



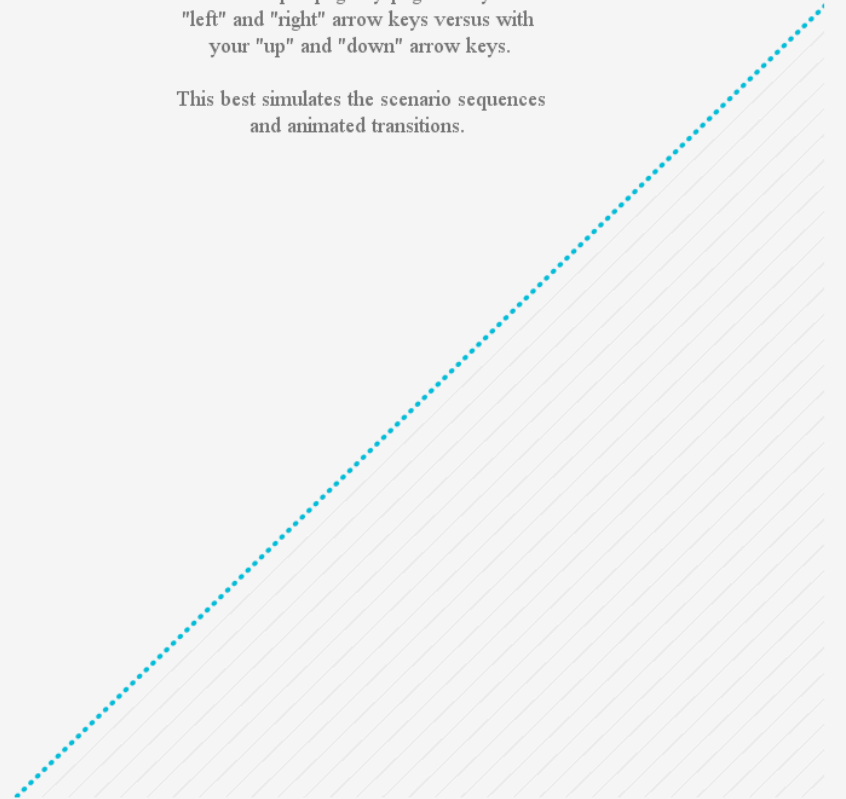
VIZCREATOR PRESENTATION

BRINGING NUMBERS TO LIFE

L6.1

View this pdf page-by-page with your "left" and "right" arrow keys versus with your "up" and "down" arrow keys.

This best simulates the scenario sequences and animated transitions.



Visualization Creator
03/30/06

Overview

In order to clearly communicate the interaction of various elements within the Visualization Creator (VC), we have described several scenarios in which the VC would be used.

We believe the users of the VC range from Ling to Sven. However, different users will have different entry points and uses for the VC. Ling will do no analysis, but simply define data. John/Sven will analyze data and publish it in order to communicate a specific point.

Scope: Chart types



The chart families for the scope of this phase of the Visualization Creator are Bar, Line, Pie, Plot and Gauge. Within each family, there are several types. The types within scope are those listed above.

NOT in scope are: Area, Radar, Polar, Finance, Stock, Histogram, Box, Map, Vector, Hierarchical, Network, Fish-Eye.

Scope: Style elements

The Visualization Creator provides a means to edit most stylistic elements of a theme.

However, editing some types of stylistic element provides little or no true value to the user, and provide a means to negatively affect the legibility of data.

The design deliberately avoids providing capability to edit:

Axis line widths

Axis color

Label and header type size

Individual element colors on the fly (this is controlled by a theme palette, meaning any change is global to that theme).

This will also have the added effect of creating a specific Business Objects visual style to the charts, while also allowing for a level of personalization.

Overview of screen areas/Panels

Scenarios • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

References • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

Slide Controls

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Visualization Creator



Data Templates Properties



Data Source

Main visualization area with a vertical scrollbar on the right side.



Recommendations

Recommendations panel showing 'Selected Data' (no data selected), 'Business Analysis', 'Chart Recommendation...', and 'What would you like to do?' with options like 'Create visualization from Report', 'Create visualization from raw Data', and 'Create visualization from Chart type'.

Toolbar: Provides basic controls

Main Window: Contains the entire Visualization Creator interface.

Preview button: The user can preview the completed visualization and drill down in preview mode.

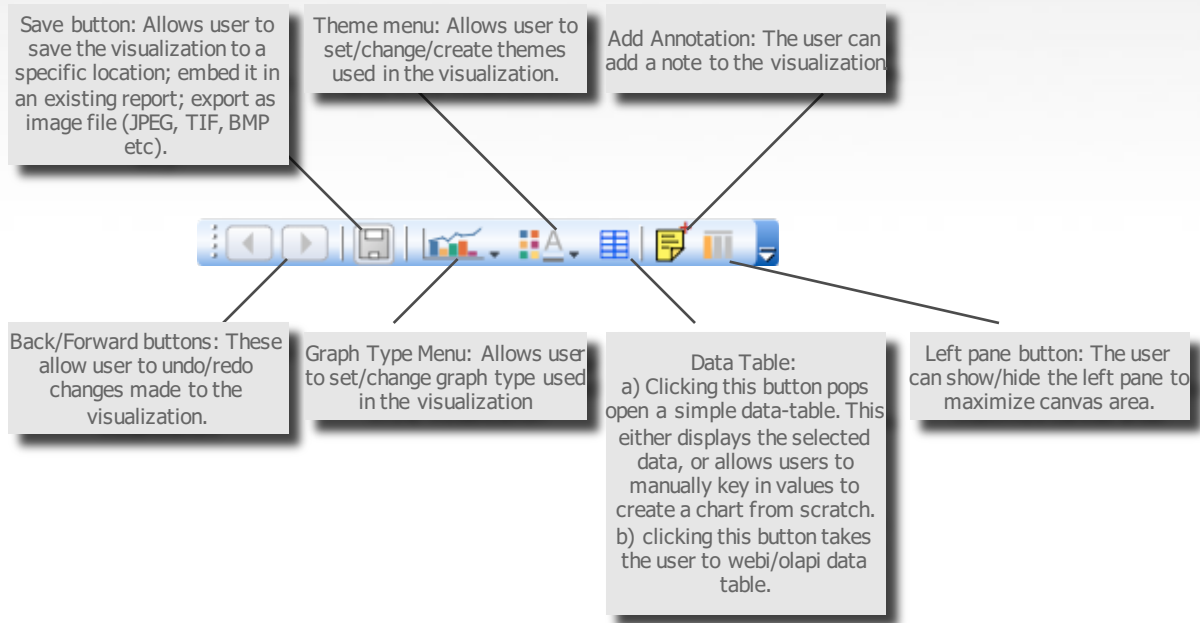
Refresh Data button. When clicked, the real values of the data set being used are cached to the front end.

Left Pane
Data Tab: Allows user to explore data. This will house an instance of the Repository Explorer (transversal UI).
Templates Tab: Allows user to browse visualization templates they have created or those shipped with Visualization Creator.
Properties Tab: Provides configuration options for visualization elements.

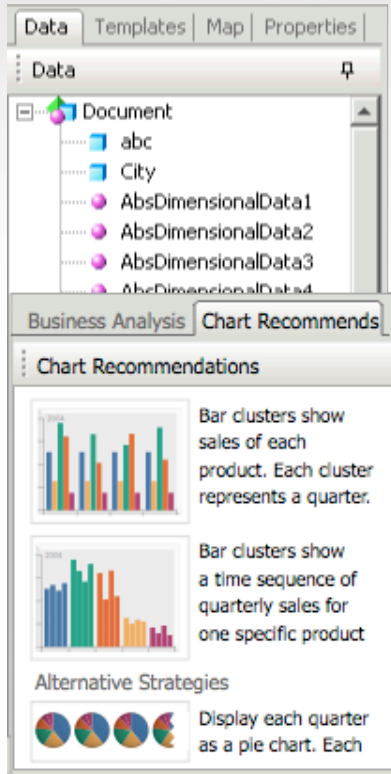
Canvas Area: This is the area in which the visualization will appear and be manipulated.

Recommendations Panel: This piece is not finalized. See slide 8 for options.

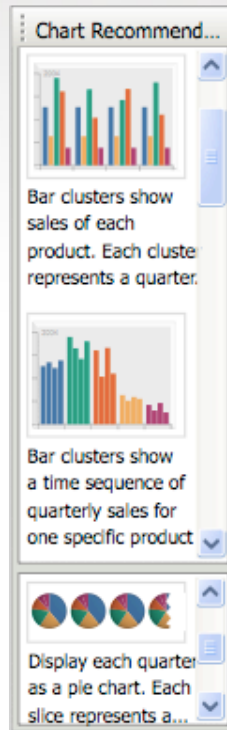
Toolbar



Recommendations panel options



Splitting the existing left-pane into two parts, each with tabs



Narrow column on right side of screen or could be floating palette.



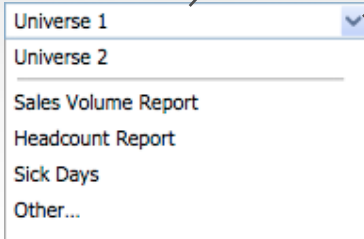
Existing panel on right side could be converted to floating window



Tab on bottom of screen. Changes to show current best recommended chart, clicking on it will provide a list of all suggestions.

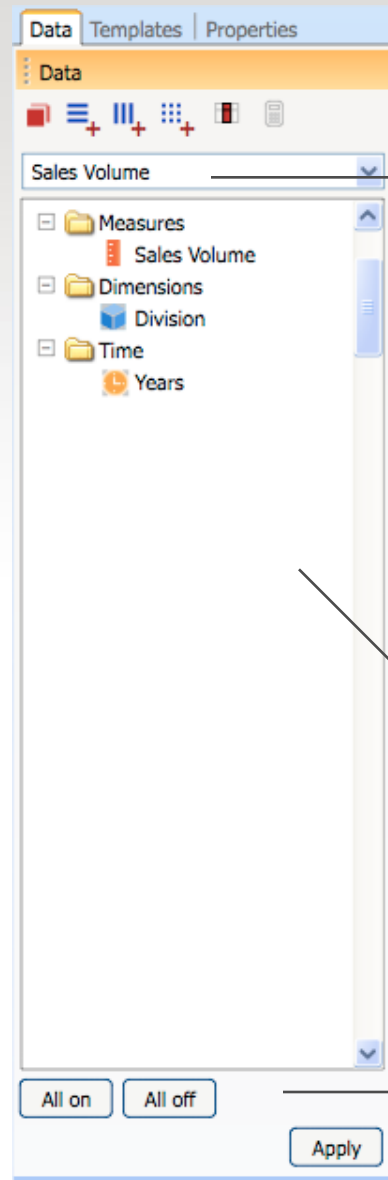
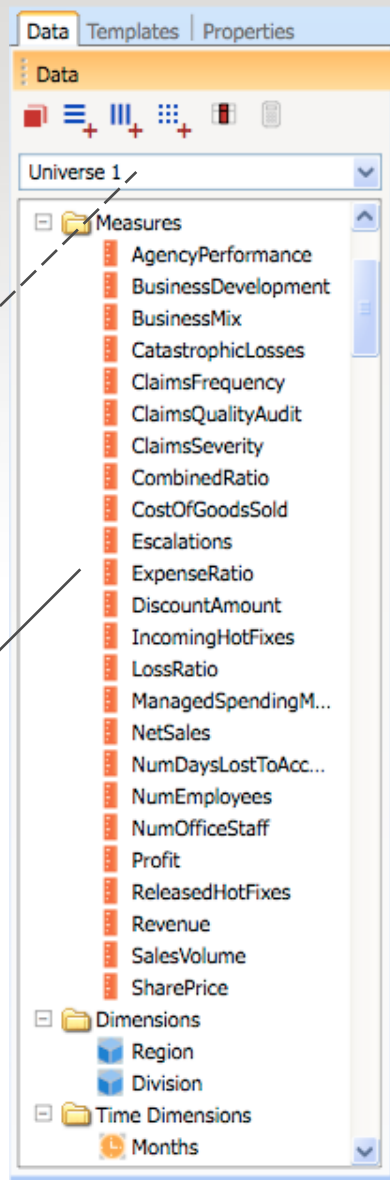
Left pane: Data Tab

Source Menu:
The source menu allows the user to see contents of a universe, or of an existing report.



Source List:
When showing a universe, data elements are listed and can be dragged in to create a chart.

The representation of this state is unfinished, as this is an instance of a transversal UI (Repository Explorer).



Source Menu:
The user can select a report, or default to a report by doing a 'turn to'.

Source List:
When showing a report, The list contains only data elements within that report.

Controls:
All On/Off selects either all or none.

If the data selection can not be applied to the chart immediately, an 'Apply' button will be necessary.

Left pane: Template Tab (Placeholder)

Source Menu:
The source menu allows the user to see Templates within a specific location. Could include My Templates, Corporate Templates, etc.

Source List:
Templates can be opened from the list. Opening a template will close any currently open document.

A template could contain any combination of:

- Chart Type
- Theme
- Data
- Properties configuration

* The definition of a Template has yet to be defined. this tab is currently on hold.

Data Templates Properties

Templates

My Templates

- HR
 - Headcount
 - Employee Satisfaction
 - Sick Days All Regions
- Finance
 - Performance by Region
 - Sales to Date
 - Share prices
- Other

Preview

Theme: Corporate
Measures: Sick Days
Dims: Regions (All)
Time: None

Open

Preview:
Preview shows a small preview of the file, containing text positions, chart type, theme type.
It also lists the data elements contained in the chart type.

Left pane: Properties tab

Data Options:
Allows setting of data-specific controls.

Display Data as:
%: will normalize the data
Value: will show real data values. 'Value' is default.

Truncate Data:
Auto: Auto will truncate data automatically, optimizing the 'difference' in relevant discrepancy of values.
Manual: provides the user a set of on-chart drag-able areas to manually optimize the data display.

Highlight:
When a user wants to highlight a single bar, line or other chart component, they can choose to highlight it in one of two ways:
Series: Maintains all elements in series colors but depicts the highlighted bar in the highlight color set in their theme.
Monochrome: Depicts the highlighted element in the key color, all other elements in the secondary color in the range.

(See Theme and Selection model)

The screenshot shows the 'Properties' tab in a software application. The tab is divided into several sections:

- Data Options:**
 - Display Data as:** Radio buttons for % (unselected) and Value (selected).
 - Truncate Data:** Checkbox (unselected), with radio buttons for Auto (selected) and Manual (unselected).
 - Highlight:** Checkbox (unselected), with radio buttons for Series (selected) and Monochrome (unselected).
- Layout:**
 - Header:** Two radio buttons, the left one is selected.
 - Legend:** Checkbox (checked), with two radio buttons, the left one is selected.
- Display:**
 - Title:** Checkbox (checked)
 - Sub-title:** Checkbox (checked)
 - Axis Labels:** Checkbox (checked)
 - Axis Sub-labels:** Checkbox (unselected)
 - Alerts:** Checkbox (unselected)
 - Targets:** Checkbox (unselected)
 - Annotations:** Checkbox (unselected)
- Grid Lines:**
 - Horizontal:** Checkbox (checked)
 - Vertical:** Checkbox (unselected)

Layout:
Allows control over placement of Chart Title and Legend.

Legend:
User checks the box to display the legend.

Any choices made here override choices made in the theme, without affecting the theme.

Display:
Allows setting of chart-specific controls.

The checkboxes for 'Title' through 'Annotations' Allow show/hide for those elements.

Grid Lines:
Turns on/off grid lines in the chart background.

Scenario 1: Turn to

FedEx Jack needs to produce a visualization of a sales report that John, a business manager at FedEx Corp. needs to see.

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

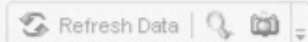
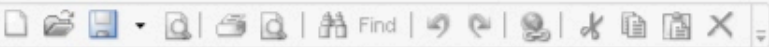
- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

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Arial 8 B I U [List Icon] [Grid Icon] [Color Icon] Thin [Pen Icon]

8 [Navigation Icons]

Object Group

- Motors
 - Time
 - Quarter
 - Year
 - Year
 - Product
 - Category
 - Products
 - Measures
 - Quantity Sold

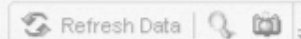
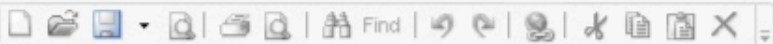
	FedExGround	FedEx Express	FedEx Freight	FedEx Home Delivery	FedEx Kinkos
2004	36805421	2736271	12726482	1776484	24982743
2005	46436372	3278239	12937464	1783637	16938462

Jack opens the Olapi report 'Sales Volume'

View: [Icons]

Zoom: 100%

FSales Volume



Arial 8 B I U [text alignment icons] [color icon] Thin [font color icon]

8 [navigation icons]

- Object Group
 - Motors
 - Time
 - Quarter
 - Year
 - Year
 - Product
 - Category
 - Products
 - Measures
 - Quantity Sold

	FedExGround	FedEx Express	FedEx Freight	FedEx Home Delivery	FedEx Kinkos
2004	36805421	2736271	12726482	1776484	24982743
2005	46436372	3278239	12937464	1783637	16938462

- Help
- Cut
- Copy
- Paste
- Insert
- Turn to Chart**
- Delete
- Calculator
- Format Cells...
- Hyperlink...

- Next to this table**
- Replacing this table
- In new report

On right-click, Jack selects the 'Turn to Chart' option 'Next to this table' (wording needs to be finalized).



