Wizcon 7, Version 7.5 Release Notes

Introduction

This document includes updated information for Wizcon 7 for Windows and Internet, Version 7.5. The information in this document contains late breaking changes and additions to Wizcon 7.5.

What's New

Listed below are some of the new or improved features in Wizcon 7.5.

- Wizcon for Internet integration
- Wizcon's new and updated Internet Features
- Project Wizard
- OPC Support
- Image button
- Gradient Patterns
- Touch screen numeric keypad
- WizSQL Enhancements
- Saving Charts as Trends
- New Macros: Direct login and Exit Application
- Communication error time out
- Support for PLC address > 255
- New network APIs
- Network enable/disable
- Improved Wizcon DOS to Wizcon 7 conversion utility
- Print Control
- User password displayed as asterisks in User Definition dialog
- Improved Wizcon Language Disk full message
- Wizcon Language commands are Y2K compatible
- Installing Wizcon 7.5 on a PC with Wizcon 7.02
- Solved problems

Wizcon for Internet Integration

Wizcon for Internet is now part of Wizcon. If you do not want to use the Internet features you can disable the non-Web features.
Path: Wizcon Studio ⇨View ⇨Disable non-Web features

Old *WZNT* files extension should be renamed to *WZ7* and then the files can be used with Wizcon 7.5.

Wizcon's New or Updated Internet Features

Described below are Wizcon's new and/or updated Internet features.

Trend

The Trend feature provides real time and historical graphical view of tags' values over time.

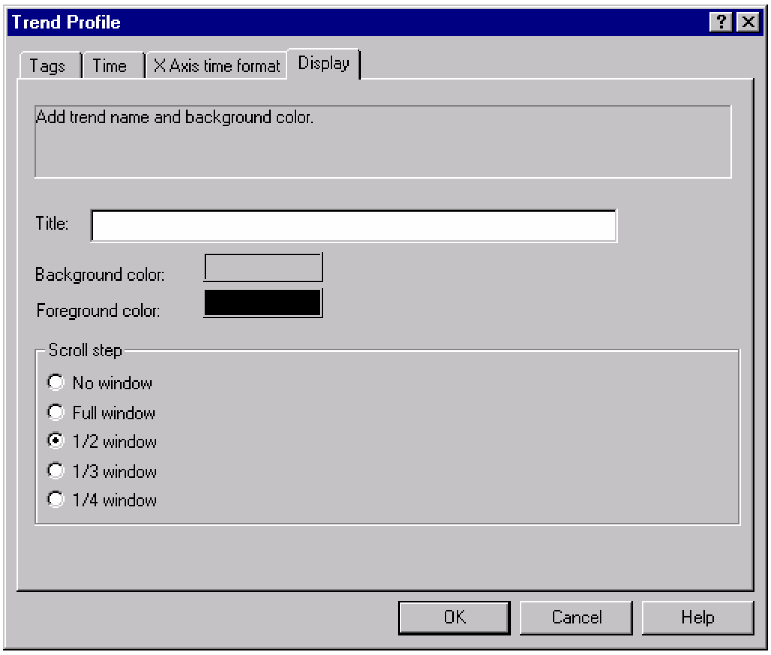
Wizcon for Internet architecture provides additional benefits for remote control applications and applications where frequent causal access is required. For those applications historical display of data is critical. In such applications an operator may wish to log in to his application at the end of the day and check what happened during the day.

The Trend feature includes:

- Historical cache mechanism – Offers improved performance with minimum load on the server.
- Asynchronous historical data download – As a result the Trend is always responsive to the user.
- Performance - On a local area network, performance is similar to Wizcon for Windows. It is possible to use trends over dial-up connection.
- Show multiple tags over time.
- Historical and on-line data support.
- X & Y axis labeling.
- Offers different Line Colors and Line Types.
- The trend component takes less than 400K to download.

Trend Scroll step

In the Trend Profile Dialog ⇨ Display, you can select the scroll step (as in the chart).
Default – ½ window.



Add trend name and background color.

Title:

Background color:

Foreground color: ■

Scroll step

○ No window

○ Full window

● 1/2 window

○ 1/3 window

○ 1/4 window

☐ **To regulate automatic scrolling:**

From the *Options* menu, select **Online scroll step**. A popup menu displays the following options:

Select	**To enable**
No step	one small bar at a time appears on the time scale.
Full window	A scroll of one full window.
1/2 window	The default step. A scroll of one-half of the current window size.
1/3 window	A scroll of one-third of the current window size.
1/4 window	A scroll of one-fourth of the current window size.

Time label

The time label in the trend applet at the browser is no longer in the format HH:mm:ss:sss but HH:mm:ss.

Tag Communication Status Indication

In Picture Viewer, all numerical and text display elements in the Picture Viewer show asterisks (****) when the tag associated with them is in communication error mode.

Improved Performance and Java 1.1 Support

This version is making use of Java 1.1 APIs. The Web browser must support Java 1.1 to work with Wizcon for Internet 2.0. Netscape Communicator 4.06 and Internet Explorer 4, both support Java 1.1.

HTML Generation

With this release HTML files created using Wizcon HTML Assistant no longer contain JavaScript code.

Faster Download Time

Wizcon for Internet Java applets are now packed in smaller packages, leading to improvement in download time.

Web Application Publishing

The *Publish To* option is no longer needed. Instead, to make the application available on the web, map Wizcon for Internet web application directory as the primary directory of your web server. For further information see the *Wizcon 7 User's Guide* or *Online Help*.

Class Files

When creating a new application, not under the original Wizfactory proj path, all the classes are copied from the Wizfactory path to the new application, the minute you create the first HTML file through Wizcon.

