

OEE Studio Tool-Tip

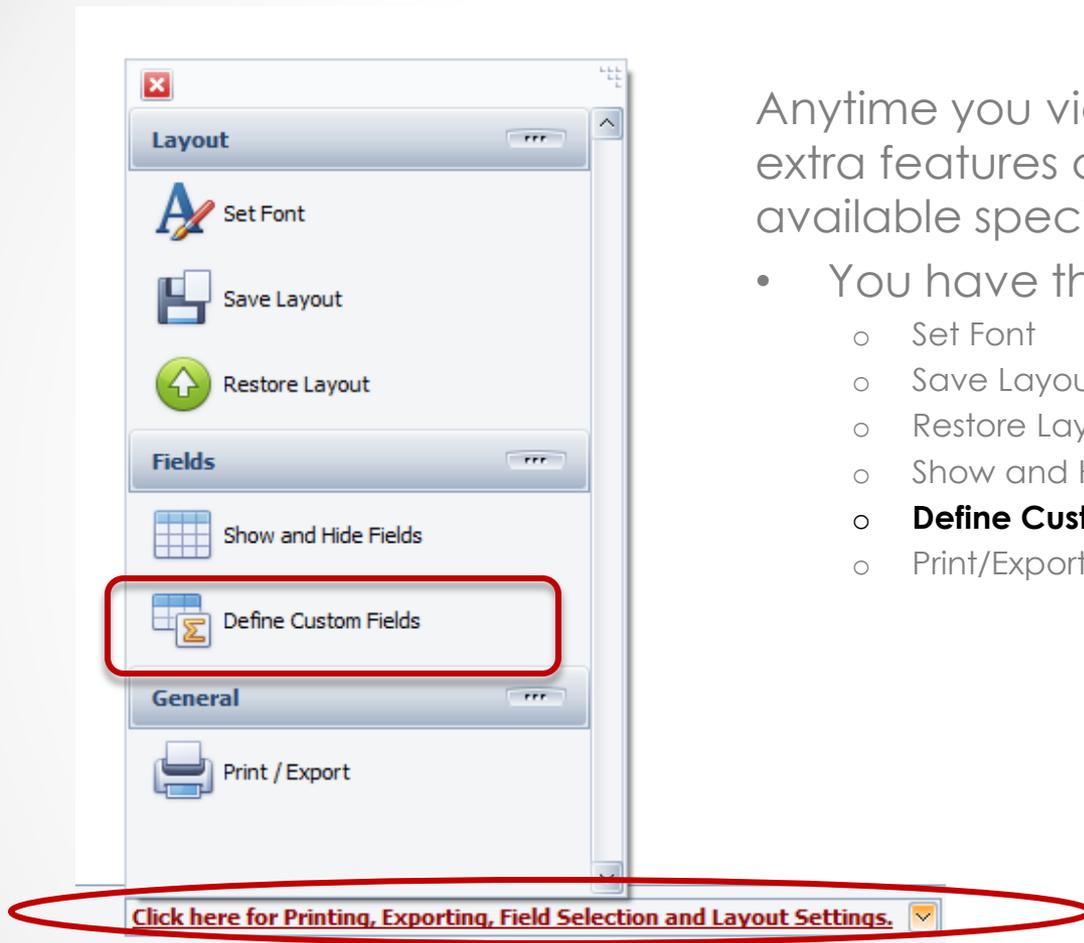
Define Custom Date Fields

Day ~ Week ~ Month ~ Quarter ~ Year

Day of Week ~ Week of Year

V3.6 updated October 12, 2017

Pivot Grid – Define Custom Fields



Anytime you view a Pivot Grid, there are extra features and data elements available specific to that Grid.

