

# NEW RELEASE

## UNILOGIC 1.7.62 UNISTREAM OS 1.7.11

JUNE, 2014

This new version includes the new HMI widgets Video Player and .pdf Viewer, which enables your users to page through .pdf files on the UniStream HMI panel. Other features include attractive polished-looking gauges, handy Find & Replace tags support, and more.

### Features

#### Video Player

Use the HMI Video Player widget to play MPEG-4 video files on the HMI screen (MPEG-4 Visual, part 2, AVC/H.264).

The widget properties enable you to display video controls that enable the user to start, stop, and adjust the volume.

You can set the video to autoplay, and play it in a loop.

Note that the video is not visible via VNC.



#### .pdf Viewer

This new HMI widget enables you to display a .pdf, and allow the user to page through it and adjust the Zoom level.



---

## New Gauges

Use the Gauge widgets to display a variable value. Gauges are available in different shapes and styles. Use the gauge properties to customize the values and appearance of the gauge.



---

## Import/Export I/O tags to Excel

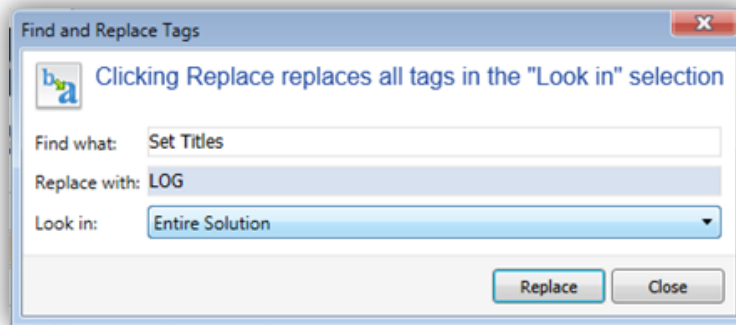
You can now export I/O Data Tags into Excel, edit them, then import them back into UniLogic via Import Export on the PLC ribbon.



---

## Find & Replace Tags

The Find (Ctrl + F) and Find & Replace (Ctrl + H) utilities on the Edit tab enable you to quickly find and find and replace any tags that in your project.



## New Trend Widget: XY

In addition to the standard Trend graph widget, where the X axis is time, you can create a graph using the XY Trend widget. This enables you to define units such as millibar or degrees for the X axis.

Curves Configuration

#	Name	Is X axis	Color	Curve Display Name	Units	Is Visible	Min Value	Max Value
0	Temperature	<input type="checkbox"/>	#FFFF0000	Temperature	C	<input checked="" type="checkbox"/>	#0	#100
1	Pressure	<input type="checkbox"/>	#FF008000	Pressure	millibar	<input checked="" type="checkbox"/>	#0	#100
2	Speed	<input checked="" type="checkbox"/>	#FFFFFF00	Speed	rpm	<input checked="" type="checkbox"/>	#0	#100

## Data Table Widget

You can now adjust the Column width of Data Tables, either by entering a value or manually adjusting them.

Data Table columns widths configuration

#	Name	Width
0	Coltrane	70
1	Simone	70
2	Gillespie	135
3	Holliday	200

Manual Drag and Drop

Coltrane Simone Gillespie Holliday

Properties Window

Timer

Data Tables

Data Table

Properties Window

Data Table1 [Data Table]

Search

Attributes

Columns... (Collecti...

Data Table Jazz

Read-Only

Selection... #FFFA

Tag: Selec... <Empty>

Tag: Selec... <Empty>

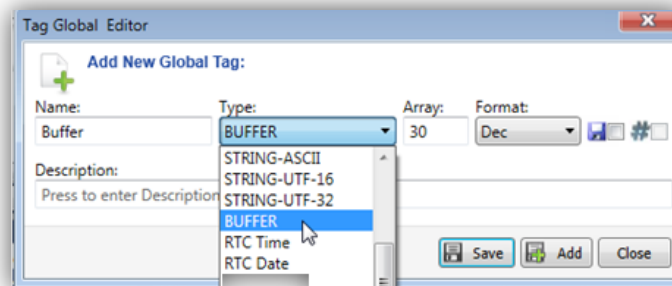
Tag: Selec... <Empty>

Properties of Appearance

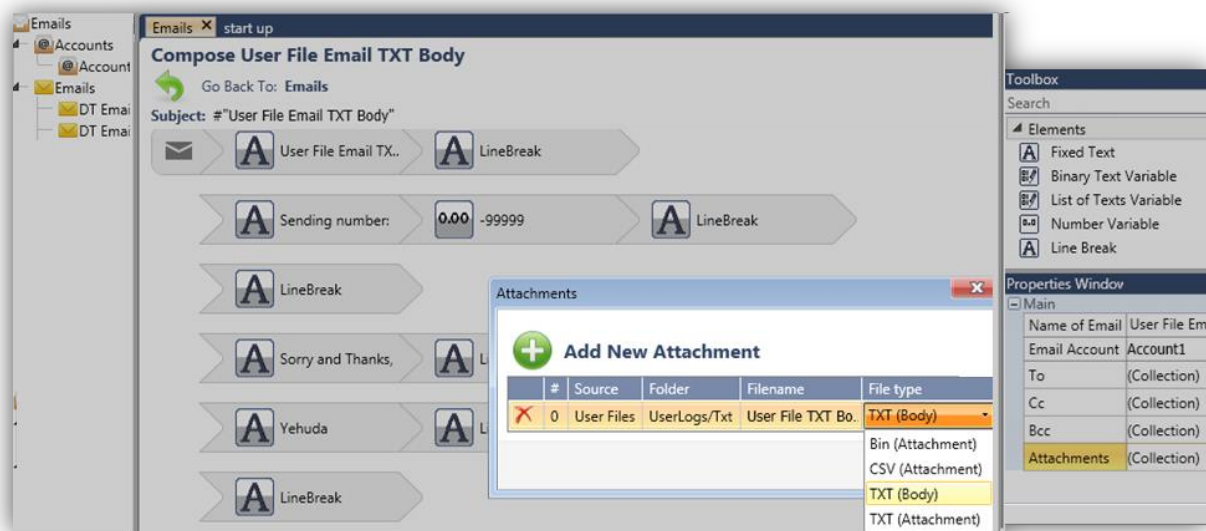
Opacity 100%

## Create File, Insert into email Body

After building a message, you can append it to a file it via the Append Buffer to File Function. This enables you to create .csv, .txt, and .bin. files.



You can use .txt files as the body of an email.



## High-Speed Counter Reset

The high-speed I/O module struct, UID-0808THS, now offers a Reset Counter bit that you can use in your program to initialize the counter value.

