Data Grid Specifications

Change Log

Purpose:
The purpose of this document is to provide Vaadin with details on the GE Digital requirements for estimating purposes. Please note the engagement will be run in Agile fashion with iterative approach to design and development.

Use Case:
As a user, I want to analyze or edit my data in a tabular format in a data-grid, so that I can easily scroll through my data results, sort, filter, hide or include data to understand the data and/or edit the data.

Description:
A data-grid displays data in a tabular format. The data-grid allows the user to scan, analyze, compare, filter, sort, and manipulate information to derive insights and commit actions. Data-Grids structure data in rows and columns, and are particularly useful when you've got lots of information to display. They make it easier for the user to read numeric or text and find specific information.

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1.1.1.1 Row Selection - Single, Default

	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
○	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
○	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
○	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
○	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
○	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
○	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
○	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
○	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
○	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
○	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Highlight a row of data via a single click in the row or and affordance such as a checkbox or radio button located in the row. Needs to support single row selection as well as multi-row selection. Assume to include all functionality here: https://cdn.vaadin.com/vaadin-grid/3.0.2/demo/selection.html

Note:
We already have the special column for multiple row-selection, add the `single-select` boolean property to it.

1.1.1.2   Row Selection - Single, Selected

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
○ 2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
● 2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
○ 2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
○ 2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
○ 2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
○ 2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
○ 2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
○ 2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
○ 2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
○ 2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

fill: $select-default
font: $white

1.1.2   Row Selection - Multiple
1.1.2.1 Row Selection - Multiple- Light

☐ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

— $gray5

Highlight a row of data via a single click in the row or and affordance such as a checkbox or radio button located in the row. Needs to support single row selection as well as multi-row selection. Assume to include all functionality here: https://cdn.vaadin.com/vaadin-grid/3.0.2/demo/selection.html

Note:
We already have the special column for multiple row-selection, add the `single-select` boolean property to it.

1.1.2.2   Row Selection - Multiple - Dark

▬ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Actions ⌄

$gray13

1.1.3   Row Selection - Plain Zebra Striping
1.1.3.1 Row Selection - Plain Zebra Striping - Light

☐ (3)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	$gray3
☐	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
☐	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

1.1.3.2 Row Selection - Plain Zebra Striping - Dark

☐ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☐	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☐	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Actions ⌄

— $gray15

1.1.4   Row Selection - With Zebra Striping
1.1.4.1   Row Selection - With Zebra Striping - Light

☒ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	— $gray3
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	— $gray5
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

1.1.4.2   Row Selection - With Zebra Striping - Dark

		Actions ∨			
■ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

$gray13

$gray15

1.2   INFINITE SCROLLING/LAZY LOADING

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

px-spinner, 100%
Add: 2px stroke inside & outside

When the user scrolls to end of list, the component grabs the next x set of results. UI displays px-spinner as bottom row of table while the next batch of results loads. Amount of rows to load should be a variable configurable by the app developer.

Note:
Implemented, `iron-list` is under the hood

1.3   RETAIN SELECTION ON GETTING FOCUS

Existing functionality in the Vaadin data table

1.4   COLUMN FREEZING
1.4.1   Column Freezing, Step 1 - Hover

$select-hover

⋮ LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Ability to pin a column to allow for horizontal scrolling for tables with many columns. Right click on the column header, contextual menu is displayed with the option to pin or unpin the column. Pinned columns stay their current order in the list. Users can pin as many columns as they would like.

https://cdn.vaadin.com/vaadin-grid/3.0.2/demo/columns.html#freezing-columns

1.4.2   Column Freezing, Step 2 - Menu Selection

$select-pressed

5	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
	Freeze Column	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
	Hide Column				
	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.4.3   Column Freezing, Step 3 - Frozen Column

$select-default $gray4

LAST OCCURANCE ↓	T PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	nit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	nit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	nit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	nit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	nit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	nit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	nit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	nit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	nit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	nit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.4.4   Column Freezing, Column moves to the left - Step 1
1. User clicks the header of the "Units" column and selects "Freeze Column"

☐ (0)	LAST OCCURANCE ↓	ASSET PATH	POINT	⋮ UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	Freeze Column	...rame-compressionratio
☐	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	Hide Column — psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☐	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.4.5   Column Freezing, Column moves to the left - Step 2

The frozen column jumps to the left. Note how the column with check boxes is always frozen and remains in place in column 1.