- You have the ability to:
 - Set Font
 - Save Layout
 - Restore Layout
 - Show and Hide Fields
 - **Define Custom Fields**
 - Print/Export

Define Custom Fields – Custom Date for Day

1. Description = **Date**
2. Select Result Type = **Date Only**
3. And select **Max Summary Type**
4. Proceed to **Expression Editor**

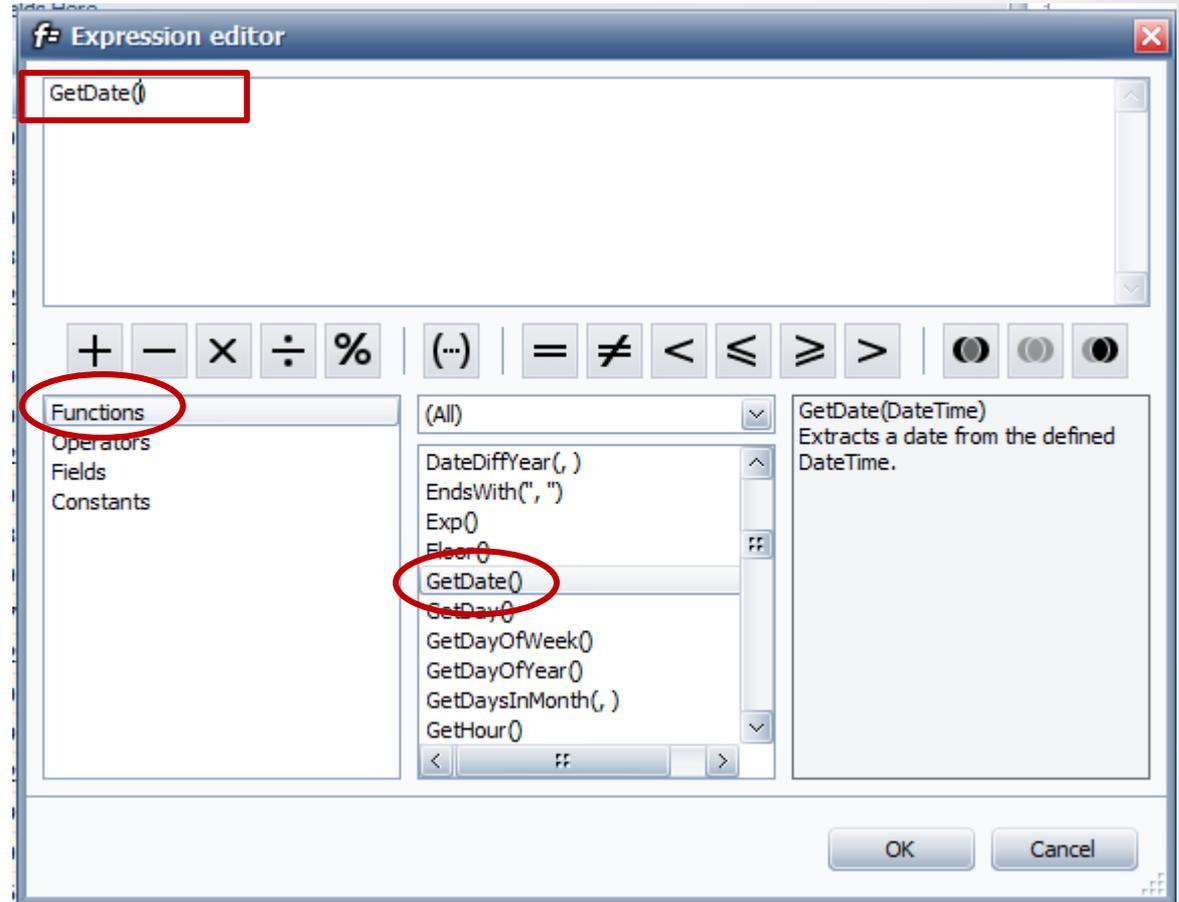
The screenshot shows the 'New Custom Expression' dialog box. In the 'Options' section, the 'Field Description' is 'Date', 'Result Type' is 'Date Only', and 'Summary Type' is 'Max'. The 'Field Area' section shows a grid with 'Availability' and 'OEE' columns circled in red. An arrow points from the 'Field Area' section to the 'Data Area' radio button.

Enterprise	Location	Plant	Line	Device 0	Device 2	Device 3	Grand Total
Area	Shift	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

- Click on the Field Area on the left to see where data elements are placed on the Grid.