Recommendations

Data Templates Properties

Data

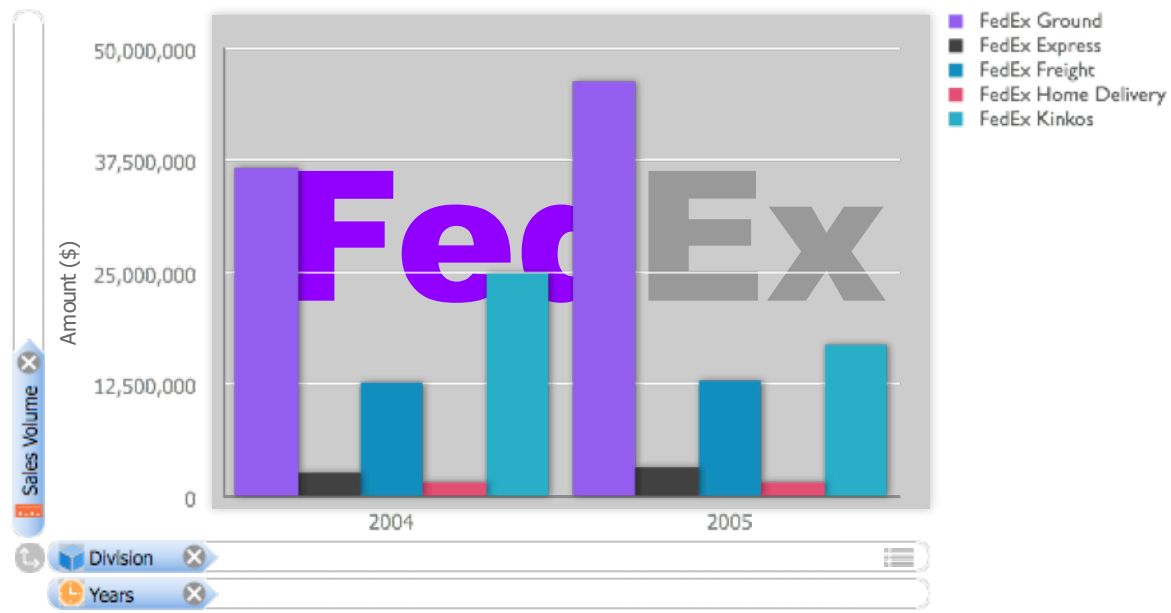
Sales Volume

- Measures
 - Sales Volume
- Dimensions
 - Division
 - Time
 - Years

All on All off Apply

Sales Volume

Division By Year



Selected Data

- Sales Volume
- Division
- Year

Business Analysis

Chart Recommend...

Bar clusters show sales of each product. Each cluster represents a quarter.

Bar clusters show a time sequence of quarterly sales for one specific product.

Bar layers represent sales of a specific

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

Visualization Creator opens, in edit mode. Jack sees the layout guides. Title and Legend are automatically populated.

Alternative chart styles are offered by the Recommendations panel.

Notes on Turn to: Restricting complex data sets

When activating a 'Turn to' from any BO Application, complex data sets must be restricted in order to create a visualization.

Turn to menu:
When selecting 'Turn to', the user has several options.

- Next to this table:** Supplements the existing table with a chart. Once the visualization has been created, saving it will place it next to this table.
- Replacing this table:** The finished visualization will replace the original data table.
- In new report:** The user will be prompted to name the new report. The finished visualization will be placed in the new report.

The 'Turn to' menu includes the following options:

- Help
- Cut
- Copy
- Paste
- Insert
- Turn to Chart** (highlighted)
- Delete
- Calculator
- Format Cells...
- Hyperlink...

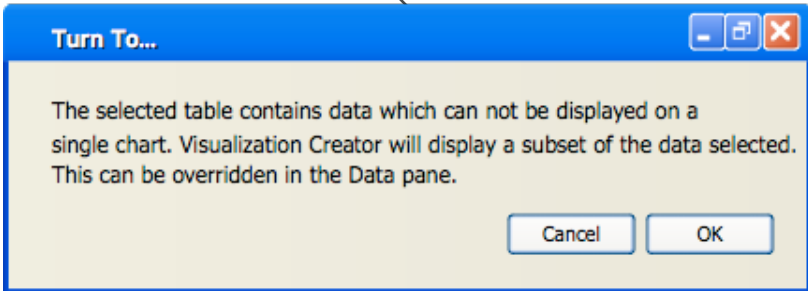
The 'Turn to Chart' option is expanded to show the following sub-options:

- Next to this table** (highlighted)
- Replacing this table
- In new report

Notes on Turn to: Restricting complex data sets

When activating a 'Turn to' from any BO Application, complex data sets must be restricted in order to create a visualization.

Dialogue box:
If working with a very complex data set in the table, having selected 'turn to' on a complex data set, the user sees a dialogue box telling them that the Data set will be restricted, but they can change the selection in the Data tab of the left pane.



Source Menu:
The source menu will now reflect the report name. Switching to another report name will display a dialogue asking the user to either save this visualization back into the originating report, discard it, or cancel the operation. If the user chooses to discard or save the report, the screen will then refresh with the newly selected report and appropriate visualization.

Source List:
When a user does a 'Turn to' from a complex data table, the Visualization Creator will select the first x members of each type of data, until a conflict is met, at which point no further members of that type of data will be used in the initial visualization displayed.

Scenario 2: Chart Type Driven

FedEx Ling builds a report from measures, knowing her chart type.

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
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- [2 Axis Layouts](#)

Slide Controls

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- Menu Item 1
- Menu Item 1
- Menu Item 1
- Menu Item 1
- New Chart...

Object Group

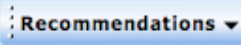
- Motors
 - Time
 - Quarter
 - Year
 - Year
 - Product
 - Category
 - Products
 - Measures
 - Quantity Sold



From within any BO application, Ling opens viz creator...

View: [Icons] [Left Arrow]

[Home] [Sales Volume]



Data | Templates | Properties

Data

Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Chart Title
Subtitle



Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Alternative Charts

She sees a blank chart area of no specific layout type.

The recommendations panel shows various starting points.

Visualization Creator



Recommendations

Data Templates Pr

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division

Time Dimensions

- Months

t Title



Measure

Dimension

Time

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

She goes to the Chart Type menu...

Alternative Charts

Visualization Creator



Recommendations

Data Templates Pr

Data

Universe 1

- Measures
- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
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 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

st Title



...and selects a Bar and Line chart.

Selected Data

You currently have no data selected.

- Click here to display the data pane.

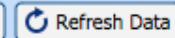
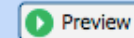
Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Alternative Charts



Recommendations ▾

Selected Data

You currently have no data selected.

- [Click here to display the data pane.](#)

Business Analysis

Chart Recommend...

What would you like to do?

- [Create visualization from Report.](#)
- [Create visualization from raw Data.](#)
- [Create visualization from Chart type.](#)

Alternative Charts

Data Templates Properties

Data



Universe 1 ▾

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
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- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
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- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division

Time Dimensions

- Months

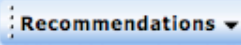
Chart Title

Subtitle



She now sees Layout Axis guides appropriate for a Bar and Line chart.

The recommendations panel does not begin to display alternative chart options until data elements are added.



Data | Templates | Properties

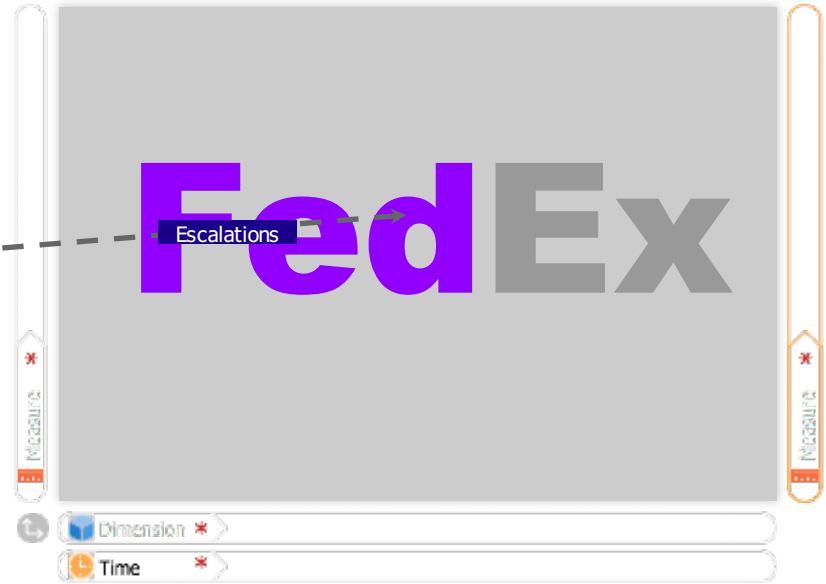
Data

Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
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 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Escalations

Subtitle



Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

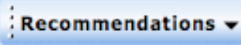
Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Alternative Charts

She drags in the measure 'Escalations'. The right Y-axis indicates that dropping the measure will place it in this location.



Data Templates Properties

Data



Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
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- NetSales
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- NumEmployees
- NumOfficeStaff
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- SharePrice

Dimensions

- Region
 - Division
- Time Dimensions
- Months

Escalations

Subtitle

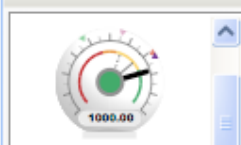


Selected Data

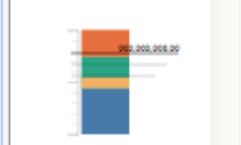
Escalations

Business Analysis

Chart Recommend...



Speedometer Gauge clearly displays the value of a single measure.

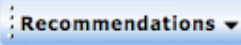


Thermometer Gauge clearly displays the value of a single measure.

Alternative Charts

She sees the current value for the measure Escalations.

The Recommendations Panel offers further options to more clearly display the currently added data elements.



Data Templates Properties

Data



Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

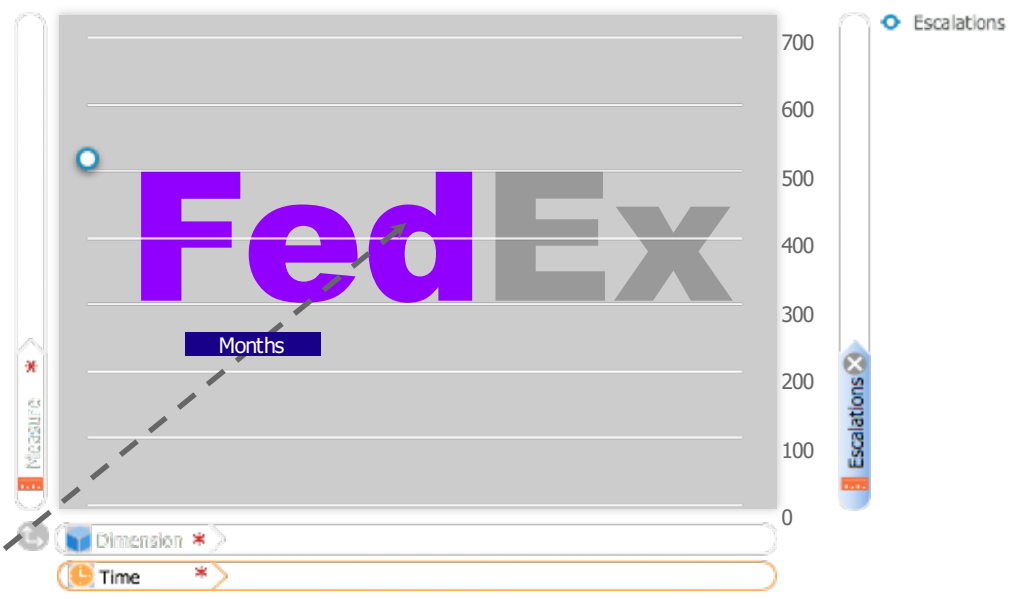
- Region
- Division

Time Dimensions

- Months

Escalations

Subtitle



She sees the current value for the measure Escalations.

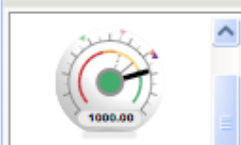
Recommendations

Selected Data

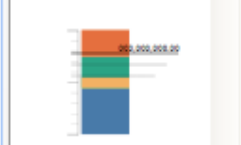
- Escalations

Business Analysis

Chart Recommend...



Speedometer Gauge clearly displays the value of a single measure.



Thermometer Gauge clearly displays the value of a single measure.

Alternative Charts



Preview Refresh Data

Recommendations

Data Templates Properties

Data



Universe 1

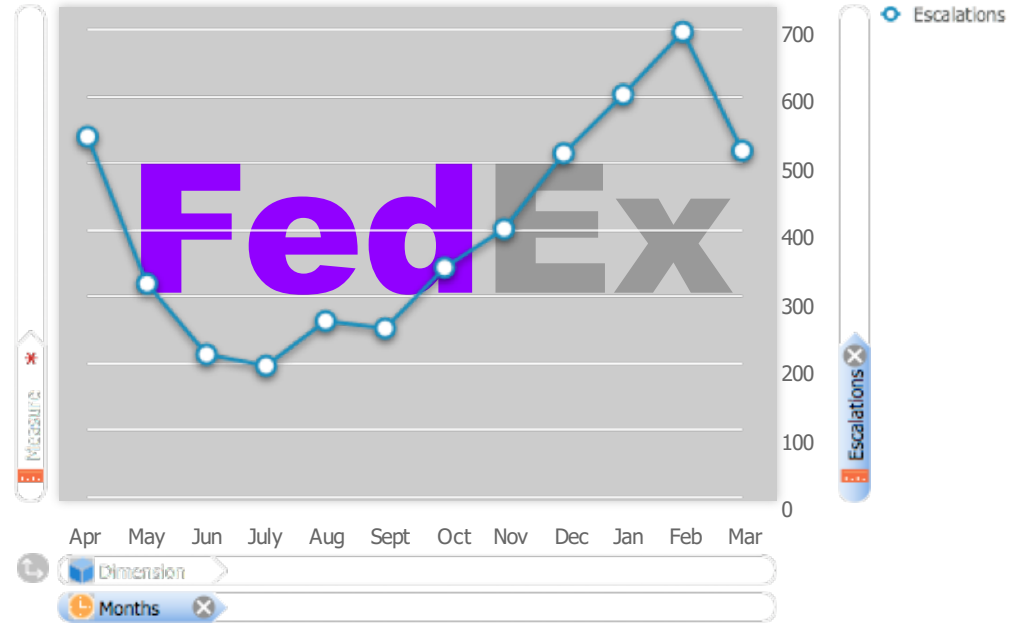
Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
 - Division
- Time Dimensions
- Months

Escalations Last 12 Months



Selected Data

- Escalations
- Months

Business Analysis

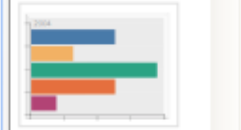
Chart Recommend...



Line shows Escalations over the prior 12 month period.



Bars show a time sequence of monthly Escalations for the prior period.



Bar layers represent Escalations of

Alternative Charts



Display each Month as a gauge to provide comparison

She sees the current value for the measure Escalations.



Preview Refresh Data

Recommendations

Data Templates Properties

Data



Universe 1

Measures

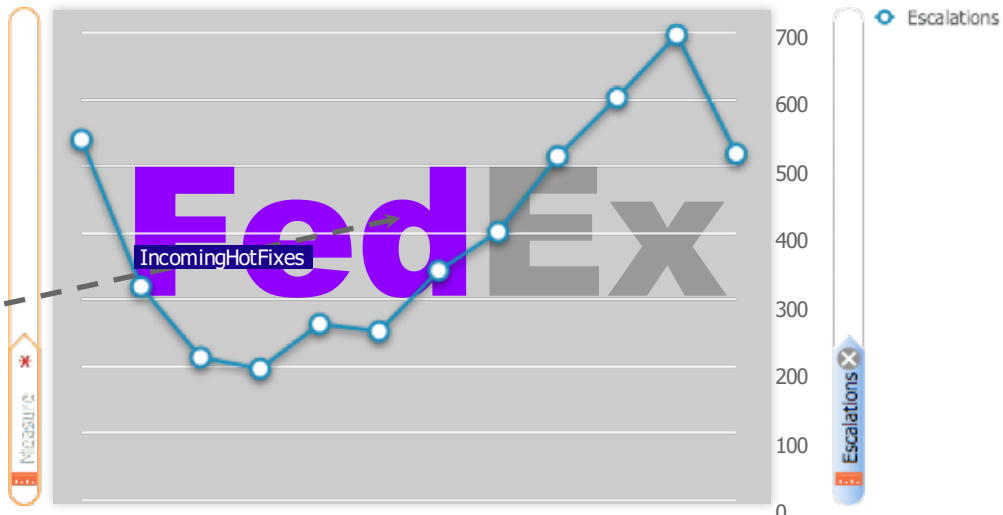
- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
 - Division
- Time Dimensions
- Months

Escalations

Last 12 Months



Measure

Apr May Jun July Aug Sept Oct Nov Dec Jan Feb Mar

Dimension

Months

Selected Data

Escalations

Months

Business Analysis

Chart Recommend...



Line shows Escalations over the prior 12 month period.



Bars show a time sequence of monthly Escalations for the prior period.



Bar layers represent Escalations of

Alternative Charts



Display each Month as a gauge to provide comparison

She now drags in the measure 'Incoming Hot Fixes'. It is plotted along the Y-axis.



Preview Refresh Data

Recommendations

Data Templates Properties

Data



Universe 1

Measures

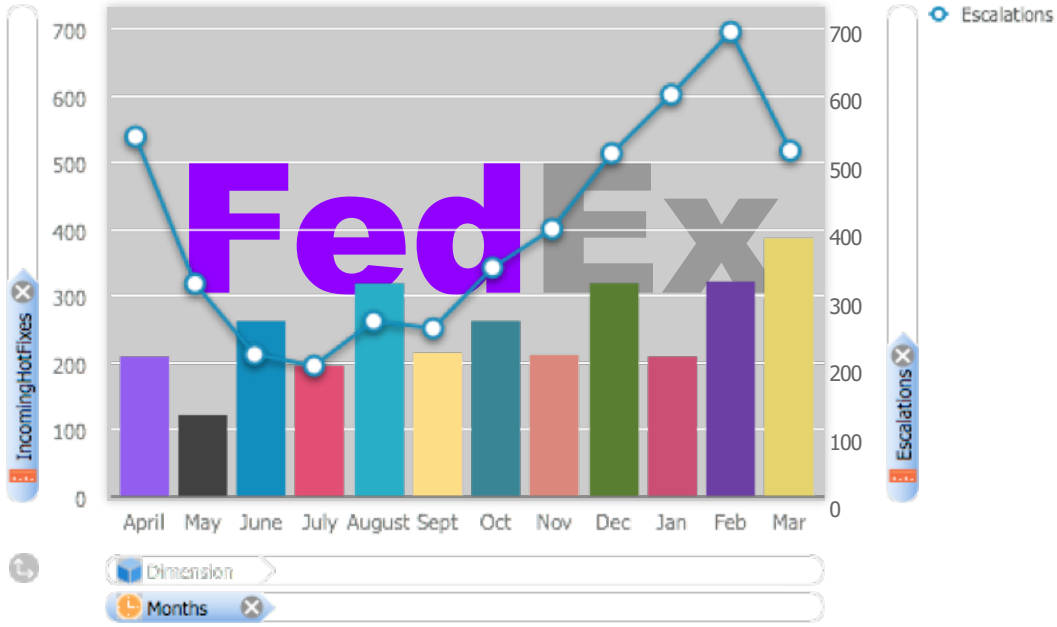
- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division
- Time Dimensions
- Months

Incoming Hot Fixes, Escalations

Last 12 Months

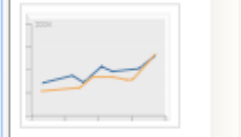


Selected Data

- Escalations
- IncomingHotFixes
- Months
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Lines shows Escalations over the prior 12 month period.