Please make sure to update your existing application classes whenever you update Wizfactory. Copy the updated class files from Wizfactory path to your application. That means to copy from the Wizfactory Class folder the following: jclass folder, Wizcon folder and *.jar and *.cab files.

Applets

The maximum number of concurrent applets that can be connected to one Wizcon Web server are 512. An applet is connected to a server, if it is opened in a browser (HTML page), even if it is not in the visible part. Application developers should consider having HTML with many applets and switching to different parts of the HTML, versus loading different HTMLs with small number of applets in each. The first way will save time in loading the applets at the expense of loading the communication. The second way does not load the communication more than is needed, at the cost of switching time between HTML pages.

Support for Rounded Box in Web

Rounded boxes are now supported in Browsers.

Project Wizard

A new Project Wizard is available. It allows applications developers to move easily from one application to another and to create new ones without the need to leave the 'Studio'. For further information see the *Wizcon 7 User's Guide* or *Online Help*.

OPC Support

Wizcon now supports both OPC client and server. OLE for Process Control™ (OPC) is the industrial software standard designed to provide business applications with easy access to plant floor data.

OPC is designed around a client-server model where the OPC Server provides an interface to the OPC objects and manages them. The OPC Server is responsible for data collection from a physical device for asynchronous distribution or synchronous collection by various OPC clients. The OPC Server also has the responsibility to update device data on behalf of OPC Clients, when an OPC Client issues a write.

The OPC Client has the responsibility to request connections to the server for data items (tags) of interest on the OPC Server. These connections can be temporary (Read or Write a value once) or continuous (Update on data change). The client needs only to utilize the appropriate server side interfaces to have complete functionality.

For further information about OPC and DCOM refer to the *Wizcon 7 User's Guide* .

For a list of available OPC servers refer to:

http://www.opcfoundation.org/OPC-CATALOG/opc_by_company.asp
and our Web site at: http://www.pcsoftintl.com/ for additional information.

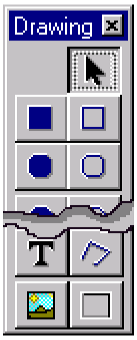
Image button

A Windows-like button is now available in the Wizcon Image. The button is a static object that can have normal attributes as other objects such as layers and colors. The main use of this object is to enable the application to contain a trigger object that has the same look and feel as a Windows button.

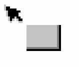
It is also possible to define over the button object dynamic, alarm or triggers objects and have the same roles as any other static object.

Defining a Button

To define a button use the new button tool on the Image Drawing toolbar – right at the bottom as shown below:

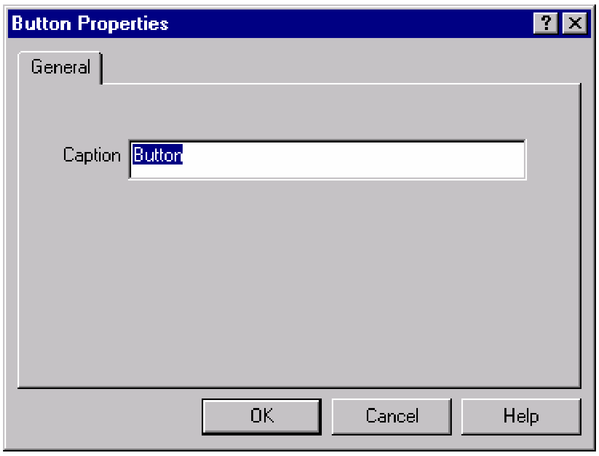


It is also possible to select the tool from the menu go to Edit⇨Drawings⇨Button Selecting the tool will show a specific cursor shown below:



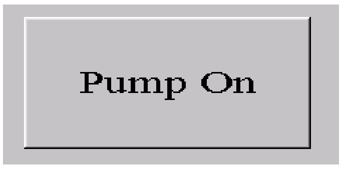
Click and hold left mouse button and drag to draw a rectangle (drawn in dash line) for the size and location of the button.

Releasing the mouse button will open the Button Properties dialog as shown below:



Caption: Button

Enter the text you want to appear on the button in the caption field. Default caption is *button* (in English). Press OK and the button will be displayed in your Image. A sample of a Button object is shown below.



The button is created with the following attributes

- The Button background color is Gray (regardless on the current fill color in the color tool)
- The caption color is the Line color as set in the color tool
- The caption is always drawn with transparent background color
- The caption font is the font attributes selected in the font toolbar
- The 3D effects color are always as shown (similar to Windows Button colors)
- The layer is the current active layer

The Button object can now be selected, moved or resized as any other object.

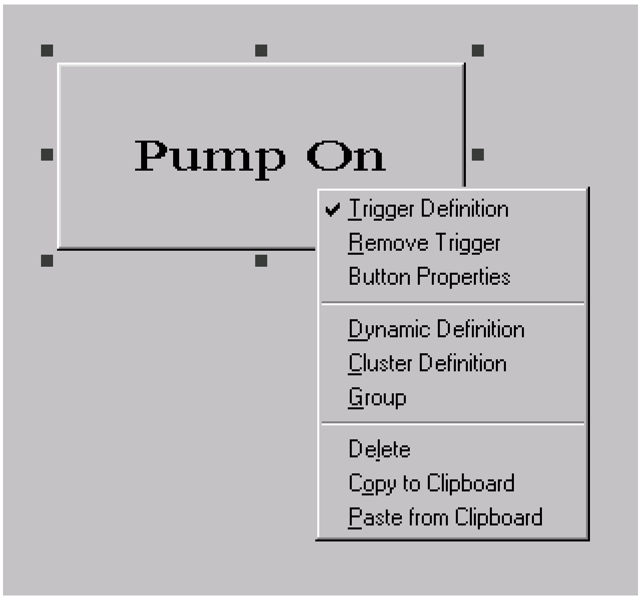
The caption is drawn at the center of the button. When resizing the button, the caption *does not* resize. To attain a different size caption, select the object and change the size in the font toolbar. You can also change the background color of the button by selecting a fill color in the color tool.

