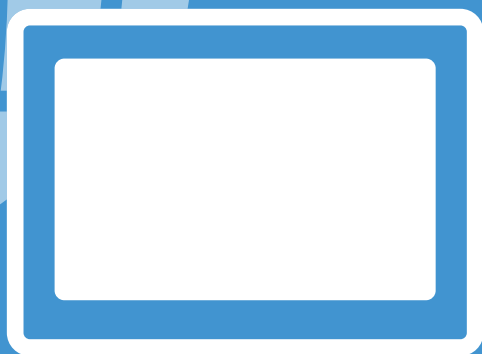# WEINTEK

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Tag over your project

Nov 25, 2014

■ Introduction

With the vigorous development of industrial control technology and factory automation market, HMI plays an increasingly important role in this market. However, since there is not much difference in the HMI hardware compared to other brands, the functionality of configuration software becomes more important to satisfy most application requirements.

Weintek has self-developed its own configuration software, EasyBuilder Pro, which is widely recognized and trusted by customers. In order to enhance the efficiency of HMI project development, Weintek is focused on **Address Tag** function which greatly improves the simplicity and maintainability of the project.

Address Tag refers to detailed definitions of HMI/PLC registers. For example, one address tag contains the register's name, address, type, and function. There are two groups of **Address Tag**: **System Tag** represents HMI default system registers offering a variety of different functions of EasyBuilder Pro and **User-defined Tag** represents HMI/PLC registers that can be customized. Furthermore, Macros can be used in the **User-defined Tag**. Thus, the objects of the EasyBuilder Pro can simply use **Address Tag** to perform any complicated numerical conversions between PLC and HMI.
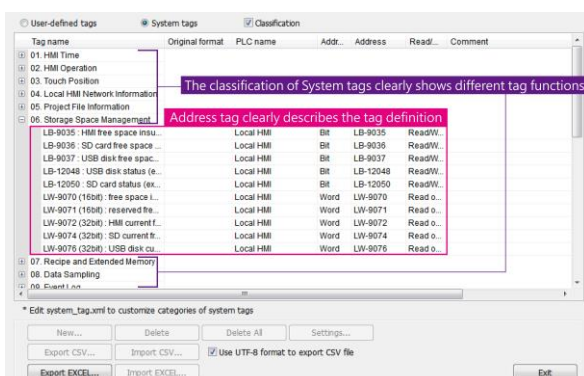
■ Features
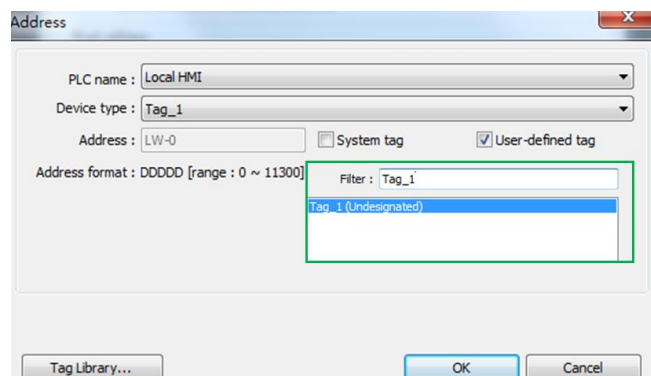
■ Efficiently search all Address Tags

HMI has been widely used in different applications in recent years, thus Weintek HMI provides many system default functions, to meet a variety of application requirements. However, how to quickly select the address tag when there are over hundreds of tags in the address tag library? Weintek offers two new functions: **System Tag Classification** and **User-defined Tag Filter** that enable project designers easily and efficiently searches the needed address tag.

■ Perfectly improve project readability and maintainability

Address Tag Library clearly lists all of the tag definitions with referred HMI/PLC registers information. Not only does **Address Tag Library** enhance the readability of the project, but also it perfectly improves the project maintainability.

Address Tag Library clearly lists all tag definitions

User-defined Tag Filter makes tag search more efficient

■ **Application Note**

Example: User-defined Scaling Method with Address Tag

Since Weintek launched User-defined Scaling Method last year, this method has extremely improved the efficiency of project development. It is capable of converting raw data from the PLC into scaling value, which is displayed on HMI, in engineering units such as Watt, Volt, and etc.