Bar layers represent Escalations of

Alternative Charts



Display each month as a pie chart. Each slice represents a...

'Incoming Hot Fixes' is plotted along the Y-axis.



Preview Refresh Data

Recommendations

Data Templates Properties

Data



Universe 1

Measures

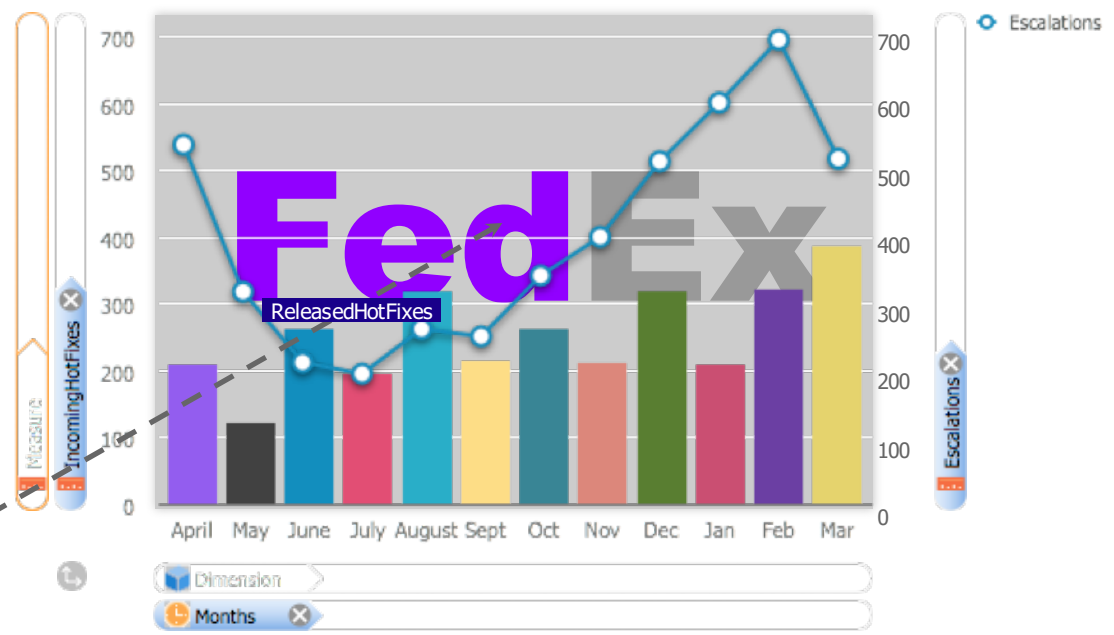
- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division
- Time Dimensions
- Months

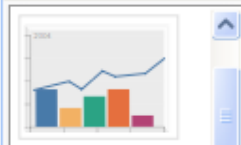
Incoming Hot Fixes, Escalations

Last 12 Months

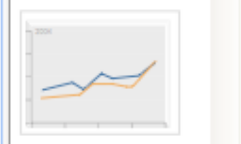


Selected Data

- Escalations
- IncomingHotFixes
- Months
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

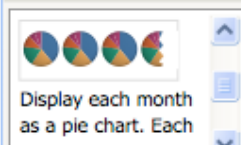


Lines shows Escalations over the prior 12 month period.



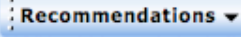
Bar layers represent Escalations of

Alternative Charts



Display each month as a pie chart. Each slice represents a...

She now drags in the measure 'Released Hot Fixes'. A new 'Measure' indicator appears on the left y-axis.



Data | Templates | Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

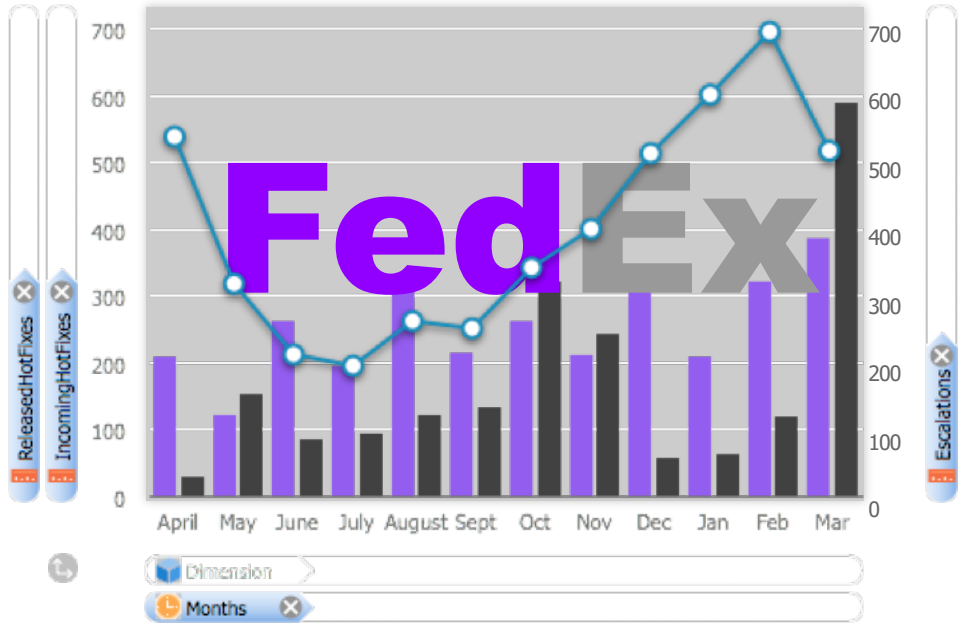
- Region
- Division

Time Dimensions

- Months

Incoming Hot Fixes, Escalations

Last 12 Months



Selected Data

- Escalations
- IncomingHotFixes
- Months
- Business Analysis
- Chart Recommend...

Lines shows Escalations over the prior 12 month period.

Lines shows Escalations over the prior 12 month period.

Bar layers represent Escalations of

Alternative Charts

Display each month as a pie chart. Each slice represents a...

All measures are now shown in series.

Scenario 3: From Data

FedEx Joanne builds a report from measures, without knowing what her chart type will be.

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

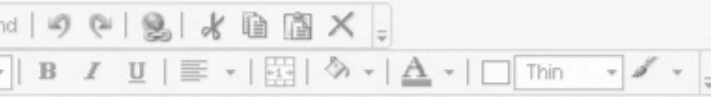
Slide Controls

- [Back to previous slide](#)
- [Back to Start](#)
- [Exit slideshow](#)



- Menu Item 1
- Menu Item 1
- Menu Item 1
- Menu Item 1
- New Chart...

Arial



Refresh Data

Object Group

- Motors
 - Time
 - Quarter
 - Year
 - Year
 - Product
 - Category
 - Products
 - Measures
 - Quantity Sold

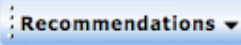


From within any BO application, Joanne goes to the 'Insert' menu and selects 'New Chart'.

View: [Icons]

FBlank Report

Zoom: 100%



Data Templates Properties

Data



Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Chart Title
Subtitle



Measure

Dimension

Time

She sees a blank chart area of no specific layout type.

The recommendations panel shows various starting points.

Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

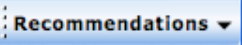
Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Alternative Charts



Data Templates Properties

Data



Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Chart Title
Subtitle



She drags in the measure 'IncomingHotFixes'.

The layout guides reflect where the data element will be placed.

If no chart type is selected, the Visualization creator will default to a bar chart (until the data defined would be better displayed by another graph type).

Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

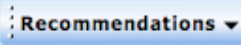
Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Alternative Charts



Data Templates Properties

Data

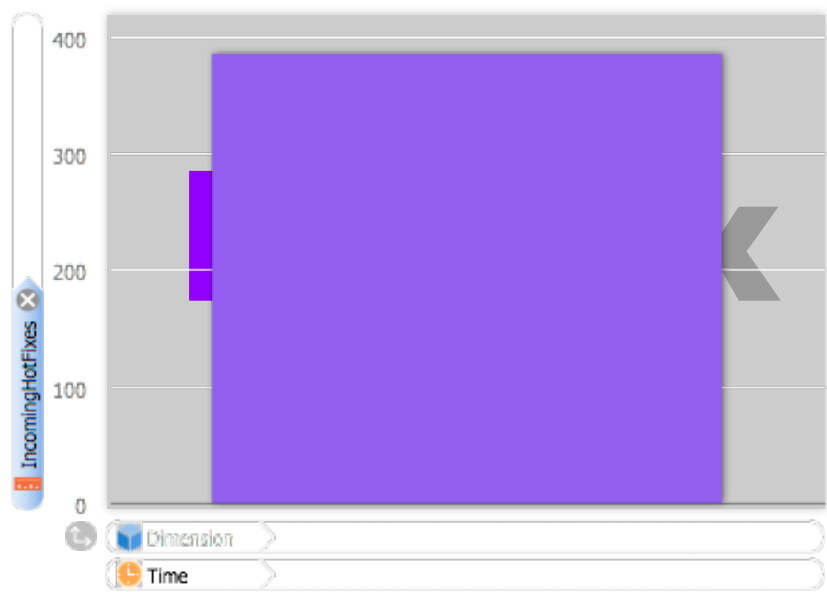


Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes

Subtitle



Incoming Hot Fixes

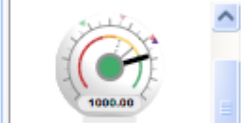
She now sees the measure plotted as a single bar. The bar represents the current actual value of the measure 'IncomingHotFixes'.

Selected Data

IncomingHotFixes

Business Analysis

Chart Recommend...

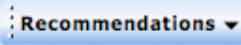


Speedometer Gauge clearly displays the value of a single measure.



Thermometer Gauge clearly displays the value of a single measure.

Alternative Charts



Data Templates Properties

Data

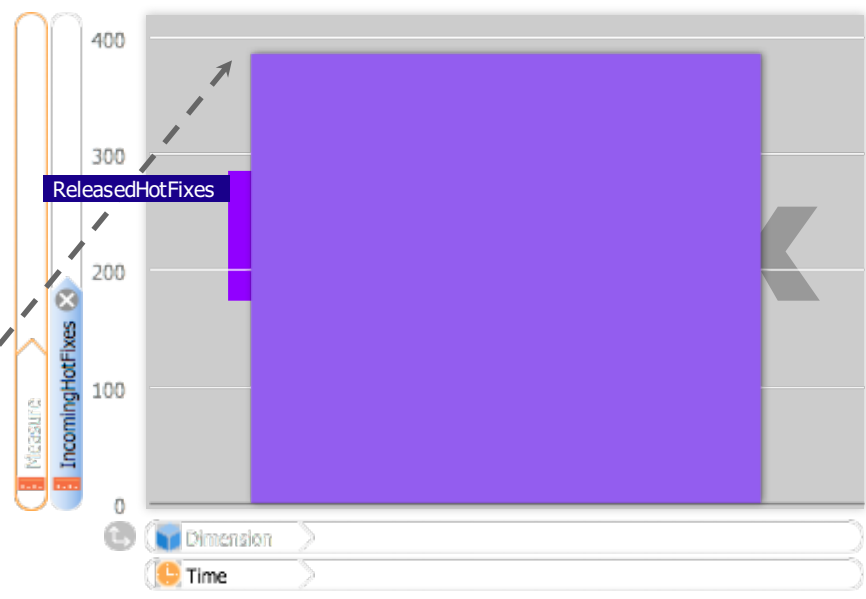


Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes

Subtitle



Incoming Hot Fixes

She drags in the measure 'ReleasedHotFixes' ...

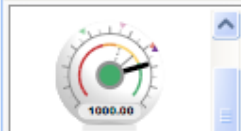
Recommendations

Selected Data

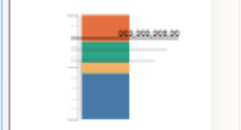
IncomingHotFixes

Business Analysis

Chart Recommend...



Speedometer Gauge clearly displays the value of a single measure.



Thermometer Gauge clearly displays the value of a single measure.

Alternative Charts



Preview Refresh Data

Recommendations

Data Templates Properties

Data



Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes

Subtitle



Incoming Hot Fixes
Released Hot Fixes

Dimension
Time

Both measures are now represented at their actual current value.

Selected Data

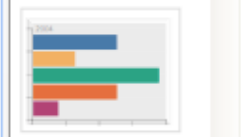
- Escalations
- IncomingHotFixes

Business Analysis

Chart Recommend...



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and IncomingHotFixes compared.



Pie allows comparison of like-measured

Alternative Charts



Display each Month as a gauge to provide comparison



Preview Refresh Data

Recommendations

Data Templates Properties

Data



Universe 1

Measures

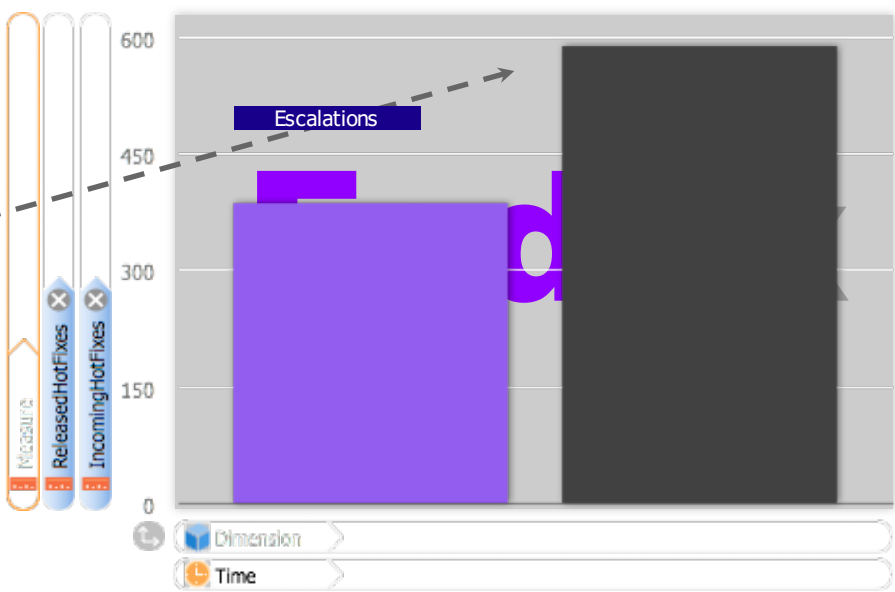
- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes

Subtitle



■ Incoming Hot Fixes
■ Released Hot Fixes

Dimension

Time

She drags in the measure 'Escalations' ...

Selected Data

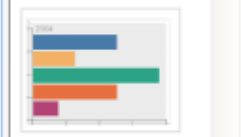
- Escalations
- IncomingHotFixes

Business Analysis

Chart Recommend...



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and IncomingHotFixes compared.



Pie allows comparison of like-measured

Alternative Charts



Display each Month as a gauge to provide comparison



Preview Refresh Data

Recommendations

Data Templates Properties

Data



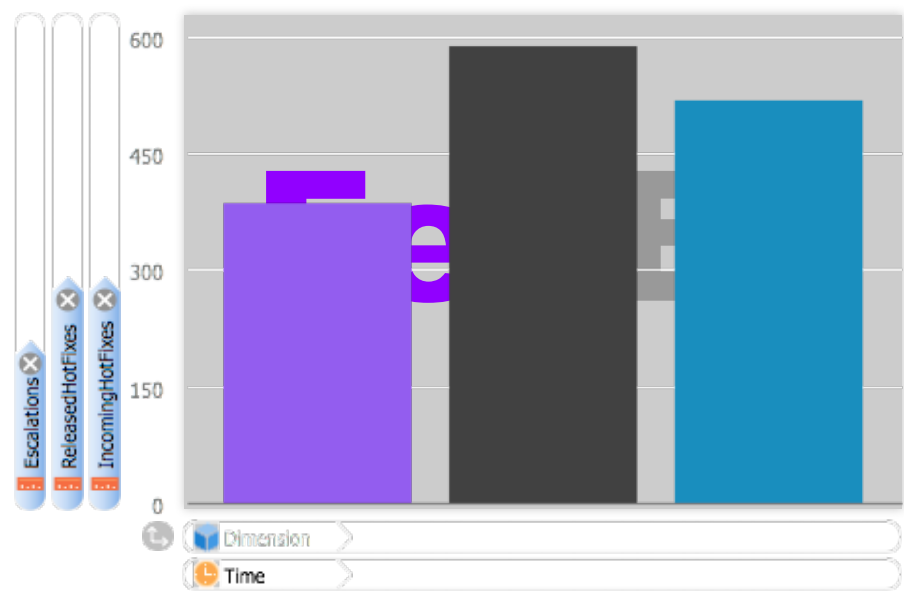
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

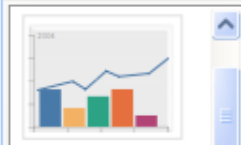
Subtitle



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.

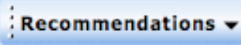


Bars show Escalations and Incoming Hot Fixes compared.

Alternative Charts

- Display each Month as a gauge to provide comparison

All three measures are now represented at their actual current value.



Data | Templates | Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

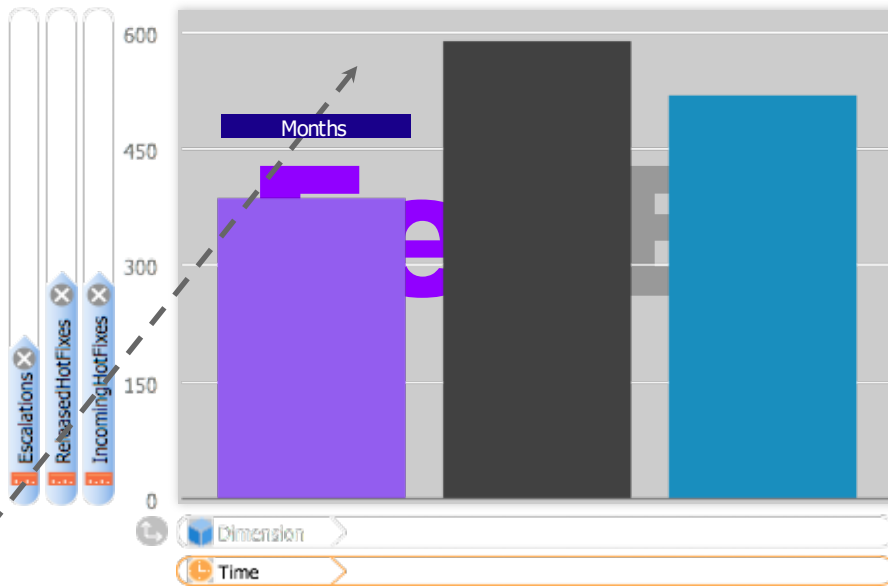
- Region
- Division

Time Dimensions

- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Subtitle



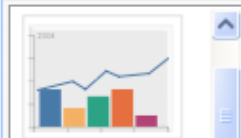
- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations

Business Analysis

Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.

