

# OEE Studio Release Note

## **Version 3.4**

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# What's New in 3.4

## Enhancements

- Pivot grid field selection screen resized and splitter repositioned to the center.
- Add Job to Grid Analysis for Availability - Loss Events - Parts - Remove Asset.
- Added Distinct Job, Part, Reason count fields to Availability/Loss Events/Parts
- Added custom function **GetDaysInMonth** to the pivot grid custom field expression editor.

## Bug Fixes

- Change to Dashboard puts dates at 5 weeks. [Id266]
- All OEE Trend screens legend shows devices twice. [Id267]
- The chart trend analysis box does not size correctly with a non standard text size. [Id272]
- OEE YTD group hierarchy selection not rendering correctly. [Id273]
- **Updated Website** – More online help - check it out!! [www.oestudio.com](http://www.oestudio.com)

# PivotGrid Field List

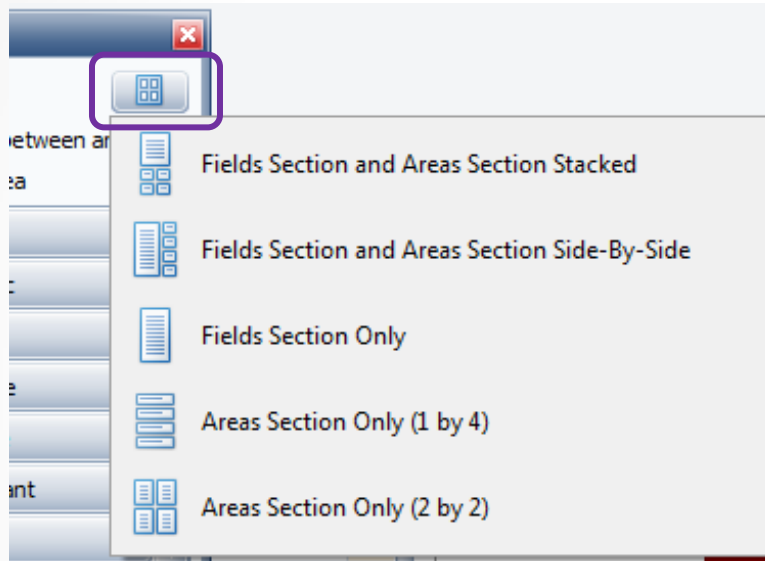
## Understanding the layout

The image shows the SAP PivotGrid Field List and Layout panels. The Field List panel on the right contains a list of fields categorized into Filter Area, Row Area, Column Area, and Data Area. The Layout panel on the left provides options for font, layout, and fields. The main PivotGrid area displays a table with columns for Enterprise, Geographic, Location, Order Type, OrderType, PlanningPlant, Plant, Region, and Type, and rows for Availability, OEE, Performance, and Quality. The table is auto-expanded and centered.

Enterprise	Geographic	Location	Order Type	OrderType	PlanningPlant	Plant	Region	Type			
Availability	OEE	Performa...	Quality	Shift 0							
				First Shift				Second Shift			
				Availability	OEE	Performance	Quality	Availability	OEE	Performance	Quality
1004_VFL4	85.7	45.3	52.9	100.0	78.4	37.8	48.2	100.0			
1004_VFL5	81.6	76.4	93.9	99.7	91.6	87.3	95.9	99.4			
Grand Total	83.6	61.0	73.1	99.8	85.0	62.5	73.9	99.6			

Based on customer request, we have auto-expanded and centered the PivotGrid Field List so that you can see all of the data elements.

# PivotGrid Field List Different Layouts



The icons next to each selection indicates how the PivotGrid Field List will be displayed.

Add Job to Grid Analysis for Availability - Loss Events - Parts - Removed Asset.

Some customers only use the Job field in the Vorne XL and needed a way to view their losses by Job.

# View Job and Part data in the Grid Analysis

The screenshot displays the 'Availability Loss Events (Part)' report configuration and grid analysis view. The interface includes a sidebar with navigation options: Home, Dashboard, About, Favorites, Analysis, Trends, and Availability. The main content area is titled 'Availability Loss Events (Part)' and features a 'Hide Main Menu' button. The configuration section includes:

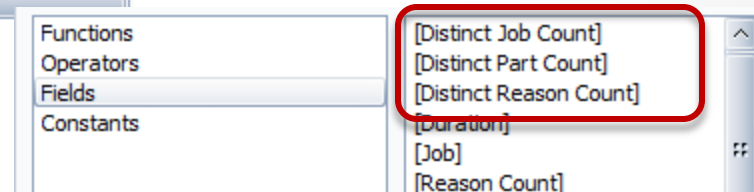
- Hierarchy:** Enterprise (dropdown), VetiiGROUP MFG (dropdown)
- Date Range:** From 10/3/2016 7:00 AM, To 10/7/2016 7:00 AM. Includes Preset Dates and Prev/Next options.
- Production Filters:** Device [All Devices] (dropdown), Part [All Parts] (dropdown). Includes 'All' buttons for both.
- Include:** Run Time (checkbox), Down Time (checkbox), Setup Time (checkbox), Standby Time (checkbox). Includes an 'Apply / Refresh' button.

Below the configuration is a 'Tabular Analysis' tab with a 'Grid Analysis' sub-tab. A red box highlights the instruction 'Drag a column header here to group by that column' and the 'Part' column header in the grid. The grid headers are: Device, Part, Job, Start Time, End Time, State, and Duration.

# Distinct Counts Jobs & Parts

Added Distinct Job, Part, Reason Count fields to Availability/Loss Events/Parts.

They are available in the PivotGrid Field List and in the Fields of the Expression Editor.



# Distinct Jobs & Parts

Several customers have asked to be able to view the average time for jobs for a specific loss event.