Preserving the advantages and features of User-defined Scaling Method, Weintek adds the Address Tag, which has numerical conversion function, into the method. Not only the Address Tag can represent the HMI/PLC registers, but also it can easily perform numerical conversions with Macros from PLC to HMI.

Easily perform numerical conversions with Macros from PLC to HMI

With numerical conversion function of **Address Tag**, User-defined Scaling Method has the following advantages:

■ **Share the Address Tag Library**

The **Address Tag Library** can be exported and used in other different projects. This feature greatly improves the efficiency of new project development.

■ **Support multiple objects**

According to different kinds of applications, customers can flexibly use supported objects such as: Word lamp, Multi-State, Numeric, Event log, PLC control and many more to design their projects.

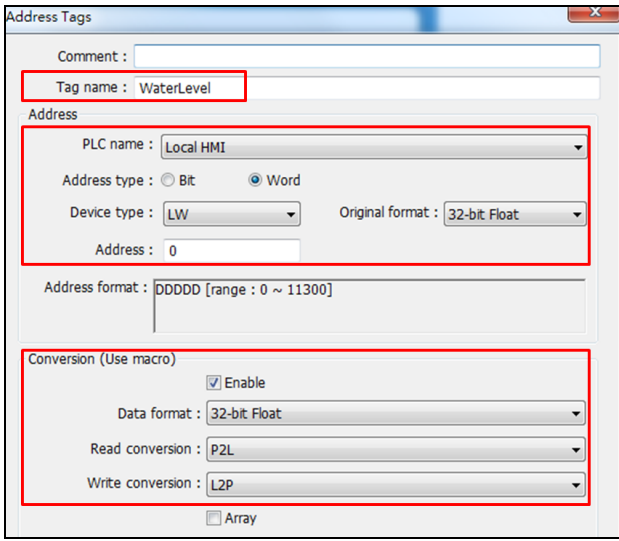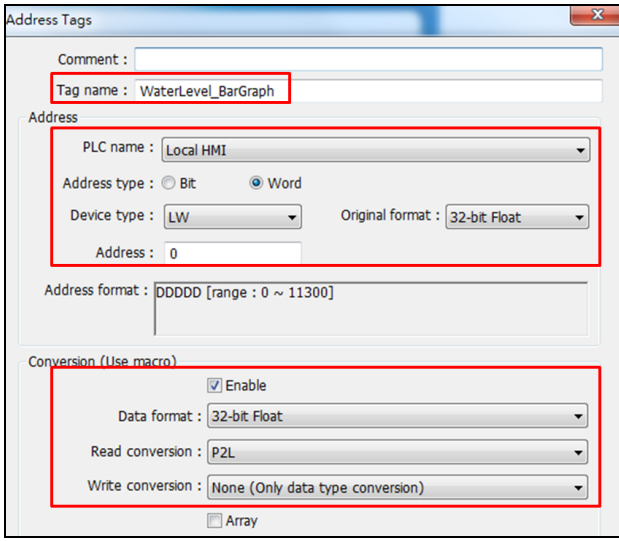■ **Greatly reduce project development time**

