the Field Description

If the Field Description is "Cost" and the Summary Type is "Sum", the field will display as Cost (Sum) if this option is chosen. Otherwise it will simply display as "Cost".

Hide Field

Date Interval Type:

- Month
- Month
- Quarter
- Year
- Day of Week
- Week of Year

**Field Area**

Enterprise Location Plant Line

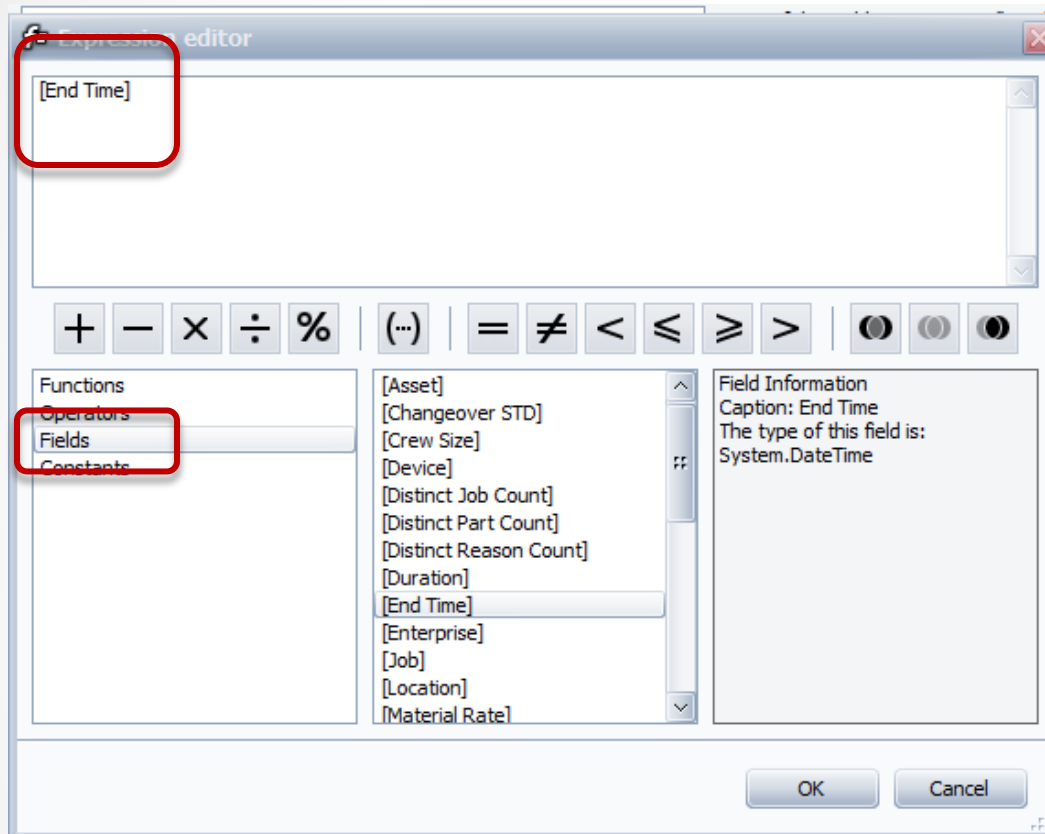
Availability OEE

Device 0

Area	Shift	Device 2		Device 3		Grand Total	
		Availability	OEE	Availability	OEE	Availability	OEE
Packaging	Shift 1	47.3	33.9	46.7	35.2	47.0	34.5
	Shift 2	0.0	0.0	0.0	0.0	0.0	0.0
	Shift 3	58.1	41.0	65.1	47.5	61.6	44.3
	Shift 4	3.9	3.1	10.9	8.8	5.8	4.7
Packaging Total		37.7	26.9	45.3	33.6	41.2	30.0

