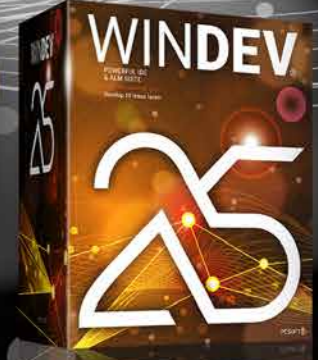


WINDEV®



- Smart Controls
- Increased speed
- Environment in English or Spanish
- Mobile: User Groupware
- Android: Report generator
- Android: Debug on smartphone
- SaaS: Transform WINDEV applications into SaaS applications
- PDF management by programming
- YAML
- GitHub
- Docker
- HFSQL Spare Server
- WEBDEV: simplified operations
- WEBDEV debugger on Browser code
- 200 new WLanguage functions in Browser code
- WEBDEV layouts
- 300+ WLanguage functions for Windows, iOS, Android, Web, Java, PHP...

NEW VERSION



DEVELOP 10 TIMES FASTER



**ORDER
VERSION 25
TODAY!**



Version 25 brings you an incredible amount of ready-to-use innovations.

New Smart controls, new WLanguage functions, smart magnetism, GitHub, more powerful and simplified operating modes...

Your teams will be even more efficient!

Version 25 brings your teams 925 essential new features.

Build on your existing experience while taking advantage of new technologies: this is the benefit provided by version 25.

These new features meet your needs, and are compatible with the elements you already have.

WINDEV 25, WEBDEV 25 and WINDEV Mobile 25 are your work tools. The main objective of our teams is your satisfaction and success, on all environments and hardware platforms.

Version 25 will quickly become your favorite version!

Integrated DevOps environment.
No more scattered tools, go WINDEV!

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

This documentation only presents the new features of version 25. To discover the thousands of features of each product, consult their respective documentation at WINDEV.COM.



NEW CONTROLS IN VERSION 25: SMART CONTROLS

001

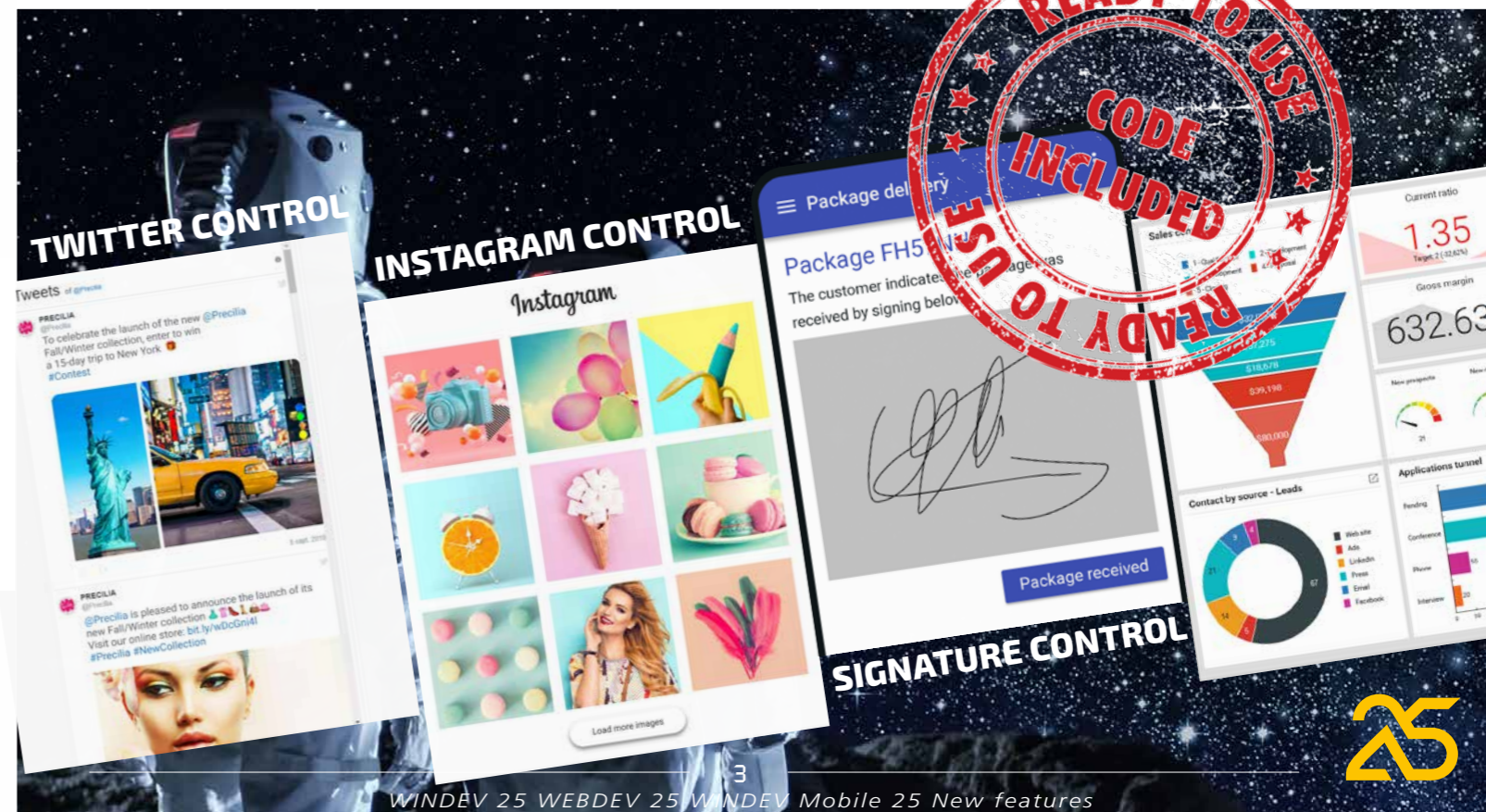
**New feature WD WB WM
101 SMART CONTROLS
"READY TO USE": CONCEPT**

Version 25 innovates with a **new concept** of control: the Smart control. This control (or group of controls) is ready to use, and includes "business" WLanguage code where necessary.

Thanks to the Smart controls, you can add sophisticated behaviors to your applications with a single click.

101 Smart controls are available in version 25: Twitter, Instagram, Signature, Countdown, Date range selection, Menu with drawers, Workflow, Cookie consent, Process monitoring...

Benefit provided by this new feature of version 25:
An incredibly powerful, easy-to-implement control

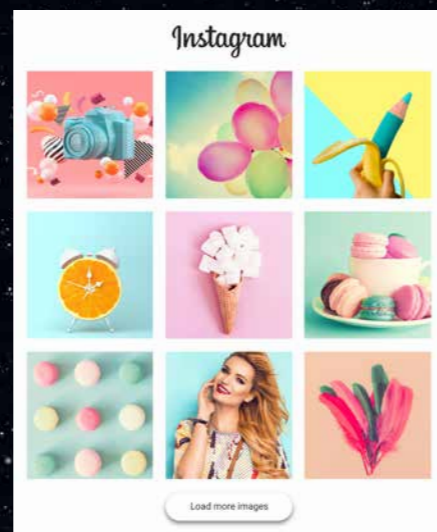


NEW: SMART CONTROLS SOME EXAMPLES

CONTROLS WITH CODE READY TO USE

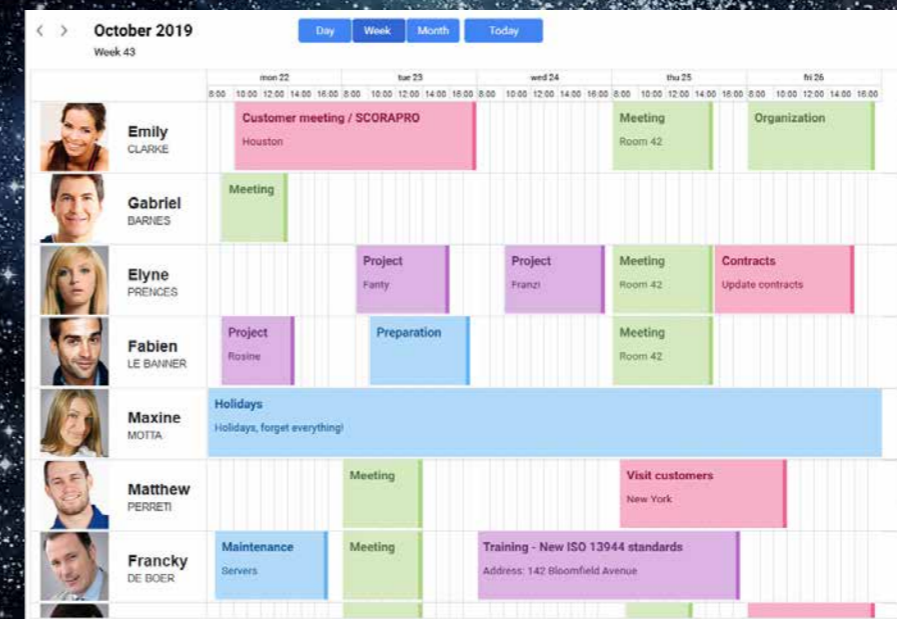
"STATISTICS" DASHBOARD CONTROL

Can be modified by programming



INSTAGRAM VIEW

Displays images from Instagram account • Flexible layout • Clicking a thumbnail opens image in high definition • Shows a post



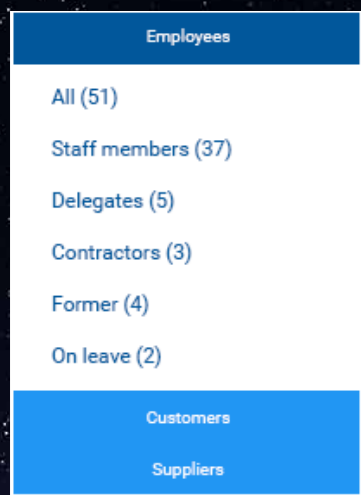
Resource PLANNING

Paste a finished planning into your applications in 1 click • Appointments are customized thanks to an internal window • Text color automatically defined to ensure readability against background.



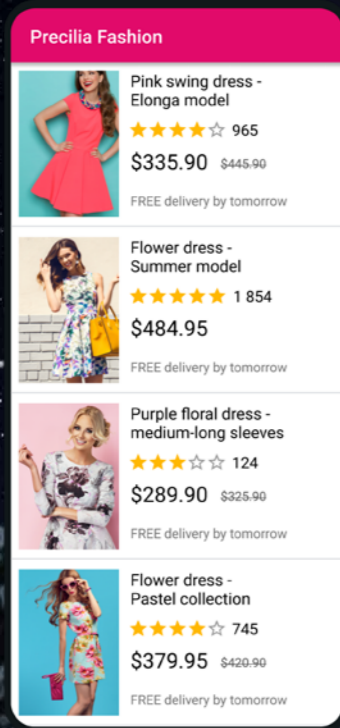
TWITTER FEED

List of public tweets from any account • Real-time update.



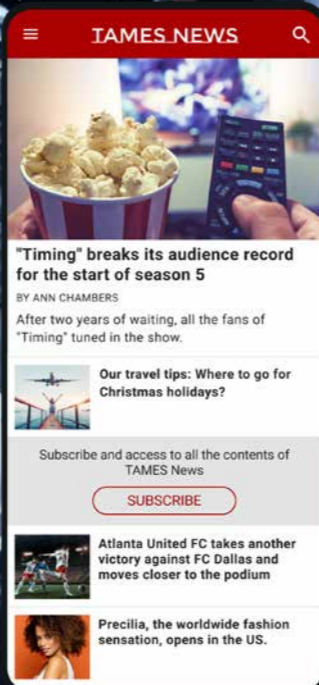
MENU with drawers

Menu with stacked drawers.



PRODUCT LOOPER

Clear design

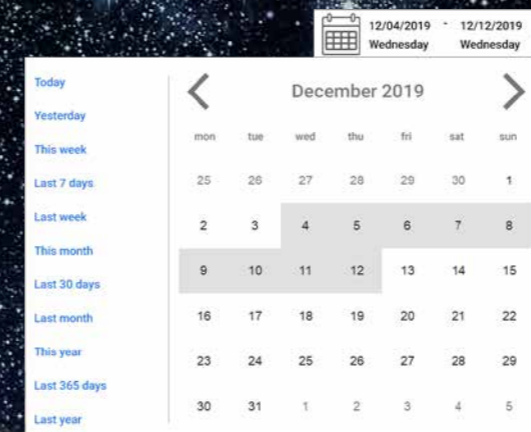
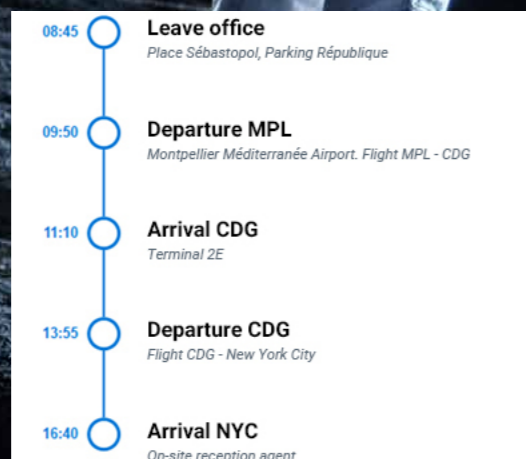


NEWS FEED LOOPER

Layout adapted to magazines

Vertical PROCESS MONITORING TIMELINE AS LOOPER

Dynamically filled by programming, Binding allowed.



DATE RANGE picker

Dates set by direct input or by selection from a calendar • Menu of preset date ranges for quick selection

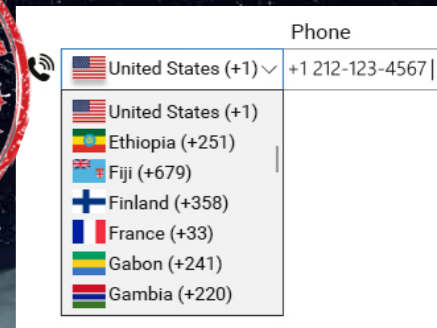


COUNTDOWN

Automatic calculation • Updated every second (or other) • Browser code

PASSWORD STRENGTH

The bar progression and color indicate the password strength as it is entered • The text indicates the strength • These criteria can be modified by programming



INTERNATIONAL PHONE INPUT

Combo Box with international telephone prefixes. Direct input of country name or code allowed • Number formatting by country

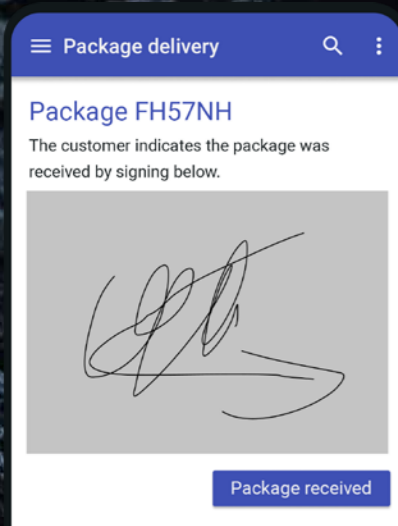
COUNTER

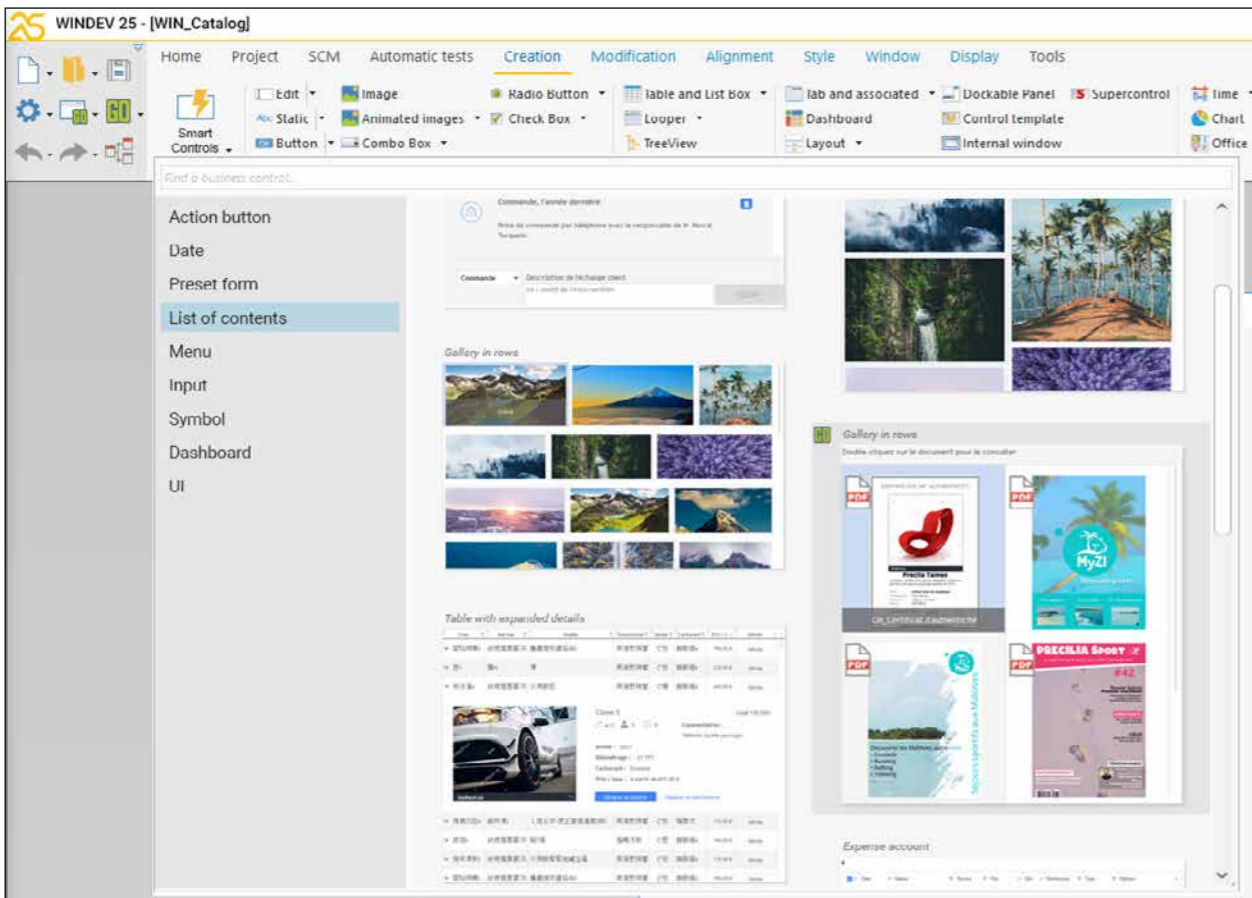
On-target counter



FINGER SIGNATURE

Image control with touch-drawing support • Saves the image





Easily select Smart controls from the environment

002 New feature WD WB WM SMART CONTROL: FULLY CUSTOMIZABLE

Smart controls are composed of:

- 1 or several controls
- WLanguage code
- in some cases, data files (tables) necessary for their processes (e. g. postal code database).

Everything can be easily modified and customized: code, position, size, anchoring, data links...

Smart controls are of course free to use and distribute with your applications.

The code provided is as standard and simple as possible so that you can easily modify it.

Benefit provided by this new feature of version 25:

A flexible structure

003 New feature WD WB WM SMART CONTROL: EASY TO FIND

Smart controls are presented like the other controls, but they can be viewed in a dedicated window of the editor.

This allows you to understand their purpose and target at a glance.

Benefit provided by this new feature of version 25:

Powerful controls at your fingertips

004 New feature WD WB WM SMART CONTROL: CODE EXAMPLE

The code included in a Smart control is clear and easy to modify.

Depending on the desired type of process, the **code** contains from a few to several hundreds of lines.

Here is a code example from the "Button with Progress Bar" Smart control.

Add your code to **LongProcess** and you will get a superb non-blocking progress bar in your application.

```

BTN_Process..State = Grayed
PROGBAR_Progress..Visble = True

LongProcess() // long process in a thread

INTERNAL PROCEDURE LongProcess () <thread>
// TODO code of long process here
// xxx

// Refresh UI in main thread
EndOfLongProcess ()

END

// Update interface controls (UI)
INTERNAL PROCEDURE EndOfLongProcess <main thread>
PROGBAR_Progress..Visible = False
BTN_Process..State = Active

END

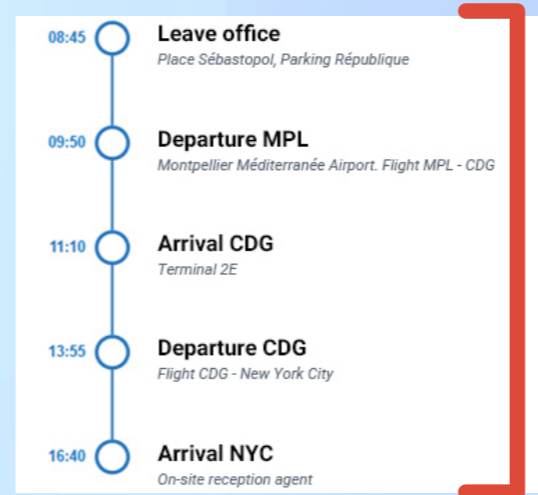
```

Benefit provided by this new feature of version 25:

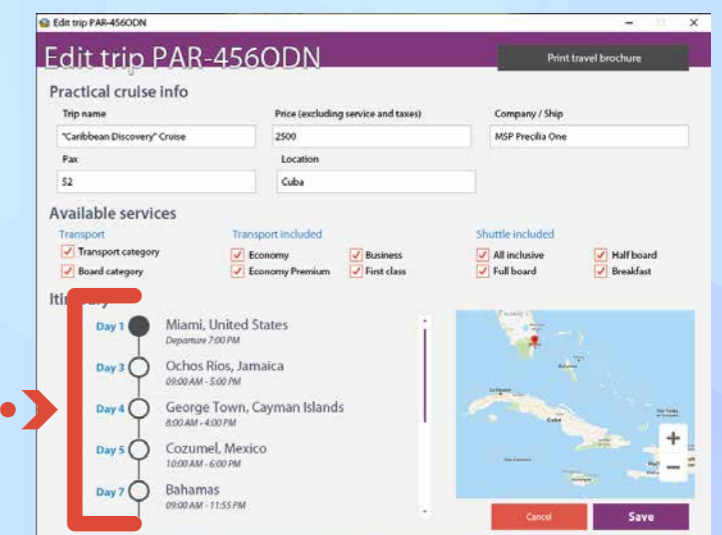
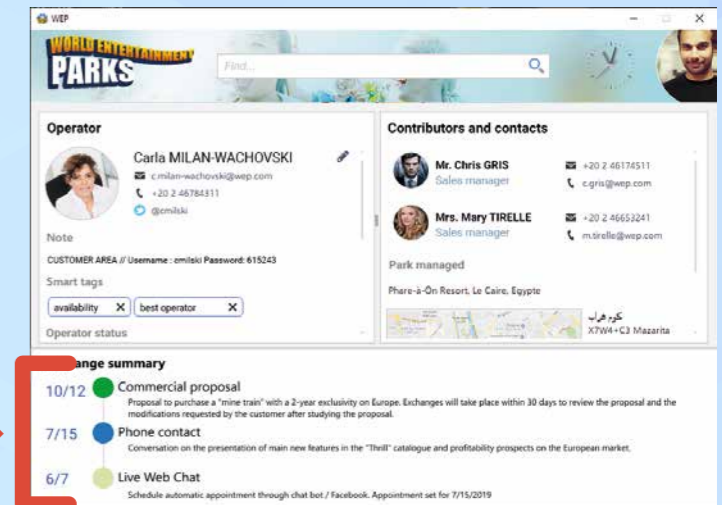
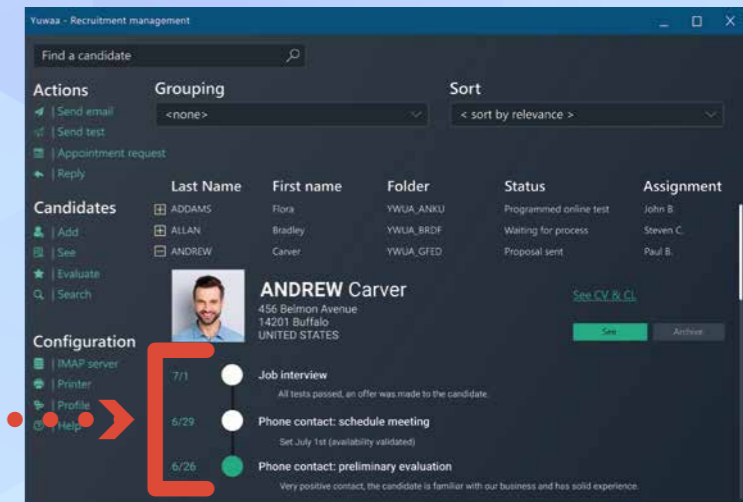
Easily-customizable code

ONE SMART CONTROL, 3 EXAMPLES OF USE IN 3 WINDOWS

"PROCESS MONITORING" SMART CONTROL



In this example, the Vertical TimeLine "Process Monitoring" Smart control (and its code) is used in 3 different applications



005 New feature WD WB WM SMART CONTROL: IT AUTOMATICALLY ADAPTS TO THE SKIN TEMPLATE OF YOUR APPLICATION

When a Smart control is dropped in a window or page, it immediately adapts to its skin template or skin.

The example opposite shows the Timeline Smart control used in 3 different applications.

Once the Smart control is inserted in the window, simply resize the control, and adapt the WLanguage code that comes with it.

Here, the number of steps and the text displayed have been adapted.

Benefit provided by this new feature of version 25:

A versatile control

READY-TO-USE CONTROL EVERYTHING CAN BE MODIFIED

Everything can be modified: add controls, delete controls, modify controls (with the 7 tabs), add, move, modify or delete code, enlarge, reduce...

006 New feature WD WB WM 101 SMART CONTROLS

Find the list of the **101 Smart controls** available for each target in their respective sections:

- new feature 167 on pages 40 to 43 for WINDEV 25
- new feature 670 on pages 56 & 57 for WINDEV Mobile 25
- new feature 750 on pages 72 & 73 for WEBDEV 25.

Take advantage of these new controls!

Benefit provided by this new feature of version 25:

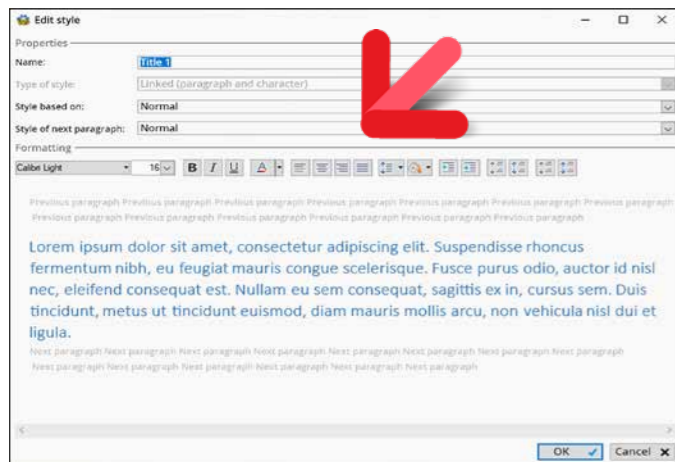
A rich list, for your applications and sites

WORD PROCESSING CONTROL (WP) IMPROVEMENTS

The Word Processing control has improved in version 25.

007 New feature WD WB WM WORD PROCESSING CONTROL (WP): STYLE EDITING

Text styles can now be created and edited with a simple right click.



Visual style editing

Benefit provided by this new feature of version 25:

Your texts are always in style

008 New feature WD WB WM WP CONTROL: TABLE OF CONTENTS

In version 25, you can automatically generate a table of con-

tents in a document.

The automatic generation of the table of contents is based on the styles used in the document.

The table of contents can be generated by programming.

Tables of contents of existing .DOCX documents are displayed.

Table of contents	
1	TAMES group overview 2
1.1	Key figures of the group 4
1.1.1	Activity and strategy 6
1.1.2	Business model 7
1.1.3	Network of stores 9
1.2	History of the group 11
1.2.1	Simplified organization chart 12
1.2.2	Companies' stock valuation 14
2	Financial information 17
2.1	Group activities 19
2.1.1	Parent company activity 21
2.1.2	TAMES stock market 27
2.2	Outlook and conclusion 28
3	TAMES and its shareholders 30
3.1	Dividends - Taxation 32
3.2	Share buyback program 35
3.3	Capital and shareholding 37

Automatic table of contents

Benefit provided by this new feature of version 25:

Order and practicality!

009 New feature WD WB WM WP CONTROL: MANAGE SDT TAGS

SDT tags (Standard Document Tag) are managed by the WP control in version 25.

Text between SDT tags is processed.

Benefit provided by this new feature of version 25:

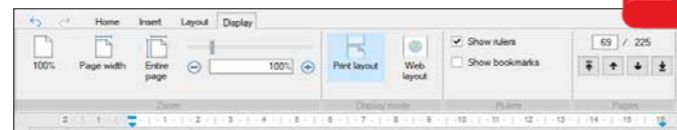
The text is displayed

010 New feature WD WB WM WP DOCUMENT: PAGE NUMBER DISPLAYED IN THE RIBBON

In version 25, the number of the current page and the total number of pages in the document are displayed in the ribbon.

The page number control allows for input. Entering the page number takes you directly to that page.

The tooltip of the scrollbar track indicates the number of the current page.



Number of pages displayed in the ribbon

Benefit provided by this new feature of version 25:

Always on the right page!

011 New feature WD WB WM WP CONTROL: MISCELLANEOUS

You can change the color of formatting marks.

Benefit provided by this new feature of version 25:

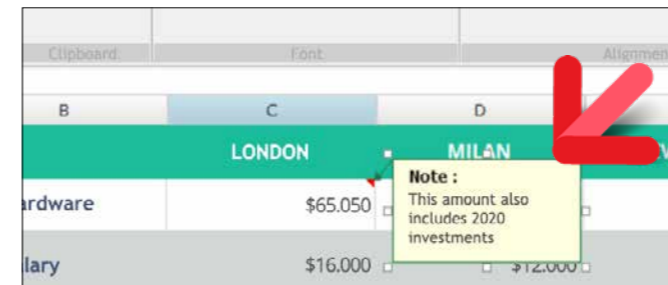
More functional marks

SPREADSHEET CONTROL IMPROVEMENTS

012 New feature WD WB WM SPREADSHEET CONTROL: COMMENTS ON CELLS

In version 25, the Spreadsheet control allows you to enter and display comments associated with a cell.

Comments in existing .XLSX documents are managed.



Comment on a cell

Benefit provided by this new feature of version 25:

Long-awaited feature

013 New feature WD WB WM SPREADSHEET CONTROL: MOVE CELLS WITH THE MOUSE

In version 25, the end user can move cells and groups of cells using the mouse.

Simply select the border.

Benefit provided by this new feature of version 25:

Better ergonomics

014 New feature WD WB WM SPREADSHEET CONTROL: COPY/PASTE TEXT WITH CR AND TAB

In version 25, text can be copied/pasted taking into account Carriage Returns (CR) and tabulations (Tab).

Each CR sends the following text to the line below.

Each TAB sends the following text to the cell on the right.

Benefit provided by this new feature of version 25:

Well-presented text!

COMPATIBILITY WITH PREVIOUS VERSIONS

WINDEV 25 respects your existing assets.

No migration phase required between WINDEV versions 7.5 - 24 and WINDEV 25: Simply recompile the application and it will work in version 25.

Going from WEBDEV version 7 - 24 to WEBDEV 25 is also very easy. Same for WINDEV Mobile.

Existing components (versions 8 to 24) work directly without having to be recompiled with applications in version 25.

Version 25 directly opens a project in version 7.5 to 24.

Several different versions of your environments can coexist simultaneously on your PC; a license 25 also launches the previous versions 5.5 to 24.



PDF CONTROL IMPROVEMENTS

015 New feature WD WB WM PDF READER CONTROL: ALLOW END USER TO SAVE

The PDF Reader control now allows the user to save the file displayed. This is useful, for example, when the end user has rotated a page. This feature can be disabled.

Benefit provided by this new feature of version 25:
Easy save

016 New feature WD WB WM PDF READER CONTROL: SCROLLBAR

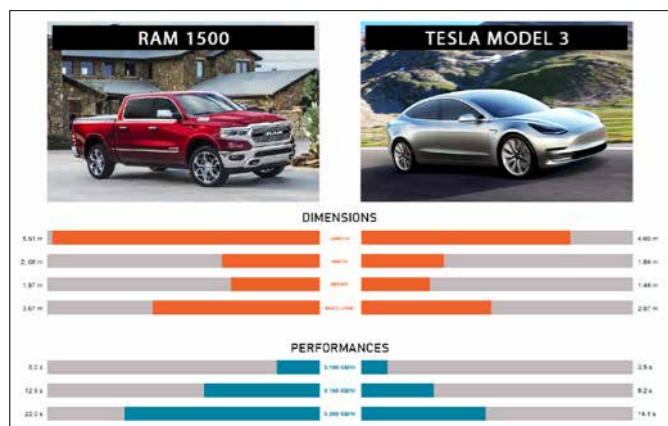
The scrollbar track in the PDF Reader control now indicates the current page number (and total number of pages).

Benefit provided by this new feature of version 25:
Once again, you're on the right page!

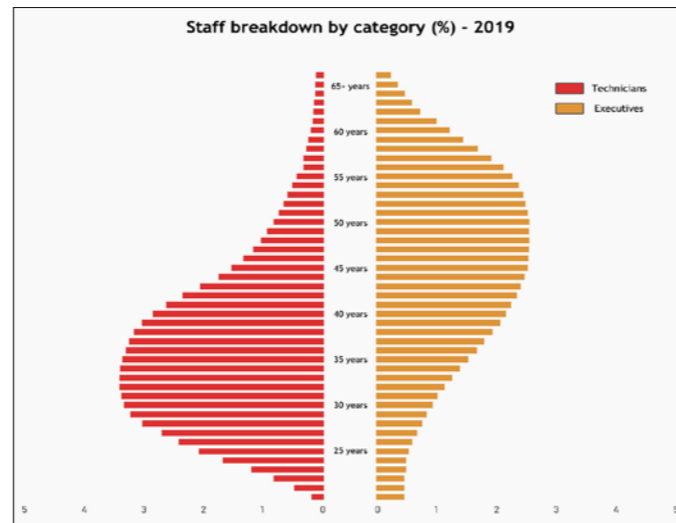
CHARTS IN VERSION 25

017 New feature WD WB WM NEW COMPARATIVE HISTOGRAM CHART CONTROL (AGE PYRAMID, ETC.)

A new type of chart has been added to the family in version 25: the Comparative Histogram chart. This type of chart is mainly used to compare 2 series. The most common example is an age pyramid.



The new Comparative Histogram chart



Age pyramid chart

Benefit provided by this new feature of version 25:
Useful chart for any type of comparison

018 New feature WD WB WM NEW COMPARATIVE HISTOGRAM CHART CONTROL: FEATURES

The new "Comparative Histogram" Chart control offers rich functionalities:

- label positioning: left, middle, right
- centered bar text: both bars come together to become one with the text on the bar, or both bars are spaced, with the text in the middle
- fix marks of horizontal axis
- define the color of each bar series: left, right
- ability to define the color of a given bar
- gridlines
- title position and visibility
- legend position and visibility
- ...

Benefit provided by this new feature of version 25:
Rich features for this chart

019 New feature WD WB WM NEW COMPARATIVE HISTOGRAM CHART CONTROL: PROGRAMMING

The Comparative Histogram chart is filled like other charts, by programming or binding.

In addition to the usual `grWLanguage` functions, the new `grComparativeHistogramAddData` and `grComparativeHistogramGetData` functions allow you to manage specific features of the new Comparative Histogram chart.

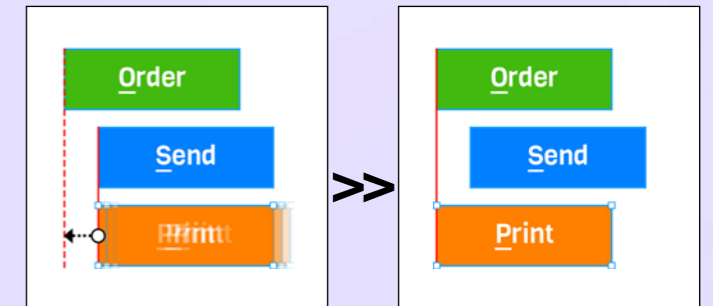
Benefit provided by this new feature of version 25:
Standard programming

SMART MAGNETISM

020 New feature WD WB WM SMART MAGNETISM

In version 25, magnetism between controls has been reworked. The available functionalities take a leap forward. Indeed, magnetism is now based on all controls, not only on the surrounding controls.

Benefit provided by this new feature of version 25:
A really attractive feature



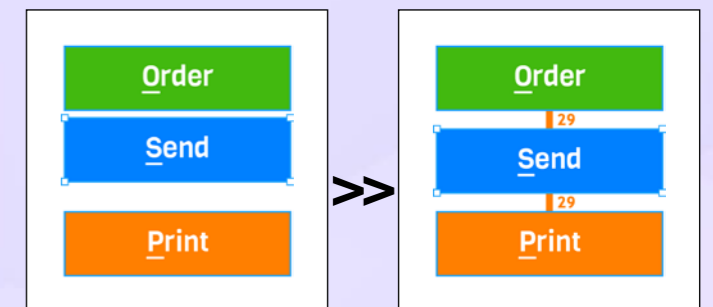
Example of magnetism on the left border of the control directly above

021 New feature WD WB WM SMART MAGNETISM: EXAMPLE OF NEW FEATURES

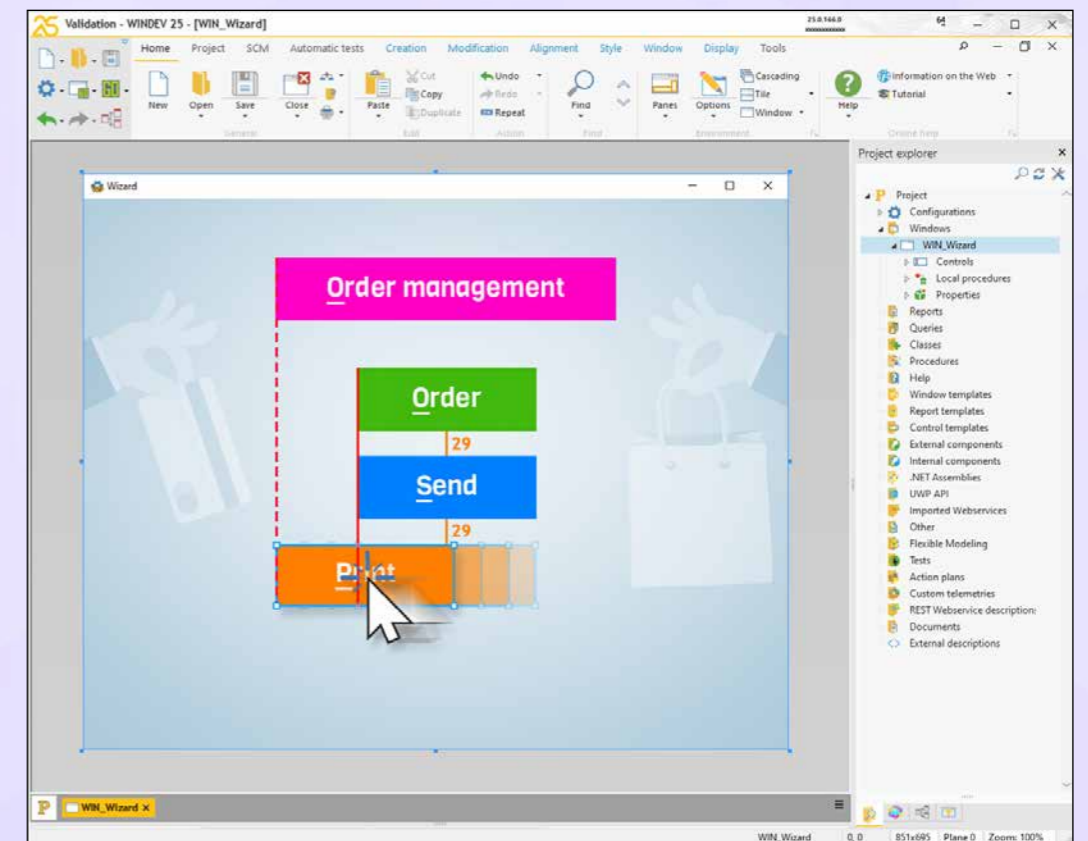
Here are some examples of how smart magnetism works:

- The reference control automatically changes as movements and magnetisms are rejected
- Adding a control below a group of controls: the default vertical spacing is the same as the controls above
- New, more ergonomic design of handles and frames
- The spacing between the controls is indicated
- Depending on the movement of a control, its alignment is proposed according to all the other controls in the window
- The alignment bar allows you to determine on which control the alignment is proposed
- The alignment bar is much thinner, which makes it easier to align elements
- Close magnetisms are differentiated: controls with close magnetisms are moved pixel by pixel; similarly, detaching from a magnetism does not cause a sudden jump, and stops at the next close magnetism, with pixel precision
- ...