IO ▶ UID-0808THS_0			
Name	Type	Description	
<a href="#">IO - Status</a>	UINT32	I/O status code	
<a href="#">Inputs</a>	BIT[0...7]	Value of inputs (0 or 1)	
<a href="#">B1: Counter</a>	UINT32	Counter value of High Speed Block	
<a href="#">B1: Frequency</a>	UINT32	Frequency value (milliHz) of High Speed Block	
<a href="#">B1: Counter direction</a>	BIT	Direction of counter in High Speed Block: 0 = Down, 1= Up	
<a href="#">B1: Status</a>	UINT8	High Speed Block Status (0 = OK)	
<a href="#">Outputs</a>	BIT[0...7]	Value of outputs (0 or 1)	
<a href="#">B1: Reset Counter</a>	BIT	Reset Counter: 0 = Don't Reset, 1 = Reset.	

## New I/P-Timer Keypad

The new keypad is attractively divided into fields. Navigate between the fields via arrows.



### Support for EXF-RC15

The EXF-RC15 is a stand-alone high-speed Remote I/O Module. It offers 9 digital inputs, 4 digital transistor outputs, and 2 relay outputs. Three inputs can be set via wiring and software to function as high-speed counters/shaft-encoders. The four transistor outputs may function as high-speed PWM/PTO outputs.

You can include the EXF-RC15 by using files that are ported between VisiLogic and UniLogic.

### Bug Fixes

Numeric Box HMI element: Certain issues with the decimal point placement have been fixed.

## Previous Versions

### UniLogic 1.6.66, UniStream OS 1.6.13

#### Hardware Configuration

#### New Temperature I/O Module

UIS-04PTN provides 4 RTD inputs supporting PT100, NI100, NI120, and Resistance.

#### New Long-Range Local Expansion Adapters

UAG-XKPLxxx: New Long Range Local Expansion adapter.  
(Available with 6 or 12 meter [20 or 40

feet]cable)  
You can  
use Short  
or Long  
Range  
Local Expansion



Adapters to connect a UniStream™ controller to a row of I/O modules located on a DIN-rail.

Daisy-chain up to 5 Local I/O Expansion Adapters to one controller to further increase the number of I/O modules up to 85.

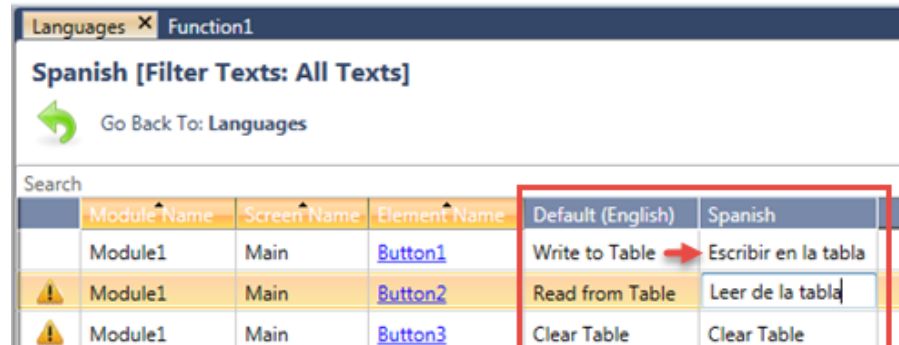
---

## Additional Features

### New Languages

This version supports 10 new languages: Ukrainian, Romanian, Hungarian, Georgian, Slovenian, Slovak, Serbian, Latvian, Lithuanian, Estonian, Filipino and Swedish.

In addition, you can edit Language strings directly in the Language table.



Module Name	Screen Name	Element Name	Default (English)	Spanish
Module1	Main	Button1	Write to Table	Escribir en la tabla
Module1	Main	Button2	Read from Table	Leer de la tabla
Module1	Main	Button3	Clear Table	Clear Table

You can also export a Language file, translate or edit it in Excel, and then import it back into the project



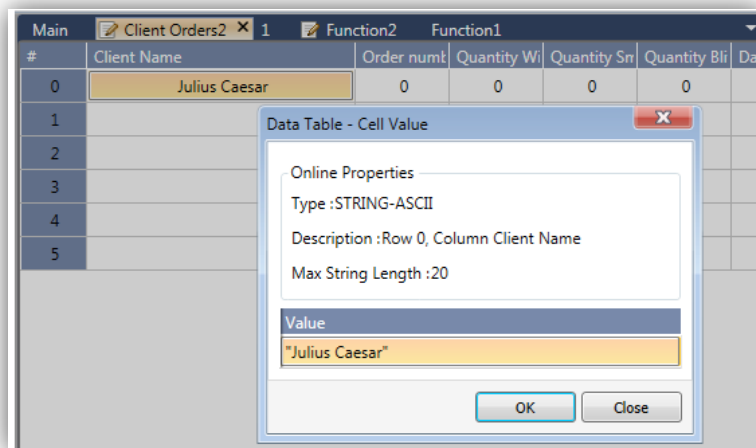
The screenshot shows the software interface with the 'Languages' menu open. The 'Import Language Texts from Excel' and 'Export Language Texts to Excel' options are highlighted. Below the menu, the 'Solution Explorer' shows the project structure. The 'Languages' window is open, displaying a table of language strings for Spanish. An Excel spreadsheet titled 'Spanish.xls' is also open, showing the same table of language strings.

Module Name	Screen Name	Element Name	Default (English)	Spanish
Module1	Main	Button1	Write to Table	Escribir en la tabla
Module1	Main	Button2	Read to Table	Leer de la tabla



## Data Tables: Direct Edit

Within UniLogic, you can now click on a Data Table cell to directly enter or edit values.



This version also supports Export and Import from Excel



## HMI Screen Jumps

- You can select whether to Show Hourglass in a Screen's Properties to display an hourglass during screen transitions.
- Displays now load faster.

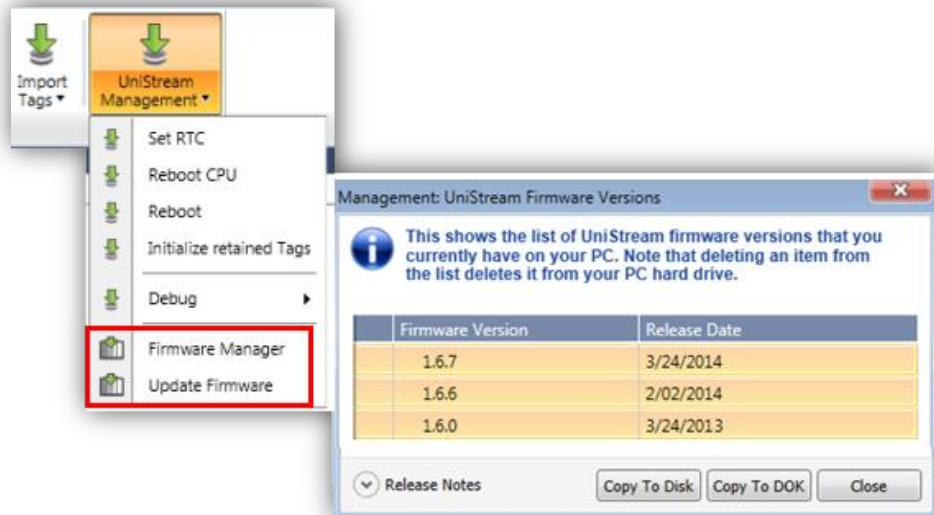


## Firmware Management

When you download a project, UniLogic now checks to see if the firmware in the controller is compatible with the UniLogic version.