Although the caption is not a separate text object it acts similarly in the following aspects:

- Selecting a button will show the font style in the font toolbar
- Changing the style when the button is selected will change the font style of the button
- If the font style is changed through the Font Definition, then any button font that has this style will be updated.

To change the button properties (caption):

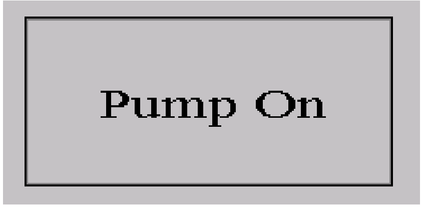
- Select the button and select the button tool
- Double click with left button on the object
- Right click on object and get a similar menu as shown with menu item 'Button properties'



Note: Button properties can be changed for only one selected object and not if the button is part of any segment (as dynamic or alarm object)

Trigger and Button

As stated, the main purpose of the button is to be a trigger. When the button is defined as trigger then pressing (activating) the trigger will show the button is in pressed state as long as the mouse button is pressed. The press-state looks like:



Notes: 1. The Image property Highlight Trigger Button must be turned on for this to work.
2. The text will be drawn a pixel down and to the right to show the 3D effect.

If any object is drawn over the button then it will be shown correctly when the button is not pressed. When the button is pressed the full rectangle will be shown, possibly hiding other objects.

The following are additional behavior characteristics of the button object:

- Selecting more than one button enables you to change attributes as color and font at one time.
- If the button is part of a group then over-loading color, affects the button too.
- It is possible to define over the button: dynamic, alarm or trigger and retain the same behavior as any other static object.
- If the button is defined as dynamic object then changing override line color will affect the background color.
- If the caption is larger than the button rectangle, the text will flow over the button perimeters. It will not resize the caption to fit the form.
- It is not recommended to use the following dynamic operations on buttons: Scale, Rotate, Fill, and Fill type. They do not have an effect on the buttons or the effect is unpredicatable.
- Buttons will not display the presses effect if they are grouped in an instance with more than one element. Effects on Dynamic and Alarm objects on *one* button operate OK, if there are no other dynamic objects on it.
- Font direction is left to right. Up, down and right to left are not supported.

Web support

The button is supported for the Web. Fonts are transferred to the browser as in regular text written in Image. Please note that when pressing on button, you do not see the pressed effect in the browser.

Button ASCII File

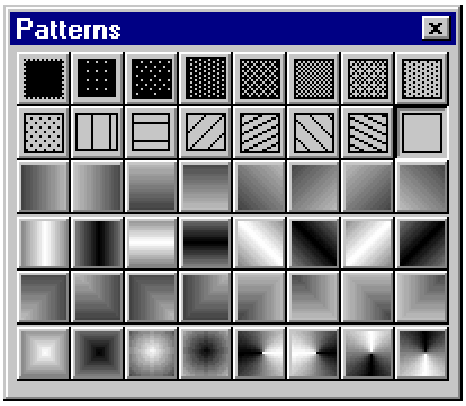
Below please find how a button is defined in an Image ASCII file (*.ILS).

```
Button  object:
OBJECT BUTTON 'object number' {
    'General data'
     FONT="'font style'"
     FACENAME= "'font name'" TEXT_SIZE= 'font size'   T_'font direction'     T_'font data'
    'box position'
     CAPTION: "'text'"
     ['Trigger definition' ]
}
```

Gradient Pattern

Image drawing patterns now support 32 gradient styles. The first color used for the gradient is the foreground color, while the last color used is the background color. Gradient fills are supported for the following objects: Text, Filled Box - Circle, and Polygon. Please note that pipes do not support Gradient fills.

The pattern tool selection looks like:



Listed below are the 32 gradient styles supported:

Line left to right

Line right to left

Line top to bottom

Line bottom to top

Line left-top to right-bottom

Line left-bottom to right-top

Line right-top to left-bottom

Line right-bottom to left-top

Line2 left and right to center

Line2 center to left and right

Line2 top and bottom to center

Line2 center to top and bottom

Line2 left-top and right-bottom to center

Line2 center to left-top and right-bottom

Line2 right-top and left-bottom to center

Line2 center to right-top and left-bottom

Angle to left-top

Angle to left-bottom

Angle to right-top

Angle to right-bottom

Angle from left-top

Angle from left-bottom

Angle from right-top

Angle from right-bottom

Rectangle to center

Rectangle from center

Ellipse to center

Ellipse from center

Cone from left

Cone from right

Cone from top

Cone from bottom

The following notes apply:

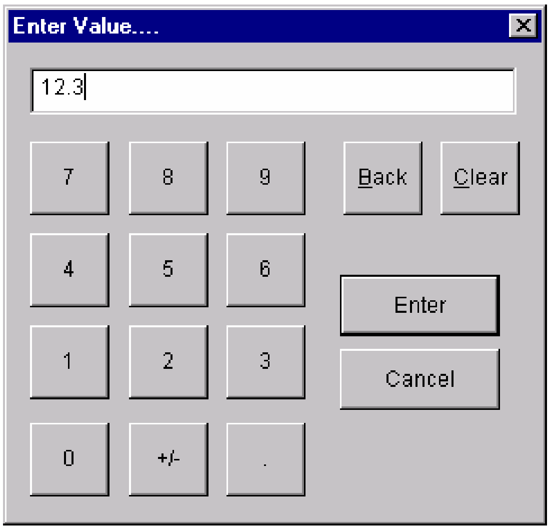
1. Gradients are not fully supported on Windows 95 / 98. Circles, ellipses and rounded rectangles will be drawn as rectangles.
2. In the ILS file the gradient pattern numbers run between 100 to 131 ordered by the above list.
3. Bitmap fonts are not effected by the Gradient.
4. After changing attributes of gradient objects, or moving from select mode, image may need refresh.
5. Performance may suffer when drawing large gradient surfaces with many steps. It is advisable that only static (background) object will be using the Gradient. Dynamic over Gradient is possible but performance may suffer. It is also advised to do development in low number of steps and later increase steps for run-time.
6. To set the gradient steps use Image⇨Properties⇨View
or in the Wiztune.dat file, manually set the tuning parameter IMG_GRAD_STEP= n). Valid values are between 2 to 255 – Default is 16.
Re-enter Image.
7. Transparent color will have 'unknown' effect over fill.
8. The gradient is not affected from rotation or transformation. It is possible to rotate objects with Gradient but the Gradient orientation will not be rotated
9. No supported on Web. Please note that if patterns are used and then brought to the Web, the patterns turn to solid colors.
10. The gradient for a group works like for a pattern.
11. It is not possible to select Gradient fill type in Dynamic definition Fill Type range.

12. The gradient's center reference point for filled polygons, orthogonal polygons, and filled arcs is always calculated by the visible parts of the objects. Therefore, when you scroll and the object partially disappears from view, you'll notice that the object's center point moves upwards away from the center.

Touch Screen Numeric Keypad

In order to enable Wizcon to support touch screens, a new type of trigger is available. In the Wiztune.dat file, manually set the tuning parameter IMG_TRG_KEYPAD = YES
Default is NO
Restart Wizcon for it to take effect.

The Key Pad is available for Data Entry triggers of numeric type. The following dialog will be opened:



Note that keypad is not supported in browser.

The keypad operates as any other numeric keypad. Press the **Back** button to delete one number back. Press **Clear** to erase all numbers in the field.

You can set the location of your keypad anywhere on the screen. Press the **Test** button and you can move the keypad to any location. When you reopen Wizcon and operate the keypad, it will be opened at the same location as you selected.

WizSQL Enhancements

Mathematical Functions

The following mathematical functions are now supported: ('expression' is any mathematical expression that evaluates to a number)

- SIN - Calculate sine Syntax : SIN(expression) expression angle in radians
- COS - Calculate cosine Syntax : COS(expression) expression angle in radians
- TAN - Calculate tangent Syntax : TAN(expression) expression angle in radians
- ASIN - Calculate arcsine Syntax : ASIN(expression) expression between –1 to 1, return the arcsine of expression in the range –π/2 to π//2 radians

- ACOS - Calculate arccosine Syntax : ACOS(expression) expression between –1 to 1, return the arcsine of expression in the range –π//2 to π//2 radians
- ATAN - Calculate arctangent Syntax : ACOS(expression) expression any number
- POWER – Calculate power Syntax POWER(x, y) where both x and y are expressions returns the value of x^y
- ROOT - Calculate square root. Syntax ROOT(expression) expression>= 0 returns the square-root of *x*
- LN – Calculate natural logarithm Syntax LN(expression) where expression > 0
- LOG – Calculate base 10 logarithm Syntax LOG(expression) expression>0
- BIT – Calculate a bit. Syntax BIT(I,B) return the bit B value from the I integer value return values are 1 if the bit B is set and 0 if it is reset.
- MAX – Calculate maximum. Syntax MAX(x,y) where both x and y are expressions returns the maximum out of the two parameters
- MIN – Calculate minimum Syntax MIN(x,y) where both x and y are expressions returns the minimum out of the two parameters
- ABS – Calculate absolute value. Syntax Abs(expression) return the absolute value of expression. In this case to differentiate from history abs function, you must enter Abs
- FLOOR – Calculate the floor Syntax FLOOR(expression) return, returns a floating-point value representing the largest integer that is less than or equal to expression
- SIGN– Calculate the signSyntax SIGN (expression) return –1 if expression<0 and 1 if expression >=0

System Variables

The following system variable are now supported:

- $MINUTES - return the current minutes 0 to 59
- $HOUR - return the current hour 0 - 23
- $WEEKDAY return the day of the week 1 to 7
- $MONTHDAY return the day of the month 1 to 31
- $MONTH return the current month 1 to 12
- $YEAR return the current year 4 digits (like 1999)

These variables can be used in any numerical expression. Note that condition statements that are based only on these variables (as IF $HOUR==12) will not work since Tag changes are event driven. IF events are only driven by tag changes.

Macro Command

Support for running Wizcon macros is now available. Use the MACRO command to execute macro. Syntax

MACRO macro_name

macro_name is a string expression that will be used as the Macro name. Macro names are eight characters long.

Message Box

A function to display Message Box from WizSQL script is now available. The function is similar to the standard Windows API MessageBox and has the following syntax

RC = MessageBox(String_expression1,String_expression2,Flags).
Note that MessageBox must be written as shown, it is case sensitive.