Alternative Charts

Display each Month as a gauge to provide comparison

She drags in the Time Dimension 'Months' ...



Preview Refresh Data

Recommendations

Data Templates Properties

Data

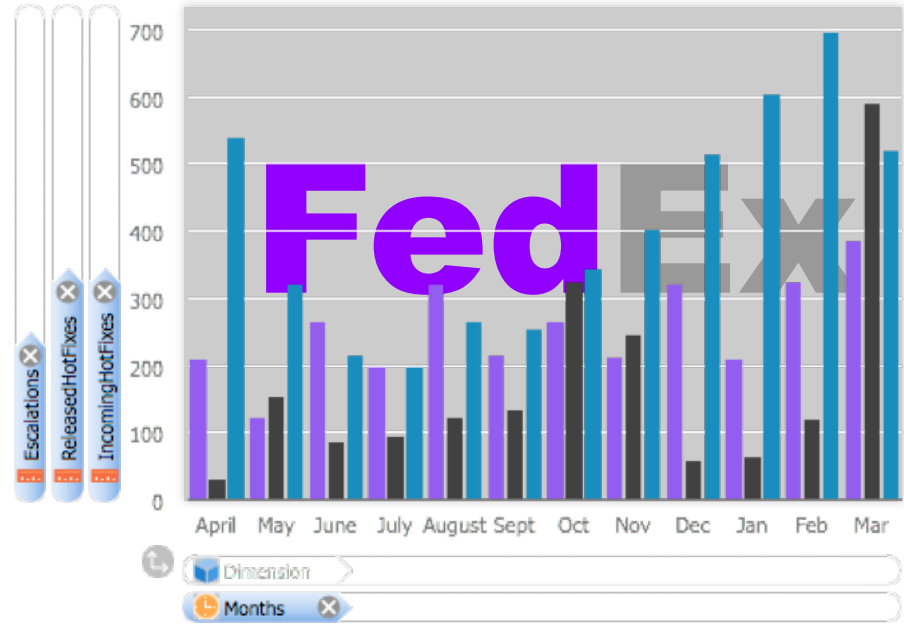


Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Dimension Months

All three measures are now represented at their actual current value, and last 12 months.

Chart type in the menu changes to a Grouped Bar.

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...

Scenario 3: From Data (cont)

There are three methods by which Joanne can create a Bar and Line chart from here. She can:

Change Graph Type

Restack the data elements manually

Use the Recommendations panel

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

Slide Controls

- [Back to previous slide](#)
- [Back to Start](#)
- [Exit slideshow](#)

Other Functions

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

Slide Controls

- [Back to previous slide](#)
- [Back to Start](#)
- [Exit slideshow](#)

Change Chart Type

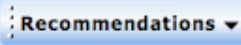
With too few required elements

With too many elements

Change Graph Type

With too few required elements

With too many elements



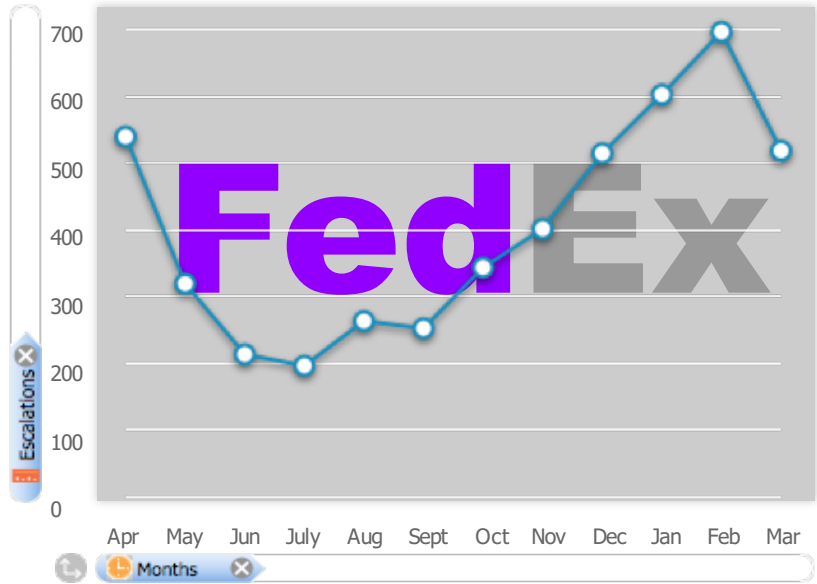
Data Templates Properties



Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Escalations Last 12 Months



Escalations

Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Joanne has a line chart. She wishes to change this to a Bar and Line chart.

Alternative Charts

Visualization Creator



Navigation icons: back, forward, save, undo, redo, zoom in, zoom out.

Menu: Data, Templates, P

Visualizations menu: Line, Bar, Pie, Scatter, etc.

Universe 1

Measures folder:

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions folder:

- Region
- Division

Time Dimensions folder:

- Months

Preview Refresh Data

Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

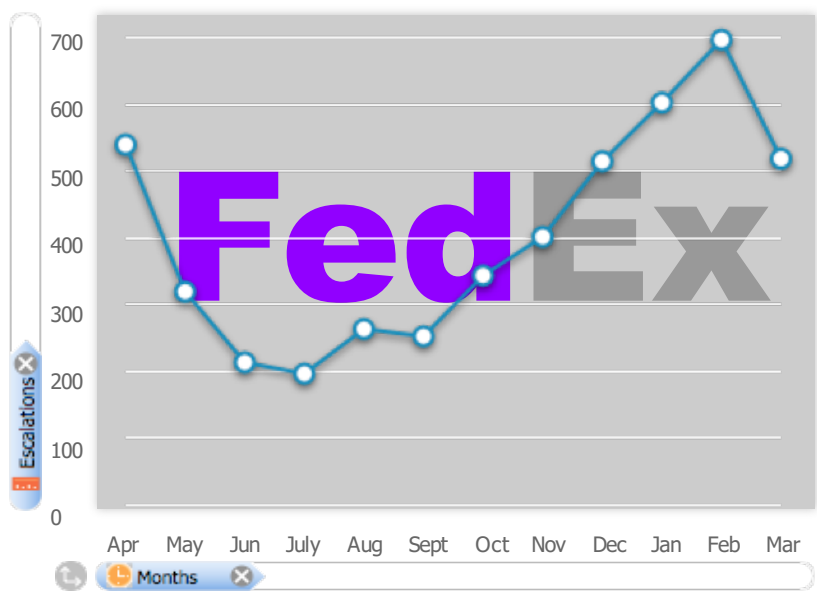
Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations
2 Months



Escalations

She clicks on the graph type menu...

Alternative Charts

Visualization Creator



Navigation icons: back, forward, save, undo, redo, zoom in, zoom out.

Visualizations menu: Line, Bar, Pie, Scatter, etc.

Data Templates: Data, Universe 1

Measures list:

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions list:

- Region
- Division
- Time Dimensions
 - Months

Preview Refresh Data

Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

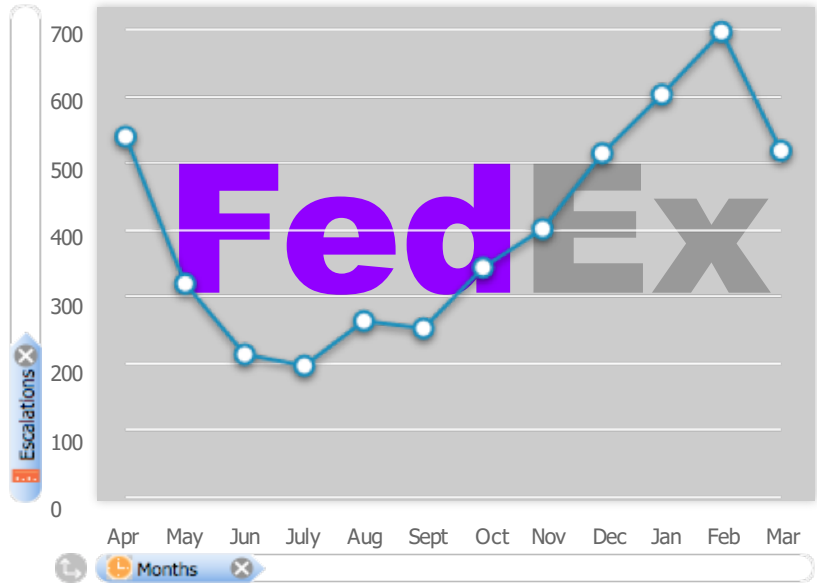
Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations 2 Months



Escalations

...and changes type to Bar and Line.

Alternative Charts



Recommendations

Data Templates Properties

Data



Universe 1

Measures

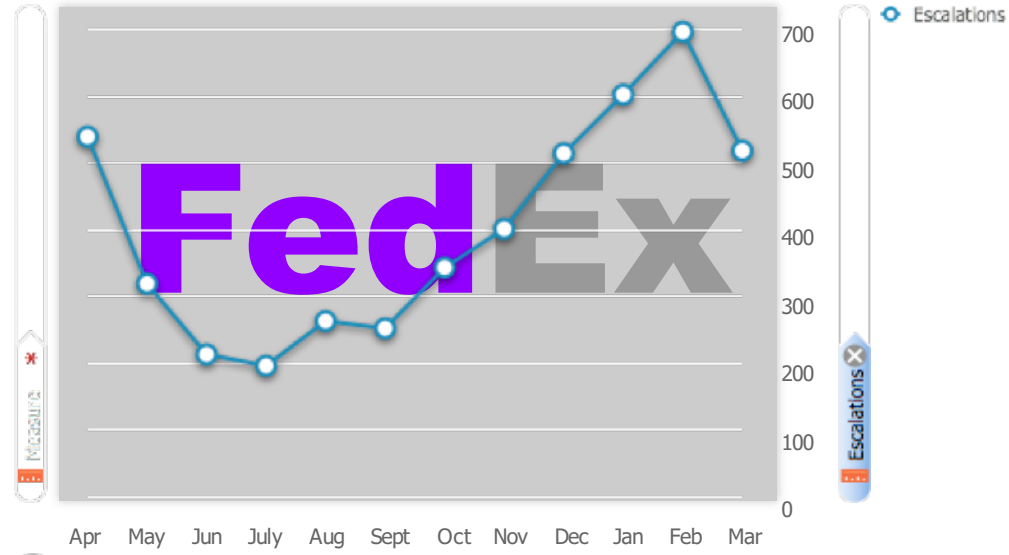
- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
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- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division
- Time Dimensions
 - Months

Escalations

Last 12 Months



Dimension:

Months:

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

The first measure dragged in to a bar and line chart becomes the right axis. A new measure axis guide is seen on the right hand side, encouraging Joanne to place another measure. The next measure added will create the bars.

Alternative Charts

Change Graph Type

With too few required elements

With too many elements

Change Graph Type

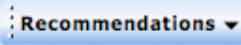
Too Many Elements:

There is only one instance in which changing graph type will require the user to remove an element. this is if the user changes from a Bubble Chart to a Scatter chart.

All other chart types are cross-compatible.

[Removing an element](#)

[Not removing an element](#)



Data Templates Properties

Data



Universe 1

Measures

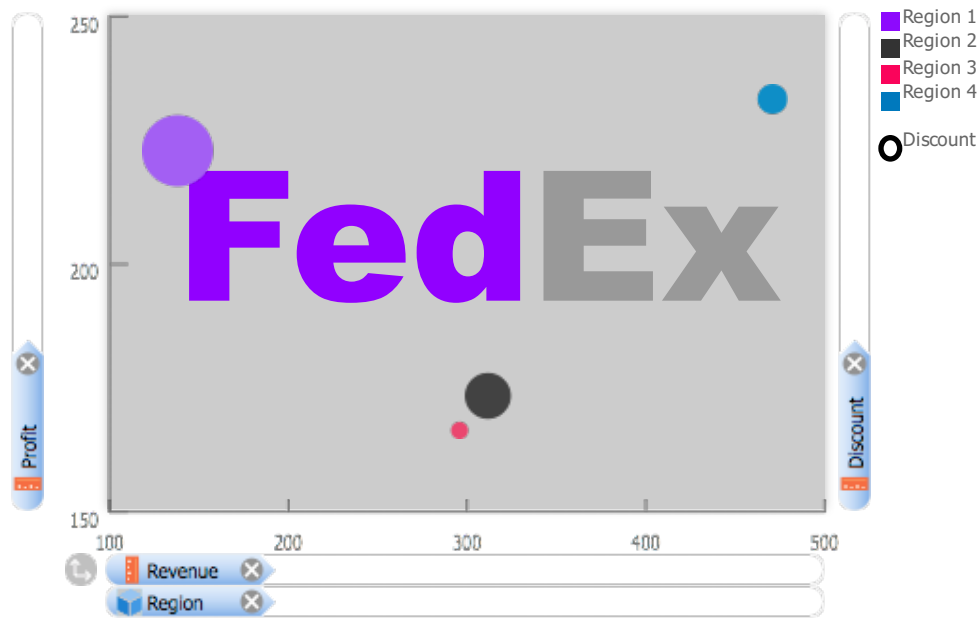
- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
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- Escalations
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- NetSales
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- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
 - Division
- Time Dimensions
- Months

Revenue/Profit by Region

Current Period



Joanna has a Bubble Chart. She wishes to make this a Scatter Chart.

Recommendations

Selected Data
You currently have no data selected.
Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Alternative Charts

Visualization Creator



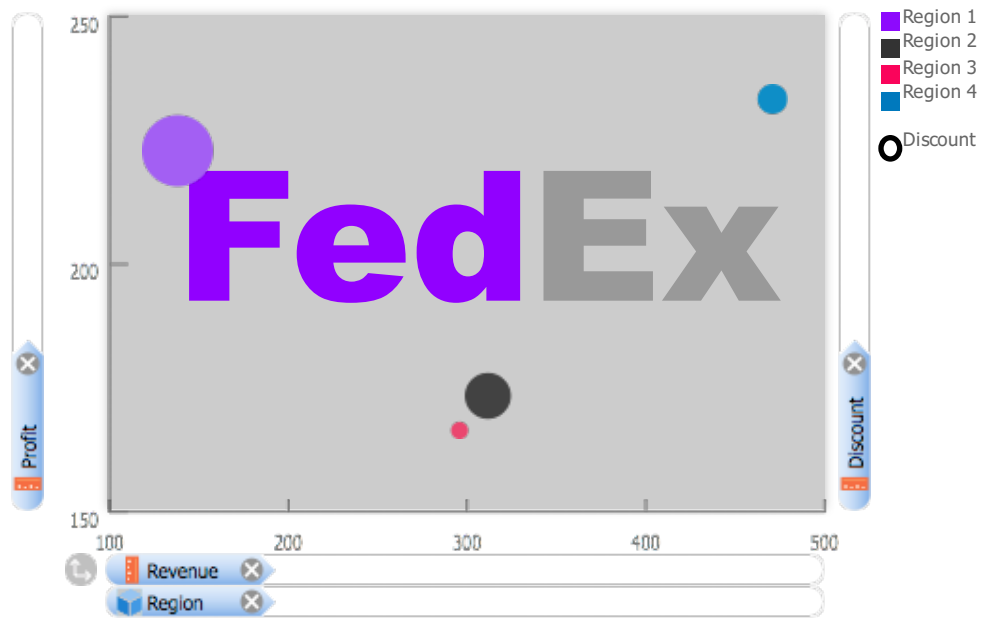
Recommendations

Data Templates

Universe 1

- Measures
- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Revenue/Profit by Region



Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

She clicks on the Graph Type menu...

Alternative Charts

Visualization Creator



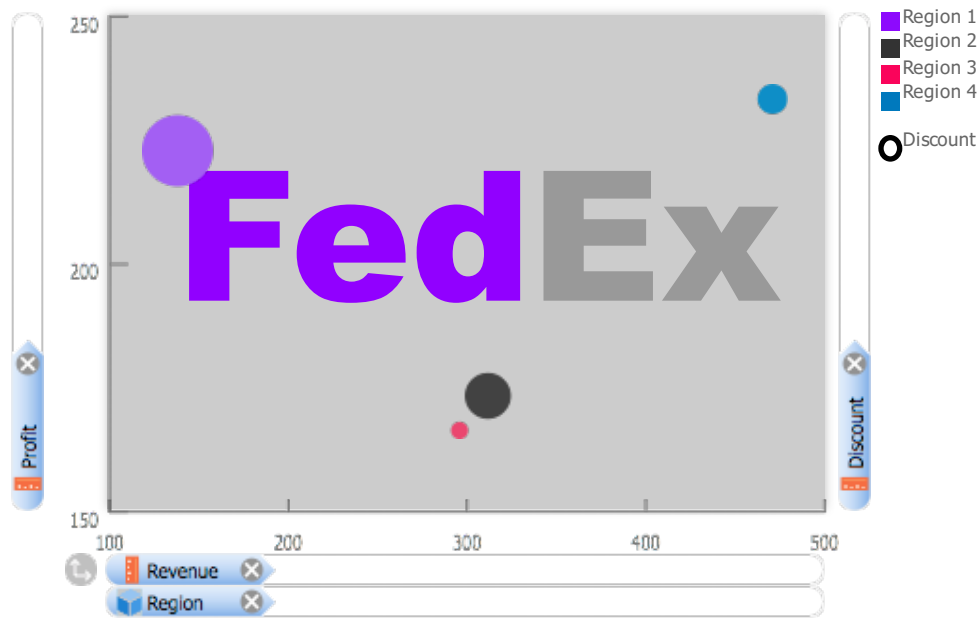
Recommendations

Data Templates

Universe 1

- Measures
- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
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 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
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 - SalesVolume
 - SharePrice
- Dimensions
- Region
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- Time Dimensions
- Months

Revenue/Profit by Region



Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

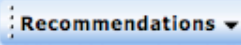
Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

...and changes type to Scatter.