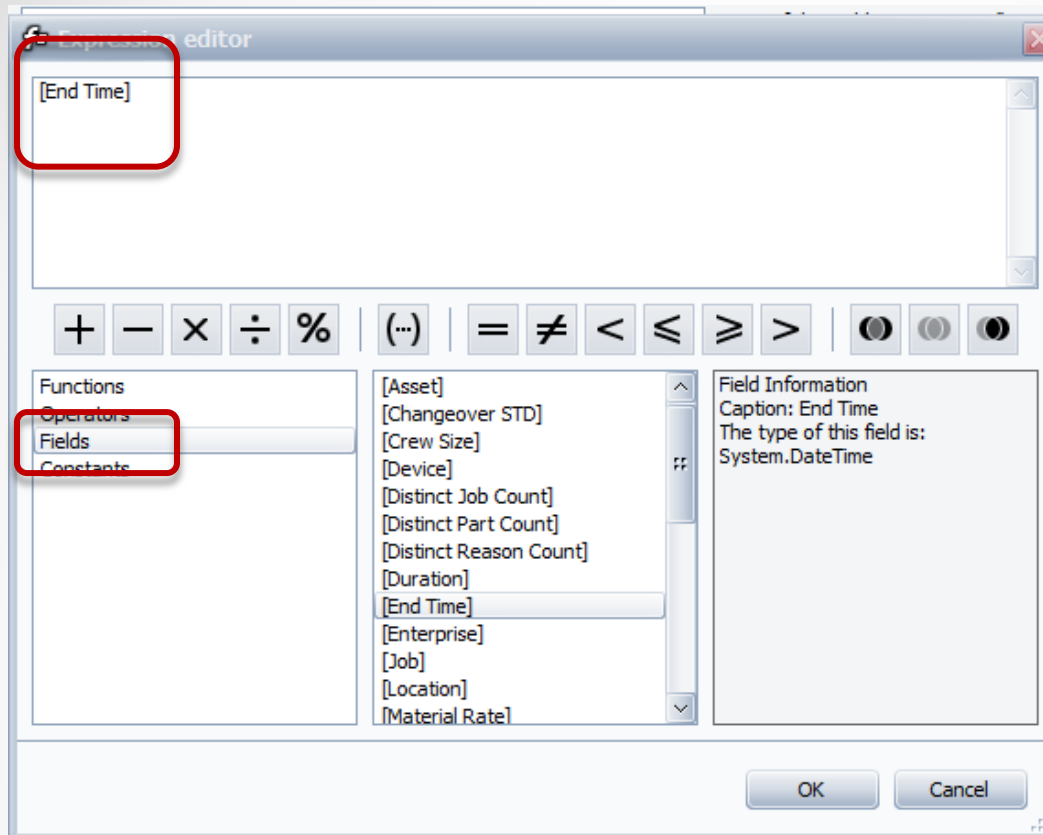
Cancel Proceed to Expression Editor >>

# More Custom Date Intervals



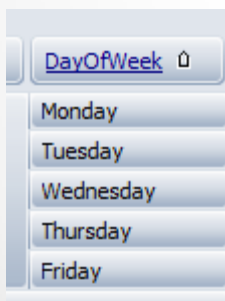
Proceed to Expression Editor and click on Fields.

Select [End Time] to find all records that ended within your selected date range.



# More Custom Date Intervals

- Proceed to Expression Editor and click on Fields.
- Select [End Time] to find all records that ended within your selected date range.
- Day of Week provides the name of the date.
- Week of Year provides the week number.



# Loss Reports – Top Losses

The screenshot shows a software interface for generating a 'Top Losses Report'. On the left is a navigation menu with categories: 'Shift Reports' (containing Production, Shift Production, All Shift Production, Shift Summary, Shift OEE, Shift OEE With Comments), 'Line Reports' (containing Line OEE), and 'Loss Reports' (containing Top Losses, which is highlighted with a red box). The main area is titled 'Top Losses Report' and includes a 'Hide Main Menu' button. Below this are several filter sections: 'Hierarchy' (Enterprise, VetiiGROUP), 'Date Range' (To: 5/4/2017, highlighted with a red box), 'Production Filters' (Shift: [All Shifts], Device: [All Devices]), and 'Options' (OEE Alert Coloring for Reason: "None"). An 'Include' section is highlighted with a red box and contains three checked items: Down Time, Setup Time, and Standby Time. A red arrow points from this section to the text 'Choose your Loss Types' at the bottom. Other UI elements include 'Add to Favorites', 'Print / Preview', and a bottom navigation bar with 'Analytics', 'Reports', and 'Settings'.