Benefit provided by this new feature of version 25:
Intuitive behavior



Example of equalized vertical spacing, and homogenized control width





TRANSFORM YOUR EXISTING WINDEV APPLICATIONS INTO WEBSITES OR SAAS



025 New feature WD WB WM YOUR EXISTING WINDEV PROJECTS CAN BECOME A WEBSITE OR A SAAS APPLICATION

A widespread need is to transform a Windows application (or parts of applications) into a dynamic website or SaaS application. WINDEV and WEBDEV perfectly meet this need. The WINDEV application to WEBDEV site migration wizard evolves in version 25. See new feature 813. The invoicing module for access to SaaS sites also evolves in WEBDEV 25. See new feature 815. **Benefit provided by this new feature of version 25:** Remarkable practicality

BUSINESS RULES & IBR PICTO

Reminder: WINDEV allows you to enter "Business Rules". These are explanations on the processing rule to be applied to a control, code, window, process, calculation... These Business Rules can be used automatically as an aid to end users via the IBR picto.

026 New feature WD WB WM PUBLIC PART, PRIVATE PART (NOT DISPLAYED)

In version 25, a Business Rule can contain a visible part, and a confidential part. The help that will be automatically displayed by the IBR picto will be the part declared as visible in the Business Rule. **Benefit provided by this new feature of version 25:** Confidentiality preserved

027 New feature WD WB WM BUSINESS RULE IN SEVERAL LANGUAGES

In version 25, Business Rules can be written in several languages. The help displayed by the IBR picto will be in the language in which the application is run. **Benefit provided by this new feature of version 25:** Una cerveza por favor

WINDEV 25 EDITS YOUR SITES AND MOBILE APPS

022 WD WB WM WINDEV, WEBDEV AND WINDEV MOBILE IN THE SAME ENVIRONMENT: CROSS-PLATFORM TO THE POWER OF 25

As you know, it is possible to use WINDEV, WEBDEV and WINDEV Mobile in the same environment. Project elements are immediately shared between all 3 platforms: analyses, queries, reports, procedures, classes, code,... **Windows, pages, mobile windows** are in the same project. These elements **are opened directly in the WINDEV environment**. This allows for easy maintenance and portability of a WINDEV application to mobile and Web, without having to import or duplicate elements of the project, or to switch between environments. Reminder: You must have a license for the corresponding program.

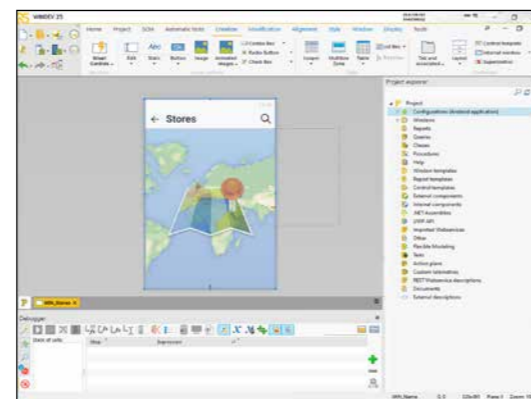
Benefit provided by this new feature of version 25: One for all, all for WINDEV

023 New feature WD WB WM WEBDEV IN WINDEV

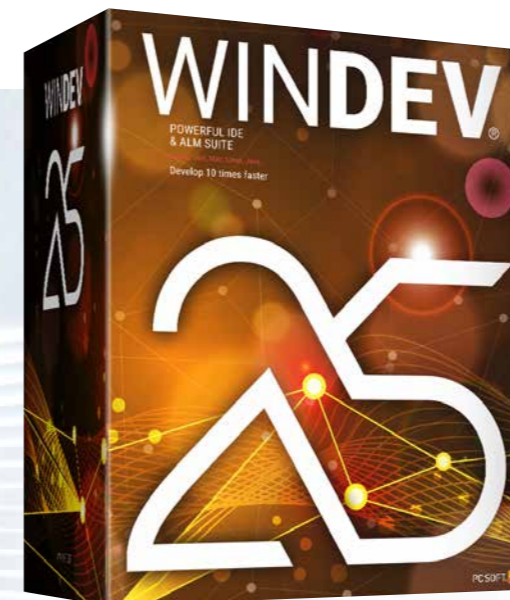
New in version 25: when working on WEBDEV projects in WINDEV, you can update the skin of the WEBDEV project directly from WINDEV's environment. **Benefit provided by this new feature of version 25:** Edit your sites in WINDEV

024 New feature WD WB WM WINDEV MOBILE IN WINDEV

The productivity gains in WINDEV Mobile's environment are also accessible from WINDEV's environment.



Benefit provided by this new feature of version 25: Edit your mobile apps in WINDEV



ENVIRONMENT

028 New feature WD WB WM PROJECT ARCHITECTURE: INTERNAL COMPONENTS CONTAIN THEIR RESOURCES: WEBSERVICES, XML, JSON, ASSEMBLIES...

In version 25, internal components now contain all their dependencies: Analysis, Windows, Pages, Reports, Sets of Procedures, Queries, Images...

In version 25 all the following elements are also encapsulated:

- Webservice
- XML
- JSON
- YAML
- Assemblies
- ...

It is no longer necessary to integrate these elements into the host project.

Internal components are thus totally autonomous for easy sharing.

The former method is still supported for compatibility.

Benefit provided by this new feature of version 25:

No risk of forgetting an element

029 New feature WD WB WM LARGE PROJECT: RIGHT CLICK "MOVE TO FOLDER"

In large projects, the project explorer can contain a lot of elements and be very long! Moving an element (window, report, etc.) to a folder can be a tedious task in the explorer of a large project.

In version 25, right-clicking on the element opens the list of destination folders.

Benefit provided by this new feature of version 25:
No scroll, no cry

030 New feature WD WB WM WINDOW, PAGE TEMPLATE: ABILITY TO SELECT CONTROLS DIRECTLY

In version 25, you can select the controls from a template, simply using the mouse.

There is no need to override the control in order to select it.

Benefit provided by this new feature of version 25:
One less right click!

031 New feature WD WB WM PROJECT PORTFOLIO: RECOMPILE OR CREATE BRANCHES FOR SEVERAL PROJECTS IN 1 CLICK

In version 25, you can create "project portfolios".

A project portfolio is a set of logically grouped projects.

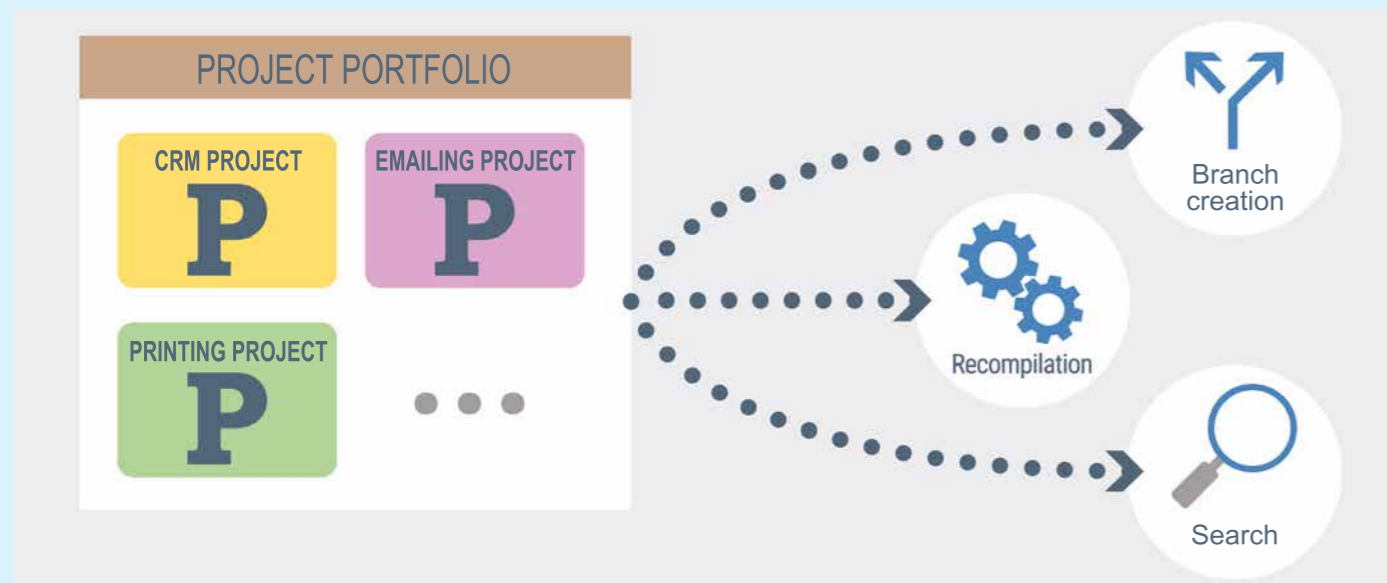
These projects often have functional links: they share components, classes, sets of procedures...

A portfolio allows you to perform actions on the entire portfolio, such as:

- recompilation in new version,
- branch creation,
- ...

No more repetitive actions when changing from one version to another or during a Sprint!

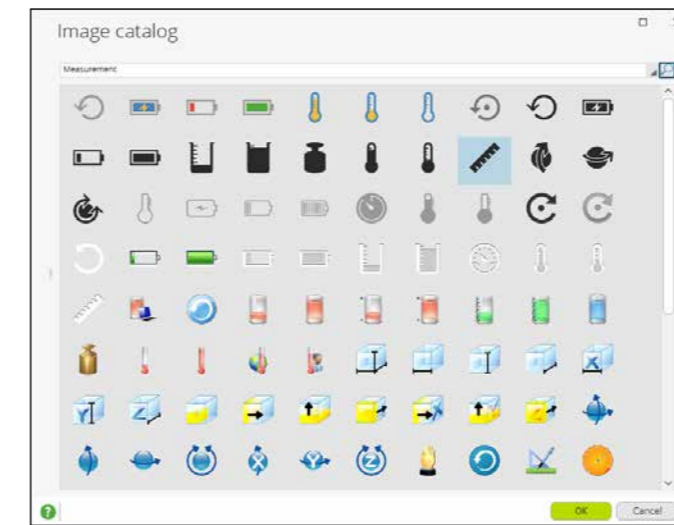
Benefit provided by this new feature of version 25:
Recompile several projects in one operation, or create branches of a set of projects in one click



032 New feature WD WB WM IMAGE CATALOG: CLEAR

The image catalog in version 25 is better looking and more intuitive.

You will find the images you are looking for more easily!



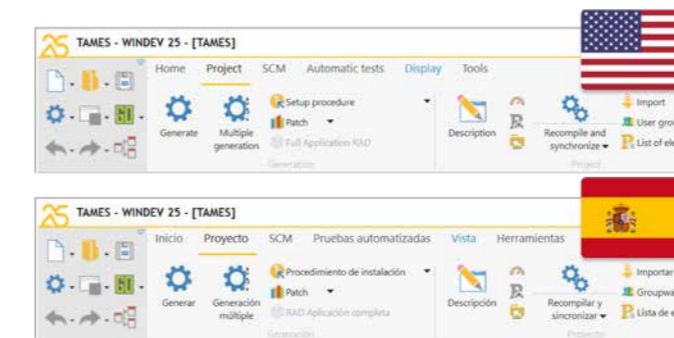
The image catalog is even more intuitive

Benefit provided by this new feature of version 25:
Search, Find

033 New feature WD WB WM YOUR ENVIRONMENT IN ENGLISH OR SPANISH (AS STANDARD)

The version 25 allows you to choose the language of the environment:

- English
- Spanish.



Choose your environment!

Note that the different languages are available on different dates.

Benefit provided by this new feature of version 25:
Choose what you prefer

DATA MODEL EDITOR DATA SCHEMA

034 New feature WD WB WM MAGNETISM IS NOW AVAILABLE IN THE DATA MODEL EDITOR

In version 25, magnetism is finally available in the data model editor.

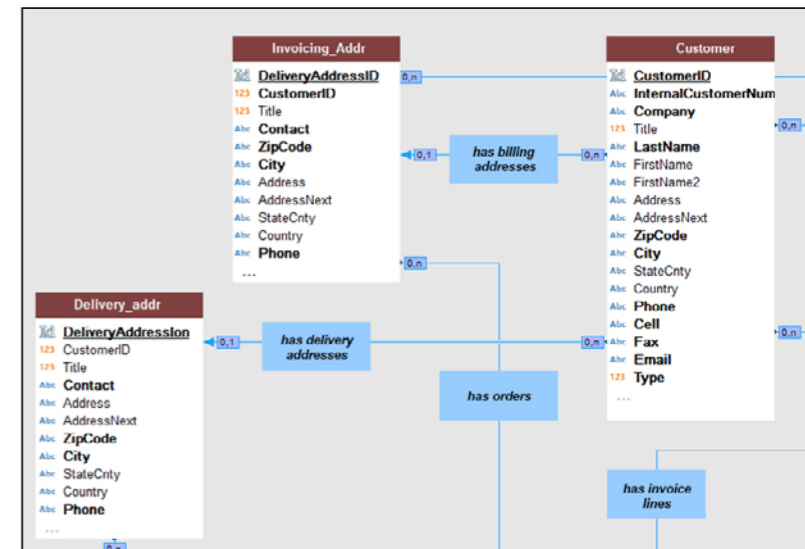
And, good news, it is the super magnetism of version 25 with its magical powers.

Finally, you can easily present a rigorously aligned analysis graph.

Benefit provided by this new feature of version 25:
Well-aligned elements

035 New feature WD WB WM NEW LOOK FOR A NEW LIFE

The representation of data files (tables) has been refreshed! Not only is the analysis graph now aligned, but it is also looks great.



Clean look and assisted alignment in version 25

Benefit provided by this new feature of version 25:
A graph you will be happy to look at

036 New feature WD WB WM SCM: CHECK-OUT ON FIRST MODIFICATION

In version 25, it is no longer necessary to manually check out the analysis when an item is modified. The check-out is automatically proposed the first time an element of the analysis is modified. No more grayed windows!

Benefit provided by this new feature of version 25:
Useful automation

037 New feature WD WB WM CREATE A MATERIALIZED VIEW FROM A PROJECT QUERY

In version 25, there is no need to duplicate a query to create a materialized view! Simply use the existing query.

Benefit provided by this new feature of version 25:
Easy creation

PROJECT MONITORING CENTER

038 New feature WD WB WM REQUIREMENT: TARGET PLATFORMS

You can now specify the platforms on which the requirement should run:

- 32-bit Windows
- 64-bit Windows
- Linux
- Web
- iOS
- Android
- ...

Benefit provided by this new feature of version 25:
Hit the right target

039 New feature WD WB WM AUTOMATIC MESSAGE WHEN THE STATUS OF A REQUIREMENT TASK CHANGES

When the status of a requirement task changes, (e.g. when it changes to "Done"), the requirement manager automatically receives a message. Testers associated with the requirement also receive a message when all developers have completed their respective tasks.

Automatic message from the Project Monitoring Center
All test tasks related to the requirement <[PreciliaERP] Comm - Evolutions file tracking> are completed.
You can correct the incidents that concern you:
[CCO#316128](#) [Printing] A3 printing is not available
[CCO#315937](#) [Settings] Network printers are not available
[CCO#315915](#) [UI] The default window does not fit large screens correctly

The Monitoring Center keeps you up to date!

Benefit provided by this new feature of version 25:
You are informed

040 New feature WD WB WM AUTOMATIC CREATION OF REQUIREMENTS AND TASKS FROM THE INTEGRATED MESSAGING

A message can become a requirement via the integrated messaging! Recipients of the message can be defined as recipients of the tasks.

Benefit provided by this new feature of version 25:
Useful option

AUTOMATIC CODE AUDIT

041 New feature WD WB WM STATIC AUDIT: NOTIFICATION FOR NON-MATCHING LOGICAL AND PHYSICAL NAMES

In version 25, the Static Audit indicates elements with different logical and physical names. This allows you to avoid confusions.

Benefit provided by this new feature of version 25:
Mywin or window.wdw?

PROGRAM DOCUMENTATION

042 New feature WD WB WM PROGRAM DOCUMENTATION: CHOICE OF VOCABULARY

The program documentation now allows you to use one of the following:

- PC SOFT vocabulary
- a more generic vocabulary.

Examples: in generic vocabulary, the term "data file" is

replaced by "table", "item" by "column", etc... This can be useful when responding to a call for tenders for example. Depending on the target client, you can choose the type of vocabulary to use when editing the documentation.

Benefit provided by this new feature of version 25:
Table or data file? Column or item?

CONTINUOUS INTEGRATION SOFTWARE FACTORY

043 New feature WD WB WM NEW ACTION: BRANCH CREATION

In version 25, a new action from the Software Factory allows you to automate the creation of branches.

Benefit provided by this new feature of version 25:
Branches keep growing...

044 New feature WD WB WM NEW ACTION: RETRIEVE CODE COVERAGE

A new action from the Software Factory allows you to recover the code coverage of automatic tests. The status report of the action plan execution contains this information.

Benefit provided by this new feature of version 25:
We've got you covered

045 New feature WD WB WM NEW ACTION: GENERATE A PATCH

A new action from the Software Factory allows you to automate the creation of patches.

Benefit provided by this new feature of version 25:
Deploy patches in 1 click

046 New feature WD WB WM NEW ACTION: PUBLISH ON DOCKERHUB

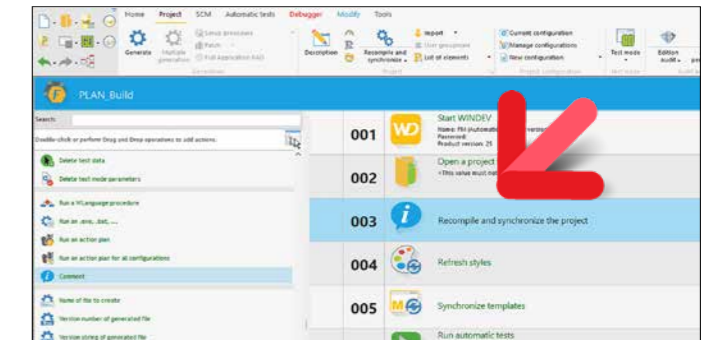
In version 25, a new action from the Software Factory allows you to automate the publication of a site's recipe.

Benefit provided by this new feature of version 25:
Share your projects and project elements on Docker Hub



047 New feature WD WB WM NEW ACTION: COMMENT

In version 25, a new action from the Software Factory allows you to position separations in an action plan. The blue row is clearly visible. This action also allows you to insert comments in the action plan status report.



A comment row (in blue)

Benefit provided by this new feature of version 25:
Easier maintenance of action plans

048 New feature WD WB WM NEW ACTION: PUBLISH A COMPONENT IN SCM

In version 25, a new action from the Software Factory allows you to publish a comment in the SCM. You can also choose the directory to publish a component.

Benefit provided by this new feature of version 25:
Automate more actions

049 New feature WD WB WM VARIOUS NEW FEATURES

Action plans can be started manually (immediately) or be set for later (scheduling). Schedules can now be modified.

Benefit provided by this new feature of version 25:
Various advantages

INSTALL

050 New feature WD WB WM START APPLICATIONS ON STARTUP

The setup allows you to specify an application that must be launched when the computer starts (see new feature 227).

Benefit provided by this new feature of version 25:
Modern day's autoexec.bat

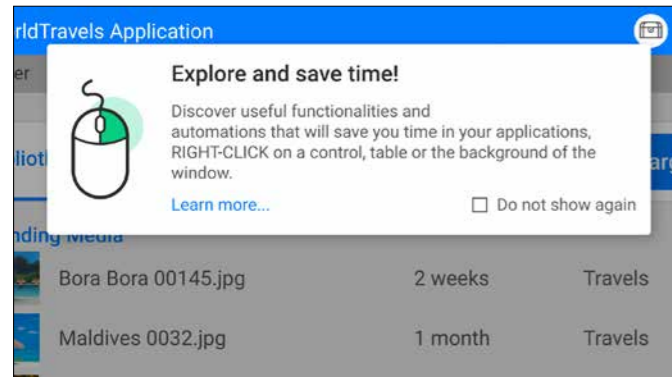
AAF: YOUR APPLICATIONS OFFER FUNCTIONALITIES

051 New feature WD WB WM TOAST FROM TIME TO TIME TO REMIND YOUR END USERS OF THE EXISTENCE OF AAFs

In version 25, a toast appears from time to time (not too often, let's say once a month) to remind end-users of the existence of AAFs.

You can prevent this toast from appearing again with `AAFDisable (Toast)`.

Besides, this toast is automatically disabled when the code calls `AAFDisable (A11)`.



A discrete, yet useful toast

Benefit provided by this new feature of version 25:

Now they know

PASSWORD SECURITY: USER GROUPWARE

052 New feature WD WB WM SHARE THE ACCOUNT AND AUTHORIZATIONS DATABASE

The account and authorizations database can be natively shared between WINDEV, WEBDEV and WINDEV Mobile User Groupwares.

This allows you to comfortably create an account in a WEBDEV site, for example, and then use it on mobile. See new feature 700.

Benefit provided by this new feature of version 25:

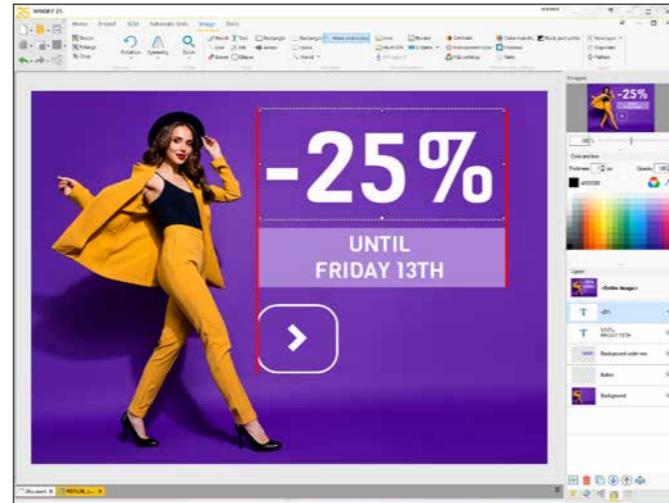
Improved cross-platform

IMAGE EDITOR

053 New feature WD WB WM SMART MAGNETISM

The environment-integrated image editor benefits from smart magnetism.

Note that these new Image Editor features are also available in the Image Editor control that you can include in your applications.



Temporary guides appear in red

Benefit provided by this new feature of version 25:

Beautiful alignments

054 New feature WD WB WM PERFORM ALL THE ACTIONS THE IMAGE EDITOR OFFERS, BY PROGRAMMING

WLanguage version 25 offers the `wdPic` type.

All the `wdLanguage` functions (drawing functions) can be called on the image layers.

The `wdPic` type contains an array of layers.

The management of layers allows you, for example, to apply a watermark to an image and keep the original image unchanged.

`PicMergeLayer` allows you to group layers together to reduce the image size or to generate a Jpeg image...

Benefit provided by this new feature of version 25:

Rich features by programming

055 New feature WD WB WM "DISPLAY ONLY" MODE

The Image Editor control offers a new image display mode for your applications.

This mode displays an image for viewing purposes only.

End users can zoom in, zoom out, print... but they can't modify the image, nor save it, of course.

Benefit provided by this new feature of version 25:

Security

056 New feature WD WB WM COLOR SELECTION

Color selection is simplified, and allows you to directly select a color.

Benefit provided by this new feature of version 25:

Simplification

057 New feature WD WB WM MISCELLANEOUS

Display the size and position of the current selection.

Benefit provided by this new feature of version 25:

Useful new feature

WDMMSG AUTOMATIC TRANSLATION



058 New feature WD WB WM ALTERNATIVE LANGUAGE

If a string has not yet been translated into the target language, you can specify which alternative language must be used.

There are no "holes" in the UI!

Benefit provided by this new feature of version 25:

Plug the holes

059 New feature WD WB WM "DO NOT TRANSLATE"

In version 25, you can specify that some project resources should not be translated:

- windows
- pages
- project configuration
- ...

This can be, for example, a test window, or a configuration that contains an action plan for Continuous Integration.

This avoids translating strings unnecessarily, and optimizes translation time.

Benefit provided by this new feature of version 25:

Faster machine translation phase

060 New feature WD WB WM MULTI-PRODUCT SMART EXTRACTION

In version 25, you can extract and reintegrate all WINDEV, WEBDEV and WINDEV Mobile project resources in a single operation.

The operation must be launched from WINDEV in the configuration that includes WINDEV Mobile and WEBDEV.

Benefit provided by this new feature of version 25:

Sharing resources is faster and easier

061 New feature WD WB WM WDTRAD: EVOLUTIONS

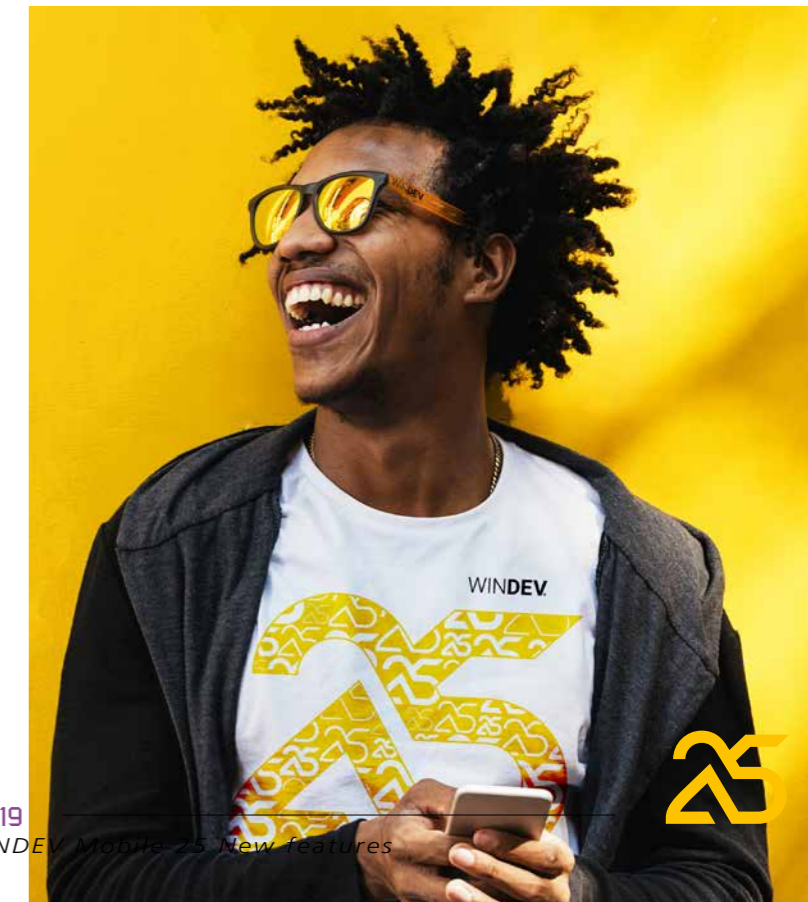
WDTRAD is the tool to translate standard messages (WDTRAD is provided with WDMMSG).

WDTRAD benefits from the following new features:

- bookmarks system: label and colors
- remember collapsed/expanded state of branches after closing
- dictionary search magnifier available on each column

Benefit provided by this new feature of version 25:

Easier translations



SCM

062 New feature WD WB WM SCM: ONE CLICK TO CREATE BRANCHES FOR ALL PROJECTS FROM A SUBDIRECTORY



In version 25, you can create a set of branches in a single operation. This new feature will help teams that handle many projects save lots of time. Note that this feature is also a new action in Continuous Integration (see new feature 043). Shares are kept.

Benefit provided by this new feature of version 25:
Less time, more practicality

063 New feature WD WB WM SCM: AUTOMATIC CREATION OF BRANCHES OF ALL PROJECTS IN A PROJECT PORTFOLIO

In version 25, you can create the branches of all projects in a project portfolio in a single operation (see new feature 031).

Benefit provided by this new feature of version 25:
Can't do without it

064 New feature WD WB WM SCM: ANALYSIS CHECK-OUT ON FIRST MODIFICATION

The analysis (database model) is automatically checked out as soon as the first change is made, (see new feature 036).

Benefit provided by this new feature of version 25:
One more automation

065 New feature WD WB WM SCM: CHECK-OUT FOR TESTING WHEN IT WAS NOT A TEST

A check-out "for test" is used to modify the element locally, without the possibility to carry over the changes to the SCM repository.

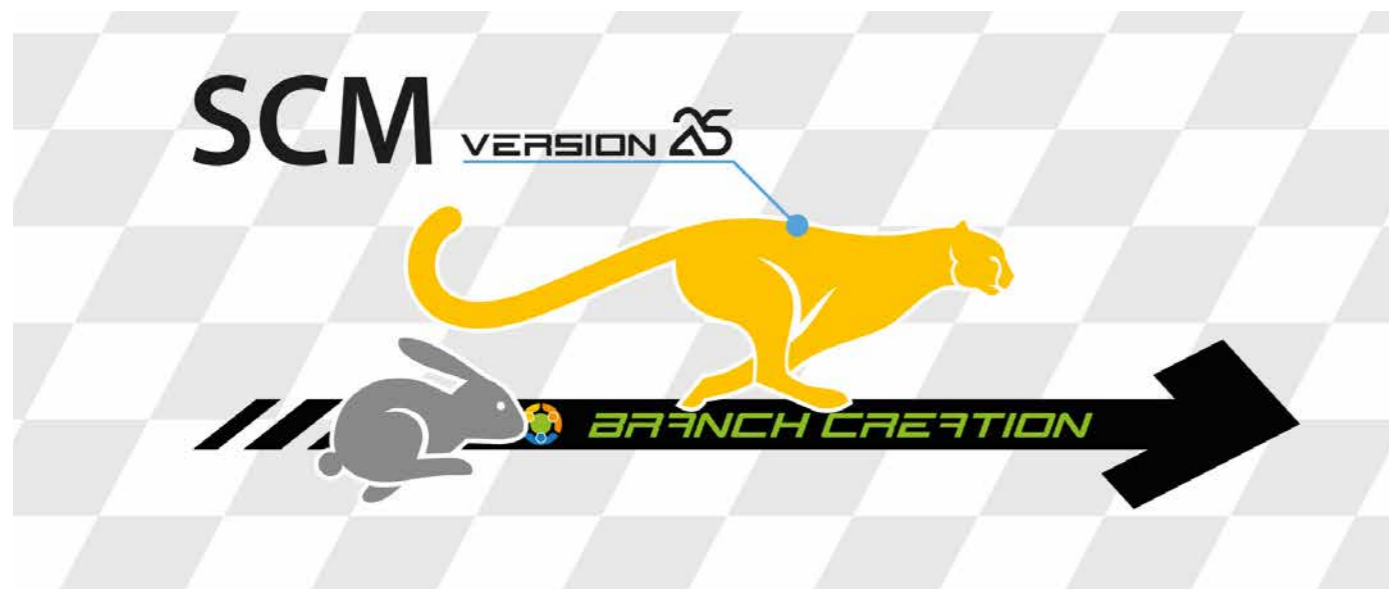
Changes made to an element checked out for test are not saved or managed by the SCM (since it is only for testing). In version 25, a warning message appears if you create an EXE that contains check-outs "for test" (i.e. whose code is not managed by the SCM).

Benefit provided by this new feature of version 25:
Find your sources

066 New feature WD WB WM SCM: EXTREMELY FAST BRANCH CREATION: 20 TIMES FASTER

In version 25, the branch creation time has been optimized. You can create branches much more quickly. Locally, twice as quickly. In remote access, 20 times as quickly.

Benefit provided by this new feature of version 25:
No more waiting



SCM MERGE SIMPLE AND USER-FRIENDLY

067 New feature WD WB WM SCM: THE MERGE GETS A FACELIFT

The Merge allows you to automatically propagate changes and detect conflicts.

In version 25, the interface is simplified and highlights changes and conflicts.

For example, similar changes made in the 2 branches to merge are no longer indicated.

Another example: the changes you have made are no longer highlighted if they do not cause conflicts..

Unresolved conflicts are more visible.

An interface to browse through conflicts is finally integrated: next conflict, previous conflict...

In the interface, each version is presented in a third of the screen.

Certain lines of code can therefore be truncated.

In version 25, the 3 versions of the selected line are shown in full width at the bottom of the window: the developer therefore sees the entire lines of code.

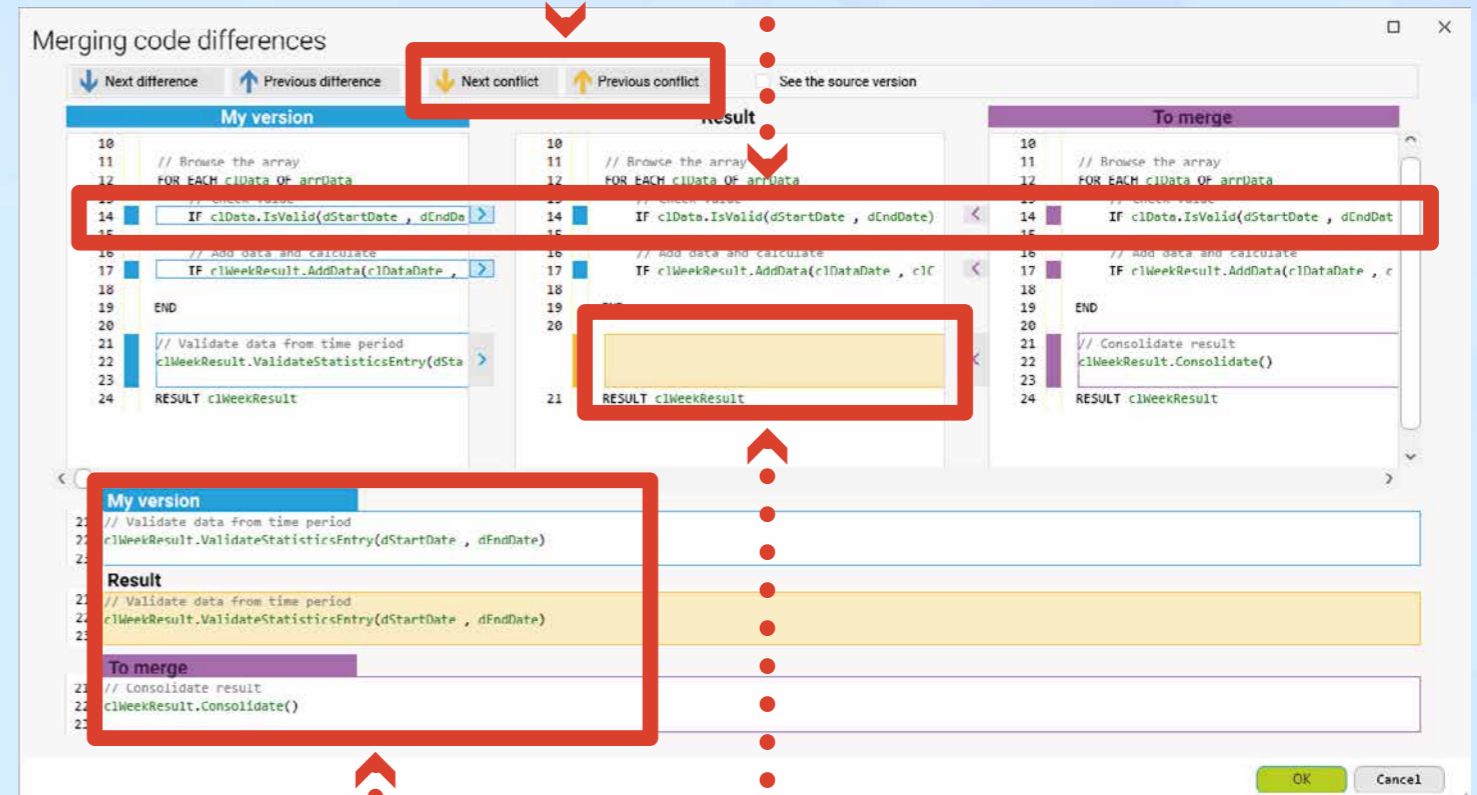
When a conflict cannot be resolved automatically, the version to keep can be more easily selected.

Benefit provided by this new feature of version 25:

Propagate changes much more efficiently

Quick access buttons, allowing you to go from one conflict to another

For better readability: identical changes made in both branches are no longer highlighted

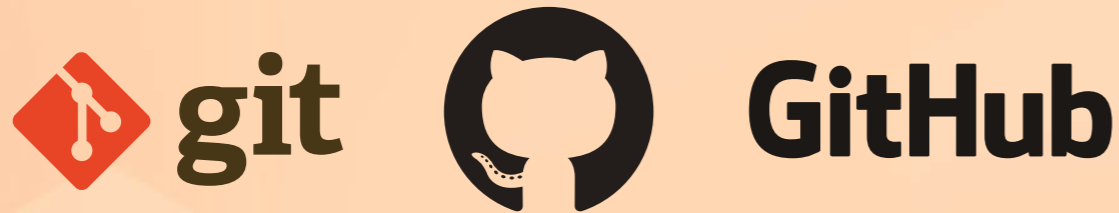


The lines of code to compare appear in their entirety. They are no longer truncated

In case of conflict, the result is not pre-filled. This makes it easier to see the conflicts

AS GOOD AS IT GITS (SORRY. COULDN'T HELP IT)

YOUR PROJECTS, YOUR WINDOWS, YOUR CODE IN GIT (AND IN GITHUB)



Git is a source code manager. Git can be used within a company on its own servers, without anyone outside having access to it. GitHub is a hosting company that offers Git database hosting (it is the most well-known hosting company, now owned by Microsoft).

068 New feature WD WB WM MANAGE PROJECTS WITH GIT (AND IN GITHUB)

In 25, the environment allows saving projects, windows, pages, reports, classes, sets of procedures and code in a Git database. This new feature allows you to share source elements through GitHub, for example.
Benefit provided by this new feature of version 25:
Publish your WLanguage code on GitHub

069 New feature WD WB WM PROJECT, WIN, PAGE, CODE, REPORT

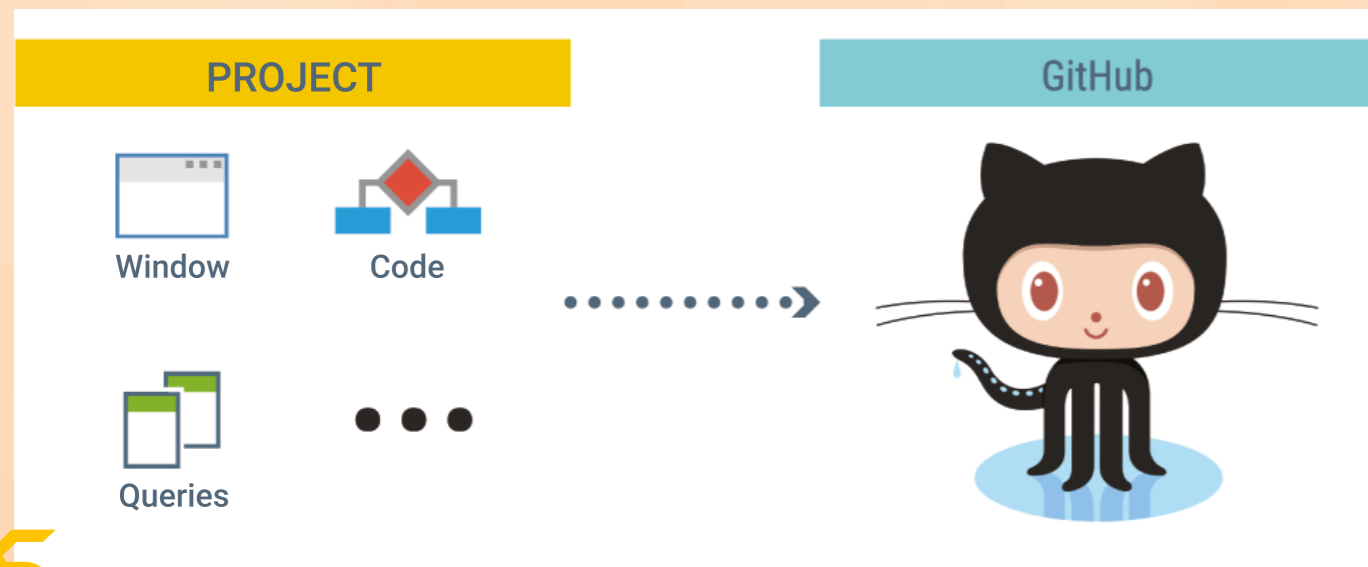
Source code is managed in text format (option). Windows, pages and reports can be saved in YAML (hierarchical hybrid text format). Objects contain the control names in readable format, as well as the code of each control. In version 25, the project elements are saved either in native format or in "Git" format (hybrid text).