Define Custom Fields – Custom Date for Day

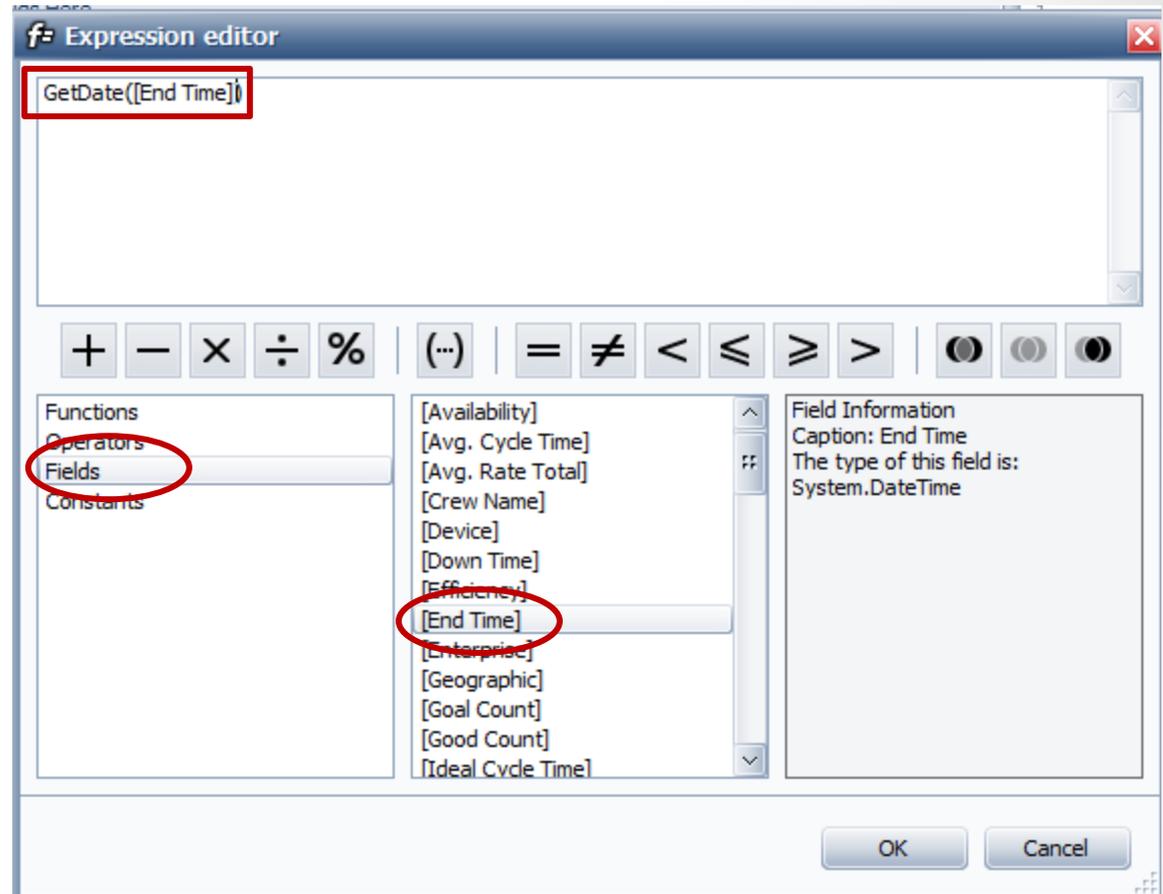
Double-Click on **GetDate()** under the **Functions** option. >>>



Define Custom Fields – Custom Date for Day

Then click on **Fields** on the left-side and double-click on **[End Time]**.

This new field will find all the records that have an end date in the specified [End Time]



Define Custom Fields – Custom Date for Day

Move the **Date** custom field to the **Row Area**.

The screenshot displays a software interface for defining custom fields. On the left, a list of custom fields is shown, with the 'Date' field highlighted by a red box. The 'Date' field is currently located in the 'Column Area' of the configuration panel on the right. The 'Row Area' configuration panel also has a 'Date' field highlighted by a red box, indicating the target location for the move. The 'Column Area' configuration panel is currently empty.