String_exppresison1: The message body

String_exprssion1 : The message title

Flgs: combination of one of the following constants:

- MB_OK - The message box contains one push button: OK.
- MB_OKCANCEL - The message box contains two push buttons: OK and Cancel.
- MB_ABORTRETRYIGNORE - The message box contains three push buttons: Abort, Retry, and Ignore
- MB_YESNOCANCEL - The message box contains three push buttons: Yes, No, and Cancel
- MB_YESNO - The message box contains two push buttons: Yes and No
- MB_RETRYCANCEL - The message box contains two push buttons: Retry and Cancel
- MB_ICONHAND - A stop-sign icon appears in the message box.
- MB_ICONQUESTION - A question-mark icon appears in the message box
- MB_ICONEXCLAMATION - An exclamation-point icon appears in the message box
- MB_ICONASTERISK - An icon consisting of a lowercase letter *i* in a circle appears in the message box
- MB_SETFOREGROUND -The message box becomes the foreground window
- MB_DEFAULT_DESKTOP_ONLY -The desktop currently receiving input must be a default desktop; otherwise, the function fails. A default desktop is one an application runs on after the user has logged on
- MB_TOPMOST - The message box is created with the WS_EX_TOPMOST window style. This will put it over all other non topmost Windows
- MB_RIGHT -The text is right-justified
- MB_RTLREADING -Displays message and caption text using right-to-left reading order on Hebrew and Arabic systems

The return codes are as follows:

- IDABORT - Abort button was selected.
- IDCANCEL - Cancel button was selected.
- IDIGNORE - Ignore button was selected.
- IDNO - No button was selected.
- IDOK - OK button was selected.
- IDRETRY - Retry button was selected.

- IDYES - Yes button was selected.

  Following is example to usage of MessageBox function

```
…
@B = MessageBox ("Run Macro?","My Title", MB_YESNO
|MB_ICONASTERISK|MB_SETFOREGROUND );
    IF (@B==IDYES)
       MACRO "LoadMain";
```

This will display the message ‘Run Macro?’ and if user pressed Yes it will run the macro ‘LoadMain’

***Caution**: WizSQL does not execute any commands when a Message box is open.*

Saving Charts as Trends

When you save a Wizcon chart, automatically a trend file is also created (**.wnt*). When you update the trend, and then you return to your chart and save it, a message appears asking you if you want to save the chart and overwrite the trend. Yes, will overwrite the trend file and No will only save the chart.

Notes:

1. Trends do not support graphs with x-axis defined as a tag. Therefore, if the user created a chart with this kind of graph the new trend will be a regular graph.
2. In the ‘Time definition’ dialog of the ‘chart’, the user can choose ‘relative’ and write the time back in the format “hours:minutes:seconds”
(for example: 03:40:50) but in the Trend definition the user can write only relative hour, so in the example above the new trend will be 4 hours relative (the time will be rounded up)
3. In the chart the user can choose for the line type – Line, Line with markers, Markers only and Bar. In the trend there is only Line and Line with markers, therefore Markers only in chart will become Line with markers in trend and Bar in chart will become Line in the trend.
4. It is not enough to write the title of the chart in the properties of the chart VP in order for it to be added to the trend, the user should press save on this chart after the title was added.
5. There is no foreground color in the chart definition so in the trend it will always be black (as the default for it in the trend definition)
6. 23 is the highest number that can be defined as relative time in the trend so if the user defined the time in the chart as ‘relative’ more then 23 hours back he could see only 23 hours back in the trend.

Support for PLC Address > 255

PLC address greater than 255 can now be used. There are up to 1024 different PLC (per VPI) addresses that can be used, where any address can be in scope
1 – 65535. Please note that this should be used for driver development only.

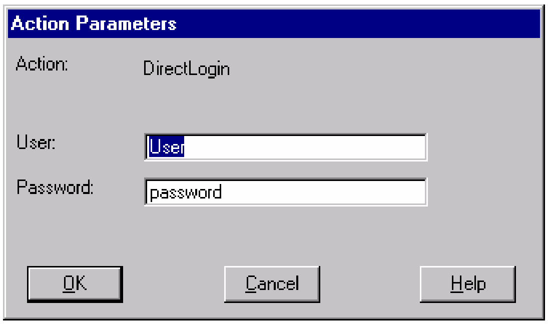
New Wizcon Macros

Two new macros are available in Wizcon version 7.5:
Direct Login and Exit Application.

Direct Login Macro

A new macro *Direct Login* is now available. It has two parameters User name and Password. No validation is done on the values entered. Note that when activated no dialog opens. Path: Design ⇨ Macros

The following is the dialog for this macro parameters:



Action: DirectLogin

User: User

Password: password

Exit Application Macro

The Exit Application macro enables you tor to exit an application easily. To define this macro select: Design ⇨ Macros.

In the Macro Definition dialog Press **Action** and select the *ExitApplication* parameter from the dropdown list. Choose an **Accelerator key**, press **Add** and **Save**.

Communication error time out (advanced users only)

The communication error time out can now be controlled by using a new internal,(without interface) tuning parameter COMMERR_TIMEOUT. Default value of this parameter is 30 (seconds) To change default value, user should add to WIZTUNE.DAT the following string:
COMMERR_TIMEOUT=n,

Where *n* is number from 5 to 180. If n < 5 – it will be set to 5, if n >180 – it will be set to 180.

In addition, the network query timeout can also be modified by using the new tuning parameter NET_QUERY_TIMEOUT, whose range can be 1 – 60 (seconds). Default value of this parameter is (as it always was for query) 6 seconds (this value will be accepted if parameter is absent). You should add this parameter manually to WIZTUNE.DAT :
NET_QUERY_TIMEOUT = n,

Where *n* is number from 1 to 60. If *n* < 1 – it will be set to 1, if *n* > 60 – it will be set to 60.