Alternative Charts



Data | Templates | Properties

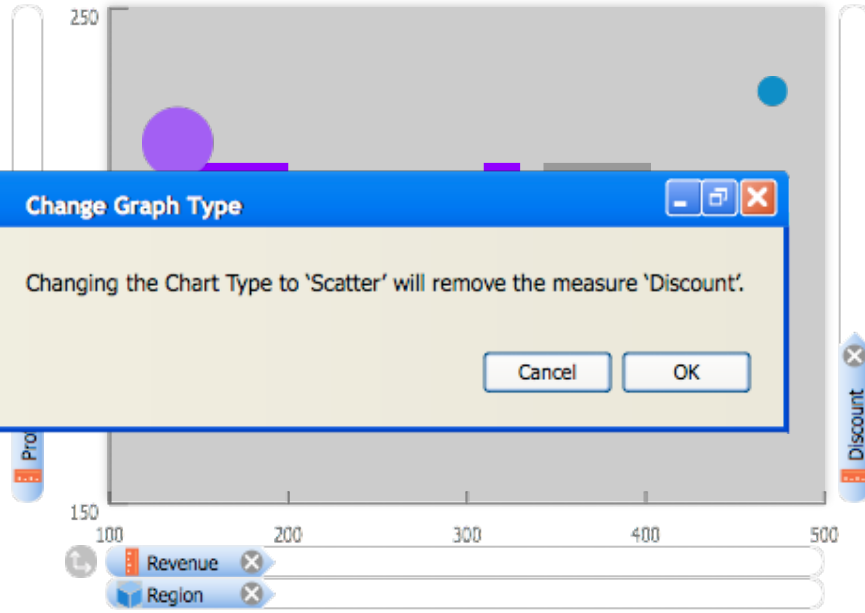
Data

Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
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- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Revenue/Profit by Region

Current Period



Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Alternative Charts

A dialogue box pops up explaining that the last measure added will be removed. Joanne clicks 'OK'.



Recommendations

Data Templates Properties

Data



Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
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 - Revenue
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 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Revenue/Profit by Region

Current Period



Selected Data

You currently have no data selected. [Click here to display the data pane.](#)

Business Analysis

Chart Recommend...

What would you like to do?

- [Create visualization from Report.](#)
- [Create visualization from raw Data.](#)
- [Create visualization from Chart type.](#)

Joanne has a Scatter chart.

Alternative Charts

Change Graph Type

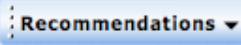
Too Many Elements:

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All other chart types are cross-compatible.

[Removing an element](#)

[Not removing an element](#)



Data | Templates | Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
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- CombinedRatio
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- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

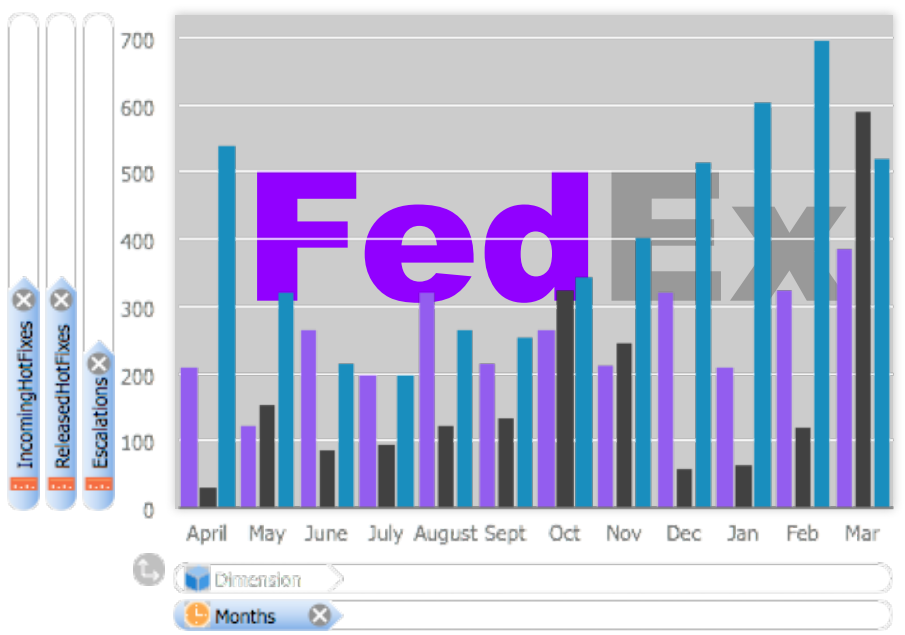
- Region
- Division

Time Dimensions

- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Recommendations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations

Business Analysis

Chart Recommend...

Lines shows Escalations over the prior 12 month period.

Bars show Escalations and IncomingHotFixes compared.

Bars show Escalations and

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

Joanne wants to reorder her bar chart so that Escalations is shown as a line.

Visualization Creator



Data Templates Pr

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division

Time Dimensions

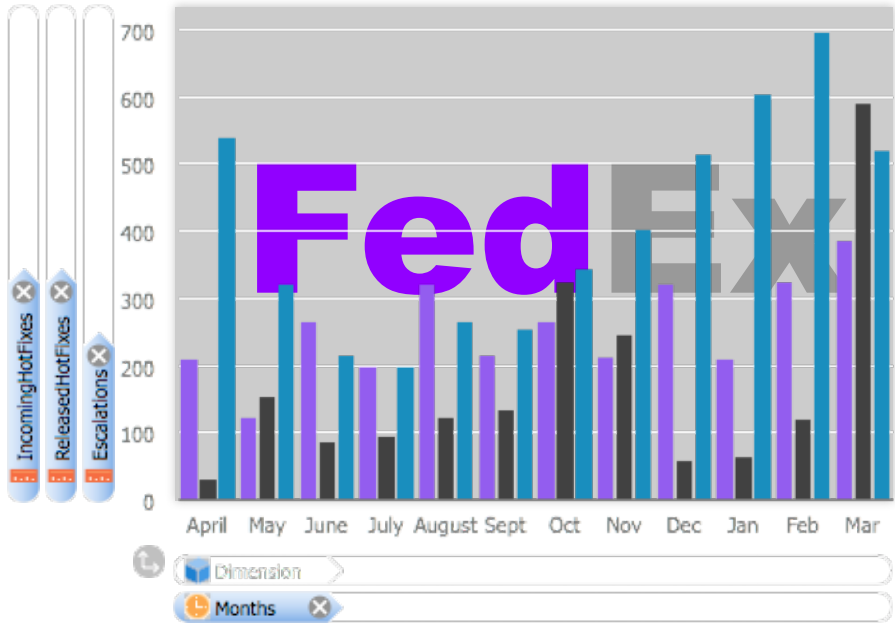
- Months

Preview Refresh Data

Recommendations

Incoming Hot Fixes, Released Hot Fixes, Escalations

months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

- Selected Data
- IncomingHotFixes
 - ReleasedHotFixes
 - Escalations
- Business Analysis
- Chart Recommend...

Lines shows Escalations over the prior 12 month period.

Bars show Escalations and IncomingHotFixes compared.

Bars show Escalations and

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

She goes to the Chart type menu...

Visualization Creator



Data Templates Pr

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
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- SalesVolume
- SharePrice

Dimensions

- Region
- Division

Time Dimensions

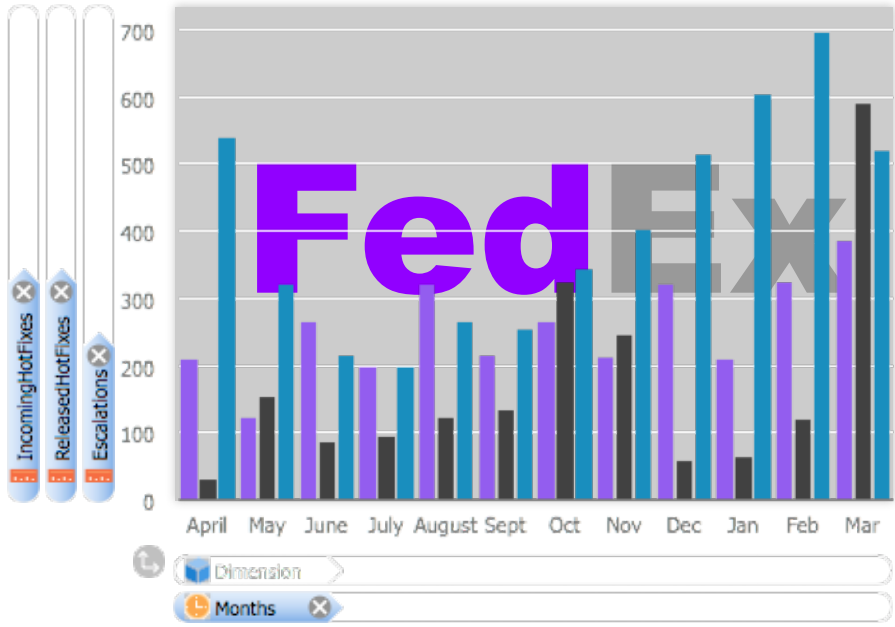
- Months

Preview Refresh Data

Recommendations

Incoming Hot Fixes, Released Hot Fixes, Escalations

months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

- Selected Data
- IncomingHotFixes
 - ReleasedHotFixes
 - Escalations
- Business Analysis
- Chart Recommend...

Lines shows Escalations over the prior 12 month period.

Bars show Escalations and IncomingHotFixes compared.

Bars show Escalations and

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

...and changes chart type to Bar and Line.



Preview Refresh Data

Recommendations

Data Templates Properties

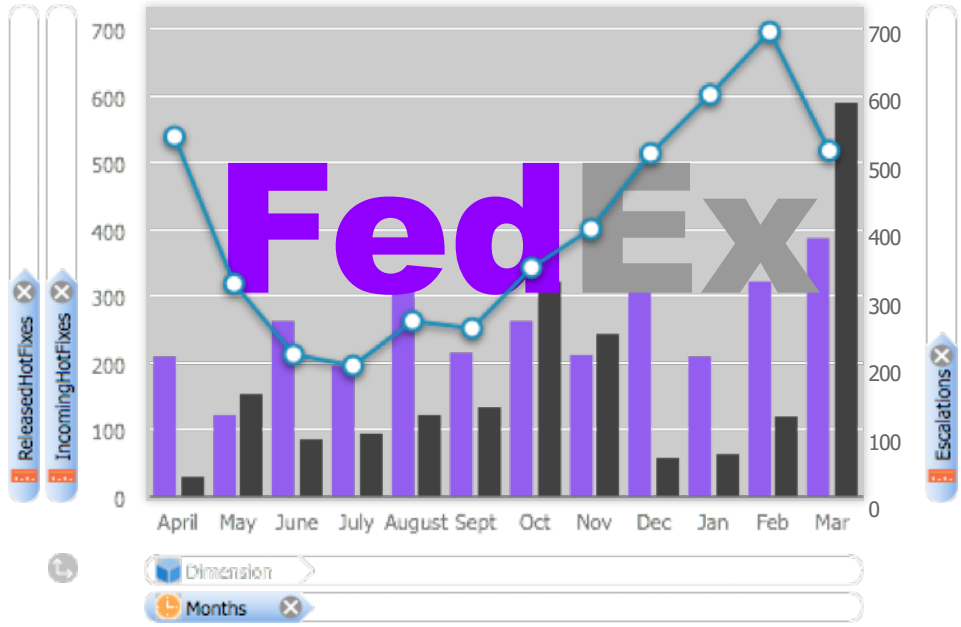
Data

Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
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 - LossRatio
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 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes, Escalations

Last 12 Months

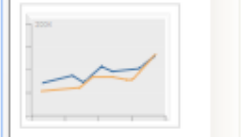


Selected Data

- Escalations
- IncomingHotFixes
- Months
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

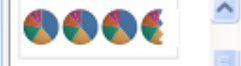


Lines shows Escalations over the prior 12 month period.



Bar layers represent Escalations of

Alternative Charts



Display each month as a pie chart. Each slice represents a...

The chart type changes to Bar and Line, and the measure added first becomes the line.

Restack Dimensions

[When restack does not change graph type](#)

[When restack changes graph type](#)

Scenarios • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

References • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

Slide Controls

- [Back to previous slide](#)
- [Back to Start](#)
- [Exit slideshow](#)



Preview Refresh Data

Recommendations

Data Templates Properties

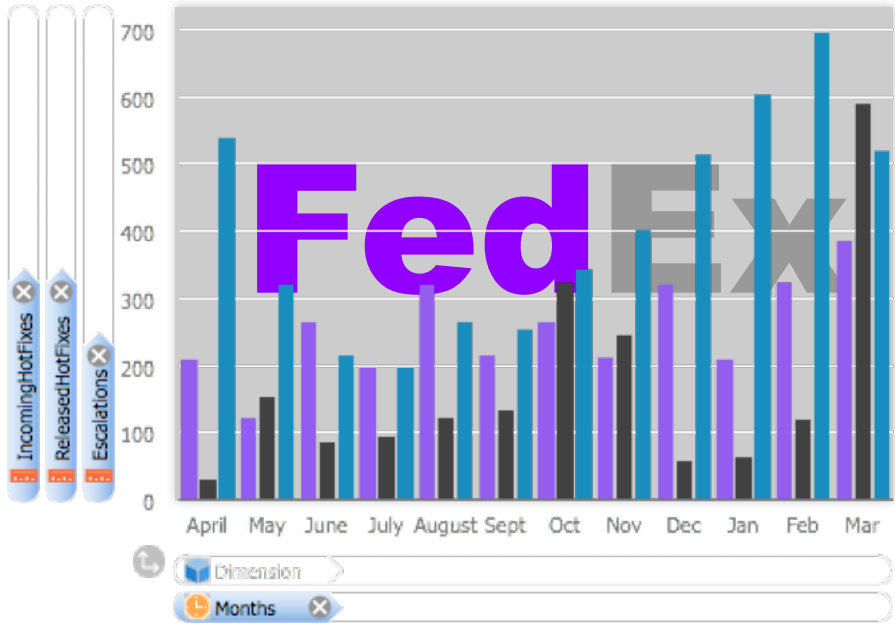
Data

Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
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 - CombinedRatio
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 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

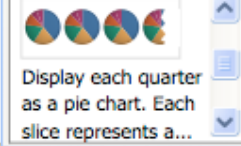


Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...

Joanne wants to reorder her bar chart so that Escalations is the first measure in the series, not the last.



Preview Refresh Data

Recommendations

Data Templates Properties

Data



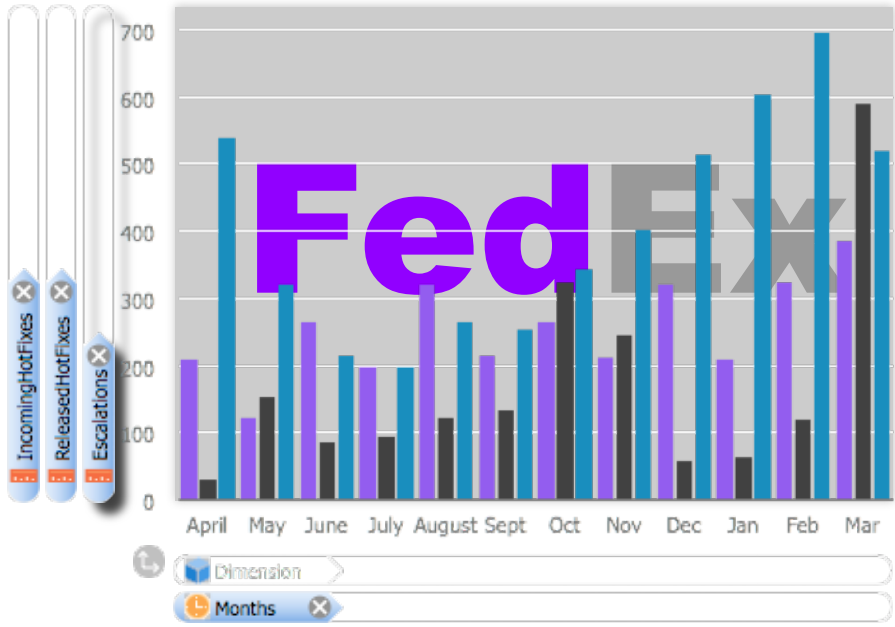
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
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 - Escalations
 - ExpenseRatio
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 - NetSales
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- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

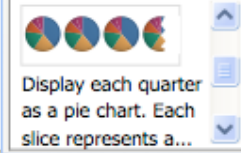


Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and IncomingHotFixes compared.

Alternative Charts



She clicks on the measure 'Escalations' ...



Preview Refresh Data

Recommendations

Data Templates Properties

Data



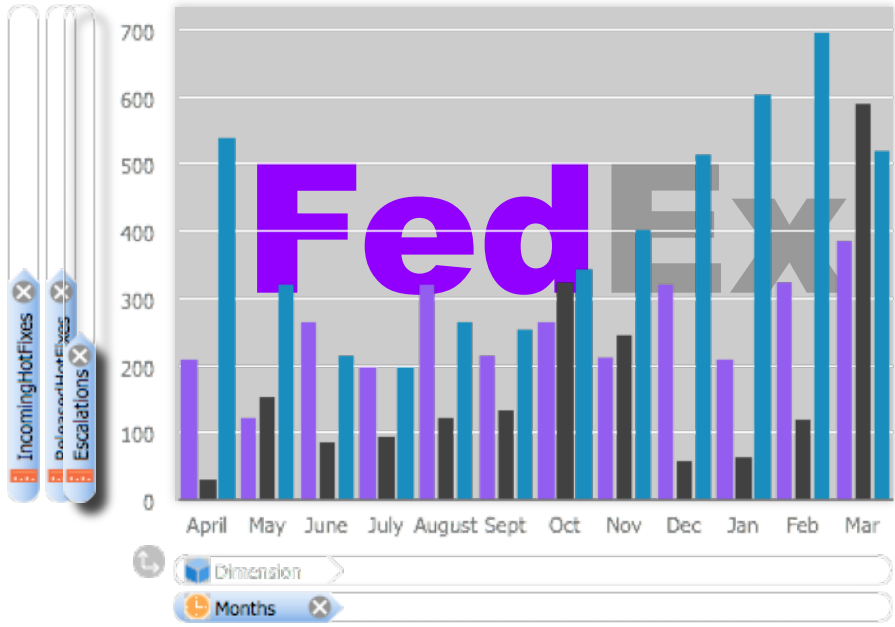
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
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 - ClaimsFrequency
 - ClaimsQualityAudit
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 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



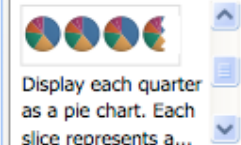
Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and IncomingHotFixes compared.



She now drags the measure to the desired location



Preview Refresh Data

Recommendations

Data Templates Properties

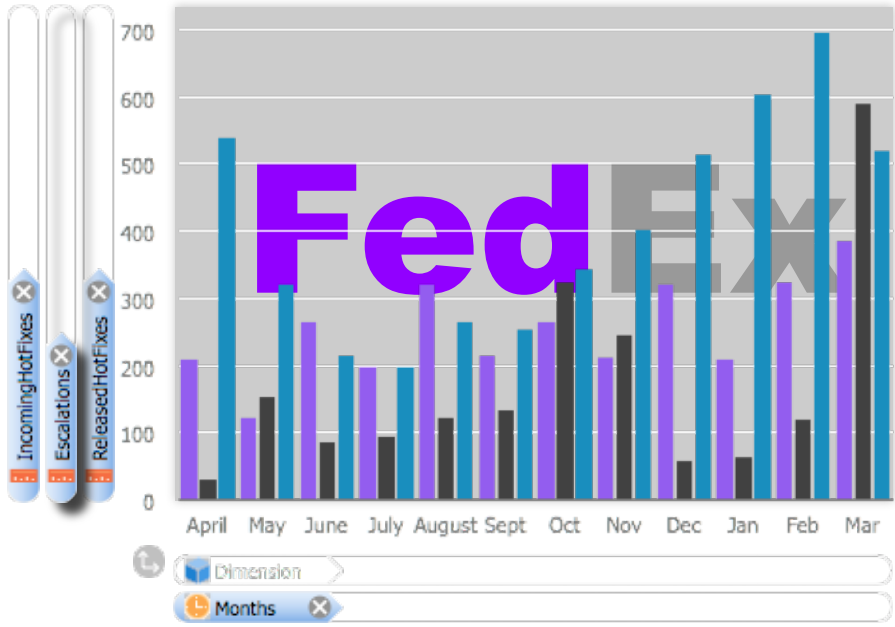
Data

Universe 1

- Measures
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 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...