Custom Field	Current Location	Target Location
Date	Column Area	Row Area

Define Custom Fields – Week of Year

1. Field Description = **WeekOfYear or Week**
2. Select Result Type = **Custom Date Interval**
3. And select **Max Summary Type**
4. Select Date Interval Type = **Week of Year**
5. Proceed to **Expression Editor**

New Custom Expression

Options

Field Description: **WeekOfYear**

Result Type: Boolean Integer Date and Time String Date Only Currency Custom Date Interval Decimal

Summary Type: Count Std Dev Sum Std Dev P Max Average 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: **Week of Year**

Use Summary Values

Field Area: Data Area Row Area Column Area Filter Area

Enterprise		Location		Plant		Line			
Availability		OEE		Device 0		Device 3		Grand Total	
Area	Shift	Availability	OEE	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 >>

WeekOfYear	Shift
17	First Shift
	Second Shift
17 Total	
18	First Shift
	Second Shift
18 Total	
19	First Shift
	Second Shift
19 Total	

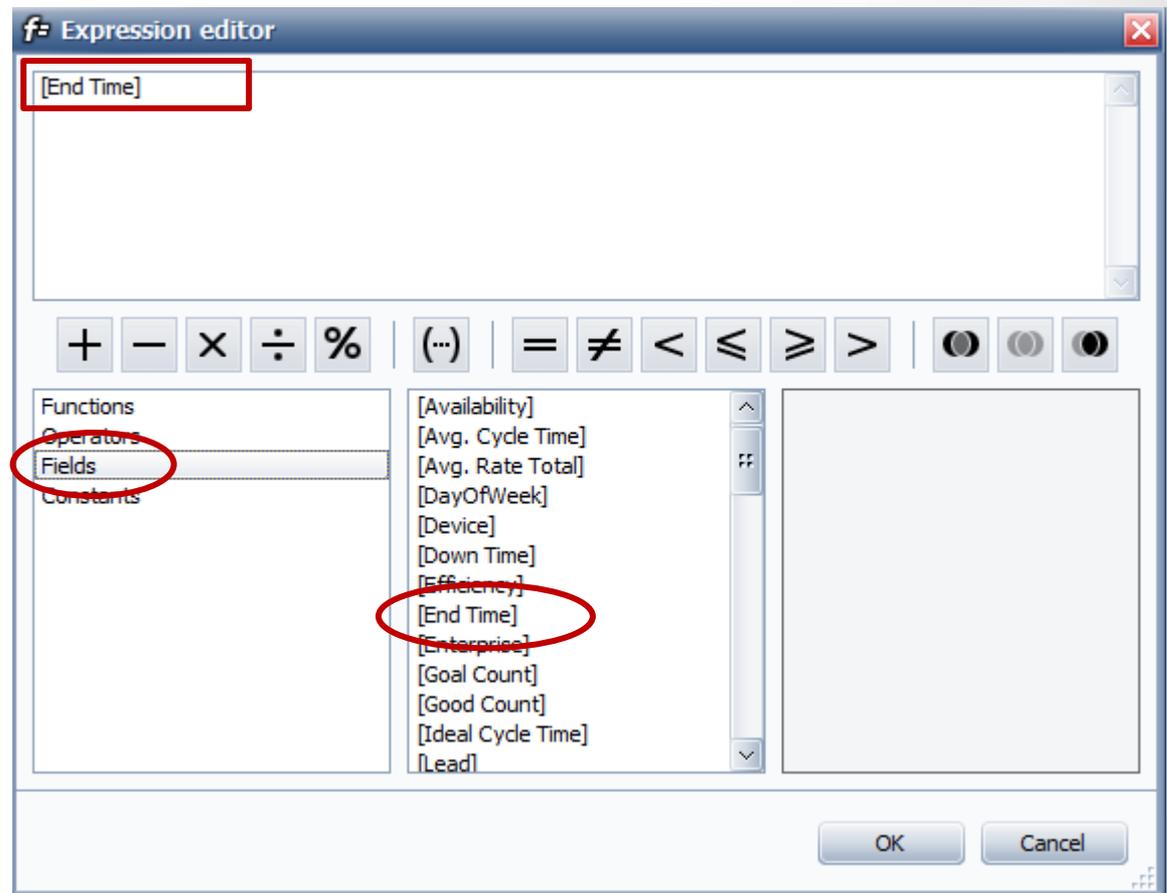
- Click on the Field Area on the left to see where data elements are placed on the Grid.