Please note that the value of this parameter will influence network movement. For example, when the network station starts, it always checks if backup station exists, and if value of this parameter is large enough and backup station does not exist, or is not present. This can take a lot of time until station will receive answer.

New Network APIs (advanced users only)

The APIs listed below allow definition of network properties.

APIs supported in Visual Basic + C:

- WizSetNetworkActive Set network to active/not active.
- WizSetNetMaxDelay To set maximum network time or maximum change delay.
- WizSetNetProtocol To choose network protocol: net BIOS or TCPIP.
- WizSetNetBackup To set hot backup parameters.
- WizSetLocalStationCfg To set local station configuration.

APIs supported in C only:

- WizGetRmtRecDataFull To get remote data: gates to be recorded and alerts lists. this table contains the full name, this means: "station:gate".
- WizSetRmtRecData Update the file which contains the remote data (tags and alarms) to be recorded on the local station.

Below please find a detailed explanation of the Network APIs:

```
/***************************************************************/
USHORT EXPENTRY
WizSetNetworkActive (WIZ_HOOK hook, PSZ YesNo)

Purpose : Set network to active/not active.
Input   : hook   - Wizpro hook.
        : YesNo  - "YES" - To set network to active.
                   "NO"  - To deactivate network.
return  : rc     - WIZ_NO_ERR
                   WIZERR_BAD_PARAMS
/***************************************************************/
```

```
/***************************************************************/
USHORT EXPENTRY
WizSetNetMaxDelay (WIZ_HOOK hook, PSZ Selector, PSZ NewString)

Purpose : Set maximum network time or maximum network change delay.
Input   : hook   - Wizpro hook.
        : Selector , NewString –
                   If Selector = "NET_MAXTIMEDELAY"
                   (To set maximum network time) then
                   NewString = maximum time.
                       If Selector = "NET_MAXCHANGESDELAY"
                       (To set maximum network change delay)
                       then NewString  = change delay .
return  :  rc    - WIZ_NO_ERR
                   WIZERR_BAD_PARAMS
/***************************************************************/
USHORT EXPENTRY
WizSetNetProtocol (WIZ_HOOK hook, PSZ NewString)

Purpose : To choose NPINTBS / NPITCP protocol.
Input   : hook        - Wizpro hook.
        : NewString - "NPINTBS" for net BIOS.
        :             - "NPITCP"  for TCPIP.
return  : rc          - WIZ_NO_ERR
                        WIZERR_BAD_PARAMS
/***************************************************************/
USHORT EXPENTRY
WizSetNetBackup (WIZ_HOOK hook, PSZ Selector, PSZ NewString)
Purpose : To set network backup mode or network backup address.
Input   : hook   - Wizpro hook.
     Selector, NewString -
                      If Selector = "NET_HOTBACKUP_MODE"
                      then NewString = "AUTO" or "MANUAL".
                      If Selector = "NET_HOTBACKUP_ADDR"
                      then NewString is backup address.

Return  : rc   - WIZ_NO_ERR
```

```
                    WIZERR_BAD_PARAMS
/*****************************************************************/
USHORT EXPENTRY
WizGetRmtRecDataFull (WIZ_HOOK hook, WIZ_STN_NAME stnName,  PUSHORT
GateCount, WIZ_GT_NAME *NameList, PUSHORT cstns,
          WIZ_ALERT_FILTER *AlertFilterList)

Purpose : Read the file of remote tags to be recorded on the local station.
          Only tag of the mentioned station will be returned.
    Input     : stnName   - name of the remote station
                GateCount - (I/O) GateCount=1: Handle the tags
                                  GateCount=0: Handle the alarms only
                cstns          - (I/O) cstns = 1: Handle the alarm filters
                                  cstns = 0 Handle the tags only
    Output   : GateCount - number of tags in the list (-1 if ALL)
                NameList  - list of remote tags full names.
                                 meaning (station : name)
                cstns          - Number of filter in the AlertFilterList
                AlertFilterList - list of alarms filters..

    return  : rc           - WIZ_NO_ERR
                             WIZERR_BAD_PARAMS
/*****************************************************************/
USHORT EXPENTRY
WizSetRmtRecData (WIZ_HOOK hook, USHORT GateCount,          WIZ_GT_NAME
*NameList, USHORT cstns,  WIZ_ALERT_FILTER *AlertFilterList)

Purpose  : Writes the new file of remote data (tags and alarms)
              to be recorded on the local station
Input     : GateCount - number of tags in the list
              NameList  - list of remote tag names (or only station
                             name if all tags of the station have to be recorded)
              cstns        - number of alarm filters in the list
             AlertFilterList - list of remote alarm filters to be recorded
return     : rc                   - WIZ_NO_ERR
                                      WIZERR_BAD_PARAMS

/*****************************************************************/
USHORT EXPENTRY
WizSetLocalStationCfg (WIZ_HOOK hook, WIZ_STN_NAME pszStnName,
   WIZ_STN_ID stnId, ULONG attr,
   WIZ_STN_NAME pszServerName, ULONG ulBackupTime)
Purpose : Sets the local station settings.
Input     : hook                  - Wizpro hook.
                pszStnName     - Station name.
                stnId               - Station Id. .
                attr                  - Attributes of station.
                pszServerName - ServerName
                ulBackupTime  - Frequency of Checking master station.
Return  : rc                     - WIZ_NO_ERR
                                      WIZERR_BAD_PARAMS
```