Lines shows Escalations over the prior 12 month period.

Bars show Escalations and IncomingHotFixes compared.

Bars show Escalations and

Alternative Charts
Display each quarter as a pie chart. Each slice represents a...



Preview Refresh Data

Recommendations

Data Templates Properties

Data

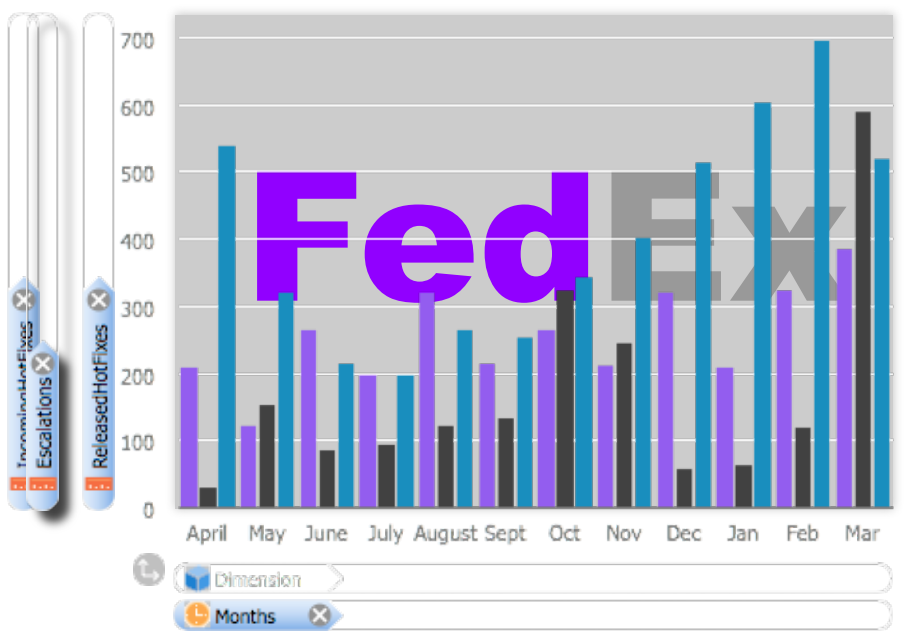


Universe 1

- Measures
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 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
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 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



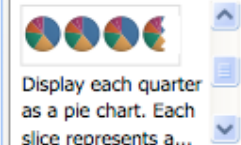
Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.





Preview Refresh Data

Recommendations

Data Templates Properties

Data



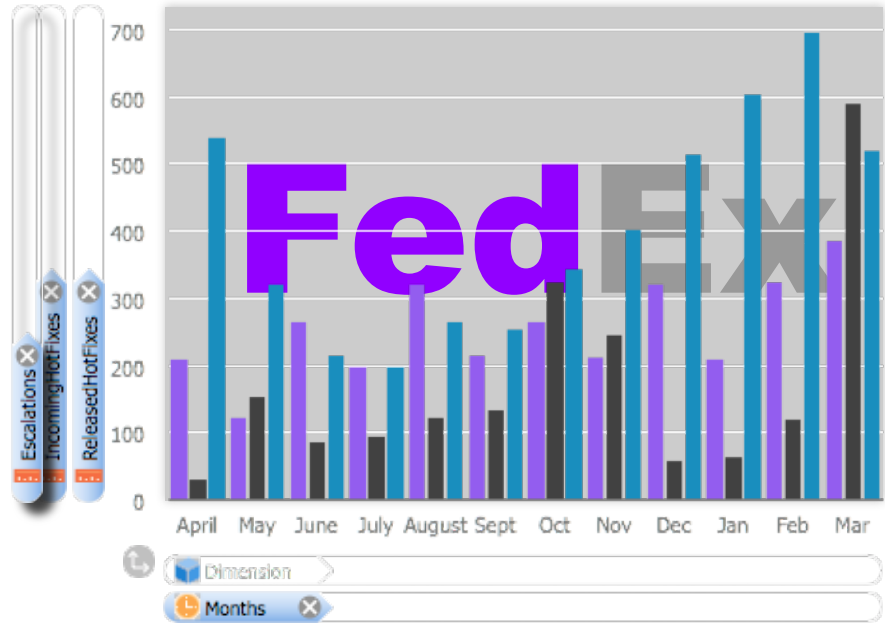
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

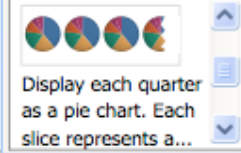


Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.

Alternative Charts





Preview Refresh Data

Recommendations

Data Templates Properties

Data



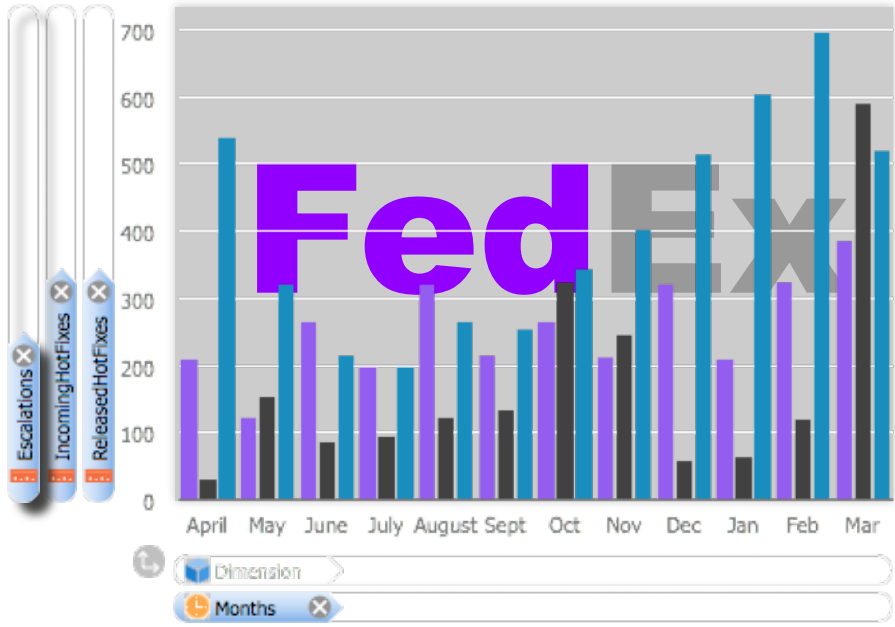
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

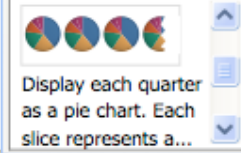


Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and IncomingHotFixes compared.

Alternative Charts





Preview Refresh Data

Recommendations

Data Templates Properties

Data



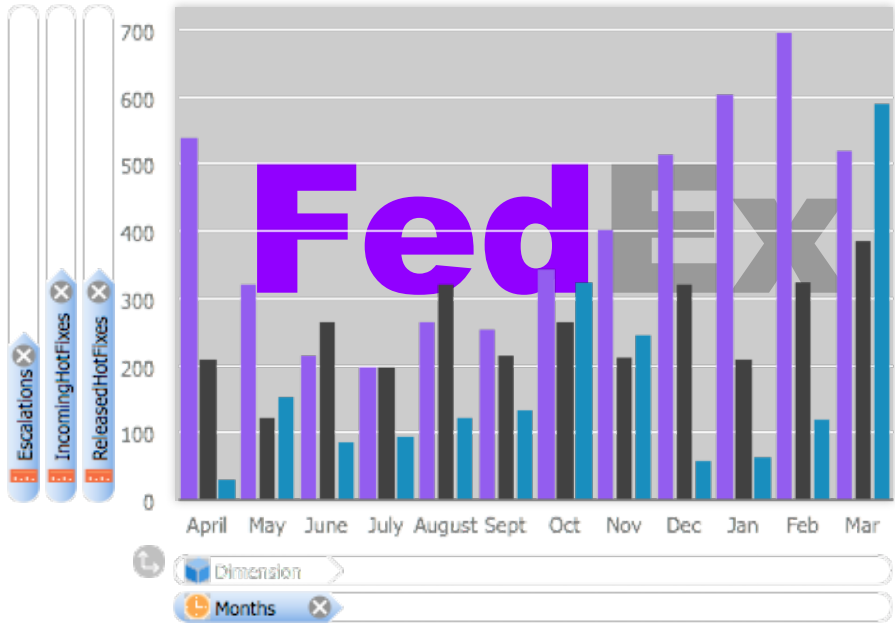
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
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 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Escalations
- Incoming Hot Fixes
- Released Hot Fixes

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

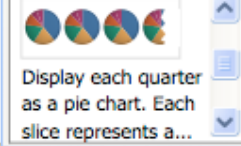


Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...

On dropping the measure in the new location, the chart is reordered.

Restack Dimensions

[When restack does not change graph type](#)

[When restack changes graph type](#)

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

Slide Controls

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- [Exit slideshow](#)



Preview Refresh Data

Recommendations

Data Templates Properties

Data



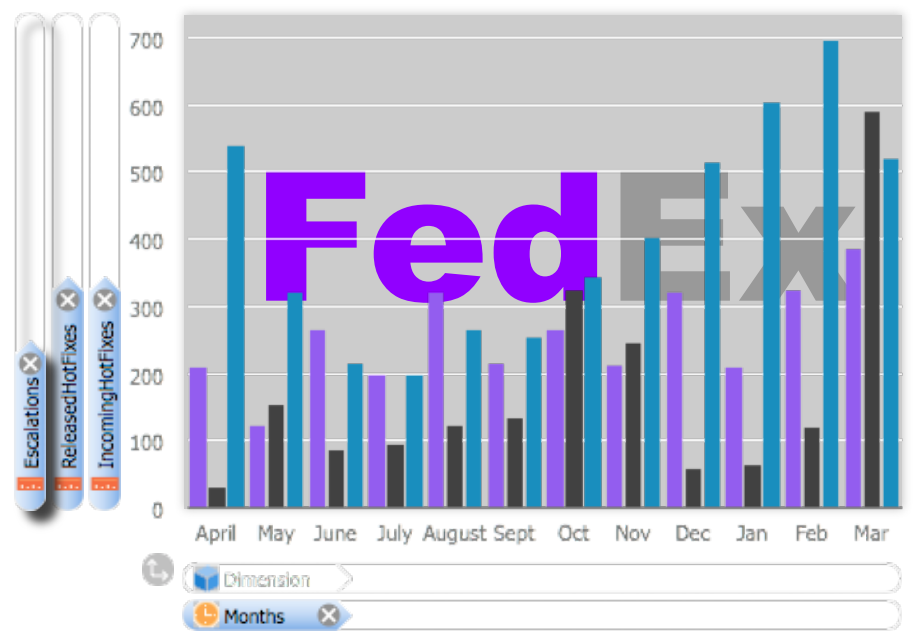
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



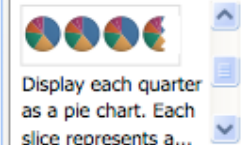
Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and Released Hot Fixes compared.



Joanne clicks on the measure 'Escalations' ...



Preview Refresh Data

Recommendations

Data Templates Properties

Data



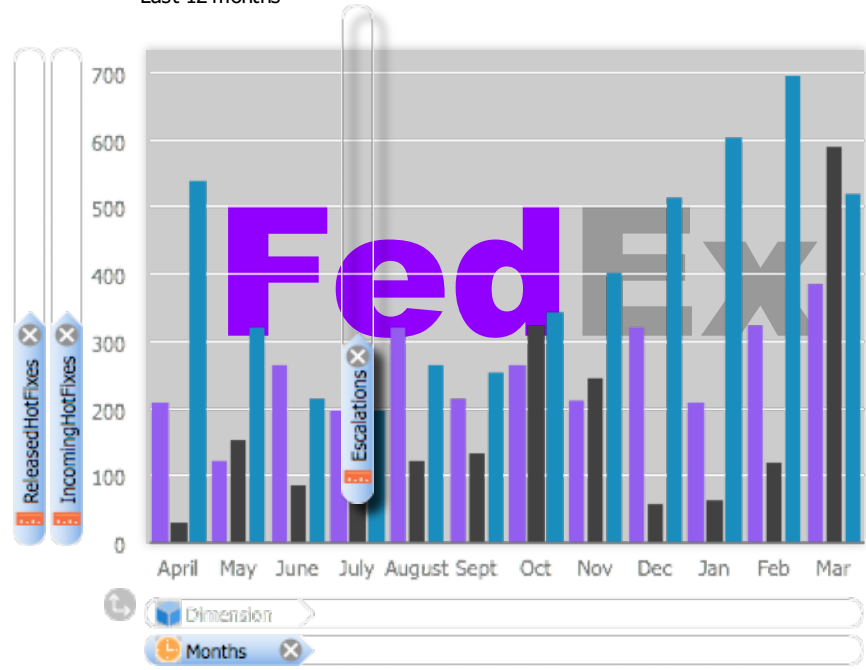
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

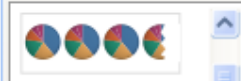


Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...

...and drags it to the far right of the chart area.



Preview Refresh Data

Recommendations

Data Templates Properties

Data

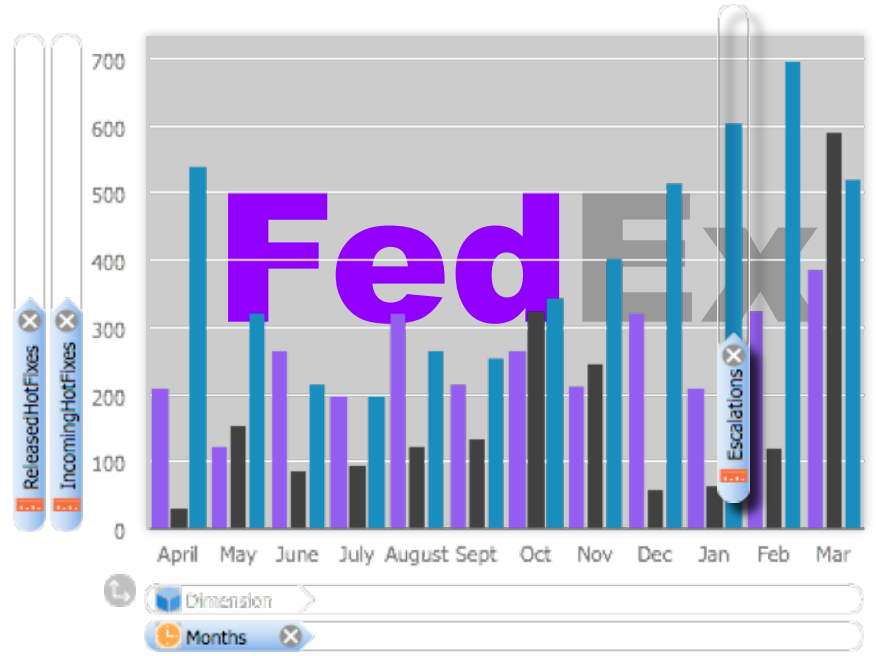


Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



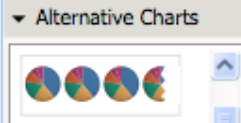
Lines shows Escalations over the prior 12 month period.



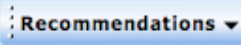
Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and ReleasedHotFixes compared.



Display each quarter as a pie chart. Each slice represents a...



Data Templates Properties

Data



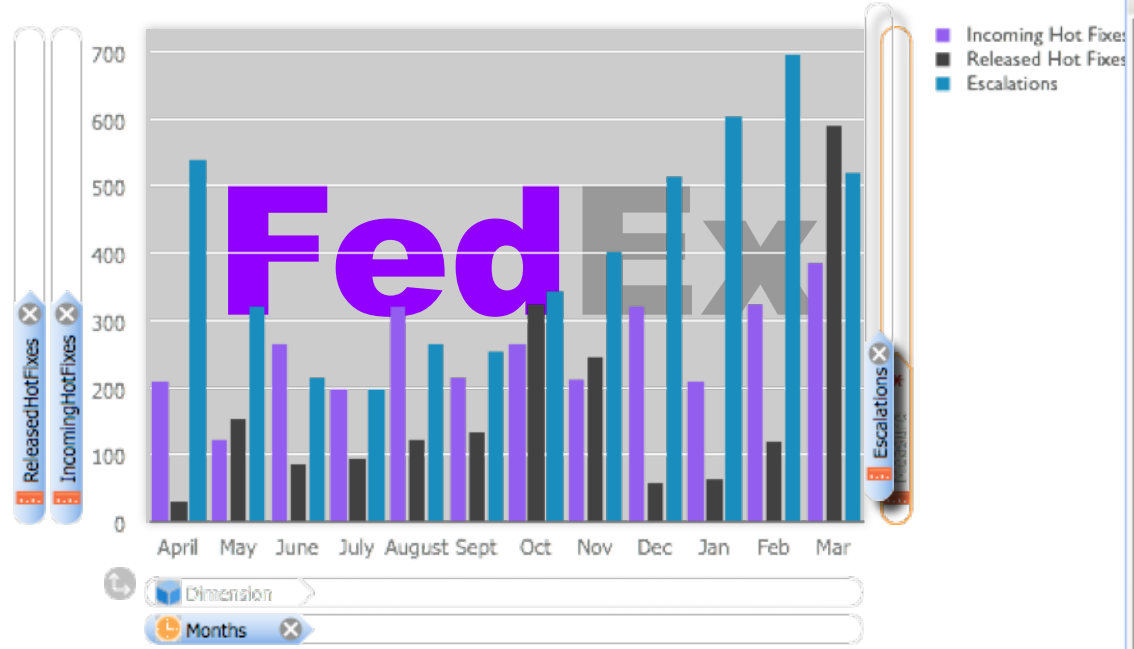
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

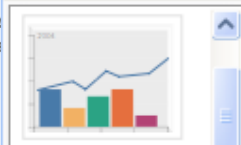
Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and IncomingHotFixes compared.