☐ (0)	UNITS	OCCURANCE ↓	ASSET PATH	POINT	METER
☐	psi	-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-compressionratio
☐	psi	-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-dischargepressure
☐	m/s	-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-suctionpressure
☐	m/s	-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-velocity
☐	psi	-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-compressionratio
☐	psi	-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-dischargepressure
☐	psi	-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-suctionpressure
☐	psi	-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-velocity
☐	m/s	-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-compressionratio
☐	m/s	-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-dischargepressure

1.4.6   Column Freezing, Column moves to the left - Step 3

Once any column is frozen, a new option appears that allows the user to "Unfreeze all columns".

	(0)	UNITS	CCURANCE ↓	ASSET PATH	POINT	METER
	☐	psi	02-17, 19:33:51	.../Unit1/HRSG/	Freeze Column	-frame-compressionratio
	☐	psi	02-18, 19:33:51	.../Unit1/HRSG/	Hide Column	-frame-dischargepressure
	☐	m/s	02-19, 19:33:51	.../Unit1/HRSG/	Unfreeze All	crank-frame-suctionpressure
	☐	m/s	02-20, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-velocity
	☐	psi	02-21, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-compressionratio
	☐	psi	02-22, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-dischargepressure
	☐	psi	02-23, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-suctionpressure
	☐	psi	02-24, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-velocity
	☐	m/s	02-25, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-compressionratio
	☐	m/s	02-26, 19:33:51	.../Unit1/HRSG/	39VS11	crank-frame-dischargepressure

1.5   AUTO RESIZING ROW

Existing functionality in the Vaadin data table

1.6   DIFFERENT ROW SIZING (ROWS OF VARYING HEIGHT)

LAST OCCURANCE	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG	39VS11	psi	crank-frame-dischargepressure-lorem-ipsum dolor sit ahmet dolor sit ahmet lorem
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/ 1236/4562/2221 .../Unit1/H	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG	39VS11	m/s	crank-frame-dischargepressure

Row height is determined by the height of its cell contents.

Existing functionality in the Vaadin data table

align text to the top of the row

1.7　AUTO WRAP TEXT

LAST OCCURANCE	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG	39VS11	psi	crank-frame-dischargepressure-lorem-ipsum dolor sit ahmet dolor sit ahmet lorem
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG	39VS11	m/s	crank-frame-dischargepressure

Auto wrap text strings to fit column width.

Auto wrap text strings to fit column width.

NOTE: There should be the ability in the back-end to allow the application to customize a column to override this ability to not allow the text to auto wrap.

Existing functionality in the Vaadin data table

1.8   CUSTOM GROUPING BY ROW OR COLUMN
1.8.1   Custom grouping by row or column, Step 1

				Actions ∨

LAST OCCURANCE	ASSET PATH	POINT	UNITS	⋮ METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	onratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	pressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	ssure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Dropdown menu:
- Freeze Column
- Show Column
- Hide Column
- Group By Column

https://cdn.vaadin.com/vaadin-grid/3.0.2/demo/columns.html#column-grouping

Existing functionality in the Vaadin data table

1.8.2   Custom grouping by row or column, Step 2

Actions ∨

LAST OCCURANCE	ASSET PATH	POINT	UNITS	METER
› crank-frame-compressionratio				
› crank-frame-dischargepressure				
› crank-frame-suctionpressure				
› crank-frame-velocity				

$gray4

1.8.3   Custom grouping by row or column, Step 3

Actions ⌄

LAST OCCURANCE	ASSET PATH	POINT	UNITS
⌄ crank-frame-compressionratio			
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
> crank-frame-dischargepressure			
> crank-frame-suctionpressure			
> crank-frame-velocity			

1.8.4   Custom grouping by row or column, Step 4

	Actions ∨	
	Clear Grouping	

LAST OCCURANCE	ASSET PATH	POINT	UNITS
∨ crank-frame-compressionratio			
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s
> crank-frame-dischargepressure			
> crank-frame-suctionpressure			
> crank-frame-velocity			

1.8.5 Custom grouping by row or column, Step 5

Actions ⌄

LAST OCCURANCE	ASSET PATH	POINT	UNITS	⋮ METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.9　AUTO RESIZING COLUMN

1.10 COLUMN HIDING
1.10.1   Column hiding, Step 1 - Default

https://cdn.vaadin.com/vaadin-grid/3.0.2/demo/columns.html#hiding-columns

LAST OCCURANCE	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.10.2   Column hiding, Step 2 - Menu Selection

<div style="text-align:right">

Actions ∨

</div>

LAST OCCURANCE	ASSET PATH	⫶POINT	UNITS	METER
		Hide Column		
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.10.3   Column hiding, Step 3 - Hidden Column

