

WINDEV. WEBDEV. WINDEV.
NEW VERSION
Mobile

996

NEW FEATURES

- New controls*
- Software factory*
- Windows Phone 7*
- New code editor*
- 64-bit*
- Composite reports*
- Linux EXE*
- HTML 5*
- CMS*
- Test hosting*
- 216 New features*
- 68 New WLanguage functions*
- 156 New Windows Phone 7 functions*
- 24 New Java functions*
- 58 New PHP functions*
- 247 New Linux functions*
- 116 New Android functions*



www.windev.com

DEVELOP 10 TIMES FASTER

DEVELOP 10 TIMES FASTER

996
NEW FEATURES

THE FUTURE IS BEING WRITTEN NOW

The changes in this **new version 16** are geared toward **100% practical** aspects, to prepare the future.

Deduced from tens of thousands of contacts with you, CIOs and developers, the new features and evolutions found in this version 16 are the **answer to your wait**. All the new features are practical, directly and instantly useful, and cost efficient.

Each of the **996 new features** (including **216 new functionalities**) immediately saves you time and improves your applications and your sites.

This version 16 is built under the banner of **instant efficiency**.

Because tomorrow is being written today... in WLanguage, of course!

Version 16 of WINDEV, WEBDEV and WINDEV Mobile gains in daily efficiency, rigor and **quality**.

Version 16 shows **great maturity**, and reaches an unmatched **performances** level.

By switching to version 16, your teams are instantly more efficient, your applications and your sites become richer and **faster**.

16

**TECHNOLOGY DOESN'T WAIT:
ORDER YOUR VERSION 16 TODAY.**



New Features Documentation. This document is intended for readers that are already familiar with version 15 of WINDEV, WEBDEV and WINDEV Mobile. If you are not familiar with them, do 'not hesitate to request these products' (free) full documentation.



Legend

In the yellow background boxes our experts point out some functionalities.

WD WB WM: the legend indicates in which product the new feature is available

Reminder: each upgrade to version 16 includes free technical support access (email or phone, 15 requests*)

COMMON NEW FEATURES WINDEV, WEBDEV, WINDEV MOBILE



NEW CONTROLS

001 new feature WD WB WM

NEW SCHEDULER CONTROL

A "Scheduler" control has been introduced in version 16. A lot of you requested it. An advanced scheduler control is therefore introduced in version 16. A scheduler control is very useful to manage the display of multiple resources and finds its way in a large number of applications or sites. Programming a schedule could take weeks. Thanks to version 16, you now only need a couple of hours for your applications to benefit from an advanced and fully configurable scheduler control. The scheduler control is available both in WINDEV 16 and in WEBDEV 16.



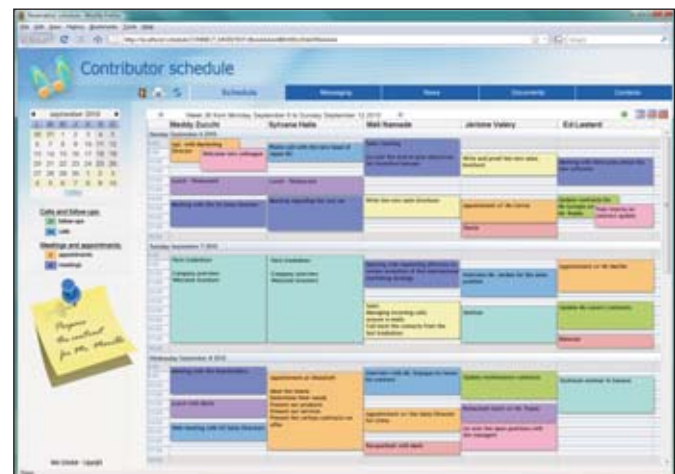
A vertical schedule

The Expert's advice

“ The main difference between a Scheduler control and an Organizer control? An Organizer concerns one resource (a person, a room, etc.), a Scheduler concerns several resources. ”



The same schedule presented horizontally



The same schedule, vertical, on the Internet (with WEBDEV 16)
Benefits provided by this version 16 new feature:
Weeks of programming saved!



SCHEDULER CONTROL OPTIONS

The display of information is managed by default and can be customized.

The display can be organized by day, week, month, or unlimited mode.