Benefit provided by this new feature of version 25:
Commit all

070 New feature WD WB WM HOW TO USE GIT

Use git as usual. Git commands are available: push, pull, commit, merge... You can resolve conflicts in Git or in the environment, depending on the type of conflict.

Benefit provided by this new feature of version 25:
Standard use



071 New feature WD WB WM SCM: SILENT CHECK-IN

In version 25, you can choose a silent check-in: one less action!

Benefit provided by this new feature of version 25:
Shh, it's checking in!

072 New feature WD WB WM SCM: EASILY UNDO CHECK-OUTS

In version 25, you can undo check-outs performed on other development computers. The SCM repository administrator can authorize developers to undo check-outs performed by other developers.

Benefit provided by this new feature of version 25:
This may help you get out of certain situations...



073 New feature WD WB WM INTEGRATED DEVOPS ENVIRONMENT

WINDEV, WEBDEV and WINDEV Mobile version 25 make up an even more integrated DevOps environment. Unlike scattered heterogeneous tools, you have all the necessary functionalities to implement the DevOps approach. You have all the integrated tools to manage the DevOps methodology: life cycle management, testing, continuous integration, deployment, continuous delivery, production, user feedback... The compatibility with Docker speeds up processes.

Benefit provided by this new feature of version 25:
Open to all methodologies

CODE EDITOR

074 New feature WD WB WM FLUIDITY OF THE CODE EDITOR

The actions of the code editor become more fluid in version 25. Display speed, movements, ... are much faster. These improvements make the user experience much more pleasant.

Benefit provided by this new feature of version 25:
A much more pleasant editor

075 New feature WD WB WM CODE EDITOR: SAVE YOUR CODE IN TEXT FORMAT

In version 25, you can save the code of your projects in 2 formats:

- native format
- text format.

Native format is the well-known, optimized format. Text format allows you to handle the code with external processes, and to deposit it in GIT.

Benefit provided by this new feature of version 25:
Everything is clear

076 New feature WD WB WM AUTOMATIC CREATION OF PROCEDURES (OR INTERNAL PROCEDURES)

The assisted input offers the following for all the functions that take a callback as parameter::

- existing project procedures
- a new procedure
- a new internal procedure

If a new procedure is created by this means, it will automatically have the appropriate parameters. No need to see the help and search for the parameters to define!

```

4
5 flistFile("C:\Users\Jess",)
6 procedure(Path, File name, Change, Pointer){
7   <Create an internal procedure...>
8   (Path, File name, Change, Pointer)=>
9   (Path, File name, Change, Pointer)=>{}
10  <Create a procedure...>
11

```

Create a procedure or internal procedure with a single click

Benefit provided by this new feature of version 25:
No need to look for the prototype!



077 New feature WD WB WM NEW KOUGLOF (CODE PANE): MUCH MORE PRACTICAL

The kouglof (code pane) allows you to access all the project code elements.
The kouglof has been revamped in version 25 to allow even faster access to these elements.

Among the new features of the Kouglof you will find:

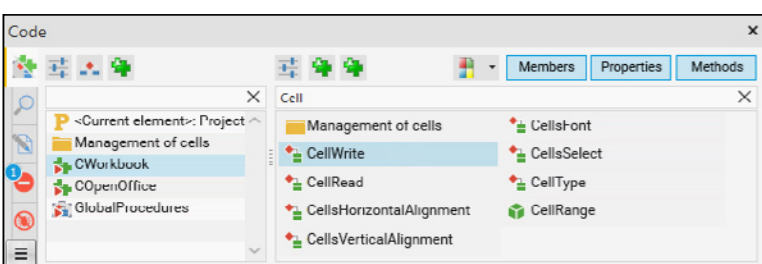
- filter, search
- custom folders
- popup menus
- display of inherited elements
- properties
- automatic synchronization with procedure
- 4K operating mode
- filter for .Net assembly

On the left section:

- List of all project elements and components
- The special entry "current element" is synchronized with the active view (displays local procedures of the window being edited...)
- On/off filter buttons to display or hide:
 - sets of procedures
 - classes
 - sets of browser procedures
 - sets of server procedures
- project elements
- elements of external components
- elements of internal components
- elements of code custom-folders
- Popup button for sort options (as in the explorer)

On the right section:

- Condensed list
- Filter buttons to display or hide:
 - members
 - procedures/methods
 - constants
 - inherited members/procedures
- Sort popup button:
 - alphabetical sort
 - sort by modification date
 - sort by scope (private/protected/public)
 - sort by color
- The filter is enabled simply by typing (as for the old kouglof, except that it filters instead of searching)
- Filter with insignificant whitespace
- Shift+Click on filter button for exclusive activation

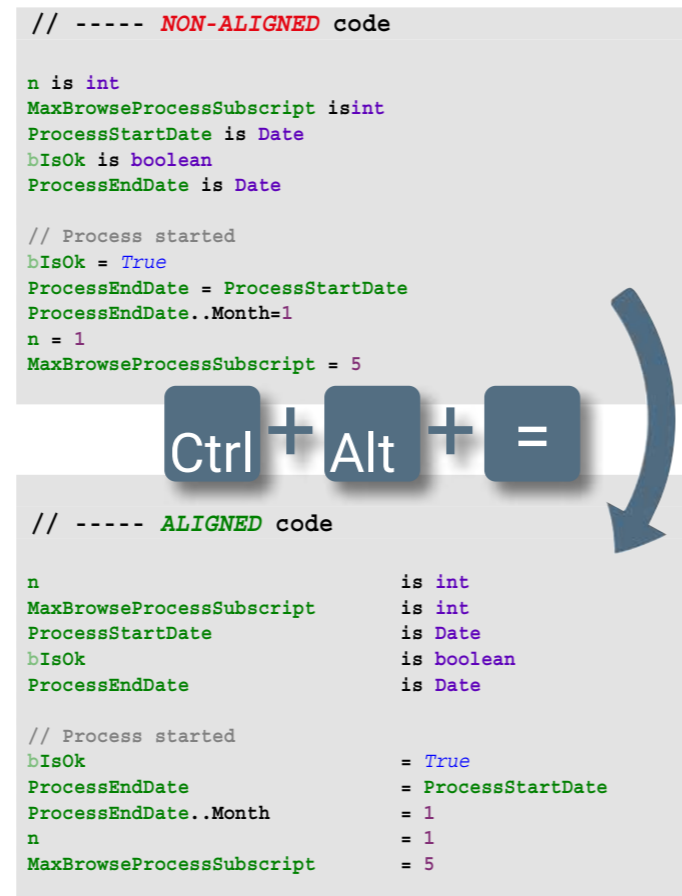


Benefit provided by this new feature of version 25:
Everything is organized in the pane

078 New feature WD WB WM ALIGNMENT ON THE "=" SIGN AND THE "IS" WORD

In version 25, the **CTRL + Alt + =** key combination aligns all the = signs in the selected area, thus aligning all the text and code to the right of these = signs.

This shortcut is also available on the "is" keyword in the declarations of variables.



Benefit provided by this new feature of version 25:
Significantly better readability!

079 New feature WD WB WM RETURN TO LAST CODE MODIFICATION: CTRL + ALT + BACKSPACE

Often, after writing a line of code, you navigate through the code to check certain elements.

And then, you have to go back to that line of code to continue your task.

In version 25, you can return to the initial code using **Ctrl + Alt + Backspace**.

Benefit provided by this new feature of version 25:
Quickly return to your code

080 New feature WD WB WM IMPORT MULTIPLE CLASSES

A useful new feature is that the file selector for importing classes in Text format now allows multiple selection.

Benefit provided by this new feature of version 25:
Less actions, more time saved

081 New feature WD WB WM CANADA: CODE IN ENGLISH OR IN FRENCH

WLanguage can be written in English or in French.
Useful for multilingual countries, like Canada for instance.

Benefit provided by this new feature of version 25:
You choose

082 New feature WD WB WM COPY/PASTE CODE WITH MULTILINGUAL STRINGS: IT'S CRYSTAL CLEAR

Version 25 offers a new option to paste multilingual strings.
When a multilingual string is copied/pasted, 2 options are available:

- the string is pasted, nothing else. There is no link to the original string.
- the string is pasted, and it remains linked to the original string. If the original string is modified, the pasted string will be automatically modified.

By default, the pasted string is not linked to the original string.
The "Special paste" menu option allows you to keep the link to the original string.

Benefit provided by this new feature of version 25:
No more trouble!

083 New feature WD WB WM CONDITIONAL TARGET-CODE: STANDARDIZED CODE PRESENTATION

The presentation of conditional target code is standardized.
The code is now presented in a single column.
The code target is indicated by a compiler directive.

Benefit provided by this new feature of version 25:
Clearer presentation

084 New feature WD WB WM DEVELOPMENT ON LAPTOP

This new feature of version 25 will delight developers who work on a laptop without a keypad: it is now possible to comment and uncomment lines of code using the following key combinations:

CTRL +: and **CTRL + Shift +:**

Benefit provided by this new feature of version 25:
Now everyone can comment!

REPORT EDITOR

085 New feature WD WB WM REPORT EDITOR: GENERATE NUMEROUS PDFS (THREADS)

To accelerate massive PDF generation, simply launch this generation in threads.
WINDEV will use the power of multi-core processors to generate PDFs faster: invoices, custom commercial proposals, emails...

Benefit provided by this new feature of version 25:
Significant time savings

086 New feature WD WB WM REPORT EDITOR: PROTOTYPE GENERATION TO PASS PARAMETERS

In version 25 the report editor automatically generates the prototype for passing parameters to the report.
It's more intuitive.

Benefit provided by this new feature of version 25:
Less code to write

087 New feature WD WB WM REPORT EDITOR: PASS PARAMETERS TO INTERNAL REPORTS

In version 25, you can explicitly pass parameters to internal reports.

This allows you to avoid global variables.

Benefit provided by this new feature of version 25:
More flexible programming

088 New feature WD WB WM REPORT EDITOR: EVOLUTION OF HTML CONTROL

In an HTML document, an image can be defined by a link and encoded directly in the document.



The report editor manages base 64 encoded images in HTML content.

Benefit provided by this new feature of version 25:
One more format supported

089 New feature WD WB WM COMPOSITE REPORT EDITOR: XLS EXPORT

In version 25, composite reports and sequences of reports can also be exported as XLS.
An XLS sheet is created by subreport.

Benefit provided by this new feature of version 25:
Always more

WLANGUAGE



090 New feature WD WB WM NEW PREFIXED SYNTAX ON ALL HFSQL FUNCTIONS

Prefixed syntax is now available on HFSQL database management functions.
The advantage of this syntax is that after writing the name of a data file (table) followed by a dot, a combo box appears and proposes the list of functions that apply to this data file

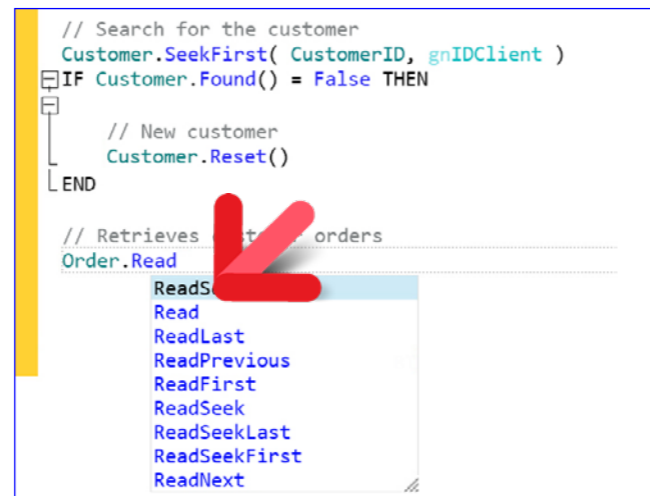
(table).
In version 25, this type of entry is available for all the code...
For example:

```
// Search for the customer
Customer.ReadSeekFirst( CustomerID, gnCustomerID )
IF Customer.Found() = False THEN
    // New Customer
    Customer.Reset()
END

// Carry over entered data
WIN_EDIT.ToFile( Customer )

// Saves the information
Customer.Save()
```

The code editor provides automatic completion.



Pro tip: automatic completion

Benefit provided by this new feature of version 25:
Homogeneous code writing



091 New feature WD WB WM EDIT PDF IN WLANGUAGE (NO NEED TO DISPLAY THE DOCUMENT)

In version 25, you can edit PDF documents in WLanguage.

You don't need to open the document in order to modify it.

Several native types are introduced:

- pdfDocument
- pdfPage
- pdfTextElement
- pdfAttachment
- ...

These native types allow you to manage PDF files by programming.

These are some of the available features:

- delete page/pages
- insert page/pages
- add/delete password
- rotate document
- crop
- resize
- add/extract attachments
- retrieve signature
- ...

This new feature opens up powerful PDF customization possibilities (including Web environment).

Benefit provided by this new feature of version 25:
Work on PDF files without opening or viewing them

092 New feature WD WB WM PDF: PADES

PADES is a PDF document signature standard.
In version 25, this standard is supported by PDF signature functions.

Benefit provided by this new feature of version 25:
PADES authentication

093 New feature WD WB WM YAML: EXCHANGE FORMAT MANAGED NATIVELY IN WLANGUAGE



YAML is a structured data exchange format.
YAML is a serialization format, like XML or JSON, but more readable by humans, and more concise than XML.
In version 25, WLanguage supports YAML.

YAML becomes a native WLanguage type.
This native type allows you to use the assistance in the code editor (completion, etc.).
YAML proposes specific concepts of tags, comments, anchors.
The native WLanguage type manages these concepts.

Benefit provided by this new feature of version 25:
Native Yaml support!

094 New feature WD WB WM JSON: EVOLUTIONS

In version 25, you can delete members of a JSON variable.

Simply set `..Exist` to `false`.

Benefit provided by this new feature of version 25:
Using JSON is even easier

095 New feature WD WB WM JSONTOSTRING AND STRINGTOJSON

JSON documents are strings with a specific formatting.
The `JSON` WLanguage type allows you to easily manage JSON documents.

The new `JSONToString` WLanguage function allows you to convert a `JSON` variable to `String`.

`JSONToString` offers formatting options:

- with or without `CR`
- with or without `TAB`

The new `StringToJSON` function allows you to fill a `JSON` variable from a string.

If `StringToJSON` fails, it means that the string containing the JSON is invalid.

Benefit provided by this new feature of version 25:
Simplify numerous processes

096 New feature WD WB WM PROPERTIES: USING TWO DOTS DRIVES YOU MAD? USE ONLY ONE!

TWO DOTS >> `clCustomer.InProgress`

ONE DOT >> `clCustomer.InProgress`

Properties have always been accessed using two dots `".."` in the syntax.

In version 25, you can use only one dot: `"."` instead of `".."`.

Both syntaxes are recognized.

Nothing changes for you and your habits.

Benefit provided by this new feature of version 25:
One dot, that's it!





FILTER, MAP, REDUCE

```
dStartDate..Day -- 7
// Browse through orders from last 7 days
for each Order where OrderDate >=dStartDate
{
    // Search for unpaid orders
    if Order.Status = UnpaidOrder
    {
        cyInProgress+=Order.TotalIOT
    }
}
// Return in progress
return cyInProgress
```

Benefit provided by this new feature of version 25:
A well-known syntax

099 New feature WD WB WM CREATE YOUR OWN PROPERTIES

- In version 25, you can create your own properties on:
- control templates
 - window templates
 - windows
 - internal windows
 - pages
 - internal pages
 - ...

This new feature allows writing code in a more concise and understandable way. This syntax encapsulates accesses. For example

```
..SendUrgentPackage
..SendEcoPackage
```

You can override standard WLanguage properties by defining custom properties with the same name.
Benefit provided by this new feature of version 25:
Find the property of your dreams

Example: in one single line of code, calculate the average age of an array of individuals by selecting only those who are over 18 years old. This allows for functional programming. You can call **Filter**, **Map** and **Reduce** one after another, as well as **Sum**, **Mean**, **Min** and **Max**.

```
MyCustomers is array of Records of Customer

// Retrieve customers from 34
CustomersFrom34 is array of Records of Customer
CustomersFrom34 = MyCustomers.Filter( x => ( x.ZipCode[[ 1 TO 2]] = "34" ) )

// Retrieve list of countries of customers
ListCountry is array of strings
ListCountry = MyCustomers.Map( x => x.Country )

// Sum of outstandings
SumOutstandings is currency
SumOutstandings = MyCustomers.Reduce( ( x, total ) => { total += x.OutstandingsAllowed }, 0 )
```



A Rebus to solve!

Benefit provided by this new feature of version 25:
Powerful and concise

102 New feature WD WB WM DYNAMIC COMPILATION: INTERNAL PROCEDURE

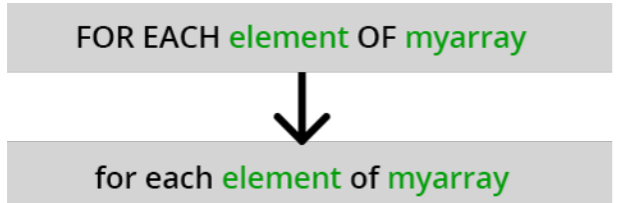
You can use Internal Procedures in dynamic compilation.
Benefit provided by this new feature of version 25:
Even more powerful

103 New feature WD WB WM INTERNAL PROCEDURE: "CASE ERROR:" AND "END:"

"CASE ERROR:" and "END:" are labels. These labels are supported in Internal Procedures.
Benefit provided by this new feature of version 25:
Useful new feature!

097 New feature WD WB WM KEYWORD IN LOWERCASE, OR IN UPPERCASE, UP TO YOU

Uppercase characters?
Lowercase characters?
In version 25, you choose how keywords appear in your source code.



Below is an example of code with keywords in lowercase.

```
procedure CalculationInProgress():currency
// Local variables
cyInProgress is currency
dStartDate is date
dStartDate..Day -- 7

// Browse through orders from last 7 days
for each Order where OrderDate >=dStartDate
// Search for unpaid orders
if Order.Status = UnpaidOrder then
cyInProgress+=Order.TotalIOT
end
```

```
end
// Return in progress
return cyInProgress
```

Benefit provided by this new feature of version 25:
Choose how your code looks

098 New feature WD WB WM CURLY BRACKETS

Yet another source code customization possibility: curly brackets. The opening curly bracket represents a beginning of a block of code, and the closing curly bracket represents the end of a block of code (!). Curly brackets apply to all blocks of code:

- if then else,
 - for i=1,
 - when exception
 - etc...
- Some developers are used to this syntax, so version 25 makes it available!

```
procedure CurrentCalculation():currency
// Local variables
cyInProgress is currency
dStartDate is date
```

100 New feature WD WB WM LAMBDA

A lambda ("lambda function") is a more concise way to write internal procedures. Lambdas are useful for all functions that take callbacks as parameters: they allow you to enter the function code directly instead of the parameter. Example:

```
Documents is array of strings
fListFile("**.docx", (Path,Name)=>Documents.Add(Name))
```

Benefit provided by this new feature of version 25:
More concise code

101 New feature WD WB WM FILTER / MAP / REDUCE: ULTIMATE CONCISENESS

The "Filter / Map / Reduce" concept allows writing data array transformation loops in a concise way.

104 New feature WD WB WM NEW THREAD TYPE: SIMPLIFY THREAD PROGRAMMING

The new `Thread` WLanguage type helps you create threads more easily. Threads and Parallel Tasks are now programmed in the same way.

Benefit provided by this new feature of version 25:

Managing threads becomes significantly easier

105 New feature WD WB WM GENERATE A PUBLIC/PRIVATE KEY COUPLE: NEW WLANGUAGE FUNCTION

Many encryption or signature algorithms require a public key and a private key.

WINDEV offers all the necessary functionalities.

The new `EncryptGenerateRSAKey` WLanguage function automatically generates a public / private key couple.

Benefit provided by this new feature of version 25:

One line of code is all it takes

106 New feature WD WB WM CONTINENT / COUNTRY FUNCTIONS

Several WLanguage functions are introduced in version 25: `GetCountryContinent`, `GetCountryContinentList`, `GetContinentList`, `GetContinentName`, `GetContinentConstant`.

Managing a country has never been easier!

Benefit provided by this new feature of version 25:

Nobel Prize in geography!

107 New feature WD WB WM HTTP REQUESTS: SPEED LIMIT

It is now possible to restrict (limit) the upload/download speed used for requests.

This allows you, for example, not to saturate the bandwidth, or to simulate a slow network.

Benefit provided by this new feature of version 25:

Testing or advanced use

108 New feature WD WB WM HTTP REQUESTS: NEW VERBS

HTTP requests accept the new verbs `PROPFIND` and `BPROPFIND`.

No need no code them!

Benefit provided by this new feature of version 25:

It's a matter of conjugation now

109 New feature WD WB WM OAUTH: TOKEN MODE SUPPORT (IMPLICIT GRANT)

The "implicit grant" mode is used to limit the number of requests made to a server to perform an authentication. The "implicit grant" mode is supported in version 25.

Benefit provided by this new feature of version 25:

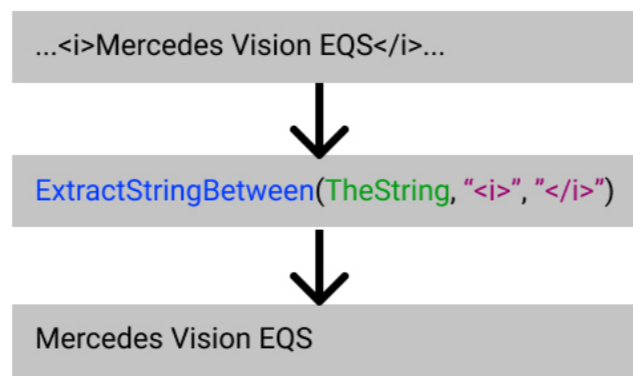
oAuth2 extension

110 New feature WD WB WM EXTRACTSTRINGBETWEEN

Here is a feature that many are going to love!

`ExtractStringBetween` allows you to extract a string between 2 substrings (tags, generally).

Now you can extract a string between 2 tags using one line of WLanguage code!



String extracted in one line of code!

Benefit provided by this new feature of version 25:

Powerful extraction in one line of code

111 New feature WD WB WM STRINGTODATE AND DATETOSTRING

`StringToDate` and `DateToString` manage ISO 8601 / RFC 3339.

This format includes the time zone.

Exemple: 2021-05-20T00:00:00+02:00

Benefit provided by this new feature of version 25:

One more format supported

112 New feature WD WB WM FREADLINE: OPTIMIZED, UP TO 10 TIMES FASTER

The remarkably useful `fReadLine` function has been optimized.

It is significantly faster: up to 10 times faster.

Benefit provided by this new feature of version 25:

Optimized speed

113 to 120 VARIOUS NEW FEATURES

- 64 encoding with or without CR.
- 2 new Hash algorithms proposed: MD4 hash and double SHA-256.
- The new `TableCollapseExpand` function changes the state of the break (collapses the break if it was expanded, and vice-versa)
- `NetworkConnect`: a persistence option allows you to keep the drive letter after closing the session
- `AppointmentModify` and `AppointmentDelete`: the functions can take the appointment identifier as a parameter (useful for Outlook)
- You can directly assign a duration to properties: `MyRequest..Timeout = 5s`
- `EmailConfigure`: new constant to no longer convert emails received in "latin 1" in Ansi projects.
- `fCreate`: support of the `foAutomaticDeletion` constant; the file is automatically deleted when it is closed.

Benefit provided by this new feature of version 25:

Useful new features

WEBSERVICES: CALLS

121 New feature WD WB WM SOAP WEBSERVICE: SUPPORT OF "IMPORT" TAG

WSDL description files with an "Import" tag are automatically supported.

Benefit provided by this new feature of version 25:

Less code

122 New feature WD WB WM SOAP WEBSERVICE: CHECK NUMBER OF PARAMETERS

In version 25, the compiler checks the number of parameters expected by the Webservice procedures.

Benefit provided by this new feature of version 25:

Less risk of errors

XML

123 New feature WD WB WM SIGNATURE

You can sign XML files using `XMLSign`.

Benefit provided by this new feature of version 25:

XML files are no longer anonymous

OOP

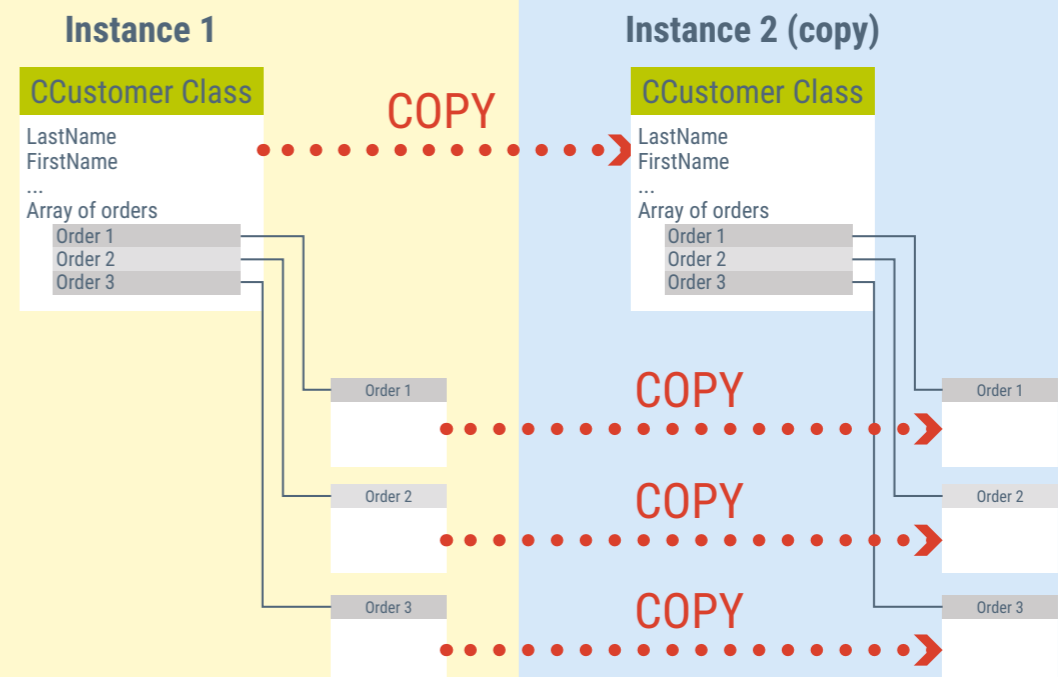
124 New feature WD WB WM DEEP COPY ATTRIBUTES: COPY OF ARRAYS (DEEP COPY)

The deep copy attribute is used to indicate if, for each attribute of the object, it is desired to reference or duplicate the member objects.

This allows you to use the copy operator `<=` to correctly copy arrays of dynamic objects.

Benefit provided by this new feature of version 25:

Everything becomes much more simple



125 New feature WD WB WM ATTRIBUTE TO PREVENT COPYING A MEMBER

The new `<Copy=false>` attribute allows you to prevent the copy of the member's value when copying from one object to another.

This is useful for confidential information, for example: passwords, GUID,...

Benefit provided by this new feature of version 25:
No need to write a copy procedure

126 New feature WD WB WM NEW CLONE FUNCTION: CLONE OBJECTS

The new `clone` function allows you to assign and copy the object that is passed as a parameter. In the case of polymorphism, it is no longer necessary to write the code necessary for this cloning. Likewise, there is no need to write virtual methods in all derived classes as well as constructors by copy.

Benefit provided by this new feature of version 25:
Cloning sheep: Done. Cloning objects? Piece of cake!

127 New feature WD WB WM DYNAMIC OBJECT AS PARAMETER: DERIVED ACCEPTED!

This new feature will delight OOP enthusiasts. It was impossible to simply call a procedure that takes a dynamic object as a parameter by passing an object of a derived class of the object expected as a parameter. It was necessary to add the `local` keyword in the declaration of the parameter, which was unheard of (and not very natural, truth be told).

This bizarre method has been corrected in version 25: it is possible to call the procedure with a derived class as a parameter.

Benefit provided by this new feature of version 25:
Everything becomes simpler

128 New feature WD WB WM OPTION TO PREVENT COPIES IN PROC(THIS) OR PROC(EXAMPLE())

In version 25, when calling a `Proc` function that passes itself as a parameter or calling a `Proc` function that takes as parameter a function that returns an object, this object is no longer copied.

A compilation option in the "7 tabs" of the project description prevents copying.

Benefit provided by this new feature of version 25:
Simplification

HFSQL DATABASE HFSQL®

129 New feature WD WB WM SPARE SERVER

A "spare" server is a target server in a unidirectional automatic replication.

It is a form of backup almost in real time.

This server is accessible only in read-only mode (except for the automatic backup operation itself).

The advantage of a Spare server is the simple implementation of the infrastructure. Compared to a replication, it is not necessary for the data file (table) to have an 8-byte auto ID item.

If necessary, the Spare server can switch to "non-Spare" mode to take over, for example, in the event of a disk crash on the main server.

It is a simple tool, offered along with the implementation of a replication and a cluster, to benefit from a backup server.

Benefit provided by this new feature of version 25:
Easy-to-implement security

130 New feature WD WB WM PREFIXED SYNTAX

In version 25, the call syntax of HFSQL WLanguage functions can be prefixed.

See new feature 090.

Benefit provided by this new feature of version 25:
Standardization



131 New feature WD WB WM OPTIMIZED QUERIES THANKS TO SEQUENTIAL BROWSE, WITHOUT SUBSCRIPT

The HFSQL engine can decide to sequentially browse a data file (table) if this type of browse is faster than using the subscripts.

The sequential browse avoids reading the subscripts.

Thus, on hard disk drives, head movements are minimized, as is the number of reads.

Besides, the operating system also optimizes sequential reading ("Read ahead").

Some queries become much faster by upgrading HFSQL server to version 25.

Benefit provided by this new feature of version 25:
Even better performance

132 New feature WD WB WM NEW WLANGUAGE FUNCTIONS: HUPDATELINK

In version 25, the new `hUpdateLink` WLanguage function allows you to update the server links by programming so that they correspond to the links in the analysis (data description).

Benefit provided by this new feature of version 25:
Check referential integrity

133 New feature WD WB WM HOT BACKUP: WEBHOOK CALL

A webhook is a callback on a web server.

A webhook allows you to trigger a process automatically.

A webhook can be defined for backups on your HFSQL databases. This webhook will be automatically called at the end of the backup.

This allows automatically retrieving the backup file from another computer, for example.

Benefit provided by this new feature of version 25:
Run a process at the end of the backup

134 New feature WD WB WM STORED PROCEDURES ALLOW THE USE OF MULTILINGUAL STRINGS

In version 25, you can use multilingual strings in stored procedures.

Benefit provided by this new feature of version 25:
The world is yours.

135 New feature WD WB WM UNIVERSAL REPLICATION THAT PROPAGATES STRUCTURE MODIFICATION (AUTO MODIF, SDD)

In version 25, universal replication automatically supports the modification of the database structure: if an "auto modif" is necessary, it will be propagated.



Benefit provided by this new feature of version 25:
More automation

136 New feature WD WB WM ASSISTED UNIVERSAL REPLICATION: SECURE ACCESS IN HTTPS

In version 25, universal replication allows the use of the secure Https connection mode. Simply install an appropriate certificate on the web server of the replication server.

Benefit provided by this new feature of version 25:
Better data security

138 New feature WD WB WM HFSQL CLASSIC: TRIGGERS ARE ALSO CALLED BY QUERIES

In version 25, when using HFSQL Classic (included version)

triggers on tables (data files) are also triggered by the use of SQL addition or modification queries: **INSERT, UPDATE, DELETE.**

Benefit provided by this new feature of version 25:
Useful improvements

139 New feature WD WB WM MISCELLANEOUS

You can set a limit to the number of simultaneous connections to an HFSQL server. Simply set the **hMaxNumberConnection** constant in the **hSetServer** function.

Benefit provided by this new feature of version 25:
I'll take it!

137 New feature WD WB WM AUTOMATIC REINDEXING IF NECESSARY DURING THE EXECUTION OF A QUERY

In version 25, the reindexing of a data file (table) is proposed when a query determines that an index is corrupted: disk problem, power outage,...

Benefit provided by this new feature of version 25:
Additional automation

SQL FUNCTIONS

140 New feature WD WB WM OPTIMIZATION ON "LEFT"

In version 25, expressions such as the following (comparison with a hardcoded value) have been optimized:

left (item,N) > value
left (item,N) >= value
left (item,N) < value
left (item,N) <= value

Benefit provided by this new feature of version 25:
Optimized performance

New feature WD WB WM

141 to 148 8 NEW SQL FUNCTIONS

8 new SQL functions to manage dates are available in version 25.

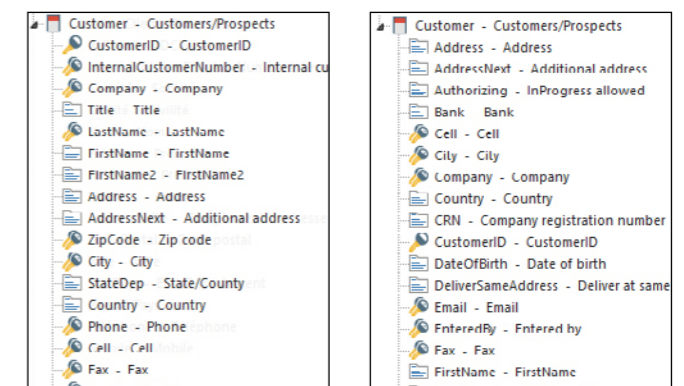
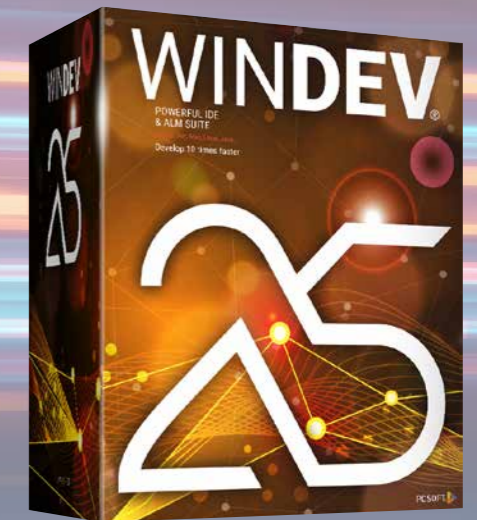
DATEADD (element, number, date)	Returns the date corresponding to the specified date plus another element (minute, hour, day, month, year, etc.). For example: get the date corresponding to the current date + 2 months.
DATEDIFF (element, start date, end date)	Returns the number of elements (minute, hour, day, month, year, etc.) between the start and end date (for example, gets the number of months between two dates).
DATEDIFF_BIG (element, start date, end date)	Returns the number of elements (minute, hour, day, month, year, etc.) between the start and end date (for example, gets the number of months between two dates).
DATETIMEFROMPARTS (year, month, day, hour, minute, second, millisecond)	Returns the datetime corresponding to the elements (minute, hour, day, month, year, etc.) specified.
DATEFROMPARTS (year, month, day)	Returns the date corresponding to the specified elements.
DATEPART (element, date)	Returns the value of the element (minute, hour, day, month, year, quarter, etc.) in the specified date.
EOMONTH (date)	Returns the last day of the month.
EOMONTH (date, x)	Returns the last day of the month adding x months.
ISDATE (expression)	Used to find out if a date is valid.

Benefit provided by this new feature of version 25:
Enriched SQL

GRAPHIC QUERY EDITOR

149 New feature WD WB WM ORDER! (CLEANER LOOK!)

In the query editor, the items were displayed only in logical order (the order of the data description). In version 25, you can also display the items in alphabetical order.



Logical order or alphabetical order.
Now you can choose

Benefit provided by this new feature of version 25:
Find items more easily

HFSQL CLUSTER

As you know, HFSQL exists in Cluster version. This HFSQL version allows you to create a server farm.

150 New feature WD WB WM LIMIT NUMBER OF CONNECTIONS TO ONE NODE

In order to reduce the load of the cluster server, you can limit the maximum number of connections to a cluster node.

Benefit provided by this new feature of version 25:
Millimetric precision



HFSQLDRIVE YOUR HFSQL DATABASES IN THE CLOUD IN 3 CLICKS

HFSQLDrive allows you to easily and immediately host your data files (tables) in the cloud. In version 25, HFSQLDrive is enriched.

151 New feature WD WB WM HFSQLDRIVE: RESET ADMIN PASSWORD

The HFSQLDrive portal allows you to reset the server administrator's password.

Benefit provided by this new feature of version 25:
Pro tip

HFSQL CONTROL CENTER

152 New feature WD WB WM REPLICATION OF SERVERS

When configuring a Server Replication in the HFSQL Control Center, the passwords of data files involved in the replication are directly requested.

Benefit provided by this new feature of version 25:
Pro tip



In version 25, HFSQL is even faster

DATABASE NATIVE CONNECTORS

As you know, there are many native connectors for third-party databases: Oracle, SQL Server, AS/400, DB2, MySQL, PostgreSQL, SQLite, xBase, MariaDB, Informix, Progress, Sybase...

153 New feature WD WB WM NUMBER OF ROWS AFFECTED BY A QUERY

The `H.NbRecModificationQuery` variable is specified at each Insert, Update and Delete.

Benefit provided by this new feature of version 25:
Information that can be useful

154 New feature WD WB WM NATIVE MS SQL SERVER CONNECTOR

Extended connection information supports Encrypt and TrustServerCertificate features.

Benefit provided by this new feature of version 25:
Evolutions

ELECTRONIC INVOICING CHORUS PRO

The European Union has chosen to generalize electronic invoicing.

155 New feature WD WB WM CHORUS PRO



In France (ECC), electronic invoicing has become mandatory for invoicing government services. The French government has set up the Chorus Pro system to submit and monitor invoices. It is the tool for managing the expenditure and non-tax revenues of French government services.

Version 25 makes it easier to automatically submit invoices to Chorus Pro.

Benefit provided by this new feature of version 25:
Create and submit your invoices on Chorus Pro with version 25

156 New feature WD WB WM SIGN PDFS WITH "PADES" STANDARD

The PADES standard is recognized for PDF signatures (see new feature 092).

Benefit provided by this new feature of version 25:
Additional standard supported

BLOCKCHAIN



157 New feature WD WB WM NATIVE HASH FUNCTION BITCOIN

The `HA_SHA_256_DOUBLE` constant is used to hash data using the native hash function `HashString`. (see new feature 113).

Benefit provided by this new feature of version 25:
Native function

IOT



158 New feature WD WB WM IOT: ACCESS TO AMAZON IOT WEBSERVICE

Version 25 provides easy access to AWS IoT APIs.

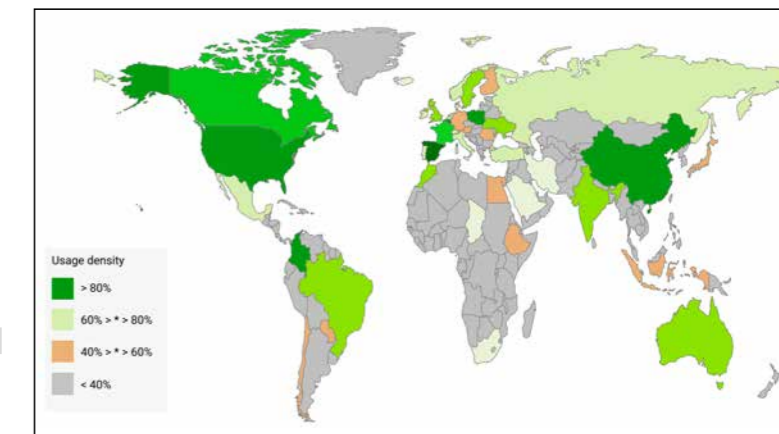
Benefit provided by this new feature of version 25:
New advantage

TELEMETRY

Telemetry, which comes as standard in WINDEV, allows you to collect and aggregate nominative or anonymous information on how your applications are used: choice of selected menus, functionalities used, long processes, possible bugs, use time ranges... Telemetry also allows you to know the hardware configuration of end users, OS versions, which is very useful especially for software publishers. Telemetry evolves in version 25.

159 New feature WD WB WM STATISTICS BY COUNTRY

New statistics show, on a world map, the countries where the application is used. The color applied to the country indicates the use density



Visual information by country

Benefit provided by this new feature of version 25:
Additional information

160 New feature WD WB WM NEW WIDGET: STATISTICS ON THE TELEMETRY SERVER

A new Widget is introduced in version 25: The "Server Status" Widget.