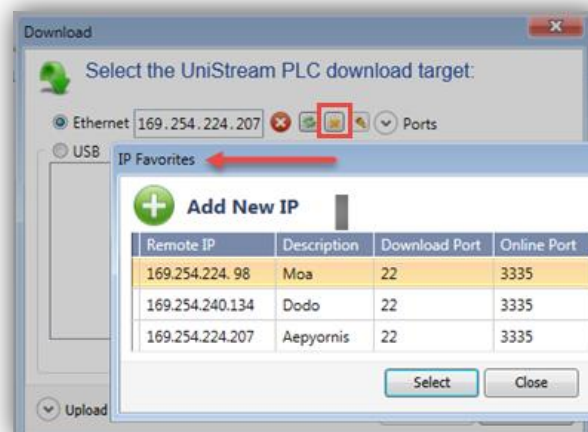
In addition, the PLC tab on the program ribbon offers Firmware Management tools:

- The Firmware Manager which locates all firmware files on your PC.
- Update Firmware, which connects to the Unitronics website and downloads any new firmware releases.



## Ethernet Favorites

When you select Ethernet PC-PLC Communications, you can use IP Favorites. This is a global file that is available in all of your UniLogic projects.



---

**New HMI Editor features**

This version supports a number of new features:

- Apply Layout: Select multiple HMI elements of the same type/ list of text/range, and then right-click to apply font, font alignment, and other attributes.
- Copy & Paste of object now retains the object's location.
- Changing font properties causes all future elements to use the new setting.
- Duplicate Screens via right-click on the screen in Solution Explorer.

---

**Actions: Sounds**

Actions now offer a System Sound Library.



---

**Keep last Communication method**

When you establish PC-PLC communications, UniLogic will continue to use the last communication channel you used, whether via Ethernet or USB, for as long as that channel is valid. You can change the channel by selecting Communications from the PLC tab on the ribbon.

---

**New Ladder Functions**

This version includes a number of new Ladder functions:

- Reset Numeric
  - Set Date/Time from Ladder
  - Copy Byte
  - String compare 8-16-32
  - Find and replace in array/buffer
  - Swap: 16/32 bit tags
  - Swap Array/Buffer
-

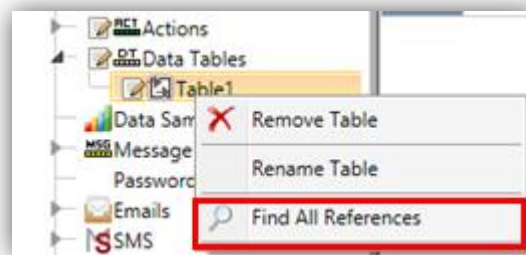
---

**Data Tables**

Indexed Data Tables (DTIs) offer new Ladder functions:

- **Find Value in DTI Column**  
Finds a value in a column and writes the row index number into a data tag.
- **Copy Array to Column in DTI**  
Copies an array, or part of an array, into a specified column in a Data Table column.
- **Copy DTI Column into Array**  
Copies data from a Data Table column into an array.
- **Copy Column to Column in DTI**  
Reads data from one DTI column and writes it into another column. The columns may be in different Data Tables.
- **Write value to DTI Column**  
Writes values into a column in a DTI. You can use it to initialize a column.
- **Find Values in DTI Row**  
Searches a range of rows for data that matches the current contents of a struct.

In addition, you can find all locations where a Data Table is referenced by right-clicking the Data Table in the Solution Explorer.



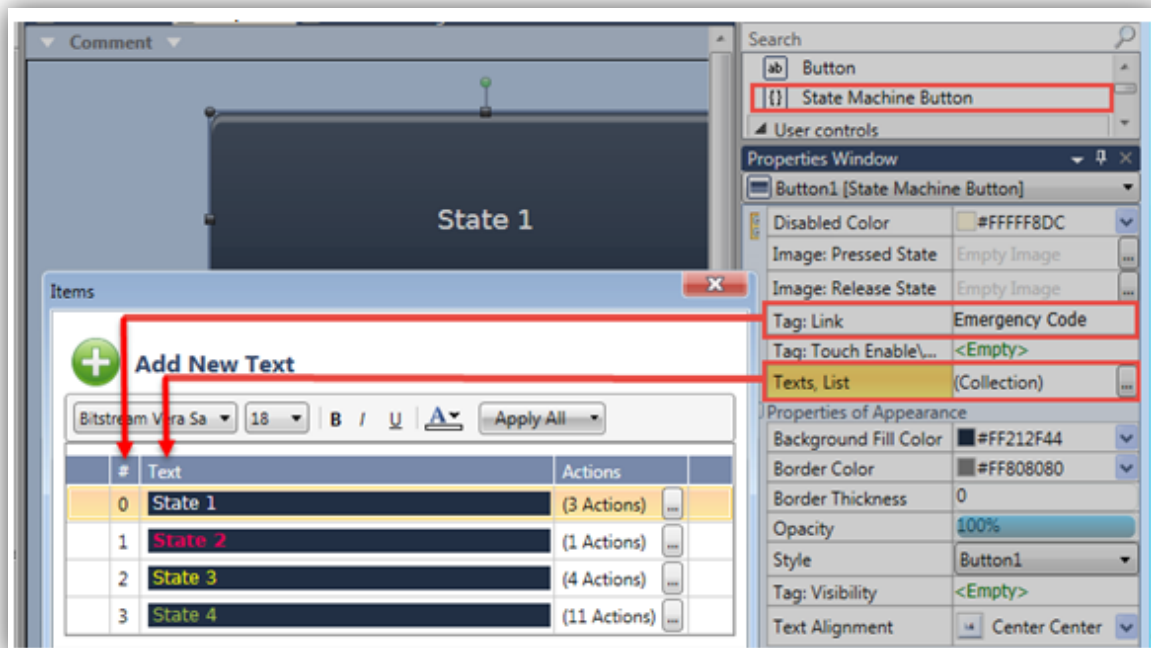
---

**Toggle Online Test Mode** Press F9 to toggle OnLine Mode on and off.

---

## State Machine Button

This button enables you to use the value of a register to display variable text within a button, and to drive multiple Actions via the button.