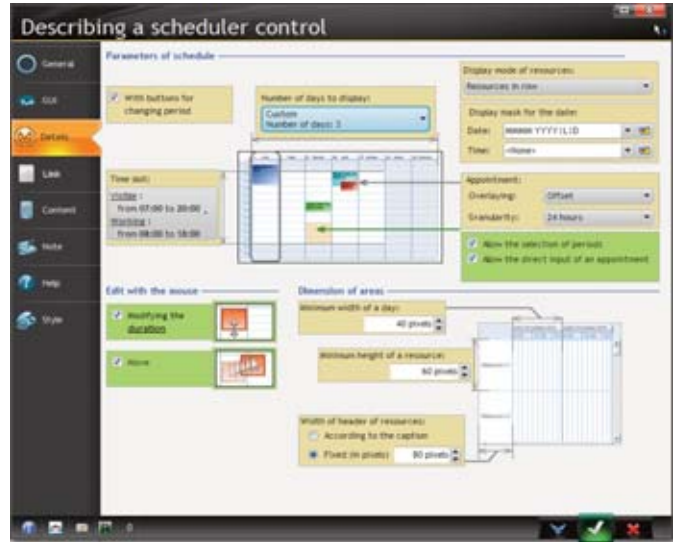


Here schedule in "month" mode

The "unlimited" mode allows you for instance to display a schedule over several months; a scroll bar comes up then allowing you to move within the schedule.

You can configure work days and work times as well as displayed days and times.

The width of the columns and rows can be set or can adapt to the content.



Schedule general options: business hours,...

Benefits provided by this version 16 new feature:

A custom look, easy to configure.

CUSTOMIZING APPOINTMENTS

The display of each appointment can be fully configured. You can display several controls in the same appointment: image control (to display a star, or a distinctive symbol, labels of any size, frames...).

Easily manage schedules

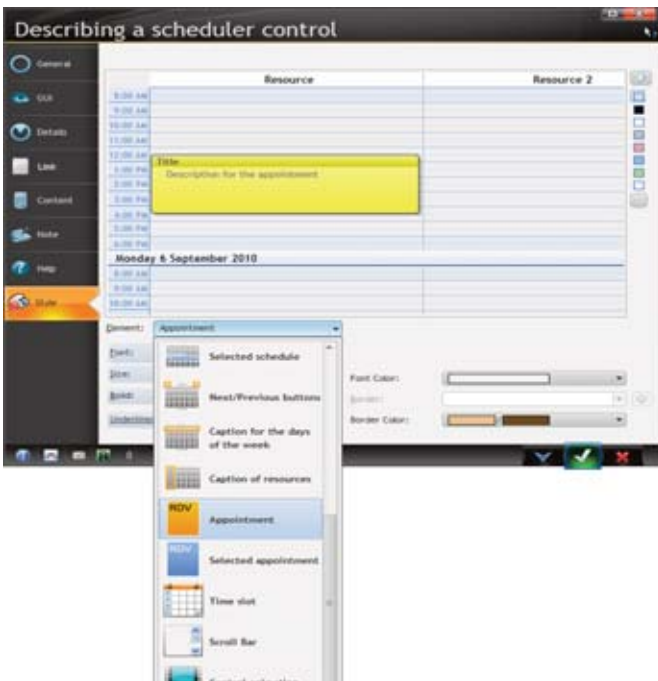


An appointment including a label

Benefits provided by this version 16 new feature:
Complete customization.

004 new feature W D W B W M

LOOK OF THE SCHEDULER CONTROL



Definition of the scheduler look

The look of the scheduler control is very granular and easily defined through the "7 tabs". The look can be modified by programming. Among the parameters for defining the look, you can take advantage of:

- outside frame
- row
- work time
- Saturday, Sunday
- holidays
- closed time
- today
- selected time
- previous/next buttons
- name of the day of the week
- appointment
- selected appointment
- time interval
- scroll bars
- animation when changing period
- etc...

Benefits provided by this version 16 new feature:
A custom look easy to configure and share

005 new feature W D W B W M

POSSIBILITIES OFFERED TO THE END USER BY THE SCHEDULER CONTROL

The end user has access to a lot of automatic features in a schedule.

There's nothing to code in order for the end user to have access to these features.

Via these automatic features, the scheduler control in version 16 offers:

- adding an appointment
- editing the title of an appointment
- moving an appointment from one time slot to another
- moving an appointment from one resource to another
- modifying the duration of an appointment
- deleting an appointment
- moving inside the calendar

Benefits provided by this version 16 new feature:
No coding needed.

