



KREO HMI TUTORIAL

Automatic conversion of the metric system

Tutorial dedicated to the metric system conversion based on current language or specific functions

Connect
Ideas.
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Introduction

With KREO HMI you can configure the project for a quick conversion from one measuring system to another.

How to do:

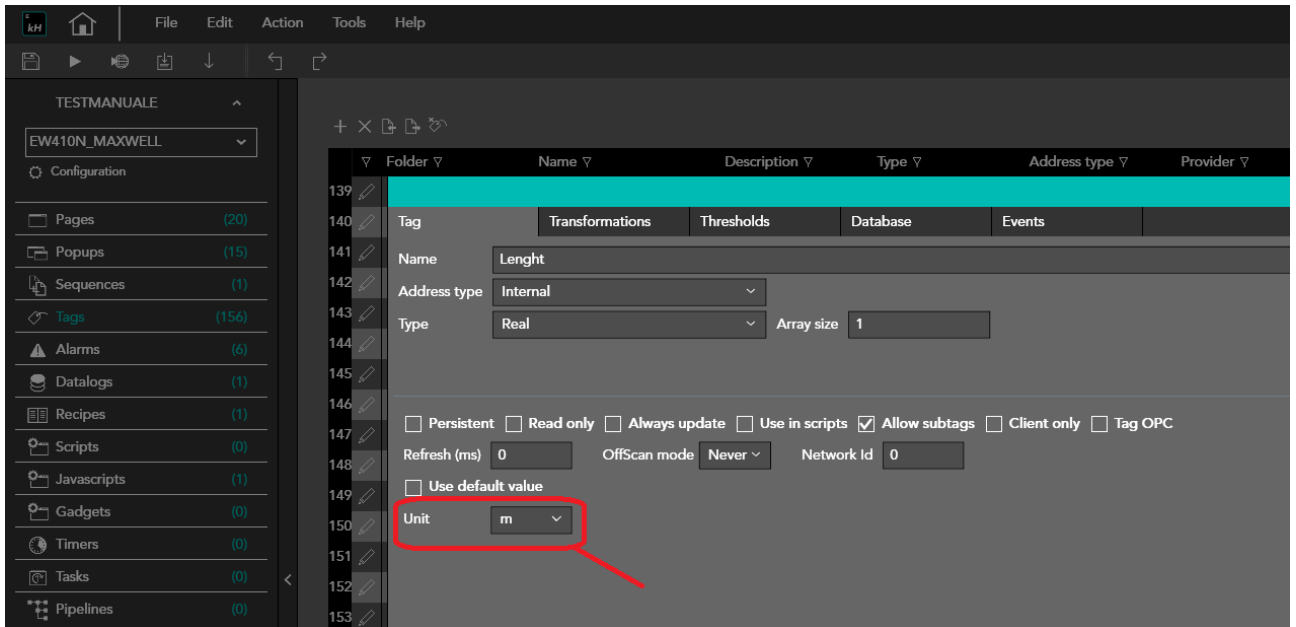
- 1) The Units table define all the main units that are already predefined. A large number of group (length, weight, area,...) and units inside each group (km, mts,cm, yard, inch, foot,...) are predefined but nothing prevents you from adding others or customize the existing ones through the conversion factor in column FACTOR + OFFSET

	Name ▾	Description ▾	Symbol ▾	Factor ▾	Offset ▾	Main ▾	Group
1	nm	Nanometer	nm	1000000000	0	<input type="checkbox"/>	Length
2	µm	Micrometer	µm	1000000	0	<input type="checkbox"/>	Length
3	mm	Millimeter	mm	1000	0	<input type="checkbox"/>	Length
4	cm	Centimeter	cm	100	0	<input type="checkbox"/>	Length
5	m	Meter	m	1	0	<input checked="" type="checkbox"/>	Length
6	km	Kilometer	km	0.001	0	<input type="checkbox"/>	Length
7	in	Inch	in	39.3700787	0	<input type="checkbox"/>	Length
8	ft	Foot	ft	3.2808399	0	<input type="checkbox"/>	Length
9	yd	Yard	yd	1.0936133	0	<input type="checkbox"/>	Length
10	rd	Rod	rd	0.1988387815	0	<input type="checkbox"/>	Length
11	ch	Chain	ch	0.0497096954	0	<input type="checkbox"/>	Length
12	mi	Mile	mi	0.0006214	0	<input type="checkbox"/>	Length
13	naut	Nautical Mile	naut mi	0.0005396	0	<input type="checkbox"/>	Length
14	lea	League	lea	0.0002071237	0	<input type="checkbox"/>	Length
15							
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- 2) The right column allows you to select the the group the selected unit is belonging to.