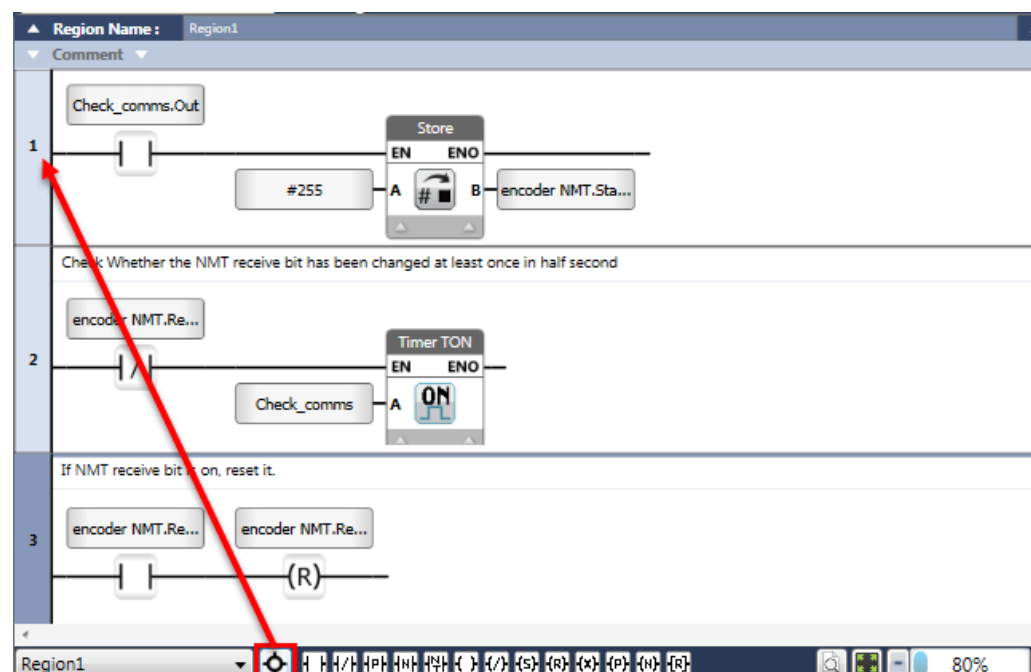


## Keyboard on Screen

A new system tag, Keyboard Bit is ON when the keyboard is displayed on the UniStream Panel. Keyboard Bit is located in the System> General> struct

## Top of Region

A new icon enables you to jump to the top of the region you are editing.



### Download Media changes

As of this version, project media Audio files will download to SD card. Note that in older projects, audio was stored in Flash memory. When these projects are edited in this version and up, any previous audio files will continue to be stored in Flash; however any added audio files will download to SD card.

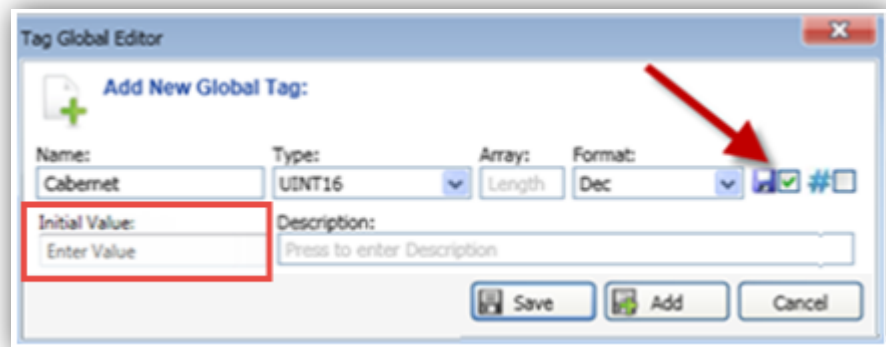
### Initial Values at Download

When you check Retain, you have the option of entering an Initial Value.

If you:

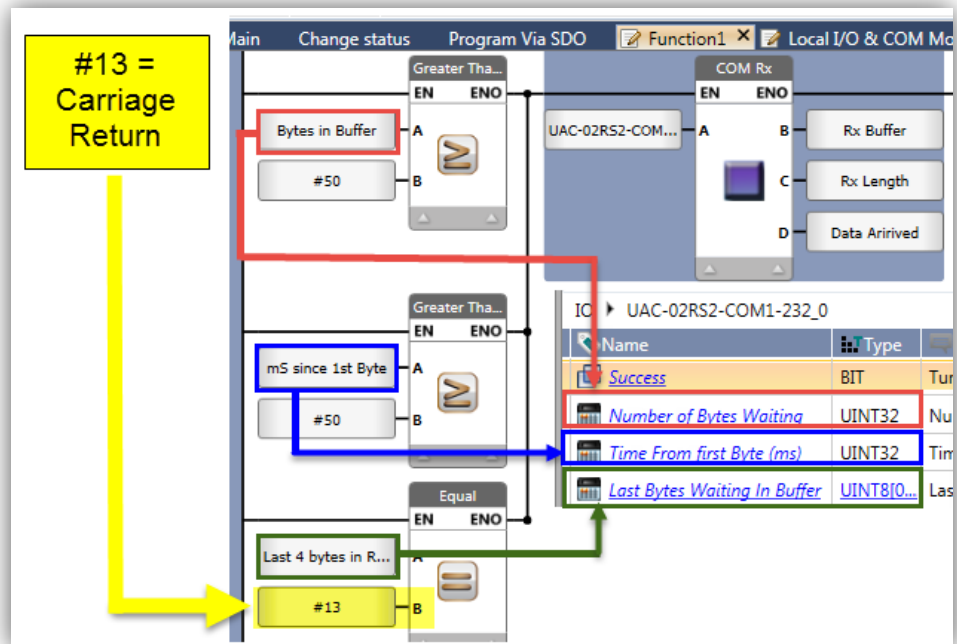
- Enter a value, that value will be downloaded with the application **first time** the tag is downloaded to the PLC.
- Do not enter a value, the tag value will be initialized to 0 the **first time** the tag is downloaded to the PLC.

Note that if you change a tag's Data Type, the tag will be initialized to 0 at download.



### Rx Terminator

You can use the members of the struct of COM Modules, the CPU RS485 port or the struct of the USB port (set to Serial Communications) to monitor incoming strings for terminators such as length, silence, and ETX characters.



## Known Issue

Only one .gif may be placed on a screen. If there is more than one, UniLogic will display a compilation error.

## UniLogic 1.5 Rev 3, UniStream OS 1.5.0, February 2014

### Timer Preset Value Retained

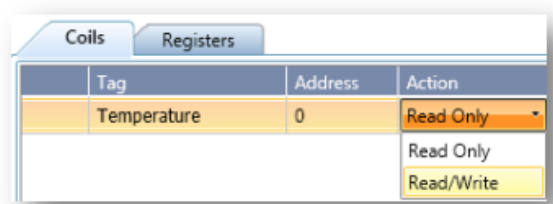
Starting from this version, modified Timer Preset Values are retained whether they are edited via HMI entry or Ladder code.

