WEINTEK LABS., INC.

Address Tag Library

Elementary Arithmetic Mode

Demo Project

Contents

1. Overview & Operation 1

2. Setting up the Screen 3

3. Addresses 6

1. Overview & Operation

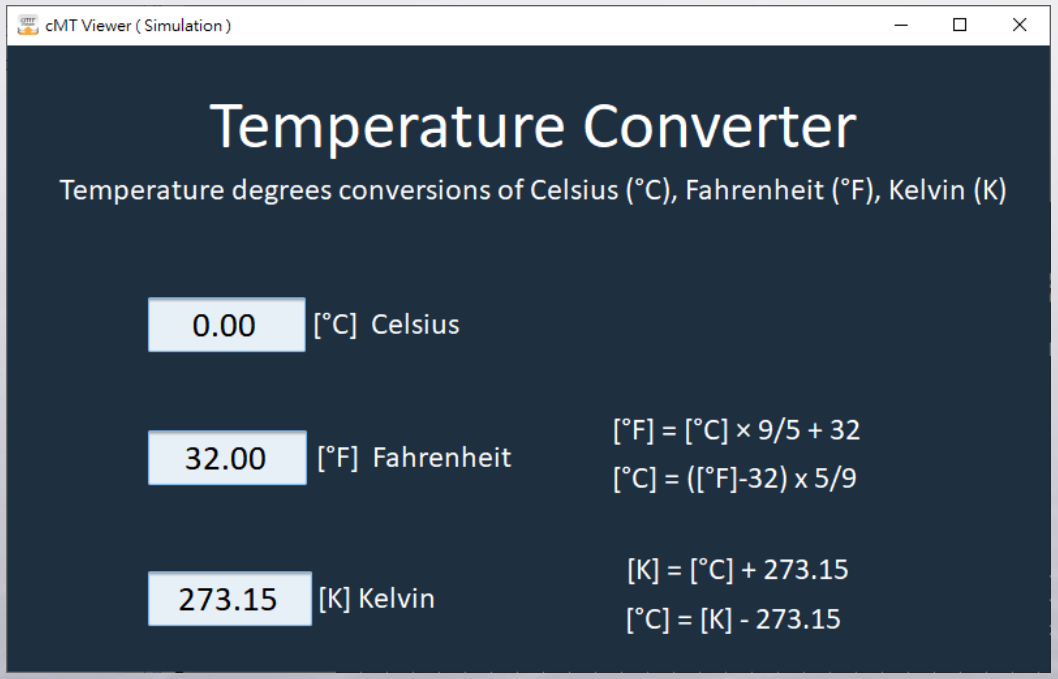
Overview

With Elementary Arithmetic mode in Address Tag Library that is available on cMT / cMT X Series HMI, read / write conversions can be done without having to use macro subroutines. All you need to do is entering the needed conversion formula. In the syntax, ${v} represents device value, and the formula requires standard mathematical operator notations. This feature is suitable for simple conversions and it reduces project design time.

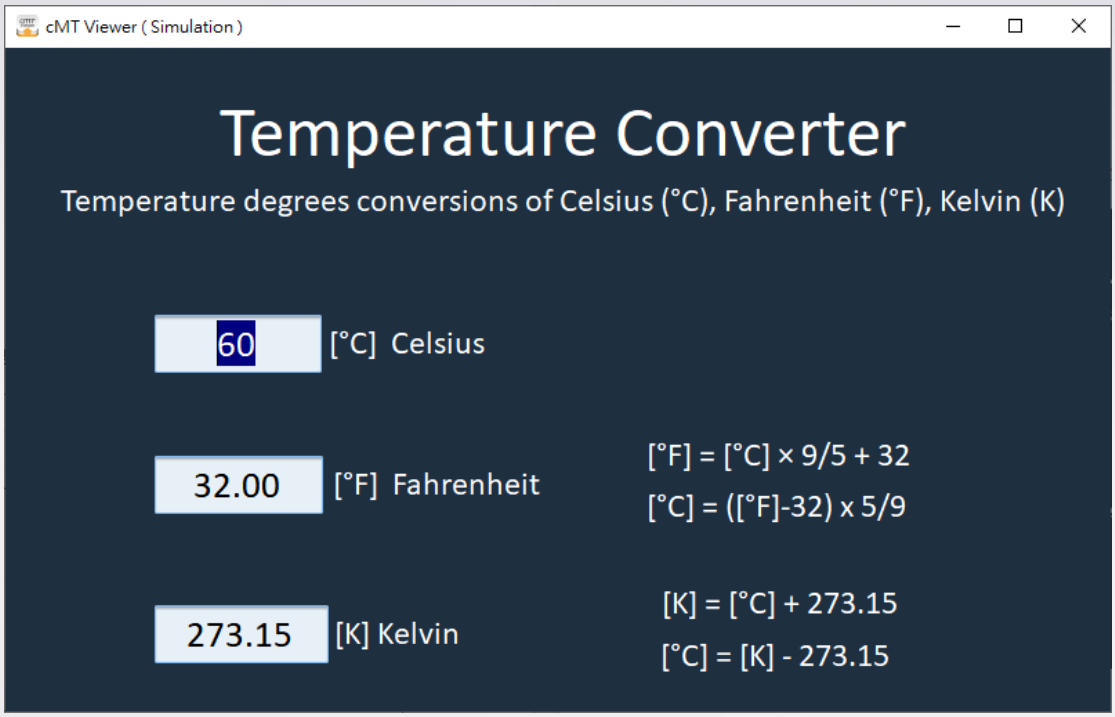
In this demo project, a temperature converter is created for showing how to use Elementary Arithmetic mode. Please note that this mode is only supported on cMT / cMT X Series models.