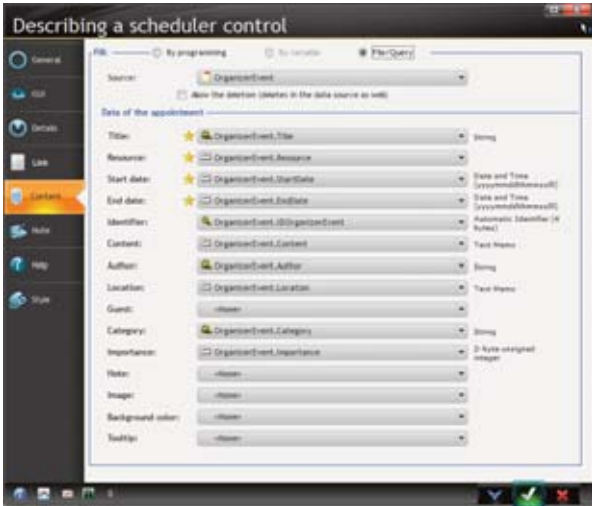
006 new feature W D W B W M

FILLING THE SCHEDULER CONTROL

The scheduler control can be filled by programming (functions in the **Scheduler** family, such as **SchedulerAddAppointment**, **SchedulerAddResource**, **SchedulerTimeDisplayed**, **SchedulerListAppointment**, **SchedulerPosition**, **SchedulerSelectMinus**, **SchedulerSelectPlus**, **SchedulerDeleteAppointment**, **SchedulerDeleteResource**, **SchedulerDeleteAll**), or automatically by data binding.

Imagine: your schedules are automatically filled with information coming from your tables or files (HyperFileSQL, Oracle, MySQL ...), object instances (OOP) or even advanced WLanguage data types (Outlook appointment, Google appointment)... These operations can be done in read and write mode.





Defining by data binding the links of a schedule in the "7 tabs"

Benefits provided by this version 16 new feature:
Choose to fill without any programming or through granular coding.

007 new feature W D W B W M

EVENTS OF THE SCHEDULER CONTROL

In your code, a large number of events are available to manage in a very granular way the programming of schedules:

- before creation of an appointment
- enter input
- exit input
- selection
- movement
- resize
- delete
- move an appointment between resources
- ...

In WEBDEV 16, these functions are available both in browser code, in server code and in Ajax code.

These events allow you to manage by programming, in a very granular way, the behavior of the scheduler control, by forbidding for example some operations (such as deleting an appointment, or assigning an appointment to a person at a certain time, etc.).

Benefits provided by this version 16 new feature:
The behavior of the scheduler control can be completely driven by programming.

CHARTS

008 new feature W D W B W M

CHART CONTROL: BUBBLES



Bubble chart

A new type of chart is introduced in version 16: the bubble chart. This type of chart is useful when 3 types of data must be represented at the same time.

In the example above, the X axis represents the number of inhabitants in the country, the Y axis represents the GDP of the country and the bubble represents the number of points scored during the soccer world cup.

This way it is easier to view the correlation between these three parameters.

Benefits provided by this version 16 new feature:
A new type of chart, easy to implement thanks to version 16.

BAR CODES

009 new feature W D W B W M

SUPPORT FOR NEW QR STANDARD

The Expert's advice

“ The QR barcode goes much farther than a simple barcode: it can run actions, such as opening an Internet site, which is very useful on a mobile. The barcode is read with the mobile's camera, and the site comes up ... No more typing long, cumbersome Internet addresses. ”

In wide use in Japan, in newspapers or in advertisements, this two-dimensional bar code contains multimedia information. To decode it you just need a mobile phone with a camera and Internet connection, on which the relevant application has been loaded beforehand.