### Ladder Coil Element Modified

When viewing Ladder code at certain resolutions, some users had trouble differentiating the Contact elements from the Coil elements. The Coil element has been modified to make the difference clearer.

### MODBUS Slave Action Text

Previously, the options were Read and Write. The options are now Read Only and Read/Write. Note that the actual functionality is unchanged, only the text has been modified.

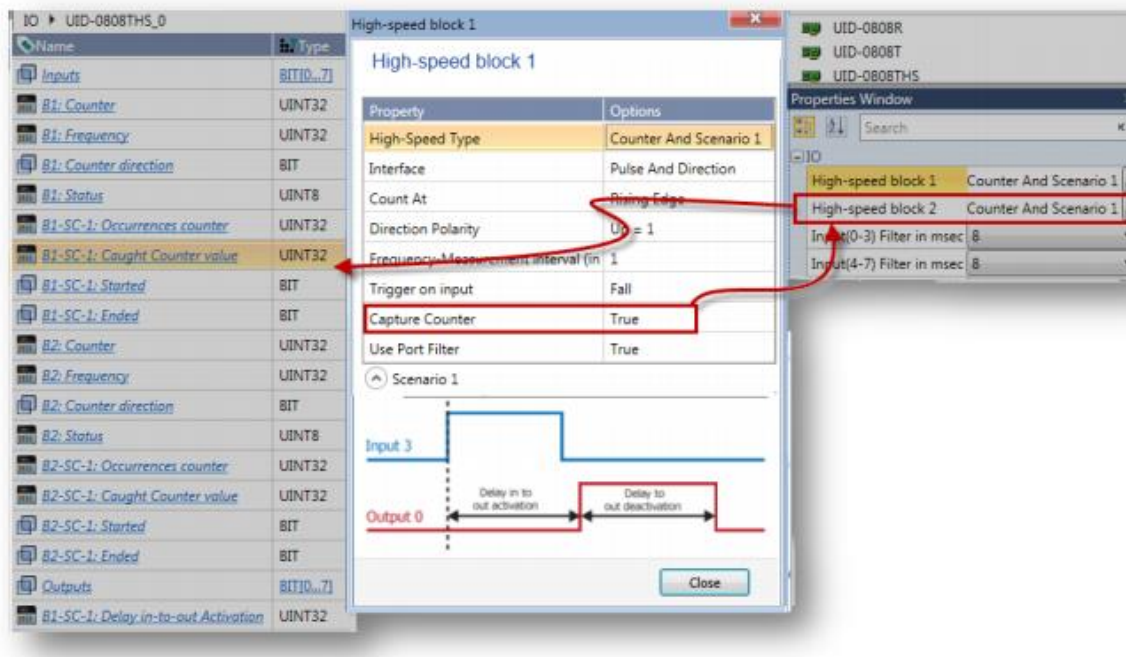


## Hardware Configuration - High-speed Counter Block: Capture Counter

When you configure a High-speed block, setting the High-Speed Type to Counter And Scenario 1 shows a new property, Capture Counter. Use this to record the value of the high-speed counter in the other Block into a data tag in the I/O module's struct called Caught Counter Value.

This means that activating:

- Capture Counter in Block 1 will record the counter value in Block 2 into the tag B1-SC1: Caught Counter Value, as shown in the next image.
- Capture Counter in Block 2 will record the counter value in Block 1 into the tag B2-SC2: Caught Counter Value.



## Bug Fixes: Fixed in the Current Version

### COM Module UAC-02-RS2, Modem

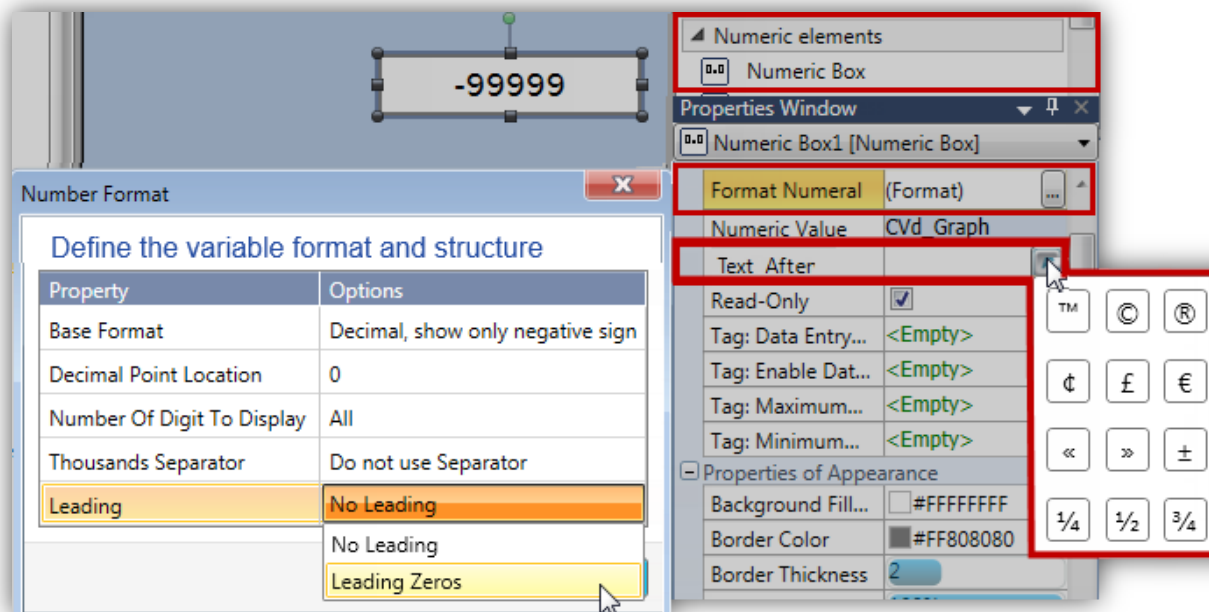
In certain cases, the Modem port setting did not work.