Actions ⌄

LAST OCCURANCE ↓	ASSET PATH	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-dischargepressure

1.10.4   Column hiding, Step 4 - Open Menu

Actions ∨

LAST OCCURANCE ↓	ASSET PATH	UNITS	METER	
2014-02-17, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio	✓ Last Occurance
2014-02-18, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure	✓ Asset Path
2014-02-19, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-suctionpressure	Point
2014-02-20, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-velocity	✓ Units
2014-02-21, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio	✓ Meter
2014-02-22, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure	
2014-02-23, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-suctionpressure	
2014-02-24, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-velocity	
2014-02-25, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-compressionratio	
2014-02-26, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-dischargepressure	

1.10.5   Column hiding, Step 5 - Column Shows

LAST OCCURANCE	ASSET PATH	⋮ POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Actions ∨

✓ Last Occurance
✓ Asset Path
✓ Point
✓ Units
✓ Meter

1.11 DRAG & DROP COLUMN REORDERING
1.11.1   Drag & drop column reordering, Step 1 Hover

$select-hover

LAST OCCURANCE ↓	ASSET PATH	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-dischargepressure

Click and hold on column header, drag to reorder columns.
https://cdn.vaadin.com/vaadin-grid/3.0.2/demo/columns.html#reordering-and-resizing-columns

1.11.2   Drag & drop column reordering, Step 2 - Drag a few pixels

LAST OCCURANCE ↓	ASSET PATH	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-dischargepressure

35 px height

Fill: $white
Opacity: 65%
Outline: 1px, $select-pressed
Header: $select-pressed

Shadow: <div class="demo shadow-modal">Level 12: Modal State</div>

1.11.3   Drag & drop column reordering
1.11.3.1 Drag & drop column reordering, Step 3 - Drag - Light

LAST OCCURANCE ↓	UNITS	ASSET PATH	METER
2014-02-17, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-18, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-dischargepressure
2014-02-19, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-suctionpressure
2014-02-20, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-velocity
2014-02-21, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-22, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-dischargepressure
2014-02-23, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-suctionpressure
2014-02-24, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-velocity
2014-02-25, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-26, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-dischargepressure

UNITS

Receiving area highlights in $select-light

1.11.3.2 Drag & drop column reordering, Step 3 - Drag - Dark

LAST OCCURANCE ↓	UNITS	ASSET PATH	METER
2014-02-17, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-18, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-dischargepressure
2014-02-19, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-suctionpressure
2014-02-20, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-velocity
2014-02-21, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-22, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-dischargepressure
2014-02-23, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-suctionpressure
2014-02-24, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-velocity
2014-02-25, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-26, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-dischargepressure

35 px height

Fill: $gray19
Opacity: 65%
Outline: 1px, $select-default
Header: $select-light

Shadow: <div class="demo shadow-modal">Level 12: Modal State</div>

Receiving area highlights in $select-hover

https://ge.slack.com/messages/C0KOGLUGU

1.11.4   Drag & drop column reordering, Step 4 - Dropped

LAST OCCURANCE ↓	UNITS	ASSET PATH	METER
2014-02-17, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-18, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-dischargepressure
2014-02-19, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-suctionpressure
2014-02-20, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-velocity
2014-02-21, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-22, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-dischargepressure
2014-02-23, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-suctionpressure
2014-02-24, 19:33:51	psi	.../Unit1/HRSG/	crank-frame-velocity
2014-02-25, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-compressionratio
2014-02-26, 19:33:51	m/s	.../Unit1/HRSG/	crank-frame-dischargepressure

1.12 PAGINATION WITH USER CONFIGURABLE ROWS IN EACH PAGE
1.12.1   Pagination - Table

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Rows per page 10 ⌄   **1-10** of 80   ← [1] 2 3 4 5 →

UI for page numbers, next page, prev page, total number of pages

1.12.2   Pagination, Redlines
1.12.2.1 Pagination, Redlines - Light Theme

Left aligned

Right aligned

Variable

20   20   20   20   20   20   20

Rows per page 10 ⌄   1-10 of 80   ←   1   2   3   4   5   →   vertically centered