This Widget displays information about the data retrieved from a server:

- number of shares in a time range
- date of latest information received
- quantity of information received in a given period
- date of last server aggregation
- possible errors
- ...

This information is used to ensure that everything is working properly!

Benefit provided by this new feature of version 25:
Information about the server itself

161 New feature WD WB WM ELEMENT "DETAILS" WIDGET: EVOLUTIONS

The information displayed by element (window, page, control, query, etc.) is more detailed and easier to understand. For example:

- times the element has been opened
- number of users who have opened the element at least once,
- average of times the element was opened per user (who has used the element at least once)
- ...

This makes it easier to understand how elements are used.

Benefit provided by this new feature of version 25:
Additional information

162 New feature WD WB WM OFFLINE MODE

Usually, when an application monitored by telemetry started, if it could not connect with the telemetry server, data was not collected until the next time the application started. In version 25, if the connection fails, the information is collected locally for a maximum of 48 hours, and will be sent automatically as soon as the connection with the server is restored.

To manage special cases, the new `TelemetrySendData` WLanguage function allows you to force the sending of this data collected locally.

Benefit provided by this new feature of version 25:
Don't lose any more information

AUTOMATIC TESTS

163 New feature WD WB WM EMULATEMOUSE WITHOUT X,Y

`EmulateMouse` simulates clicks during a test. Click coordinates are now optional: the object will be "clicked" in the center, and the click will work even if the control is resized.

Benefit provided by this new feature of version 25:
Even more generic automatic tests

MONITORING BOT (WATCHDOG)

164 New feature WD WB WM TEMPORARY SUSPENSION OF TEST

In version 25, you can temporarily suspend a test with a simple right click. This can be useful, for example, during a hardware maintenance phase.

Benefit provided by this new feature of version 25:
Avoid receiving unnecessary messages

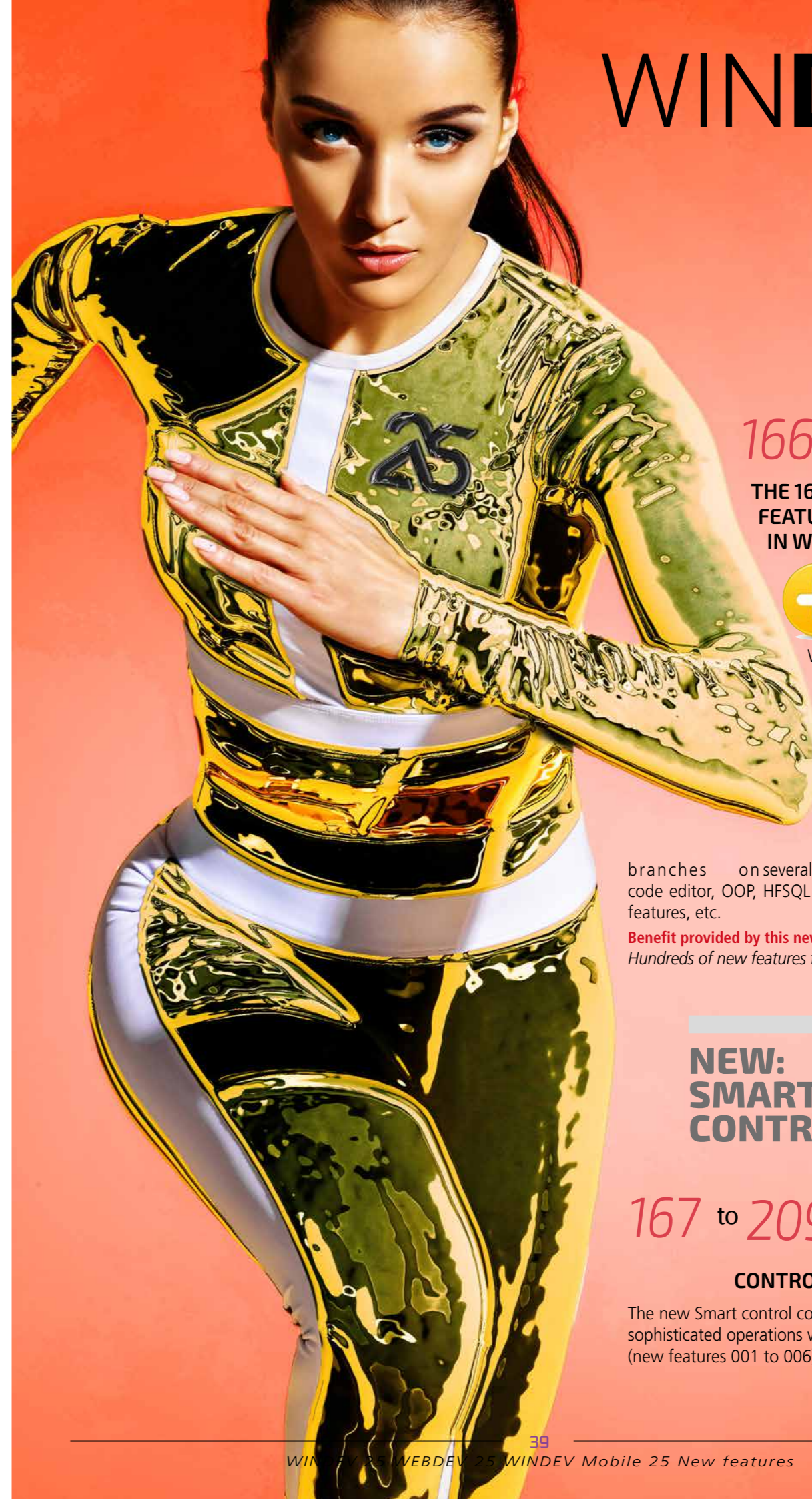
BIG DATA

165 New feature WD WB WM MONGODB

The new `MongoPipelineAggregation` WLanguage function is introduced for MongoDB databases. This function allows you to send aggregation pipelines to the database.

Benefit provided by this new feature of version 25:
A function that won't stay in the pipeline!

WINDEV®



166 New feature WD WB WM BENEFIT FROM THE 160 COMMON NEW FEATURES OF VERSION 25 IN WINDEV



WINDEV benefits from the 160 common new features of version 25, and in particular from Smart controls, WINDEV Mobile in WINDEV environment, management of PDF files, management of YAML, GitHub, project portfolios, creation of SCM branches on several projects, new features in the code editor, OOP, HFSQL Spare servers, telemetry new features, etc.

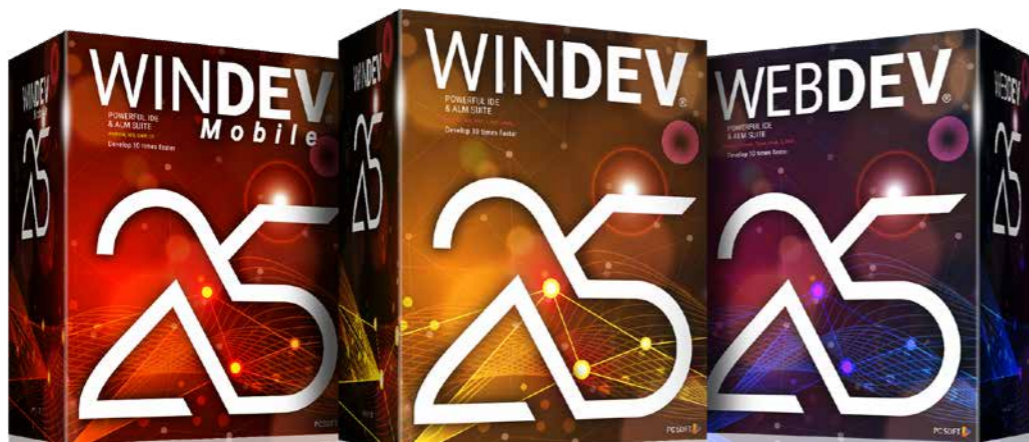
Benefit provided by this new feature of version 25:
Hundreds of new features for WINDEV in version 25

NEW: SMART CONTROLS

167 to 209 New feature WD WB WM 43 SMART CONTROLS FOR WINDEV

The new Smart control concept allows implementing sophisticated operations with one click in WINDEV (new features 001 to 006).

Continues page 44.



NEW: SMART CONTROLS WITH CODE, READY TO USE

Employees

- All (51)
- Staff members (37)
- Delegates (5)
- Contractors (3)
- Former (4)
- On leave (2)

Customers

Suppliers

MENU with drawers
Menu with stacked drawers.

FFFFFF RGB 255 255 255

COLOR PICKER
Displays the Web hex and RGB values of the selected color
Ability to directly enter Web hex and RGB values



PROGRESS BARS
Different designs
Slim and elegant look, perfect for modern dashboards

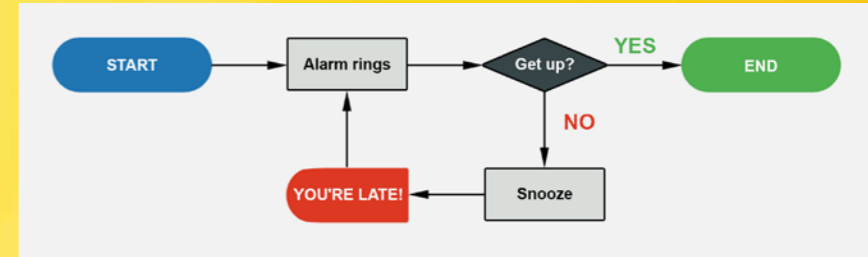
Phone

United States (+1) +1 212-123-4567

- United States (+1)
- Ethiopia (+251)
- Fiji (+679)
- Finland (+358)
- France (+33)
- Gabon (+241)
- Gambia (+220)

INTERNATIONAL PHONE INPUT
Combo Box with international phone prefixes • Ability to directly enter country name or code • Number formatting by country

DIAGRAM & WORKFLOW
Example of diagram and workflow based on a Wire control • Images supported



LOGIN
Simple and elegant alignment. Hint text in input.

Log in

User

Email address

Password

Log in



IMAGE FILE PICKER
File picker with examine button + filter for images in code.
Autocomplete, ellipse in the middle of path, memorization, etc...

Image : C:\CRM\Suppliers\Tames\Logo.png

SEARCH INPUT
Magnifier icon. "X" button to delete entered text

My search

PASSWORD STRENGTH
The bar progression and color indicate the password strength as it is entered.
The text indicates the strength. These criteria can be modified by programming

Medium

Open WINDOWS EXPLORER
Opens the Windows file explorer on the specified directory

Open application directory

FORM
Click to edit photo • Email verification
International telephone numbers supported
Display Google Maps (or other) to locate address

Contact form

Last name

First name

Company

Occupation Service

E-mail info@pocoft.com

Phone France +33

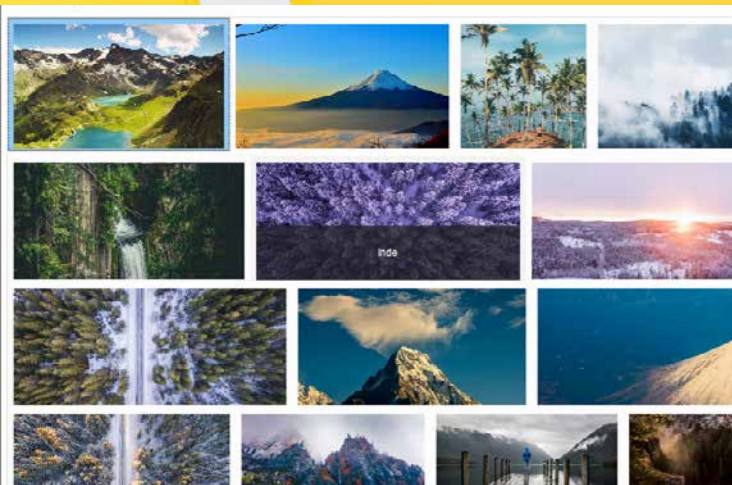
2775 Hiney Road NV 89101 Las Vegas

Cancel Save

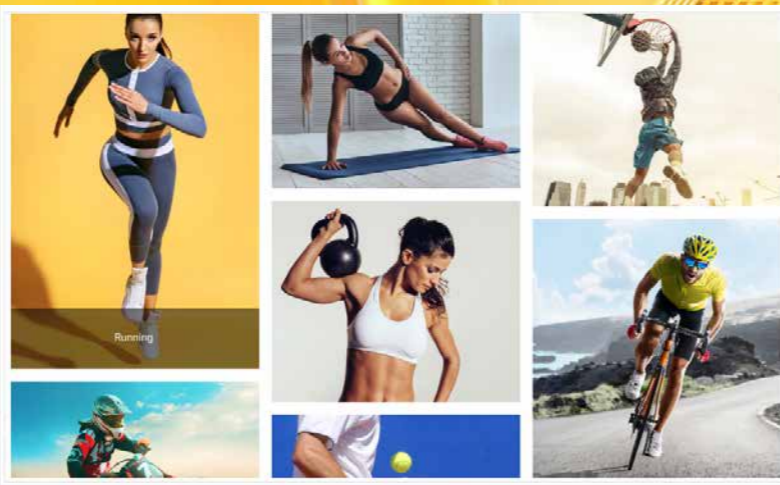
"STATISTICS" DASHBOARD CONTROL
Can be modified by programming

PROGRESS BAR BUTTON
Button with progress bar. The process is triggered when the button is clicked: the (infinite) progress bar cycles through. The button turns grey during the process. Progress bar also displayed in the Windows taskbar.

Long process



GALLERY IN ROWS
Ability to choose the visual layout of the gallery • Dynamic caption when hovering over the image



GALLERY IN COLUMNS

Double click on a document to view it

PDF GALLERY
Displays the PDF cover page (or another page)
Information label (file name or other) on hover. Opens the PDF Reader control

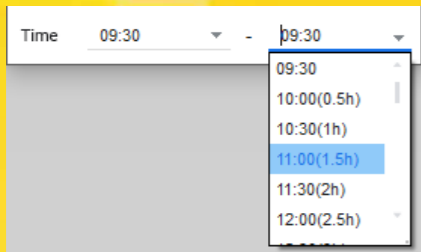
"MENU" DASHBOARD
Menu-oriented: each widget can be clicked on and launches a processing
Can be modified by programming



WINDEV 25 SMART CONTROLS, CONTINUED

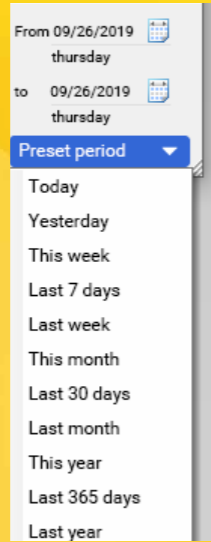
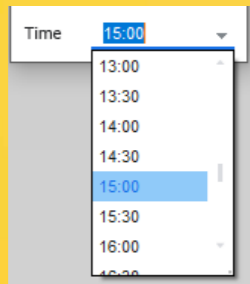
TIME RANGE input with picker

The duration of this time range can be configured
Free input allowed (e.g. 12:15 to 12:37)



TIME INPUT with picker

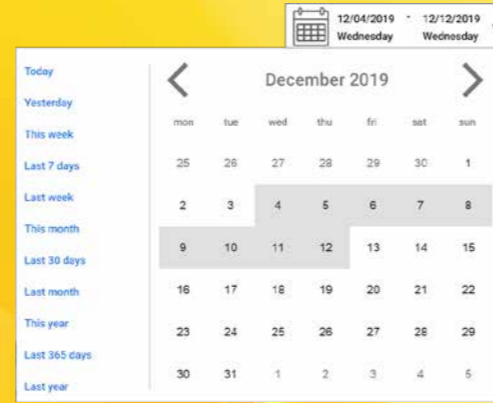
The time displayed in the picker can be configured



DATE RANGE picker

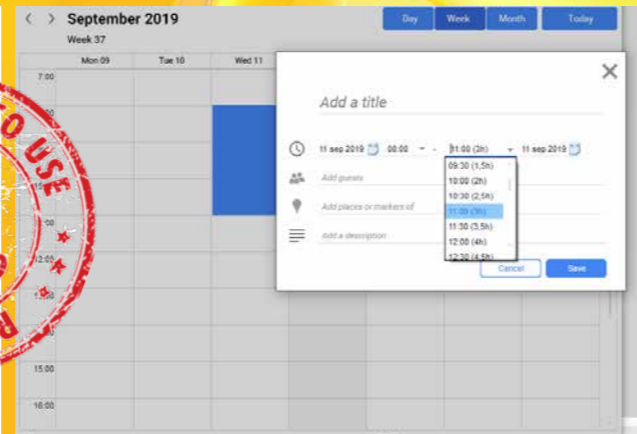
Vertical and Horizontal version

Dates set by direct input or by selection from a calendar
Menu of preset date ranges for quick selection



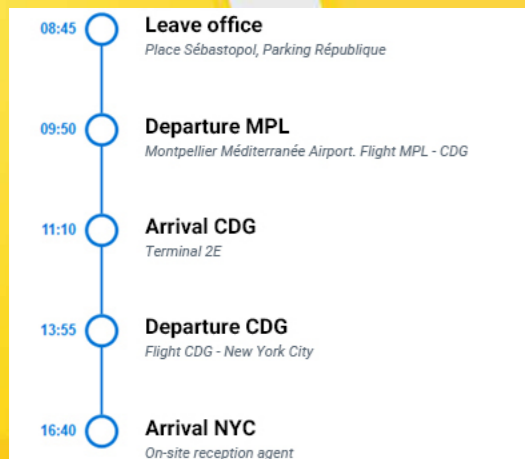
ORGANIZER Appointment Form. Allows input/edit of title + guests + location + description.

Lists times by fixed interval or by entering a specific time.
Completes end time combo box based on start time
Indicates the duration between the 2 times in the 2nd combo



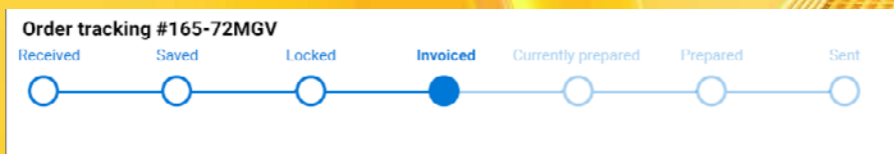
RESOURCE PLANNING with image + last name + first name

Paste a finished planning into your applications in 1 click.
Appointment customized via a title + description internal window.
The text color is automatically defined to ensure readability against the background.



VERTICAL TIMELINE PROCESS MONITORING as Looper

Filled dynamically by programming or binding.

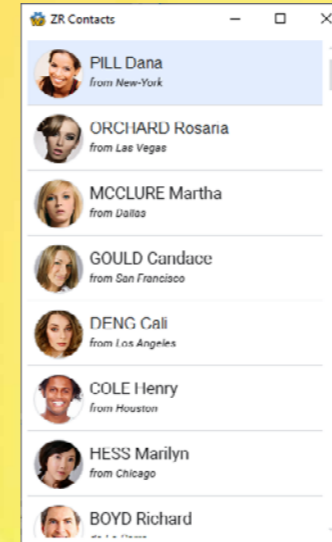


Horizontal TIMELINE PROCESS MONITORING.

Current marker. Following steps automatically grayed out.
Can be assigned by programming or binding

CLOCK

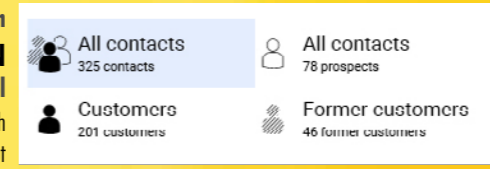
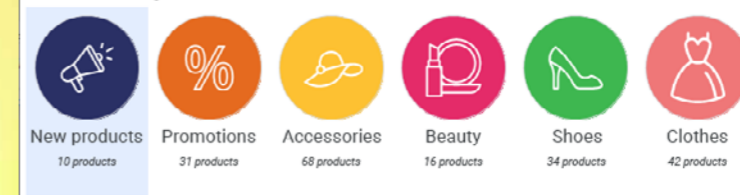
Time automatically updated in real time.
Time assigned in WLanguage with DateTime, Local time or another time zone



CUSTOM RADIO BUTTON control

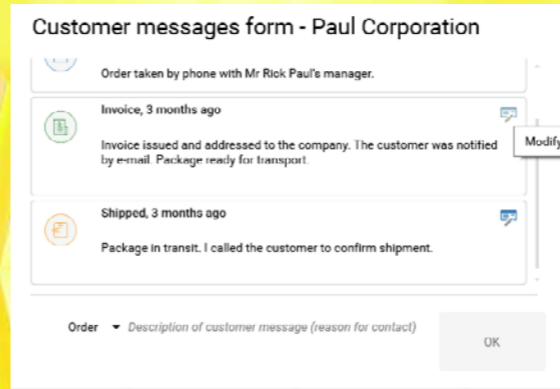
Radio Button control with sophisticated layout

Product categories



WELL-ORGANIZED Contact Looper

Presentes product categories. Clickable. Fill by binding or programming

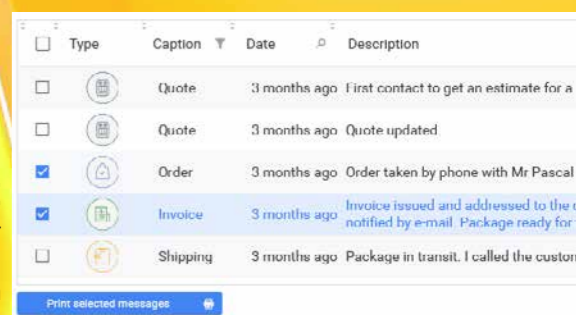


DETAILED summary LOOPER

The height of each row adapts to the content • Icons, Title and subtitle
Summary creation button

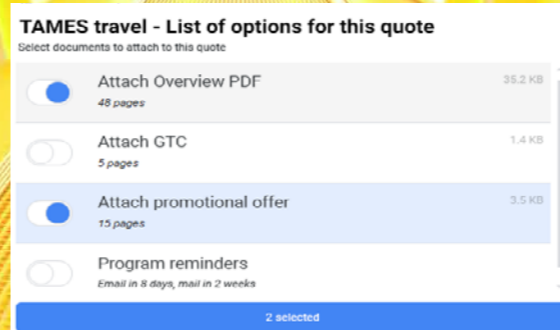
Compact SUMMARY TABLE

Looper
Multiline description and anchored column
Check Box for multiple selection



Read-only LOOPER

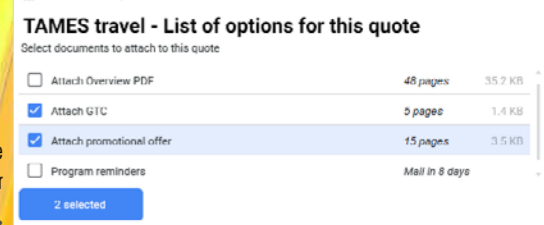
With Breaks



LOOPER WITH SWITCHES

Clear design. Multiselection.
Refresh the caption of button.
Use keyboard or mouse to navigate

The same Looper
CONDENSED.



MULTIPLE SELECTION TABLE WITH BREAK

Table with multiple selection, check box column, break.
Icons in the row • Edit button that appears on the selected row.

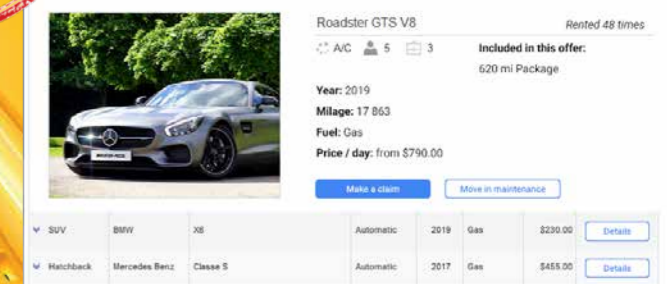
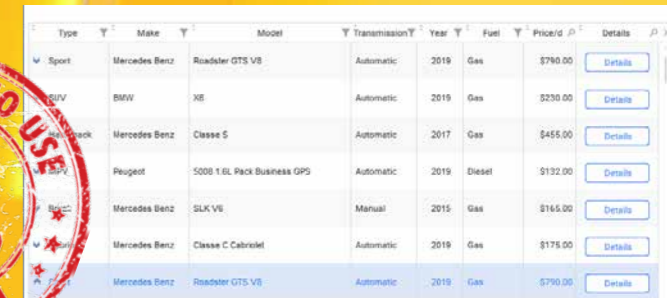


TABLE WITH DETAILS WINDOW

Table with search and filter.
Opens a detail form (Internal Window) when a row is clicked on.



A Smart control offers both:

- an interface (UI)
- behaviors (WLanguage code).

Each **Smart control** makes you optimize programming and the design phase.

The Smart control is ready to use and offers a complete behavior that you might not have had time to code; or that you might not have known.

Everything can be modified and customized.

Once the Smart control is inserted in your window, it adapts to the current skin template.

43 Smart controls are provided with WINDEV 25:

- Menu with drawers
- Progress Bar button
- Numerous Looper control templates
- Diagram
- Workflow
- Password strength
- Login
- Different forms
- Galleries
- Clock
- Various sophisticated table templates
- Dashboard
- Receipt
- Timeline
- Weather
- Progress bars
- Ribbon
- Scheduler
- (French) Zip Code / City input
- International phone number input
- Different Radio Button templates
- Date and date range entry
- ...

Benefit provided by this new feature of version 25:

Massive time savings

NEW FEATURES OF CONTROLS

210 New feature WD WB WM ZIP CODE MASK FOR NUMEROUS COUNTRIES

Zip codes of many countries are now supported by the "Zip Code" input mask:

- European countries
- United States
- Canada
- China
- etc

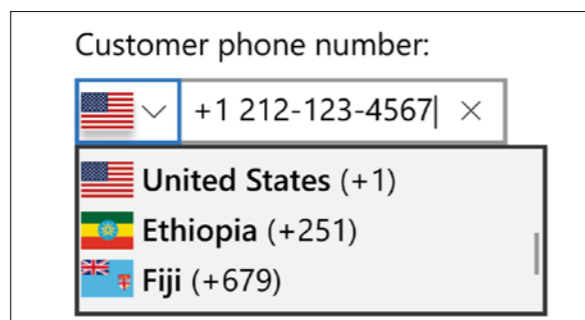
Implementing this new feature is easy thanks to the "Zip Code" Smart control, which includes the code necessary for the processes. See new feature 167.

Benefit provided by this new feature of version 25:

Useful

211 New feature WD WB WM TELEPHONE MASK FOR NUMEROUS COUNTRIES

The Phone input mask can now be configured by country. The new `MaskCountryToPhoneNumber` WLanguage function allows you to specify the country.



List of country codes, and number format according to the country's standard

Benefit provided by this new feature of version 25:

Useful

212 New feature WD WB WM STATIC CONTROLS: FONT SIZE REDUCED AUTOMATICALLY IF CONTENT TOO LONG

A Static control can have dynamic content, assigned by programming. In some cases, the content may be too long and is truncated. The "ellipse" option already displays "..." at the end of the content to warn the end user that the text is truncated. In version 25, when the text is too long, the new "reduction" option automatically reduces the font size so that the entire text fits the control.

You can set the minimum font size.



*At runtime:
At the top, with "ellipse": the content is truncated
At the bottom, with "reduction": the font size has been automatically reduced, the entire content is displayed*

Benefit provided by this new feature of version 25:

The size adapts at runtime

213 New feature WD WB WM NEW PROGRAMMING PROCESS: CLOSING CHILD WINDOWS

A new process is introduced in version 25: closing child windows. This process already existed in WINDEV Mobile, which makes code sharing easier.

Benefit provided by this new feature of version 25:

Even more process available

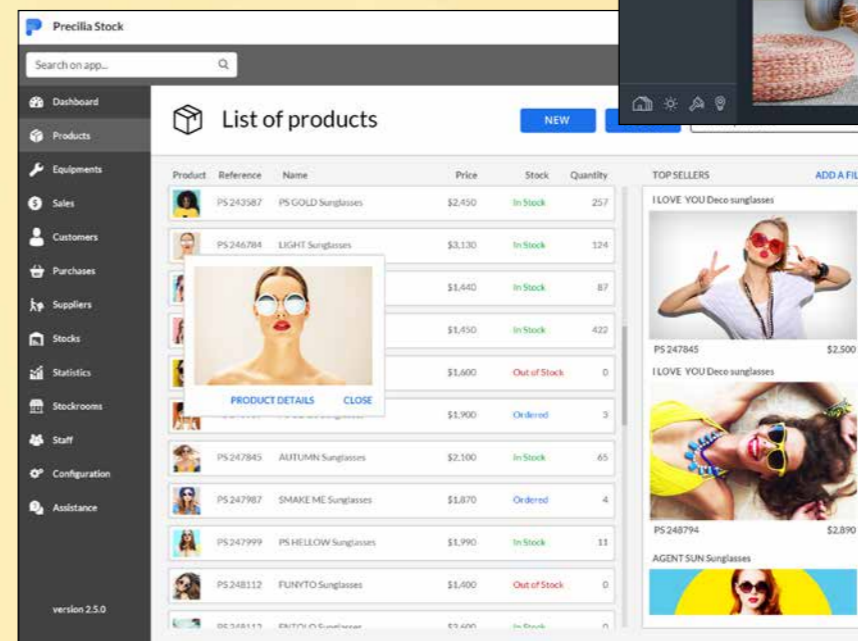
214 New feature WD WB WM 2 NEW SKIN TEMPLATES FOR WINDEV

The Phoenix and Ankaa skin templates are introduced in version 25.

This offers you new possibilities for customization.

Benefit provided by this new feature of version 25:

Express new look!



Use these skin templates for your applications and programs as you like.

All the skin templates provided with WINDEV.

And remember: you can also create your own skin templates.

WINDEV provides you with the necessary support to create superb UIs.

215 New feature WD WB WM NEW CAPTION STYLE: TEXT WITH OUTLINE

Static controls can now use fonts with outlines. This type of style allows for better visibility when the text is displayed on an image with various colors (avoid "tone-on-tone" parts that are not visible).



In this example, without black outline, the text on white background would have been unreadable

Benefit provided by this new feature of version 25:

Always visible text

216 New feature WD WB WM OTHER NEW FEATURES OF CONTROLS

- The `..Reduced` property is introduced for Dockable Panel controls (DOPA)
- The `Timeline` function family now accepts `EventTimeline` variables or array of variables as parameter.
- The `Organizer` and `Scheduler` function families now accept `Appointment` variables or array of variables as parameter.
- `TextHeight` and `TextWidth` now benefit from a new constant `tWithMargin`.

Benefit provided by this new feature of version 25:

Useful new features

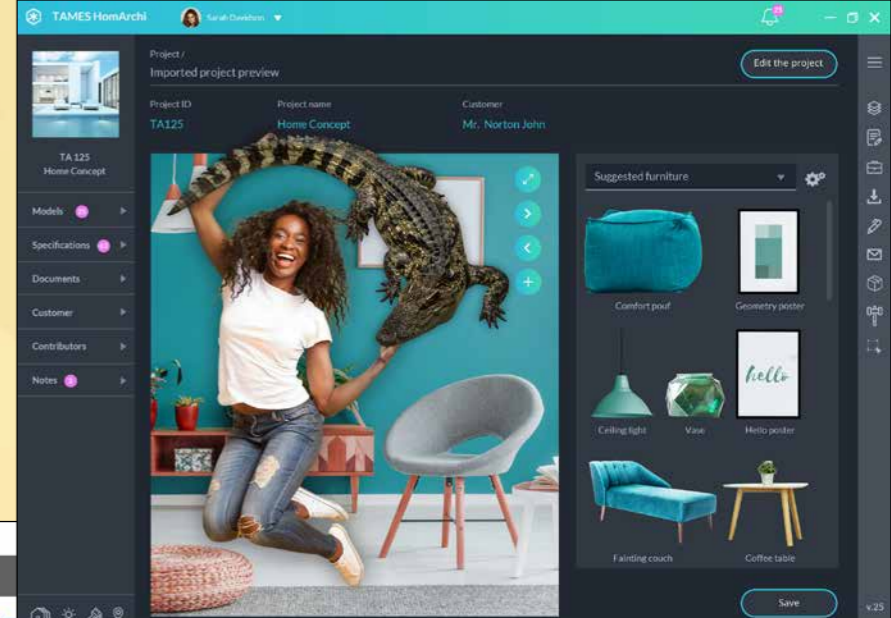


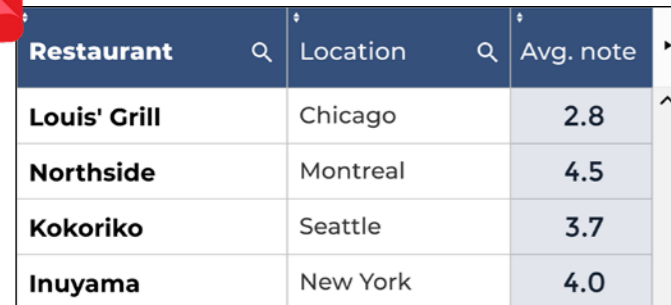
TABLE CONTROL NEW FEATURES

The Table control is one of the most powerful and widely used controls in WINDEV applications. It keeps improving in version 25.

217 New feature WD WB WM TABLE CONTROL: STYLE BY COLUMN

In version 25, each table column can benefit from an independent style.

This allows you to customize the aspect of Table controls even further.



Restaurant	Location	Avg. note
Louis' Grill	Chicago	2.8
Northside	Montreal	4.5
Kokoriko	Seattle	3.7
Inuyama	New York	4.0

Custom Title, Font and Column background

Benefit provided by this new feature of version 25:
Customize each column of your tables

218 New feature WD WB WM NEW PROGRAMMING EVENT: CLICK ON COLUMN HEADER

The new "Click on column header" event allows you to define a custom process (no sort or search, which are proposed by default) on the table column.

Benefit provided by this new feature of version 25:
Even finer programming on tables

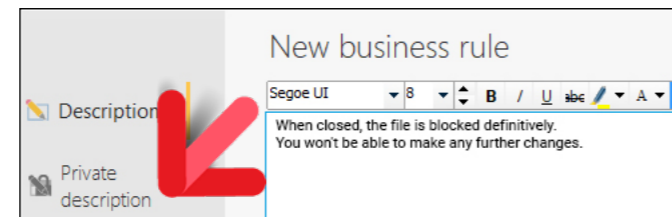
HELP IN YOUR APPLICATIONS

WINDEV offers several levels of help for the applications you distribute:

- launching the application's general help (HTML or PDF); called by F1.
- automatic display of a tooltip when hovering over an element.
- text displayed in the status bar (for compatibility); this is more of an information message than a help message.
- IBR picto: a pictogram appears next to the controls that offer contextual help based on Business Rules.

This helps keeps improving in version 25.

219 New feature WD WB WM "IBR PICTO": PUBLIC TEXT, PRIVATE TEXT



Public and private text entered separately

The IBR picto automatically displays the content of a Business Rule.

In version 25, you can create Business Rules where only part of the text, the "public" part, will be displayed in the tooltip.

Benefit provided by this new feature of version 25:
Ensure the confidentiality of private texts

220 New feature WD WB WM HELP EDITOR: SPELLING CHECKER

The help editor now features a spelling checker.

Benefit provided by this new feature of version 25:
Help without mistakes

221 New feature WD WB WM HELP EDITOR: EDIT INTEGRATED IMAGES

The help editor now allows you to edit images without leaving the editor.

This makes it possible to easily add an arrow in a screenshot to point to an important control or to indicate the button to click.

Benefit provided by this new feature of version 25:
Easier operations

ENVIRONMENT

222 New feature WD WB WM COMMON NEW FEATURES

WINDEV's environment benefits from common new features (see new features 028 to 033).

One particularly useful new feature in large WINDEV projects is internal components that now include the resources they need in order to run.

These resources (webservices, assemblies, XML, JSON, YAML, etc.) are isolated and encapsulated.

Benefit provided by this new feature of version 25:
An ever richer environment

WINDOW EDITOR

223 New feature WD WB WM SMART MAGNETISM

The window editor benefits from smart magnetism in WINDEV 25. (See new feature 020).

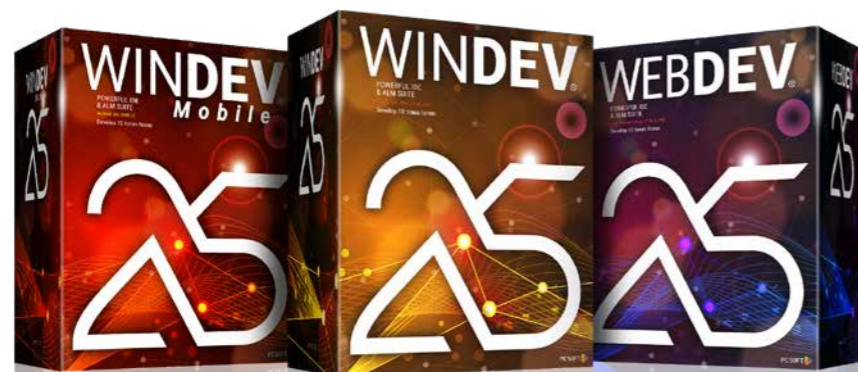
Benefit provided by this new feature of version 25:
Easy alignments!

224 New feature WD WB WM VARIOUS NEW FEATURES

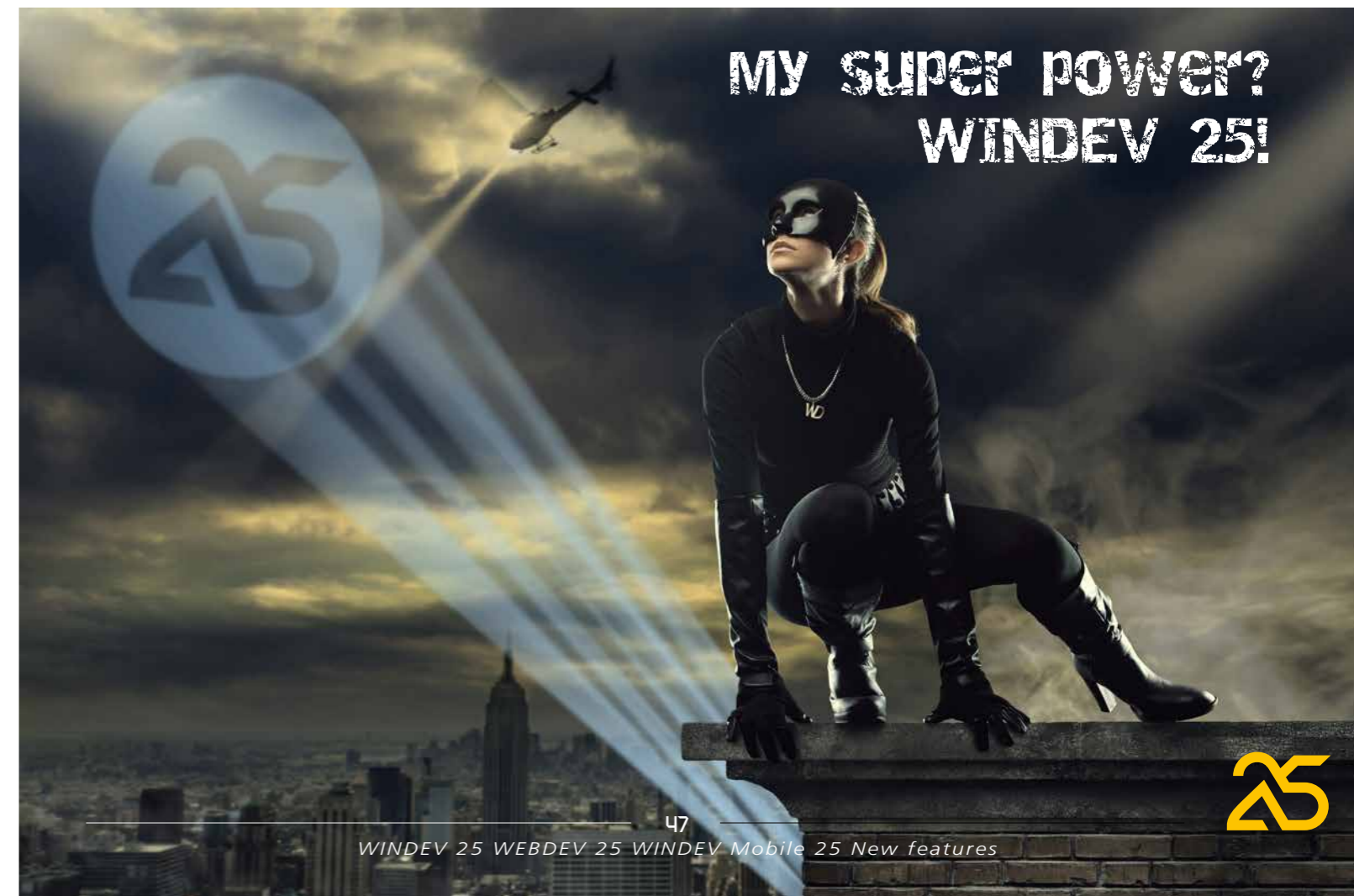
In WINDEV, in addition to the common new features, the window editor has 2 practical features:

- when editing styles, the color selection combo box also displays the RGB code of the selected color
- 4K mode is even better

Benefit provided by this new feature of version 25:
More time saved



WINDEV 25 WEBDEV 25 WINDEV Mobile 25 New features



MY SUPER POWER?
WINDEV 25!