Operation

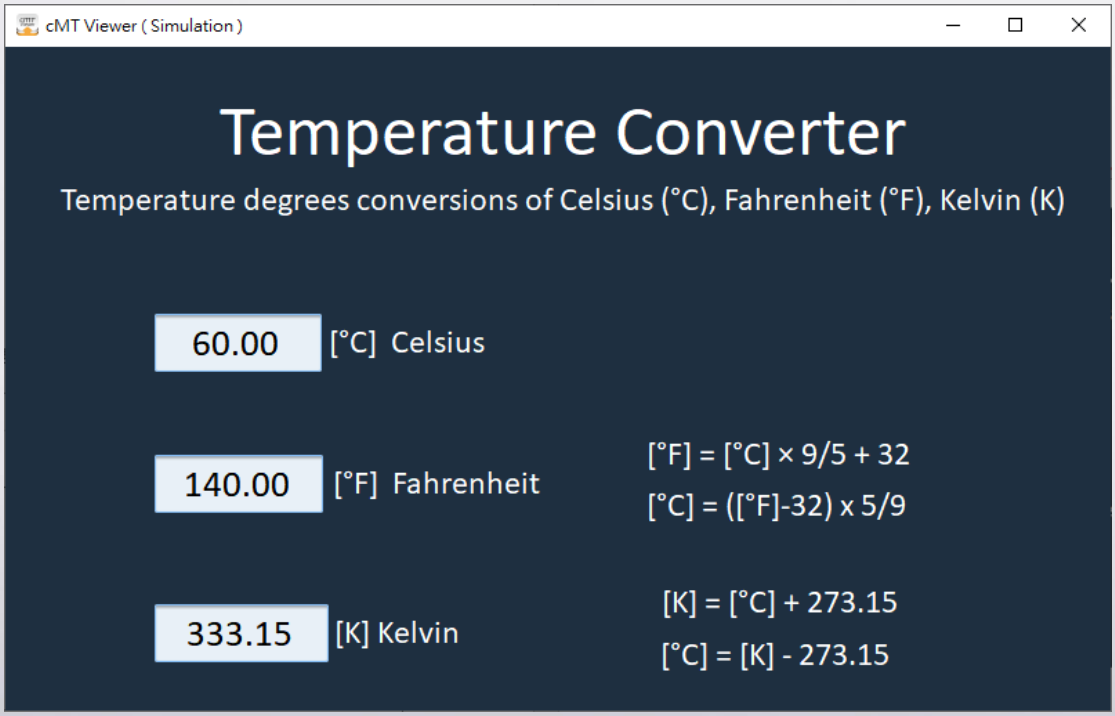
Step 1. Run the project.



Step 2. Enter the temperature in Celsius, Fahrenheit, or Kelvin.