Each object can be simply referred to the pre-defined Address Tag for numerical conversions. This feature makes User-defined Scaling Method easier and more intuitive. Moreover, Address Tag can be defined one time and re-used by objects. Thus, Address Tag function greatly reduces project development time.
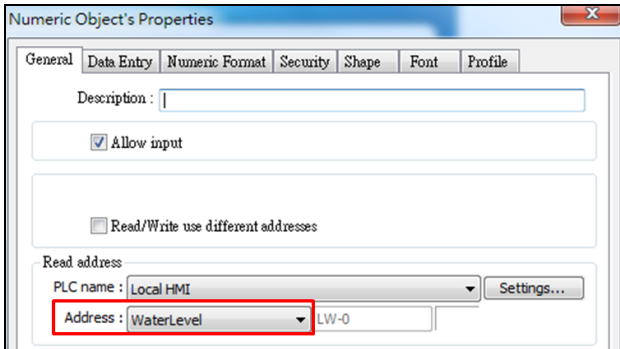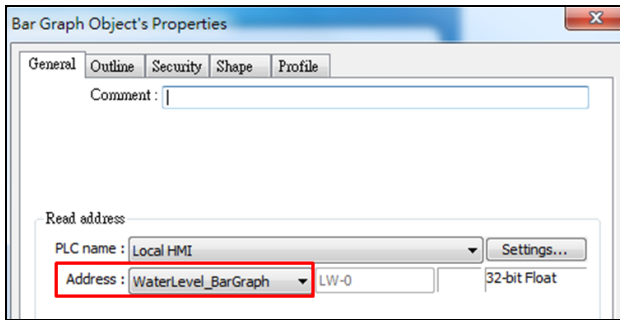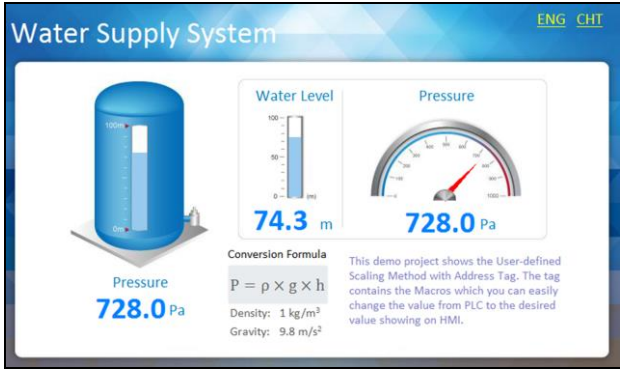
This demo project will use Address Tag to call Macros to perform the numerical conversions between water pressure and water level. Installation requirements, Reference documents, and Configuration steps are shown below.

Installation Requirements

Applied models	OS versions
MT8070iE、MT8070iER、MT8100iE、MT6070iE1	20140924 or later versions
MT8050iE、MT8121iE、MT8150iE、MT8101iE、MT6070iE2	20141002 or later versions
eMT3070A	20140624 or later versions
eMT3105P、eMT3120A、eMT3150A	20141007 or later versions
MT8121XE、MT8150XE	20141002 or later versions
mTV-100	20140911 or later versions
cMT-SVR	20140715 or later versions
EasyBuilder Pro versions	
V.5.00.01 or later versions	

Reference Documents

User Manual: Chapter 16 – Address Tag Library
eNews: User-defined Scaling Method
Demo Project: Tag over your project

Configuration Steps

Steps	Figures
Macro icon 1. Select **Tools** > **Macro** > **Library** > **New** Create two macro functions for numerical conversions: (1). P2L: from pressure to water level (2). L2P: from water level to pressure **Notes:** Conversion Formula: $P = \rho \times g \times h$ **P:** pressure **ρ:** density **g:** gravity **h:** water level	 P2L function L2P function

Configuration Steps

Steps	Figures
Tag icon 2. Select **Library** > **Tag** > **User-defined tags** > **New** Create two tags: (1). **WaterLevel** (2). **WaterLevel_BarGraph** 3. Address: (1). Check Address type: **Word** (2). Select Device type: **LW** (3). Select Original format: **32-bit Float** (4). Address: **0** 4. Conversion (Use Macro): (1). Check **Enable** (2). Data format: **32-bit Float** **Tag WaterLevel:** (3). Read conversion: **P2L** (4). Write conversion: **L2P** **Tag WaterLevel_BarGraph:** (3). Read conversion: **P2L** (4). Write conversion: **None**	WaterLevel tag WaterLevel_BarGraph tag

Configuration Steps	
Steps	**Figures**
5. Create one Numeric Object to use **WaterLevel** tag 6. Create one Bar Graph Object to use **WaterLevel_BarGraph** tag	 Use WaterLevel tag Use WaterLevel_BarGraph tag
7. Now you can easily convert the value between Pressure and Water level.	