Choose your Loss Types

# Top Losses Reports – all losses or just Downtime reasons

OEE Studio, Application Licensed to Vetii Group (Global).

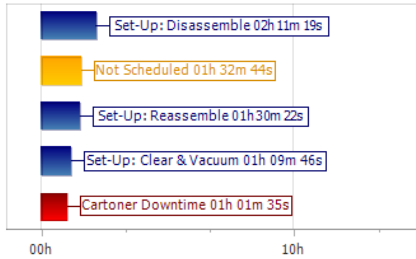
## Top Losses for Enterprise : VetiiGROUP

All Shifts, All Devices, All Parts

Losses : Down, Setup, Standby. Report date 5/4/2017

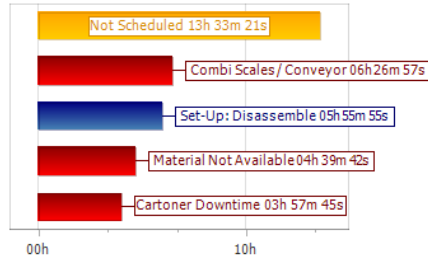
### Yesterday

5/3/2017 - 5/4/2017



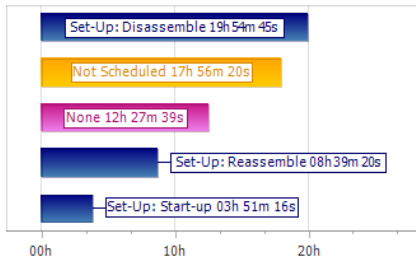
### Today

5/4/2017 - 5/5/2017



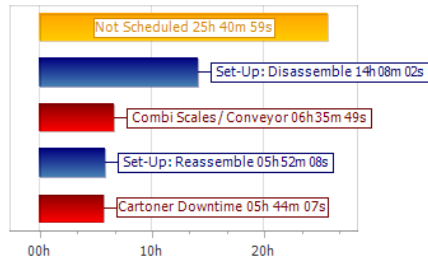
### Last Week

4/24/2017 - 5/1/2017



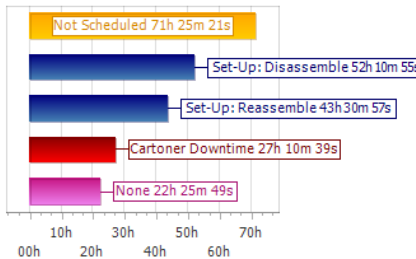
### This Week

5/1/2017 - 5/8/2017



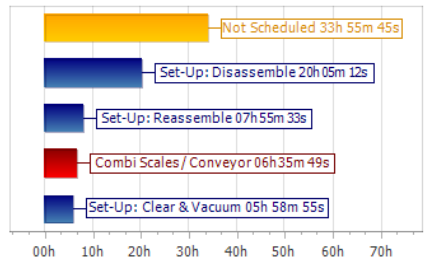
### Last Month

4/1/2017 - 5/1/2017



### This Month

5/1/2017 - 6/1/2017



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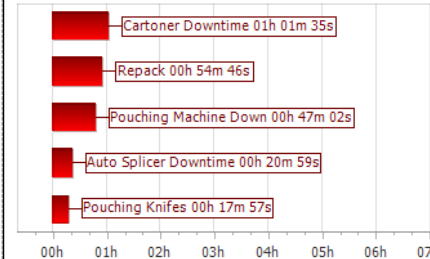
## Top Losses for Enterprise : VetiiGROUP