Below please find an example using the above APIs

```
rc = WizSetNetworkActive (hook, "NO");
rc = WizSetNetworkActive (hook, "YES");

rc = WizSetNetMaxDelay (hook, "NET_MAXTIMEDELAY", "1000");
rc = WizSetNetMaxDelay (hook, "NET_MAXCHANGESDELAY", "48");

rc = WizSetNetProtocol (hook, "NPINTBS");
rc = WizSetNetProtocol (hook, "NPITCP");

rc = WizSetNetBackup  (hook, "NET_HOTBACKUP_MODE", "AUTO");
rc = WizSetNetBackup  (hook, "NET_HOTBACKUP_MODE", "MANUAL");
rc = WizSetNetBackup  (hook, "NET_HOTBACKUP_ADDR", "111.22.33");

rc = WizGetLocalStationCfg (hook, stnName, &StnId, &usReserved,
                            &Attr, serverName, &ulBackupTime);
rc = WizSetLocalStationCfg (hook, stnName, StnId, Attr,
                            serverName,ulBackupTime );

*pGCount = 1;
*pAlCount = 1;
strcpy (stnName, "RACHELI");
pNameList = (WIZ_GT_NAME *)malloc (100 * sizeof(WIZ_GT_NAME)+1);
pAlertFilterList = (WIZ_ALERT_FILTER *)malloc
(10 *sizeof(WIZ_ALERT_FILTER)+1);

rc = WizGetRmtRecDataFull (hook, stnName, pGCount, pNameList, pAlCount,
pAlertFilterList);

rc = (USHORT)WizSetRmtRecData (hook, GateCount, pNameList, AlFilters,
pAlertFilterList);
```

Network Enable / Disable (advanced users only)

Some networks applications, require checking if communication exists. For such networks, the following APIs can be used.

```
USHORT EXPENTRY WizSetNetworkCheckState(WIZ_HOOK hook, USHORT usState)
/*********************************************************************/
/* Purpose : Enable/disable communication error checking             */
/*         : If usState is TRUE (1), communication error checking    */
/*         : will be performed. If usState is FALSE (0), checking    */
/*         : will not be performed.                                  */
/* Input   : hook      - Clients hook value.                         */
/*         : usState   - Checking state - TRUE or FALSE (1 or 0)     */
/* Return  :WIZ_NO_ERR, WIZERR_BAD_HOOK, WIZERR_NO_QUEUE             */
/*********************************************************************/

USHORT EXPENTRY WizGetNetworkCheckState(WIZ_HOOK hook, USHORT *pusState)
/*********************************************************************/
/* Purpose : Retrieve current state of network communication error   */
/*         : checking.                                               */
/* Input   : hook      - Clients hook value.                         */
/* Output  : pusState  - Network checking state:                     */
/* 0 - checking disabled                      */
/* 1 - checking enabled                       */
/* Return  :WIZ_NO_ERR, WIZERR_BAD_HOOK, WIZERR_NO_QUEUE             */
/*********************************************************************/
```

Tag Enhancements

Tag Icons

Wizcon marks tag-type with icons. Below please find the new analog and digital icons used to mark tags in the Studio Tag List.

∿ Analog icon

⎍ Digital icon

Single Tag

When you select (highlight) a tag from the Studio's List of Tags, the *Single Tag* dialog opens with tag already selected. But, if you did not select a tag, the tag name field, in the *Single Tag* dialog, will be empty. You will need to select a tag name from the tag listbox or enter the tag name in the tag name field.

Improved Conversion Utility Wizcon DOS to Wizcon 7

A new improved version of the conversion utility from Wizcon DOS to Wizcon 7 is now available. This version cuts down the conversion time considerably. For complete information please refer to the *Wizcon 7 User's Manual*. Install the conversion utility from the Value Pack CD.

Print Control

The following tuning parameters were added for better print control.

- WRITE_FORMAT=RTL or LTR
  The user can write Hebrew text in two ways, in one way the cursor is at the left side and

the writing is done from the left side to the right side (LTR) and in the second way the cursor is in at the right side and the writing is done from right to left (RTL)
Default - LTR

- PRINTER_FORMAT=DOS or WINDOWS
  If the ASCII of Hebrew characters is between 224 and 250 then the user should use WINDOWS, but if it's between 128 and 154 then the user should write DOS
  Default - DOS
- PRINTER_LINE=COMPRESSED or NONCOMPRESSED
  If the user sets his printer to write in a compressed way, he should add this parameter (COMPRESSED)
  Default - NONCOMPRESSED

User Password

In the User Definition dialog, the password is displayed as asterisks (****) when users type password and when User entry is selected from the list. There is no need to retype password each time when changing user definition as Groups or default layout.

Path: Design ⇨ Authorization ⇨ Users

Improved Wizcon Language Disk full Message

Wizcon language Alarms for Disk full can now be controlled. Two new tuning parameters can be used to set the LOW and HIGH limits for the percentage of disk available. In addition, the percentage is now of type float (was integer) and this gives better control. The parameters are to set in the Wiztune.dat file are:

WIL_DISK_LOW_LIMIT = xx.xx (Default is 75)

WIL_DISK_HIGH_LIMIT = xx.xx (Default is 97)

Both values are limited to 0 up to 100 and if LOW is bigger than HIGH it will be set to HIGH.

Wizcon Language commands - Y2K Compatible

The following Wizcon language commands are compatible with the year 2000:

YEAROF

$YEAR

$DATE

Miscellaneous

Undo

Copying objects using <*Ctrl C*> does not support the Undo feature.

Image Resolution

Image Resolution is online. Set the Image resolution factor in Image Properties ⇨ View tab. To take effect, close image and re-open.