## UniLogic 1.4 Rev 3, UniStream OS 1.4, Rev 1, January 2014

### HMI Element Numeric Box: New Features

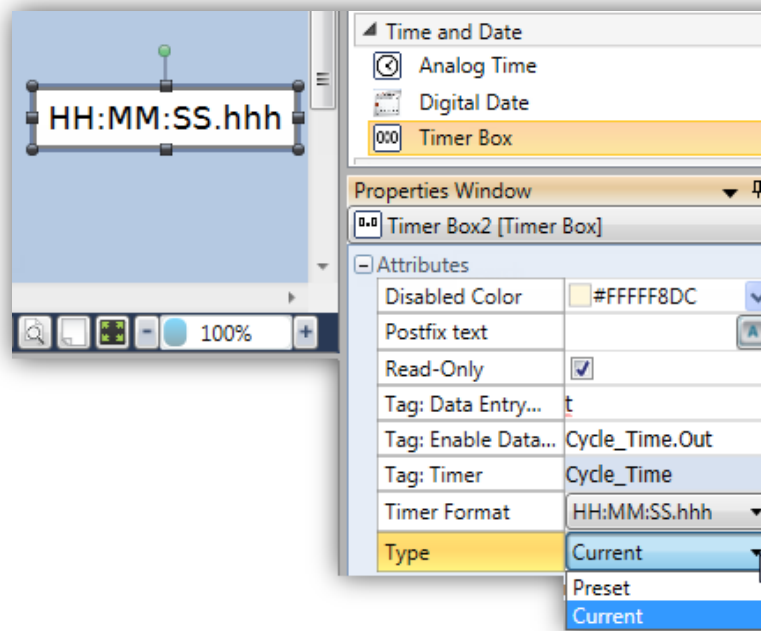
- Text After
- Timer Format
- Number of Digits to Display
- Leading Zeros
- Convenient Special Characters for Text After





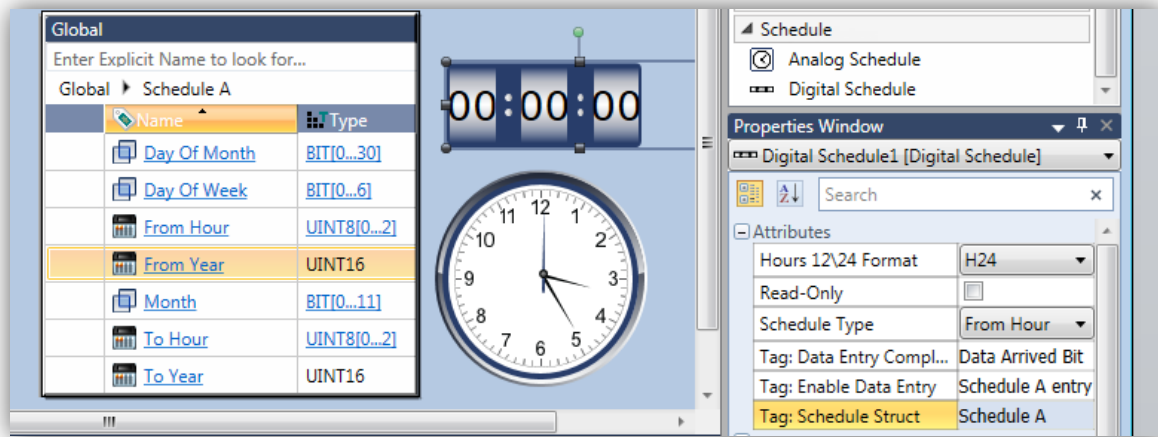
### **HMI Timer Box Widget**

Time and Date widgets now include Timer.



### **Schedule Widgets**

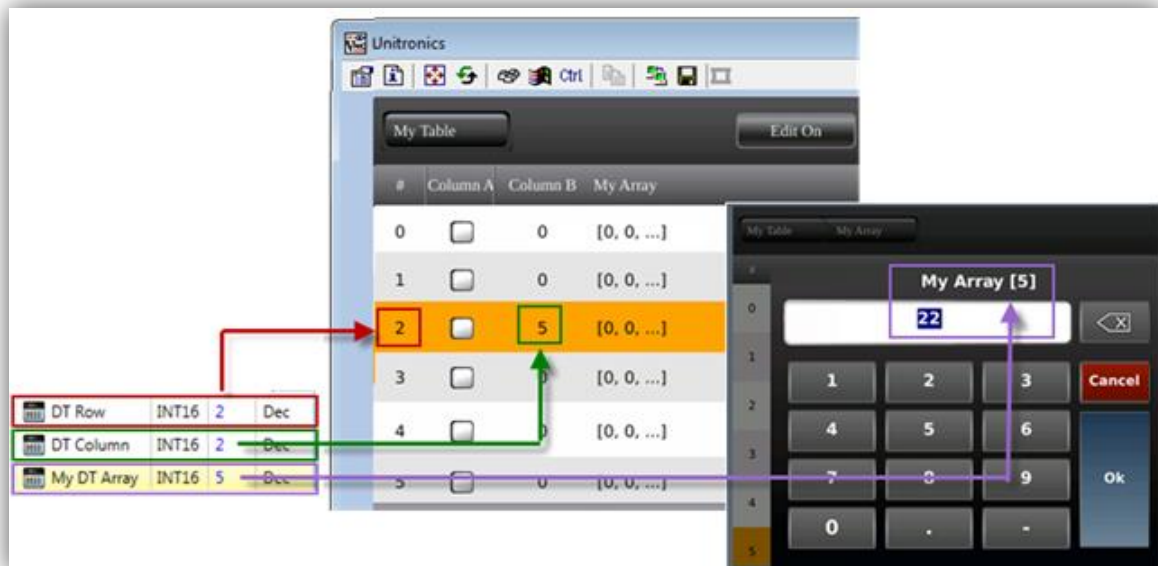
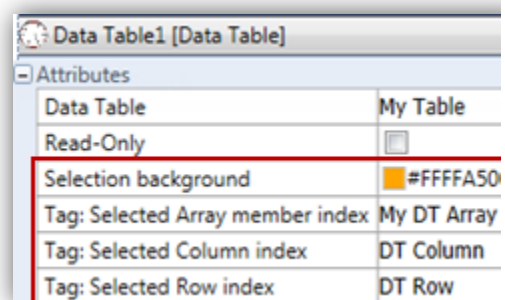
Use the HMI schedule widgets to display Schedule times from the Schedule struct. You can also enable a user to enter Hour time data.



## Data Tables: HMI Widget Editing Mode

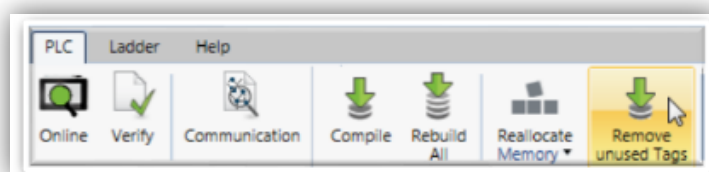
Four new parameters enable you to:

- Highlight the selected row
- Record the column and row of the current selection
- Record which array member is currently selected



## Remove Unused Tags

Click this on the PLC tab to remove unused Global and Timer tags.