All Shifts, All Devices, All Parts

Losses : Down. Report date 5/4/2017

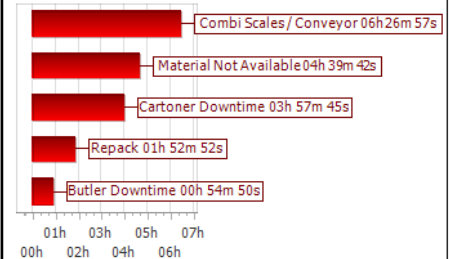
### Yesterday

5/3/2017 - 5/4/2017



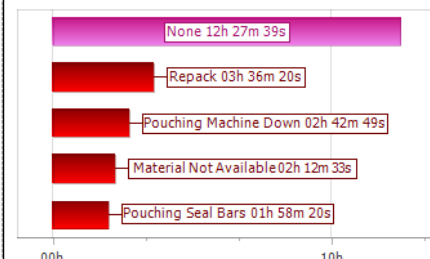
### Today

5/4/2017 - 5/5/2017



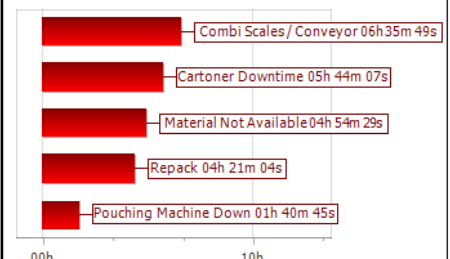
### Last Week

4/24/2017 - 5/1/2017



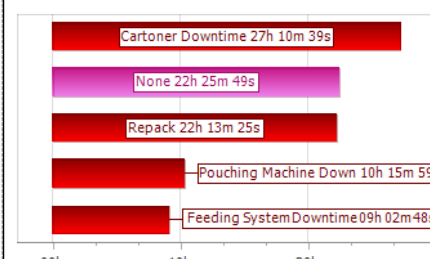
### This Week

5/1/2017 - 5/8/2017



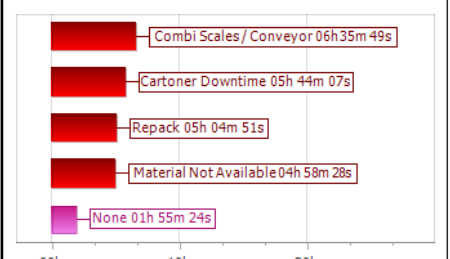
### Last Month

4/1/2017 - 5/1/2017



### This Month

5/1/2017 - 6/1/2017



# Schedule Reports



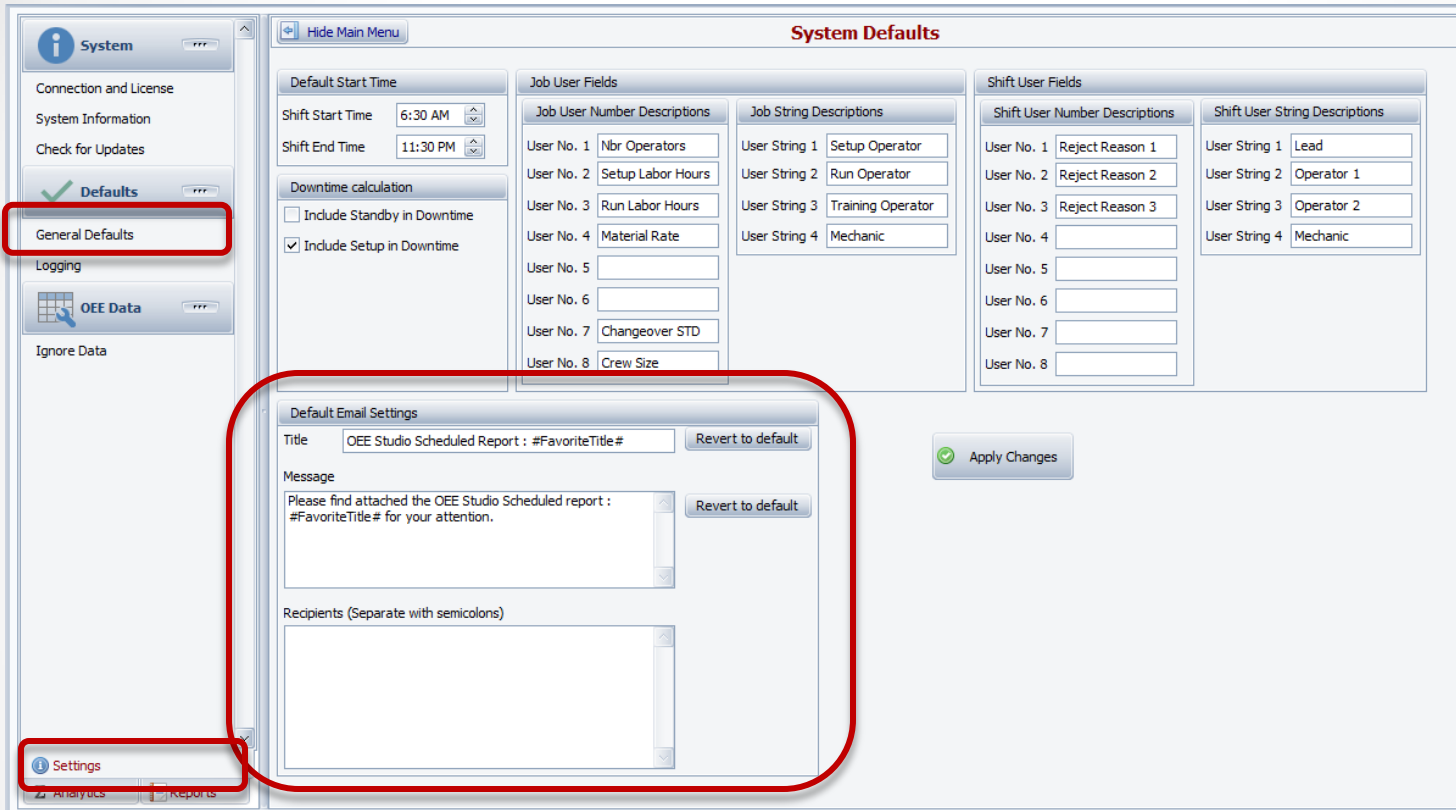
It is important to understand when your shift's start and end to ensure that the report can be created.