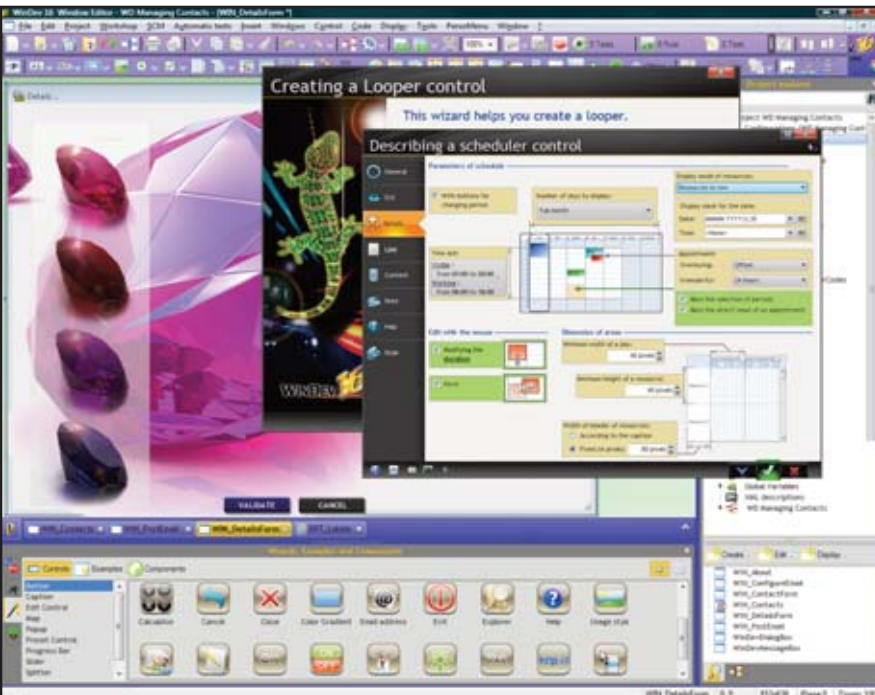
ENVIRONMENT

010 **W Q W feature W D W B**

ENVIRONMENT

The development environment sports better user friendliness. The look is more polished and adopts a cleaner style. Space devoted to useful information is increased while the size of presentation bands is reduced. The way you work is not altered, but the visual impact decreases for better everyday comfort.

Benefits provided by this version 16 new feature:
Space available for information is increased. Better visual comfort.



011 **new feature W D W B W M**

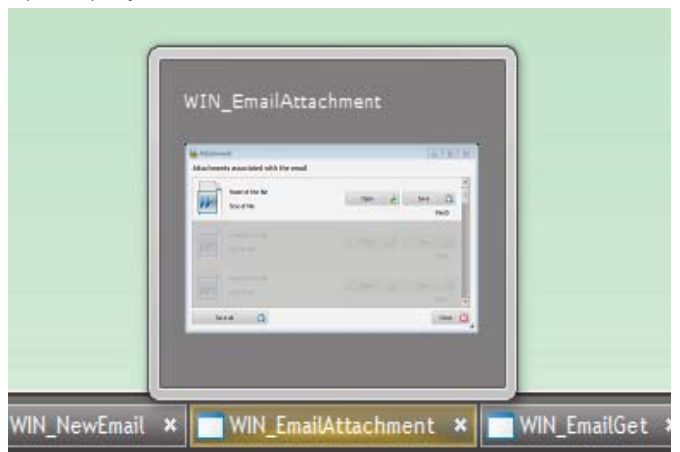
NEW DOCUMENT BAR

The environment document bar has been revamped in version 16. The main new aspect is that the code and the UI are grouped into the bar. Going from one to the other is more comfortable.

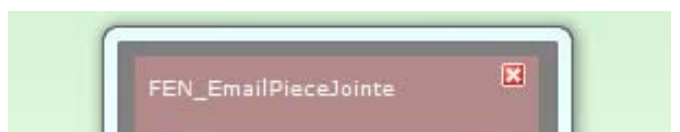


UI and code grouped in the bar: the yellow background indicates the active window

Rolling over a button displays a preview thumbnail: UI window, report, query, code...



Each document can be closed using an [x] inside the icon, which is faster.



The popup menu of each button in this bar evolves; the "close everything except myself" option will soon become your favorite!

BAR CODES (CONTINUES)

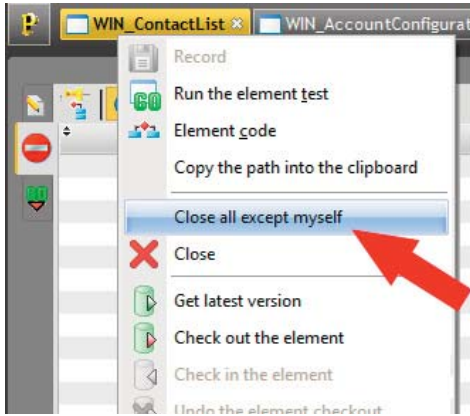


Once read, the bar code triggers the programmed action: load a site, open a documentation, display a set of advertising images, display updated data,...

On one hand, you can print this bar code, generate it in image format (to use it in a Web site for instance).

On the other hand, you can also decode this bar code; a URL for instance, text a phone number or a SMS!

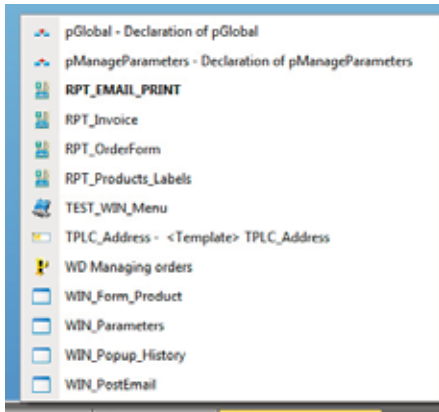
Benefits provided by this version 16 new feature:
A new easy type of communication with consumers in version 16.