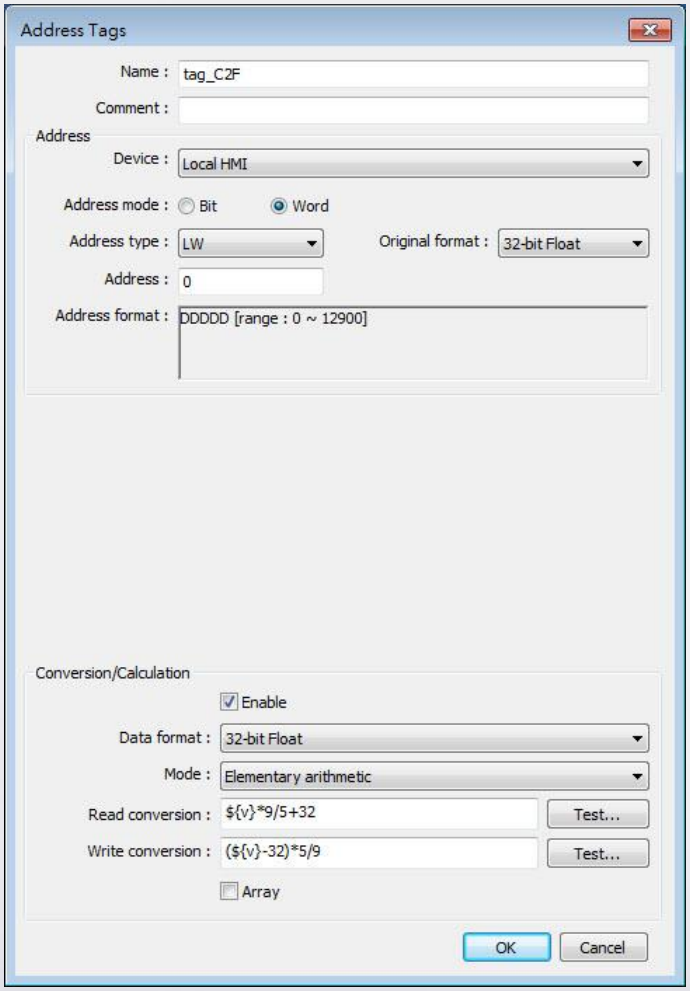


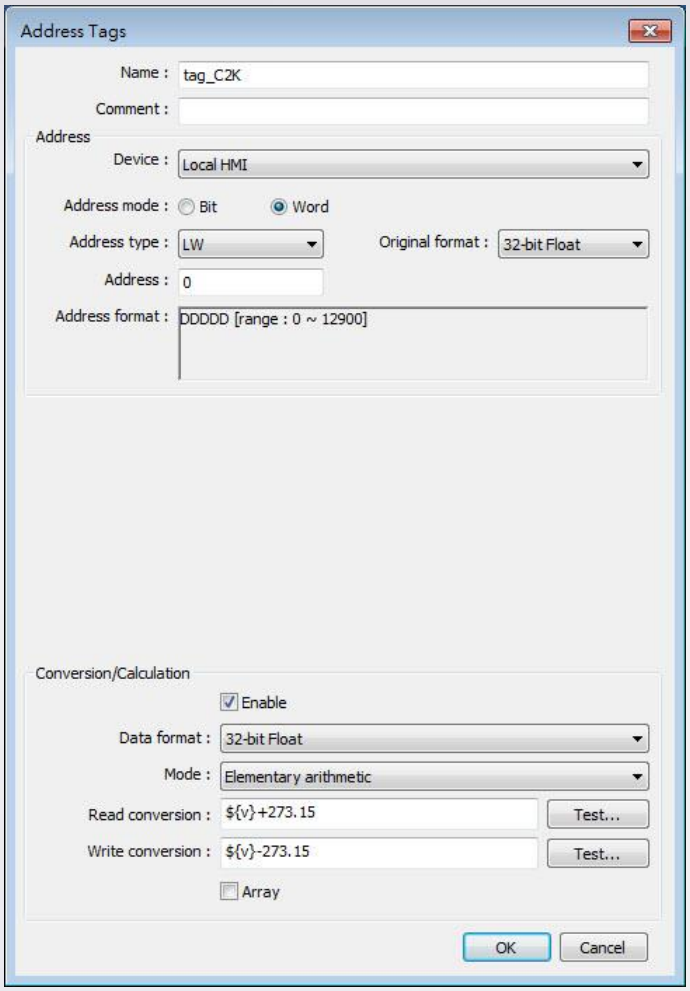
Step 3. The temperature is converted into Celsius, Fahrenheit, and Kelvin.