The **Schedule Reports** option provides the ability to schedule a report to be emailed at a preset 'scheduled' time.

This requires the **OEE Studio Scheduler Service** to be installed on the same server as the XL Bolt-On Data Collector.

(Please contact us to work with your IT team to get it installed.)

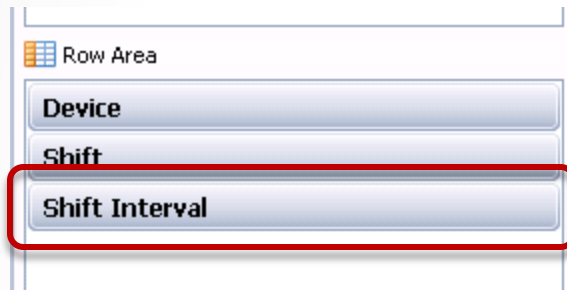
# Set the Schedule Defaults in OEE Studio



Click on the **Settings** tab **bottom left corner** of OEE Studio. Select **Defaults – General Defaults**. Enter all possible **Recipients** for any of the reports. You can also enter Active Directory groups. When you schedule a specific report, you can remove recipients or add different ones. Click **Apply Changes** to save the information.



# Finding Valid Shift Start and End Times



Shift	Start Time	End Time
First Shift	6/12/2018 6:20 AM	6/12/2018 2:20 PM
	6/13/2018 6:20 AM	6/13/2018 2:20 PM
	6/14/2018 6:20 AM	6/14/2018 2:20 PM
First Shift Total		
Second Shift	6/12/2018 2:20 PM	6/12/2018 10:20 PM
	6/13/2018 2:20 PM	6/13/2018 10:20 PM
Second Shift Total		
Third Shift	6/12/2018 10:20 PM	6/13/2018 6:20 AM
	6/13/2018 10:20 PM	6/14/2018 6:20 AM
Third Shift Total		

It is **VERY** important that you understand what your shift Start and End times are.

You can find them by navigating to Shift Data – Shift Analysis.

Select the Show/Hide Fields option and scroll all the way to the end of the list to find '**Shift Interval**'. Drag Shift Interval to the Row Area.