Define Custom Fields – Week Of Year

Click on **Fields** on the left-side >>>>

Double-Click on **[End Time]** under the Fields option.

This new field will find all the records that have an end date in the specified **[End Time]**



Define Custom Fields – Day of Week

1. Field Description = **DayOfWeek** or **Day**
2. Select Result Type = **Custom Date Interval**
3. And select **Max** Summary Type
4. Select Date Interval Type = **Day of Week**
5. Proceed to **Expression Editor**

New Custom Expression

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 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:

Use Summary Values

Field Area

Data Area
 Row Area
 Column Area
 Filter Area

Enterprise		Location		Plant		Line	
Availability		OEE		Device 0		Grand Total	
Area	Shift	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 >>>

Shift

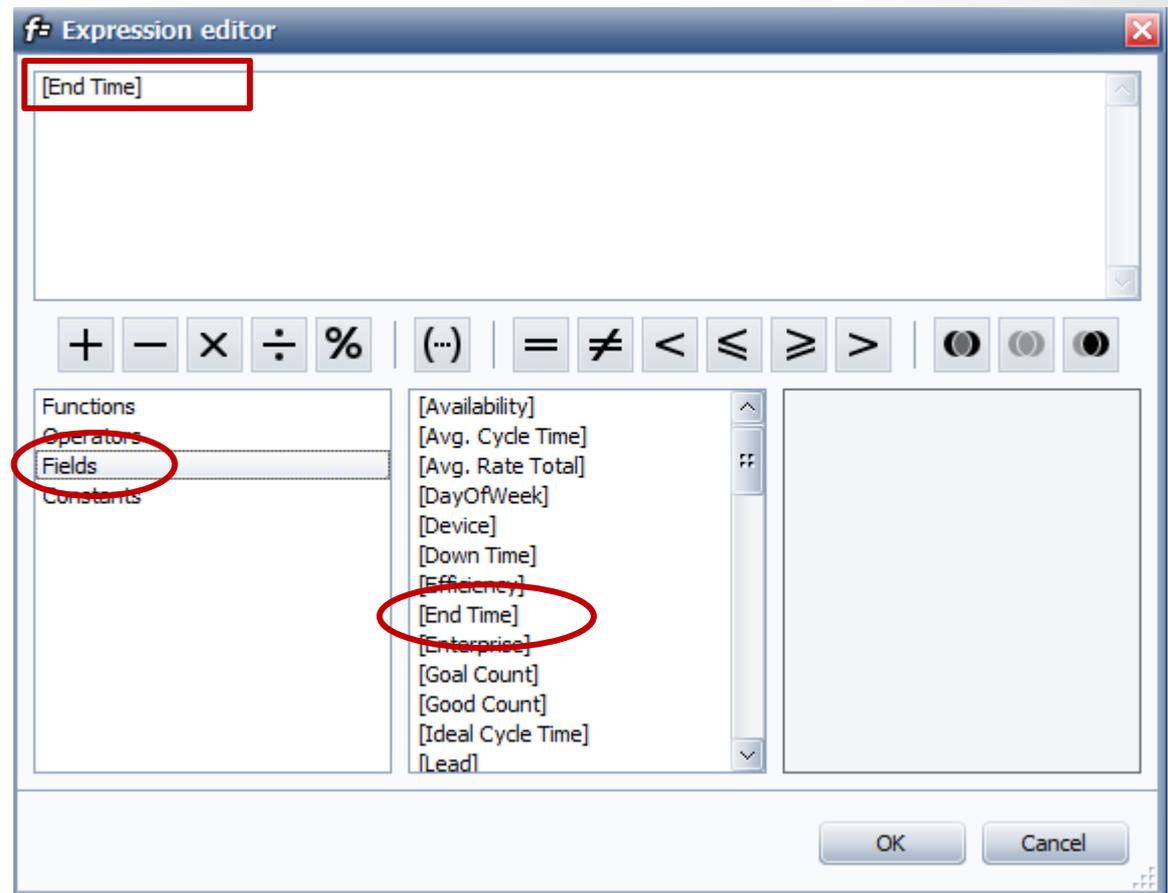
Shift	Day
First Shift	Monday
	Tuesday
	Wednesday
	Thursday
	Friday
First Shift Total	