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...

A new drop zone appears, indicating that she can drop the measure here. If she dragged the measure to a location where no drop zone appears, dropping the measure will result in the measure remaining in it's prior location.



Preview Refresh Data

Recommendations

Data Templates Properties

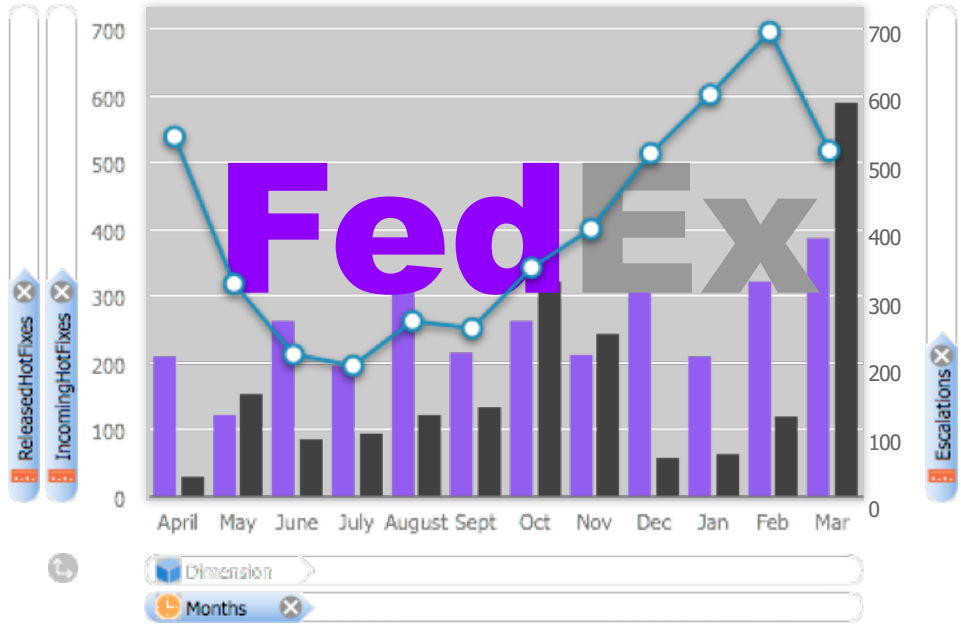
Data



Universe 1

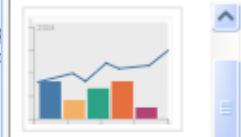
- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations Last 12 Months



Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...

On dropping the measure, the chart becomes a Bar and Line.

Reference

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

Slide Controls

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Axis guides

Axis guides are used to imply the orientation and placement of data elements. There are three types of data element:



Within certain layout types, some data elements are ‘required’, others are optional. Required elements are indicated by a red asterisk:



Axis guides 2

When a user drags a data element to a drop zone, the active drop zone is highlighted:



When a data element is placed within an axis guide, the measure name is shown and the axis guide is seen as 'filled'. Any 'required' asterisk is removed, and replaced by a 'close' button.



Refresh Data button

In the instance that live data can not be rendered within Visualization Creator, the user will see obvious sample data.

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

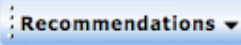
- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

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Data Templates Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

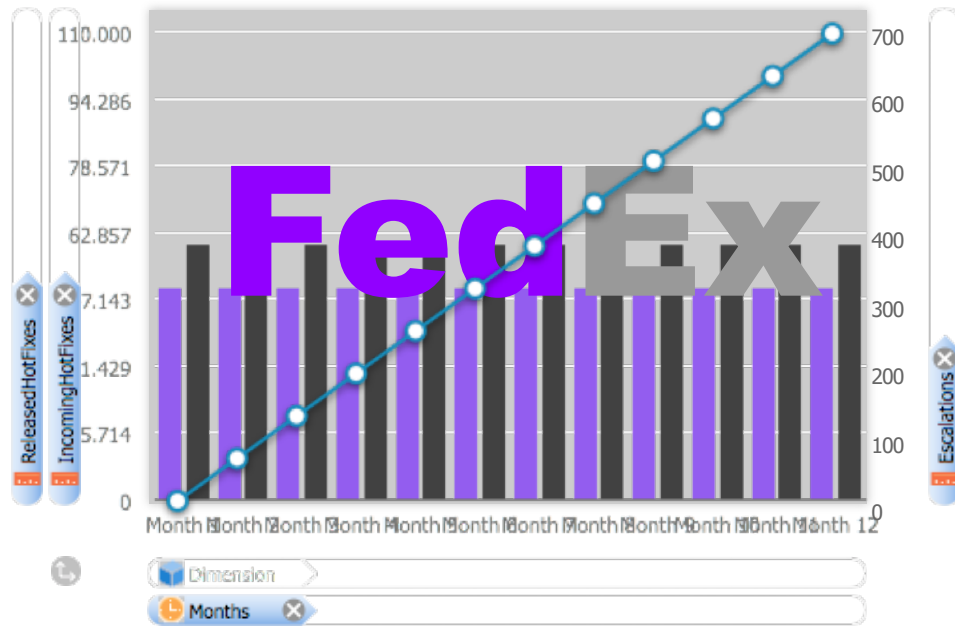
- Region
- Division

Time Dimensions

- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 Months



Recommendations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations

Business Analysis

Chart Recommend...

Lines shows Escalations over the prior 12 month period.

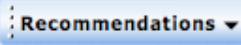
Bars show Escalations and IncomingHotFixes compared.

Bars show Escalations and

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

Clicking on 'Refresh Data' will load the real data.



Data | Templates | Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

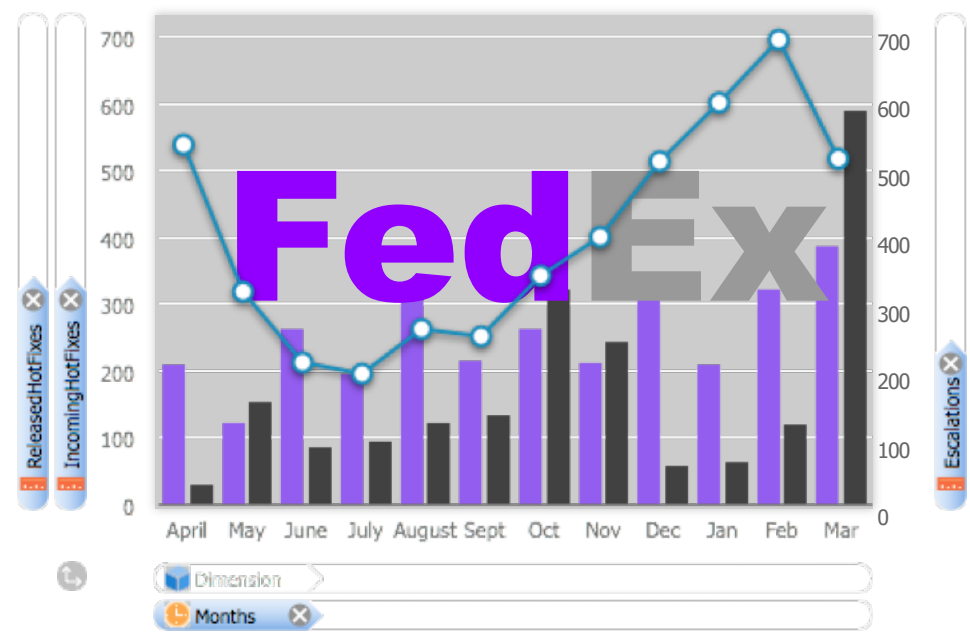
- Region
- Division

Time Dimensions

- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 Months



Recommendations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations

Business Analysis

Chart Recommend...

Lines shows Escalations over the prior 12 month period.

Bars show Escalations and IncomingHotFixes compared.

Bars show Escalations and

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

Recommendations panel

The recommendations panel is designed to assist the user in making the most appropriate choice of chart for the data they are displaying.

It offers appropriate alternative chart types, ranked by order of appropriateness.

It could also house Michael Thompson's 'Smart Viz' component (not shown).

Scenarios • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

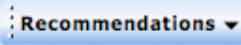
- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

References • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

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Data | Templates | Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

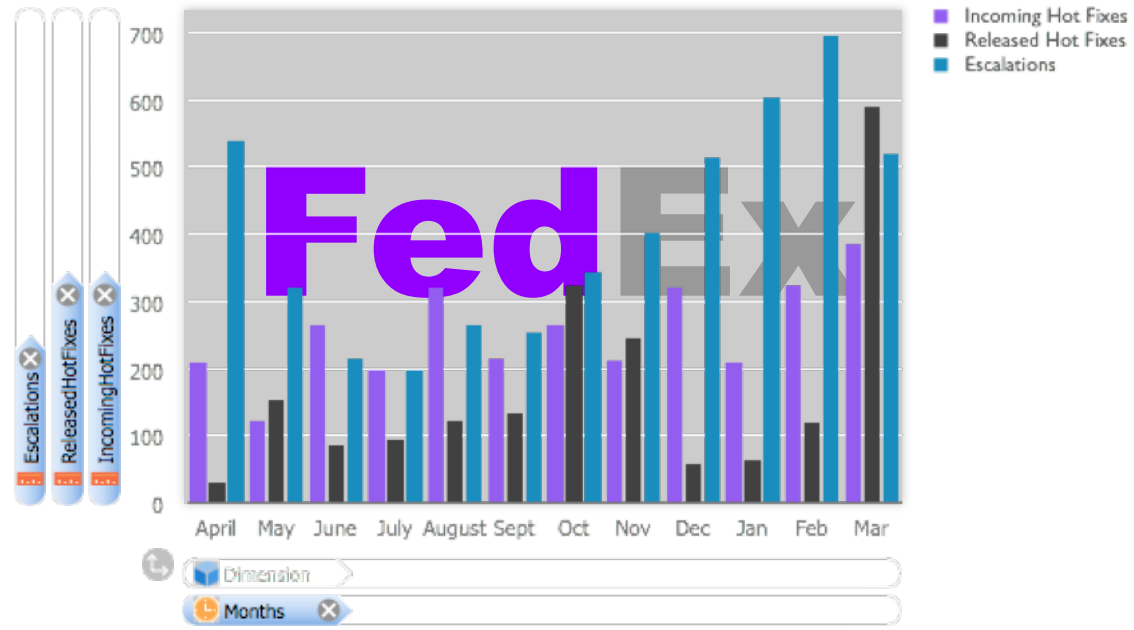
- Region
- Division

Time Dimensions

- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations

Business Analysis

Chart Recommend...

Lines shows Escalations over the prior 12 month period.

Bars show Escalations and IncomingHotFixes compared.

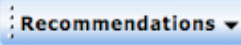
Bars show Escalations and

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

Joanne has built a series bar chart, but wants to represent Escalations differently from both HotFix measures.

The Recommendations Panel ranks a Bar and Line chart as the best choice for the given data.



Data | Templates | Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

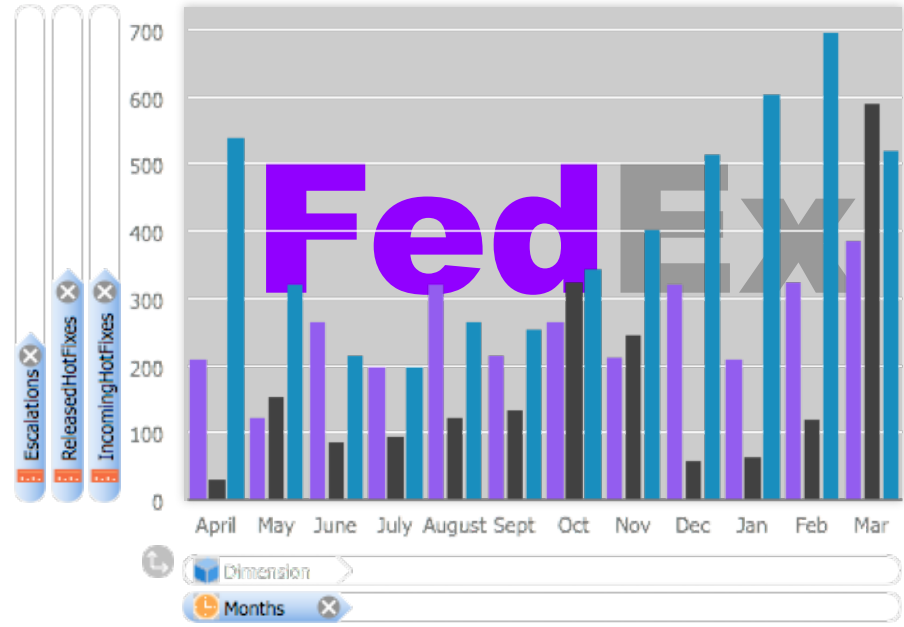
- Region
- Division

Time Dimensions

- Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 months



- Incoming Hot Fixes
- Released Hot Fixes
- Escalations

Recommendations

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations

Business Analysis

Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.

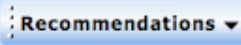


Bars show Escalations and

Alternative Charts

Display each quarter as a pie chart. Each slice represents a...

Joanne clicks on the Bar and Line chart...



Data Templates Properties

Data



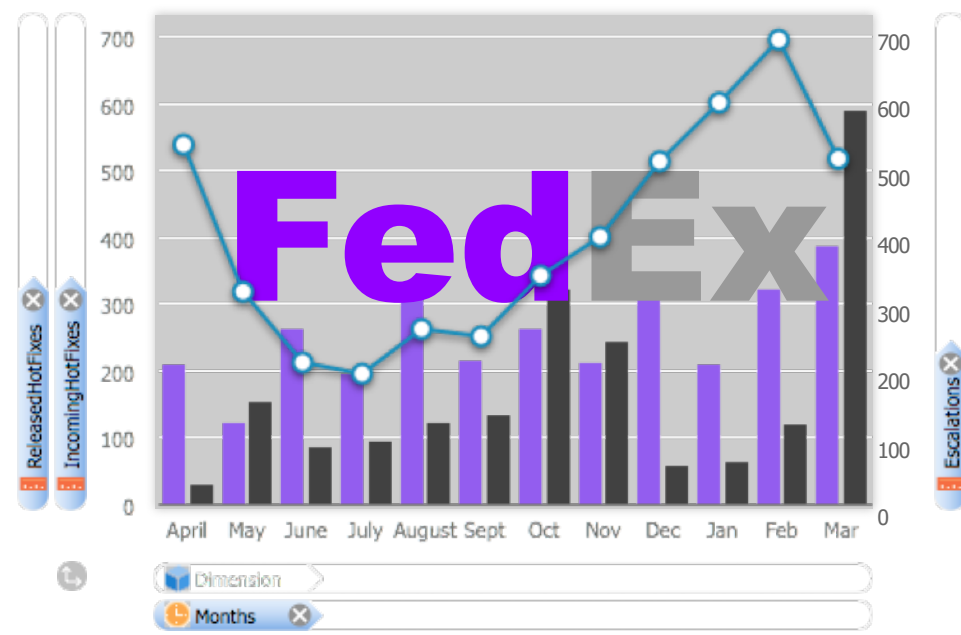
Universe 1

Measures

- AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
- Region
 - Division
- Time Dimensions
- Months

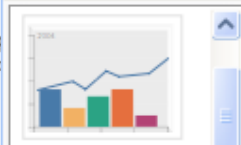
Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 Months



Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.

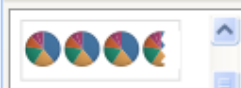


Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...

...and the Bar and Line chart is applied to the existing data.

Theme Editor

Themes are a concept which allows the user to manage every aspect of the visual appearance of a chart.

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

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Visualization Creator



Data Templates Properties



Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

- Default BO theme
- Finance theme
- HR theme
- Edit Themes...

Preview Refresh Data

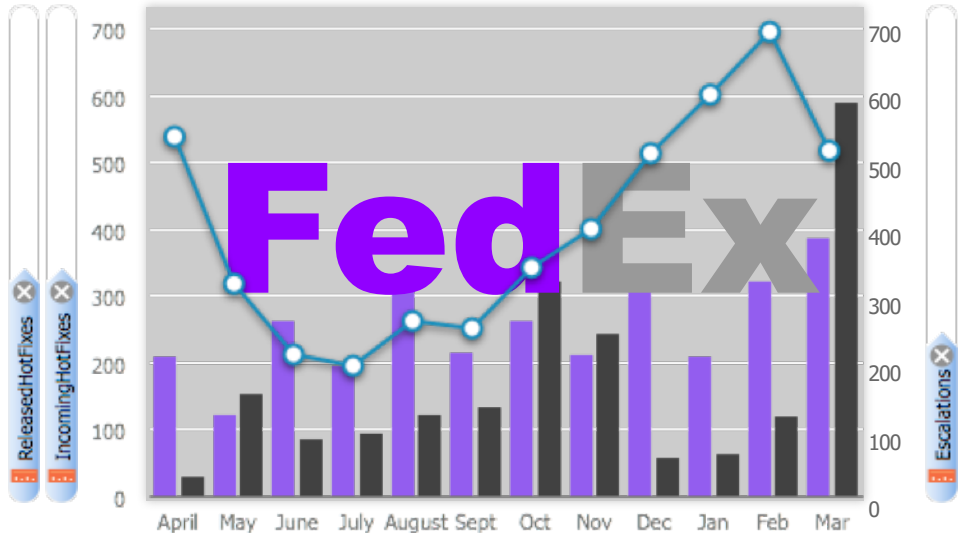
Recommendations

- Selected Data
 - You currently have no data selected.
 - Click here to display the data pane.
- Business Analysis
- Chart Recommend...

- What would you like to do?
- Create visualization from Report.
 - Create visualization from raw Data.
 - Create visualization from Chart type.

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 Months



Dimension Months

The theme menu contains previously defined themes, and provides the ability to edit themes.

There could be personal themes and corporate themes. Personal themes are those only this user sees and can edit, corporate themes are those that every user sees and only some are permitted to edit.

Jack clicks on 'Edit Themes'.

Alternative Charts

Visualization Creator

Theme Editor

Default Theme

Delete

New...

Foreground

Background

Properties

Skin

Aqua

Color Palette



Type

Font: Tahoma

Size: Medium

Preview



Cancel

Save

Close

view Refresh Data Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations

- Incoming Hot Fixes
- Released Hot Fixes

The Theme editing window opens. Three tabs contain all editing features.

The Preview area below allows the user to see how each type of chart will appear.

Foreground tab contains Skin, Color Palette and Font.

He clicks the 'New' button...