# Step 1 – Setting up the Report Parameters

The screenshot shows the 'Shift Comment Reporting' interface. On the left, the 'Shift Reports' sidebar has 'Shift OEE With Comments' highlighted with a red box. The main area shows the following parameters:

- Hierarchy:** Plant: D012
- Date Range:** From: 6/17/2018 2:20 PM, To: 6/17/2018 10:20 PM (both highlighted with red boxes)
- Available Items:** Second Shift (checked, highlighted with a red box)
- Show in Top Losses:** Running, Down, Setup, Standby (all unchecked)
- DEVICES:** L21 (highlighted with a red box), All

- Select the Report (in the Reports tab) you want scheduled.
- Depending upon which **Shift** - **Select the current date and the start TIME for the shift and the end TIME for the shift** (following the shift interval times from the shift analysis screen).
- Select the Shift.
- Select what to show in the Top Losses.
- Select a specific Line or leave blank for all Lines.
- Click the **Add to Favorites** Button. Do not Print/Preview the report.

A close-up of the 'Date Range' section showing the following values:

- From: 7/17/2018 5:00 AM
- To: 7/18/2018 5:01 PM
- Preset Dates: Choose Preset
- Prev/Next: <<...>>

## Step 2 – Setting up the Favorite

**Add to Favorites**

**Identification**

Title: Shift Comment Report - 2nd Shift L22

Description: D012 L22 Created by vorneadmin 6/17/2018 2nd Shift selected

Group Name: Second Shift

**Date Range**

Range: 1 Day(s)

Available To: All Users

Status: Active

Set Scheduling

No Scheduling is Currently Defined

OK Cancel

- It might be a good idea to add a little more description of the report as this is what will show up in the Subject line of the email.
- Select the **Range for 1 Day(s)** if you want this report send each day.
- Make sure the Status is **Active**.
- Click the **Set Scheduling** Button.

# Step 3 – Set the Schedule

**Important Note** – Most often the XL Bolt-On Data Collector is configured to look for new data from each Vorne XL unit every 1 minute. If you don't see your report, it may be that the Data Collector is configured at a higher rate than 1 minute.

Hierarchy  
Plant

Date Range  
From 6/17/2018 2:20 PM  
To 6/17/2018 10:20 PM  
Preset Dates Choose Preset  
Prev/Next <<...>>

Available Items  
 First Shift  
 Manual Reset  
 Second Shift  
 Shift Undefined  
 Third Shift

Show in Top Losses  
 Running  
 Down  
 Setup  
 Standby

Devices  
L22

Print / Preview

**Schedule Options**

Every  
 Day  
 Week  
 Month  
 Not Scheduled

Daily Report  
Run Every Day at 10:22:00 PM

Message Detail  
Title OEE Studio Scheduled Report : Shift Comment Report -  
Message Please find attached the OEE Studio Scheduled report : Shift Comment Report - 2nd Shift L22 for your attention.  
Recipients (Separate with semicolons) debbie.olk@debtechsystems.com

Status  Active

Every Day at 10:22 PM.

Select the Schedule Options.

1. **Frequency** – Day, Week, etc.
2. **Run at** – make it at least 2 minutes after the shift end time.
3. Update any **Recipients**
4. Click **OK** button