20

Bold, $gray15

Regular, $gray15 $gray7

Rows per page 10 ⌄   1-10 of 80   ←   1   2   3   4   5   →

Regular, $primary-default

Regular, $gray10

Regular, $gray10

$gray8 50%

Regular, $select-default

Multiple digits

7   7   7   7   7   7   7   7

1   10   100   1000
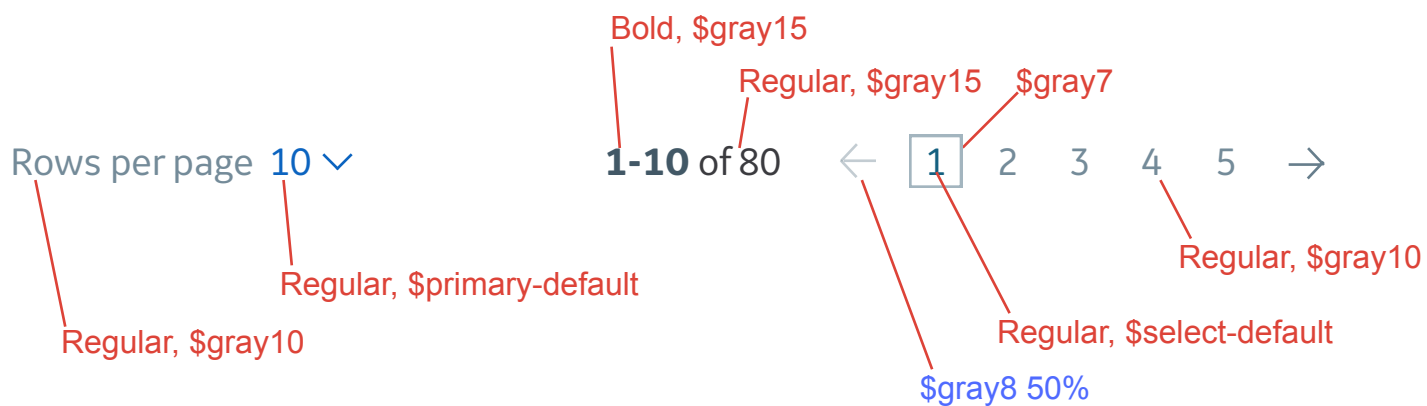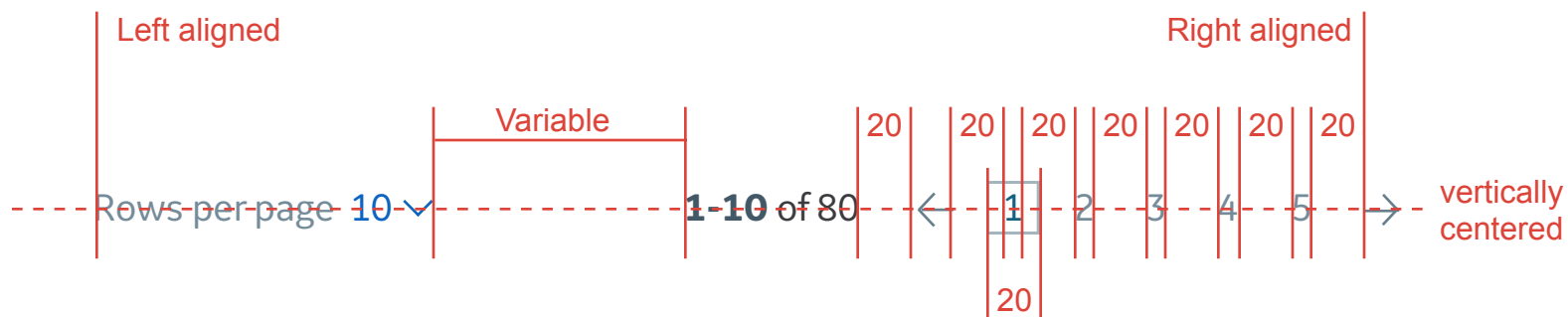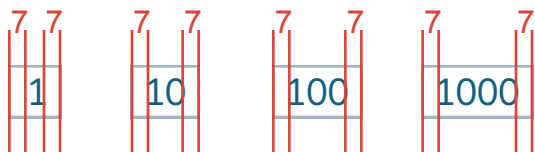
1.12.2.2 Pagination, Redlines - Dark Theme