The best menu choice to clean up the environment!

If the number of choices is greater than the amount of space available to display it, the bar becomes scrollable.

You can also display in a menu the list of all open elements.



List of all open elements (active element in bold)

Benefits provided by this version 16 new feature:

Much easier navigation among open documents.

012

new feature W D W B W M

WIDE TOOLBARS

Wide monitors are more common, toolbars take advantage of all the space available to optimize their display.

A larger number of options can be displayed this way.

Benefits provided by this version 16 new feature:

Better support for wide monitors.

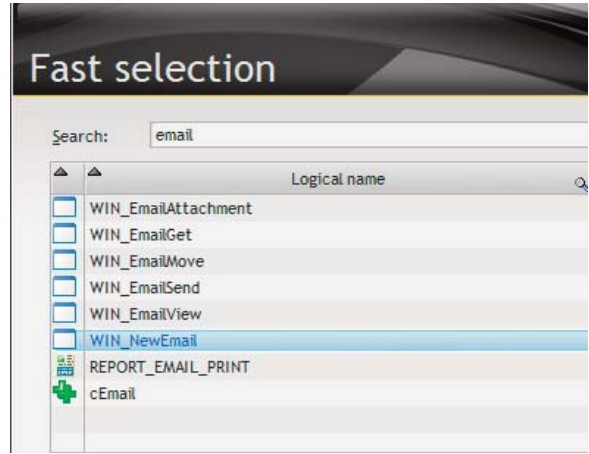
013

new feature W D W B W M

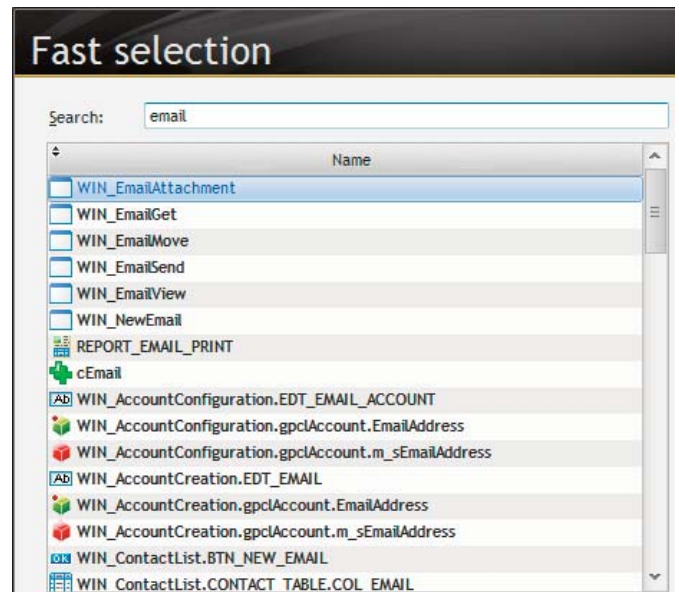
CTRL E: SEARCH EVERYWHERE

Searching via the Ctrl E key combination (available until now with windows, pages, reports and queries) allows you to find and open an element quickly.

In version 16 this feature evolves and becomes available also for all the procedures, methods, controls, etc,...



Pressing Ctrl E in version 15...



The same Ctrl E in version 16: the search is performed on all the project's elements; you get more results

Benefits provided by this version 16 new feature:

Quick element opening.

014

new feature W D W B W M

CLIPBOARD WITH HISTORY (CTRL SHIFT V)

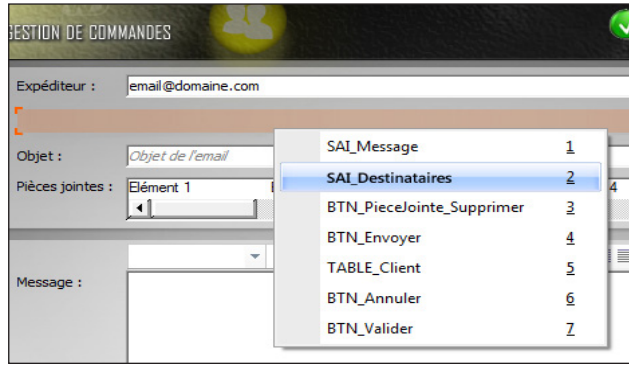
In version 16, the clipboard stores the last 10 pieces of content that were cut or copied.