Define Custom Fields – Custom Date for Week

Click on **Fields** on the left-side >>>>

Double-Click on **[End Time]** under the Fields option.

This new field will find all the records that have an end date in the specified **[End Time]**



Define Custom Fields – Custom Date Interval

Select **Custom Date Interval – Max Summary Type** and then select the Date Interval Type. Proceed to **Expression Editor**>>

Options

Field Description:

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 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

Data Area

Enterprise Location Plant Line

Availability OEE

Device 0

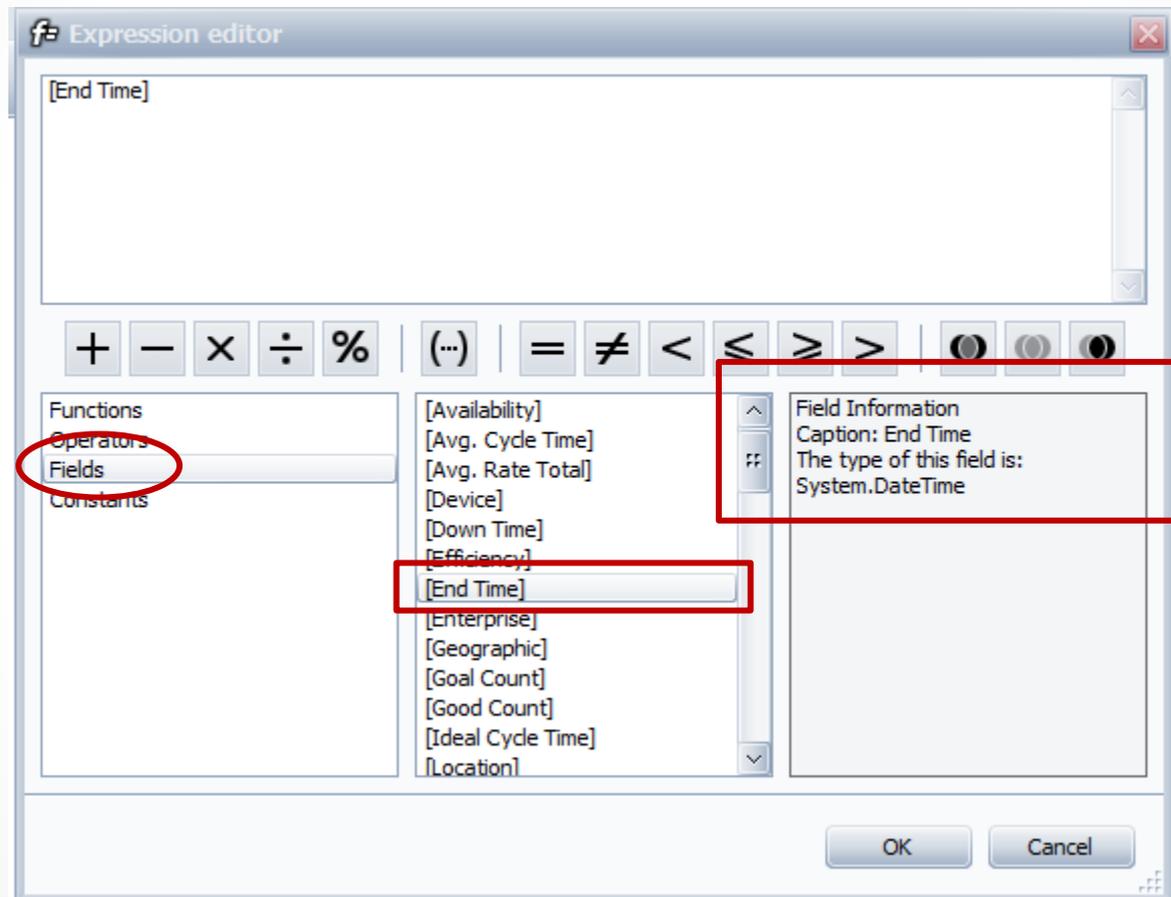
Area	Shift	Device 2		Device 3		Grand Total	
		Availability	OEE	Availability	OEE	Availability	OEE
Packaging	Shift 1	47.3	33.9	46.7	35.2	47.0	34.5
	Shift 2	0.0	0.0	0.0	0.0	0.0	0.0
	Shift 3	58.1	41.0	65.1	47.5	61.6	44.3
	Shift 4	3.9	3.1	10.9	8.8	5.8	4.7
Packaging Total		37.7	26.9	45.3	33.6	41.2	30.0