Bold, $gray10

Regular, $gray10 $gray12

Rows per page 10 ⌄   **1-10** of 80   ←   1   2   3   4   5   →

Regular, $actionable-default

Regular, $gray10

Regular, $select-default

Regular, $gray10

$gray10 50%
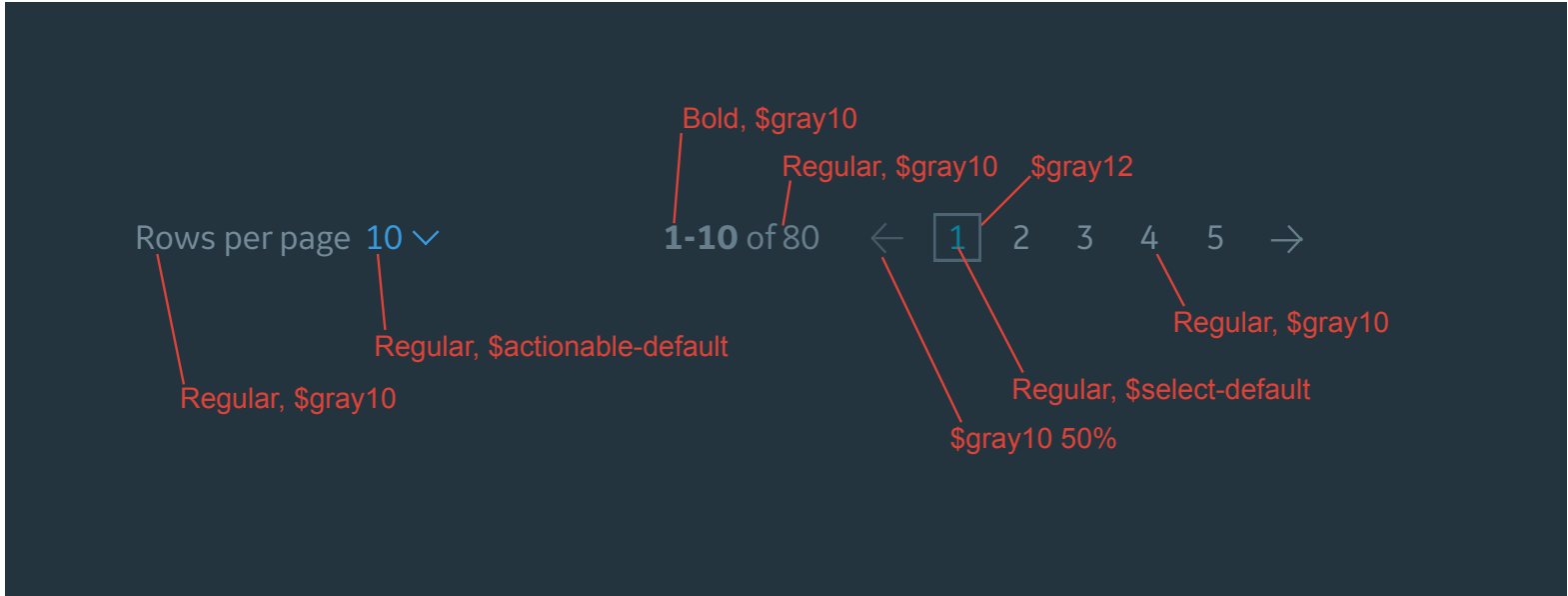
1.12.3   Pagination - Behavior

1.12 PAGINATION - BEHAVIOR

Principle explained with a simple case:

Rows per page 10 ⌄   **1-10** of 10   ← [1] →   hide pagination when the table
                                                                            has only 10 items or less

Rows per page 10 ⌄   **1-10** of 30   ← [1] 2 3 →

Rows per page 10 ⌄   **1-10** of 30   ← 1 [2] 3 →

Rows per page 10 ⌄   **1-10** of 30   ← 1 2 [3] →

Less then 100 / maximum pages:

Rows per page 10 ⌄   **11-20** of 85   ← 1 [2] 3 4 5 →

Dynamic truncation in the beginning and the middle:

Rows per page 10 ⌄   **11-20** of 1800   ← 1 [2] 3 … 180 →

Rows per page 10 ⌄   **61-70** of 1800   ← 1 … 5 [6] 7 … 180 →

Rows per page 10 ⌄   **560-570** of 1800   ← 1 … 56 [57] 58 … 180 →

Dynamic truncation at the end:

Rows per page 10 ⌄   **1780-1790** of 1800   ← 1 … 176 [177] 178 … 180 →

Rows per page 10 ⌄   **1790-1800** of 1800   ← 1 … [178] 179 180 →

1.13 ABILITY TO HIGHLIGHT A ROW OR COLUMN
1.13.1   Hightlight Row
1.13.1.1 Hightlight Row - Light Theme

LAST OCCURANCE ↓	ASSET PATH	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio	$status-yellow2
2014-02-22, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-suctionpressure	$status-red2
2014-02-24, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-dischargepressure

API, UI and CSS variables for highlighting
columns needed

We differentiate between Selection and
Highlight. Selection is when the user
selects a cell or a row to interact with it.
Highlighting happens for example when
a value exceeds a certain limit.