The Ctrl Shift V key combination (instead of Ctrl V) brings up a popup menu that displays the last 10 copied or cut values: simply choose the element to copy.

Interesting sophistication, the paste operation adapts to the editor.

A control copied from the window editor can be pasted into the code: it is its name that will be pasted.

Over time, you will find this copy with history indispensable in the code editor (see new feature 037).



Benefits provided by this version 16 new feature:
 Save time and concentration: don't hesitate to copy because you fear losing the content of the clipboard!

015 new feature W D W B W M

LOCKING THE ENVIRONMENT

Sometime an unfortunate action "breaks" the development environment: toolbars are scattered, windows docked in the wrong location.

Resetting everything right can be time consuming. In version 16, a "Lock environment" button is introduced and allows you to lock the toolbars and docked windows. This way no involuntary movement is possible.

Benefits provided by this version 16 new feature:
 No time lost reconfiguring the environment.

AUDIT

016 new feature W D W B W M

STATIC AUDIT

The static audit evolves in version 16. Among the main new features, you can take advantage of:

- locate the missing elements directly from the static audit.
- list of dissociated styles
- list the elements that have several versions
- compilation error list (code and UI)
- list of unused elements in the project directory.

Benefits provided by this version 16 new feature:
 The audit is more polished.

017 new feature W D W B W M

DYNAMIC AUDIT

The dynamic audit can be activated during the execution of an unit test.

Benefits provided by this version 16 new feature:
 The audit is faster.

WINDOW, PAGE AND REPORT EDITOR

The Expert's advice

“ One tends to forget since this feature is so obvious and buried so deep in the 'DNA' of WINDEV, WEBDEV and WINDEV Mobile: the page and window editors let you easily build multi-platform UIs. ”

018 new feature W D W B W M

64 LANGUAGES PER PROJECT

The number of languages supported per project goes up to 64. The UI for editing the list of languages and the parameters of these languages (thousand separator, currency, dates, etc.) has also been revised and notably improved.



Benefits provided by this version 16 new feature:
 You can develop applications using all the languages of the European Community, plus Chinese and Russian for example (non western languages).

019 new feature W D W B W M

A DIRECTORY PER CONFIGURATION

Reminder: a configuration allows you to structure a project when it is the base for several generations. For example, a project lets you create an application, a web service and a component at the same time. Creating a configuration per type of generation avoids having multiple projects and makes



it easier to share elements and therefore simplifies the maintenance and evolutions phases.

In version 16, in the "EXE" directory of the development machine, a directory is created for each configuration. For example, you can create a directory for an application in 32-bit mode and another one for an application in 64-bit mode. Also, you can create a directory for the Java configuration and another one for the Windows configuration of the same application.

The former generation mode is still available of course.

Benefits provided by this version 16 new feature:
Better organization of the generated elements.

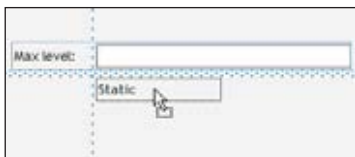
020 new feature W D W B W M

ANCHORS AND MAGNETISM: 4 NEW FEATURES

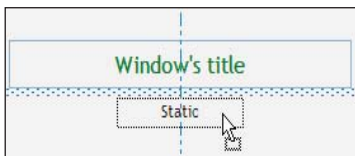
The already present anchor and magnetism options make it easy to create and modify windows, reports and pages. The user friendliness of your UIs is automatically insured. The evolutions in this version 16 come on top of the already large number of available features.

These new features are:

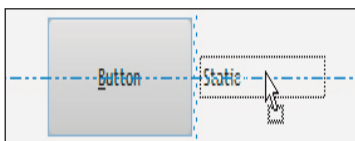
- magnetism on internal frame
- magnetism with the control centers
- magnetism with the reduced window
- magnetism for text alignment



Magnetism on internal frame



Magnetism on center



Magnetism on text

Benefits provided by this version 16 new feature:
Create user-friendly UI faster

021 new feature W D W B W M

ASSISTED TABLE CONTROL CREATION

When creating or modifying a table control, if the data to display in this table can be accessed by the environment ("live data" display), the characteristics of the data are used to initialize the default parameters of the created table.

For example, the width suggested for a column is based on the

data that will be found in this column.

Benefits provided by this version 16 new feature:
Better adaptation of the column width.