Visualization Creator

Theme Editor

Data Templates Properties

Data

Universe 1

Measures

- AgencyPerformance
- BusinessDevelopment
- BusinessMix
- CatastrophicLosses
- ClaimsFrequency
- ClaimsQualityAudit
- ClaimsSeverity
- CombinedRatio
- CostOfGoodsSold
- Escalations
- ExpenseRatio
- DiscountAmount
- IncomingHotFixes
- LossRatio
- ManagedSpendingM...
- NetSales
- NumDaysLostToAcc...
- NumEmployees
- NumOfficeStaff
- Profit
- ReleasedHotFixes
- Revenue
- SalesVolume
- SharePrice

Dimensions

- Region
- Division

Time Dimensions

- Months

Default Theme

Delete New...

Foreground Background Properties

Skin

Aqua

Color Palette

Type

Font: Tahoma Size: Medium

New Theme...

Name: FedEx Corporate

Based On: Default Theme

Cancel OK

Preview

Legend 1 Legend 2 Legend 3 Legend 4 Legend 5 Legend 6

Cancel Save Close

view Refresh Data

Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations

- Incoming Hot Fixes
- Released Hot Fixes

Escalations

Jack names the theme 'FedEx Corporate' and clicks 'Save'.

Alternative Charts

Visualization Creator

Theme Editor

FedEx Corporate

Delete

New...

Foreground

Background

Properties

Skin

Aqua

Color Palette

Automatic

Black	Red	Green	Blue	Grey
Orange	Yellow	Cyan	Purple	Light Grey
Pink	Light Blue	Light Green	Light Purple	White

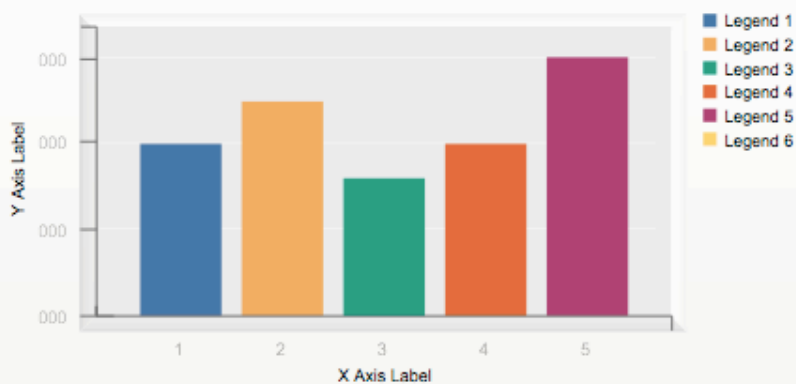
More Colors...

Size: Medium

Preview

Chart Title

Subtitle



Cancel

Save

Close

Refresh Data

Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations

- Incoming Hot Fixes
- Released Hot Fixes

Alternative Charts

Clicking on each color in the series allows Jack to change that color via a color picker.

Visualization Creator

Theme Editor

FedEx Corporate

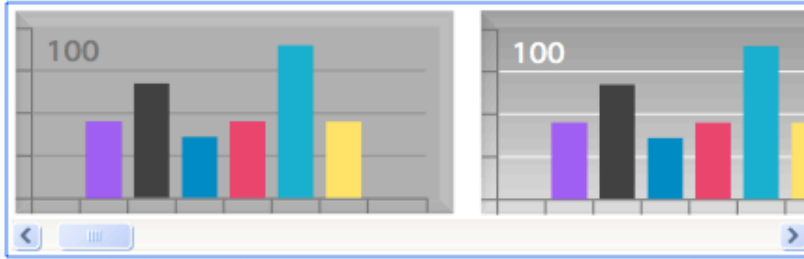
Delete

New...

Foreground

Background

Layout

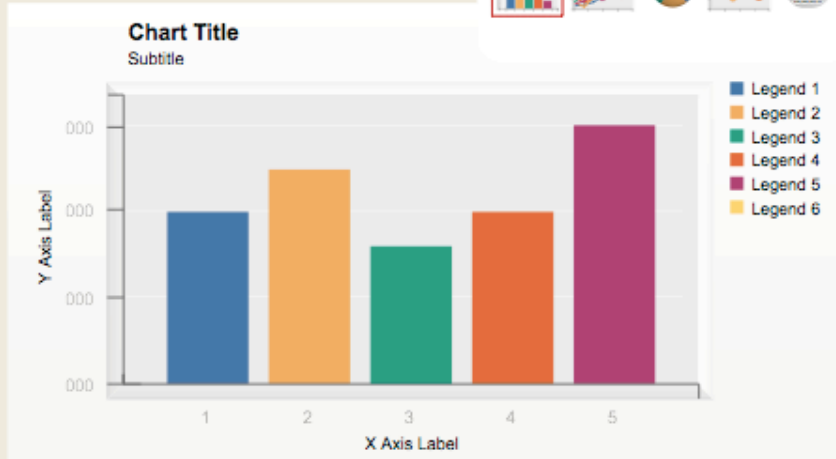


Background Image/Watermark

Display image FedEx_logo_corp.png Browse...

Transparency 0 100 50 %

Preview



Cancel

Save

Close

In the background tab, Jack can select from a series of 'mini themes'. Each is designed to optimize legibility between the background, axis lines, and line and text values.

Jack can also specify to include a background image or watermark, by selecting an image file to include.

He places the FedEx logo as a background image.

view Refresh Data Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations

- Incoming Hot Fixes
- Released Hot Fixes

Visualization Creator

Theme Editor

FedEx Corporate

Delete

New...

Foreground

Background

Layout



Display

Title

Axis Labels

Legend

Sub-title

Axis-Sub Labels

Tooltip

Measure Name

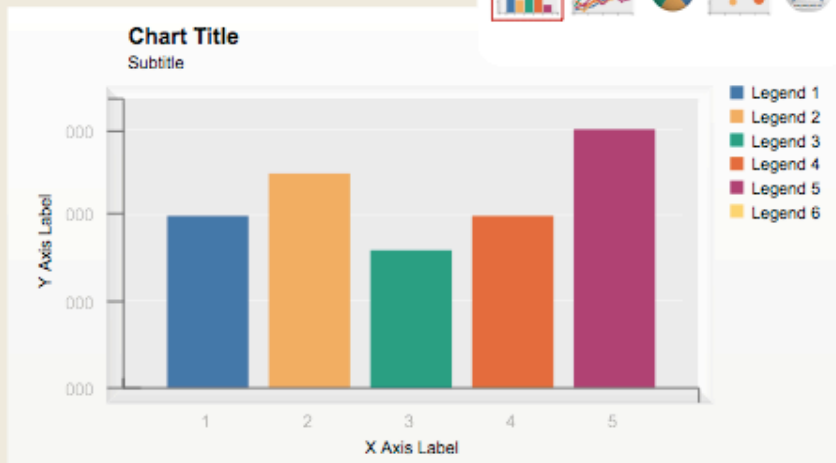
Value

Owner

Date Created

Date Updated

Preview



Cancel

Save

Close

view Refresh Data Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations

- Incoming Hot Fixes
- Released Hot Fixes

Alternative Charts

In the Layout tab, Jack can specify Title position, Legend position, Default display elements and content of a tooltip to be displayed on rollover of a bar, line or other chart element.

Visualization Creator

Theme Editor

FedEx Corporate

Delete

New...

Foreground

Background

Layout

Title

Legend

Display



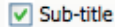
Title



Axis Labels



Legend



Sub-title



Axis-Sub Labels

Tooltip



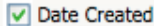
Measure Name



Value



Owner

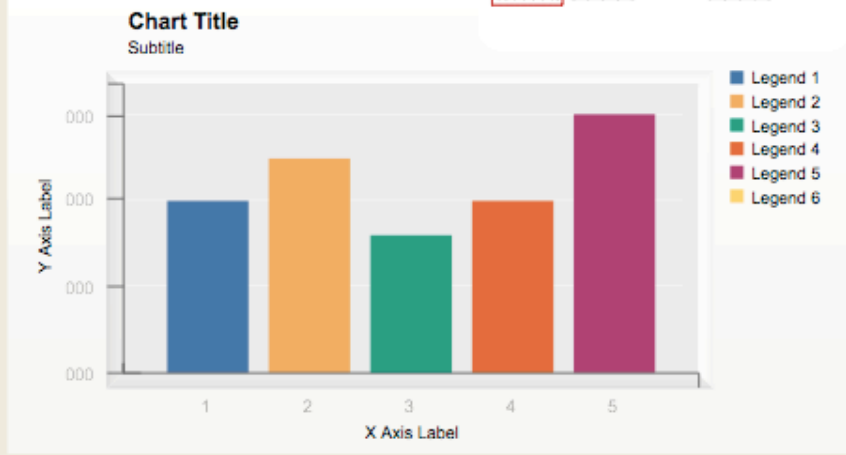


Date Created



Date Updated

Preview



Cancel

Save

Close

view Refresh Data Recommendations

Selected Data

You currently have no data selected.

- Click here to display the data pane.

Business Analysis

Chart Recommend...

What would you like to do?

- Create visualization from Report.
- Create visualization from raw Data.
- Create visualization from Chart type.

Escalations

- Incoming Hot Fixes
- Released Hot Fixes

Alternative Charts

Using the same process, he can builds themes for FedEx Ground, FedEx Express, FedEx Freight, FedEx Home Delivery and FedEx Kinkos.

Selection Model

On click, individual data points can be selected.

Individual bars on a bar chart

Individual data points on a line on a line chart

Individual slices of a pie chart

This enables highlighting in the properties panel. The user can then highlight a specific piece of data.

Demonstrated in file: VizCreationScenarios2.ppt (slide 30)

Scenarios • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

References • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

Slide Controls

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Preview mode vs. Edit mode

In Edit mode, all edit capability is available.

Under the selection model, when in Edit mode, clicking on a bar will select it (see Selection Model).

In Preview mode, all edit capability is removed, and the selection model is changed. Clicking on a bar will drill down.

Scenarios • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

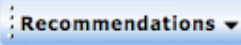
- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

References • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
- [Selection Model](#)
- [Preview mode](#)
- [2 Axis Layouts](#)

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Data Templates Properties

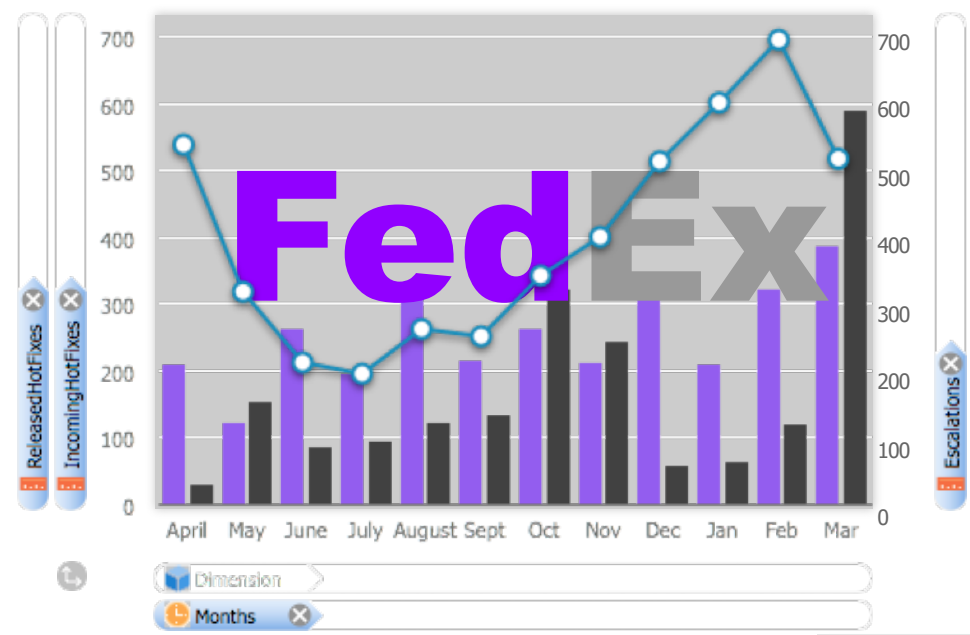
Data



Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
 - ExpenseRatio
 - DiscountAmount
 - IncomingHotFixes
 - LossRatio
 - ManagedSpendingM...
 - NetSales
 - NumDaysLostToAcc...
 - NumEmployees
 - NumOfficeStaff
 - Profit
 - ReleasedHotFixes
 - Revenue
 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
- Time Dimensions
 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations Last 12 Months



Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and

Alternative Charts

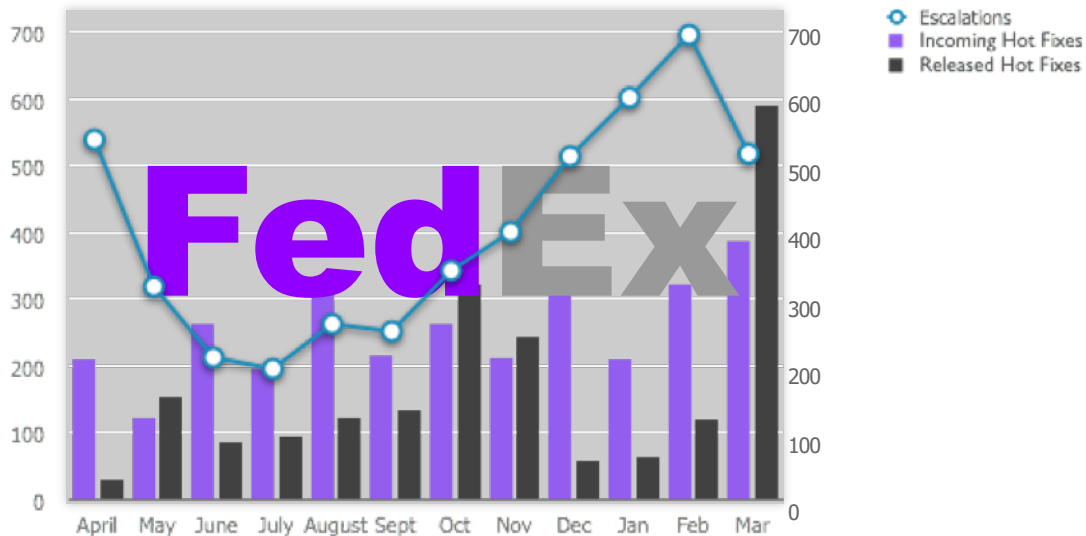


Display each quarter as a pie chart. Each slice represents a...

In Edit mode, all edit capability is available.

Under the selection model, when in Edit mode, clicking on a bar will select it (see Selection Model).

Incoming Hot Fixes, Released Hot Fixes, Escalations Last 12 Months



Preview pops open a window displaying the interactive chart.

In Preview mode, all edit capability is removed, and the selection model is changed. Clicking on a bar will drill down.

Option for 2-axis layouts

An instance was identified where our proposed method of handling a Bar and Line chart was insufficient. We had placed bars on one axis, line on another. However, this affects the users ability to create multi-axis charts.

Here we propose a method whereby, in a multi-type chart such as bar and line, the user can specify the chart type of each data element.

This provides the ability to switch which element defines lines and which defines bars along a single axis.

[Scenarios](#) • [Scenario 1](#)

- [Scenario 2](#)
- [Scenario 3](#)

Other Functions

- [Changing Chart Type](#)
- [Re-stacking Dimensions](#)

[References](#) • [Axis Guides](#)

- [Refresh Data button](#)
- [Recommendations Panel](#)
- [Theme Editor](#)
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Preview Refresh Data

Recommendations

Data Templates Properties

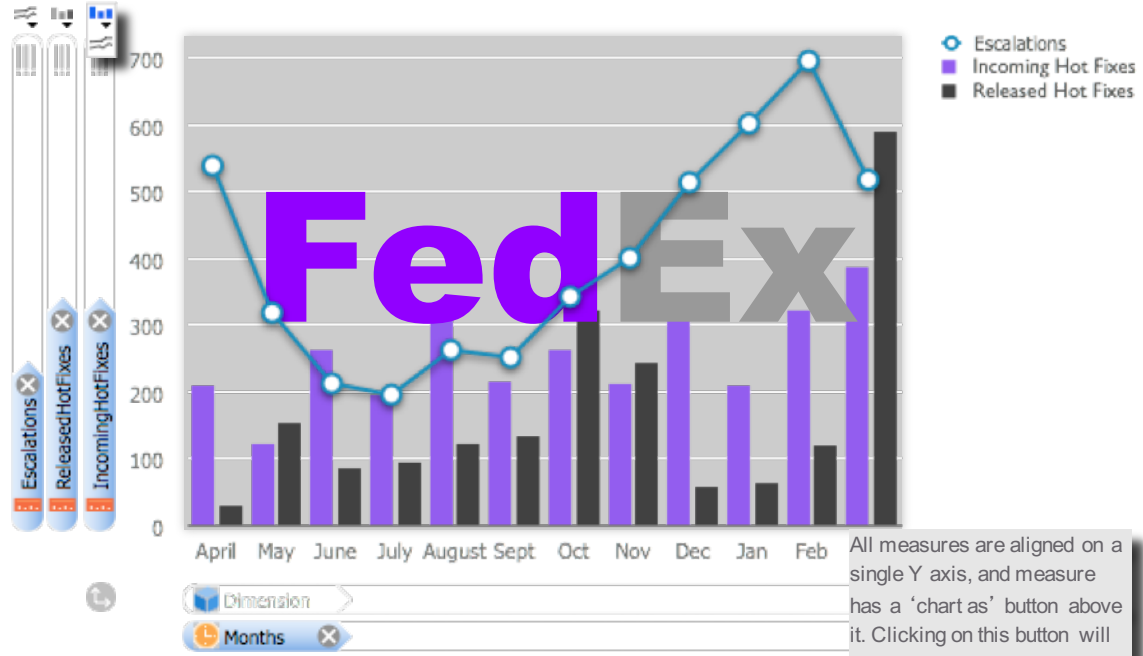
Data

Universe 1

- Measures
 - AgencyPerformance
 - BusinessDevelopment
 - BusinessMix
 - CatastrophicLosses
 - ClaimsFrequency
 - ClaimsQualityAudit
 - ClaimsSeverity
 - CombinedRatio
 - CostOfGoodsSold
 - Escalations
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 - ManagedSpendingM...
 - NetSales
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 - SalesVolume
 - SharePrice
- Dimensions
 - Region
 - Division
 - Time Dimensions
 - Months

Incoming Hot Fixes, Released Hot Fixes, Escalations

Last 12 Months



All measures are aligned on a single Y axis, and measure has a 'chart as' button above it. Clicking on this button will display options contained within the multi-type chart.

In this instance, the only options available are Bar or Line. The user should not be provided capability to display as anything other than one of the options defined by the multi-type chart.

Selected Data

- IncomingHotFixes
- ReleasedHotFixes
- Escalations
- Business Analysis
- Chart Recommend...



Lines shows Escalations over the prior 12 month period.



Bars show Escalations and IncomingHotFixes compared.



Bars show Escalations and

Alternative Charts



Display each quarter as a pie chart. Each slice represents a...