1.13.1.2 Hightlight Row - Dark Theme

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	$status-yellow4
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	$status-red4
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

1.13.2 Highlight Column

LAST OCCURANCE ↓	ASSET PATH	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-dischargepressure

1.13.3   Highlight both

LAST OCCURANCE ↓	ASSET PATH	UNITS	METER	
2014-02-17, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio	
2014-02-18, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure	
2014-02-19, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-suctionpressure	
2014-02-20, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-velocity	
2014-02-21, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-compressionratio	
2014-02-22, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-dischargepressure	
2014-02-23, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-suctionpressure	
2014-02-24, 19:33:51	.../Unit1/HRSG/	psi	crank-frame-velocity	
2014-02-25, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-compressionratio	
2014-02-26, 19:33:51	.../Unit1/HRSG/	m/s	crank-frame-dischargepressure	

1.14 API: SAVE & RESTORE LAYOUT (USER PREFERENCES)

RU: Make it as an application first to support user preferences

1.15 API: RESET TO DEFAULT LAYOUT

1.16 FIXED HEADER
1.16.1   Fixed Header - Fixed

LAST OCCURANCE	ASSET PATH	POINT	UNITS	METER	fixed header
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

1.16.2   Fixed Header - Non Fixed

LAST OCCURANCE	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.17 EXPANDABLE TABLE ROW
1.17.1   Expandable Row, Step 1

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
› 2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
› 2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
› 2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
› 2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
› 2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
› 2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
› 2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
› 2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
› 2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
› 2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Existing functionality in the Vaadin data table

Click on a row affordance, display area below the row with additional information. Should be flexible enough to display any component (such as a chart or a graph) inside the expanded area.

HVS: Is "HTML Container" the right term?

1.17.2   Expandable Row, Step 2

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
> 2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
> 2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
> 2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
> 2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
⌄ 2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio

<div style="background:#gray7">Container</div>

— $gray7

— Allow for a container when open

> 2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
> 2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
> 2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
> 2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
> 2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

1.17.3　Expandable Row, Light

☐ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	— $gray3
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	— $gray5
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	— $gray7
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

1.17.4   Expandable Row, Dark

		LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
						Actions ⌄	
■ (2)							
☐	>	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
☑	>	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	— $gray13
☐	>	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	— $gray15
☐	>	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
☐	>	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
☑	>	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
☐	⌄	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
							— $gray19
☐	>	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
☐	>	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
☐	>	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

1.18 API: HOVER ACTION

Ability to have hover over action to display more information on a cell in grid

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	..Tooltip/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

px-tooltip, light theme
(use dark for dark theme)

Display metadata about cell or row on
hover.

1.19 MICROCHART IN A CELL
1.19.1   Spark Bar Chart

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	▁▂▃▄▅ ⊢— Allow for a microchart
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	▅▄▃▂▁
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	▁▂▃▄▅
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	▅▄▃▂▁
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	▁▂▃▄▅
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	▅▄▃▂▁
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	▁▂▃▄▅
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	▅▄▃▂▁
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	▁▂▃▄▅
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	▅▄▃▂▁

Ability to display a small thumbnail chart or microchart in a cell in grid

Display a small thumbnail version of a chart or microchart in a cell to show information relevant to that row of the grid. e.g. a bar chart or line chart could be shown. On hover state, more information on that chart could be displayed or the enlarged chart could be displayed. See an example below.

2. Styling & Rendering

2.1   CUSTOM VALIDATORS

All default data types should be supported

Might need clarification

DN, ??: Boolean in cell, how to represent?
Boolean we don't want to say true or false
Randy: we have the devs validate their own data
AN: GE to show how Boolean would be shown
Consider having a checkbox?
AN: Follow up with Randy - is it just an API thing?

2.2   KEYBOARD NAVIGATION

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Q1

Existing functionality in the Vaadin data table

(Tabbing seems to not work properly in the current Vaadin table demo)

2.3　ADD/DELETE ROW
2.3.1　Add/delete row - Hover

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

24px x 22px,
$primary-default

API should be designed and
implemented.