022 new feature W D W B W M

UI COMPILATION ERRORS

The notion of "UI compilation error", already found in WINDEV and WEBDEV allows for great UI quality (windows, pages, ...) With the first delivery of your application, the quality and the precision of your UI is noticeable to your end users, which makes your teams look better.

Label longer than the control, text not translated, window without any title, and so on, are noted in the environment with the first compilation. This way it is easy to correct one's mistakes.

In version 16, new errors are detected:

- button caption too long, regardless of the language
- 2 identical data binding links
- errors are now noted for reports.

Also see new feature 107 for specific errors in the report editor. The display of the UI errors has also been improved in version 16.

Benefits provided by this version 16 new feature:
Tighter interfaces the first time around.

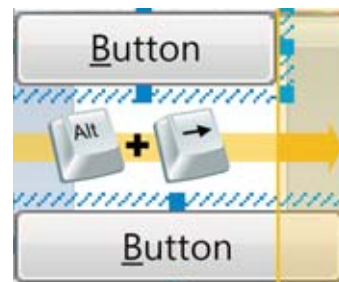
023 new feature W D W B W M

HANDLING CONTROLS WITH THE KEYBOARD

In version 16, you can resize (enlarge, shrink ...) controls directly with the keyboard, without the mouse, using the following shortcuts:

- Alt Right Arrow: enlarges the control on the right
- Alt Left Arrow: enlarges the control on the left
- Alt Up Arrow: enlarges the control by the top
- Alt Down Arrow: enlarges the control by the bottom.

Convenient: these key combinations are enabled as soon as the control is selected (don't need to select the control's side).



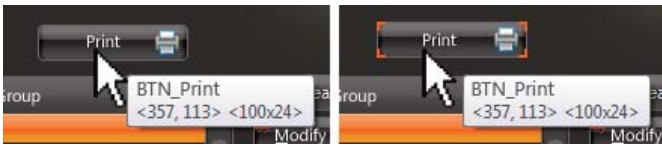
Benefits provided by this version 16 new feature:
Easier pixel level operations.

024 new feature W D W B W M

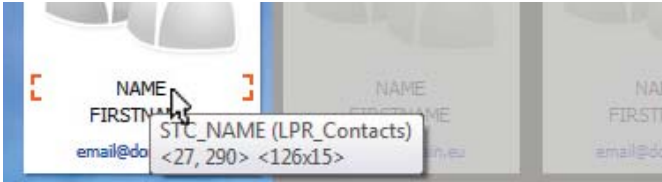
HIGHLIGHT THE ROLLOVER CONTROL

When the mouse cursor rolls over a control, it is shown with a small border.

This makes the control more visible and you can be sure of which control you are selecting when clicking.



Here on the right, the rollover control (Print button) is highlighted (red corners)



This example illustrates another benefit of this feature: the case of control without a frame or a background. Their size is immediately visible.

Benefits provided by this version 16 new feature:

This feature is very useful in the case of overlapping controls; you don't lose time trying to select controls

CODE EDITOR: 22 NEW FEATURES



The code editor is certainly the editor where developers spend most of their time!

The code editor changes noticeably and offers 22 new features in version 16.

Of course all the automatic operations of the previous versions have been kept.

The new features in version 16 allow for a better ease of development and allow you to save even more time in the coding and maintenance phases.

The sum of all the code editor's new features in version 16 brings added comfort, which makes the developer more efficient.

The Expert's advice

“ The code editor is certainly the editor where developers spend most of their time. I've played with the new features in version 16, it's "fantastic". I'm very unhappy when I go back to version 15. ”

025

new feature W D W B W M

AUTOMATICALLY HIGHLIGHT SOME ELEMENTS

Who hasn't look for all the uses of a variable (or identifier) in the entire code where it's found?

When you have a lot of code, this search may be painful: you need to use the editor's "search" feature.

In version 16, in the current event (the code), each time the cursor is placed on an identifier (variable, procedure, data file, etc.) all the uses of this identifier are highlighted. This feature can be turned off.

Useful practical detail, the highlight color of the declaration is different from the other highlights.

ENTIRELY COMPATIBLE WITH PREVIOUS VERSIONS

WINDEV 16 respects your existing code.
No migration step is required between WINDEV 7.5, 8, 9, 10, 11, 12, 14 or 15 and WINDEV 16: simply recompile the application and it will work in version 16.
It is the same for going from WEBDEV 7, 9, 10, 11, 12, 14 or 15 to WEBDEV 16. Just recompile.

Existing components (version 8, 9, 10, 11, 12, 14 or 15) work directly (without needing to be recompiled) with applications built using version 16.