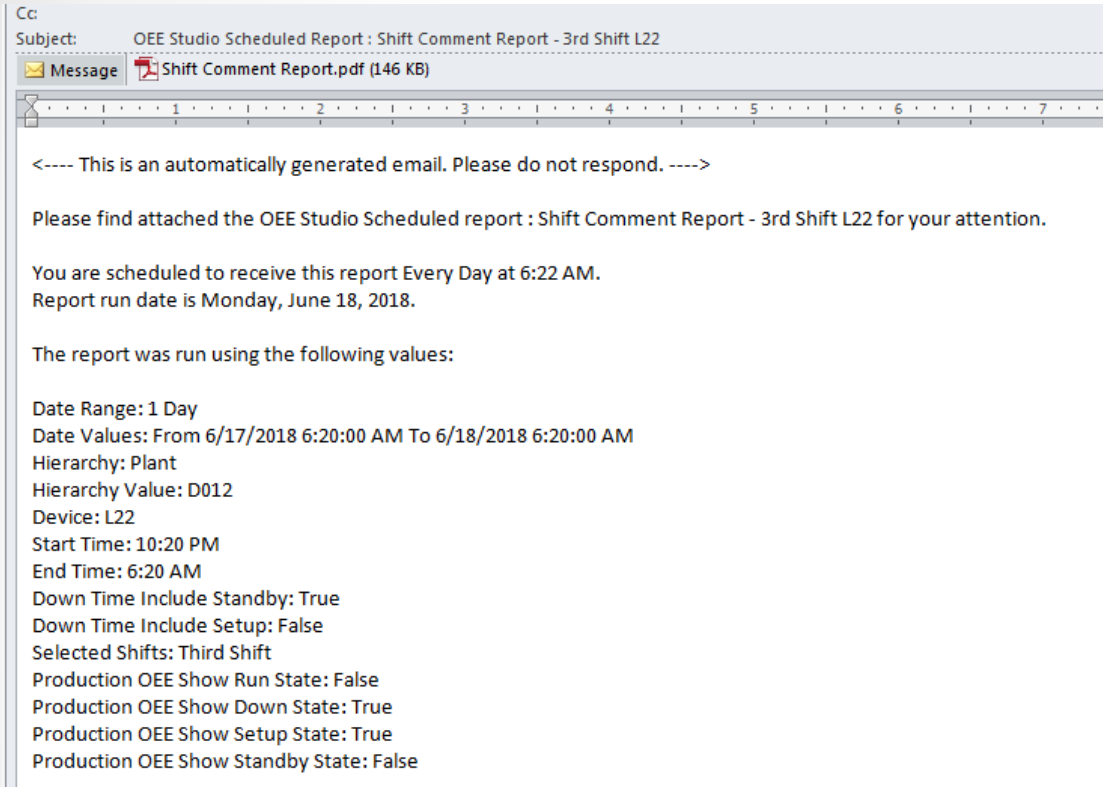
# Third Shift

The screenshot shows a software configuration window with several sections:

- Hierarchy:** Plant: D012
- Date Range:** From: 6/17/2018 10:20 PM, To: 6/18/2018 6:20 AM. This section is highlighted with a red box.
- Available Items:** First Shift, Manual Reset, Second Shift, Shift Undefined, and Third Shift (checked). This section is also highlighted with a red box.
- Show in Top Losses:** Running, Down, Setup, Standby.
- Devices:** L22, All.
- Print / Preview:** Button at the bottom right.

- If your Third Shift starts the evening before, then you need to be very explicit with the Date Range selection.
- When setting up the report the first time, the **From** date should be today and the time is the start time of the Third Shift.
- The **To** date should be set to tomorrow and the time is the end time of the Third Shift.
- Follow the rest of the steps above making sure that the scheduled time is at least 2 minutes after the shift has ended.

# Email Example



The contents of the email indicate the selection settings for the specific report. This is helpful in troubleshooting.



# OEE Studio v 4.0

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

**XL Bolt-on Data Collector version 1.8.9.4**

<http://www.sulzerconsulting.com/downloads/vorne/XL Bolt-On Data Collector.zip>

**Version 4.0 of OEE Studio supports all versions of Vorne XL device v1.x firmware.**

Smart Installation

<http://www.oeestudio.com/installs/release/v4/setup/InstallOEEStudio.exe>

If you have questions or need assistance, please contact either  
Debbie Olk (OEE Studio, OEE Alert, ERP integration, or custom reports)

Debbie.olk@debtechsystems.com

or

Jim Sulzer (XL Bolt-On Data Collector).

jim@sulzerconsulting.com



# Contact Us

- As the Vorne Authorized Reporting Consultants, we provide customized reporting solutions, including working with data from your ERP/MRP systems.
- In addition to customized reporting, we provide support and customization for the **OEE Studio** reporting software (designed specifically for the data captured from the Vorne XL devices).
- We also provide sales, support and customization for **OEE Alert**. ([www.OEEAlert.com](http://www.OEEAlert.com))

OEE Studio, OEE Alert and XL Bolt-On Data Collector are part of the Marketing brand of

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