2.3.2   Add/delete row - Click

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressu
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

$primary-pressed

Add Row

Delete Row

2.4   INLINE EDITING

2.4.1   Inline editing, Step 1 - Default State

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
2014-02-17, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
2014-02-18, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-19, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
2014-02-20, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
2014-02-21, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
2014-02-22, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-23, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
2014-02-24, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
2014-02-25, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
2014-02-26, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

Empty gutter for Row Actions

2.4.2   Inline editing, Step 2 - Hover

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	$primary-default
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

2.4.3   Inline editing, Step 3 - Click

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
2014-02-17, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
2014-02-18, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-19, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	
2014-02-20, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	
2014-02-21, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	$primary-pressed
2014-02-22, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
2014-02-23, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
2014-02-24, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-velocity	
2014-02-25, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
2014-02-26, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

2.4.4   Inline editing, Step 4 - Before Edit

$primary-default

$select-light

$gray3

$gray10

$primary-default

$gray5

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER		
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio		
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure		
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure		
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity		
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi ⌄	crank-frame-compressionratio	⊗	✓
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure		
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure		
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity		
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio		
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure		

10, 16 ,10, 16 ,10,

2.4.5   Inline editing, Step 5 - After Edit

$primary-default

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/22	39VS11	psi ⌄	crank-frame-compressionratio ⊗ ⊘
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

2.4.6   Inline editing, Step 6 - Saved

Confirmation Message needed?

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/22	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

2.4.7   Inline editing - Simple Error

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	cranl
2014-02-21, 19:33:51	.../Unit1/HRSG/22	39VS11	psi ⌄	123
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Only Letters are allowed.

2.5   CONDITIONAL EDITABLE CELLS

Editable cells on hover: The text turns $primary-default. A pencil Icon appears. The cursor changes.   API should be designed and implemented

39VS11   ✎

Text in non-editable cells doesn't change color on hover. The cursor remains the same.

39VS11

2.6   API: ADDING NOTE/COMMENT

UI: vaadin-context-menu? + vaadin-dialog? for adding notes

2.7   SUPPORT FOR PREDIX THEMING
2.7.1   Light Theme
2.7.1.1   Light Theme - Without Redlines

Actions ⌄

	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

(2)

Rows per page 10 ⌄   **1-10** of 48   ←   [1]   2   3   4   5   →

2.7.1.2   Light Theme - With Redlines

Label: Small, All Caps, $gray10, letter-spacing: 0.12

Value: $gray8

Sorting indicator: $select-default

12

	(2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	Actions ⌄

See px-dropdown Spec

20

Header Line: 1px, $gray10
Separator: 1px, $gray4

10

☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Value: $gray3

Value: Regular, $gray15

40

Rows per page 10 ⌄

1-10 of 48   ← 1 2 3 4 5 →

Footer Line: 1px, $gray10

Regular, $primary-default

Regular, $gray10

See Pagination Spec

2.7.2   Dark Theme
2.7.2.1 Dark Theme - Without Redlines

	Actions ⌄				
▣ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Rows per page 10 ⌄   1-10 of 48   ← 1 2 3 4 5 →

2.7.2.2   Dark Theme - With Redlines

Label: Small, All Caps, $gray10, letter-spacing: 0.12

Value: $gray5

Sorting indicator: $select-default

12

10

Actions ⌄   **See px-dropdown Spec**

20

	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER	
☐ (2)						
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	**Header Line:** 1px, $gray10
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	**Separator:** 1px, $gray15 **Value:** $gray14
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure	**Value:** $gray15
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity	**Value:** Regular, $gray5
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio	
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure	
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure	
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity	40
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio	
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure	

Rows per page 10 ⌄

1-10 of 48   ← | 1 | 2   3   4   5 →   **Footer Line:** 1px, $gray10

Regular, $d-actionable-default

Regular, $gray10

See Pagination Spec

3. Search

3.1   SORTING (CLIENT SIDE)
3.1.1   Simple Sorting Indicator

Chronologically

Extend vaadin-grid-sorter to px-data-grid-sorter

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio

Reverse Chronologically

LAST OCCURANCE ↑	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio

3.2   SINGLE COLUMN SORT
3.2.1   Single Column Sorting

⊟ (2)↑	LAST OCCURANCE	ASSET PATH	POINT	UNITS	METER
☑	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☐	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

The part of extended px-data-grid-sorter. Part of "px-data-table compatibility"

Existing functionality in the Vaadin data table

3.3   MULTIPLE COLUMN SORT

3.3.1   Multiple Column Sort - Checkbox Column - 1

▬ (2)	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

The part of extended px-data-grid-sorter. Part of "px-data-table compatibility"

Existing functionality in the Vaadin data table

3.3.2   Multiple Column Sort - Checkbox Column - 2

☑⇅	LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

3.3.3   Multiple Column Sort - Checkbox Column - 3

☑ (2)↑2	LAST OCCURANCE↑1	ASSET PATH	POINT	UNITS	METER
☑	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☐	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

3.3.4   Multiple Column Sort - Large Selection 99+

(99+) ↑2	LAST OCCURANCE ↑1	ASSET PATH	POINT	UNITS	METER
☑	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☑	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☑	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☑	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☑	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☑	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☑	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☑	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☑	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