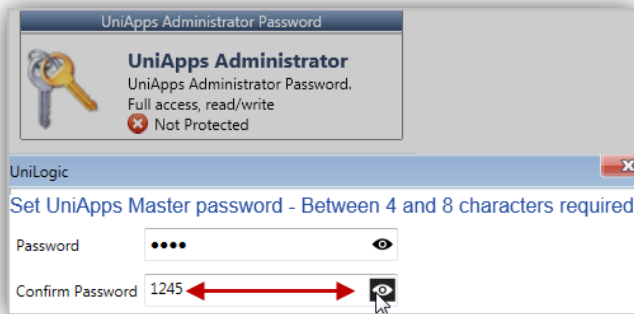


---

## **Passwords: View Typed Characters**

You can reveal the just-typed characters in:

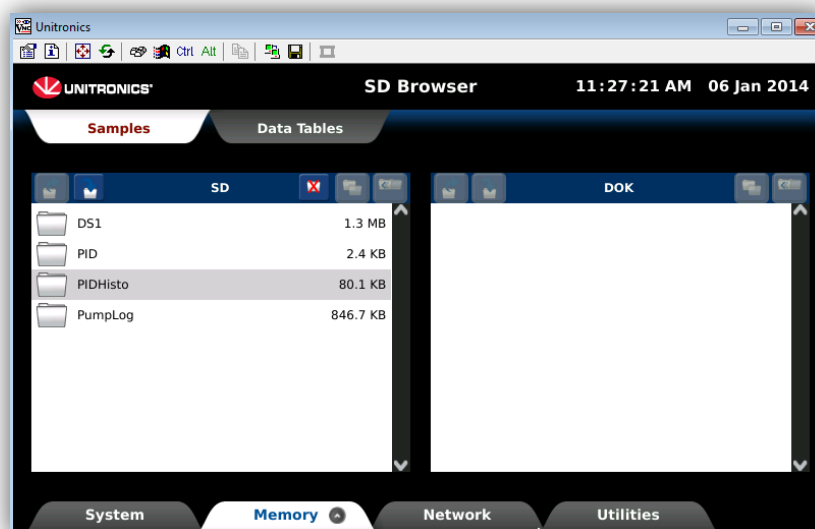
- UniLogic Password Manager, by clicking the 'eye' icon.
  - In UniApps, by touching the 'Eye' icon.
- 



---

## **UniApps: Improved SD Browser Interface**

The browser now offers a slider and colors for easier navigation.



---

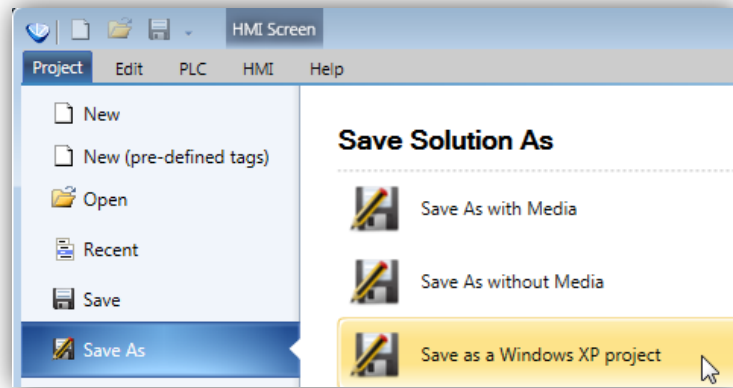
### **Save as XP**

Use this option if you have written your project on a PC running Windows 7, but want to ensure that it can be edited on a PC running Windows XP.

This services the Known Issue

### **Windows Versions and UniLogic Project Issues**

documented in the previous version, UniLogic 1.2.5.



---

## **Bug Fixes**

### **Turkish Regional Setting**

When Format settings (typically Control Panel>Clock, Language, and Region> Region and Language> Format) were set to Turkish (Turkey Format), certain actions such as Delete or Copy caused the program to close.

### **Struct/Array Editing Issue**

When the user created a Struct or Array, edited the entity name, and then saved the project, the struct or array would not load or compile correctly.

---

## **UniLogic 1.2.5, UniStream OS 1.2.2 December, 2013**

### **Chinese Support**

HMI Text Elements now support Chinese characters.



---

### **Download without Reset**

Certain program changes will no longer require reset after download.

---

### **Mouse: Plug-and-play**

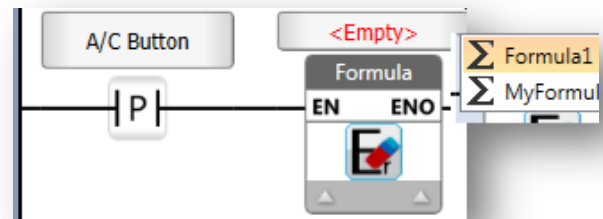
Plug a mouse into a panel USB port to operate the screen via mouse.

---

---

## **Formula**

Use Formula to build mathematical expressions, save them, and use them throughout your program.



---

## **New HMI Element: Password Widget**

You can insert a Password HMI widget that requires operators to enter a password via the controller's keyboard. When the user touches it, the virtual keypad appears, enabling the user to enter the password. Via HMI Actions, you can drive a number of tasks according to the result.

---

## **FTP Client/Server**

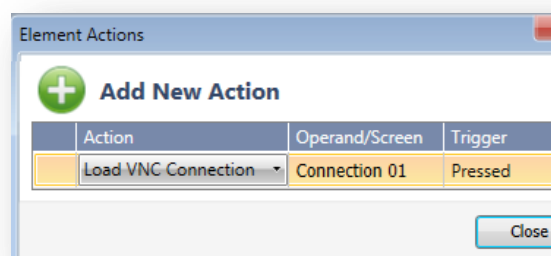
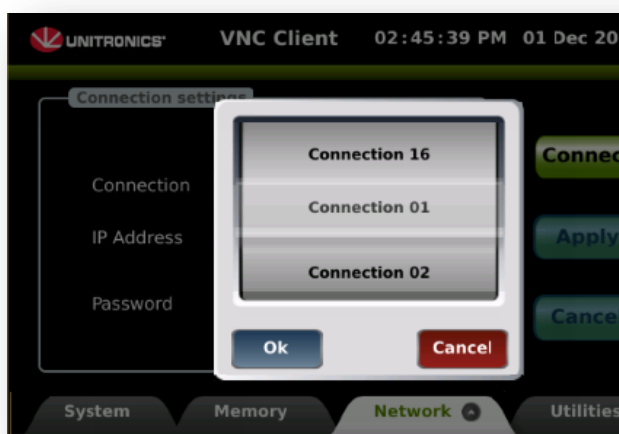
Configure a UniStream controller as FTP Server and/or Client. Use the Ladder elements COM>FTP to receive and send files.

---

## **VNC Client: New HMI Action**

Enable UniStream controllers to access other UniStream controllers.

Use the HMI action Load VNC Connection to display another UniStream controller screen on its screen.