Cancel Proceed to Expression Editor >>

- Click on the Field Area on the left to see where data elements are placed on the Grid.

Define Custom Fields – Custom Date Interval

Select either the [Start Time] or [End Time] for the Date Interval.



Custom Date Interval - Hierarchy

Below is an example of the date hierarchy for the pivot grid.

Enterprise																			
Geographic																			
Order Type																			
Device																			
Plant																			
OrderType																			
PlanningPlant																			
Region																			
Type																			
OEE																			
Year 0																			
Quarter 0																			
Month 0																			
2015																			
Location	Q1 2015			Q1 2015 Total	Q2 2015			Q2 2015 Total	Q3 2015			Q3 2015 Total	Q4 2015			Q4 2015 Total	2015 Total		
	January	February	March		April	May	June		July	August	September		October	November	December				
Avondale, PA	42.5	35.4	38.0	38.5	39.7	44.1	38.3	40.7	5.8	14.8	24.3	13.5	28.0	39.6	33.6	33.4	33.2		
Carrollton, KY	30.4	45.4	41.6	41.6	51.4	54.3	43.0	49.9	24.8	26.9	26.7	26.7	31.0	28.5	44.3	34.5	38.3		
Channahon, IL		36.0	58.0	45.6	69.2	53.5	33.0	54.3			43.4	43.4	55.9	45.8	43.5	47.9	47.4		
Germantown, WI		41.8	35.8	38.0	56.6	59.7	27.8	56.5	50.2		46.8	47.3	33.0	31.9	33.0	32.5	38.9		
Imlay City, MI		17.7	43.9	33.6	54.0	55.7	42.3	52.3		33.2	35.7	34.5	31.6	27.4	31.3	30.0	36.0		
Lebanon, CT	46.9	36.8	42.2	41.7	47.2	49.3	43.7	46.9	25.4	24.6	34.7	28.9	46.5	46.1	37.6	44.0	40.7		
Orrville, OH	24.3	24.6	30.8	27.7	44.2	51.4	36.9	44.3	19.2	16.9	33.9	23.6	37.1	39.6	44.5	39.8	34.6		
Oxford, PA	21.4	24.3	27.9	24.8	36.6	50.7	32.4	40.4	20.4	28.9	29.1	26.1	37.2	41.1	22.3	33.8	31.5		
Shreve, OH	28.2	31.2	42.5	34.2	50.1	53.4	46.5	50.3	38.4	63.2	62.9	51.6	66.9	56.7	43.4	54.3	48.6		
Wright City, MO		53.4	57.8	56.4	75.5	57.6	47.0	62.0	28.0	49.8	27.0	38.2	51.1	41.1	39.8	43.4	48.3		
Yaphank, NY					52.8	26.9	27.0	28.9	21.4	15.0	0.0	12.7	19.1	23.2	26.1	23.7	22.2		
Grand Total	35.4	31.9	39.6	36.2	47.3	48.9	38.7	45.2	22.6	27.0	31.1	27.0	39.4	37.2	35.4	37.3	37.1		