Version 16 can directly open a project in version 7.5, 8, 9, 10, 11, 12, 14 or 15. Older projects (version 5.5, 4.1, etc.) can be migrated.

And of course, several different versions of your environment can coexist on your PC; a version 16 license also runs older versions (15, 14, 12, 11, 10, 9, 8, 7.5, 5.5, etc.)

Version 16 is of course compatible with Windows 7.





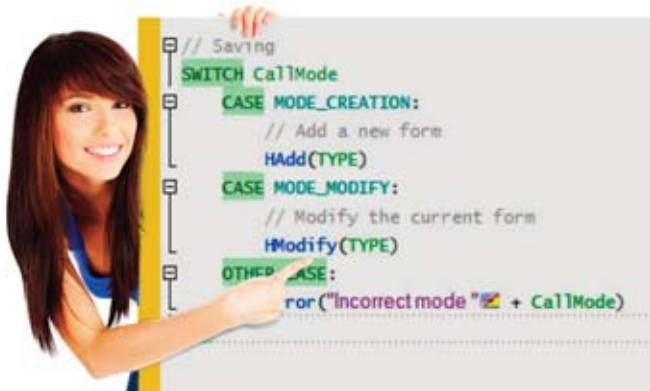
The cursor is located on the "TABLE_RECIPIENT". All the uses of this variable can be seen in one glance

Benefits provided by this version 16 new feature:
All the uses of the element can be viewed at a glance; debugging is easier

026 new feature WD WB WM

AUTOMATIC HIGHLIGHT OF BLOCK INSTRUCTIONS

This version 16 new feature increases the user friendliness of the code editor based on the same principle used for the automatic highlight of elements.
Here, the highlight feature allows you to visualize the flow of a conditional instruction (IF THEN ELSE, FOR TO END, LOOP, WHEN EXCEPTION IN,...).
This highlight feature allows you to understand the code better, especially when there are a lot of nested statements.



Benefits provided by this version 16 new feature:
Better view of the code flow; you remain focused on the code architecture.

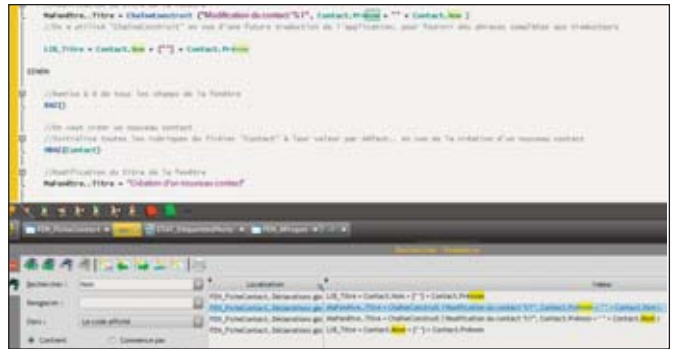
027 new feature WD WB WM

CTRL+F3 : SEARCH AUTOMATION

The Ctrl F3 key combination automates the search:

- it fills the search field with the word on which the cursor is located
- then it starts the search
- it highlights all the occurrences found in the code.

F3 and Shift F3 let you navigate from occurrence to occurrence, without leaving the keyboard.



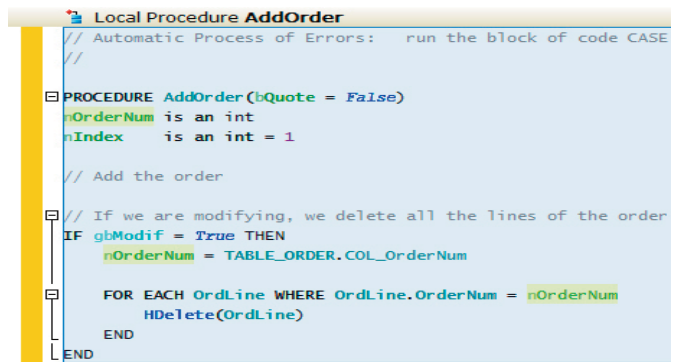
A much faster search

Benefits provided by this version 16 new feature:
The number of actions to perform for a search is limited to a minimum.

028 new feature WD WB WM

SEARCH IN THE CURRENT SELECTION

Searching inside your code evolves even more with this very useful new feature.
You can now perform a search (and replace) in a selection.
If a selection of more than one line is active, the search is performed automatically in the selection.
In a search, the sought name appears underlined, in bold.
In any case, the sought name appears underlined in the code (F3 lets you jump to the next occurrence).



Here, nOrderNum is only sought in the current selection

Benefits provided by this version 16 new feature:
Faster searches.