WINDEV 25 WEBDEV 25 WINDEV Mobile 25 New features

DEBUGGER

225 New feature WD WB WM FROZEN APPLICATION: GENERATE DEBUG DUMP (FOR ANALYSIS IN THE DEBUGGER)

Frozen applications are not unheard of. In version 25 you can request a debug dump on a frozen application! Simply ask the end user to launch WDDDebug, which is installed with the application. There is nothing particular to enable in the application, this feature is enabled in all applications compiled in version 25.

WDDDebug allows to generate a dump of frozen (and also non-frozen) applications. This dump must be sent to the developer. When opening this dump in WINDEV, with the project loaded, the code currently running appears, and the debugger allows you to analyze the thread stacks, as well as the content of the variables, among other elements.

This generally helps to understand why the application froze: infinite loop, abnormally slow processing (statistics over 20 years...), timeout too long, etc.

Benefit provided by this new feature of version 25:
Easier optimization

226 New feature WD WB WM REMOTE DEBUGGING ON REQUEST: WEBSERVICES, STORED PROCEDURES, APPLICATION...

The designer of an application may allow it to connect to the development computer for debugging. The new **dbgConnect** WLanguage function allows the application to connect to the development environment (on developer request). Remote debugging becomes much easier. **dbgConnect** can be enabled in WINDEV applications, but also in stored procedures, Webservices, on Windows and Linux, iOS, etc.

Benefit provided by this new feature of version 25:
Easy remote debugging

INSTALL


227 New feature WD WB WM START APPLICATIONS ON STARTUP (WHEN OPENING SESSION)

In version 25, you can request that an application be launched automatically as soon as the user starts their PC. A new option appears in the setup wizard (and editor). **Benefit provided by this new feature of version 25:**
Autoexec.bat, the return!

AAF END USER

228 New feature WD WB WM PIVOT TABLE CONTROL (PVT) THE USER CAN ADD PERCENTAGES

On a PVT, the end user can view "difference" columns and add "percentage" columns.



2017 =		2018 =		
01/01..12/31 =		01/01..12/31 =		
T/O	Qty	T/O	T/O evolution	T/O evolution %
\$4,466,857.88	46,582	\$8,738,969.88	▲+ \$4,272,112.00	+95.64 %
\$535,934.78	23,358	\$1,570,084.88	▲+ \$1,034,150.10	+192.96 %
\$261,065.27	10,917	\$2,588,588.91	▲+ \$2,327,523.64	+891.55 %
\$357,136.36	9,203	\$23,477.48	▼- \$333,658.88	-93.43 %
\$542,964.86	12,114	\$804,233.46	▲+ \$261,268.59	+48.12 %
\$3,443,602.14	38,313	\$5,869,301.83	▲+ \$2,425,699.69	+70.44 %
\$7,553,292.55	69,601	\$14,876,900.48	▲+ \$7,323,607.93	+96.96 %

The PVT now calculates percentages directly

Benefit provided by this new feature of version 25:
Easily view evolutions

229 New feature WD WB WM THE USER CAN VIEW TIME PERIODS WITH A TOTAL OF ZERO

By default, rows with a total of Zero are not displayed in a PVT, so as not to overload it. When comparing different PVTs by exporting their results, an identical basis of comparison is necessary so that all rows are displayed.

Benefit provided by this new feature of version 25:
Easy comparisons in spreadsheet export

230 New feature WD WB WM AAF: REMINDER TOAST

AAFs provide a phenomenal help for end users without asking more resources from development teams. With AAFs, end users are much more efficient in performing their tasks. A non-intrusive message appears on end users' screens about once a month to remind them of the AAFs included in your applications. This feature can be disabled. **Benefit provided by this new feature of version 25:**
End users are informed of the functional richness of your applications

231 New feature WD WB WM AAF: TREEVIEW

In a TreeView control, the **Shift + Click** combination expands the branch and its sub-branches. **Benefit provided by this new feature of version 25:**
Practicality...

JAVA



232 New feature WD WB WM PREFIXED SYNTAX AVAILABLE ON NON-TYPE PARAMETERS

In version 25, prefixed programming syntax is also available on non-type parameters. **Benefit provided by this new feature of version 25:**
Standardization

233 New feature WD WB WM INDEPENDENT HFSQL CONTEXTS

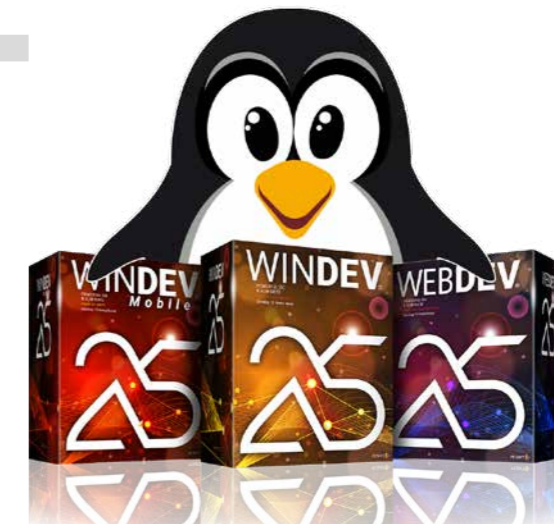
Independent HFSQL contexts are now managed in windows, internal windows and classes. **Benefit provided by this new feature of version 25:**
Your data files will never be out of context

234 New feature WD WB WM 4 NEW WLANGUAGE FUNCTIONS

WLanguage offers 4 new functions for Java.

DateToDayOfWeek	InDeviceOwnerMode
InKioskMode	fDirRename

LINUX



235 New feature WD WB WM AUTOMATIC MANAGE- MENT OF ERRORS

In version 25, automatic management of fatal and non-fatal errors is supported in Linux. **Benefit provided by this new feature of version 25:**
Improves cross-platforming

**A reminder
of the
standards
supported
by WINDEV**

- IoT
- Blockchain
- GDPR
- ActiveX
- API
- XML
- LDAP
- FTP/ FTPS
- OPC - UA
- OAuth
- iOS
- Android
- Windows
- Mac
- J2EE
- PDF
- RFID
- MQTT
- OPC
- CSS
- Bluetooth
- RS 232
- USB
- SSL UDP
- socket
- DLL
- https
- SMTP
- POP
- Imap
- SaaS
- REST & SOAP Webservices
- XML, JSON, YAML
- Ajax
- All the bar codes
- QR Code
- All Office documents
- All image formats
- All video formats
- Encryption: AES256, DES, 3DES,...
- Zip, RAR, CAB, Z2, GZIP, TAR, TAR.GZ,...
- iCalendar
- Twain
- XIO, CM II, CM15, DLNA
- SNMP, TAPI
- ...

**Databases
supported
by WINDEV**

- HFSQL, Oracle, SQL Server, AS/400, DB2, MySQL, PostgreSQL, SQLite, xBase, MariaDB, MongoDB, Informix, HBase, Memcached, Progress, Sybase, Azure, Redis, ...

236 New feature WD WB WM SERIES FUNCTION FAMILY (USB)

Series functions are now available in Linux. This function family allows you to manage USB devices.

Benefit provided by this new feature of version 25:
Manage USB ports in Linux

237 New feature WD WB WM SSH FUNCTION FAMILY

SSH functions, which allow executing Shell commands, are now available in Linux.

Benefit provided by this new feature of version 25:
Improves cross-platforming

New feature WD WB WM

238 to 296 59 NEW FUNCTIONS 35 NEW LINUX CONSTANTS FOR WINDEV

WLanguage offers 59 new functions and 35 new constants (to discover on the online help) for Linux.

Reduce	Apply	StringToJson	Clone
EncryptGenerateRSAKey	DateToDayOfWeek	dbgConnect	GetContinentConstant
GetCountryContinent	GetContinentList	GetCountryContinentList	GetContinentName
EmailConfigure	InDeviceOwnerMode	InKioskMode	ExtractStringBetween
AAFEEnable	fContentType	Filter	fDirRename
FTPGetFile	gpwRemoteConnect	gpwListOAuthParameters	gpwResetPassword
gpwBiometricAuthentication	HUpdateLink	iInitInternalReport	JSONToString
PDFIsProtected	PDFExtractPage	PDFMerge	PDFMergeWithPassword
PDFPassword	PDFNumberOfPages	PDFToText	PicMergeLayer
PicResize	PicRotation	SaaSAdminListVisit	sInEntryQueue
sEscape	sWrite	sClose	sParameter
sRead	SOAPAddSAMLAssertion	SOAPAddXMLSignature	sOpen
SSHCommand	SSHConnectShell	SSHDisconnectShell	SSHWrite
SSHRead	TelemetrySendData	Map	CheckAllFalse
CheckAllTrue	CheckAnyFalse	CheckAnyTrue	

DOTNET

297 New feature WD WB WM MANAGEMENT OF INTERFACE INHERITANCE

Derived interfaces are managed when using .Net assemblies.

Benefit provided by this new feature of version 25:
More powerful OOP

WLANGUAGE

298 New feature WD WB WM COMMON NEW FEATURES

Language remains the cornerstone of development.

WLanguage is enriched in WINDEV version 25. It benefits from common new features and numerous useful improvements: extension of prefixed syntax, new syntaxes, visualization of HTTP request flow, certificate in the WDL library, OAuth and OpenID library, etc. See new features 090 to 128.

Benefit provided by this new feature of version 25:
Ever-increasing power in WLanguage

299 New feature WD WB WM NEW MASK TYPE

The new **Mask** type allows you to create your own advanced masks by programming. The **Mask** type contains **Procedure** properties to describe behaviors of the mask. Created masks are applied to selected edit controls. Examples:

- a procedure is called for each character entered to indicate if character is accepted
- a procedure replaces a character entered by another character
- add a hyphen after entering the 3rd character and move the cursor to the 5th character
- ...

Two new functions are introduced. **MaskFormat** formats a string passed as parameter. **MaskRemoveFormat** removes formatting.

Benefit provided by this new feature of version 25:
Use your masks every day, not just on Halloween

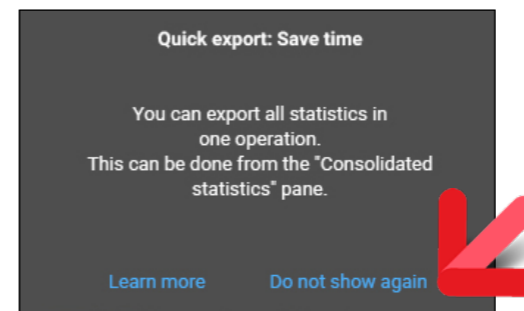
300 New feature WD WB WM TOAST: NEW TYPE

In version 25, the new **Toast** type is introduced. This type allows you to customize toasts by programming, adding one or more buttons. The appearance of the buttons adapts to the skin template.

```
Tip is Toast
Tip.Title = "Quick export: Save time"
Tip.Text =
[
You can export all the statistics in one
single operation
This is done from the "Consolidated
statistics" pane
]
Tip.Button[1].Caption = "Learn more"
Tip.Button[1].ActionClick = ProcessClickLearnMore

Tip.Button[2].Caption = "Do not show again"
Tip.Button[2].ActionClick = ProcessClickDoNotShowAgain

ToastDisplay(Tip)
```



Toast with buttons (blue)

For a toast, you can configure:

- color
- opacity,
- display duration.

Benefit provided by this new feature of version 25:
Perfect toasts!

301 New feature WD WB WM TOAST: GRAPHIC CUSTOMIZATION

You can customize a toast using an internal window. This internal window will be the toast.



Example of the new type of toasts you can display in your applications in version 25

Benefit provided by this new feature of version 25:
Crispy toasts

302 New feature WD WB WM TOAST: MISCELLANEOUS

When there are consecutive requests to display toasts, each toast appears only after the previous toast has disappeared.

Benefit provided by this new feature of version 25:
No need to manage timers anymore

303 New feature WD WB WM AAF: DISABLE, RE-ENABLE AAFS

It was already possible to disable AAFs by programming (**AAFDisable**).



308 NEW SYNTAXES IN PREFIXED INPUT

ORGANIZER CONTROL Display	TIMELINE CONTROL ListEvent	eServer ManageTask InfoDatabaseRights InfoFileRights InfoServerRights InfoViewRights InfoFile GroupInfo InfoDatabaseProperty InfoFileProperty InfoServerProperty BackupInfo ServerInfo Info-	RSMModifyConfig RSDeleteConfig Backup SaveParameter SimulateNetwork DeleteDatabase DeleteSet DeleteFile DeleteGroup DeleteLink DeleteScheduledOpti- mization DeleteParameter DeleteScheduling DeleteDirectory DeleteQuery DeleteBackup DeleteScheduledBackup DeleteTask DeleteUser Transaction TransactionCancel TransactionStart TransactionEnd TransactionIsolation TransactionList CheckServerUpdate	Last DisableFilter DeactivateAutoFilter DeleteTrigger DeleteView DuplicateRecord Write Out Save RecordToJSON RecordToXML ErrorStatusModification ErrorModification State ExecuteSQLQuery ExecuteView ExportCSV ExportJSON ExportXLS ExportXML ExtractMemo Close FileExist Filter FilterStartWith FilterIncludedBetween FilterContains FilterIdentical EndNoMotif Flush MergeView SetRemoteAccess SetDuplicates SetLog SetMemo SetTransaction HistoryModification ImportHF55 ImportJSON ImportText ImportXLS ImportXML InfoFile MemInfo InitSubscriber NoModif LogInfo LogRecreate LogRestart LogStop JSONToRecord Free FreeQuery ListKey ListFullTextIndex ListLink ListStopWord ListItem ListSynonym Read ReadLast ReadPrevious ReadFirst ReadSeek ReadSeekLast ReadSeekFirst ReadNext MigrateLinkedCompositeKey UpdateLink Mode	Modify ModifyStructure Password NbRec RecNum Optimize Open CurrentPosition Position Previous First PrepareSQLQuery Crossed Reset Search SeekLast SeekFirst Backward RetrieveRecord RetrieveItem IndexingInProgress Index RestorePosition SavePosition Security StatCalculate StatDate StatTime StatNbDuplicates StatNbRec StatNbRecRange Next Delete DeleteAll OnError TransactionFree SortView Find CheckIndex CheckStructure ToFile Version ToItem ViewToFile
IMAGE EDITOR CONTROL Blend Resize	WORD PROCESSING CONTROL ChangeZOrder		WDPIC VARIABLE AlphaBlend MergeLayer Resize Rotation Save		
INTERNAL WINDOW CONTROL ChangeSourceWindow	HFSQL CONNECTION ActivateServerTrigger AddGroup AddLink AddScheduledOptimization AddScheduling AddScheduledBackup AddTask AddUser CancelBackup StopServer LoadParameter	NoDatabase- Access ListDatabase ListStoredElement ListGroup ListScheduledOptimization ListParameter ListScheduling ListScheduledBackup ListTask UserList ServerMaintenance RefreshSet RefreshQuery UpdateView ModifyDatabaseRights ModifyFileRights ModifyServerRights ModifyViewRights ModifyGroup ModifyScheduledOptimization ModifyScheduling ModifyDatabaseProperty ModifyFileProperty ModifyServerProperty ModifyScheduledBackup ModifyTask ModifyUser NotifAddCCRecipient NotifAddEmailRecipient NotifConfigure NotifListCCRecipient NotifListEmailRecipient NotifDeleteCCRecipient NotifDeleteEmailRecipient OperationInProgress OpenConnection Priority PriorityClient ConnectionQuality RefreshView RetrieveLog RetrieveBackup RegenerateFile RestoreBackup RSAddConfig RSWaitForDataProcess RSExecute RSInfo RSInit RSListConfig	REDIS CONNECTION VARIABLE Subscribe	REST SEND VARIABLE Send	HFSQL DATA FILE EnableFilter ActivateAutoFilter Add Alias CancelDeclaration CancelSeek LinkMemo Scroll LockFile LockRecNum ChangeKey ChangeConnection ChangeLocation ChangePassword ChangeName ChangeDir ChangeLogDir CompareItem BuildKeyValue CopyRecord Creation CreationIfNotFound CreateView RecordDate UnlockFile UnlockRecNum Declare DeclareExternal DescribeFile DescribeTrigger
REPOSITIONABLE NOTE		Task UserInfo InfoView NoDatabase- Access ListDatabase ListStoredElement ListGroup ListScheduledOptimization ListParameter ListScheduling ListScheduledBackup ListTask UserList ServerMaintenance RefreshSet RefreshQuery UpdateView ModifyDatabaseRights ModifyFileRights ModifyServerRights ModifyViewRights ModifyGroup ModifyScheduledOptimization ModifyScheduling ModifyDatabaseProperty ModifyFileProperty ModifyServerProperty ModifyScheduledBackup ModifyTask ModifyUser NotifAddCCRecipient NotifAddEmailRecipient NotifConfigure NotifListCCRecipient NotifListEmailRecipient NotifDeleteCCRecipient NotifDeleteEmailRecipient OperationInProgress OpenConnection Priority PriorityClient ConnectionQuality RefreshView RetrieveLog RetrieveBackup RegenerateFile RestoreBackup RSAddConfig RSWaitForDataProcess RSExecute RSInfo RSInit RSListConfig			UNICODE STRING VARIABLE EndsWith
					DATE OR DATETIME VARIABLE ToWeekDay
					ARRAY VARIABLE Reduce Apply Filter Max Min Mean Sum ToString AllFalse AllTrue Map AnyFalse AnyTrue Sort
CONTROL LoadAll Created SaveAll					
TABLE CONTROL - TREEVIEW TABLE Expand Collapse Collapse Expand Expand End					

In version 25, you can re-enable AAFs by programming, using **AAFEnable**.

This makes it easier to disable them in a part of the applica-
tion.

Benefit provided by this new feature of version 25:
On, Off, On, Off...

304 to 611 308 NEW SYNTAXES IN PREFIXED INPUT

Prefixed syntax, which became very popular, is now supported by a very large number of additional functions in HFSQL and other domains.

For example: `mystring.ExtractString()`
`myarchive.ExtractFile()`

Reading and developing code is made even easier.
See the list of supported new syntaxes on the opposite page.

Benefit provided by this new feature of version 25:
Let's get straight to the point

612 New feature WD WB WM 39 NEW CONSTANTS

39 new WLanguage constants are available in version 25:

continentAfrica continentAsia emailParameterHTML aafCancelComparePeriodPvt HA_HMAC_MD4 httpLock	continentNorthAmerica continentEurope encodeBASE64NoCR aafToday HA_HMAC_SHA_256_DOUBLE httpMkCol	continentSouthAmerica continentUndefined aafDisplayPercentageEvolutionPvt aafDiscoverAaf HA_MD4 httpMove	continentAntarctica continentOceania aafDisplayEvolutionPvt aafDeleteFilter HA_SHA_256_DOUBLE httpPropFind
--	---	---	---

httpPropPatch iViewer maskDateInternetUTC ncOptionNone	httpUnlock lcContinent psdMinified ncOptionPersistent	iDrawTextMultiplatform maskDateEmailUTC pttCompatible tWithMargin	iHomotheticEnlargementPrintableZone maskDateInternet pttDefault
---	--	--	---

Benefit provided by this new feature of version 25:
More and more power for WLanguage

613 New feature WD WB WM 9 NEW TYPES

9 new types of variables are available in WLanguage:

gpwOAuthParameters pdfAttachment YAML	pdfDocument picLayer	pdfTextElement saasVisit	pdfPage Toast
---	-------------------------	-----------------------------	------------------

Benefit provided by this new feature of version 25:
More and more power for WLanguage

New feature WD WB WM

614 New feature WD WB WM 2 NEW PROPERTIES

2 new WLanguage properties are available for WINDEV.

FormattingMarksColor Collapsed	Changes the color of formatting marks Returns or modifies the collapsed/expanded state of a Dockable Panel control.
-----------------------------------	--

Benefit provided by this new feature of version 25:
More and more power for WLanguage

ENVIRONMENTAL POLICY

Preserving our environment is essential. When PC SOFT prints physical documents, the paper supplier or the printer, (FSC - Forest Stewardship Council - certified and PEFC - Program for the Endorsement of Forest Certification - certified) replants as many trees as the ones that were used to print. The FSC label was created by the FSC, an NGO that includes, among others, Greenpeace, Friends of the Earth and the WWF.

For example, it takes 50 trees with a trunk diameter of 6 inches to print 100,000 copies of a 92-page document on

glossy paper: PC SOFT or the printer has 50 trees replanted immediately. Also, we favor pulp coming mainly from recycled wood (from furniture mills for instance) and from controlled forest clearing. Our products can be delivered without packaging or paper documentation on simple request. For example, a license for 10 developers can be supplied with only 2 sets of tutorials, on request.

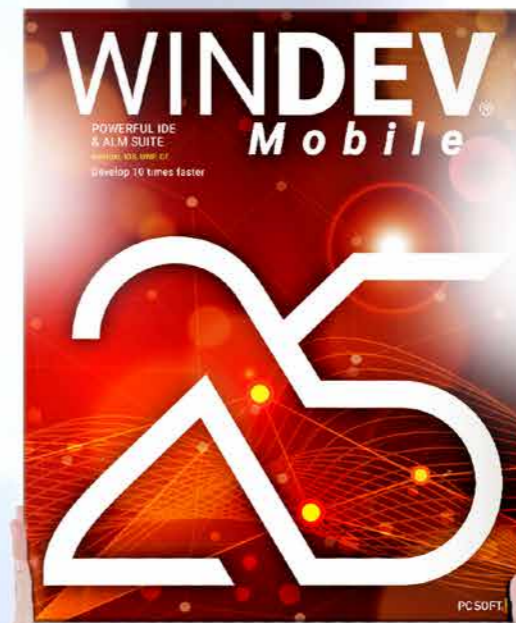


New feature WD WB WM

615 to 668 54 NEW WLANGUAGE FUNCTIONS FOR WINDEV

54 new WLanguage functions are available for WINDEV in version 25:

Reduce	Performs an aggregation on each element of an array.	gpwRemoteConnect	Allows connecting to the application via the user groupware Webservice.
Apply	Runs a procedure for each element of an array	gpwListOAuthParameters	Lists the providers (Google, Facebook, etc.) to which it is possible to connect via the user groupware.
StringToJSON	Converts a JSON string into a JSON variable.	gpwResetPassword	Allows you to send a password reset email
Clone	Clones an object.	gpwBiometricAuthentication	Enables biometric authentication for the connected user or retrieves the current status for the user.
EncryptGenerateRSAKey	Generates an RSA private/public key pair.	grComparativeHistogramAddData	Adds data to a comparative histogram.
DateToDayOfWeek	Returns the day of the week corresponding to a given date.	grComparativeHistogramGetData	Retrieves data from a comparative histogram.
dbgConnect	Connects an application to the debugger.	HUpdateLink	Updates links of an HFSQL Client/Server file on the server.
GetContinentConstant	Returns the constant that identifies the continent corresponding to a continent caption.	lInitInternalReport	Initializes the parameters of an internal report.
GetCountryContinent	Returns the continent caption of a country corresponding to its name in ISO 3166-1.	iParameterViewer	Configures the report viewer.
GetContinentList	Returns the list of continents.	JSONToString	Converts the content of a JSON variable to a JSON string.
GetCountryContinentList	Returns the list of countries (to ISO 3166-1) for a given continent	MaskZipCode	Returns the zip code mask according to the country ISO code
GetContinentName	Returns the continent caption that corresponds to a constant identifying a continent.	MaskRemoveFormat	Removes the format specified for a string.
InDeviceOwnerMode	Indicates if the application is "device owner".	MaskFormat	Formats a string according to a mask.
InKioskMode	Indicates whether the Android application is in kiosk mode.	MaskPhoneNumber	Returns the phone number mask according to the country ISO code.
EventExist	Indicates whether a specific procedure is run when a Windows event is sent to a control or window.	MaskVerify	Indicates whether a string is valid according to a specific mask.
ExtractStringBetween	Extracts a string between two given separators.	PDFSave	Saves a PDF document.
AAFEnable	Re-enables an Automatic Application Feature (AAF) previously disabled by AAFDisable.	PicMergeLayer	Merges the layers of an image displayed in the Image Editor control
fContentType	Allows you to know if a file on disk is a recognized image format.	PicResize	Resizes an image displayed in the Image Editor control.
Filter	Filters the elements of an enumerator (array, etc.).	PicRotation	Rotates an image displayed in the Image Editor control.
fDirRename	Renames a directory.	SaaSAdminListVisit	Returns the list of visits to a SaaS site.
FTPGetFile	Retrieves a file from an FTP/SFTP server	TableCollapseExpand	Collapses or expands an element in a Table or TreeView Table control.
GalleryDisplayPopup	Displays the automatic zoom popup for the Image Gallery control.	SpreadsheetListComment	Enumerates all comments on the current worksheet of a Spreadsheet control.
GalleryClosePopup	Closes the zoom popup of the Image Gallery control.	TelemetrySendData	Force the sending of telemetry data
gpwAddUserInGroup	Adds a user to a group.	ToastDisplayIW	Opens a toast whose content is based on an internal window.
		ToastDisplayPopup	Displays a popup page during a given duration in order to display a "Toast" message.
		Map	Builds an array containing the results of a procedure run for each element of a source array.
		CheckAllFalse	Returns True if all the elements of an array are False.
		CheckAllTrue	Returns True if all the elements of an array are True.
		CheckAnyFalse	Returns True if at least one element of an array is False
		CheckAnyTrue	Return True if at least one element of an array is True.



WINDEV MOBILE

669

New feature WD WB WM

WINDEV MOBILE 25 BENEFIT FROM THE 160 COMMON NEW FEATURES OF VERSION 25



Version 25 offers 160 common new features. Of course, WINDEV Mobile 25 benefits from most of these 160 common new features, especially: Smart controls, WINDEV Mobile in WINDEV environment, management of PDF files, management of YAML, GitHub, project portfolios, creation of SCM branches on several projects, new features in the code editor, OOP, HFSQL Spare servers, etc...

Of course, WINDEV Mobile 25 also benefits from many new features specific to the mobile world. Learn more in the following pages.

NEW: SMART CONTROLS

670 to 691 New feature WD WB WM

22 SMART CONTROLS FOR WINDEV MOBILE

The new Smart control concept allows implementing sophisticated and customizable operations with one click in WINDEV Mobile (new features 001 to 006).

You will save a lot of time and benefit from a state-of-the-art UI.

Continues page 58...



UNIQUE SERVICE

FREE SUPPORT

Each update to version 25 entitles you to 15 free technical support requests at PC SOFT. In version 25, your teams benefit from free technical support*!

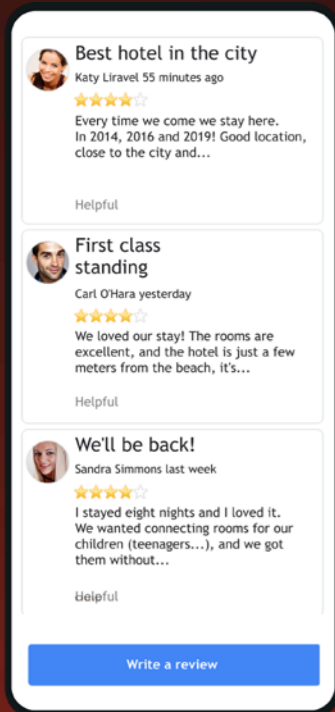
NO WORRIES...

(*during the release period of the version. Call charges may apply)



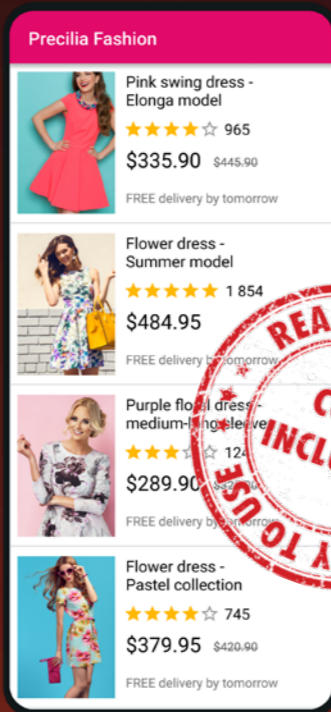
NEW: WINDEV MOBILE 25 SMART CONTROLS

CONTROLS WITH CODE, READY TO USE



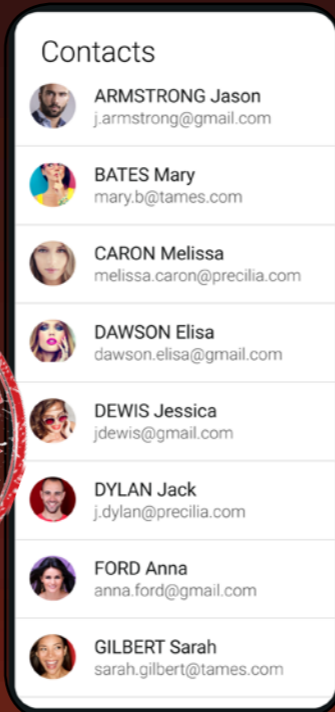
COMMENT WITH RATING

Looper
• The row height fits the displayed text (ellipses previously defined)



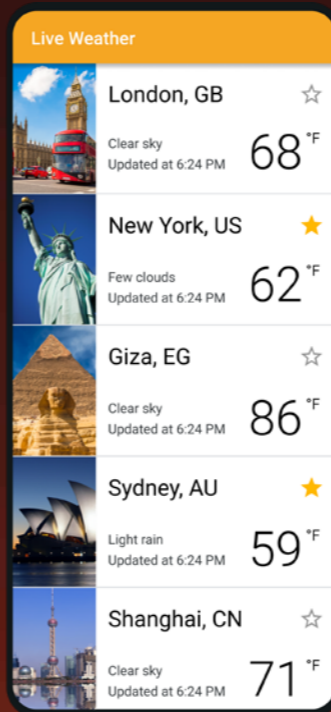
PRODUCT LOOPER

Clear design



CONTACT LOOPER

Clear design



WEATHER - LOOPER WITH WEBSERVICE CALL

Clear design • Data updated in real time by Webservice

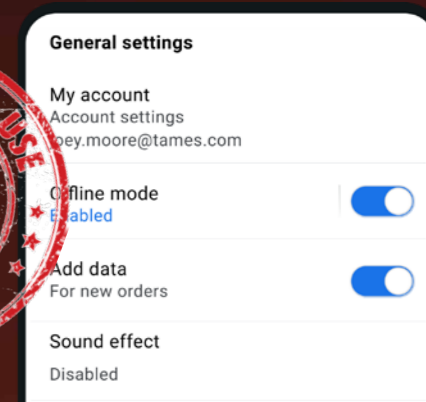


IMAGE SWIPE

Fine-tuned swipe

APPLICATION PARAMETERS

Standard-looking settings • Switch



Download ...

13.26 MB / 19.34 MB

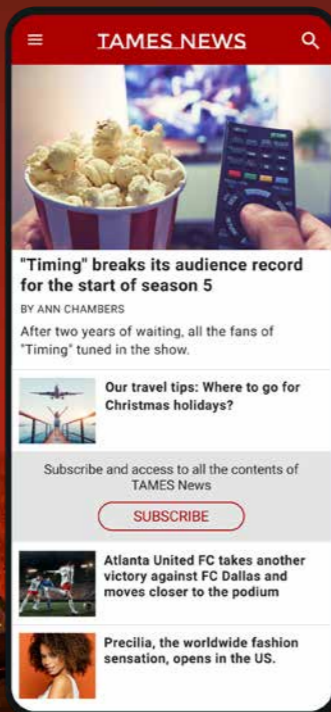
DOWNLOAD IN THE BACKGROUND

Displays Toast or sends notification at the end of download



COLUMN GALLERY

Design adapted to phones
• Delayed image load

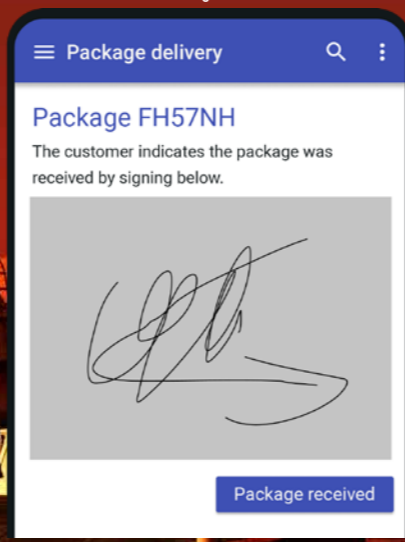


NEWS FEED LOOPER

Layout adapted to magazines

FINGER SIGNATURE

Image control with touch-drawing support
• Saves the image

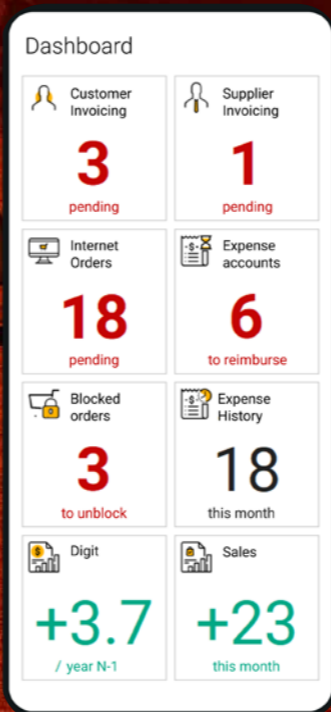


LOGIN WITH FACEBOOK ID

Ready to use

MENU DASHBOARD

Design adapted to phones • Navigate by touch



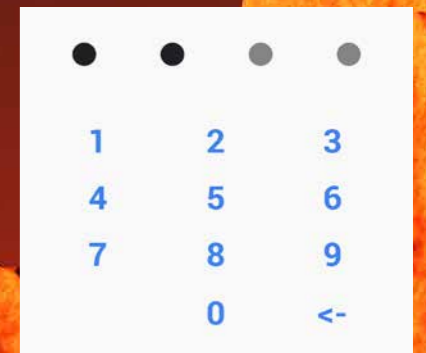
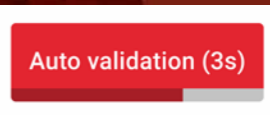
COUNTER

On-target counter

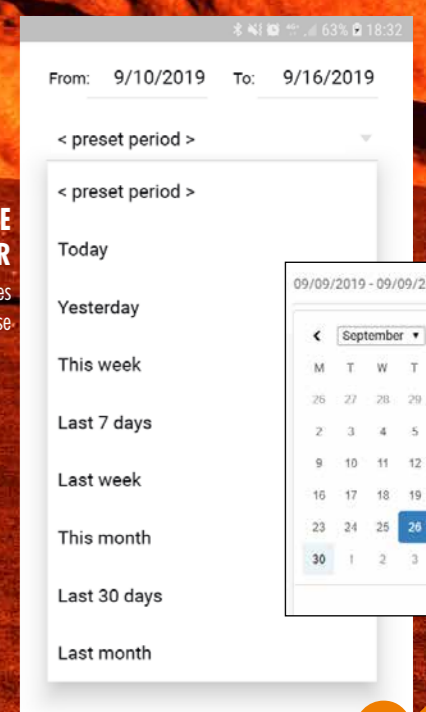


TIMER BUTTON

Choice validated at the end of the duration



PIN CODE INPUT • Ready to use

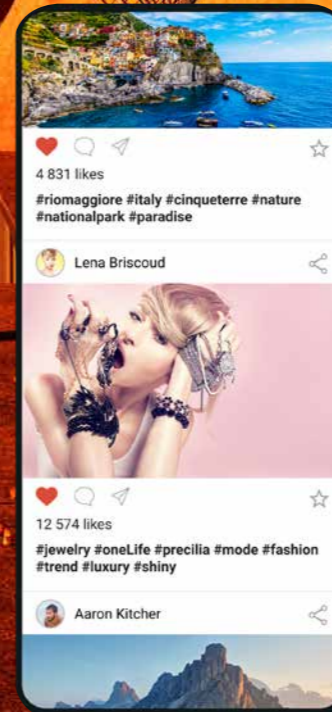


DATE RANGE PICKER

Preset date ranges ready to use

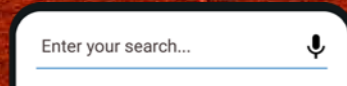
INSTAGRAM IMAGE LOOPER

Layout ready to use



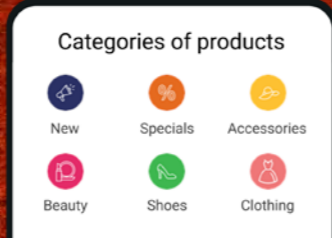
EDIT CONTROL WITH SPEECH RECOGNITION

Returns the dictated text as a string to the calling application



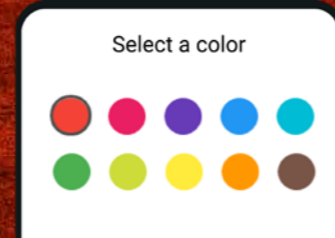
BUTTON MENU

Buttons that behave like a menu



SIMPLIFIED COLOR PICKER

Here, buttons allow you to select a preset color



Among the **Smart controls** provided with WINDEV Mobile 25, you will find:

- timer button
- download button
- counter
- Facebook login
- gallery
- clock
- bar code reader
- menu with round buttons
- PIN code input
- voice input
- color picker
- date and date range picker
- language selector
- finger signature
- dashboard
- different looper control templates
- ...

Benefit provided by this new feature of version 25:
Major time savings

- zoom
- change pages
- select and copy text (or not)
- print (or not)
- share (or not)
- perform searches
- ...

The PDF Reader control also prevents easily exporting confidential documents.

WINDEV MOBILE IN WINDEV

692 New feature WD WB WM REMINDER: WINDEV CAN OPEN WINDEV MOBILE PROJECTS

To facilitate the development of cross-platform applications, WINDEV can open WINDEV Mobile projects (and WEBDEV projects as well).

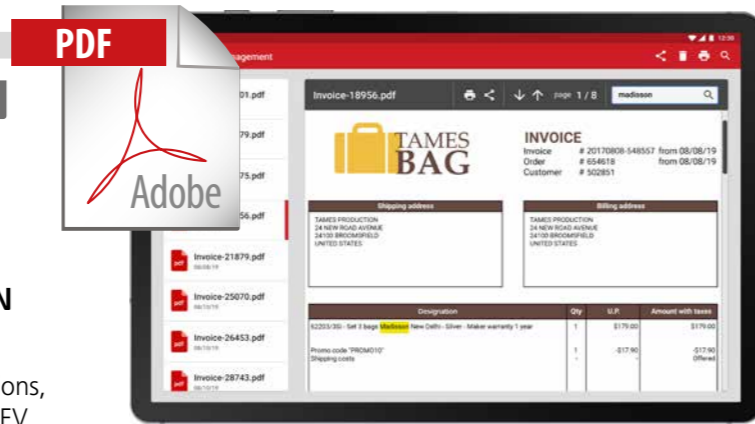
This avoids unnecessary duplication and manipulation. Sharing elements is easy.

The same project can contain WINDEV, iOS and Android configurations (and even WEBDEV configurations).

In edit mode, you can seamlessly switch from one configuration to another.

Note: it is of course necessary to have a WINDEV Mobile (and/or WEBDEV) license.

Benefit provided by this new feature of version 25:
Simplified operations

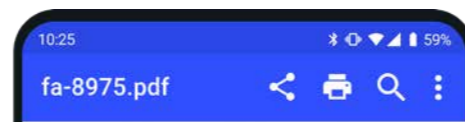


View a PDF document without leaving the application.
Example above: Invoice

Benefit provided by this new feature of version 25:
No need to leave the application, no need to expose the PDF file

694 New feature WD WB WM PDF PRESET WINDOW FOR WINDEV MOBILE 25

A preset window is proposed when a PDF control is created. This preset window features an ActionBar with all the necessary functionalities: zoom, go to a page, print, share... Everything can be customized.