Installing Wizcon 7.5 on a PC with a Previous Wizcon 7 Version

As in many Windows products, it is recommend to uninstall previous versions of Wizcon 7, before installing the new version. However, it is possible to install Wizcon 7.5 to a different folder than W7.*xx* and thus enabling the possibility to run both versions on the same PC. The following needs to be noted:

1. The new MFC42.DLL installed with Wizcon 7.5 may cause problems with Wizcon 7.*xx*. Before installing copy MFC42.DLL from the windows systems folder to W7.*xx* BIN folder.
2. After installing W7.5, WZ7 files will be linked to W7.5. To run W7.*xx* you can change this link in folder options or run WIZCON.EXE from W7.*xx*BIN folder with command line of WZ7.
3. Wizcon installs and uses some OCXs. W7.*xx* may not work correctly with Visual Basics programs after installing

Previous version of Wizcon for Internet(W4I):

Wizcon 7.5 has built-in Web support, therefore it is advisable to remove the previous version of W4I and run the application using WZ7.

Solved Problems

The following problems were solved in this version:

1. Event summary may hang if many alarms are generated at high rate.
2. Values in Image stop to update.
3. Converting applications from Wizcon 5 to Wizcon 7 - fonts might be with wrong size and bold font instead of regular font.
4. Wizcon language definition empty message “Start Wizcon? Y/N”.
5. Master-Backup - bit of comm. error was not transferred from the master to the backup.
6. Master-Backup - two alarms printed, instead of only one
7. Image: Alarm object stops to update
8. Assigning values to tags after command Terminate in WizSQL script causes an error (W7SPR166)
9. WizSQL: Stop condition test after communication error with driver or network. (WSPR178)
10. Default Layout field in User Setup dialog is limited to 8 characters. (W7SPR158)
11. Font problem when opening Wiz5 Images in Wizcon 7.02. (W7SPR155)
12. If an add-on program or WizPLC will not terminate when WizPro sends the WIZ_SIGNAL_SHUT message, then the next time that WizPro will be loaded, it will fail to start and will display the error message: "Shutdown not completed!". (W7SPR47)

13. DDE channel between Wizcon and Excel, is blocked by Wizcon modules (WizDDES). Few modules can be a "Client of tag" at the same time. However some modules 'block' the DDE channel with Excel so that, tag values caused by other modules will not be transferred to the Excel via DDE. For example: When you change tag value with slider the value is updated in Excel. if now you load a recipe which is defined on the same tag, the DDE channel will be blocked and values will stop to be updated in Excel.
    (W7SPR184)
14. DDEClient results to tag value trembling for float tags. Tag value in Excel and Single tag input dialog is not consistent when changed by smooth input.
15. Force Dynamic show will now stop the blinking of dynamic blink objects.
16. Running HTML from Studio may crash if CLASSPATH is very long (over 250)
17. A strange 'start date' for Login-text alarms appears when using Login-Text function combined with 'Collapse alarm' - WizPro's option (W7SPR172).
18. Wizcon does not freeze if add-on is still running from previous application.
19. Fixing problems with mfc42.dll Visual Studio 6.
20. Fixed crash problem when defining more than 64,500 Tags.
21. Fixed the SaveRecipe macro problem. When activating a macro that performs the action SaveRecipe, the macro fails with rc=5. Entering wrong parameters caused this problem. The correct parameters for SaveRecipe action are 'Model name' 'Description'.
    (W7SPR109).
22. Data in an XY-CHART is not displayed accurately.
    When there is a big historical data displaying in an X-Y CHART window, the values in the XY-CHART are not displayed accurately. If two CHARTS are defined, one TIME {with XY values} and one XY-chart, the values in the XY chart are not correct according to the values in the TIME chart. (WSPR688).
    When defining an XY-chart with X-axis definition: Gate - X gate values the chart will not display anything when loaded for the first time. (WSPR698).
    Solved by increasing the number of point s allowed before compression from 5000 to 20,000.
23. Parameter IMG_SMALL_INPUT_BOX not configurable. This parameter defines for a DIRECT trigger if you will get a box displayed with or without tag details. Solved by adding a checkbox, in Image ⇨ Properties ⇨ Trigger ⇨ Trigger small input. (W7SPR 061).
24. Recipes that are saved (RSAVE"Model.Recipe") via WIL are not seen in the "Load Recipes" and "Save Recipes" dialog boxes opened via the task bar. (W7SPR 159).
25. Goto zone button remains grayed after defining the first zone.
26. The function YEAROF in Wizcon language works according to date format.
27. Expansion the date entry fields in trigger date dialog.
28. Date-text objects on Image disappear after image refreshing for any four digit date objects. This occurs when one sets the date format to any type of 4 digits (e.g. DDMMYYYY). (W7SPR110).

29. Certain operations cause all the WIL statements to be deleted (W7SPR176).

30. Problem with tolerance of 32-bit PLC tags when exported to a GLS file. (W7SPR165).

31. DataBox in charts (SCADA VIEW) causes data request from remote station. Working in "Record Remote Data" mode, data from history is being handled locally, but when the DataBox in a chart is open and the “Show current values” mode is off, there is a data request from a remote station while moving with the scroll on the chart . (W7SPR208).

32. Memory loss when opening and closing Images with *.jpg inserts. When opening and closing images that include *.jpg objects, there is memory loss each time you open and close the IMG. The lost memory is the size of the JPGs objects. (W7SPR196).

33. The number of $ASK("") tags that can be edited in cluster instance is limited to 10. Defining cluster objects that consist of more than 10 tags using the token $ASK("Gate: xx"),make it impossible to redefine more than 10 tags, when instantiating the cluster. (W7SPR157)