In this example, we see that in a one week period, across 8 production lines, we ran 50 jobs and had over 42 hours of downtime for **just** Capper/Pumps Events averaging .84 hours for each event.

[Hide Main Menu](#)

**Availability Loss Events (Part**

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Hierarchy

Enterprise ▼ VetiiGROUP MFG ▼

Date Range

From 10/3/2016 ▼ 7:00 AM ▲

To 10/7/2016 ▼ 7:00 AM ▲

Preset Dates ▼ Prev/Next ▼

Choose Preset ▼ <<...>> ▼

Production Filters

Device [All Devices] ▼ [All](#)

Part [All Parts] ▼ [All](#)

Include

Run Time

Down Time

Setup Time

Standby Time

[Apply / Refresh](#)

[Visit our Pivot Grid Help Page to learn more](#)

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Tabular Analysis [Grid Analysis](#)

[Select multiple Duration or Reason Count values to chart information](#)

Asset Enterprise Line Device Location Plant Type Part

Duration Distinct J... [Avg. Job ...](#) Drop Column Fields Here

Grand Total			
Reason	Job	Duration	Avg. Job Duration(hrs)
+ 1300 Capper/Pumps		42h 10m 05s	50
			0.84

# Distinct Jobs & Parts

To do this we need to Calculate average event duration by dividing the event duration by the number of distinct jobs ran during that duration.  
Create a new custom field.

The screenshot shows the 'Options' dialog box for a custom field. The 'Field Description' is 'Avg. Job Duration(hrs)'. The 'Result Type' is 'Decimal'. The 'Summary Type' is 'Sum'. The 'Use Summary Values' checkbox is checked.

Options

Field Description: Avg. Job Duration(hrs)

Result Type:

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

Summary Type:

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

The sum of the values.

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

Use Summary Values

The screenshot shows the 'Expression editor' dialog box. The expression entered is '[Duration] / ([DistinctJobCount] \* 3600.0)'. The 'Fields' list includes '[Duration]'.

f= Expression editor

[Duration] / ([DistinctJobCount] \* 3600.0)

Functions

Operators

Fields

Constants

- [Actual Head Count]
- [Distinct Job Count]
- [Distinct Part Count]
- [Distinct Reason Count]
- [Duration]
- [Job]
- [Line Speed]
- [Material Description 3]
- [Material Description 1]



# GetDaysInMonth Function

It returns the number of calendar days in a month/year.

This value can now be used in other calculations.

The screenshot shows a data visualization interface. At the top left, there is a dropdown menu labeled "Days In Month". To its right is a grey area labeled "Drop Column Fields Here". Below these are three column headers: "Year", "Month", and "Days In Month Total". The "Year" column is expanded to show "2016". The "Month" column lists the months from January to October. The "Days In Month Total" column shows the number of days for each month. The data is as follows:

Year	Month	Days In Month Total
2016	January	31
	February	29
	March	31
	April	30
	May	31
	June	30
	July	31
	August	31
	September	30
	October	31

Options

Field Description

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

The smallest value.

# GetDaysInMonth Function

Added custom function **GetDaysInMonth** to the pivot grid custom field expression editor.

It returns the number of calendar days in a month/year.

The function needs the Year and Month.

Expression editor

Functions  
 Operators  
 Fields  
 Constants

(All)

Exp()  
 Floor()  
 GetDate()  
 GetDay()  
 GetDayOfWeek()  
 GetDayOfYear()  
 GetDaysInMonth(, )  
 GetHour()  
 GetMilliSecond()  
 GetMinute()

OK Cancel

# OEE Studio v 3.4

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

**XL Bolt-on Data Collector version 1.8.3**

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

**Version 3.4 of OEE Studio supports all versions of Vorne XL device firmware.**

Smart Installation

<http://oeestudio.com/installs/release/v3/setup/InstallOEEStudio.exe>

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

Debbie.olk@debtechsystems.com

or

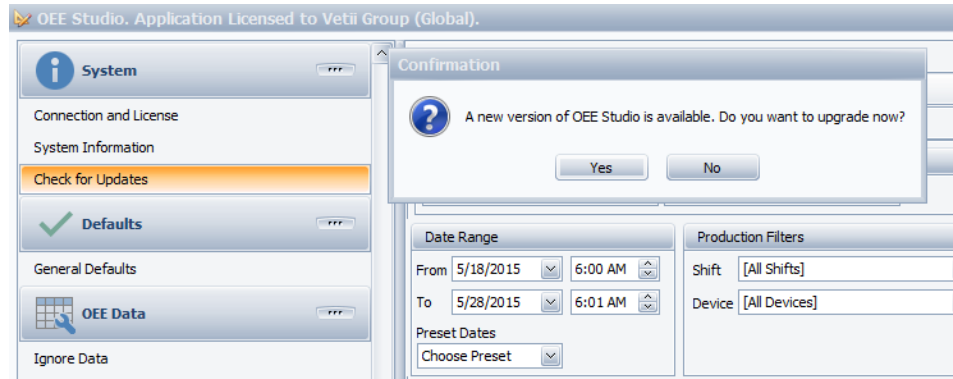
Jim Sulzer (XL Bolt-On Data Collector).

jim@sulzerconsulting.com

# OEE Studio v3.4

OEE Studio version 3.4 is available for upgrade.

If you have an older version that was manually installed, please uninstall that version of OEE Audit before installing this version of OEE Studio. This can be determined by looking at the bottom right of the OEE Audit software.



## Smart Installation

<http://oestudio.com/installs/release/v3/setup/InstallOEEStudio.exe>

- The OEE Studio installation manual is available for downloading on our new website – <http://www.oestudio.com/toolbox.html>

# 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

**Vetii | GROUP**