---

## **New Touch Events System Operands**

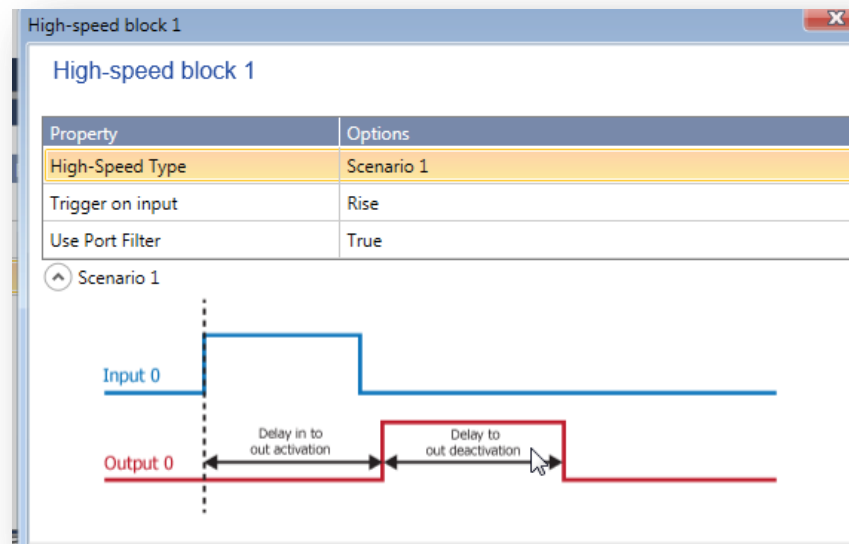
"Touched Bit" is ON while the touch screen is actually being touched.

System ▸ General	
Name	Type
Touched Bit	BIT
Coordinate X	UINT32
Coordinate Y	UINT32

---

## **High-Speed I/Os: Embedded Scenarios**

New scenarios make it easy to select the appropriate configuration for your application.



### **Simplified OS update from UniLogic**

From this version on, UniLogic diagnoses when the UniStream OS is outdated. UniLogic then prompts you to plug a USB stick into your PC to download an updated OS, which you can then install into the controller.

### **Update from the Web**

The Help tab contains new options for updating BIN and Help files



### **Ladder/HMI Library—Reuse your work**

UniLogic now includes a global library that is accessible from the Solution Explorer. Any Ladder Function and HMI Screen you place here will be available for use in all UniLogic projects.

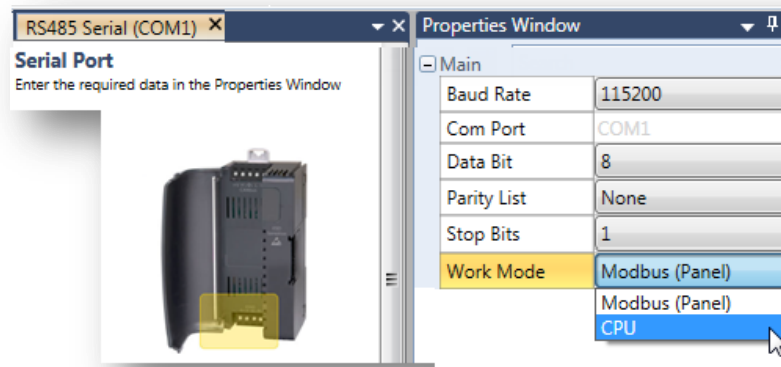
### **MODBUS via Ladder Utility**

By default, MODBUS is set to run operations periodically. You can now run operations according to Ladder function, using the Ladder element MODBUS Aperiodic (Ladder Triggered).

### **RS485 via Panel or via the CPU**

You can configure the serial port on the CPU:

- To run MODBUS, via the panel.
- To run Serial communications for serial devices via the CPU.

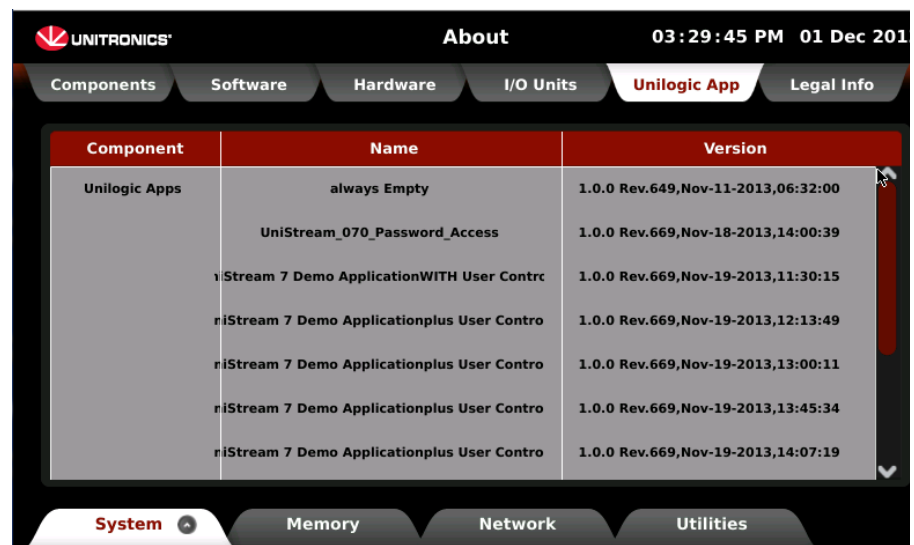


### **VNC Server: supports multi clients**

VNC server now supports multiple clients, such as smartphones.

### **UniApps Download Signature History**

View the download history by accessing UniApps>System>About> UniLogic Apps tab.



### **Remote I/Os: Now supports up to 8 adapters**

UniStream can now support up to 8 to 8 EX-RC1 expansion adaptors; each adaptor can support up to 8 I/O modules.

### **UniPics: Expanded Library**

UniStream's free graphic library has a number of new images.





## **Export/Import Module**

Right-click on a Ladder Module and select import or export it with all functions, or an HMI module to import or export it with all of its screens.

---

## **Bug Fixes**

### **Display Initial Values for Display**

When entering an HMI screen, there was a short delay before the Image elements refreshed to show the actual state.

---

### **Export/Import**

Issues relating to tags have been fixed.

---

## **Known Issues**

### **Windows Versions and UniLogic Project Issues**

The UniLogic installation uses different databases:

- Windows XP uses SQL 2008
- Window 7 and up use an internal database.

This causes issues when porting complete UniLogic projects, individual Ladder functions (UDFBs), and HMI screens:

- Opening a project that was written in Windows 7 (or later) in Windows XP will cause UniLogic to shut down.
- Trying to upload a project into XP that was downloaded using Windows 7 (or later)
- Importing Ladder functions and HMI screens that were written in Windows 7 (or later) in Windows XP will cause UniLogic to shut down.