3.3.5   Multiple Column Sort - None Selected

	LAST OCCURANCE ↑	ASSET PATH	POINT	UNITS	METER
☐	2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☐	2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
☐	2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
☐	2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
☐	2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
☐	2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
☐	2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
☐	2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
☐	2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

~80

3.4   SORT INDICATORS
3.4.1   Basic Sort Indicators

Add support for px- themes

Existing functionality in the Vaadin data table

LAST OCCURANCE ↑1	ASSET PATH	POINT ↓2	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio

px-nav:up, height: 8px

px-nav:down, height: 8px

LAST OCCURANCE ↑1	ASSET PATH	POINT ↓2	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio

3.5   SERVER SIDE SORT

No changes needed if we will use our data provider API

Existing functionality in the Vaadin data table

Filtering should be available via an API
as well so teams can customize the UI
using other components.

4. Filtering

4.1　AUTO FILTERING
4.1.1　Auto filtering - Entire Table

Filter 🔍

40px

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Basic filtering for plain strings

Existing functionality in the Vaadin data table

4.2   NUMERIC RANGE FILTERING

Show Only ∨	Point is between ∨	12		48
				Cancel Save Apply

Filtering UI needs to be designed and implemented, `px-slider` could be utilized

"Give me everything over 12% and below 48%"

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Q1

4.3　DATE/TIME RANGE FILTERING

| Show Only ∨ | Time range includes ∨ | 📅 2014/02/17　🕐 01:00:00 UTC | TO | 📅 2014/02/26　🕐 01:00:00 UTC |

Cancel　Save　Apply

Depends on "Numeric range filtering", `px-rangepicker` could be utilized

▽

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	…/Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	…/Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

4.4   PATTERN FILTERING
4.4.1   Pattern filtering, Step 1 - Default

⌄̇   16 px height

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Default: $gray15
Hover: $primary-default
Pressed: $primary-pressed
With Filters:
$select-default (placeholder)

Display Rules	Column Label	Conditions	Value
Show only Hide Highlight	"Asset ID" or "Location" or "Color"	Equals Larger then Equals or larger then Smaller Equals or smaller then Starts with Ends with Contains Does not contain	Like "Truck 15", "San Francisco" or "Red"

(equals/contains/starts with/wildcard)

No changes needed if we will use our data provider API

4.4.2   Pattern filtering, Step 2 - Simple Filter

| Show Only ⌄ | Asset Path ⌄ | Contains ⌄ | HRSG | + |

ABC

Cancel   Save   Apply

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

4.4.3   Pattern filtering, Step 3 - Two Rows

Show Only ⌄	Asset Name/ID ⌄	Equals ⌄	Maintenace required	✕ +
Hide ⌄	Location ⌄	Equals ⌄	Chicago	✕ +

ABC

Cancel   Save   **Apply**

▽

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

Q1

4.4.4   Pattern filtering, Step4 - Saved Filter

| Show Only ⌄ | Asset Name/ID ⌄ | Equals ⌄ | Maintenace required | ✕ ＋ | ABC

| Hide ⌄ | Location ⌄ | Equals ⌄ | Chicago | ✕ ＋ |

Cancel   Save   **Apply**

▽ | Filter 1 ✕ |

LAST OCCURANCE ↓	ASSET PATH	POINT	UNITS	METER
2014-02-17, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-18, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-19, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-suctionpressure
2014-02-20, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-velocity
2014-02-21, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-compressionratio
2014-02-22, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-dischargepressure
2014-02-23, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-suctionpressure
2014-02-24, 19:33:51	.../Unit1/HRSG/	39VS11	psi	crank-frame-velocity
2014-02-25, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-compressionratio
2014-02-26, 19:33:51	.../Unit1/HRSG/	39VS11	m/s	crank-frame-dischargepressure

4.5   API: SERVER SIDE FILTER

No changes needed if we will use our data provider API

Existing functionality in the Vaadin data table

4.6   ABILITY TO ACCEPT GLOBAL FILTER CONDITIONS

New API, not sure if UI is needed

5. Printing & Exporting

5.1   API: RAW VALUE EXPORT

In case of remote data-provider we need
to fetch all pages before exporting

5.2   API: ABILITY TO EXPORT ONLY THE DISPLAYED/FILTERED DATA

Depends on "Raw Value Export"

5.3   API: EXPORT TO XLSX

Depends on "Raw Value Export" https://github.com/SheetJS/js-xlsx

5.4   API: EXPORT TO CSV

Depends on "Raw Value Export"