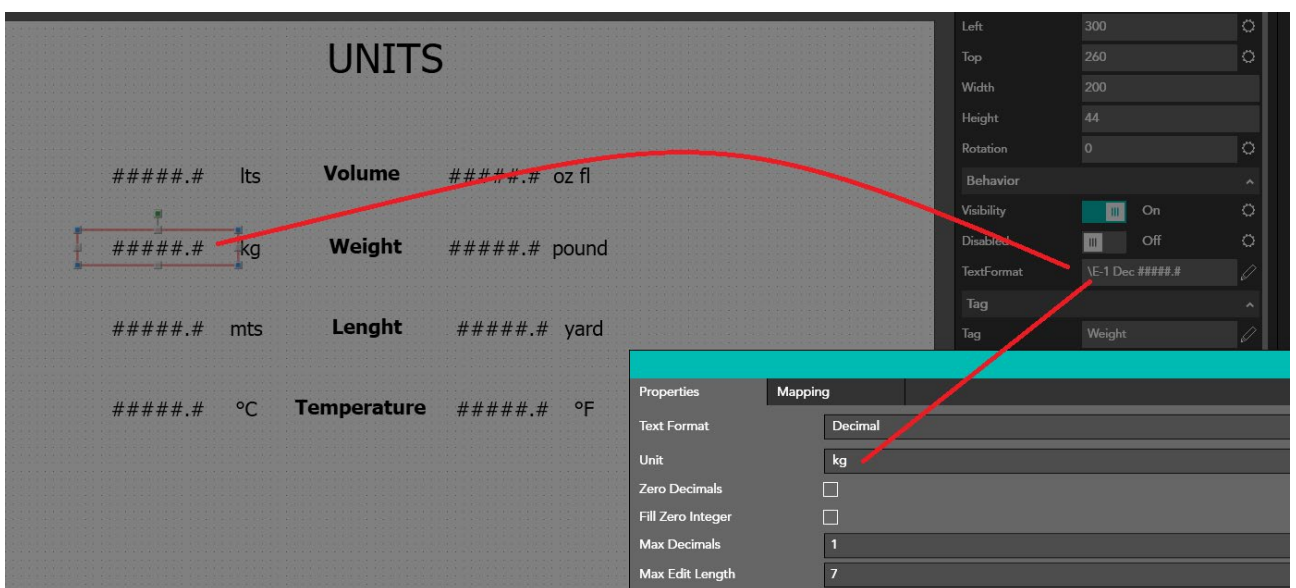


3) Now let's define tags that represent some typical measures such as VOLUME, WEIGHT, LENGTH, TEMPERATURE by defining in the UNIT box the relative reference:



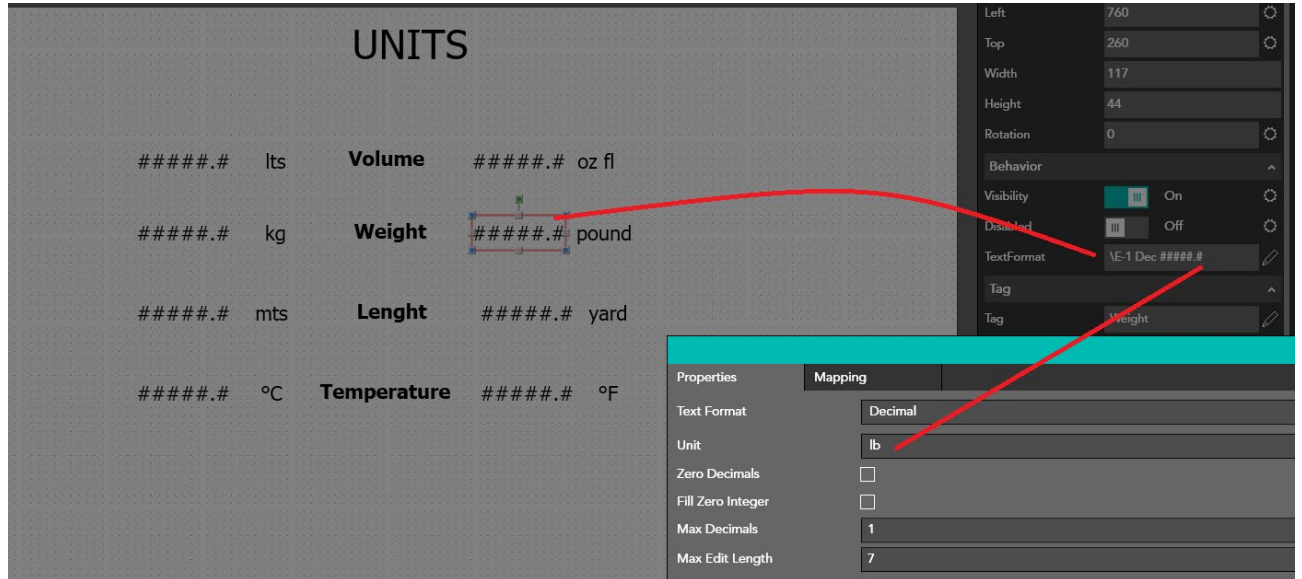
4) Now develop the project page with the fields and the conversion to be applied.

A conversion 1:0.001 for Kg (compared to grams of FACTOR=1):

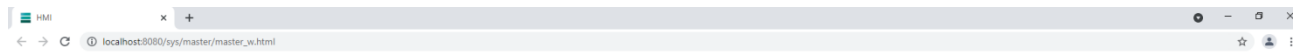




A 1:0.0022 conversion for pounds (compared with FACTOR=1 grams)



5) At RUNTIME you can see the different conversions on all the fields that represent the same tag but with different UNITS:



UNITS					
1	lts	Volume	35.2	oz fl	
1	kg	Weight	2.2	pound	
1	mts	Length	1.1	yard	
1	°C	Temperature	33.8	°F	



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