Benefit provided by this new feature of version 25:
An essential new feature

695 New feature WD WB WM EASY MBAAS WITH WINDEV MOBILE 25

An MBaaS (Mobile Backend as a Service) solution is a cloud-based software architecture that provides mobile applications with access to storage devices, databases and other resources (such as Webservices) that they may need to operate. WINDEV Mobile 25 and WEBDEV 25 allow you to easily implement MBaaS solutions.

Benefit provided by this new feature of version 25:
WINDEV Mobile 25 is very powerful

NEW IOS/ANDROID COMMON FEATURES

693 New feature WD WB WM PDF READER CONTROL FOR MOBILE APPLICATIONS

The new PDF Reader control allows the user to read PDF files without leaving the application.

From a technical standpoint, the PDF file does not have to be accessible outside the application. It can be located in an HFSQL database, or retrieved from a Webservice...

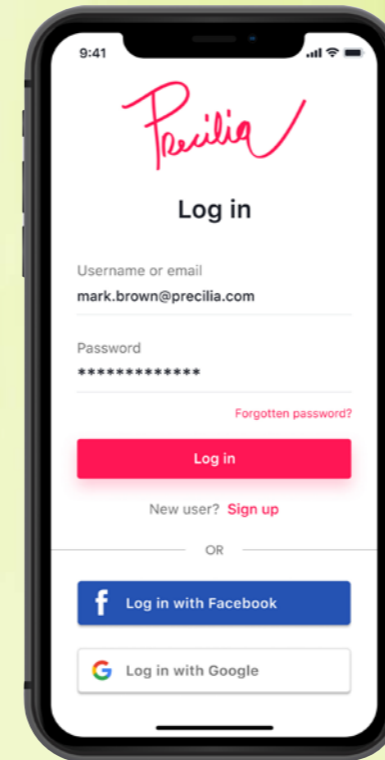
The developer can also be sure about the PDF display mode, and can provide detailed instructions.

All users of an application with the PDF control will have the same operating mode.

The PDF Reader control allows users to:

USER GROUPWARE FOR MOBILE

696 New feature WD WB WM USER GROUPWARE ON MOBILE, AUTHENTICATION & ACCOUNT MANAGEMENT



In version 25, the User Groupware is available on mobile: phone and tablet. The operating mode is similar to WINDEV's User Groupware. The architecture has been adapted to mobile. It is possible to use the User Groupware while being connected to the Internet or offline: The rights information is replicated on the device. A configurable expiry date makes it possible to secure "offline" mode.

Example of authentication automatically generated by Mobile User Groupware

Benefit provided by this new feature of version 25:
A very powerful feature

697 New feature WD WB WM MANAGEMENT OF ACCOUNTS

Full login/password management is available:

- account creation
- validation of account creation by email
- management of forgotten passwords
- change password
- ability to log in with Google or Facebook or Instagram id (oAuth)
- cancel, temporarily block an account
- ...

End users can be allowed to create their accounts directly. This is particularly useful for public applications.

It is also possible to allow only certain contacts to create an account: users' email address (or domain name) must be specified by the administrator.

Benefit provided by this new feature of version 25:
Powerful account management

698 New feature WD WB WM MANAGEMENT OF RIGHTS

Mobile User Groupware allows managing rights for end users or groups of users.

Example of rights:

- non-accessible window
- invisible control
- grayed control.

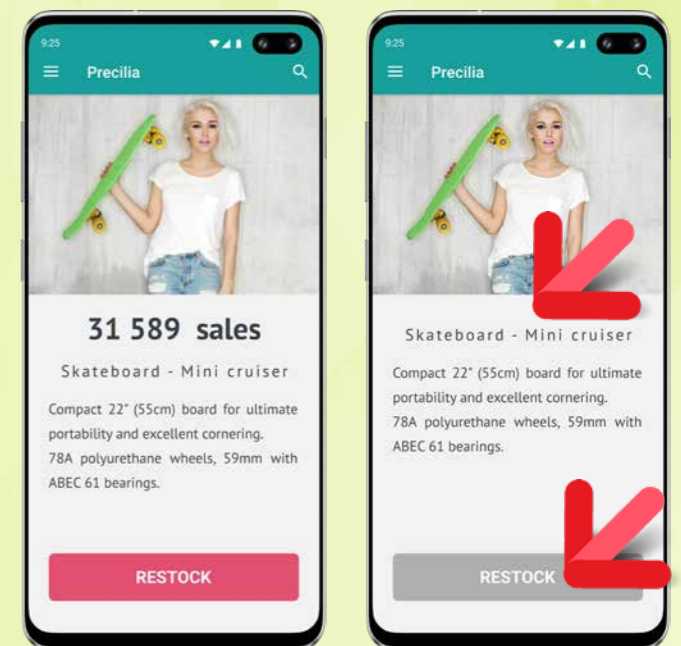
Rights are defined in the User Groupware administration site. See new feature 700.

Benefit provided by this new feature of version 25:
Fine-tuned management of rights

699 New feature WD WB WM AUTOMATICALLY ADAPT YOUR APPLICATIONS' UI: INVISIBLE CONTROLS, NON-ACCESSIBLE WINDOWS

The content of the windows in your applications automatically adapts to the rights assigned to end users. Controls (edit, static, button, etc.) can be grayed out or invisible.

You can also make a window inaccessible. It is thus possible to hide controls that contain sensitive information.



On the phone on the left, the user has all the rights: all the controls are displayed. On the phone on the right, the user has fewer rights: the sales control is hidden, the "Restock" button is grayed out

Benefit provided by this new feature of version 25:
Rich possibilities for window customization

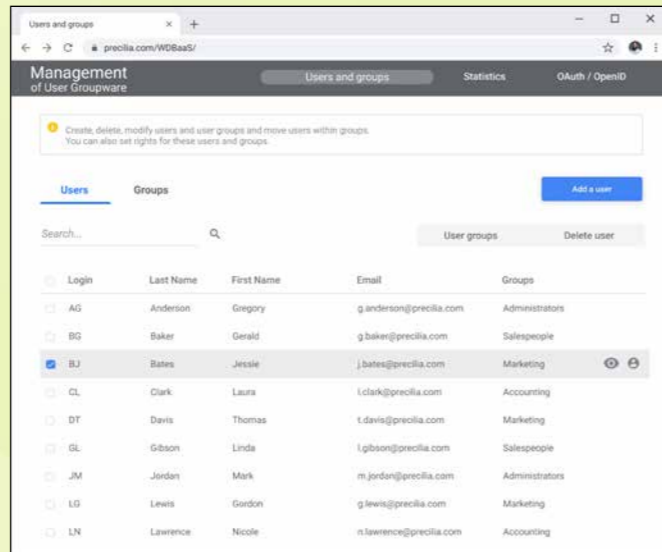
Continued on next page...

USER GROUPWARE FOR MOBILE (CONTINUED)

700 New feature WD WB WM GROUPWARE: ACCOUNT AND RIGHTS ADMINISTRATION

The User Groupware is managed via a website that can be accessed on the Internet or Intranet. When the site is hosted on an Intranet, the mobile device must have access to the network: e.g. be connected to the same WiFi network. The administration website comes as standard. The User Groupware administrator sets the parameters for creating accounts and managing rights. Note that the administrator does not know the passwords users have created. Note: a hosting service provider (PCSCloud.net, etc.) or one of your servers is required to run the the administration site.

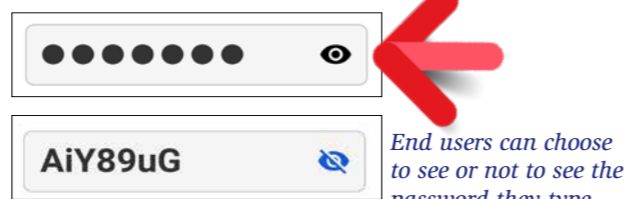
Benefit provided by this new feature of version 25:
A user-friendly administrator



Groupware portal

701 New feature WD WB WM PASSWORD CONTROL: SHOW WITH EYE ICON

In version 25, the Password control can display an "eye" icon on the right. When the user clicks on this eye, the password becomes visible.



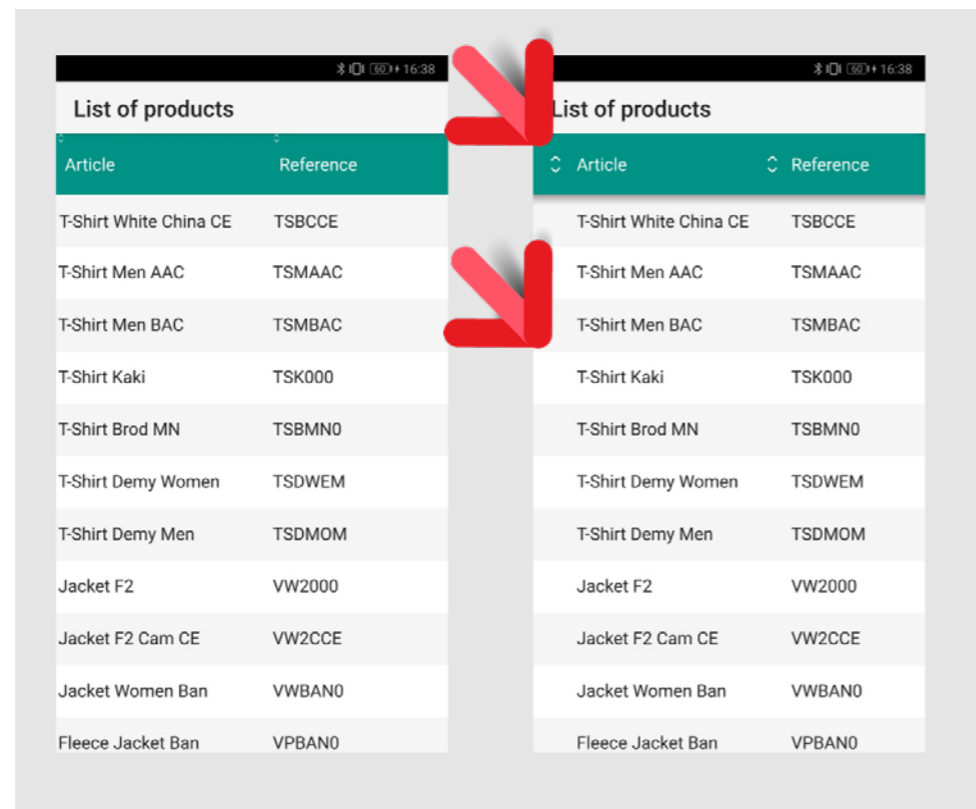
End users can choose to see or not to see the password they type

Benefit provided by this new feature of version 25:
To see or not to see, that is the question

702 New feature WD WB WM IMPROVED DEFAULT TABLE LOOK

As you know, WINDEV Mobile features a powerful Table control. This control offers a wide range of customization parameters. In previous versions, all the parameters were customized manually: different margins,... Developers used to ignore this phase! In version 25, the default settings of a Table control are positioned for a modern and pleasant look. Default tables look much better!

Benefit provided by this new feature of version 25:
Beautiful tables from the start



Before / After: margins, spacing, sort icons are automatically added.

703 New feature WD

WB WM

REFACTORING OLD TABLES

For existing tables in applications developed before version 25, the "Improve UI" option allows you to apply the new layout settings. In 1 click, your old tables will bathe in the "fountain of youth"!
Magic!

Benefit provided by this new feature of version 25:
Gorgeous, user-friendly tables by default

704 New feature WD WB WM IMAGE CONTROL: DISPLAY PDFS

The powerful PDF Reader control is available in version 25. But for simple cases, or to display a thumbnail of a PDF file, it is possible to view a PDF page in an Image control and lighten the UI. In version 25, the Image control can display a given page of a PDF document.

Benefit provided by this new feature of version 25:
A very useful feature

705 New feature WD WB WM AUTOMATIC MANAGEMENT (OR NOT) OF DARK THEME

Dark themes are in vogue, and help to slightly increase battery life. At runtime, the application will automatically switch to a dark theme if the OS is configured in a dark theme. This function can be disabled. When an application switches to a dark theme, this application uses the dark skin provided by WINDEV Mobile. To finely manage the display options, the `SystemThemeDark` WLanguage function allows you to know if the OS is in dark mode.

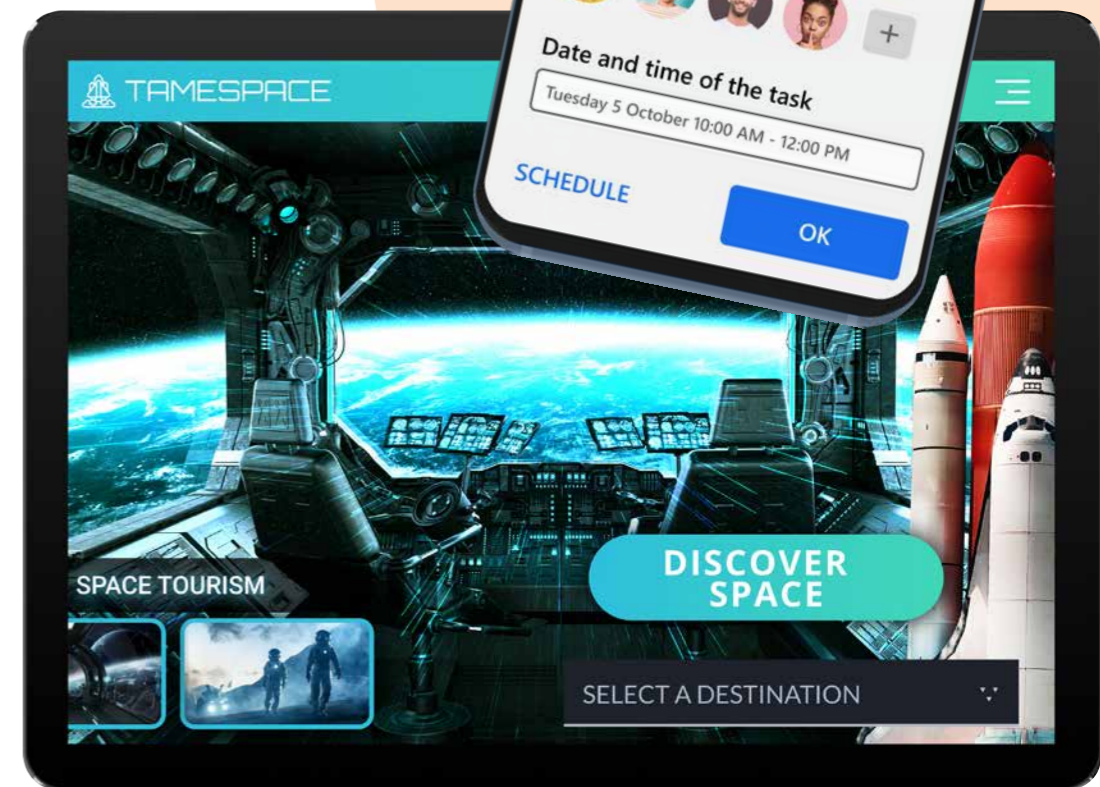
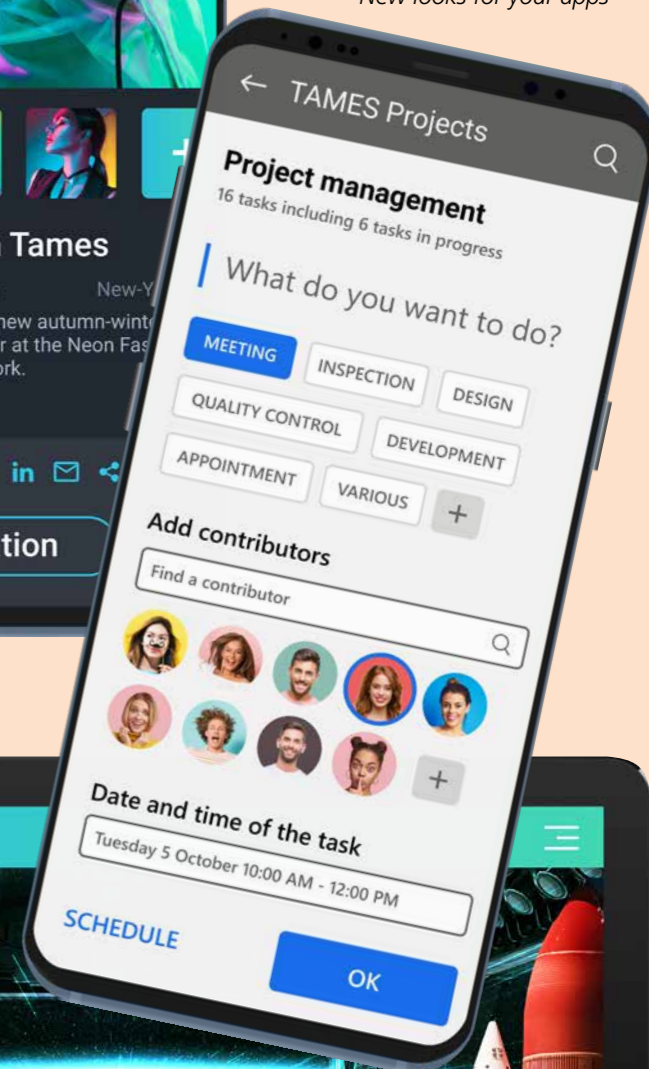
Benefit provided by this new feature of version 25:
Dark themes are in fashion

706 New feature WD WB WM 2 NEW SKIN TEMPLATES FOR MOBILE

The Phoenix and Ankaa skin templates for mobile are provided with version 25: use them as you like to customize your apps!

Benefit provided by this new feature of version 25:

New looks for your apps



707 New feature WD WB WM CROSS-PLATFORMS: HIDE WINDOWS CE IN THE ENVIRONMENT

As you know, WINDEV Mobile 25 also allows you to create (and maintain) applications for Windows CE. Today, this is mostly used for maintaining existing industrial applications. Many developers do not have to work with Windows CE. To lighten the environment interface for these developers, it is now possible to hide Windows CE options in the environment. The environment is thus lighter.

Benefit provided by this new feature of version 25:
Simplified environment

708 New feature WD WB WM UNIVERSAL REPLICATION: AUTOMATIC STRUCTURE UPDATE

Replication is often used in mobile applications to make them work offline. In version 25, Universal Replication automatically propagates automatic changes in the structure of data files (tables) when necessary.

Benefit provided by this new feature of version 25:
Significant simplification

709 New feature WD WB WM ANDROID + IOS PROJECT CREATION

In version 25, you can create an iOS + Android project in a single step. 2 project configurations are automatically created. A multiple platform selection is available in version 25.

Benefit provided by this new feature of version 25:
Simplified operations

710 New feature WD WB WM NEW WLANGUAGE FUNCTIONS: SSH (REMOTELY SEND SHELL COMMANDS)

SSH functions are used to run commands on remote computers. In version 25, these functions are available on mobile.

Benefit provided by this new feature of version 25:
The essence of remote commands

IOS

711 New feature WD WB WM COMMON NEW FEATURES FOR MOBILE



iOS development has never been as powerful as with WINDEV Mobile 25. You benefit from powerful new features that come in addition to all the existing ones. iOS evolves, and so does WINDEV Mobile 25. WINDEV Mobile 25 for iOS benefits from the general common features of version 25, plus features common to mobile devices: Smart controls, User groupware on Mobile, PDF Reader, table look by default, dark theme management, ... And in addition to the general common new features, and new features specific to mobile devices, version 25 offers the following new features for iOS.

712 New feature WD WB WM IOS 13, IPHONE 11



WINDEV Mobile 25 supports the new iOS 13. Applications compiled with WINDEV Mobile 25 run on iPhone 5S and later models (iOS 11 or later). In the case of iPads, applications run on all models since the release of the 1st-generation iPad Air (2013).
Benefit provided by this new feature of version 25:
Enjoy all the features of iOS version 13

713 New feature WD WB WM IPAD OS

From now on, iPad's operating system is no longer called iOS (as for iPhone), but iPadOS. WINDEV Mobile 25 supports iPadOS.

iPadOS offers additional features compared to iOS. WINDEV Mobile 25 supports the following additional features:

- split view
- slide over
- opening several windows of an application simultaneously
- widget
- dark theme
- ...

Benefit provided by this new feature of version 25:
iPadOS support



714 New feature WD WB WM APPLE WATCH SERIES 5



Apple Watch Series 5 is supported. Anchors allow you to automatically manage the 2 screen sizes.
Benefit provided by this new feature of version 25:
WINDEV Mobile 25 is right on time!



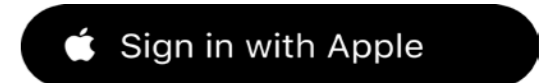
Your applications developed for iPad also work on Mac

715 New feature WD WB WM COMPILATION OF TABLET APPS FOR MAC (CATALYST)

WINDEV Mobile 25 allows you to create applications to run on Mac. These are Catalyst applications, offering a runtime mode similar to that of tablets (iPad).
Benefit provided by this new feature of version 25:
Your applications directly on Mac

716 New feature WD WB WM SIGN IN WITH APPLE: AUTHENTICATION SYSTEM

Sign In with Apple is a standard authentication system. This system allows users to sign in to your application using their Apple IDs. Your application only retrieves an authorization (and some information) or a refusal. WINDEV Mobile 25 supports Sign In with Apple. The new `AppleSignIn` WLanguage function family is introduced.



"Sign in with Apple" button

Benefit provided by this new feature of version 25:
Apple authentication

717 New feature WD WB WM EDIT CONTROL: ADDITIONAL MASKS

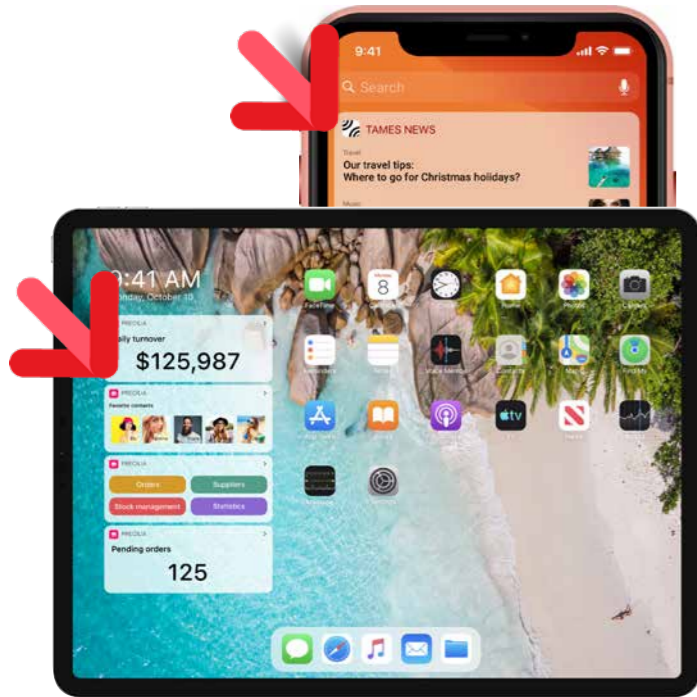
New input masks are introduced for iOS:

- IP address
- Uppercase
- 1st letter in uppercase
- ...

Benefit provided by this new feature of version 25:
Halloween may be over, but you can still use your masks

718 New feature WD WB WM WIDGET

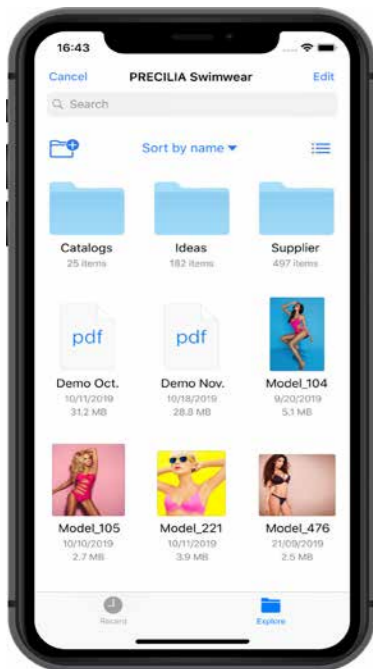
A Widget is a window that appears on the phone or tablet home screen. WINDEV Mobile 25 also allows you to create and debug Widgets. WINDEV Mobile now supports iPhone and iPad Widgets.



Widgets on iPad and iPhone

Benefit provided by this new feature of version 25:
Enhance the home screen!

719 New feature WD WB WM URI SELECT WLANGUAGE FUNCTIONS: IN IOS TOO!



On iPhone, as in Android, it is possible to manage "external" (installed) or local files from the phone. The **URI** function family is now available for iPhone and iPad. You can then program the processes of your choice on the selected files.

URI functions allow you to display local files or files accessible from the phone

Benefit provided by this new feature of version 25:
Easy access to everything.

720 New feature WD WB WM APPSTORE, APRIL 2020

From April 2020, Apple will require that all applications submitted to the store be adapted to iPadOS. Thanks to WINDEV Mobile 25 you don't have to do anything in particular. Your applications are already compatible!



Benefit provided by this new feature of version 25:
Already ready!

721 New feature WD WB WM 9 NEW TYPES

9 new types of variables are available for iOS:

gpwOAuthParameters	gpwUser	sshSession	URI
xmlSignature	xmlSignatureInformationKeyX509	xmlSignatureReference	xmlSignatureTransformation
YAML			

Benefit provided by this new feature of version 25:
More and more power for WLanguage

722 New feature WD WB WM 3 NEW PROPERTIES

3 new properties for iOS are available in WLanguage

..DisplayMode	..NumberPage	..NumberDisplayedPage
---------------	--------------	-----------------------

Benefit provided by this new feature of version 25:
More and more power for WLanguage

723 New feature WD WB WM 55 NEW WLANGUAGE FUNCTIONS FOR IOS

55 new functions for iOS are available in WLanguage.

Reduce	Apply	StringToJSON	Clone
EncryptGenerateRSAKey	DateToDayOfWeek	dbgConnect	GetContinentConstant
GetCountryContinent	GetContinentList	GetCountryContinentList	GetContinentName
InDeviceOwnerMode	InKioskMode	ExeGetPID	ExtractStringBetween
AAFEnable	Filter	fDirRename	FTPGetFile
GalleryDisplayPopup	GalleryClosePopup	gpwAddUser	gpwAddUserInGroup
gpwAuthLogin	gpwRemoteConnect	gpwDisconnectUser	gpwListOAuthParameters
gpwOpen	gpwGetUserInfo	gpwResetPassword	gpwBiometricAuthentication
HUpdateLink	ilnitInternalReport	JSONToString	SOAPAddSAMLAssertion
SOAPAddXMLSignature	SSHCommand	SSHConnectShell	SSHDisconnectShell
SSHWrite	SSHRead	TableCollapseExpand	TelemetrySendData
ToastDisplayW	ToastDisplayPopup	Map	URIGetInfo
URISelect	URIToBuffer	URIToFile	CheckAllFalse
CheckAllTrue	CheckAnyFalse	CheckAnyTrue	



724 New feature WD WB WM COMMON NEW FEATURES FOR MOBILE



Android development has never been more powerful than with WINDEV Mobile 25. You benefit from powerful new features that come in addition to existing ones. Android evolves, and so does WINDEV Mobile 25. WINDEV Mobile 25 for Android benefits from the general common features of version 25, plus new features common to mobile devices: Smart controls, User groupware on Mobile, PDF Reader, table look by default, dark theme management... In addition to the general common new features and the common new features specific to mobile devices, version 25 offers the following new Android-specific features.

725 New feature WD WB WM FASTER COMPILATION FOR GO

In version 25, compiling Android applications to perform a "GO" is much faster. The gain is between 20% and 60%, depending on the type of application.

Benefit provided by this new feature of version 25:
Already ready!

726 New feature WD WB WM ANDROID 10 SUPPORT

Version 25 supports Android 10. Note that the minimum Android version supported to run applications generated with WINDEV Mobile 25 is version 5 (released in 2014). If you need to develop applications for very old versions of Android, simply use an older version of WINDEV Mobile. You can access these versions with your license for version 25.

Benefit provided by this new feature of version 25:
You are up to date!

727 New feature WD WB WM APP BUNDLE: OPTIMIZED APPLICATION SIZE (OPTIMIZATION FOR PLAY STORE)



"App bundle" is Google Play Store's new publishing format. This format allows you to publish small applications that are optimized for each device configuration: processor, screen size, etc. The installed application contains only the resources it needs according to the device. WINDEV Mobile 25 allows you to generate smaller apps, in "App bundle" format.

Benefit provided by this new feature of version 25:
Publish your apps on Google Play

728 New feature WD WB WM APK GENERATION BY TARGET (REDUCED SIZE)

When deploying applications directly (i.e. outside Play Store), you can reduce the app size by specifying the specific target.

For example, when a business application is used only on industrial terminals of a certain type, you can compile the application only for that configuration, for that type of processor and screen size. The generated app will not have to include all the possible hardware and processors, all the possible image resolutions, and will therefore be smaller. Version 25 allows generating this type of APK. It is also possible to generate several APKs for several different types of devices in a single operation.

Benefit provided by this new feature of version 25:
Reduce the size of your APKs



729 New feature WD WB WM INTERNAL COMPONENTS: EVOLUTIONS

In Android, internal components now also include:

- Analysis
- HFSQL context.

This is very useful, and allows for better compatibility with iOS apps.

Benefit provided by this new feature of version 25:
A brilliant new feature



Benefit provided by this new feature of version 25:
Go from Bar to Bar!

732 New feature WD WB WM CALL SOAP

WEBSERVICES: 7 EVOLUTIONS

In version 25, Webservices evolve in Android:

- SOAP WLanguage functions are available for Android. One key function is `SOAPToHTTP`, which allows you to modify an Http request before sending it.

- The `wsRequest` and `wsResponse` WLanguage types are available to finely configure calls to Webservices, and to process responses.
- Multipart support
- MTOM/XOP support
- Webservices with "User/Password" authentication are automatically supported
- InnerXML support
- A certificate can be used to call the Webservice that requires it.

Benefit provided by this new feature of version 25:
Ever-simpler Webservice management

733 New feature WD WB WM SEND LONG SMS AND MMS

SMS and MMS functions now accept long texts.

Benefit provided by this new feature of version 25:
No limit

734 New feature WD WB WM CHROMEBOOK WITH INTEL PROCESSOR

In version 25, Android runtime framework is delivered for 32-bit and 64-bit Intel processors.

Benefit provided by this new feature of version 25:
Wider spectrum

735 New feature WD WB WM RETRIEVE THE "RECTANGLE" DISPLAYED WHEN ZOOMING OR MOVING

A user can zoom in an Image control.

The new `..RectangleDisplayed` property allows retrieving the coordinates of the zoomed (or moved) area, as well as the zoom factor.

Benefit provided by this new feature of version 25:
Click!

730 New feature WD WB WM APP IN "KIOSK" MODE: DON'T EXIT THE APP (MUSEUM VISIT, ETC.)

We have all (or almost all!) visited a museum where we are provided with a tablet (with or without headphones) containing an explanation of the works on display. On this type of devices, it is impossible to exit the application. This prevents baddies from changing or destroying the configuration!

This mode is called "kiosk".

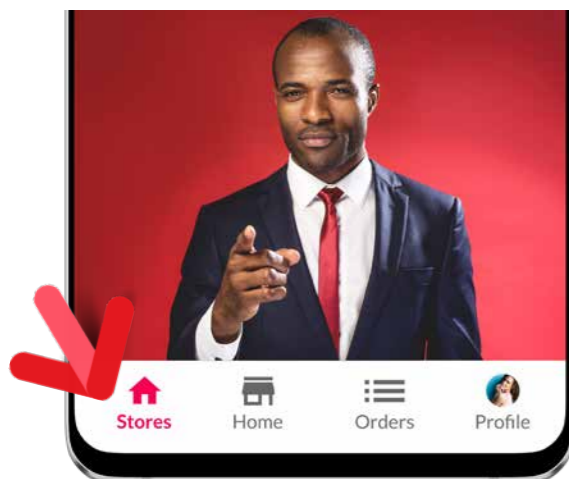
WINDEV Mobile 25 makes it easy to create this type of application: 1 click.

Benefit provided by this new feature of version 25:
Now that's a work of art!

731 New feature WD WB WM NATIVE NAVBAR

More and more applications offer a navigation bar at the bottom of the window.

Since this bar is now standardized, WINDEV Mobile 25 offers it natively for Android.



Example of Native NavBar

ANDROID: DEBUG DIRECTLY ON PHONE (OR TABLET)

736 New feature WD WB WM ANDROID: DEBUGGER ON DEVICE

All developers appreciate the possibility to debug an application directly on the device.

How to trace a feature that cannot be effectively emulated on a PC: GPS location, embedded printer, scanner, access to phone contacts and calendar, photo and video recording, gestures (delete rows by swiping, etc.), ...

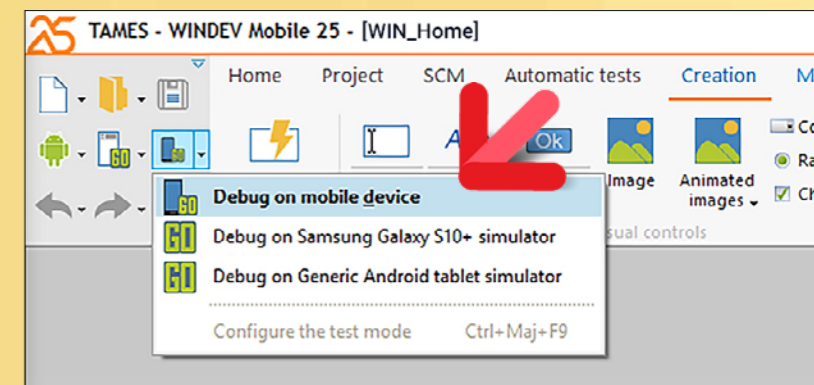
In version 25, WINDEV Mobile allows you to debug an under-development Android application directly on the device.

Note that this feature is also available for iOS.

You can now quickly debug everything!

Simply set **breakpoints** (beforehand or during debugging) and click "Debug on mobile device".

When the execution reaches the breakpoint, the application goes into freeze mode, and the code editor displays the corresponding code.

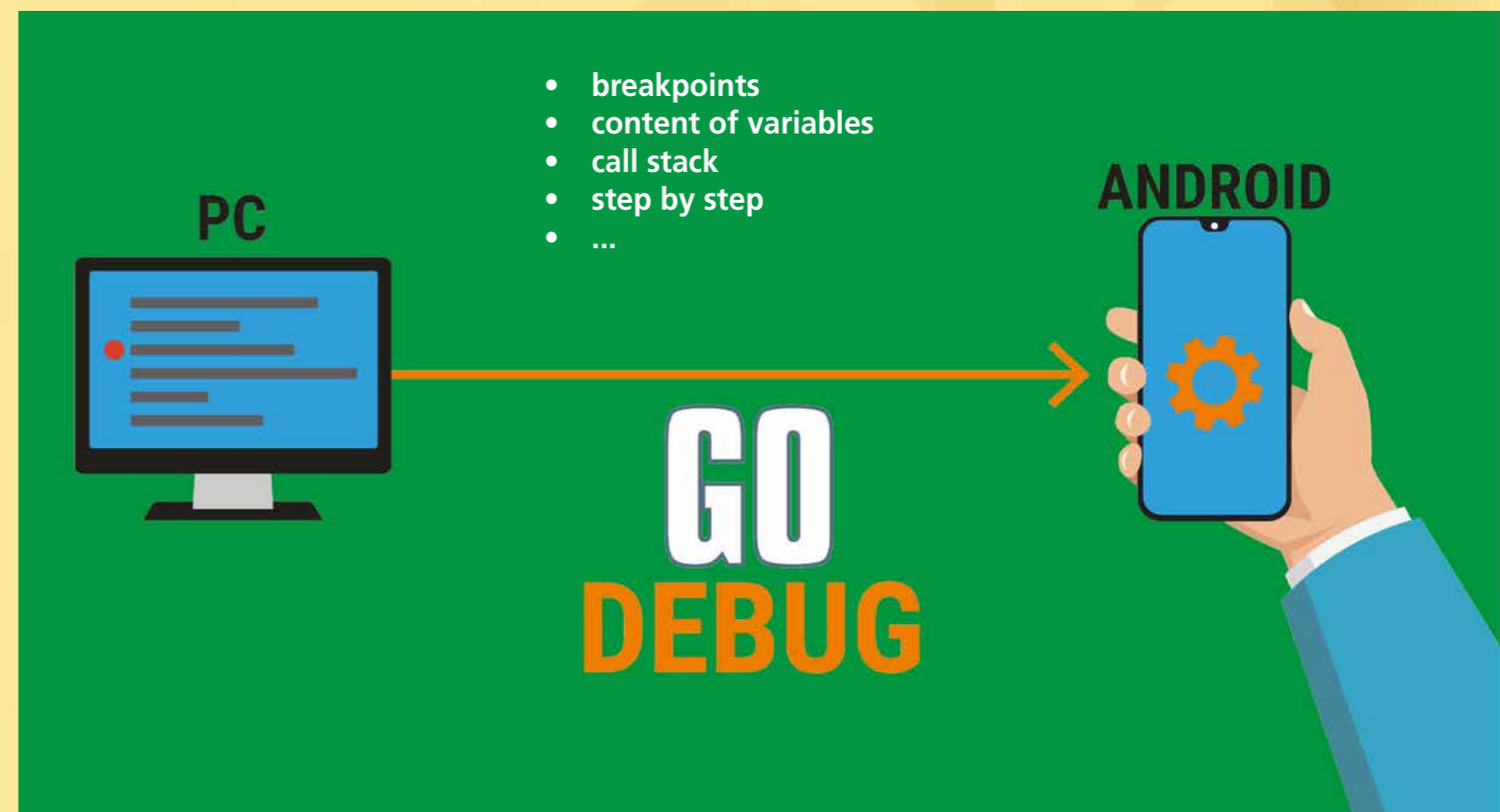


Choose your debug mode: here, directly on the device

The current instruction is indicated by the usual arrow in the margin.

As usual, you can **view the content of variables**, the **call stack**,... then continue the execution: step by step,...

Benefit provided by this new feature of version 25:
Essential



737 New feature WD WB WM ASYMMETRIC ENCRYPTION WLANGUAGE FUNCTIONS

Asymmetric encryption functions are now available for Android.

Benefit provided by this new feature of version 25:
Easier encryption

738 New feature WD WB WM RANDOMCRYPTO WLANGUAGE FUNCTIONS

Encryption methods often use a "random number" parameter.

The **RandomCrypto** WLanguage function allows generating a random, unpredictable and unrepeatable number for this purpose.

Benefit provided by this new feature of version 25:
Easier encryption

739 New feature WD WB WM MISCELLANEOUS

- Independent HFSQL contexts are now available in windows, internal windows and classes.
- All drawing functions of the "d" family accept a **Color** type instead of the RGB color.

Benefit provided by this new feature of version 25:
Various new features

SAMSUNG GALAXY FOLD

WINDEV Mobile 25 allows you to develop applications for folding phones: the split is managed, when the phone is closed, the application automatically switches to the external screen and the layout adapts automatically (thanks to anchors)... You're all set!