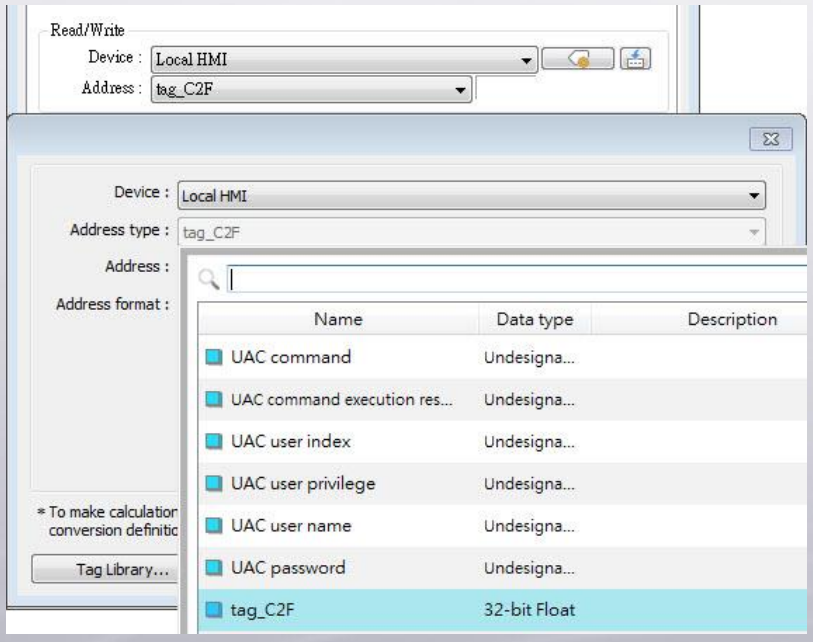
2. Setting up the Screen

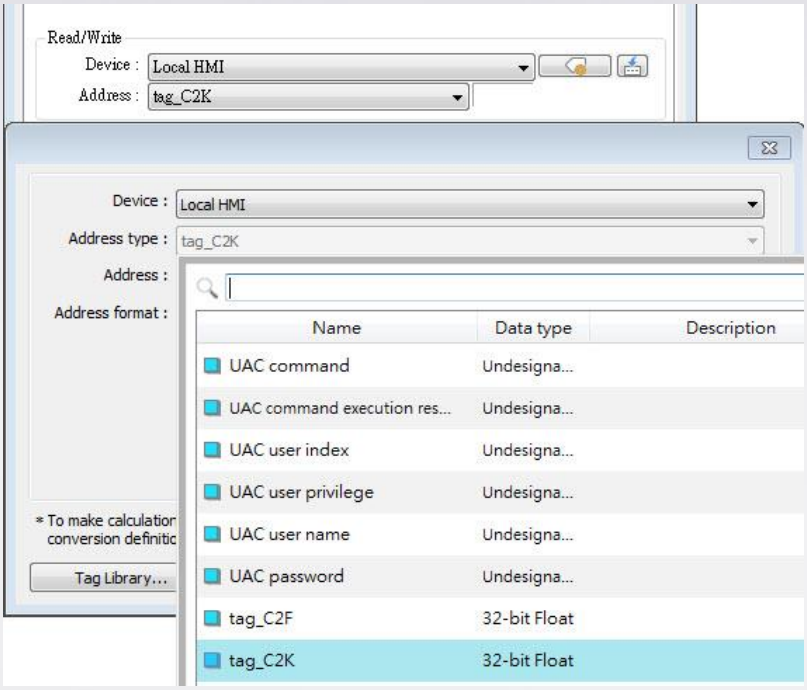
Step 1. Create tags in Address tag Library, select a format, and enter the conversion formulas.





Step 2. Create Numeric objects and select the corresponding tags.




Read/Write
Device : Local HMI
Address : tag_C2K
Device : Local HMI
Address type : tag_C2K
Address :
Address format :
* To make calculation
conversion definitic
Tag Library...
Name
Data type
Description
UAC command
Undesigna...
UAC command execution res...
Undesigna...
UAC user index
Undesigna...
UAC user privilege
Undesigna...
UAC user name
Undesigna...
UAC password
Undesigna...
tag_C2F
32-bit Float
tag_C2K
32-bit Float

3. Addresses

The addresses of key objects used in this demonstration are listed below, please adjust as necessary.

Object	Address	Object ID	Description
		Window 10	
Numeric	LW-0	NE_0	Celsius
Numeric	Tag_C2F	NE_1	Fahrenheit
Numeric	Tag_C2K	NE_2	Kelvin