740 New feature WD WB WM WLANGUAGE 6 NEW TYPES

6 new types of variables are available for Android:

gpwUser	pdfDocument	pdfTextElement	pdfPage
pdfAttachment	sshSession		

Benefit provided by this new feature of version 25:
Very useful types

741 New feature WD WB WM 69 NEW PROPERTIES

69 new WLanguage functions are available for Android:

PageEndStick	Certificate	KeepVisibleHierarchy	StartDatePeriodDisplayed
EndDatePeriodDisplayed	DisplayCurrency	MemoryCurrency	RightToLeft
HeaderVisible	HSpace	VSpace	PrintedSheet
GranularityGridlines	LabelHeight	FutureHeight	HeightInPixel
BackgroundImagePrinted	PageByPagePrint	LabelWidth	WidthInPixel
CaptionPeriodHeader	BottomMargin	RightMargin	LeftMargin
TopMargin	AdjustmentMode	SignatureMode	ModifiableInReportsAndQueries
MsgSortSel	NbColumn	NbCopy	NbPrintedRec
NbRecRead	TotalNbRec	NbLabel	NbLabelCopy
NbPagesInWidth	InternalReportName	SourceName	ViewName
MemZoneName	LabelNumberToStart	PageNumber	ODBCSQLCode
ODBCPassword	ODBCDatabaseName	ODBCConnectionName	ODBCUserName
Font	FontCharset	FontStrikeOut	FontCondensed
FontAppointmentContent	FontExtended	FontBold	FontItalic
FontLarge	FontName	FontUnderlined	FontAppointmentTitle
HierarchicalDepth	GridlinesVisible	RTFWithImagesAndTables	RichEdit
TextDirection	SelectionOnly	Size	AllModifiableWithReportsAndQueries
SignatureType			

Benefit provided by this new feature of version 25:
More and more power for WLanguage

742 New feature WD WB WM 72 NEW WLANGUAGE FUNCTIONS FOR ANDROID

In version 25, WLanguage integrates 72 new functions for Android:

EncryptAsymmetric	EncryptAsymmetricEnvelopped	DateToDayOfWeek	DecryptAsymmetric
DecryptAsymmetricEnvelopped	InDeviceOwnerMode	InKioskMode	fDirRename
gpwAddUser	gpwAddUserInGroup	gpwAuthLogin	gpwRemoteConnect
gpwDisconnectUser	gpwListOAuthParameters	gpwOpen	gpwGetUserInfo
gpwResetPassword	gpwBiometricAuthentication	grDestinationImage	RandomCryptoBuffer
RandomCryptoInteger	iAddAttachment	iAddBookmark	iChangeSubReportSource
iSequencingAdd	iSequencingPrint	iCloseReport	iCurrentFile
iEndReport	iForceComplement	iNestHeaderFooter	iPageHeightLeft
iPrintBlock	iPrintBodyComplement	iPrintReport	ilimitReportQuery
ilimitReportQueryConnection	ilistNestedReports	iColumnNum	iResetNbPages
iReportPrintingStatus	iSubstBlock	iColumnEnd	iPageEnd
KioskEnable	KioskDisable	PDFReaderClose	PDFReaderOpen
PDFReaderSeekPrevious	PDFReaderSeekFirst	PDFReaderSeekNext	PDFReaderHighlight
PDFReaderRotatePage	PDFIsProtected	PDFExtractPage	PDFMerge
PDFMergeWithPassword	PDFNumberOfPages	PDFToText	SOAPAddSAMLAssertion
SOAPAddAttribute	SOAPAddHeader	SOAPAddXMLSignature	SOAPPrepare
SOAPGetHeader	SOAPToHTTP	SSHCommand	SSHConnectShell
SSHDisconnectShell	SSHWrite	SSHRead	TableCollapseExpand

ANDROID REPORT EDITOR

743 New feature WD WB WM ANDROID REPORT EDITOR

It's here! In version 25, the report editor is available for Android!

Your existing reports work natively on Android!
In version 25, you can run an **iPrintReport** command on Windows, Linux, Web, iOS and now in Android.

The report can be printed (on a printer) or generated as a PDF.

The Android report editor is very rich.

It supports all the features you need, such as:
Static control, Preset control, Calculated control, Image control, Check Box control, Shape control, Bar Code control; Link control, Internal Report control,...
All the processes of these controls are supported, as well as all their properties (auto-resizing, unbreakable

controls...), styles, types of frames; etc...

All types of blocks are supported: document start/end, header/footer, body, break, body complement, iteration, block substitution, breaks, planes...

The data source can be HFSQL (Data file, query, embedded query) or a programmed data source.

Bounds, sorts and sort breaks are supported.

Available types of reports include: blank, form, table, crosstab, mailing, label, multicolumn, ...

The "[% %]" syntax in labels is supported.

Nested reports and report sequences are supported.

PDF export is available.

Et cetera...
You can easily create all types of reports for your Android applications..

Benefit provided by this new feature of version 25:
How could we do without it?



WINDOWS MOBILE & CE

Windows Mobile, Windows CE and Windows Embedded are very popular in industrial settings.

Please note: your Windows Mobile, CE and Embedded code is compatible with Android (and iOS). If you migrate your industrial devices from CE to Android, you don't lose your code! All thanks to WINDEV Mobile!
Your teams will be happy to keep their know-how!



744 New feature WD WB WM COMMON NEW FEATURES

WINDEV Mobile 25 for Windows CE, Mobile and Windows Embedded benefit from the common new features of the environment in version 25.

Benefit provided by this new feature of version 25:
New features even for Windows CE!

745 New feature WD WB WM 33 NEW WLANGUAGE FUNCTIONS FOR WINDOWS MOBILE, CE AND EMBEDDED

33 new WLanguage functions are available in Windows Mobile, CE and Embedded in version 25.

Reduce	Apply	StringToJSON	Clone
DateToDayOfWeek	dbgConnect	Decode	GetContinentConstant
GetCountryContinent	GetContinentList	GetCountryContinentList	GetContinentName
Encode	InDeviceOwnerMode	InKioskMode	ExtractStringBetween
AAEnable	Filter	fDirRename	gpwAddUser
gpwAddUserInGroup	gpwAuthLogin	gpwBiometricAuthentication	ilnitInternalReport
JSONToString	TableCollapseExpand	TelemetrySendData	ToastDisplayPopup
Map	CheckAllFalse	CheckAllTrue	CheckAnyFalse
CheckAnyTrue			

UWP

Although it seems like it is being abandoned by Microsoft, UWP (Universal Windows Platform) is still supported in version 25.

746 New feature WD WB WM COMMON NEW FEATURES

UWP development benefits from the common new features of version 25. See new features 670 to 692.

Benefit provided by this new feature of version 25:
UWP evolves

747 New feature WD WB WM NEW ENVIRONMENT

UWP development also benefits from the new development environment of version 25.

Benefit provided by this new feature of version 25:
Increased user friendliness

748 New feature WD WB WM 28 NEW WLANGUAGE FUNCTIONS FOR UWP

28 new WLanguage functions are introduced for UWP.

Reduce	Apply	StringToJSON	Clone
DateToDayOfWeek	dbgConnect	GetContinentConstant	GetCountryContinent
GetContinentList	GetCountryContinentList	GetContinentName	InDeviceOwnerMode
InKioskMode	ExtractStringBetween	fContentType	Filter
fDirRename	HUpdateLink	ilnitInternalReport	JSONToString
TelemetrySendData	ToastDisplayIW	ToastDisplayPopup	Map
CheckAllFalse	CheckAllTrue	CheckAnyFalse	CheckAnyTrue



WINDEV Mobile 25 App Approved!



WEBDEV

749 New feature WD WB WM WEBDEV 25: BENEFIT FROM THE 160 COMMON NEW FEATURES OF VERSION 25



WEBDEV 25 benefits from most of the 160 new common features of version 25. WEBDEV 25 benefits most notably from Smart controls, management of PDF files, management of YAML, GitHub, project portfolios, creation of SCM branches on several projects, new features in the code editor, OOP, HFSQL

Spare servers, etc... And in addition to all these new features, WEBDEV 25 benefits from new features specific to the Web to be discovered in the following pages.

Benefit provided by this new feature of version 25:
An incredible amount of new features

NEW: 36 SMART CONTROLS

750 to 785 New feature WD WB WM 36 SMART CONTROLS FOR WEBDEV

The new Smart control allows implementing sophisticated operations in your pages with one click

Continues page 74...

WEBDEV



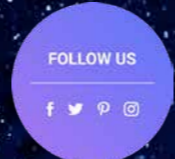
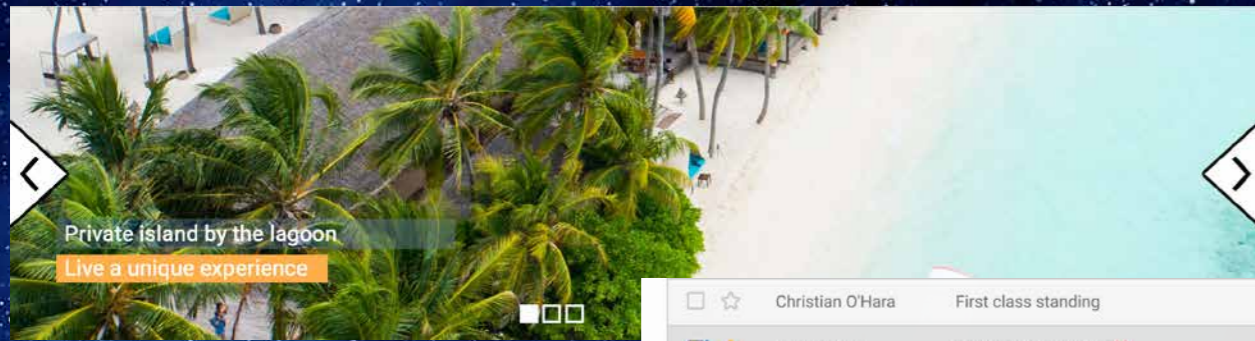
Note: controls not to scale

NEW: WEBDEV 25 SMART CONTROLS READY TO USE

The following Smart controls are also available: Progress-Bar Button · Password Strength · Login · Gallery in Rows · Gallery in Columns · Clocks · Amazon-style image management · ...

SLIDING BANNER

Automatic slide · Pause on hover · Effects · Browser code

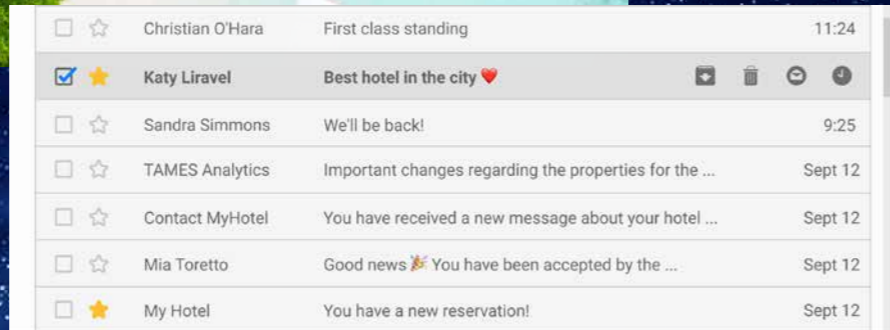


FOLLOW US
Effects · Displays the social network page



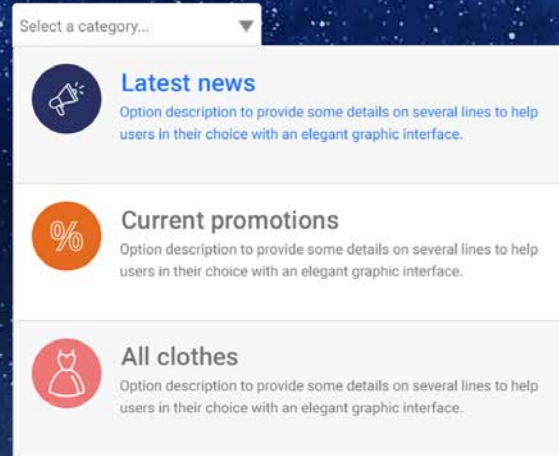
COUNTDOWN

Automatic calculation · Updated every second (or other) · Browser code



"GMAIL-LIKE" LOOPER

Multiple selection · On-hover effects · Action buttons

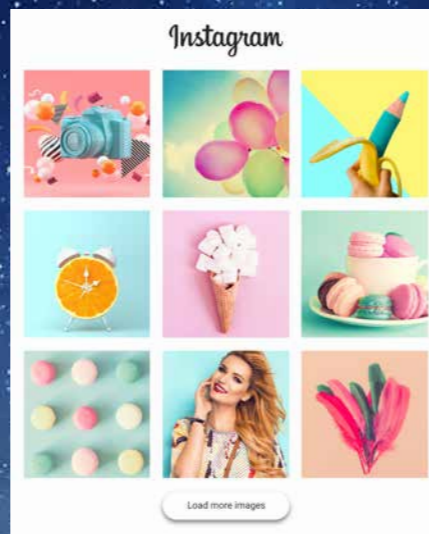
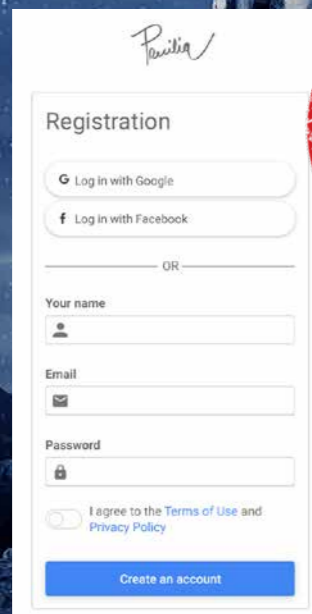
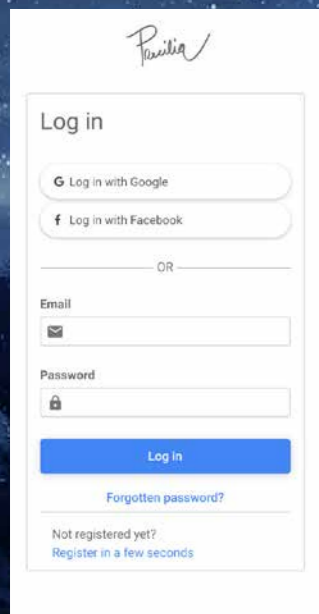


LANGUAGE COMBO BOX

Language displayed either in the current language or in the target language. Browser language first

POPUP COMBO BOX

Here, a popup managed in programming as a combo box



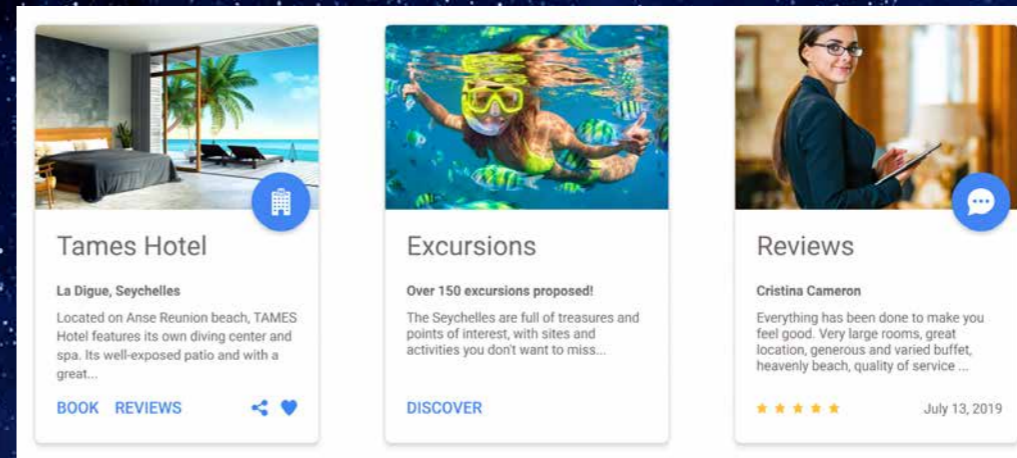
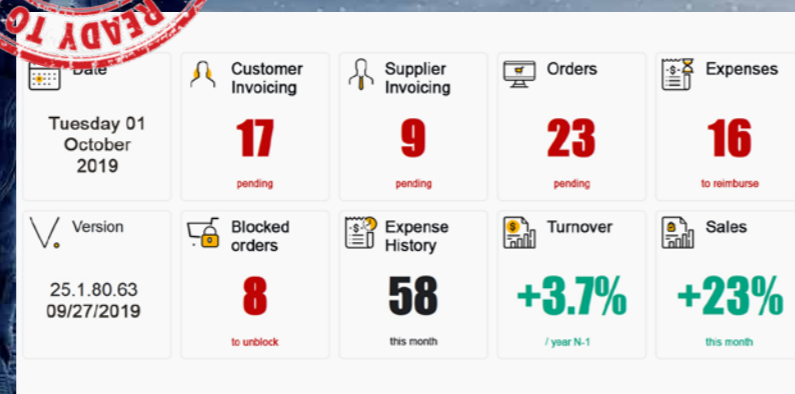
INSTAGRAM VIEW

Displays images from Instagram account · Flexible layout · Clicking a thumbnail opens image in high definition · Shows a post



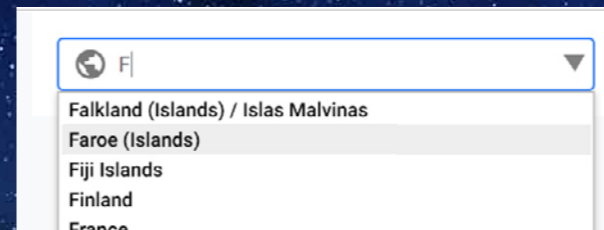
"MENU" DASHBOARD

Understated dashboard · Clickable = Menu-oriented



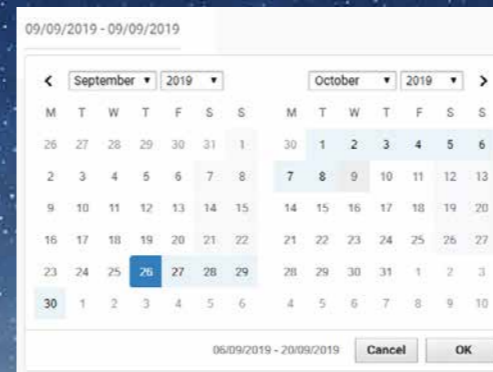
CARDS "Material Design" layout

Highlight 3 (or other) elements · Share buttons and links



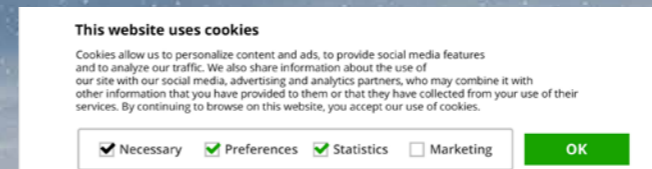
INPUT COMBO BOX WITH FILTER

Edit control with autocomplete and Combo Box features



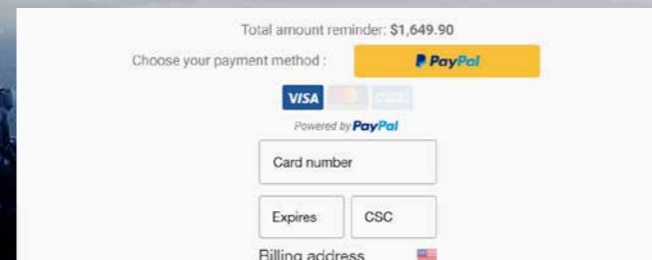
SELECT DATES AND DATE RANGES

Select with mouse · Selected period highlighted



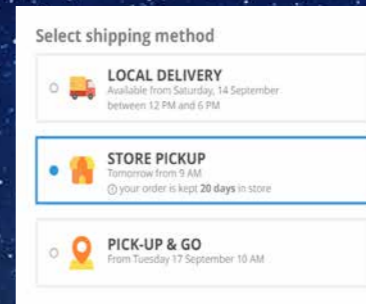
COOKIE CONSENT

Several layouts and levels of detail provided.



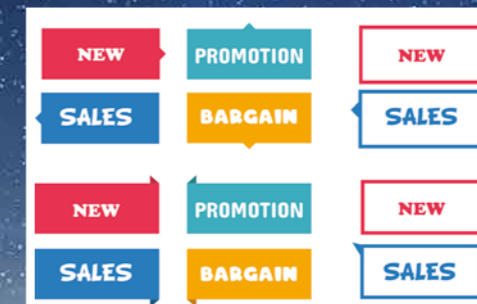
ACCEPT A CREDIT CARD VIA PAYPAL

Payment by credit card managed by Paypal account



VISUAL SELECTOR

Sophisticated selector



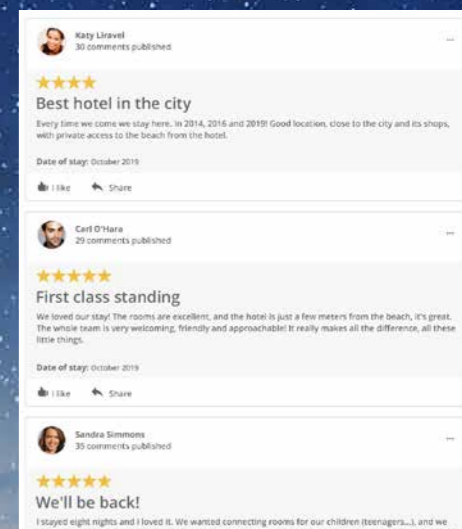
COMICS-STYLE SPEECH BUBBLES

To use in your pages · Custom text and size · Overlayable



TWITTER FEED

List of public tweets from any account · Real-time update

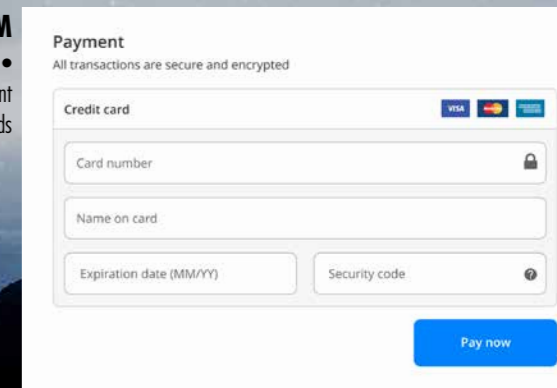


CUSTOMER REVIEW LOOPER

Rating stars · Several versions provided, with or without input

PAYMENT FORM

Input assistance · Manages different payment methods



LOGIN / ACCOUNT CREATION

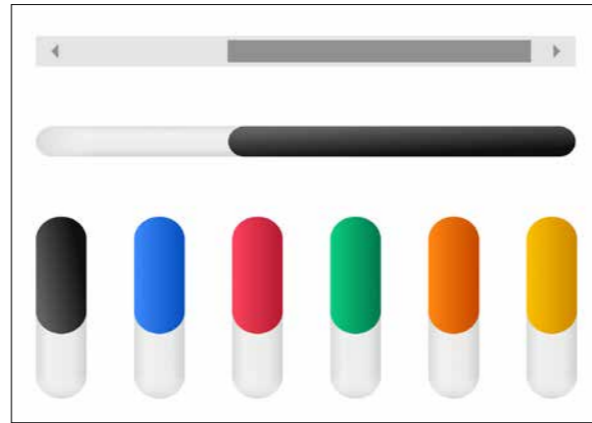
Login or Account creation · Google, Facebook, LinkedIn, GitHub login...



in WEBDEV (new features 001 to 006). Today's standard Web-based processes, such as date range selections, sliding banners, galleries, Twitter feeds... are supplied ready for use, with their code. And everything can be customized.

Among the **Smart controls** provided with WEBDEV 25, you will find: • Sliding Banner • Progress Bar button • Tooltips • Cards • Search Combo Box and Popup • Comments and rating • Countdown • Cookie consent banner • Form • Galleries • Clock • Payment • Credit card reader • Date and date range picker • Dashboard • Advanced Looper controls • Twitter feed • ...

Benefit provided by this new feature of version 25:
Massive time savings



Examples of scrollbar looks

Benefit provided by this new feature of version 25:
Better-looking scrollbars

NEW FEATURES OF CONTROLS

786 New feature WD WB WM MODERNIZED SCROLLBAR LOOK

Two scrollbar looks are available in version 25: either the standard look of the browser, or a sleek look that matches the skin. You can change the color of the scrollbar.

787 New feature WD WB WM AUTOMATIC INFINITE LOOPER CONTROL

In addition to the modes "with pager" and "with scrollbar", Looper controls now feature an "Infinite" mode. This mode is increasingly popular. When the user approaches the bottom of the Looper control, the rest of the content appears automatically.

Benefit provided by this new feature of version 25:
One more mode as standard

DEBUGGER FOR BROWSER WLANGUAGE CODE

Today, Web applications use more and more Browser code. Browser code uses less resources (no processes on the server) and bandwidth. The user experience is improved. Debugging Browser code easily is now a necessity.

- step by step, line after line or by entering the functions called
- view contents of variables,
- view call stack
- ...

The browser is run by the debugger. The operating modes and shortcuts are identical to the server code debugger you already know. When the execution sequence switches from browser code to server code (or vice versa) the debugger automatically switches from one mode to another. Note: Chrome is the browser to use for debugging. Of course, the debugged code will work on all browsers: Edge, Firefox, Opera...

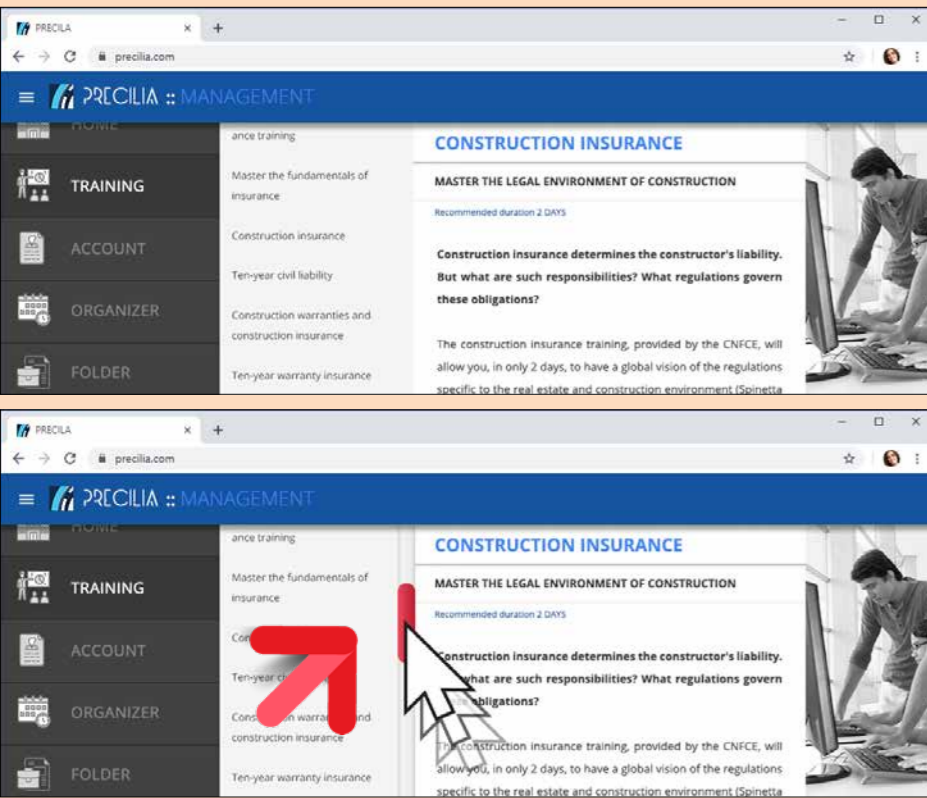
Benefit provided by this new feature of version 25:
How did you do it before?

789 New feature WD WB WM DEBUG YOUR BROWSER CODE WITH VERSION 25

In version 25, you can easily debug Browser code written in WLanguage. The browser code debugger has useful features:

- breakpoint, set beforehand or during debugging

SCROLLBAR THAT APPEARS ON HOVER



788 New feature WD WB WM SCROLLBAR THAT APPEARS ON HOVER

In sophisticated pages, scrollbars only appear when hovering over a specific area to avoid cluttering the UI. In version 25, you can automatically create this type of scrollbar. You can have several scrollbars in the same page. You can have 1 scrollbar per container.

Benefit provided by this new feature of version 25:
Create sophisticated yet uncluttered pages

The scrollbar (here in red!) appears only when the column is hovered over. Similarly, a scrollbar will appear on the black column (left of page) when hovered over



WEBDEV ADAPTIVE DESIGN: LAYOUTS & ANCHORS

790 New feature WD WB WM ADAPTIVE DESIGN: SIMPLER THAN RESPONSIVE DESIGN

In version 25, WEBDEV features Adaptive Design to create pages...

For WINDEV and WINDEV Mobile users, this is the same principle as the one used in layouts.

The principle is straightforward: the page layout varies according to the width of the browser.

The same page has several possible layouts.

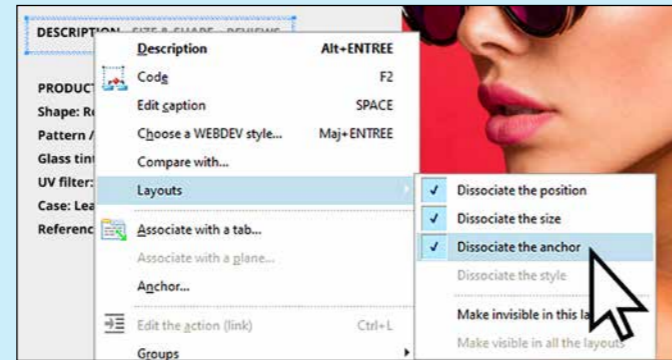
Typically:

- a layout for PCs and tablets,
- a layout for wide screens
- a layout for smartphones.

The appropriate page is automatically displayed according to the width of the browser.

An advantage of this method is that controls can be freely positioned in each layout.

The page is in "zoning" edit mode.



The layout menu

Benefit provided by this new feature of version 25: Another method to make your pages more adaptive

791 New feature WD WB WM LAYOUT: HOW TO CREATE PAGES

Creating layouts is easy.

Simply click "create a new layout" and:

- select one of the proposed templates,
- create a specific layout: super wide display, specific industrial device, fixed size device,...

In each layout, you can position controls as you wish.

Benefit provided by this new feature of version 25:

Easy creation

792 New feature WD WB WM LAYOUT: CUSTOMIZE CONTROLS

In a layout, a control can:

- be dissociated
- remain associated.

When an associated control is modified in one of the layouts, the changes are applied in all the layouts.

By dissociating a control, you can modify it only in the desired layout.

You can also dissociate only certain properties of the control:

anchors, color, position, size, style...

In the "7 tabs", a symbol indicates which properties are dissociated.

Benefit provided by this new feature of version 25:

Advanced customization

793 New feature WD WB WM LAYOUT, CODE: LAYOUT CHANGE PROCESS

Layouts are managed automatically.

But you can customize the behavior of the pages when the layout changes.

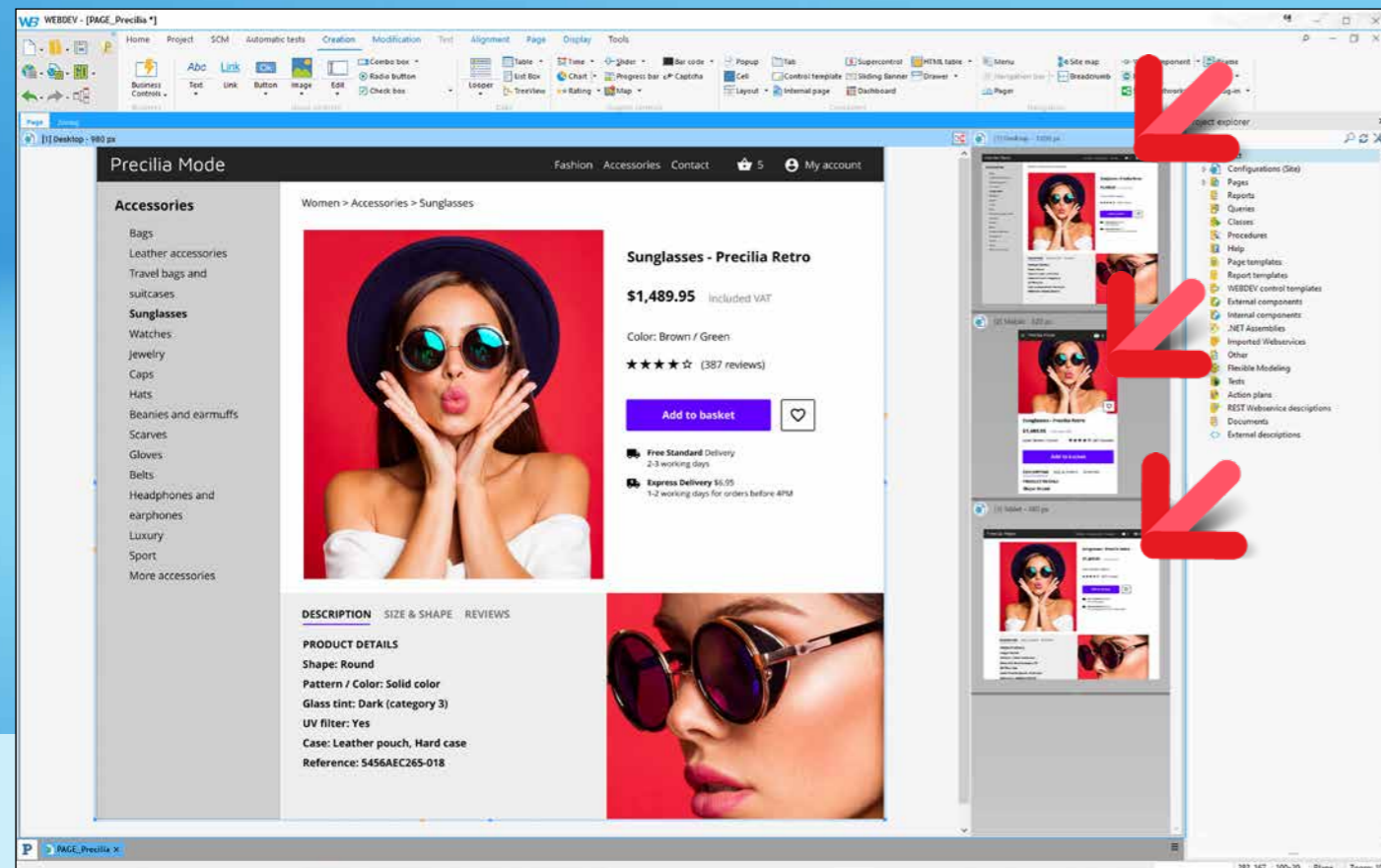
A new process is introduced to manage layouts by programming: "Change of layout" process.

This process is automatically called when the layout changes: Web users resize their browsers, or rotate their devices.

This process may be particularly useful for managing special cases by programming: save a cookie, change the content of a control...

Benefit provided by this new feature of version 25:

New programming possibilities



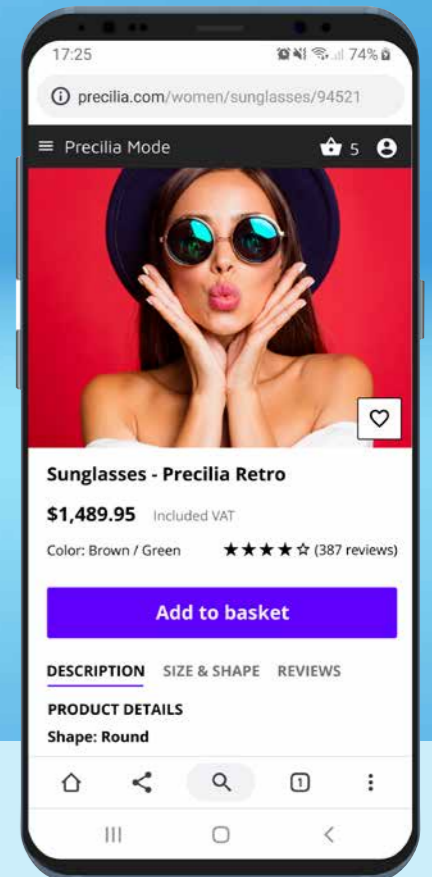
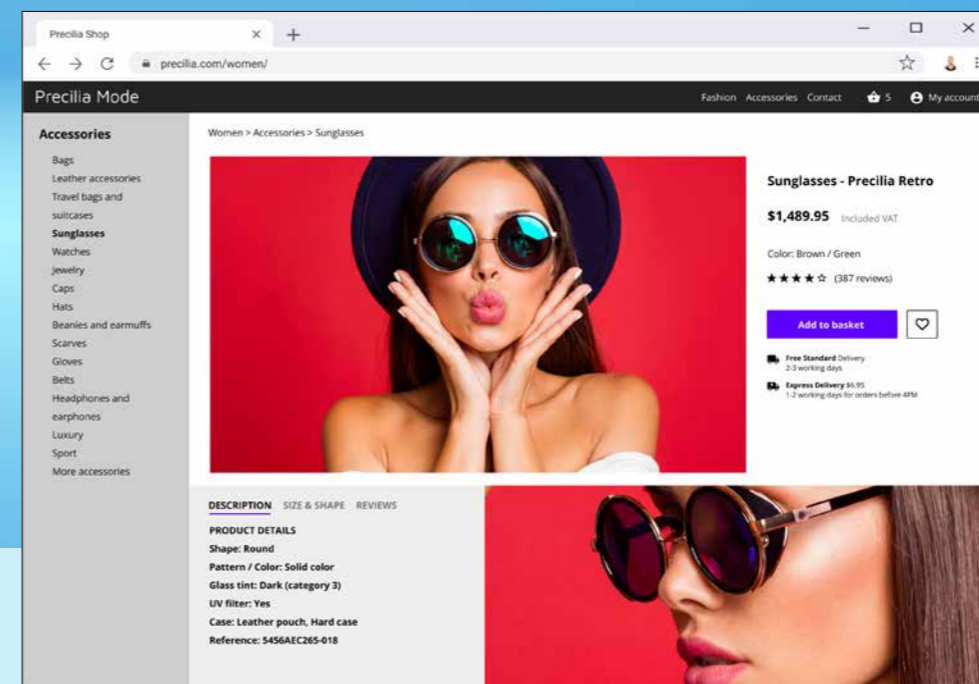
Page in edit mode (left).

3 layouts have been defined for this page: PC, Phone and Tablet

The blue bar above the thumbnail indicates which layout is being edited

At runtime (below), the appropriate layout is automatically selected.

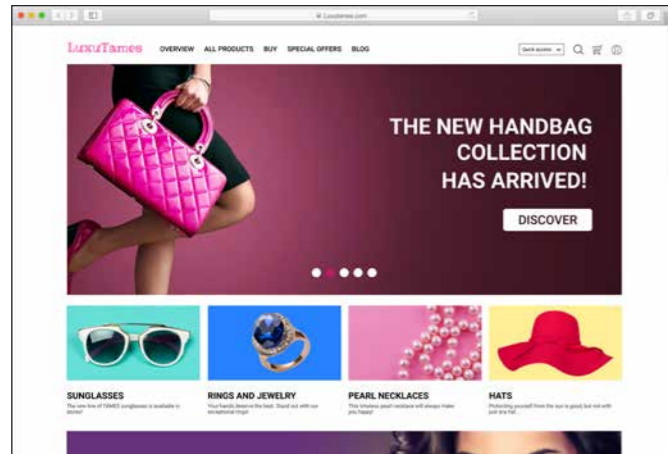
Here: PC and Phone



PRESET PAGES

794 New feature WD WB WM NEW PRESET PAGE

When you create a new page, WEBDEV proposes preset pages, to get started faster!
A new preset page is available in version 25: home page.



Standard home page layout

Benefit provided by this new feature of version 25:
A useful template

SIMPLIFIED OPERATING MODES IN THE EDITOR

In version 25, WEBDEV simplifies and secures many operations in the editors even further.
This does not change anything about your existing elements, but it greatly facilitates interactions.

795 New feature WD WB WM IT'S TIME TO TIDY UP YOUR PROJECTS!

Let's say developers of version 25 were asked to arrange the directories containing the project's HTML pages.
In previous versions, these pages were located in subdirectories of the project, by language.
In version 25, the generated pages are in the `cp1` directory.
There is no more mess at the root of the project!

Benefit provided by this new feature of version 25:
Know exactly where everything is

796 New feature WD WB WM ONE "_WEB" DIRECTORY BY CONFIGURATION!

In previous versions, all the resources for all configurations were in the same `_web` directory.
Let's say that, in version 25, developers were asked to store each configuration in a different subdirectory.
This allows you to deploy only one given configuration, when necessary, without including the others.

Benefit provided by this new feature of version 25:
Smaller deployments

797 New feature WD WB WM CLICKABLE (OR NOT) IMAGE CONTROLS

In previous versions, there were 2 types of "Image" controls depending on whether the image was clickable or not.
In version 25, you can simply indicate that the image is clickable in the "General" tab.
There is no need to change the type of control.
Note that you don't have to make any changes to your existing elements. Your existing elements will keep working as usual.



Benefit provided by this new feature of version 25:
Simplification

798 New feature WD WB WM A "MAP AREA" CONTROL CAN BE "SUBMIT"

In previous versions, when you wanted to include clickable areas in an image, you had to change the type of control and select a "Map Area".

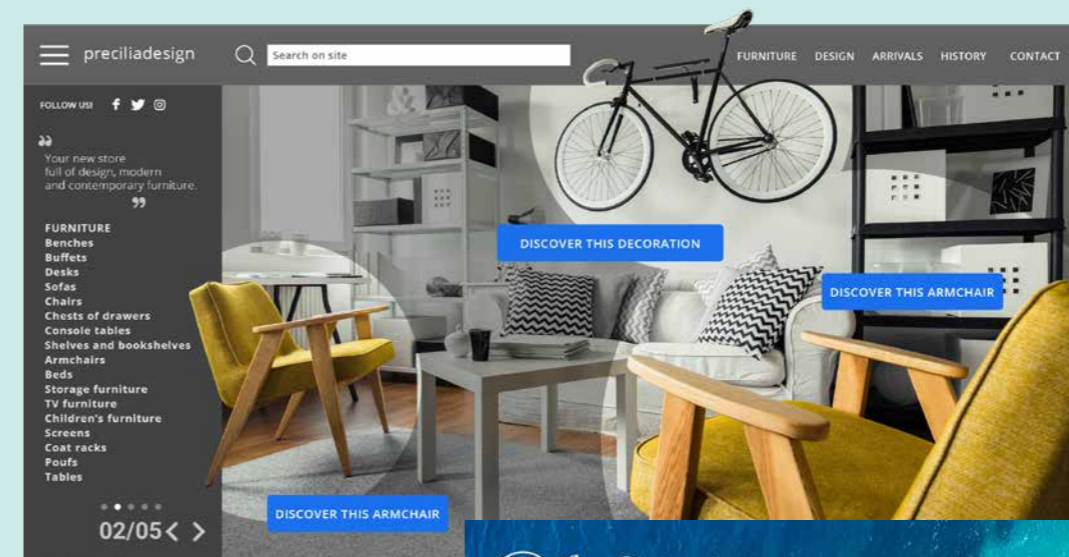
In version 25, this becomes a simple option of the Image control. See new feature 797.

Likewise, in previous versions, a "Map Area" control was not "Submit".

This meant that the values of the other controls on the page were not automatically returned to the server in the image's server click process.

In version 25, simply select the option "Send data to server" in the "General" tab to make the control "submit".
Note that you don't have to make any changes to your existing elements. Your existing elements will keep working as usual.

Benefit provided by this new feature of version 25:
Simplification



Benefit provided by this new feature of version 25:
More and more choices

800 New feature WD WB WM AN "IMAGE" CONTROL TAKES INTO ACCOUNT EXIF ORIENTATION INFORMATION

Did you know? The image orientation can be defined by "Exif" information (the various values integrated in an image).
In version 25, the Image control uses this information to determine the orientation (portrait, landscape) of the image to display.

Benefit provided by this new feature of version 25:
Always keep your head up!

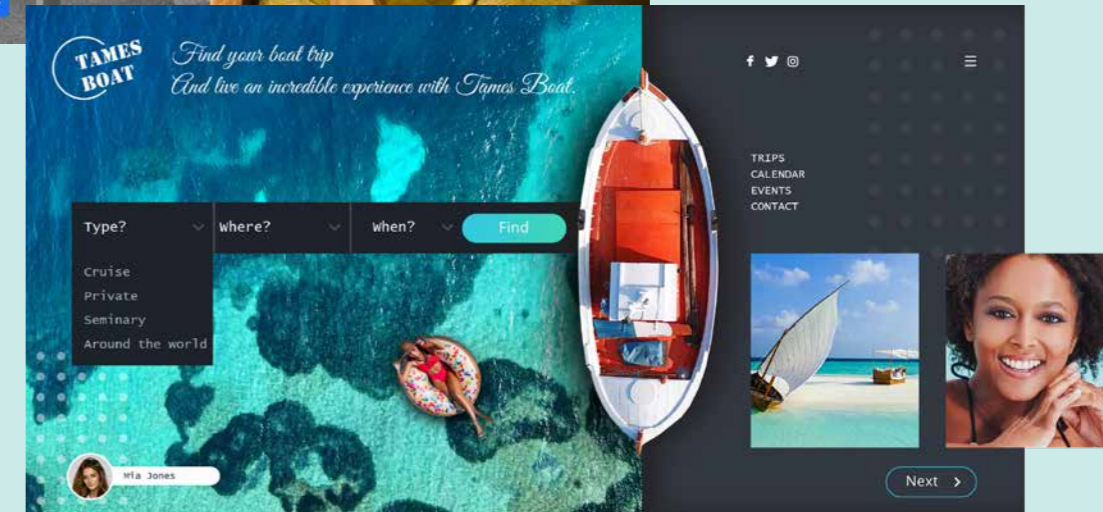
801 New feature WD WB WM IMAGE CONTROL IN THE EDITOR: DISPLAY OR NOT ITS REPRESENTATION

In the editor, an Image control that has no file link and no default image defined is represented by a "mountain/sun" symbol.
If this control is intended to be used as a border or frame, this symbol reduces readability in the editor.
In version 25, you can choose not to display this symbol ("UI" tab in the "7 tabs").

799 New feature WD WB WM

2 NEW SKINS

2 new skins are provided in version 25: Phoenix and Ankaa.
Use these skins for your sites as you like!



Benefit provided by this new feature of version 25:
Easier editing

802 New feature WD WB WM SEE ALL QUERIES INTEGRATED IN THE PAGE

In version 25, the list of all the requests integrated in the page becomes available.
Queries integrated in the Looper controls of the page are also listed.

Benefit provided by this new feature of version 25:
Information that saves time

803 New feature WD WB WM EXTERNAL CSS STYLE SHEETS: DEFINE INCLUSION ORDER

In version 25, you can specify the order in which CSS sheets are included in the project.
The inclusion order defines the priority of CSS styles.
The choices of the graphic designer will be kept!

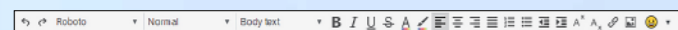
Benefit provided by this new feature of version 25:
Simplified operations

HTML EDIT CONTROL

HTML EDIT CONTROL: A MASSIVE BOOST

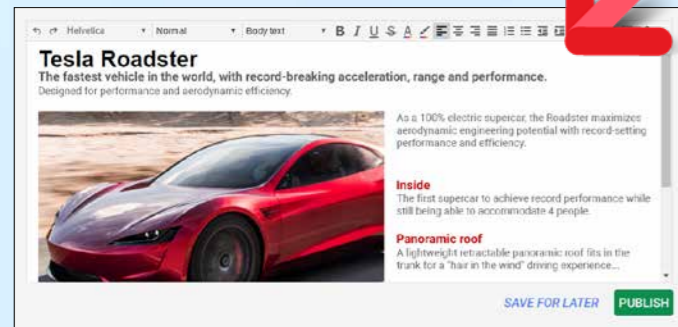
804 New feature WD WB WM HTML EDIT CONTROL: THE NEW FORMATTING BAR NO LONGER OVERFLOWS THE CONTROL

The HTML control formatting bar has been entirely revamped in version 25. To start with, the formatting bar has a new design.

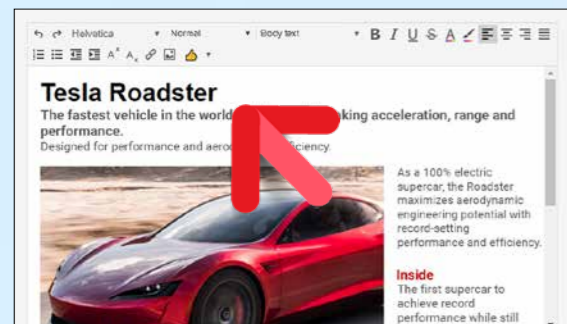


New HTML edit control bar, available to web users

The bar no longer overflows the control when the latter is narrow. If the control width is limited, the bar is displayed on several rows. The bar is pinned at the top of the control: it remains visible when scrolling.



In this page, the bar fits the entire HTML control



Reduced page width: The bar is rearranged on 2 rows (it no longer overflows the control)

The font picker is WYSIWYG.

Benefit provided by this new feature of version 25:
An adaptive, better-looking bar

805 New feature WD WB WM HTML EDIT CONTROL: UNDO REDO

In version 25, the HTML edit control allows the end user (the Internet user) to "undo/redo" on different levels.

Benefit provided by this new feature of version 25:
On. Off. On. Off...

806 New feature WD WB WM HTML CONTROL: RESIZABLE INPUT AREA

The end user can resize the input area. The other areas of the page will be automatically repositioned.



The HTML edit control has a resize handle

Benefit provided by this new feature of version 25:
Ease for the web user

807 New feature WD WB WM HTML EDIT CONTROL: POWERFUL IMAGE MANAGEMENT

In version 25, the HTML control allows for powerful and intuitive image management.

You can now paste images directly into the text. Images can be dragged/moved from the user's file explorer. You can set the image wrapping: a small specific bar appears when an image is selected.

This bar features: type of wrapping, rotation, crop, resize, anchors, magnetism...

Images can be moved. They can be resized with the mouse, with or without keeping the proportions.

Inserted animated GIFs are animated! WEBP images are also supported. (see example on opposite page)

Benefit provided by this new feature of version 25:
Web users manage their images in the HTML edit control

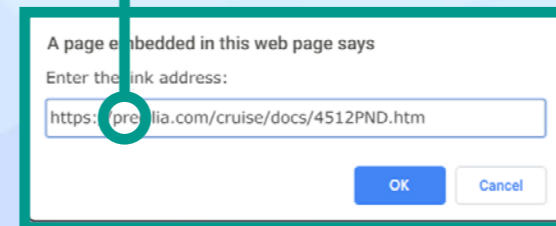
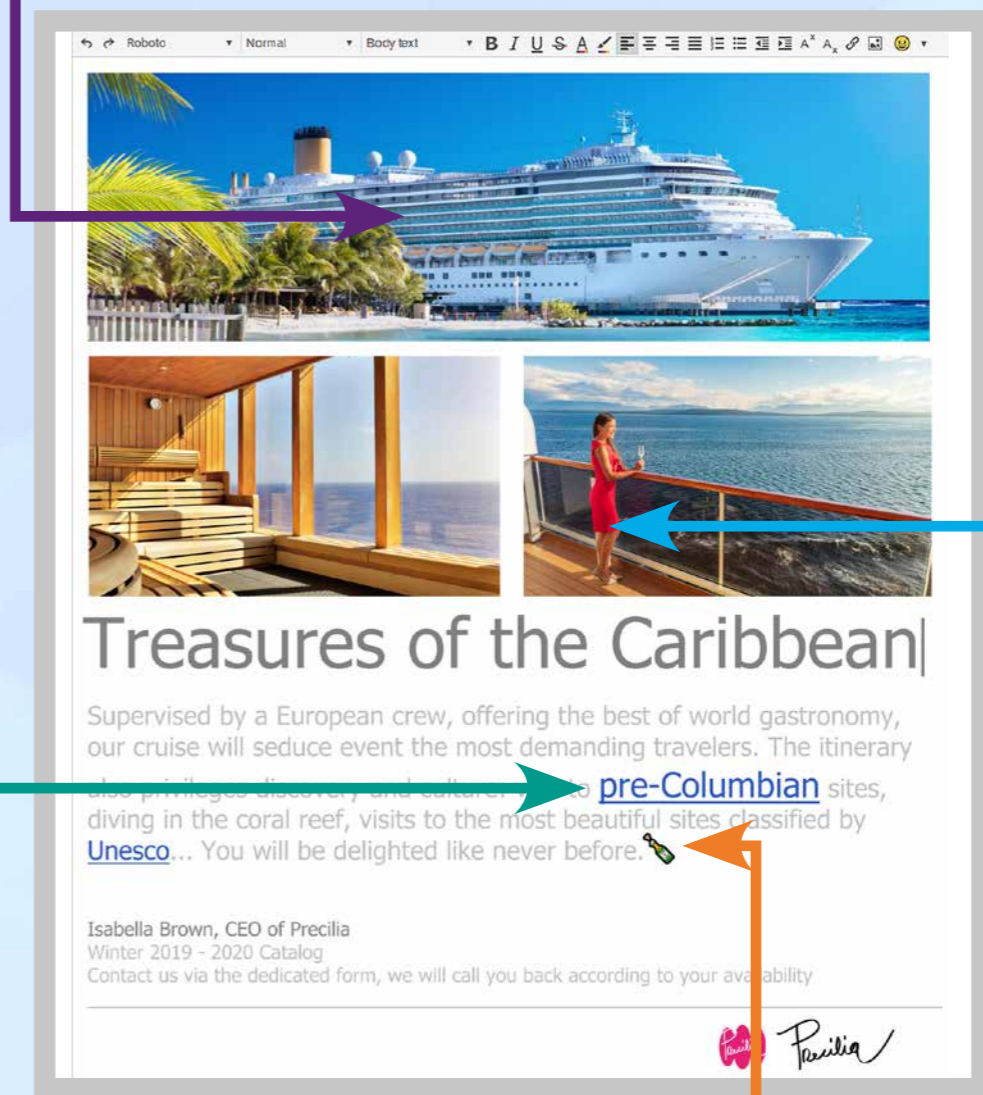


IMAGE CROPPING

Web users can crop images they have imported, or images already present in the HTML control.

FEATURES: REMINDER

- Among the features of the HTML edit control
- font and size options
 - text enrichment and color
 - text alignment and justification
 - image addition
 - image wrapping
 - ...



EDIT LINKS

In an HTML edit control, the Web user can:

- edit existing HTML links
- enter HTML links.



EMOJIS

Web users can insert emojis.



IMAGE ROTATION

Web users can rotate (by 90°) images they have imported, or images already present in the HTML control.

SMART MAGNETISM

808 New feature WD WB WM SMART CONTROL LAYOUT

The page editor benefits from Smart Magnetism in WEBDEV 25: it is much easier to position the controls on the page (see new feature 020).

Benefit provided by this new feature of version 25:
Perfect alignments

which consisted in editing in the largest mode by default.

Benefit provided by this new feature of version 25:
A more natural operating mode

810 New feature WD WB WM AUTOMATIC POSITIONING IN SMALLER SLICES

When a control is created in the reference slice, it is automatically positioned in a logical way in the smaller slices.

Benefit provided by this new feature of version 25:
Saves time

811 New feature WD WB WM ABILITY TO HIDE TABLE COLUMNS ACCORDING TO SLICE

In version 25, you can hide table columns to fit the resolution slice used at runtime.

Benefit provided by this new feature of version 25:
A valuable help to create your Responsive pages

812 New feature WD WB WM DIFF OF RESPONSIBLE PAGES

The "diff" indicates properties of responsive web design that have been modified between 2 versions of a page.

Benefit provided by this new feature of version 25:
You'll know everything

RESPONSIVE WEB DESIGN

809 New feature WD WB WM EDIT IN THE MINIMUM SIZE OF EACH SLICE

Slices are now edited in the minimum size of each slice, and no longer in their maximum size. This makes editing much more intuitive. Note that there is an option to return to the previous method,

WEBIFICATION OF WINDEV APPLICATIONS: EASIER AND EASIER

813 New feature WD WB WM WEBIFICATION MADE EASIER AND EASIER

Transforming your existing WINDEV applications (or parts of applications) into Web sites has never been easier. New features allow you to transform a Windows application into Web more easily:

- WINDEV windows Custom-Notes are transformed into WEBDEV pages Custom-Notes
- **iPreview** is converted into a code that generates a PDF file and sends it to the browser. The PDF is independent of the computer driver.
- Code is converted in the original language
- The Webification wizard becomes faster
- WINDEV layouts are kept in the WEBDEV site.



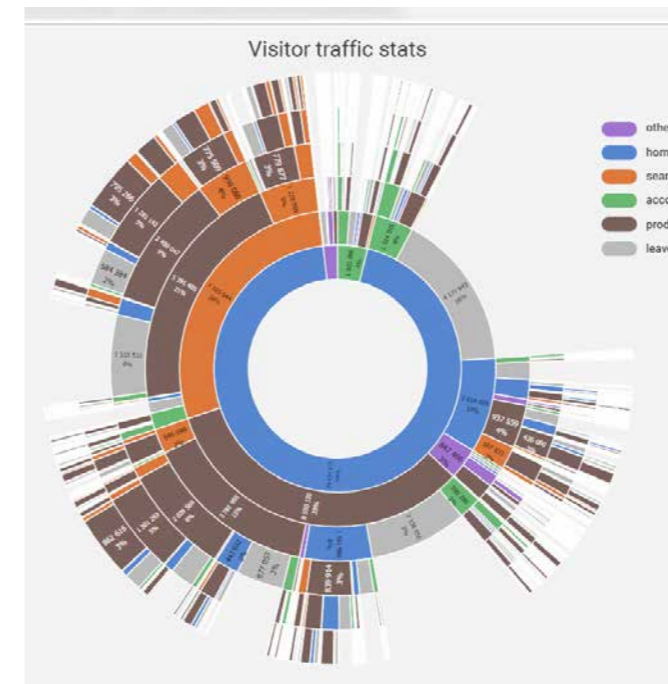
Benefit provided by this new feature of version 25:
Transform your applications into Web sites or SaaS

CHART

814 New feature WD WB WM NEW CHART IN WEBDEV: SUNBURST

In version 25, WEBDEV is enriched with a new chart: the "Sunburst" chart.

This type of chart allows you to present structured hierarchical data.



Sunburst chart in a page

Benefit provided by this new feature of version 25:
A new type of chart!

and apply custom monetization..

Benefit provided by this new feature of version 25:
Even more precise SaaS invoicing

MICROSERVICES

816 New feature WD WB WM WEBDEV 25 FACILITATES MICROSERVICES ARCHITECTURES



Microservices architectures have become very popular. These architectures consist in breaking down the application's functionalities into independent webservices (SOAP or REST): in theory, this allows deploying and updating features independently, and it also allows creating scalable architectures... WEBDEV allows the easy creation of microservices architectures.

Benefit provided by this new feature of version 25:
WEBDEV 25 is open to all architectures

SAAS



815 New feature WD WB WM SAAS FUNCTIONS

SaaS benefits from a new native WLanguage type: **SaaSVisit** as well as a new function: **SaaSAdminVisit**. This makes it possible, for example, to retrieve visit statistics

SINGLE-PAGE APPLICATION (SPA)

817 New feature WD WB WM SPA: GENERAL IMPROVEMENTS IN BROWSER MODE

"Browser" mode improvements in version 25 allow you to develop Single Page Applications (SPA) more easily:

- new Browser WLanguage functions (see new feature 824)
- new types in Browser mode, such as Json (see new feature 823)
- Browser code debugger (see new feature 789)
- ...

Benefit provided by this new feature of version 25:
WEBDEV 25 is open to all architectures

SOCIAL NETWORKS

818

New feature
WD WB WM

AUTOMATICALLY DISPLAY AND SCROLL TWEETS IN A PAGE

A new useful Smart control is available to display tweets in a page. This control can be placed in an existing page (e.g. on the right of the page) to display Tweets posted on a given account in real time. The control can be resized, of course.

(see new feature 750)
Benefit provided by this new feature of version 25:

A sophisticated, easy-to-implement Smart control

Display a self-updating Twitter feed in the pages of your sites



820

New feature WD WB WM

"TOCLIPBOARD" WLANGUAGE FUNCTION AVAILABLE IN BROWSER

In version 25, hundreds of new functions are available in Browser mode, for example:

ToClipboard.

This will become essential for many developers!

Benefit provided by this new feature of version 25:
Time saved

821

New feature WD WB WM

WLANGUAGE FUNCTION EXAMPLE: "BROWSERPRINT"

In version 25, hundreds of new functions are available in Browser mode, for example:

BrowserPrint.

This function allows you to open the browser's print window, with the document to print already selected (same behavior as **Ctrl + P**).

Note: this function is enabled on Chrome only. It has no effect on other browsers.

Benefit provided by this new feature of version 25:
Print it out!

822

New feature WD WB WM

WLANGUAGE FUNCTION EXAMPLE IN BROWSER MODE: HASHSTRING

HashString ensures that the information received by the browser is the information sent by the server. The application must simply process the sending and reception of the "Hash".

Benefit provided by this new feature of version 25:
Detect transmission changes

823

New feature WD WB WM

NEW JSON TYPE IN BROWSER

The JSON type is available in Browser code. This type is used to easily exploit data retrieved via Webservices.

Benefit provided by this new feature of version 25:
Simplified code

819

New feature WD WB WM

ACCESS CONTROL PROPERTIES IN LOOPER CONTROLS IN BROWSER CODE

In version 25, you can access the properties of the controls in a Looper control: make them visible, change their color, retrieve their content directly (without attribute), ...

Benefit provided by this new feature of version 25:
Finally!

New feature WD WB WM

824

208 NEW BROWSER WLANGUAGE FUNCTIONS

Writing Browser code is becoming more and more necessary. This makes it possible to develop more responsive, faster and less resource-intensive Web applications: no requests sent to the server, less bandwidth used.

Web developers will love WEBDEV 25: 208 new WLanguage functions are now available.

Age	LeapYear	CurrentYear	ArcTan2
RoundDown	RoundUp	CalendarSelect	CalendarSelectCount
CharactTypeCount	CharactType	CharactUnicode	StringStartsWith
StringSplit	StringEndsWith	StringIncrement	StringInsert
StringReverse	StringDelete	StringToJSON	StringToArray
ChronoStart	ChronoEnd	ChronoPause	ChronoReset
ChronoResume	ChronoValue	MakeInteger	Conversion
CSVToArray	DateTimeTimeZoneToLocal	DateTimeLocalToTimeZone	DateTimeLocalToUTC
SysDateTime	DateTimeUTCToLocal	DateTimeValid	DateTimeToEpoch
DateTimeToReal	DateToDay	DateToDayOfWeek	DateToDayInAlpha
DateToMonthInAlpha	DateToWeekNumber	dBorder	DecimalToSexagesimal
LastDayOfWeek	LastDayOfMonth	GetContinentConstant	GetCountryContinent
GetColor	GetGUID	GetIdentifier	GetCountryISO
GetContinentList	GetCountryList	GetCountryContinentList	GetContinentName
GetCountryName	GetUUID	GetUUID256	dPolyline
dRoundedRectangle	In64bitMode	InAJAXMode	InAndroidMode
InAppleWatchMode	InBackgroundMode	InAWPMode	InComponentMode
InDeviceOwnerMode	InAndroidEmulatorMode	InAppleWatchEmulatorMode	IniOSEmulatorMode
InWindowsPhoneEmulatorMode	InReportsAndQueriesMode	InFactoryMode	IniOSMode
InJavaMode	InKioskMode	InLinuxMode	InUMCMode
InPHPMode	InPocketMode	InDelayedProcedureMode	InStoredProcedureMode
InServiceMode	InPrelaunchedSessionMode	InSimulatorMode	InAndroidSimulatorMode
InAppleWatchSimulatorMode	IniOSSimulatorMode	InPHPSimulatorMode	InPocketSimulatorMode
InUniversalWindowsAppsSimulatorMode	InTestMode	InAutomaticTestMode	InTSEMMode
InUniversalWindowsAppMode	InVGAMode	InWebMode	InWebserviceMode
InWidgetMode	InWindowsMode	InWindowsMobileMode	EpochToDateTime
ExtractLine	Factorial	geoAzimuth	geoDistance
grTooltip	grBarColor	grCategoryColor	grPointColor
grSeriesColor	grCategoryLabel	grPieStartAngle	grSunburstRootSection
HashString	HashCheckString	BankHoliday	BankHolidayAdd
BankHolidayList	BankHolidayDeleteAll	MatAdd	MatStack
MatCopy	MatCreate	MatDeterminant	MatWrite
MatError	MatExist	MatInvert	MatRead
MatReadColumn	MatReadLine	MatMultiply	MatNbColumn
MatNbLine	MatFloatAdd	MatFloatMultiply	MatFill
MatDelete	MatTranspose	CurrentMonth	WordCount
WordToArray	Mean	BrowserPrint	NumberInWords
DayNumberInAlpha	MonthNumberInAlpha	Easter	LoWord
HiWord	FirstDayOfYear	FirstDayOfWeek	FirstDayOfMonth
RealToDateTime	RGBToHTML	NoCharacter	NoRightCharacter
NoLeftCharacter	sComputeCrc16	sComputeCrc32	SexagesimalToDecimal
Sum	StatCorrelation	StatCovariance	StatAverageDeviation
StatStandardDeviation	StatStandardDeviationP	StatError	StatMax
StatMin	StatAverage	StatSum	StatVariance
StatVarianceP	TableCollapseExpand	CommonLength	TextToHTML
Truncate	URLExtractPath	ToClipboard	XMLFindNamespaceByName
XMLFindNamespaceByURI	XMLValidDocument	XMLWrite	XMLExecuteXPath
XMLExtractString	XMLExtractDocument	XMLChildExist	XMLInsertDocument
XMLInsertElement	XMLRead	XMLModify	XMLNamespace
XMLNamespaceURI	XMLValidNode	XMLEOpen	XMLOpenReader
XMLPath	XMLRename	XMLResult	XMLRestorePosition
XMLSave	XMLSavePosition	XMLDelete	XMLToText

Benefit provided by this new feature of version 25:
Enriched browser code

SERVER WLANGUAGE



825

New feature WD WB WM

CHANGE INTERNAL PAGE BY PROGRAMMING

This new feature of WEBDEV 25 was requested by a large number of users: they will be happy, and so will you! You can now change internal pages by programming. This allows you to create dynamic interfaces. For example, a product form can include an internal page according to the type of product (food, clothing, services, etc.). In edit mode, there is only one page to develop and maintain, the internal page changes with the specific data.

Benefit provided by this new feature of version 25:
Better sharing

826

New feature WD WB WM

PROVIDE A RETURN URL TO PAYMENT SITES (IN SESSION MODE)

In Session mode, the address of the current page is automatically secured: it is impossible to launch this page on another device by copying/pasting this address. It is simply impossible to call the server on the URL of the page, except from the browser of the computer. An online payment system requires a URL to redirect to when the payment is complete. It is therefore necessary to provide a URL that can be called from another computer (from another server).

PageAddress now allows sending a URL that can be called from a computer other than the user's.

Benefit provided by this new feature of version 25:
Maximum security, same flexibility

827

New feature WD WB WM

"SAME-SITE" COOKIE: IMPROVED SECURITY

"Same-Site" cookies are used to protect against vulnerabilities such as CSRF (Cross Site Request Forgery). In version 25, the new **CookieSameSiteStrict** constant allows you to create this type of cookie.

Benefit provided by this new feature of version 25:
Armored!



828 to 873 SERVER CODE: 46 NEWS FUNCTIONS

46 new WLanguage functions are available in Server code:

Reduce	Apply	StringToJSON	ChangeSourcePage
Clone	EncryptGenerateRSAKey	DateToDayOfWeek	dbgConnect
GetContinentConstant	GetCountryContinent	GetContinentList	GetCountryContinentList
GetContinentName	InDeviceOwnerMode	InKioskMode	ExtractStringBetween
fContentType	Filter	fDirRename	FTPGetFile
gpwRemoteConnect	gpwListOAuthParameters	gpwResetPassword	gpwBiometricAuthentication
grSunburstAddData	grSunburstStartAngle	grSunburstSectionColor	grSunburstPullOut
grSunburstRootSection	grSunburstGetData	HUpdateLink	ilnitInternalReport
JSONToString	PageCurrentLayout	PageChangeLayout	PicMergeLayer
PicResize	PicRotation	SaaSAdminListVisit	TableCollapseExpand
TelemetrySendData	Map	CheckAllFalse	CheckAllTrue
CheckAnyFalse	CheckAnyTrue		

AJAX



874 New feature WD WB WM CALLBACK PROCEDURE PROPOSED ASYNCHRONOUSLY

When `AjaxExecuteAsynchronous` is used, the code editor proposes to automatically create Server and Browser callback procedures, with the right prototype. No need to read the doc every time!

Benefit provided by this new feature of version 25:
Who's calling?

JSON

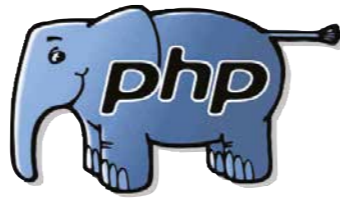


875 New feature WD WB WM JSON TYPE IN BROWSER CODE

Version 25 offers the native JSON type in Browser code. See new feature 823.

Benefit provided by this new feature of version 25:
Native json

PHP



876 New feature WD WB WM NEW PHP CONTROLS

New features of version 25 in PHP

- Sunburst Chart control
- New functions in Browser code
- New types in Browser code are available in PHP.

Benefit provided by this new feature of version 25:
New possibilities in PHP

877 New feature WD WB WM 11 NEW WLANGUAGE FUNCTIONS FOR PHP

11 new functions are available in PHP:

DateToDayOfWeek	InBackgroundMode	InDeviceOwnerMode	InKioskMode
fDirRename	grSunburstAddData	grSunburstStartAngle	grSunburstSectionColor
grSunburstPullOut	grSunburstRootSection	grSunburstGetData	

Benefit provided by this new feature of version 25:
WLanguage improvements

LINUX

878 New feature WD WB WM PDF WLANGUAGE FUNCTIONS

PDF functions are now available in WEBDEV Linux. These functions allow you to handle existing PDF files: rotate, extract a page, search text...

Benefit provided by this new feature of version 25:
Handling PDFs in Linux becomes easy

879 New feature WD WB WM SSH WLANGUAGE FUNCTIONS

SSH functions are now available in WEBDEV Linux. These functions are used to control processes remotely.

Benefit provided by this new feature of version 25:
Improves cross-platforming

880 New feature WD WB WM SERIES WLANGUAGE FUNCTIONS (USB)

PCs generally no longer have a serial port! However, the **serial port** management functions are still used. Indeed, devices connected to a USB port are managed with these functions.

Serial port management functions are now available in WEBDEV for Linux.

Benefit provided by this new feature of version 25:
Linux connectivity

881 New feature WD WB WM AUTOMATIC ERROR MANAGEMENT



Code errors are now automatically managed in WEBDEV Linux.

Benefit provided by this new feature of version 25:
Improves cross-platforming

New feature WD WB WM

882 to 949 68 NEW WLANGUAGE FUNCTIONS ON LINUX

68 new functions are available on Linux:

Reduce	Apply	StringToJSON	ChangeSourcePage
Clone	EncryptGenerateRSAKey	DateToDayOfWeek	dbgConnect
GetContinentConstant	GetCountryContinent	GetContinentList	GetCountryContinentList
GetContinentName	EmailConfigure	InDeviceOwnerMode	InKioskMode
ExtractStringBetween	fContentType	Filter	fDirRename
FTPGetFile	gpwRemoteConnect	gpwListOAuthParameters	gpwResetPassword
gpwBiometricAuthentication	grSunburstAddData	grSunburstStartAngle	grSunburstSectionColor
grSunburstPullOut	grSunburstRootSection	grSunburstGetData	HUpdateLink
ilnitInternalReport	JSONToString	PageCurrentLayout	PageChangeLayout
PDFIsProtected	PDFExtractPage	PDFMerge	PDFMergeWithPassword
PDFPassword	PDFNumberOfPages	PDFToText	PicMergeLayer
PicResize	PicRotation	SaaSAdminListVisit	sInEntryQueue
sEscape	sWrite	sClose	sParameter
sRead	SOAPAddSAMLAssertion	SOAPAddXMLSignature	sOpen
SSHCommand	SSHConnectShell	SSHDisconnectShell	SSHWrite
SSHRead	TableCollapseExpand	TelemetrySendData	Map
CheckAllFalse	CheckAllTrue	CheckAnyFalse	CheckAnyTrue

Benefit provided by this new feature of version 25:
Better cross-platform

APPLICATION SERVER

950 New feature WD WB WM ENHANCED SECURITY TO PREVENT URL COPY/PASTE

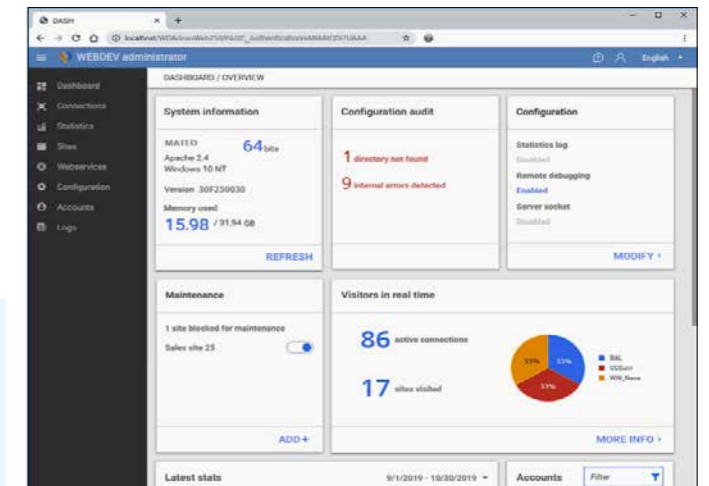
As you know, in Session mode, it is impossible to copy/paste a URL to launch it on another computer. In version 25, this protection is further improved against CSRF attacks.

Benefit provided by this new feature of version 25:
Maximum security

MANAGEMENT

951 New feature WD WB WM ADMINISTRATOR IN WEB MODE

In version 25, the remote administrator interface in Web mode has been revamped. For example, a dashboard is now available to the administrator.



Web administrator's dashboard: practical!!

Navigation in the administrator is more fluid.

Benefit provided by this new feature of version 25:
Manage in Web mode

952 New feature WD WB WM PROXY MANAGEMENT

WEBDEV 25's administrator now allows viewing the users' IP address if the server is behind a reverse proxy.

Benefit provided by this new feature of version 25:
Who's there?



DOCKER DEPLOYMENT

953 WD WB WM DOCKER OF WEBDEV APPLICATION SERVER

As you know, WEBDEV Application Server is available on DockerHub.

When the license number is specified the first time the image is launched, the number of simultaneous connections to the application server is unlimited. When the license number is not specified, the number of simultaneous connections is limited to 10. Sites on this server are deployed remotely, as usual.

Benefit provided by this new feature of version 25:
Easy deployment

954 New feature WD WB WM AUTOMATIC CREATION OF DOCKER IMAGES OF YOUR SITES, INCLUDING WEBDEV APPLICATION SERVER

With WEBDEV 25, you can also create an image that includes both the web server (e. g. Apache), the WEBDEV application server and your site.

This makes it easier to deploy your sites on new servers.

In version 25, WEBDEV allows you to create the "recipe" for a docker image of your site.

The site is easy to deploy, without manipulation.

The image of the WEBDEV Application Server is automatically included in the recipe and therefore in the image of your site.

This method has many advantages:

- no Web server to install or configure
- no WEBDEV Application Server to install or configure
- regardless of the deployment environment (test, production, cluster docker,. etc.), the installed configuration will necessarily be the one that has been defined, without risk of modifying the version...

Benefit provided by this new feature of version 25:
Easy deployment



Docker image creation

Benefit provided by this new feature of version 25:
Up to date!

DEPLOYMENT OF YOUR SITES

955 New feature WD WB WM IGNORE SERVER DIRECTORIES TO SPEED UP UPDATES

When updating a site, the WEBDEV Application Server browses the directories of the relevant site to find the files to update or delete.

Some directories may only contain data files or thousands of PDFs, for example, that are not relevant for an update procedure.

In version 25, you can specify a list of directories to ignore in the site setup procedure.

The site update will not process these directories and will therefore be much faster.

Benefit provided by this new feature of version 25:
Faster updates of your sites

956 New feature WD WB WM RE-ENABLE AN OLD VERSION OF A SITE

The administrator of a site may decide to immediately re-enable an old version of this site.

Useful in case of force majeure (i.e. serious bug in the new version that had been installed, which of course will never happen to you)!

Benefit provided by this new feature of version 25:
Remarkable security

957 New feature WD WB WM SIMPLIFIED ACCOUNTS: ONE IS BETTER THAN TWO

On the application server, it is recommended to create accounts for each person who will deploy sites.

In previous WEBDEV versions (24 and earlier), 2 accounts were required: OS account, WEBDEV account.

In version 25, only 1 account is required. The WEBDEV account retrieves the data from the OS account.

Benefit provided by this new feature of version 25:
Simplification!

958 New feature WD WB WM UPDATED DEPLOYMENT WIZARD

The deployment wizard menu provides modern options for deployment:

- remote deployment
- deployment in the cloud
- deployment by physical media
- creation of a docker image
- ...

The deployment procedure is automatically generated.

REST WEBSERVICES

959 New feature WD WB WM WEBSERVICE PARAMETER: AUTOMATIC JSON TYPE

In version 25, Webservice procedures directly accept JSON variables.

JSON elements are automatically extracted from the content of the request.

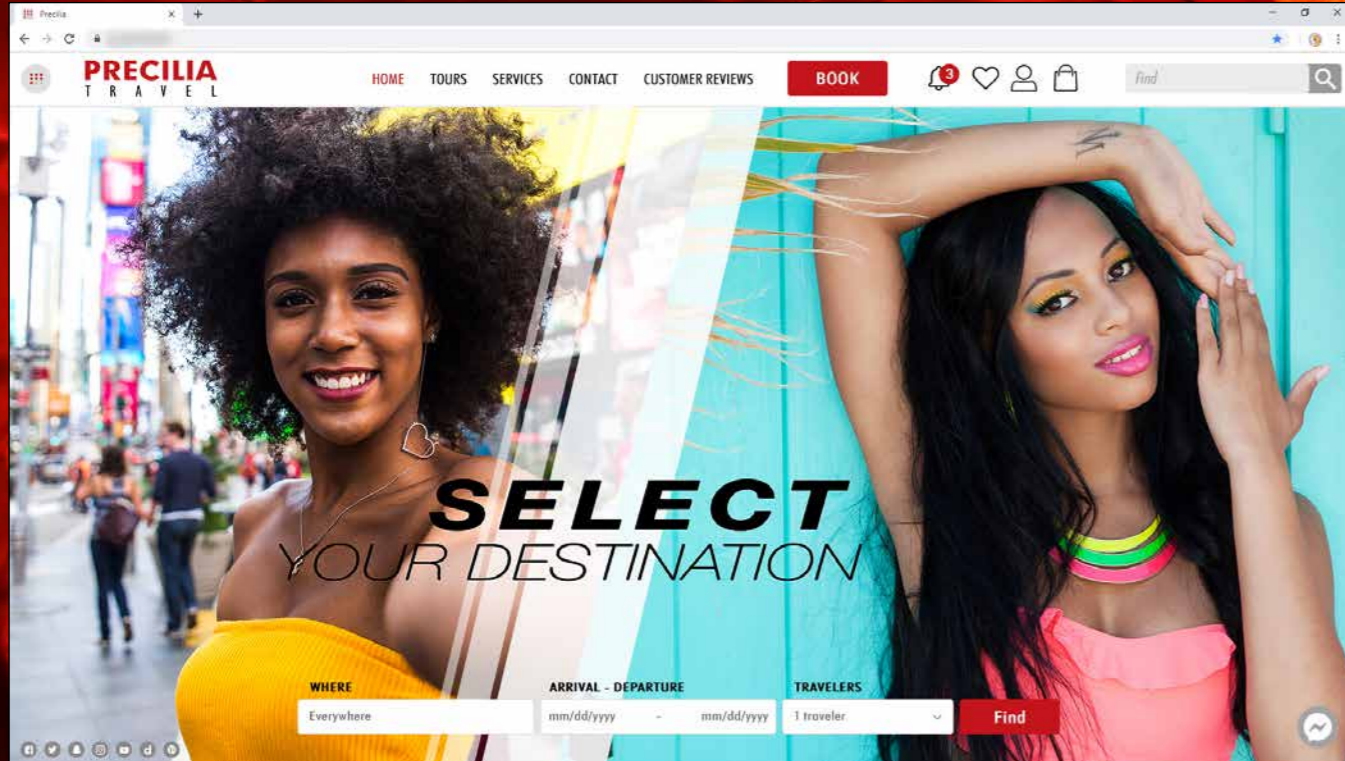
Benefit provided by this new feature of version 25:
Simpler code...

960 New feature WD WB WM AND MANY OTHER NEW FEATURES

Version 25 offers many other new features, which we will let you discover once you have ordered and received your product...



VERSION 25, AN IMPRESSIVE ARRAY OF NEW FEATURES



YOUR
APPLICATIONS
ARE FASTER
AND MORE
BEAUTIFUL
IN VERSION

25

**TECHNOLOGY DOES NOT WAIT:
ORDER VERSION 25
TODAY**

Order today! Before the release date, buying WINDEV 24 or WEBDEV 24 or WINDEV Mobile 24 (excluding updates) as from 9/1/2019 entitles you to a free update (package and tutorials) to the corresponding version 25, as soon as it becomes available. Buying an update to version 25 before its release date and after 9/1/2019 enables you to get version 25 (package and manuals) for the difference in update price (excluding shipping costs). New english versions are being announced now so you can plan on them when developing, and so you don't spend time developing features that will be included in the product. Some functions may not be available as soon as the version is shipped, but will be offered later as downloads. Also note that additional improvements and new features other than the ones described in this document may be available in the new version. WINDEV, WEBDEV and WINDEV Mobile are professional software. The amount of new features adds up to more than 925 since certain new features concern several subjects and are presented more than once. Despite the care taken in creating this document, it is not contractual. Screenshots and lists are indicative. Windows XP was released in 2001. Microsoft stopped supporting Windows XP in April 2014. To compile applications intended for Windows XP, you must use version 24 or earlier of WINDEV. A license for WINDEV 25 allows you to launch older WINDEV versions and thus compile applications for Windows XP. Do not hesitate to contact us for any additional information or to confirm a feature. All the trademarks mentioned in this publication are registered trademarks of their respective owners.
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9.25
NEW FEATURES

TECHNOLOGY DOES NOT WAIT:
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